

Title 23 - Deschutes County Comprehensive Plan

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TITLE 23 COMPREHENSIVE PLAN

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Chapter 23.04. PREFACE

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Deschutes County's first comprehensive plan, entitled *Comprehensive Plan to 1990*, was adopted in June of 1970. In November 1979, the *Deschutes County Year 2000 Comprehensive Plan* was adopted by the enactment of PL-20 by the Board of County Commissioners. This plan was acknowledged by the Land Conservation and Development Commission in April 1981, and is the current comprehensive plan for the County. In 2000, the comprehensive plan text was codified as Title 23 in the Deschutes County Code.

Deschutes County has grown rapidly since 1979 and the comp plan has been revised in piecemeal fashion, as part of Periodic Review to reflect statewide changes in land use regulations and due to changes initiated by policy makers or landowners. Consequently, parts of the document may seem dated.

The comprehensive plan text, goals and policies contained in Title 23 are supplemented by the Deschutes County Comprehensive Plan Map and by several companion documents. For example, *The Deschutes County Comprehensive Plan Resource Element*, also adopted in 1979, contains voluminous data about the people, places and natural resources in Deschutes County. The Resource Element has been amended over time by the addition of separate documents, such as the *Geothermal Element* (January, 1985), the *Deschutes County/City of Bend River Study* (April, 1986), and by amendments to the primary document itself.

The latter include the County's inventories and analyses for Goal 5 resources, including surface mining, sensitive birds and mammals, historic and cultural sites, and riparian/wetland areas. For convenience, the Goal 5 inventories are also included in the comp plan.

(Ord. 2000-017 § 1, 2000)

Chapter 23.08. INTRODUCTION

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23.08.010. Introduction.

Recent years have witnessed dramatic growth and change in Deschutes County. A rapidly increasing population causes ever greater pressures on the land as well as the economic, governmental and social structures of the area. These pressures require many adjustments. Unfortunately, in the past, many of these public decisions on land use and related matters were made without adequate consideration of alternatives or consequences. To provide part of the answer, the comprehensive planning process has been developed. This process provides for the gathering of information, the prudent review of alternatives and the final development of reasonable policies. The local need for planning is also spurred by the requirements of the people of Oregon, as manifested through the Legislature and the Land Conservation and Development Commission, which require all local jurisdictions to prepare adequate plans and planning programs. (Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.08.020. Purpose.

The purpose of the Comprehensive Plan for Deschutes County is not to provide a site-specific identification of the appropriate land uses which may take place on a particular piece of land but rather it is to consider the significant factors which affect or are affected by development in the County and provide a general guide to the various decisions which must be made to promote the greatest efficiency and equity possible, while managing the continuing growth and change of the area. Part of that process is identification of an appropriate land use plan, which is then interpreted to make decisions about specific sites (most often in zoning and subdivision administration) but the plan must also consider the sociological, economic and environmental consequences of various actions and provide guidelines and policies for activities which may have effects beyond physical changes of the land.

The plan must also consider factors other than those of a strictly local nature because the policies must serve not only as an internal guide but also as a way of relating to the larger society of which we are a part. The planning process has to be oriented toward the production of the most beneficial long-range results possible for the residents of the community, not as an end to growth, but as a way to guide growth for the general welfare of the public.

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.08.030. The process.

In Deschutes County, as well as throughout the State of Oregon, there is a strong commitment to citizen participation in the planning process. This is consistent not only with State regulations, but also with standard local planning practice and common sense, because citizen involvement with the planning process improves the quality of the plan and ensures greater acceptance of the final document since it is the direct product of the people's involvement.

Deschutes County's citizen involvement program has involved hundreds of participants representing the various geographic areas and interest in the County. Thousands of hours were spent by the citizens in the preparation of the plan. Predictably, because of the plan's importance to the future of the residents of Deschutes County, there is still controversy and continual improvements are being made. The planning process calls for regular updates to assure that the plan is functioning properly and adapting to the changing

needs of the local populace. Undoubtedly, the on-going participation of the local citizenry will be an important part of that process.
(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.08.040. The Plan.

The Deschutes County Comprehensive Plan is a reflection of the needs and desires of the people now and for the future. Important resources, such as agriculture, wildlife and forest lands, have been identified and marked for protection. The inefficient, expensive development pattern which has characterized the County's growth in recent years is being restricted. Emphasis is being placed on accommodating development in urban areas, while providing areas in and around Rural Service Centers and on the urban fringes for those who wish to live in a rural area. This growth pattern is considerably more efficient, as far as energy and public facilities are concerned, as well as less environmentally damaging than the present land use pattern. Further, this polynucleated pattern will lend itself to the future transportation, public service, energy, housing and urban expansion needs of the County during and beyond the present 30-year planning period, while preserving, as much as possible, the rural character and environmental quality of the area. By maintaining large open spaces and keeping development clustered together along transportation/energy corridors not only is sprawl reduced, but services may be provided more efficiently and air pollution may be kept at lower levels.

Naturally, the plan must be a compromise between the need for protecting existing resources and the demand to accommodate a growing population. Intermixed in this situation are also the complexities of individual rights and the public's needs. Difficult decisions have been made. More will yet be required. However, the County Comprehensive Plan will serve the needs of the people of Deschutes County well, especially as long as the people stay involved--working toward the goals they have set in this plan.
(Ord. 2000-017 § 1, 2000; PL-20, 1979)

Chapter 23.12. DEFINITIONS

23.12.010. Definitions

23.12.010. Definitions

“Access or access way” means the place, means, or way by which pedestrians and vehicles shall have safe, adequate and usable ingress and egress to a property or use.

“Aquifer” means a water-bearing rock, rock formation or a group of formations.

“Annexation” means to add or join to, append or attach, especially to a larger, or more significant thing. To incorporate into a county or city. Annexation is the process by which usually contiguous fringe territory is added to an existing municipality.

“Archeology” means the systematic recovery by scientific methods of material evidence from man's life and culture in past ages and the detailed study of this evidence. The study of antiquity, ancient times or early conditions.

“Architectural control” means regulations and procedures requiring structures to be suitable, harmonious and in keeping with the general appearance, historical character or style of their surrounding area.

“Average” means a number that typifies a set of numbers of which it is a function. The arithmetic mean.

“Berm” means a narrow ledge or shelf, as along a slope. Relative to surface mining operations, a berm is a mound of dirt used for screening operations or for storage of material to use during reclamation of the mining site.

“Bonuses” (also known as incentive zoning) means the awarding of bonus credits to a development in the form of allowing more intensive use of the land if such public benefits are greater than the minimum open spaces or agricultural lands are preserved, special provisions for low and moderate income housing are made, or public plazas and courts are provided at ground level.

“Buffer zone” means a strip of land created to separate and protect one type of land use from another; for example, a screen of planting or fencing to insulate the surrounding area from the noise, smoke, or visual aspects of an industrial zone or junkyard. In other instances, a greater width of land to separate and protect farm production from more dense, urban use.

“Capital improvements program” means a timetable of public improvements budgeted to fit the jurisdiction's fiscal capacity some years into the future.

“Cluster development” means it is intended to concentrate on residential improvements and to preserve and protect open land; should be consistent with the public facilities and services policies; should require a minimum of 65 per cent open land and a maximum of 35 per cent for improvement (excluding fencing) of the contiguous land under the same ownership.

“Community facilities” means public or privately owned facilities used by the public, such as streets, schools, libraries, parks and playgrounds; also facilities owned and operated by non-profit private agencies such as churches, settlement houses and neighborhood associations.

“Commuter” means a person who travels regularly from one place to another place and back, as from a suburb to city and back.

“Comprehensive Plan” means a generalized, coordinated land use map and policy statement of the governing body of a state agency, city, county or special district that interrelates all functional and natural systems and activities relating to the use of lands, including but not limited to sewer and water, transportation, educational and recreational systems and natural resources and air and water quality management programs. "Comprehensive" means all-inclusive, both in terms of the geographic area covered and functional and natural activities and systems occurring in the area covered by the plan. "Generalized" mean a summary of policies and proposals in broad categories and does not necessarily indicate specific locations of any area, activity or use. A plan is "coordinated" when the needs of all levels of governments, semi-public and private agencies and the citizens have been considered and accommodated as much as possible. "Land" includes water, both surface and subsurface, and the air.

“Conditional use” means a use which meets certain conditions and may locate in some zoning districts provided it will not be detrimental to the public health, morals and welfare and will not impair the integrity and character of the zoned district.

“Conservation easement” means a tool for acquiring open space with less than full-fee purchase; the public agency buys only certain specific rights from the owner. These may be positive rights, giving the public rights to hunt, fish, hike or ride over the land, or they may be restricted rights limiting the uses to which the owner may put his land in the future. Scenic easements allow the public agency to use the owner's land for scenic enhancement such as roadside landscaping and vista point preservation.

“Dedication” means a turning over of private land for a public use by an owner or developer and its acceptance for such use by the governmental agency in charge of the public function for which it will be used. Dedications for roads, parks, school sites or other public uses are often made conditions for the approval of a development.

“Dedication, payment in lieu of” means cash payments as substitute for a dedication of land by an owner or developer usually at so many dollars per lot. This overcomes the two principal problems of land-dedication requirements by applying the exactions on development more equitably and by allowing purchase of sites at the best locations rather than merely in places which the development is large enough to be required to dedicate a school or park.

“Density” means the number of residential dwelling units per acre of land and/or the amount of land area expressed in square feet assignable to each dwelling unit in a residential development, including but not limited to one house on one lot. It is computed as follows: the gross area of land within the development, less the total aggregate area dedicated for streets, schools or other public facilities, but not including public or private parks and recreation facilities dedicated or created as an integral part of the development, divided by the total number of dwelling units in the proposed development, equals the density.

“Density transfer” means a technique of retaining open space by concentrating residential densities, usually in compact areas adjacent to existing urbanization and utilities, where outlying areas are being left open, so that the residential density of the entire community will average out at the same number of dwelling units as if the community were developed from end to end with large lots. A variation of this involves allowing density transfers by private developers who buy the development rights of outlying properties that are publicly desirable for open space and adding the additional density to the base number of units permitted in the zone in which they propose to develop.

“Destination resort” means a self-contained development providing visitor-oriented accommodations and developed recreational facilities in a setting with high natural amenities. To qualify as a "major destination resort" under Goal 8, a proposed development must meet the following standards:

- A. The resort is located on a site of 160 or more acres.
- B. At least 50 percent of the site is dedicated to permanent open space, excluding yards, streets and parking areas.
- C. At least \$2,000,000 (in 1984 dollars) is spent in the first phase of improvements for on-site developed recreational facilities and visitor-oriented accommodations, exclusive of costs for land, sewer and water facilities, and roads. Not less than one-third of this amount shall be spent on developed recreational facilities. Developed recreational facilities and key facilities intended to serve the entire development and visitor-oriented accommodations must be physically provided or be guaranteed through surety bonding or substantially equivalent financial assurances prior to closure of sale of individual lots or units. In phased developments, developed recreational facilities and other key facilities intended to serve a particular phase shall be constructed prior to sales in that phase or guaranteed through surety bonding.
- D. Visitor-oriented accommodations are provided, including meeting rooms, restaurants with seating for 100 persons, and 150 separate rentable units for overnight lodgings. Accommodations available for residential use will not exceed two such units for each unit of overnight lodging.
- E. Commercial uses limited to those types and levels necessary to meet the needs of visitors to the development. Industrial uses are not permitted.

“Developed recreation facilities” means with respect to destination resorts, improvements constructed for the purpose of recreation. These include, but are not limited to, golf courses, tennis courts, swimming pools, marinas, equestrian trails and facilities and bicycle paths.

“Dude ranch” means a ranch operated primarily or in part as a resort which offers horse-related activities as its primary outdoor recreation opportunity and provides only temporary rental accommodations, serves custom prepared food and which is intended and suitable only for vacation use by non-residents.

“Easement” means a right afforded a person to make limited use of another's real property, as a right-of-way.

“Eminent domain” means the right of a government to appropriate private property for public use or benefit upon payment of just compensation to the owner. The terms "eminent domain" and "condemnation" are often used interchangeably, although condemnation may also mean the demolition by public authority of an unsafe structure where no compensation is paid to the owner and the condemned property does not become public land. "Inverse condemnation" is a condition in which the use of political power to regulate the use of land is so severe that it represents a de facto taking of private property for public benefit or use without just compensation.

“Erosion” means to erode is to wear away by or as if by abrasion, dissolution, transportation, weathering or corrosion. The removal, loosening or dissolution of earth or rock material from any part of the earth's surface.

“Exception” (also called variance) means the official provision of an exemption from compliance with the terms of conditions or a building or zoning regulation by a local board or administrator vested with the power to authorize it. It is usually granted if there are practical difficulties in meeting the existing requirements literally, or if the deviation or exception would not have a detrimental impact on adjacent properties or affect substantial compliance with the regulations. While an exception (or variance or special use) is a departure from the standard application of the zoning ordinance, it is provided for within the ordinance.

“Goals” means in terms of land use planning, the mandatory statewide planning standards adopted by the Land Conservation and Development Commission pursuant to ORS 197.005 to 197.430 and the goals adopted in this plan.

“Groundwater” means water beneath the earth's surface between saturated soil and rock that supplies wells and springs.

“Improved land” means raw land that has been improved with basic facilities such as roads, sewers, water lines and other public infrastructure facilities in preparation for meeting development standards. It sometimes refers to land with buildings as well, but usually land with buildings and utilities would be called a developed area, while the term "improved land" more often describes vacant land with utilities only.

“In-filling” means the use of undeveloped lands in areas of existing housing and high densities.

“Interim or study zone” means a zoning technique used to temporarily freeze development in an area until a permanent classification for it can be decided upon. It is generally used to preserve the status quo while an area or community- wide comprehensive plan is prepared to serve as a basis for permanent zoning.

“Land Use Plan” means a basic element of a comprehensive plan, it designates the future use or reuse of the land within a given jurisdiction's planning area and the policies and reasoning used in arriving at the decisions in the plan. The land use plan serves as a guide to official decisions in regard to the distribution and intensity of private development, as well as public decisions on the location of future public facilities and open spaces. It is also a basic guide to the structuring of zoning and subdivision controls, urban renewal and capital improvement programs.

“LCDC” means the Land Conservation and Development Commission of the State of Oregon.

“Leapfrog development” means land development that occurs well beyond the existing limits of urban development and thus leaves intervening vacant land behind. This bypassing of the next-in-line lands at the urban fringe results in the haphazard shotgun pattern of urbanization known as "sprawl".

“Median” means the middle value in a distribution, above or below which lies an equal number of values.

“Mobile home” means a factory-built home, equipped with all of the basic amenities of a conventional home (both, kitchen, electricity), which can be moved to its site by attaching it whole or in sections to an automobile or truck. (A trailer is a much smaller mobile shelter, usually used for camping and outings rather than as a permanent dwelling.) Prefabricated modular units currently come complete with built-in furnishings, appliances, porches and other areas. "Double-wides" and "triple-wides" are units connected together to form a single structure of size and roof design similar to that of a conventional home built on a foundation on site. Mobile home parks rent spaces with utility hookups to mobile home owners; sometimes they also rent the mobile homes. The parks range in size from a few parking spaces equipped with plumbing and electrical connections to elaborate mobile home communities with swimming pools and community centers. About a quarter of the single-family home sales since 1968 have been captured by mobile homes.

“Moratorium” means in planning, a freeze on the approval of all new development pending the completion and adoption of a comprehensive plan. In recent years, building moratoriums have also been instituted by water and sewer agencies when sewage treatment facilities are inadequate or when water shortages are threatened. They have also been voted into being by residents of communities whose schools and other public facilities have been overwhelmed by rapid growth.

“Multiplier effect” means an economic base multiplier is a mathematical device used to estimate the number of jobs that will be created in service or non-basic industries which will provide needed goods and services to the new community residents (such as retail stores, professional services, entertainment facilities, etc.), because of new employment in basic industries, such as manufacturing. An example might be as follows:

300 total new jobs	=	100 new jobs in steel plant	+	150 new jobs in private services (groceries, etc.)	+	50 new jobs in public – police, fire, etc.
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The Base Multiplier here is 3.0. The Base Ratio is 1:2. So, for every new basic job there is created two non-basic jobs, or three new jobs totally.

“Non-Goal 5 aggregate resources” means those mineral and aggregate resources that are not significant aggregate resources as determined under OAR 660-023-0030(4) and are not included on the County’s inventory list of significant Goal 5 mineral and aggregate resource sites.

“Open land” means is land without tree cover, land which is exposed, land without cover except grass, brush and sparse or immature trees; lands or topography which do not reasonably conceal structures, improvements and personal property.

“Open space” means the part of the countryside which has not been developed and which is desirable for preservation in its natural state for ecological or recreational purposes, or in its cultivated state to preserve agricultural, forest or urban greenbelt areas. More specifically, open space consists of any land area that would, if preserved and continued in its present use:

- A. Conserve and enhance natural or scenic resources;
- B. Protect air or streams of water supply;
- C. Promote conservation of soils, wetlands or beaches;
- D. Conserve landscaped areas, such as public or private golf courses, that reduce air pollution and enhance the value of abutting or neighboring property;
- E. Enhance the value to the public of abutting or neighboring parks, forest, wildlife preserves, natural reservations or sanctuaries or other open space;
- F. Enhance recreation opportunities;
- G. Preserve historic sites;
- H. Promote orderly urban development.

Open space in destination resorts may include some alteration of the natural or existing landscape to allow siting of golf course greens and fairways, lakes and ponds, bike paths and jogging trails and primitive picnic areas (including picnic tables and park benches).

“Overnight lodgings” with respect to destination resorts, means permanent, separately rentable accommodations that are not available for residential use. Overnight lodgings include hotel or motel rooms, cabins and timeshare units. Individually owned units may be considered overnight lodgings if they are available for overnight rental use by the general public for at least 45 weeks per calendar year through a central reservation and check-in service. Tent sites, recreational vehicle parks, mobile homes, dormitory rooms and similar accommodations do not qualify as overnight lodgings for the purpose of this definition.

“Parcel” means a unit of land that is created by a partitioning of land.

“Partition” means either an act of partitioning land or an area or tract of land partitioned as defined below:

"Partitioned land" means to divide an area or tract of land into two or three parcels within a calendar year when such area or tract of land exists as a unit or contiguous units of land under a single ownership at the beginning of such year (ORS 92.010).

"Performance standards" means zoning regulations providing specific criteria limiting the operations of certain industries, land uses, and buildings to acceptable levels of noise, air pollution emissions, odors, vibration, dust, dirt, glare, heat, fire hazards wastes, traffic generation and visual impact. This type of zoning may not bar an industry or use by specific type, but rather admits any use that can meet the particular standards of operation set for admission. Instead of classifying industries in districts under the headings "light", "heavy" or "unrestricted", it establishes measurable technical standards and classifies the industries in terms of their probable environmental impact. Terms such as "limited", "substantial" and "objectionable" determine the overall acceptability rating of a particular use.

"Planned community" means a fully self-contained complex of residential, commercial and industrial areas, transportation facilities, utilities, public facilities and recreational areas.

"Planned Development (PD)" means a self-contained development, often with a mixture of housing types and densities, in which the subdivision and zoning controls are applied to the project as a whole rather than to individual lots as in most subdivisions. Therefore, densities are calculated for the entire development, usually permitting a trade-off between clustering of houses and provision of common open space.

"Plat" means a map, diagram, drawing or replat or other material containing all the descriptions, locations, specifications, dedications, provisions and information concerning a subdivision.

"Police power" means the inherent right of a government to restrict an individual's conduct or his use of his property in order to protect the health, safety, welfare and morals of the community. In the United States, this power must relate reasonably to these ends and must follow due processes of the law; but unlike the exercise of the State's power of eminent domain, no compensation need be paid for losses incurred as a result of police power regulation.

"Predominant lot size" means the most frequently occurring lot size in a given area. The arithmetic mode of lot sizes.

"Resort community" means an unincorporated community that was established primarily for and continues to be used primarily for recreation and resort purposes. It includes residential and commercial uses and provides for both temporary and permanent residential occupancy, including overnight lodging and accommodations.

"Right-of-way" (ROW) means the right of passage over the property of another. The public may acquire it through implied dedication-accepted access over a period of time to a beach or lake shoreline, for example. More commonly, it refers to the land on which a road or railroad is located. The pathways over which utilities and drainage ways run are usually referred to as easements.

"Riparian:(zone, habitat, or vegetation)" means of or pertaining to the bank of a river, or of a pond or small lake. Riparian habitat is riverbank vegetative cover and food for many wildlife species.

"Road types" means:

- A. Arterial. Roads designed for through access between major traffic generators. Arterials provide primarily for the traffic mobility needs.

- B. Collector. Roads which gather the traffic from local roads between arterials. These roads provide a balance between the needs of land access and traffic mobility.
- C. Local. Roads designed for land access, serving local traffic only.

“Rural lands” means those lands outside recognized urban growth boundaries which are necessary and suitable for such uses as:

- A. Exclusive farm use;
- B. General agriculture;
- C. Forest;
- D. Rural residential;
- E. Rural service center;
- F. Destination resort, dude ranch, planned community;
- G. Landscape management;
- H. Special interest;
- I. Open space;
- J. Fish and wildlife protective area;
- K. Recreation;
- L. Surface mining.

Industrial, commercial and urban and suburban residential uses are not generally appropriate on rural lands.

“Rural service center” means an unincorporated convenience-commercial and residential center of a nature and size only as required to serve the convenience-commercial needs of the surrounding rural lands. Planning area boundaries are not the boundaries for rural service centers.

“Scabland” means level and undulating upland plains where blister-like outcrops of basalt occur. Scabland consists of areas in which the bedrock, stony shallow soil and soil-forming material predominate. The natural vegetation consists mainly of big sagebrush, open stands of juniper, rabbit brush, bunchgrass and annual grasses and associated herbs. Level areas can be suitable for irrigate pasture.

“Self-contained development” means with respect to destination resorts, means community sewer, water and recreational facilities provided on site and limited to meet the needs of the resort or provided by existing public sewer or water service as long as all costs related to service extensions and any capacity increase are borne by the development. A "self-contained development" shall have developed recreational facilities provided on site.

“Septic tank” means a tank plus a leaching field or trenches in which the sewage is purified by bacterial action. It is distinct from a cesspool, which is merely a perforated buried tank that allows the liquid effluent to seep into the surrounding soils but retains most of the solids and must be periodically pumped out.

“Sewage system” means a facility designed for the collection, removal, treatment and disposal of waterborne sewage generated within a given service area. It usually consists of a collection network of pipelines and a treatment facility to purify and discharge the treated wastes.

“Shall” means a mandatory, non-discretionary policy or regulation.

“Should” means a non-mandatory, discretionary policy or regulation.

“Silica or siliceous” means a white or colorless crystalline compound, SiO₂, occurring abundantly as quartz, sand, flint, agate and many other materials and used to manufacture a wide variety of materials, notably glass and concrete.

“Special District” means any unit of local government, other than a city or county, authorized and regulated by statute, which includes but is not limited to water control, irrigation, port districts, fire, hospital, mass transit and sanitary districts, as well as regional air quality control authorities.

“Spot zoning” means the awarding of a use classification to an isolated parcel of land which is detrimental or incompatible when such an act favors a particular owner. Such zoning has been held to be illegal by the courts on the grounds that it is unreasonable and capricious. A general plan or special circumstances such as historical value, environmental importance, or scenic value may justify special zoning for a small area.

“Strip zone” means a mélange of development, usually commercial, extending along both sides of a major street leading out of the center of a city. Usually a strip zone is a mixture of auto-oriented enterprises (e.g., gas stations, motels and food stands), truck-dependent wholesaling and light industrial enterprises, along with the once rural homes and farms overtaken by the haphazard leap-frogging of unplanned sprawl. Strip development, with its incessant turning movements in and out of each enterprise's driveway, has so reduced the traffic-carrying capacity of major highways leading out of urban centers, that the post-war limited-access freeway networks have become a necessity. In zoning terms, a strip zone may refer to a district consisting of a ribbon of highway commercial uses fronting both sides of a major arterial road.

“Subdivide” means to divide a part or parts of land parcels into at least four smaller parts or lots. A subdivision is the result of laying out a parcel of raw land into lots, blocks, streets, and public areas. Its purpose is the transformation into building sites.

“Urban fringe” means an area at the edge of an urban area usually made up of mixed agricultural and urban uses. Where leap-frogging or sprawl is the predominant pattern, this mixture of urban and rural may persist for some time until the process of urbanization is completed.

“Urban Growth Boundary” (UGB) means is an established line identifying an area which contains land lying within and adjacent to an incorporated city and which is determined to be necessary and suitable for future urban uses capable of being served by urban facilities and services.

“Urbanized lands” means those lands within the urban growth boundaries which can be served by urban services and facilities and are necessary and suitable for future expansion of an urban area.

“Visitor-oriented accommodations” with respect to destination resorts, means overnight lodging, restaurants and meeting facilities designed to provide for the needs of visitors rather than residents.

(Ord. 2001-047 § 1, 2001; Ord. 2001-038 § 1, 2001; Ord. 2000-017 § 1, 2000; Ord. 92-001, 1992; Ord. PL-20, 1979)

Chapter 23.16. EXISTING CONDITIONS AND CONCERNS

23.16.010. Introduction.

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23.16.010. Introduction.

Before a plan can be prepared for a community, there must be an understanding of the physical structure, general attitudes and existing trends which identify that community as the unique society that it constitutes. Further, it is important that there exist some understanding of the problems and issues facing the local community. The purpose of this portion of the plan is to briefly review the status of some of the elements which make up Deschutes County in 1979 and discuss the apparent direction which the County seems to be taking into the future. More detailed information on local conditions and trends may be found in the Resource Element which is part of this plan.

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.16.020. Population.

The population of the County has increased significantly since the adoption of the comprehensive plan in 1979.

Population Growth in Deschutes County: 1980 to 2000			
Sources	1980	1990	2000
Population Research Center - July 1 estimates	62,500	75,600	116,600
Census Bureau - April 1 census counts	62,142	74,958	115,367

ORS 195.025(1) requires the counties to coordinate local plans and population forecasts. In 1996, Bend, Redmond, Sisters and the County reviewed the most recent population forecasts from the Portland State University Center for Population Research and Census, the Department of Transportation, Woods and Poole, the Bonneville Power Administration and the State Department of Administrative Services Office of Economic Analysis. After review of these projections, the cities and Deschutes County agreed on the coordinated population forecast adopted by the County in 1998 by Ordinance 98-084

The results of the 2000 decennial census and subsequent population estimates prepared by the Population Research Center (PRC) at Portland State University revealed the respective populations of the County and the incorporated cities were growing faster than contemplated under the 1998 coordinated forecast. The cities and the County engaged in a coordination process between 2002 and 2004 that culminated with the County adopting a revised population forecast that projected population for the cities and the County to the year 2025. The following table displays the 2004 coordinated population forecast for Deschutes County and the urban growth boundaries of the cities of Bend, Redmond, and Sisters from 2000 to 2025:

2000-2025 Coordinated Population Forecast					
Year	Bend UGB	Redmond UGB	Sisters UGB	Unincorporated County	Total County
2000	52,800	15,505	975	47,320	116,600
2005	69,004	19,249	1,768	53,032	143,053
2010	81,155	23,897	2,306	59,127	166,572
2015	91,158	29,667	2,694	65,924	189,443
2020	100,646	36,831	3,166	73,502	214,145
2025	109,389	45,724	3,747	81,951	240,811

The process through which the County and the cities coordinated to develop the 2000-2025 coordinated forecast is outlined in the report titled "*Deschutes County Coordinated Population Forecast 2000-2025: Findings in Support of Forecast*" dated July 2004. This report provides the findings in support of the adopted forecast. The Deschutes County Year 2000 Comprehensive Plan (1979) included a population forecast from 1980 to 2000 that was incorporated in several chapters. In 1998, the County adopted a coordinated population forecast under ORS 195.036. The following table displays all three forecasts for comparison:

Deschutes County Population Forecasts from 1979, 1998, and 2004			
Year	1979 forecast	1998 forecast	2004 forecast
1980	53,400	-	-
1985	66,600	-	-
1990	82,900	74,958	-
1995	103,400	94,100	-
2000	128,200	113,231	116,600
2005	-	132,239	143,053
2010	-	151,431	166,572
2015	-	167,911	189,443
2020	-	182,353	214,145
2025	-	-	240,811

In the fall of 1998, the Oregon Water Resources Department acknowledged that virtually all groundwater in the Deschutes River basin discharges to the rivers of the basin. The Water Resources Department may place restrictions on the consumptive use of groundwater to protect the free flowing nature of the Deschutes River, instream water rights and existing water rights. These restrictions may affect the use of groundwater resources for future development and consequently affect the future growth and allocation of population in the County and the three urban jurisdictions.

(Ord. 2003-078 § 1, 2003; Ord. 2003-001 § 1, 2003; Ord. 2000-017 § 1, 2000; Ord. 98-084 § 1, 1998; PL-20, 1979)

23.16.030. Economy.

Equally important in understanding the local area is the economic base of the community. Presently the timber and wood products sector is the major manufacturing employer locally, with 2,720 employees as of March 1978. However, major changes may be expected during the 20-year planning period and the overall result is difficult to assess. It does appear that conversion to processing smaller trees and maintenance of the allowable cut will permit some growth in employment but overall timber and wood products will probably play a proportionally smaller role in the County's future economy. In fact, total manufacturing is presently decreasing in importance locally. How much decrease this ultimately will amount to is difficult to predict. Regionally and nationally the economy is shifting to a more service and trade-oriented status. Given the emphasis on promoting manufacturing in Redmond and to a lesser extent in La Pine and the growing local labor pool, it seems probably that some gains in industrial employment may be expected although as a proportion of the economy some small decline may occur.

One of the strongest segments of the local economy is construction which grew 187.5 per cent between 1970 and 1978. Related to construction is the growth in finance, insurance and real estate employment, up 95.8 per cent during the same period. These industries are directly related to the large in-migration of people occurring in the County.

Tourism is also a significant factor locally, as is reflected in the strong growth (up 107.3 per cent) taking place in the services sector of the economy. Some of this growth is likely to be related to population growth and a national trend to more services. Unfortunately, service jobs tend to be somewhat lower paying and more seasonal than some other types of employment. However, the City of Sisters has chosen to base its economy almost solely on tourism. And tourism locally is a less seasonable economy which seems to provide many jobs for the young and second incomes for families.

Wholesale and retail trade has also witnessed rapid growth, up 96.9 per cent, and is probably tied to a burgeoning population and a growing importance for Bend as a regional shopping center. Agriculture, once a major factor in the local economy, has continued to decline. Only livestock areas and some of the better cropland areas, which have remained largely undivided, have continued to produce significant amounts of agricultural products. Many small farms exist in the County, but their agricultural production is largely subsidized by off-farm employment. The definition of marginal farmland and how much is marginal is a major issue in this area.

It appears Deschutes County is shifting from a rural economy to one more characteristic of a growing urban area. Growth in trade and services seems likely to continue with a growing interest in manufacturing employment, presently not evident, probable once an adequate pool of labor exists.

Unemployment has consistently been higher in Deschutes County for many years. To some extent, this situation is related to the seasonable fluctuations of such industries as tourism, logging and agriculture. Most recently, the major reason is probably the rapid influx of new residents. Many of these people are young skilled individuals who have moved here for the higher quality of life available locally and are willing to accept jobs for which they are over-qualified or to create their own employment. Given the rapid influx of people, which likely hides a large out-migration of people unable to find adequate employment (in-migration is still faster than the out-migration so the population increases), it is perhaps surprising the economy has accommodated so many.

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.16.040. Housing.

Nineteen seventy-seven housing data indicate Deschutes County residents build more single family units (62.5 per cent of all new dwelling unit permits versus a State average of 55.32 per cent), buy more mobile homes (20.4 per cent versus 15.92 per cent), and construct fewer multiple family units (17.1 per cent versus 28.75 per cent) than is characteristic Statewide. These findings appear to be consistent with the earlier

population information. The low vacancy rates found locally, for single-family dwellings and multiple family units, are indicative of the rapid growth locally. One aspect of the local housing situation that is difficult to determine is the effect of seasonal housing on local housing demand. Surveys indicate about 10 per cent of the local housing stock is used as seasonal housing and is, therefore, generally unavailable to meet the need of local residents. This is a factor which must be remembered when assessing how much land needs to be set aside for housing construction.

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.16.050. Land use.

One of the most obvious results of growing County population has been the sprawling residential development that has spread rapidly over much of western Deschutes County. This has caused the loss of valuable agricultural and forestland and accentuated the need for expensive public services. Recreational and rural tract lots in the County in 1979 accounted for 58 percent of the total lots. Interestingly, of these lots, 17,377 were found to be undeveloped.

It appears the County presently has enough available empty lots to more than serve the needs of the anticipated new rural residents.

In the La Pine area, recreational subdivisions once seen as a boon to the County taxpayer have slowly been changing to more permanent occupancies that demand schools, buses, sheriff and fire patrol, as well as a variety of other expensive services that must be delivered over a large area.

Historic structures and sites, so important to the preservation of the County's history and the education of the community, have been lost to the dictates of unregulated change.

Strip commercial development has continued to stretch out from the urban areas along the highways, often obliterating scenic views and natural lands while promoting inefficient energy consumption and traffic patterns.

Rural Service Centers have not been used as originally intended. Often the land uses constructed have little or nothing to do with the servicing of the rural population, but instead are just further examples of the spread of commercial uses along the highways or the use of loopholes to avoid planned development (i.e., Deschutes Junction).

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.16.060. Public facilities.

As has been mentioned previously, the sprawling pattern of development which has been characteristic locally has resulted in extensions of increasingly expensive public services. Further, growth has been so rapid that even in urban areas services have lagged behind the population growth, although not so seriously as in La Pine. Occasionally, the lack of services has even created the potential for serious problems, such as the lack of sheriff's protection in La Pine and the use of irrigation water for drinking in the Bend-Tumalo areas.

Many people have expressed concern over rising tax rates and the possibility that they are subsidizing those areas of the County they would like to see left open and unchanged.

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.16.070. Transportation.

In Deschutes County, as is typical of rural areas, the primary mode of transportation is the private automobile. In fact, this area's love of outdoor activities and sprawled development seems to have resulted

in a higher rate of vehicular ownership than is characteristic Statewide. Certainly these attitudes and conditions are much of the reason mass transit has been so unsuccessful locally.
(Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.16.080. Other.

Concern has been expressed over the loss of wildlife habitat, such as the subdivision of deer winter ranges and the blockage of deer migration corridors in the La Pine area. The Oregon Fish and Wildlife Department has been outspoken in its concern and has, upon occasion, sued to protect the dwindling habitat.

Problems with water quality have been found to exist in La Pine and septic tanks have failed in Terrebonne. Increasingly the major environmental damage has been the loss of scenic vistas and sensitive environment areas along highways, rivers and other areas where development has occurred. Often the resources lost have been irreplaceable locally.

Fortunately, Deschutes County still has many scenic and natural resources available. Public ownership constitutes over 78 per cent of the land in the County. Proper management of both public and private lands can assure the area's primary resource--its natural beauty and diversity--is maintained for future residents.

Energy usage has been growing dramatically in Deschutes County, not only because of the population growth but also due to the low-density sprawled-out pattern, construction of energy consumptive commercial uses and a general unconcern about energy by many citizens. Interestingly, the heavy use of wood heat locally does seem to have saved a significant amount of electrical energy. Problems with coordinating activities and regulations between the various Federal, State and local agencies have often created unnecessary delays and expenses. Often this has been expressed in comments about comments about lax enforcement of local ordinances are being received. While improvement has been noted, much more will be necessary for the coordinated and productive management of public resources and services locally, particularly if growth and change continue to occur at a pace as rapid as it is now.

This brief summary of conditions, trends and local issues is not meant to be all-encompassing, but it does include the major characteristics and trends of concern in the preparation of this plan. Deschutes County has available tremendous environmental and human resources but it also suffers from many of the problems common to areas with rapid rates of growth. The scenic and environmental qualities that first attracted people will be needed in the future as well.

However, not all of the results of growth are bad. Increasing population has brought new businesses and services to the area. Educational and cultural opportunities have improved significantly. Employment alternatives have increased, as have wages. And, a lot of new people have been able to improve their quality of life. Growth and change is a mixed blessing. The purpose of this plan is to address the issues and provide the best available development alternative for this County's people. Given the complexity of local issues and the importance of the task, it is not surprising that the preparation of this plan has been a controversial and lengthy process.

(Ord. 2000-017 § 1, 2000; PL-20, 1979)

Chapter 23.20. COMPREHENSIVE PLANNING PROCESS

23.20.010. Planning organization.

23.20.020. Comprehensive planning process.

23.20.030. Alternatives.

23.20.040. Goals and policies.

23.20.010. Planning organization.

In order to actually prepare a comprehensive plan, it is necessary to develop an organizational network which outlines tasks and assigns responsibilities within the bounds set by the available time and the applicable State laws. Deschutes County chose to develop an organization that relied upon citizen involvement and initiative to complete the necessary plan.

Citizen involvement in land use planning has been mandatory statewide since 1973. Senate Bill 100 (ORD 197.160) required each County-governing body to submit a program for citizen involvement in preparing, adopting and revising comprehensive plans within each County. Each program must at least contain provision for a citizen advisory committee broadly representative of geographic areas and interest relating to land use. All jurisdictions must develop, publicize and adopt a program appropriate to the local level of planning and containing the following:

- A. Provision for widespread citizen involvement;
- B. Assurance of effective two-way communication with citizens;
- C. Provision of opportunities for citizens to be involved in all phases of the planning process;
- D. Assurance that technical information is available in an understandable form;
- E. Assurance that citizens will receive a response from policy makers;
- F. Assurance that there will be funding for the citizen involvement process.

Further, the law requires that Federal, State and local agencies, as well as special districts, coordinate their planning efforts and make use of existing citizen involvement programs.

In Deschutes County, citizen participation in planning has occurred since 1968 but with the advent of the LCDC goals and the project of updating the Deschutes County Comprehensive Plan, the citizen involvement program experienced a dramatic expansion.

The planning process followed in the plan preparation was largely based upon citizens' participation, agency involvement and both local and outside professional analysis to assure consistency with the LCDC goals and good planning.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.20.020. Comprehensive planning process.

The program began with a well-publicized educational meeting at the local college to acquaint Deschutes County residents with citizen involvement in land use planning and the upcoming opportunities for participation. One hundred and fifty persons attended to view a slide show on the goals, hear an explanation of the program, fill out an attitude survey (later compiled by college students) and receive several handouts. For a month thereafter, people volunteered for advisory committee membership and were accepted without restrictions.

The Board of County Commissioners, acting as the committee to evaluate the citizen involvement program, appointed 17 technical and area advisory committees and an Overall Citizens Advisory Committee with a total of 326 officially appointed members. Up to 300 additional persons also were indirectly involved.

The technical committee functioned as a panel of experts (often including Federal, State, local and district agency personnel) and interested citizens. These committees covered the following topics: minerals and aggregates, agriculture, forest lands, fish and wildlife, historic and cultural, economy, transportation, public facilities and services, recreation, housing and energy. Each committee was given a general work program to collect information, identify needs and problems and prepare justified recommendations. Committees met two to four times per month and 10 to 20 times totally. Each group prepared a detailed and factual preliminary report which was then submitted to the Overall Citizens Advisory Committee (OCAC) for comment. Revisions to each report were made and submitted as a final report to the OCAC and Planning staff. The initially weak database as well as the demanding time schedule for plan completion were handicaps the committee had to overcome. Their detailed reports were used word for word in the preparation of the resource element and preliminary plan.

The area committees involved interested citizens from the three major rural service center areas: La Pine, Terrebonne and Tumalo. An attempt was also made to form a Sunriver committee but little interest was expressed by residents of that area. The committees addressed each of the LCDC goals and developed a list of programs, needs and directions for future community growth. Their reports were reviewed by the OCAC in the same manner as the technical reports and eventually used in the preparation of the preliminary plan.

There were also three urban area advisory committees appointed to work with each city's planning staff in order to prepare urban area plans for each city and its surrounding urbanizing area. While the Bend Urban Area Plan was largely completed by the time the OCAC was formed, the Redmond and Sisters planner periodically reported to the Overall Citizens Advisory Committee to assure communication and coordination.

The Overall Citizens Advisory Committee was the largest committee and the one most broadly representative of the various interests and areas of the County. Their primary function was to resolve conflicts between the recommendations of the various committees. In addition, they also reviewed the recommendations to assure they met the State's goals and guidelines. The OCAC also initiated many of the recommendations regarding development in urbanizing and rural areas of the County, thereby tying together the various elements of the plan. It was their direction to the staff which served as the basis for the preliminary plan.

In this period the County Planning staff also wrote several reports to provide information to the OCAC. These papers covered geology, geomorphology, soils, areas of special interest, climate, hydrology, history and population. The OCAC also considered this information in its deliberations.

During this citizens' committee stage of the process, over 200 meetings were held and in excess of over 10,000 hours of time were spent by volunteers working on the plan. More than 5,000 newsletters were mailed to interested citizens and thousands of letters, mailings, posters and flyers were also distributed. Radio, television and newspaper coverage was extensive. The largest local newspaper printed an explanatory article on each of the committees' and staff's reports. This was to insure that everyone whether involved directly in the process or not, was kept up to date as to where the plan was heading.

Once in the preliminary plan stage, the document was brought to the County Planning Commission for review. A newspaper supplement describing the major elements of the plan was placed in the major newspaper in Deschutes County and the local news media were very cooperative in disseminating information about the plan. The Planning staff also spoke to various groups in the community. Copies of

the plan were placed in local libraries and made available to everyone interested. The Planning Commission held a number hearings on the preliminary plan and then provided a services of recommendations to the Board of County Commissioners.

The County Commissioners also held hearings on the plan. These hearings seemed to be emotion-packed events which generated large turnouts and spirited testimony. Using the public testimony (both written and verbal) and the recommendations of the Planning Commission and staff, the Board compiled a working draft of the Comprehensive Plan. This working draft was then sent out to outside legal and planning consultants for review and comment. Earlier, the preliminary plan had been given to an outside reviewer to determine the adequacy of the energy elements of the plan. All these reports were then delivered to the Board of County Commissioners. Their determination was that the Planning staff should take some additional time to use these studies to improve the plan where necessary. This new draft was then taken to the Overall Citizens Advisory Committee and Planning Commission for comment, before the Board took any final action. The Board also determined that an additional public hearing would be held to hear testimony on planned exceptions to be taken to the agricultural and forest land goals of the State Land Conservation and Development Commission. The use of such an extensive citizen involvement program, as well as the utilization of specific professional assistance, was a complex but extremely useful combination. The preparation of the plan was not only speeded but the quality of the overall document was significantly improved. It is expected that this will produce a document that will effectively serve as a basis upon which to build a bright future for the people of Deschutes County.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.20.030. Alternatives.

A. Introduction.

Choosing a course into the future is a difficult task. To help in making adequate decisions, it is often most desirable to consider a number of alternatives. In the preparation of the Deschutes County Plan, a number of different options were considered at several levels. First, each of the citizen advisory committees reviewed and discussed a variety of different policies, each with varying impacts, and chose the recommendations most likely to achieve the desired result. After their deliberations, the policies were sent on to the Overall Citizens' Advisory Committee, where decisions had to be made about tying the various elements of the plan together into a cohesive document. To do that it was necessary for the membership to determine a consistent philosophy and direction for development in Deschutes County.

B. Population and housing projections.

This subsection, and the following Table 1, represents the population forecast adopted with the Comprehensive Plan in 1979. The initial decision which had to be reached was which population projection to use in preparing for the future. The Center for Population Research and Census at Portland University had prepared a population estimate indicating Deschutes County would grow at an approximate rate of 2.8 per cent annually. A study by the Economic CAC indicated the present growth rate (1970-77) was 6.3 per cent annually. The committees felt that CPRC's estimate was too far off and should not be used but that use of the present growth rate would certainly exceed the actual growth because of economic fluctuations and a declining percentage gain near the end of the planning period (Planning Period = present to the year 2000). The preferred alternative was one, which would use the 4.5 per cent annual growth rate to yield 128,200 people in Deschutes County by the year 2000. Section 23.16.020, Population, of the Comprehensive Plan includes the updated population forecast for 2000 to 2025.

**TABLE 1
DESCHUTES COUNTY
POPULATION PROJECTIONS (1979)**

	PSU 2.8%	PRESENT RATE	PREFERRED ALTERNATIVES
1980	50,500	56,324	53,400
1985	56,700	76,298	66,600
1990	60,700	103,557	82,900
1995	63,900	140,554	103,400
2000	65,700	190,770	128,200

Recognizing the need for a single target population and in light of the Economic ACA's research and expertise the 4.5 per cent annual growth was chosen as the "best guess" option and the one to be used in the preparation of comprehensive plans in Deschutes County. Ultimately, this was to result in allocations of population to different parts of the County with the Bend Urban Area receiving 84,000, the Redmond Urban Area obtaining 23,093, the Sisters Urban Area having 2,135, and the remainder of the County getting 18,972. Once the population figure was chosen, it was possible to determine housing needs to the year 2000 by making some assumptions about household size and rehabilitation.

**TABLE 2
NEW HOUSING UNITS (1979)**

1980	3,181
1985	6,339
1990	7,740
1995	9,669
2000	11,753
	38,682

The question still remaining was how to allocate this new population and housing throughout the County. Several different alternatives were directly and indirectly discussed by members of the OCAC.

Underlying all of the alternatives were a number of basic assumptions:

1. LCDC will require some protection and coordination.
2. Energy will become increasingly expensive and relatively more scarce.
3. Much of the area's growth is tied to amenities.
4. Federal agencies will continue to use their lands for multiple public uses.

C. Alternative One - Current Trends.

1. Land Uses: Continue with the present trends without modification of the dispersed housing pattern that was developing in Deschutes County. Anticipate that most people would live in the urban areas but that many would choose to scatter throughout rural areas. Recognize that much of the agricultural and forest lands of the County would be lost or replaced by hobby farms. And expect a less than stringent enforcement of regulations to protect unique historic and environmental areas. Environmental: Anticipate the loss of additional scenic and natural amenities. Recognize that the deer winter ranges would almost certainly be developed and the wildlife lost. And prepare for increasing problems with air and water quality.
2. Social and Economic: Continue the strong economic growth of the area, particularly in the service, trade and construction industries. Expect more cultural amenities. Anticipate increasing social problems such as crime.

3. Public Services and Facilities: Expect to see an expanding road system and a growing demand for other public services. Recognize that these services will continue to lag behind demand and taxes are rising rapidly to provide the necessary services. Other: While there will be some improvement in land use controls and increasing cities and County cooperation there is likely to be continued State review and occasional intervention. Ultimately, population increase is expected to decline as the environmental amenities of the area decline.

D. Alternative Two – Unrestricted Development.

1. Land Uses: Greater amount of urban sprawl from all growth centers; in addition rural sprawl also occurs in the vicinity of the Rural Service Centers as they rapidly develop. Some protection is given the most dramatic and publicly supported historic and environmental sites. Agriculture ceases to exist as pollution problems in parts of the County ultimately requiring some areas to be mandated to install expensive sewer and water facilities. The growing development on private lands interspersed within the public lands severely reduce the beauty and usefulness of the public lands.
2. Social and Economic: Continued high employment, particularly in construction, for the next 10 to 15 years with the development ultimately resulting in a loss of amenities which sharply reduce unemployment in the non-manufacturing industries. Cultural amenities increase in conjunction with the population, but there are serious social dislocations resulting from the inequitable tax burdens created by the growth and loss of esthetics.
3. Public Facilities and Services: Serious problems with providing adequate services, resulting in higher taxes and public dissatisfaction. Recreation demands continue to grow and demand expands rapidly as the formerly available outdoor areas become lost to development. Finally an expensive mass transit system must be constructed to bring people into the urban centers as the gasoline prices continue to climb. Other: Energy costs locally continue to increase finally leading some people to begin leaving. There is little effective coordination or local authority to control unnecessary subdivision and construction. Increasingly, the State intercedes in Deschutes County to assure State interests and people's lives and safety are protected.

E. Alternative Three – Strict Growth Controls.

1. Land Uses: No further residential, commercial or industrial construction is permitted in rural areas and ultimately the rural population begins to decline. Urban areas grow rapidly but the restrictiveness of the regulations result in a slower growth rate. Historic and environmental sites receive strict protection. Increasingly, apartments and higher densities are common.
2. Social and Economic: Housing and land costs rise rapidly because of the relative shortage of buildable land. Lower and middle-income families find themselves effectively excluded from the community. Cultural amenities rise. Employment suffers to some extent and much of the higher paying construction jobs are replaced by lower paying service employment. This situation leads to considerable social and economic dissatisfaction.
3. Public Facilities and Services: Few new roads are constructed and an emphasis on alternative transportation methods provides effective local people and freight movement. Public facilities, such as sewer and water, catch up and keep pace but may be somewhat more expensive than otherwise due to the reduced tax base.
4. Environmental: Pollution levels rise only slightly and the natural amenities are protected. Public lands receive heavy use but are protected from the more serious effects of development.
5. Other: Energy costs are down. There is considerable upheaval over government regulations, such as zoning and environmental controls, as well as mandated local government coordination.

F. Alternative Four – Chosen Alternative.

After considering the various alternatives available, the citizens chose a compromise between current trends and strict growth control, the emphasis to be on restricting sprawl and protecting resources while accommodating the new population in adequately large urban boundaries and Rural Service Centers.

1. Land Uses: Major growth occurs in urban areas as the County continues its shift from a rural to urban area. Rural development is largely restricted to rural service centers and on existing rural lots. An active housing program seeks to offset the costs created by the regulations. Some hobby farming occurs and the existing agriculture and forest areas are protected.
2. Social and Economic: Taxes increase but not so rapidly as in the other alternatives because a more efficient growth pattern exists as does a growing tax base. Jobs continue to increase with some shift from construction to services, and growth in manufacturing, but not as rapidly as the commercial sector. Cultural amenities continue to increase.
3. Public Facilities and Services: Few new roads are constructed and a greater emphasis on transit alternatives reduces automobile use. Energy costs rise but within the capabilities of the area's residents. Most public facilities catch up with the growth and provide adequate services.
4. Environmental: Wildlife and vegetative areas particularly vulnerable to damage are protected from excessive development. Pollution increases are small. Public lands continue to be adequate to meet the demand. There is some loss of visual amenities but it is minimal.
5. Other: Continuing controversy over how much control to use but general acceptance of local ordinances and little State intervention. Coordination is mandated and controls are strict but oriented to achieving a specified result rather than being a routine and/or arbitrary mechanism.

The process by which the final alternative was chosen was not a smooth one. Many meetings were required and the alternatives are certainly more clearly identified here than was true during their discussion by the committees. Yet, as the process continued, it became increasingly clear that the people wanted to see growth guided but not stopped, except where development was proceeding too rapidly and needed to be slowed, or where important natural or cultural resources needed to be protected. They were convinced that the inefficient sprawled pattern of development must be curtailed in a way to restrict additional subdivision while permitting existing development to be utilized. To do that, the philosophy of Alternative Four was used to develop the goals and policies that are contained within this plan.

(Ord. 2004-012 § 2, 2004; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.20.040. Goals and policies.

A. Introduction.

The alternative chosen for growth in Deschutes County was one which emphasized accommodating the anticipated growth of the area primarily in the urban areas, with some rural development taking place in the Rural Service Centers and in existing subdivisions. This new pattern would then provide much greater efficiency in the provision of public services and foster savings in energy, particularly in transportation. The development pattern would also protect scarce resources, while permitting compatible improvements.

B. Rural development.

DCC 23.20.040(B), Rural Development, serves as the basis for the rest of the plan. Basic guidelines to do away with the former inefficient development pattern and to accommodate the anticipated 7,050 new rural residents are contained in DCC 23.20. Emphasis is placed on maintaining the existing rural character of the County, while acknowledging that Deschutes County is becoming more urban, by concentrating new rural development in the Rural Service Centers. In that way people desiring a rural lifestyle may do so without unduly increasing the costs to others or utilizing resource lands. The only exception to this rural pattern is in the La Pine area where emphasis is laid on the incorporation of the community and improvements in local services provided. The La Pine rural area is also likely to receive many of the over 3,000 new rural homes which will be built, because so many lots already exist in that area.

C. Urbanization.

Urbanization links this plan to those of the three incorporated communities. DCC Chapter 23.20 provides parameters for the establishment and expansion of the urban boundaries and provides common guidelines to the cities to help them accommodate the 71,450 new residents that will need over 35,600 homes and 29,000, perhaps as high as 35,000, new jobs. Sufficient land must be allocated and managed to serve these new local citizens.

D. Economy.

The Economy chapter discusses the need to protect our existing timber, agriculture, mining and scenic resources for our future prosperity. It also provides policies to help Deschutes County in its metamorphosis from a rural resource economy to a more commercial/industrial orientation as an urban center, perhaps providing between 7,700 and 16,000 new manufacturing jobs and 27,000 to 32,000 new non-manufacturing positions.

E. Housing.

Housing emphasizes the need for flexibility in housing styles and costs so as to provide adequate homes for all segments of the community. Also fostered are programs to help rehabilitate existing homes and to accommodate low and moderate-income families through government programs and efforts to reduce development costs.

F. Transportation.

The Transportation chapter seeks to aid movement to and between the communities, and to improve the ability of the communities to efficiently deal with the new residential, commercial and industrial uses which are anticipated. Greater public safety is promoted, as is preparation of a shift from automobile dependence to public transit and other transportation alternatives.

G. Public facilities and services.

To accommodate existing and anticipated populations and land uses the Public Facilities and Services chapter provides basic guidelines for the construction of new facilities, while again fostering urban rather than rural development.

H. Recreation.

Recreation seeks to accommodate both the growing local population and the tourist industry. New facilities and cooperative plans are identified and, while the county seeks to provide primarily a facilitator function, greater commitment to recreation and associated activities is made.

I. Energy.

The Energy chapter emphasizes more local independence in providing energy, protection of future energy resources and better coordination with energy providers. Information and education about energy and local opportunities are stressed. As the population continues to grow and because of the importance of tourism, energy will play an ever more dominant role in local planning efforts. These policies seek to emphasize the need for greater efficiency in development patterns and construction, while surveying our available future options.

J. Natural hazards.

The Natural Hazards chapter seeks to guide development away from identified hazards, such as wildfire, while making use of areas that need to be protected from development for other useful purposes. The protection of the 100-year flood plain is an example of an area where development shall be prohibited but wildlife and recreation opportunities will be fostered.

K. Agriculture.

One of the more controversial resource chapters has been Agriculture. The policies in this plan seek to protect identified agricultural areas, while recognizing that marginal agricultural conditions are present in some areas. Some hobby farming is permitted in the more marginal areas so as to increase agricultural productivity, while a program to research local marginal lands and to determine how they may be utilized while agricultural production is preserved, is mandated for future updates of the plan.

L. Forest lands.

Forest Land seeks to protect existing areas with timber capability, while permitting compatible development on non-productive lands that will foster other aspects of the local economy. The loss of much of La Pine to development is recognized (see Exceptions Statement) but in those areas where larger lots exist, small woodlot management is encouraged and commercial timber is protected where it remains feasible (primarily the national forest and on timber company ownerships).

M. Open spaces.

The local economy and environment is very dependent on the protection of this County's scenic and natural areas. Because of that, the Open Spaces chapter identifies the policies required to protect those resources for the area's tourism, recreation and quality of life needs, while recognizing the appropriateness of flexibility when dealing with individual property owners.

N. Surface mining.

The Surface Mining chapter seeks to preserve known mining resource sites for ultimate mining activity and to permit mining as it is needed in the County. There is also recognition of the County's responsibility to protect adjoining residents (safety and health hazards) and the general public (excessive construction costs and hazards created by a shortage of building materials as well as loss of scenic qualities and pollution).

O. Fish and wildlife.

Fish and Wildlife seeks to balance the wildlife needs of the area against the requirements of a growing population. The important economic and lifestyle qualities are recognized and irreplaceable wildlife areas protected, while precautions that permit limited development are identified.

P. Historic and cultural.

One of the most non-controversial chapters is Historic and Cultural, which seeks to protect the ever dwindling supply of historic and cultural sites, protection that will have important economic and social benefits for a community growing as is Deschutes County presently.

Q. Water resources.

Water is the resource without which there will be no future growth in Deschutes County. Preservation of existing water quality and greater efficiency in delivering available water supplies is being sought. The new and existing residents will need all that is presently identified. Agriculture, new employment opportunities and maintenance of the tourism/ recreation industry all require water. This plan seeks to improve coordination and planning for that water's use.

R. Citizen involvement.

DCC 23.20.040(R) of this plan is Citizen Involvement. Planning is a dynamic process and one that does not stop with the adoption of a plan. More study to keep the plan functional and up-to-date will be required. The County's efforts will continue to be aimed at involving the public, in meaningful ways, with the preparation of future plans and studies. There is also an emphasis on explaining planning, its purposes and techniques, so that it will be better understood and more usable by County residents.

S. Plan policies.

The plan policies must be read as a whole, as the County will grow as a single unit, not sixteen separate pieces or aspects. Taken together these policies point the direction for the County's future, a future full of change but one full of promise as well.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

Chapter 23.24 RURAL DEVELOPMENT

- 23.24.010. Rural Development.**
- 23.24.020. Goals.**
- 23.24.030. Policies.**

23.24.010. Rural development.

The primary duty of this comprehensive plan is to guide growth and development in the rural areas of Deschutes County. The Urbanization chapter discusses urban area growth, but the primary plans for the County's major communities are the three urban area plans. The Deschutes County Comprehensive Plan is focused upon the changes that will be taking place outside the urban growth boundaries. This chapter is meant to tie together the various more specific chapters that deal with resource and growth management so that an integrated plan for the development of the County may be obtained.

Being the fastest growing County in Oregon has meant many changes for Deschutes County. Some of the changes, such as improved social, cultural and economic opportunities, are seen as beneficial. Others, such as traffic congestion, loss of scenic views, and rising taxes to pay for public services, are changes most people would like to do without.

Recent years have witnessed Countywide growth occurring at about 6.3 per cent annually. The present population of Deschutes County is estimated at 49,700. Growth is expected to continue at a slower rate (4.5 per cent annually) to the year 2000. By that time, the County will likely have about 128,200 residents. Of that number, 84,000 will be in the Bend Urban Area; another 23,093 will be in and around Redmond; 2,135 are expected for Sisters; and La Pine will have incorporated and reached an urban area population of 3,620. That leaves a rural population of 15,350 people, up from an estimated 8,300 presently.

To accommodate the new rural population will require 3,039 lots (assumes 2.32 persons per household). There were available in Deschutes County, as of January 1, 1979, 17,377 undeveloped rural tract and recreational lots. It appears that Countywide there is in excess of 14,000 lots beyond the public housing needs until the year 2000. That does not preclude the possibility of certain areas needing new lots, since the vast majority of those existing lots are in the La Pine area, but it does indicate the County must give serious review before approving any further rural development.

Much of the development that has occurred locally has been the standard parcelization of land into small (less than 10 acres) lots. This dispersed pattern is often the most costly to serve; the most wasteful of energy, land and resources; the least esthetic; and the most destructive to rural character. Planned Developments, such as Indian Ford Planned Development, often provide a more efficient and beneficial manner in which to serve the public demand for rural recreational or residential experience. Destination resorts, such as Black Butte Ranch and dude ranches, have been found locally to be economically and socially desirable land uses, when located and developed consistent with the capabilities of the land and the abilities of various public and private agencies to serve that area.

Recreational subdivision was originally seen as a benefit to the County as the non-resident landowners would be contributing to the County tax base. This probably resulted in areas like La Pine subsidizing other portions of the County. Now the recreation subdivisions are filling up with retirees and younger people seeking less expensive building lots. The result is a call for more services in areas far from existing service facilities and in subdivisions where roads and other improvements were meant only for seasonal and limited use. As demand continues to grow, to provide adequate service levels it will be necessary for other areas to subsidize the recreational areas for many years. Studies by Oregon State University indicate that Deschutes County is likely faced with such a situation presently.

The County has witnessed losses of agricultural, forest and other resource lands, as well as seen the expense and esthetic losses created by urban sprawl. Studies such as “The Costs of Sprawl” have emphasized the greater efficiencies that can be obtained by a more condensed and planned development pattern. When these factors were combined with State requirements to contain development in urban areas, there was no question to the Overall CAC that the updated comprehensive plan would have to address the issue of containing urban sprawl and protecting the rural character of the County.

The predominant rural land uses in the County are open spaces, pasture and limited crop production, livestock production, natural resource utilization and wildlife cover. There is also residential use and some commercial and industrial activity in the rural service centers. Unfortunately, the unrestrictive zoning permitted in the rural service centers has allowed incompatible adjacent land uses and not resulted in providing the needed services for the surrounding rural areas. In the case of Deschutes Junction this result is combined with another factor in that Bend's urban sprawl is augmented by development at the junction.

Interestingly, the residents of the rural service centers, except for La Pine, have expressed concern that higher levels of development in their locales would be incompatible with the existing rural nature of the area. They agree that there is a need for limited and controlled growth, but that the rural character of the community must be maintained.

To guide development into appropriate patterns the following goals have been prepared.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

23.24.020. Goals.

- A. To preserve and enhance the open spaces, rural character, scenic values and natural resources of the County.
- B. To guide the location and design of rural development so as to minimize the public costs of facilities and services, to avoid unnecessary expansion of service boundaries, and to preserve and enhance the safety and viability of rural land uses.
- C. To provide for the possible long-term expansion of urban areas while protecting the distinction between urban (urbanizing) land and rural lands.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

23.24.030. Policies.

The policies needed to accomplish the identified goals were largely developed by the Overall CAC during its deliberations on the preliminary plan. It was obvious that some policies were needed to pull the various resource and management chapters together and to fill in some gaps so that an integrated and cohesive plan was available.

Rural Development policies are meant to pertain to all non- urban areas (areas outside urban growth boundaries) and are the basic policies to be followed in guiding rural growth. Specific resource or management policies from other chapters shall augment these policies so that the plan must be viewed as an integrated whole rather than a series of individual chapters.

- **Residential/recreational development.**

- 1. Because 91 percent of the new County population will live inside an urban area, with only 3,039 new rural lots required, and in light of the 17,377 undeveloped rural tracts and lots as well as the energy, environmental and public service costs, all future rural development will be stringently reviewed for public need before approval. As a guideline for review if a study of existing lots within three miles of the proposed development indicates approximately 50 per cent or more of

those lots have not had structures constructed thereon, then the developer shall submit adequate testimony justifying additional lots in that area. This will permit development in areas where such is needed (other policies considering energy, public facilities, safety and other development aspects shall also be considered) while restricting future division in areas where many undeveloped lots already exist.

2. To further restrict subdivision outside urban areas the minimum parcel size shall be 10 acres, except where other policies supercede this minimum (see Unincorporated Communities, Rural Service Centers, Agriculture and Forest Lands).
3. Cluster or planned development offers significant savings to the developer because of reduced roadway, utility and construction costs. Public costs to serve cluster developments are also usually lower. Therefore, to encourage cluster and planned developments, rather than parcelization, the county shall permit smaller lot sizes and the continued use of special lot size requirements in cluster and planned developments in rural residential exception areas.
4. Cluster and planned developments shall maintain a minimum of 65 per cent of the land in open space, forest or agricultural uses compatible with the surrounding area and the development area. The open space of the development may be platted as a separate parcel or in common ownership of some or all of the clustered units; however, the open area shall not be subject to development unless the whole development is brought inside an urban growth boundary. Also, service connections shall be the minimum length necessary and underground where feasible. Roads may be private roads and shall meet County standards.
5. Destination resorts are important elements of the local economy. These developments shall not be permitted in exclusive farm use districts except in EFU-20 and EFU-40 zones pursuant to the County's Destination Resort Siting Map and Destination Resort Siting Combining Zone and in forest districts only in the F-2 zone pursuant to the County's Destination Resort Siting Combining Zone. They may be allowed in the County's rural areas if compatible with the environmental capabilities of the site, near existing transportation and utility facilities, consistent with the rural character of the area, and unlikely to create undue public service burdens.
6. Other than as outlined in Policy 5 and the Goals and Policies set forth for Destination Resorts, no further recreational (seasonal) subdivision will be approved in rural areas.
7. Parcels legally existing at the time of this plan's adoption shall continue to function as legal lots and will not be unduly affected by the new lot size.

- **Commercial and industrial development.**

8. Within one mile of acknowledged urban growth boundaries, use of the planned or cluster development concepts shall permit development in Multiple Use Agriculture or Rural Residential zones (not under a combining zone which would prevent such) with a minimum lot size or equivalent density of one unit per five acres.
9. Temporary on-site processing and storage of either mineral and aggregate materials or agricultural products shall be permitted as appropriate, in order to support the continued productivity of the County's natural resources.
10. Certain industrial uses, such as research and development facilities (requiring quiet and open surroundings) and manufacturers of hazardous materials (requiring long distances between the plant and neighbors) are more suitably located in rural areas. The County shall consider making provision for such uses as the need is found to exist (see Tumalo).
11. Certain industrial uses, such as research and development facilities (requiring quiet and open surroundings), wrecking or salvage yards and manufacturers of hazardous materials (requiring long distances between the plant and neighbors) are more suitably located in rural areas. The County shall consider making provision for such uses as the need is found to exist (see Tumalo).
 - a. To ensure that the uses in the Rural Industrial zone on tax lot 16-12-26C-301 are limited in nature and scope, the Rural Industrial zoning on the subject parcel shall be subject to a

Limited Use Combining Zone, which will limit the uses to storage, crushing, processing, sale and distribution of pumice.

12. Because large scale recreation facilities cannot normally be accommodated in urban areas, uses such as motor cross tracks, rodeo grounds and livestock arenas shall be conditional uses which may be approved in rural areas adjacent to existing highways and other public facilities.

- **Other.**

13. Construction on open lands shall be in a manner least intrusive to the aesthetic and natural character of those lands and neighboring lands (fences and access roads shall not be considered structures).
14. Because there have been problems in obtaining community centers in some areas, centers approved on the original subdivision plat or development plan shall be permitted uses in rural residential zones.
15. Due to the more dispersed pattern of dwellings in rural areas the notice requirement area for public hearings on quasi-judicial land use actions shall be larger than in urban areas.
16. More effective dog control program should be considered by the County to counter existing problems.
17. Pre-existing status shall be granted to subdivisions and partitions with at least preliminary approval and buildings with at least an issued building permit at the time of plan adoption by the Board of County Commissioners.
18. All development in Deschutes County shall comply with all applicable state and federal rules, regulations and standards.

(Ord. 2004-023 § 1, 2004, Ord. 2002-001 § 2, 2002, Ord. 2002-005 § 1, 2002, Ord 2002-001 § 2; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

(Note: Pursuant to Exhibit “A” of this Ordinance this section of text has been moved to DCC 23.40.010 with text amended pursuant to Exhibit “D” of this Ordinance.)

Chapter 23.28 TERREBONNE RURAL COMMUNITY

23.28.010. Terrebonne Rural Community.

23.28.020. Maps.

23.28.010. Terrebonne Rural Community.

A. General background.

1. Historical background. Terrebonne is located in northeastern Deschutes County, about 6 miles north of Redmond and 22 miles north of Bend. Smith Rock State Park, located on the Crooked River, is about 2.5 miles northeast of Terrebonne.

Located on the Oregon Trunk Railroad, Terrebonne was originally called Hillman, named after James Hill and E. H. Harriman, famed railroad builders. The Terrebonne Rural Community today includes the original Hillman townsite, platted in 1909. As news of the Hillman Plan spread across the United States, people purchased property sight unseen. A few individuals never actually claimed their lots, while others came to find the promises of fertile land were embellished.

One story that persists regarding the original townsite is about a developer who reportedly sold the same lots to several different buyers and that some of the lots were not buildable. When disgruntled buyers caught up with him, he was run out of town. As news of this land fraud spread across the country, the residents of Hillman decided to change the name of their townsite, in order to improve its reputation. They held a meeting and selected the name "Terrebonne," which means "good earth."

As the original townsite grew and developed, Hillman/Terrebonne boasted at one time a hotel, a newspaper, a livery stable, two general stores, two barber shops, a bank, a blacksmith shop, a meat market, a realty company, various feed stores, a school, churches and a grange hall.

2. Population and growth.

The 1990 US Census classified Terrebonne as a "designated place" with a reported total population of 1,083 persons. The estimated population growth was about 3 percent annually in 1991-1992. In 1995 the population of Terrebonne Rural Service Center was estimated at 1,250 persons, with 2.57 residents per dwelling. Terrebonne's median household income in 1990 was \$21,029, below the poverty level established by FmHA for rural communities in Oregon. Historical population data for Terrebonne have not been collected. However, Terrebonne Domestic Water District staff have noticed an influx of younger couples with children replacing retirees who have moved out of the area. This type of change creates an increase in population without evidence of growth such as new residential construction. The Terrebonne elementary school is the fastest growing in the Redmond school district.

The rate of future population growth in Terrebonne is difficult to estimate because growth is limited until community sewer facilities allow desired growth to occur. Deschutes County projects a county-wide growth rate of 4.5 percent until the year 2000.

3. Periodic review.

In the fall of 1994, the Land Conservation and Development Commission adopted a new administrative rule, OAR 660-22, Unincorporated Communities. In 1997, as part of periodic review, the county updated the Deschutes County Comprehensive Plan and implementing regulations for the Terrebonne community to comply with the rule. The description and the policies in this section of the plan reflect the outcome of that planning process.

4. Rural Community.

Terrebonne meets the definition of a Rural Community because it is primarily a residential community, which also has a school, churches, a grange hall, a post office and a handful of local businesses that serve the community, the surrounding rural area or persons traveling through the area. The comprehensive plan designates Terrebonne a Rural Community and provides for its growth and development accordingly.

5. Terrebonne Rural Community boundary.

The 1979 Deschutes County Comprehensive Plan designated Terrebonne a Rural Service Center (RSC), a Goal 3 and 4 exception area, comprising 667 acres and 577 tax lots. The 1979 Terrebonne RSC boundary included the Hillman Plat, except that portion east of the Oregon Trunk Railroad tracks. It included the area south of the Hillman Plat known as the Circle "C" Acres subdivision which occupies land west of the highway, east of 19th Street and north of Davidson Way. The 1979 Terrebonne RSC boundary also included the land in the north one-quarter of section 16, T14S, R13E, north of the Hillman Plat.

OAR 660-22-020(3)(a) states that land which has been acknowledged as an exception area and historically considered part of the community may be included in an unincorporated community boundary. As part of periodic review the Terrebonne community boundary has been amended in the following two ways to include a total of 631 acres and 551 tax lots (See Map A1):

- a. The boundary has been expanded to include the portion of the old Hillman Plat east of the railroad tracks. This land has been acknowledged as an exception area and historically considered part of the community.
- b. At the request of Circle "C" residents, the community boundary has been moved to the north, to Odem Avenue to exclude the entire Circle "C" Acres subdivision. This land has been designated Rural Residential Exception Area on the Deschutes County Comprehensive Plan map.

The comprehensive plan designation applied to the land south of Terrebonne Rural Community known as part of the Circle "C" Acres Subdivision bounded on the north by Odem Way, on the south by Davidson Way, on the east by West 19th Street and on the west by Highway 97 has been changed from Rural Service Center to Rural Residential Exception Area.

B. Land Use Planning.

1. Existing land uses.

The predominant land use in Terrebonne is single-family residences, including a manufactured home park with 26 single-family units. Commercial land uses include supermarkets, a gas station, trucking companies, farm equipment sales and service, restaurants, a hardware store, a veterinarian and various other small-scale retail businesses located along Highway 97. There is a grange hall, a post office and an elementary school. There are also several churches. A significant recent development in Terrebonne is a large new supermarket.

Land bordering Terrebonne is zoned Exclusive Farm Use Terrebonne Subzone (EFU-TR), Multiple Use Agriculture (MUA-10 acre minimum lot size), and Rural Residential (RR-10 acre minimum lot size). The Deschutes County Comprehensive Plan designates EFU land for agriculture uses and MUA-10 and RR-10 land for rural residential uses. The EFU land around Terrebonne is employed in a range of small-to large-scale irrigated agricultural uses, while the MUA-10 and RR-10 land is parcelized and developed with rural residences and small-scale agricultural uses.

According to a county land use inventory conducted in 1994, the estimated maximum number of potential new lots in Terrebonne was 1,233, based on the availability of community water service. A land use inventory compiled in 1997 using the County Assessor's data base is shown in Table B1 below.

Table B1: Land Use Inventory – Terrebonne Rural Community

Assessors Property Class	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
Miscellaneous	19	0	19
Commercial	43	35	8
Tract	445	319	126
Farm	16	8	8
Exempt	28	12	16
Total Tax Lots	551	374	177

Zoning District	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
TeC	50	41	9
TeCR	18	11	7
TeR	445	290	155
TeR5	38	32	6
Total Tax Lots	551	374	177

Source: Deschutes County Assessors Database, January 24, 1997 & Deschutes County PW GIS Parcel Basemap, November 15, 1996.

2. Comprehensive Plan Designations.

The Deschutes County Comprehensive Plan for the Terrebonne Rural Community has the following five comprehensive plan designations (See Map B1 and Table B2 and B3 on the next two pages):

- a. Residential. The land designated Residential on the Terrebonne comprehensive plan map includes the highest density area of Terrebonne, corresponding with the boundary of the old Hillman Plat. It is intended to accommodate higher density residential uses, served by community water.
- b. Residential 5 Acre Minimum. The land designated Residential-5 Acre Minimum includes the larger parcels of land in Terrebonne located to the north and south of the Hillman Plat. The Residential-5 Acre Minimum designation is intended to maintain the rural character of the community by retaining large lots where community water is not available.
- c. Commercial. The Commercial plan designation was created to accommodate existing non-conforming commercial uses on the east side of Highway 97 and to in-fill between commercial uses on both sides of 11th Street. The Commercial designation is intended to encourage development of a pedestrian-friendly commercial center on both sides of 11th Street and to discourage highway strip-commercial development.
- d. Commercial Expansion Area. The Commercial Expansion Area designates the only area for future expansion of the Commercial plan designation and Commercial zoning district. The Commercial Expansion Area is intended for future expansion of the Terrebonne commercial center with a connected road network and good pedestrian access, directed away from the highway to discourage highway strip-commercial development.
- e. Commercial-Rural. The Commercial-Rural plan designation was created to accommodate existing non-conforming, small-scale, low-impact truck and heavy equipment uses, not generally compatible with a pedestrian friendly commercial center. The businesses listed below in Table B3 were not required to go through a conditional use permit process or site plan review when the Commercial-Rural zone was applied to the properties. The business owners provided some specific information about the operating characteristics of each business on a questionnaire, recorded in county File No. TA-96-13 and in the county address file for each

primary property. Applying the Commercial-Rural zone to these properties did not validate them as legal uses. The new zone gives the existing uses an opportunity that did not exist before to apply for a receive site plan and conditional use permit approval for a listed use. If these uses change or expand, they will be subject to site plan review, conditional use permit requirements and to the provisions of Title 18, chapter 18.66 of the Deschutes County Code.

Table B2: Terrebonne Comprehensive Plan Designations and Zoning Districts

Comprehensive Plan Designation	Corresponding Zoning Districts
Residential	Residential (TeR) District
Residential – 5 Acre Minimum	Residential – 5 Acre Minimum (TeR5) District
Commercial	Commercial (TeC) District
Commercial Expansion Area	Residential (TeR) District
Commercial – Rural	Commercial – Rural (TeCR) District

Table B3: December 1996 – Businesses in the Commercial-Residential District

Company Name	Tax Map	Primary Property
C.B. Foss Trucking Inc.	14-13-16AC 400 14-13-16DC 300	8805 11 th Street, Terrebonne OR
Central Oregon Trucking Co.	14-13-16AC 500 14-13-16AC 502 14-13-16AC 202	8888 11 th Street, Terrebonne OR
Deschutes Valley Equipment	14-13-16DB 113 14-13-16DB 114	710 F Avenue, Terrebonne OR
Riemenschneider RL Enterprises	14-13-16DB 100 14-13-16DB 106	736 F Avenue, Terrebonne OR

3. Land use policies.

a. General land use policies.

1. Land use regulations shall conform to the requirements of OAR Chapter 660, Division 22 or its successor.
2. County plans and land use regulations shall ensure that new uses authorized within the Terrebonne Rural Community do not adversely affect agricultural uses in the surrounding Exclusive Farm Use (EFU) zones. Zoning regulations shall require any new structure on land contiguous to EFU-zoned land which is received special assessment for farm use to set back 100 feet from the common property line.
3. All zoning districts in the Terrebonne community shall allow residential uses.
4. The county shall encourage the preservation of historical structures in the Terrebonne Rural Community, such as the Ladies Pioneer Club (1911), the Grange Hall (1925) and the Oregon Trunk Railroad Depot (1911).

b. Residential area policies.

1. Areas designated residential on the comprehensive plan map shall be designated a corresponding residential district on the zoning map.
 2. The county shall plan and zone for a diversity of housing types and densities suited to the capacity of the land to accommodate water and sewer facilities.
 3. The land designated Residential—5 Acre Minimum is intended to maintain the rural character of the community by retaining large lots where community water and sewer are not available.
 4. Lands designated Residential—5 Acre Minimum shall not be redesignated and rezoned to accommodate higher densities until public water is provided.
 5. Livestock shall be permitted in both residential districts subject to use limitations.
- c. Commercial area policies.
1. Allow small-scale, low-impact commercial and industrial uses in conformance with the requirements of OAR Chapter 660, Division 22, and larger commercial uses, if such uses are intended to serve the community and the surrounding rural area or the travel needs of people passing through the area.
 2. The commercial district shall limit the size of all industrial buildings and the type of industrial uses to assure that the industrial uses are small-scale, low-impact and do not dominate the character of the commercial district.
 3. Design standards in the commercial districts should encourage new development that is compatible with the rural character of the community.
 4. Where there is a choice to use a road other than Highway 97 for access, access shall not be taken from Highway 97.
 5. Approval standards for conditional uses in the Commercial—Rural District shall take into account the impact of proposed uses on the nearby residential and commercial uses and on the capacity of the transportation and other public facilities and services to serve the proposed use.
 6. The land designated Commercial—Rural shall not be considered for expansion into the surrounding land designated Residential or Commercial, except at next periodic review.
 7. Stand-alone residential uses or residences in conjunction with uses listed in the commercial districts shall be allowed, but they are not intended to predominate or set the development standards for other uses in the area.
 8. Land divisions or replatting for residential purposes shall not be allowed in the commercial districts.
 9. Livestock shall not be permitted in the commercial districts.
- d. Commercial expansion area policies.
1. The Commercial or Commercial Rural plan designations shall not expand on the west side of Highway 97.
 2. The area designated Commercial shall only expand to the designated Commercial Expansion Area on the Terrebonne comprehensive plan map (See Map B1). No expansion of the Commercial Expansion Area shall be considered until next periodic review.
 3. Rezoning the Commercial Expansion Area from Residential District to Commercial District shall be allowed only if no land currently zoned Commercial District can reasonably accommodate the proposed use.
 4. Rezoning the Commercial Expansion from Residential District to Commercial District may be done without a Plan Amendment and shall be allowed only if the Terrebonne Domestic Water District facilities provide, or will provide, adequate water quantity and pressure for commercial or domestic use to serve the area being rezoned; and the road rights of way serving the area being rezoned have been, or will be, improved to applicable county right of way standards for the Terrebonne Rural Community. An applicant for a zone change must be able to demonstrate that:

- i. Road right of way improvements and public water facilities to the property are in place or will be in place when the development occurs; or
- ii. Road right of way improvements and public water facilities to the property are under construction when a permit is issued; or
- iii. Road right of way improvements and public water facilities to the property have been in a local government or special district budget.

These standards shall apply in place of the county standards for rezoning contained in Title 18, section 18.136.020 of the Deschutes County Code.

C. Public facility planning.

1. Special Districts.

Terrebonne Rural Community is served by the following special districts: (1) Terrebonne Domestic Water District (see Map C1); (2) Deschutes County Rural Fire Protection District #1 (see Map C2); (3) Redmond School District #2J (see Map C3); (4) Central Oregon Irrigation District.

a. Water.

The area identified in the 1979 Plan as the Terrebonne Rural Service Center (RSC) had two community water systems:

- 1. The Terrebonne Domestic Water District serving the area identified as the old Hillman Plat, the south $\frac{3}{4}$ of Section 16 T14S R13E; and
- 2. A separate water district serving the Circle "C" Acres subdivision located in the south portion of Terrebonne RSC.

As part of period review, the Terrebonne community boundary was amended, at the request of residents of Circle "C" Acres subdivision, to exclude the entire Circle "C" Acres subdivision. Today, the Terrebonne Domestic Water District is the only community water system in the Terrebonne Rural Community.

The District, which boundary coincides with the extent of the old Hillman Plat, serves the most densely populated area of Terrebonne. The District's Board of Directors recognized the need to improve the antiquated water system both for fire protection and for household use. In July of 1994, the Board of Directors and Deschutes County authorized H.G.E. Engineers & Planners to prepare an updated Water System Master Plan for Terrebonne Domestic Water District. The Water System Master Plan, with a 25 year planning horizon, was published in January 1995. In May 1997, Deschutes County received a federal-state, grant-loan package for constructing priority improvements to the District's water system identified in the 1995 Water System Master Plan.

OAR Chapter 660-22, Unincorporated Communities, requires the county to enter a coordination agreement with the Terrebonne Domestic Water District for Coordinated review and administration of the land use in the District's service area.

The Oregon Department of Water Resources reported there is an abundant supply of potable water in a deep aquifer under Terrebonne. The department has not identified the Terrebonne Rural Community as a groundwater limited or groundwater critical area. The Terrebonne Rural Community is a groundwater limited or groundwater critical area. The Terrebonne Domestic Water District currently depends on two groundwater wells. The District's groundwater source does not exceed current EPA maximum contaminant limits. No treatment is performed; none has been required by the state Health Division. The area in the Terrebonne Rural Community that is outside the District service area boundary relies on individual wells for drinking water. The Water Resources Department routinely approves new groundwater wells in the areas of the Terrebonne community not served by community water.

b. Sewer.

Terrebonne does not have a community sewer system or a sewer facility plan. Land uses in the community rely on on-site sewage disposal systems of all ages and descriptions, ranging from new sand-filter systems to old drill holes. In some cases on-site systems are insufficient for current needs. Much of the area defined by the Hillman Plat is on a rocky plateau. The soils are shallow – most no deeper than 18 inches – such that a standard septic system is not feasible on smaller lots. It is often necessary to install a relatively expensive sand-filter system in order to obtain development permits for new development or for alterations to existing development. There are a few tax lots that cannot be developed or redeveloped because they are too small to accommodate any approved one-site sewage disposal system.

The county has not conducted a sewer feasibility study for the Terrebonne Rural Community. The community has not reached consensus about the need for a sewer system. However, a group of concerned citizens recognize that a sewer system is needed, both to protect the water quality and to allow development at desired densities.

The county plan and zoning regulations restrict the type and intensity of allowed uses to those that can be served by a DEQ approved on-site sewage disposal systems. In addition, county zoning regulations set minimum lot sizes adequate to ensure the on-site systems do not exceed the capacity of the land. These provisions are true for all zoning districts in Terrebonne.

2. Public facility policies.

a. General public facility planning policies.

1. Residential minimum lot sizes shall be determined by the capacity of the land to accommodate available water and sewer facilities, in order to protect and promote public health and safety and to provide efficient public facilities and services.
2. The county shall encourage early planning and acquisition of sites needed for public facilities (e.g., school, roads and water facilities).

b. Water facility policies.

1. The Terrebonne Domestic Water District 1995 Water System Master Plan shall serve as the public facility plan for water supply in Terrebonne.
2. The county shall support improvement of the community water system to meet health and safety needs.
3. Deschutes County and the Terrebonne Domestic Water District shall enter a coordination agreement, consistent with ORS Chapter 195, as required by OAR 660-22-050(2)(c).
4. New uses or expansion of existing uses requiring land use approval in the Terrebonne Domestic Water District service area shall be approved only upon confirmation from the District that the District can provide water for domestic or commercial uses to the property.
5. Deschutes County shall encourage all development in the District service area to connect to the Terrebonne Domestic Water District water system.

c. Sewer facility policies.

1. Only uses and densities that can be served by a DEQ approved on-site sewage disposal system shall be allowed in the Terrebonne Rural Community until such time as a community sewer system is available.
2. Zoning regulations shall set minimum lot sizes adequate to ensure the on-site systems do not exceed the capacity of the land until such a time as a community sewer system is available.
3. The county shall support replatting of lots in the Hillman Plat to create lots large enough to accommodate a DEQ approved on-site sewage disposal system.
4. The county shall attempt to obtain funding for a sewer feasibility study.
5. The county shall facilitate the development of a community sewer system if needed to protect public health.

6. If a sewer system is proposed, the county will review the Terrebonne comprehensive plan policies related to public services.

D. Transportation planning.

1. Background - Transportation in Terrebonne.

The transportation plan will play a role in addressing long-standing transportation issues and in maintaining the rural character of Terrebonne. This plan meets the requirements of the OAR Chapter 660, Division 12, Transportation Planning, by designating a network of local roads, sidewalks and bikeways. In addition, it establishes appropriate right of way development standards for county roads in Terrebonne and makes recommendations for increasing safety for local pedestrian and vehicle traffic on the highway.

a. Community transportation goals.

The livability of the Terrebonne community depends on the ability of the transportation network to provide safe and convenient access from residential areas to the commercial areas and to the school. It is important that the state highway be integrated into the community and that it function efficiently to transport travelers and freight through the community.

1. Local road network.

- i. Maintain the existing roads.
- ii. Provide sidewalks only where they are warranted for safety.
- iii. Protect utility trenches located in the public right of way from damage by tree roots.

2. Appropriate local road standards.

- i. Provide transportation facilities that are practical and cost effective to construct, use and maintain and in character with the rural community.

3. Highway 97 corridor.

- i. Slow traffic on Highway 97.
- ii. Provide safe, convenient pedestrian crossings on the highway near the school.
- iii. Reduce misuse of the center turn lane.
- iv. Redesign Highway 97 intersections to balance the needs of truck and pedestrian traffic, particularly at the "B" Avenue and "C" Avenue and the 11th Street intersections.

b. Community profile.

The 1990 US Census shows that compared to the population of the state, Terrebonne is a community of relatively young families. About 21 percent of the people in Terrebonne are five to 15 years old, too young to drive. About 14 percent of the community is over 64. This age group will likely increase after 2010 due to national demographic trends. Both of these user groups would benefit from sidewalks separated from vehicle traffic in key locations to increase pedestrian safety and convenience.

Terrebonne is a bedroom community for surrounding cities in Central Oregon. US Census data for 1990 showed that out of 454 workers (42% of the population), 355 (78%) drove alone to work, 66 (15%) carpooled, 14 (3%) worked at home and 19 (4%) reported other means of transportation to work. No workers reported walking or bicycling to work. The commute time (for those who did not work at home) was less than 10 minutes for 11% and less than 20 minutes for 69% of the population.

c. Highway 97 collision data.

The State of Oregon recorded 29 collisions on Highway 97 in Terrebonne from 1991 to 1995. Seventeen crashes caused 28 injuries and one crash resulted in two deaths. Nineteen of the collisions occurred at intersections, mostly from Central Avenue south to 11th Street. There were ten mid-block collisions. Most of the collisions occurred in daylight, but two involved pedestrians after dark.

d. Constraints of the transportation system.

1. Topographical Features. Topography and irrigation canals limit opportunities to connect the existing discontinuous road network. A large area of Terrebonne is located on a rocky plateau characterized by steep rimrock outcrops on the north, east and west. Roads constructed through the rimrock have up to 10 percent grades. Many rights of way mapped on the rimrock cannot be developed except possibly as stairways. Some roads end against rimrock. In addition, two irrigation canals, the lateral H and the lateral H-1, divide the public rights of way in many places.
2. Transportation Features. Highway 97 and the Oregon Trunk Railroad tracks restrict east-west road connections. In the central, developed area of Terrebonne, there are four highway crossings and two railroad crossings.

Many segments of public right of way, originally dedicated as part of the Hillman Plat, have been vacated, resulting in a fragmented network of undeveloped right of way.

2. Inventory of existing transportation facilities. This section contains an inventory of the existing public roads, pedestrian and bicycle facilities in Terrebonne. The data were gathered primarily from existing sources supplemented by site visits and aerial photographs.

- a. Roads.

Terrebonne has good transportation access. Highway 97, the north-south state highway east of the Cascade Range, bisects the community. Highway 97 in Terrebonne has three lanes, a travel lane in each direction and a continuous center turn lane. The traffic count on Highway 97 at "A" Avenue in Terrebonne in 1994 was 12,500 Average Daily Traffic (ADT). The posted speed through the community is 45 mph. Interstate truck traffic comprises a significant percentage of the traffic mix passing through Terrebonne.

Highway 97 is intersected in Terrebonne by Lower Bridge Way and Smith Rock Way, which function as county arterial roads. County collector roads in Terrebonne are West 19th Street and East 1st Street (numbered as part of the Redmond grid) and Odem Avenue. These collectors define the west, east and south boundaries of the Terrebonne community. "C" Avenue and 11th Street function as collector roads in the community. Totaled, there are about 13.5 miles of roads in the community. Table D1: "Inventory of Existing Public Roads," is organized by road functional classification, then by road name in numerical and alphabetical order. It lists the available ADT counts provided by the state for Highway 97 and by the county. There is additional inventory information contained in Map D1: "Inventory of Existing Public Roads." (See Table D1.)

The public roads in Terrebonne (see Map D1) range in width from 20 feet to 32 feet. Some are in poor condition due to cracking, spalling, pot holes and raveling. Lack of adequate crown and roadway drainage result in puddling. Most of the unpaved roads need to be graded and graveled.

- b. Pedestrian facilities.

Until recently, pedestrian facilities were not provided in Terrebonne. Terrebonne has one new sidewalk, a 700-foot, curb-tight sidewalk in the public right of way on the south side of "B" Avenue west of Highway 97. The sidewalk is curbed but lacks ramps at the three crosswalks that link it to the north side of "B" Avenue near the school.

There is a crosswalk on "C" Avenue at 7th Street on the north side of the school. Another crosswalk spans the highway from the north side of "B" Avenue. All roads with crosswalks have school crossing signs. The highway has an overhead sign with a flashing light at the "B" Avenue intersection.

All other pedestrian travel is on shared roadways with narrow or no shoulders. The primary pedestrian destinations are the school, post office, grocery stores and other businesses in the commercial area.

c. Bicycle facilities.

Highway 97 south of Lower Bridge Way has a four-foot paved shoulder bikeway. All other bike travel is on shared roadways. There are bike racks at the Terrebonne Market and at the school.

3. Future transportation needs.

A bedroom community such as Terrebonne, located in a major highway, requires a transportation network that can accommodate local traffic, commuter traffic and regional interstate traffic without detracting from the livability and rural character of the community. Accomplishing this goal requires a combination of approaches and techniques, which are summarized below in the following order:

a. Transportation network plan with roads, pedestrian and bicycle facilities;

b. Road development standards for the Terrebonne community; and

c. Highway 97 corridor recommendations for increasing safety for local pedestrian and vehicle traffic.

The Terrebonne transportation plan is based on conventional road functional classifications—arterial, collector and local roads. It establishes development standards appropriate to each type of road. The design of arterial and collector roads gives priority to through traffic rather than access to adjacent land uses. On local roads the emphasis is on access to adjacent land uses.

d. Transportation network plan.

The transportation network plan for Terrebonne identifies where new roads will be needed and where pedestrian and bicycle facilities are warranted. The network plan has three components: (1) Roads, (2) Sidewalks and (3) Bikeways.

1. Roads. Map D2: “Planned Roads,” depicts the general alignments of transportation corridors needed in the future to complete the local road network. The precise road alignments will be determined after further study and engineering analysis and during the development of vacant properties. The transportation corridors depicted on Map D2 take advantage of existing public rights of way, where they exist. It will be important to preserve the existing road rights of way. Where there are gaps in the existing network of public right of way, the county will need to secure 60 foot rights of way along the future transportation corridors.

2. Sidewalks. Map D3: “Planned Pedestrian Improvements,” shows where sidewalks are needed for safety and where there are opportunities for trails. Sidewalks provide a smooth hard surface, a safe place for pedestrians, separated from the road. In Terrebonne, sidewalks are warranted on 11th Street and “C” Avenue which function as collectors in Terrebonne. Sidewalks are warranted on some local roads to provide access to the school. They are also warranted in the Commercial District to provide safe places for people to walk as the commercial area develops and redevelops. Sidewalks are warranted on Highway 97 from Central Avenue south to 11th Street for pedestrian safety and convenience.

Sidewalks are usually separated from the roadway by a curb and gutter, which function as part of the storm drain system. Terrebonne does not have a storm drain system. Curbs are not necessary for drainage control until densities reach four units per acre. The highest density in Terrebonne is about three units per acre. Sidewalks in Terrebonne shall be constructed without curbs and gutters, set back from the road surface behind a drainage swale. This type of sidewalk is adequate, less costly and has a more rural appearance. On the highway, sidewalks may have curbs and gutters and would be buffered to help calm traffic. They may require drainage system improvements.

A drainage swale is a broad, man-made depression running parallel to the right of way, between the roadway and the sidewalk, where water can drain into the ground. The swale also provides room for signs, mailboxes and snow storage, leaving the sidewalk free from obstructions.

Street trees should not be planted in a drainage swale when they will conflict with the Terrebonne Domestic Water District's existing or planned utility trenches. These trenches are dug, often cut through rock, and lined with sand. In Terrebonne, where soils are shallow over bedrock, tree roots seek out the utility trenches, both damaging pipes and conduits and complicating repair work.

3. Bikeways. The network plan specifies where shoulder bikeways are needed for bicycles to safely use arterial roads. On local roads where traffic volumes and speeds are low, bicycles share the roadway with motor vehicles. On arterial and collector roads that carry high traffic volumes at higher speeds, bicycles need paved shoulders to use the roads safely.

Projects to complete the transportation network plan are grouped into three categories listed in Table D2: "Road Projects;" Table D3: "Shoulder Projects;" and Table D4: "Sidewalk & Trail Projects." These tables list and rank the projects, high, medium and low priority. The priorities are based on perceived need; they are intended to be flexible to development opportunities and grant funding.

- e. Road development standards.

In previous years, the county required urban road development standards in unincorporated communities in the rural county. The urban standards required 36 feet of pavement, with curb-tight sidewalks, curbs and gutters. It became evident that this standard was not practical or necessary in Terrebonne. Few of the existing roads in Terrebonne meet this standard. The cost per lineal foot to build to this standard prohibited local residents from forming Local Improvement Districts (LIDs) to improve local roads. In addition, people resisted the urban road profile because it did not fit with the community's preference for a rural appearance. These road standards are intended to decrease the cost of road improvements and to remove barriers to the formation of LIDs for improving local roads.

There are sound traffic engineering principles that support reduced road standards. The State Transportation Planning Rule (OAR 660-12-045(7)) directs local governments to establish standards for local roads that minimize pavement width and total right of way consistent with the operational needs of the facility. Excessive standards increase the costs of construction, use up available land and encourage inappropriate traffic volumes and speeds. In Terrebonne, full urban road standards are not needed because the traffic volumes and speeds on community roads are low compared to city streets. Many roads serve only a few residences. However, the road development standards applied in the rural county are not adequate to serve the densities and variety of uses found in Terrebonne. Businesses, a school, a post office and other uses generate many local trips, more than generally found in the rural county.

Road improvement standards applicable in Terrebonne Rural Community were developed in coordination with the community planning process, the Oregon Department of Transportation (ODOT) Region 4, the state Bicycle and Pedestrian Program and with the Deschutes County Planning Division and Public Works Department. These road development standards, based on conventional road classifications, are recognized by ODOT and the American Association of State Highway Traffic Officials (AASHTO) for rural communities. They apply to public rights of way other than the state highway which is under state jurisdiction.

- f. Highway 97 corridor.

The Terrebonne transportation plan accounts for the need to coordinate with ODOT to assure that improvements to Highway 97 address community goals.

1. Highway 97 Corridor Strategy. The Deschutes County Board of Commissioners adopted a resolution supporting the Oregon Department of Transportation's Highway 97 Corridor Strategy (Strategy) on October 11, 1995. The Strategy guides improvements to the highway in Terrebonne. It states that most rural sections of the highway will need to be expanded to four lanes. However, it also states that in small rural communities, such as Terrebonne, La Pine, Chemult and Crescent, the focus will be on slowing traffic to posted speeds using a combination of enforcement and traffic calming techniques.

The Strategy contains objectives relevant to balancing the needs of local traffic and through traffic on Highway 97. State objectives seek to maintain the function of the state highway to efficiently transport regional and interstate travelers and freight, but also recognize that a community needs to safely and conveniently use the highway. To protect the function of a major highway, it is often necessary to limit access and control turning movements on the highway. When carefully implemented, these measures combined with traffic calming, can improve safety for local traffic, particularly pedestrians, because they slow traffic, guide turning movements and improve pedestrian crossing areas. However, these techniques can make accessing local businesses from the highway more difficult.

The Strategy encourages local land use and transportation plans to orient commercial development and access on to parallel local road, such as 11th Street in Terrebonne, as an alternative to using the highway as the main commercial road. This objective addresses the difficulty of maintaining the function of a major highway and at the same time making it a safe, convenient community main street. The Strategy objectives, if met, may help reduce the need to add travel lanes to the highway in Terrebonne and encourage improvements to alternative commercial roads in the community.

2. Design for Highway 97 in Terrebonne. The existing three-lane highway with a center turning lane, splits the community in half and is dangerous to cross. The Deschutes County Comprehensive Plan for Terrebonne, directs commercial development to the east side of the highway and designates and zones the land on both sides of 11th Street for commercial uses. There is wide-spread community support for improved pedestrian crossing places on Highway 97, particularly at the "B" and "C" Avenue intersections and for slowing traffic on the highway to posted speeds. A feasible design for Highway 97 in Terrebonne is illustrated on Map D3: "Planned Pedestrian Improvements" and Figure D1: "Highway 97 Cross-Section."
4. Transportation policies.
 - a. Road network policies.
 1. Roads.
 - i. Provide a transportation network that can accommodate local traffic, commuter traffic and regional interstate traffic without detracting from the livability and rural character of the community.
 - ii. Provide a transportation network that will improve transportation efficiency, convenience and safety, as well as increase transportation choices and decrease conflicts between modes of transportation.
 - iii. Preserve alignments for transportation corridors depicted on Map D2 for future transportation purposes. The precise alignments will be determined after further study and engineering analysis or during the development of vacant properties.
 - iv. New roads shall take advantage of existing public rights of way, where they exist.
 - v. Existing road rights of way shall be preserved.

- vi. Roads shall be classified as arterial, collector and local roads in accordance with Table D1 and Map D2.
 - vii. The county shall implement measures, based on weight limits, to prohibit or limit heavy truck on 11th Street and Smith Rock Way in the Terrebonne Rural Community.
 - viii. Commercial uses that generate more than 20 vehicle trips to and from the premises, including automobiles, truck-trailers and other heavy equipment, during the peak hour of the day, shall demonstrate that the affected roads are adequate to serve the proposed use, considering the function, capacity and level of service of those roads.
2. Sidewalks and bicycle facility policies.
- i. Provide functional, cost effective sidewalks that are in keeping with the rural character of the community.
 - ii. Provide sidewalks where they are warranted for pedestrian safety, as set forth in Map D3.
 - iii. Where sidewalks are specified along county public roads, they shall be constructed without curbs and gutters, set back from the road surface behind a drainage swale at a distance from property lines to allow room for utilities.
 - iv. Sidewalks identified on Map D3 shall be constructed either at the time of development, subject to site plan review, or later through formation of a local improvement district (LID). Applicants for conditional use permits or site plan approval electing to defer constructing sidewalks, shall be required to submit and have recorded in the County Clerk's office a waiver of remonstrance, signed by the land owner. The waiver shall waive the land owner's right to have his/her objection count against the formation of an LID.
 - v. The utility trenches located in the public right of way should be protected from damage by tree roots. Street trees should not be planted in the public right of way where they will conflict with existing or planned utility trenches.
 - vi. On local roads where traffic volumes and speeds are low, bicycles shall share the road with automobiles. Bicycles shall be accommodated on paved shoulder bikeways on Lower Bridge Way and Smith Rock Way, which are county arterial roads, and on county collector roads that carry high traffic volumes.
- b. Road development standards policies.
- 1. The county shall provide transportation facilities that are practical and cost effective to construct, use and maintain and in keeping with the rural character of the community.
 - 2. The county shall implement road development standards for the Terrebonne community that minimize pavement width and are consistent with the operational needs of the transportation facility.
 - 3. Specific road, bicycle and pedestrian facility improvement projects for the Terrebonne community are listed in Tables D2, D3 and D4 respectively. The projects are ranked high, medium and low priority based on perceived need. These priorities shall be flexible to take advantage of development opportunities and funding.
- c. Highway 97 corridor policies.
- 1. The county shall work with ODOT to increase safety on Highway 97 in Terrebonne by using a combination of enforcement and traffic calming techniques to slow traffic to posted speeds, to safely handle local traffic and to improve pedestrian crossings.
 - 2. The county shall work with ODOT to provide safe, convenient sidewalks and bikeways on both sides of Highway 97 in the Terrebonne community, between Central Avenue and the south 11th Street intersection, particularly in the vicinity of the school.
 - 3. Sidewalks on Highway 97 may have curbs and gutters and shall be buffered behind a planting strip to calm traffic and provide pedestrian safety. Curbed sidewalks would require drainage system improvements.

4. The county shall work with ODOT to provide improved pedestrian crossings places on Highway 97, between Central Avenue and the south 11th Street intersection, particularly at the “B” Avenue and “C” Avenue intersections, to increase pedestrian safety in the vicinity of the school.
5. The county shall work with ODOT to adopt means to enhance 11th Street parallel to the highway, to safely handle local business traffic, in particular, enhance the intersections and pedestrian crossings and access, to make better use of 11th Street as the main local commercial road.
6. The county shall support limiting Highway 97 to no more than three lanes between the Central Avenue and south 11th Street intersections, to protect the livability of the community, to address pedestrian safety and the need to reduce traffic speeds on the highway in Terrebonne.
7. Large trucks shall be accommodated with wide turning radius corners where necessary, as determined by truck routes established by the Deschutes County Transportation System Plan, thereby minimizing corner radii at all other intersections. Other design features such as rolled curbs or medians, shall be used as necessary to minimally accommodate large trucks in the Terrebonne community.
8. The county shall support improvements to Highway 97 primarily in conjunction with highway rehabilitation or reconstruction projects.

Table D1: Inventory of Existing Public Roads

Arterial Roads

Road Names	From	To	Length in miles	ADT
Lower Bridge Way	Highway 97	West 19 th Street	.583	3601
Smith Rock Way	Highway 97	Street	.305	2391
Smith Rock Way	RR xing	RR xing East 1 st Street	.284	1434

Collector Roads

Road Names	From	To	Length in miles	ADT
East 1 st Street	Odem Avenue	Wilcox Avenue	.979	--
East 1 st Street	Avenue	End (N)	.145	--
11 th Street	Wilcox Avenue	Smith Rock Way	.189	--
11 th Street	Avenue	Way	.576	--
West 19 th Street	Highway 97	Highway 97	.760	--
West 19 th Street	Smith Rock Way	C Avenue	.736	--
C Avenue	Way	Lower Bridge Way	.295	900
C Avenue	Odem Avenue	Way	.495	--
Odem Avenue	Avenue	Highway 97	---	--
	C Avenue	West 19 th Street		
	Highway 97	West 19 th Street		
	10 th Street	Street		
1 st Street	C Avenue	End (N)	.161	--
2 nd Street	Central Avenue	End (N)	.152	--
3 rd Street	C Avenue	End (N)	.095	--
4 th Street	B Avenue	End (N)	.065	--
4 th Street	C Avenue	End (N)	.075	--
4 th Street	Forester Drive	E Avenue	.152	--
5 th Street	End (S)	B Avenue	.050	--
5 th Street	B Avenue	E Avenue	.264	--
5 th Street	E Avenue	End (N)	.189	--
6 th Street	C Avenue	Central Avenue	.096	--
6 th Street	Central Avenue	E Avenue	.157	--
7 th Street	End (S)	B Avenue	.189	--
7 th Street	C Avenue	End (N)	.242	--
8 th Street	C Avenue	End (N)	.210	--
9 th Street	C Avenue	End (N)	.173	--
9 th Street	End	F Avenue	.057	--
12 th Street	Lower Bridge	End (N)	.133	--

Collector Roads (cont'd)				
13 th Street	South End	End (N)	.303	--
15 th Street	C Avenue	E Avenue	.175	--
16 th Street	C Avenue	End (N)	.484	--
17 th Street	End	Smith Rock Way	.114	--
A Avenue	6 th Street	7 th Street	.066	--
A Avenue	11 th Street	End (E)	.189	--
B Avenue	West 19 th Street	End (E)	.095	--
B Avenue	5 th Street	Highway 97	.247	--
Central Avenue	5 th Street	Highway 97	.248	--
Central Avenue	15 th Street	16 th Street	.038	--
E Avenue	4 th Street	9 th Street	.246	--
E Avenue	15 th Street	16 th Street	.038	--
F Avenue	West 19 th Street	End (E)	.066	--
F Avenue	4 th Street	6 th Street	.090	--
F Avenue	End (W)	Highway 97	.080	--
F Avenue	11 th Street	16 th Street	.243	--
F Avenue	16 th Street	End (E)	.066	--
Forester Drive	4 th Street	F Avenue	.189	--
G Avenue	16 th Street	1 st Street	.189	--
H Avenue	16 th Street	End (E)	.105	--

Table D2: Road Projects.

Street	From	To	Length, feet	Improvement	Priority	Cost*
Existing Roads						
U.S. 97	Central Ave.	11 th St. South	1,500	Traffic calming and crossing improvements	High	Unknown
Connector	U.S. 97 south of Lower Bridge Way	11 th Street	100	Improve for truck use	High	\$5,000
11 th Street	Central Ave.	U.S. 97 South	1,950	Widen from 22' to 24' with parking swale and concrete strip (see also sidewalks)	High	\$40,000
11 th Street	U.S. 97 south	Intersection alignment		Realign T-intersection to right angle	Medium	\$10,000
Other	Various	Various	16,900	Pave existing gravel streets (see Fig. 8)	Low	\$750,000
Future Roads						
7 th Street	South end	South	Unknown	Extend ROW as necessary	When development occurs	Unknown
13 th Street	North	North end	Unknown	Extend ROW as necessary		Unknown
13 th Street	"E" Ave.	400' south of "A" Ave.	1,400	Develop and extend ROW		\$65,000
15 th St.	"H" Ave.	"F" Ave.	850	Develop existing ROW		\$8,000
15 th St.	"C" Ave.	400' south of "A" Ave.	1,320	Extend ROW		\$60,000
16 th St.	North	North end	Unknown	Extend ROW as necessary		Unknown
"E" Ave.	11 th St.	Canal	800	Develop existing ROW		\$35,000
"G" Ave.	West	U.S. 97	Unknown	Extend ROW as necessary		Unknown
"H" Ave.	11 th St.	13 th St.	600	Develop existing ROW		\$25,000
Other	Various	Various	Unknown	Create as needed (see Fig. 8)	Unknown	

The estimated cost is for a typical facility built in Oregon and includes engineering, installation, minor contingencies, striping and signing. The cost does not include administration, special grading and fill operations, unusual construction (e.g. bridges and tunnels) or land acquisition. Estimated costs are particularly useful for comparing projects.

Table D3: Shoulder Projects.

Street	From	To	Length, ft.	Improvement	Priority	Cost*
Smith Rock Way	U.S. 97	1 st St.	3,110	Widen from 26' to 34' with 5-ft shoulders	High	\$74,700
Lower Bridge Way	West 19 th St.	U.S. 97	3,080	Widen from 26' to 34' with 5-ft shoulders	High	\$74,000

*The estimated cost is for a typical facility built in Oregon and includes engineering, installation, minor contingencies, striping and signing. The cost does not include administration, special grading and fill operations, unusual construction (e.g. bridges and tunnels) or land acquisition. Estimated costs are particularly useful for comparing projects.

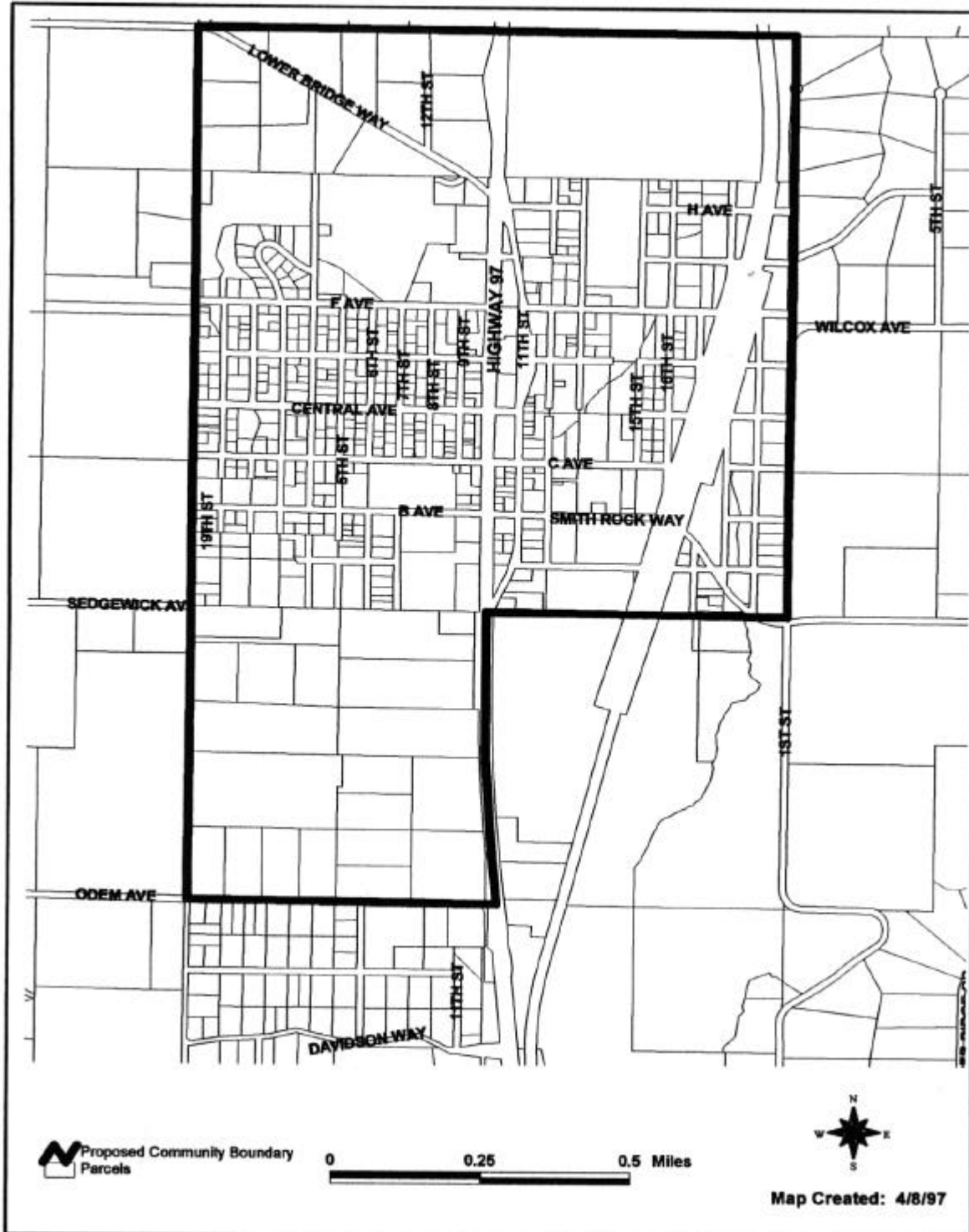
Table D4: Sidewalk & Trail Projects.

Street	From	To	Length, ft.	Improvement	Priority	Cost*
Hwy. 97	Central Ave.	400' south of "A" Ave.	1,800	Both sides (6 ft.)	High	\$108,000
11 th St.	Central Ave.	U.S. 97	1,850	Both sides	High	\$92,500
"B" Ave.	5 th St.	U.S. 97	1,500	North side only	High	\$37,500
"C" Ave.	19 th St.	U.S. 97	1,560	South side only	High	\$40,000
Smith Rock Way	U.S. 97	15 th St.	1,250	Both sides	High	\$62,500
"C" Ave.	U.S. 97	16 th St.	2,615	South side only	Medium	\$65,000
13 th St.	"C" Ave.	400' south of "A" Ave.	1,200	Both sides (future)	Low	\$60,000
15 th St.	"C" Ave.	400' south of "A" Ave.	1,250	Both sides (future)	Low	\$62,500
"A" Ave.	11 th St.	15 th St.	1,000	Both sides (future)	Low	\$50,000
Trails						
Lateral "H"	13 th St.	12 th St.	300	Unpaved, requires easement along canal	Medium	\$1,500
Lateral "H"	12 th St.	400' south of "A" Ave.	1,200	Unpaved	Medium	\$5,500
"B" Ave.	East end of west segment	West end of east segment	700	Stairs for 300'	Medium	\$21,000
"E" Ave.	East end of west segment	West end of east segment	700	Stairs for 300'	Low	\$21,000
"E" Ave.	West of lateral "H"	East of Lateral "H"	200	Unpaved connector, requires easement and bridge	Low	\$20,000
4 th St.	North	Forster Dr.	700	Stairs for 300'	Low	\$21,000

*The estimated cost is for a typical facility built in Oregon and includes engineering, installation, minor contingencies, striping and signing. The cost does not include administration, special grading and fill operations, unusual construction (e.g., bridges and tunnels) or land acquisition. Estimated costs are particularly useful for comparing projects. Cost of sidewalk is for 5-ft wide concrete unless otherwise noted. Cost of trail is for 10-ft. wide unpaved sandseal unless otherwise noted.

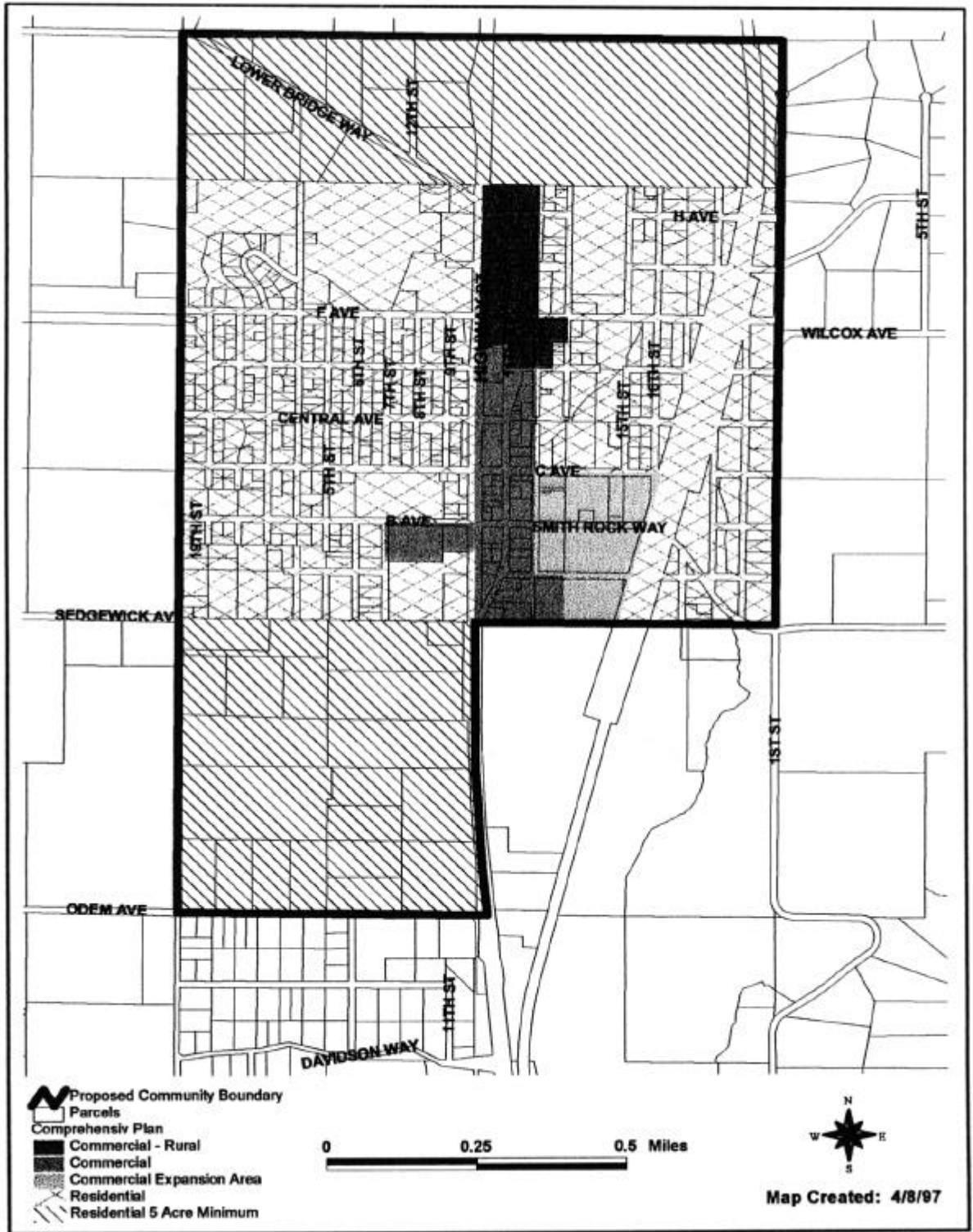
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 97-001, 1997; Ord. 92-051, § 3, 1997; PL-20, 1979)

Map A1: Terrebonne Rural Community Boundary

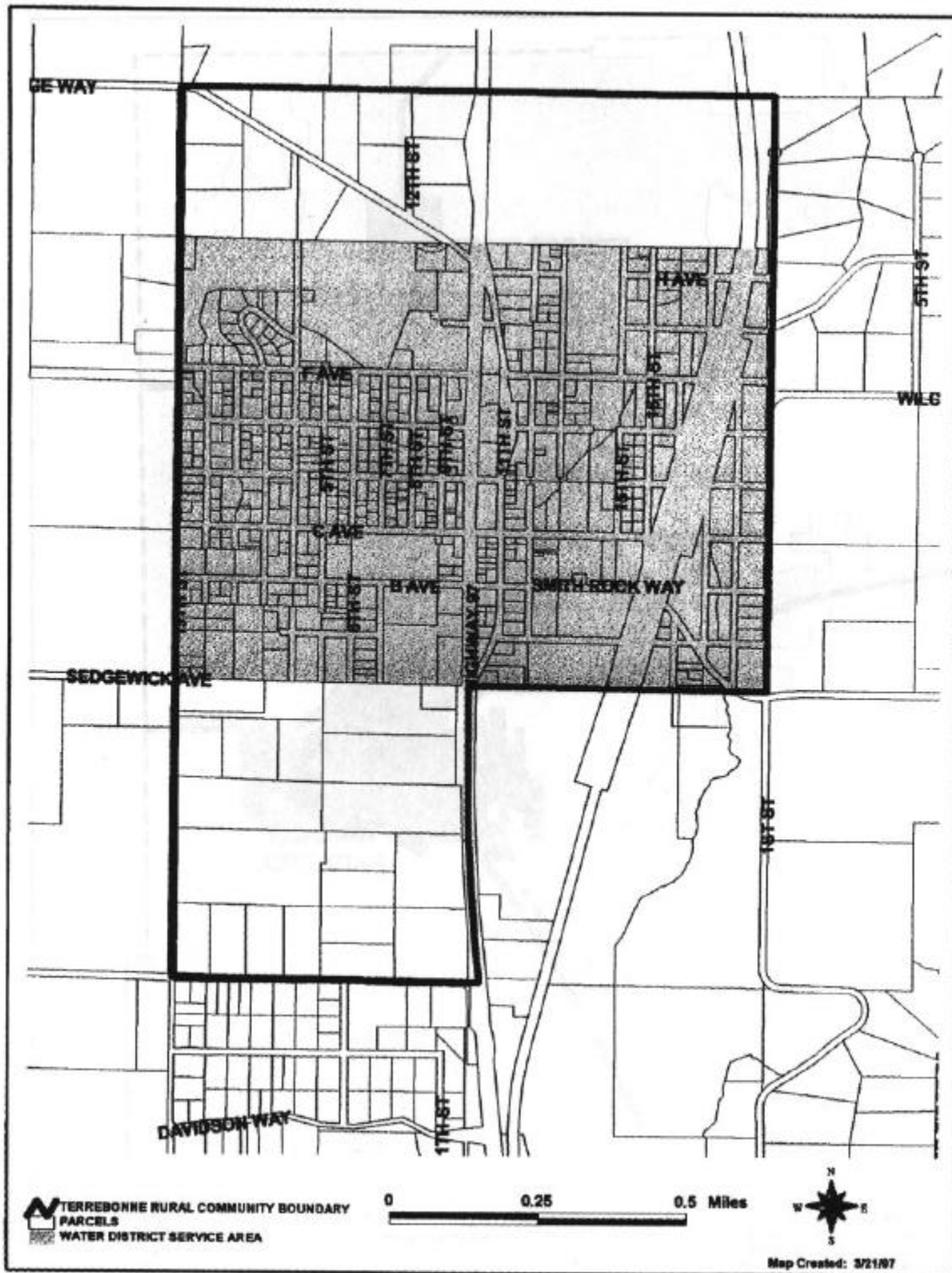


Map B2: Terrebonne Rural Community
Comprehensive Plan Map

0162-0050



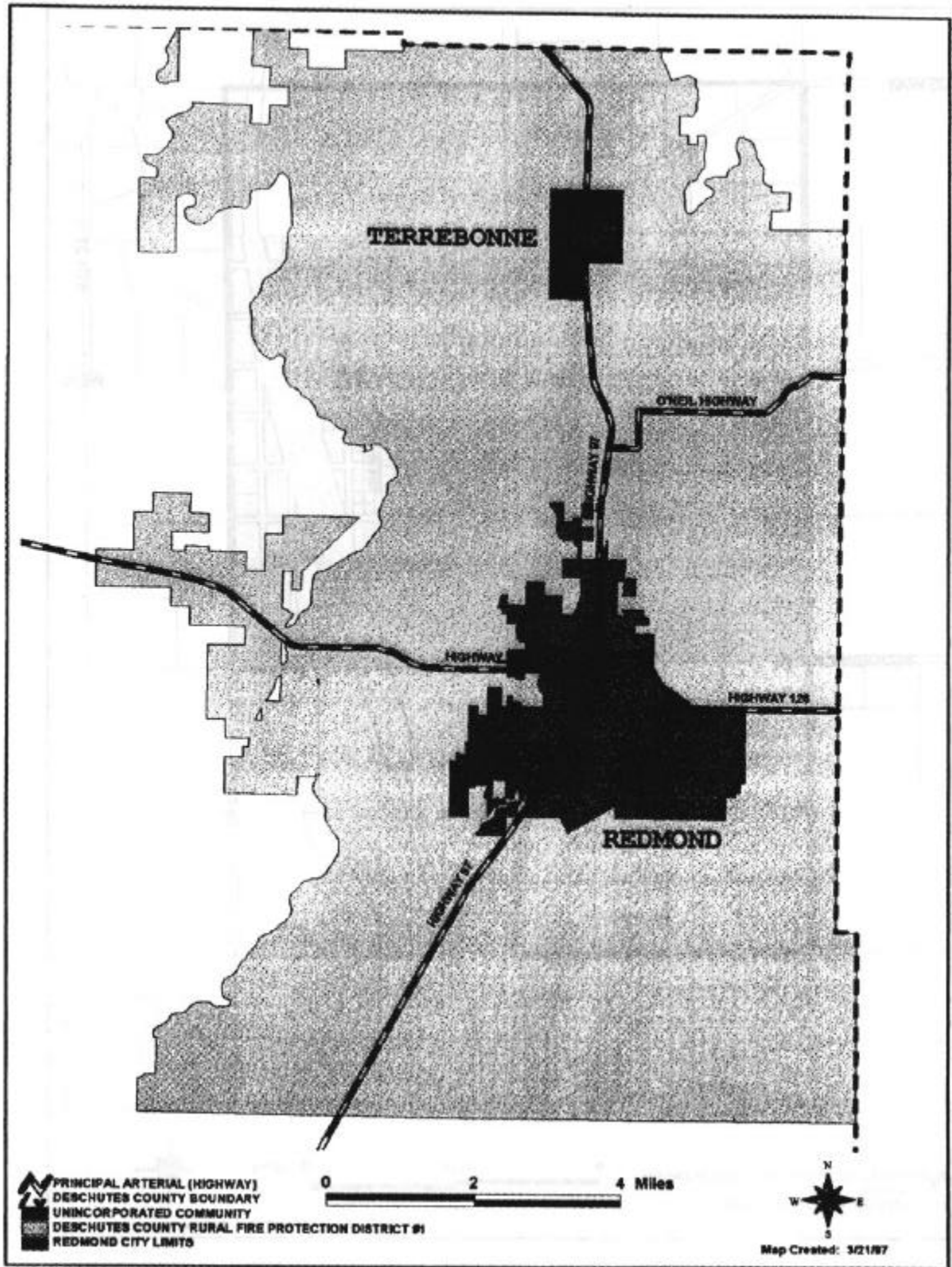
Map C1: Terrebonne Domestic Water District



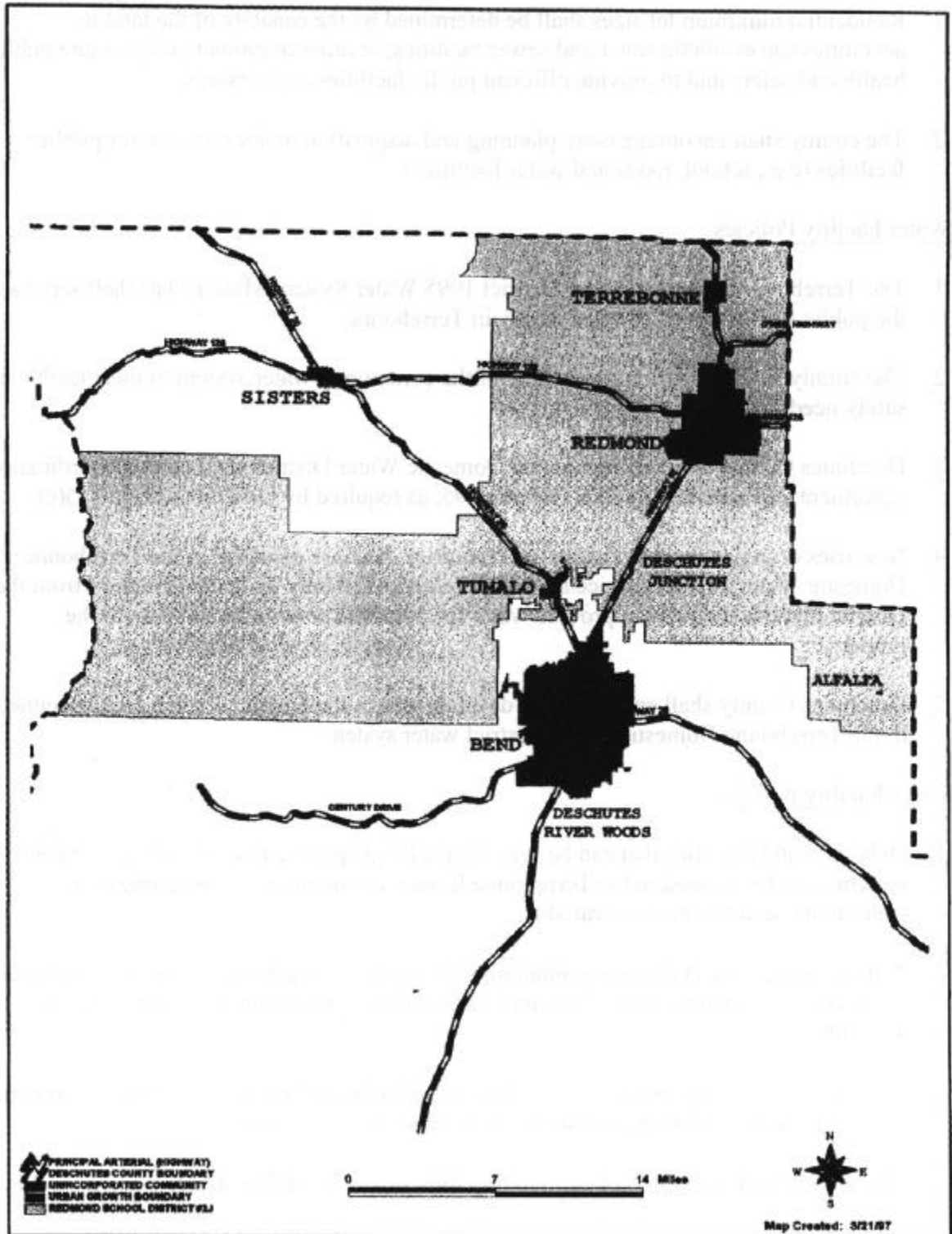
Map C2: Deschutes County

0162-0057

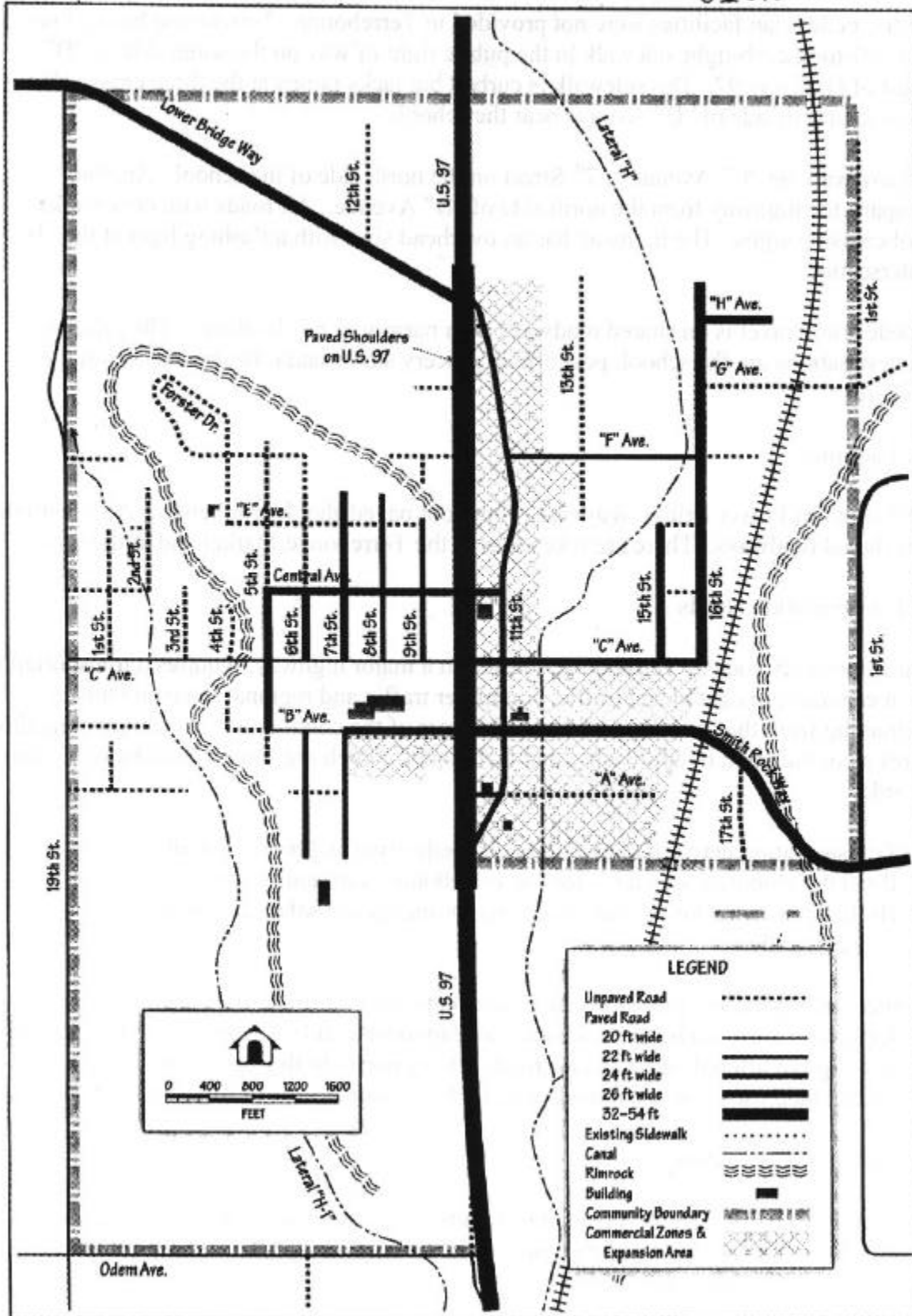
Rural Fire Protection District #1



Map C3: Redmond School District #2J

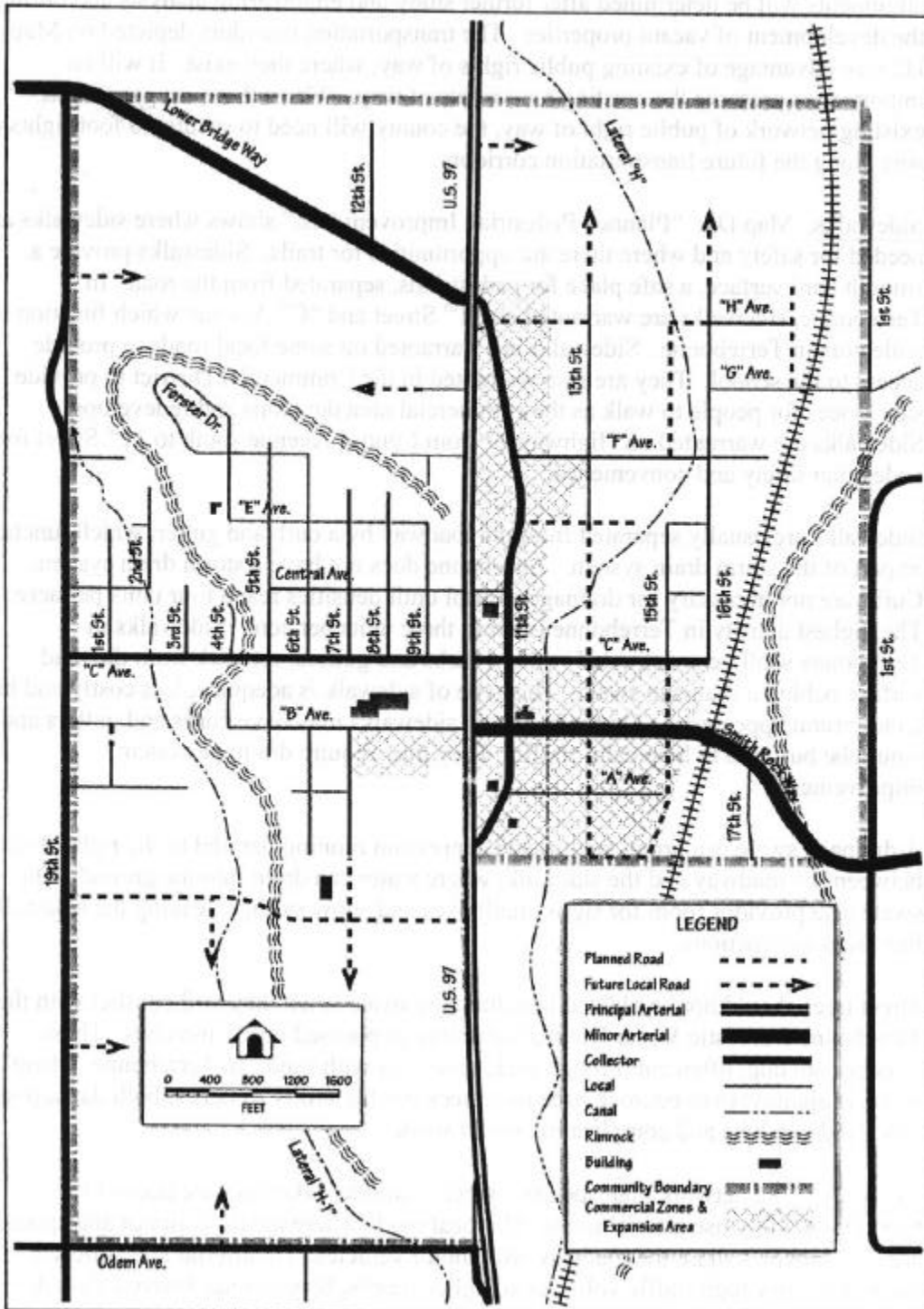


Map D1: Inventory of Existing Public Roads 0162-0064



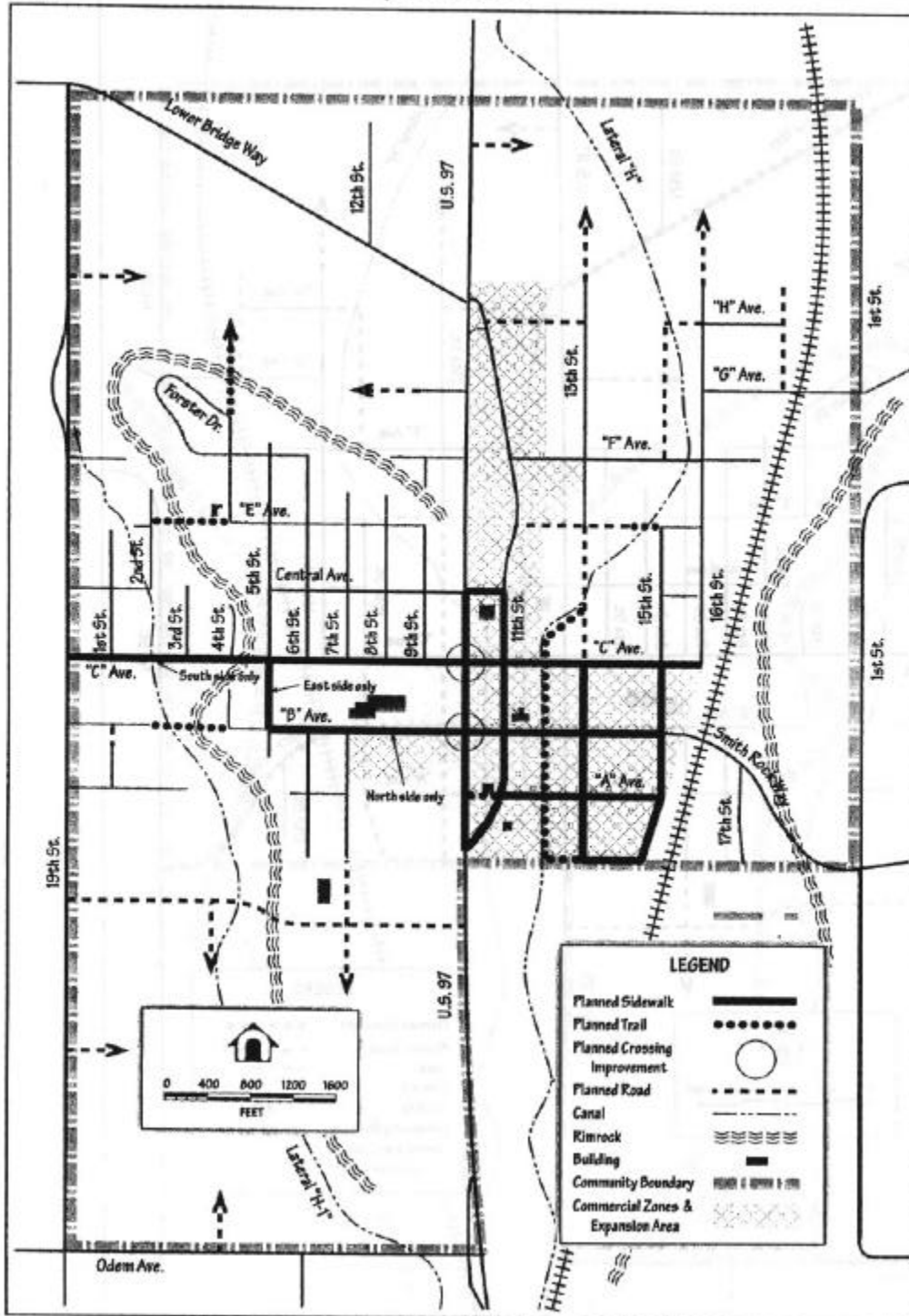
Map D2: Planned Roads

0162-0067



Map D3: Planned Pedestrian Improvements

0162-0068



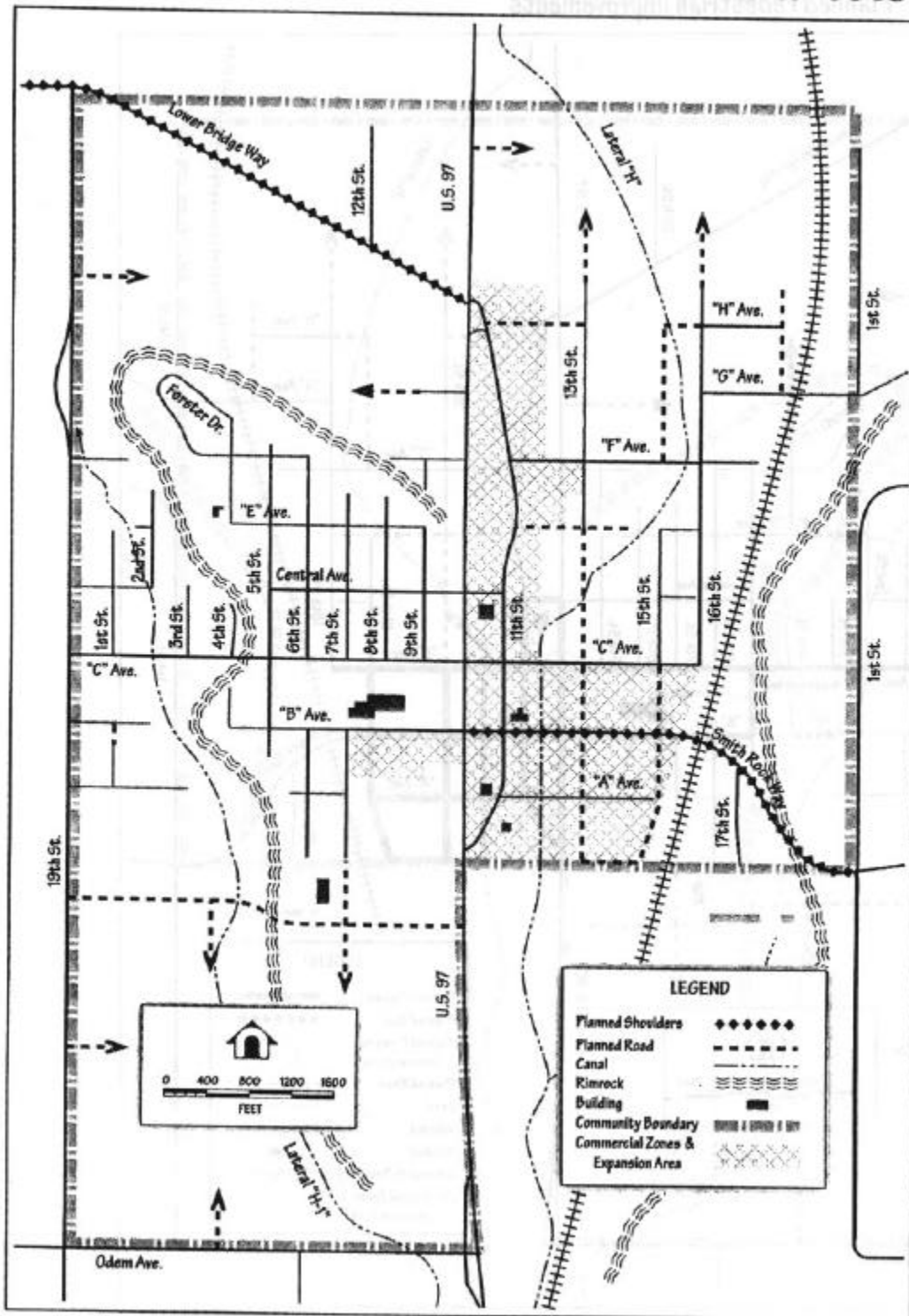
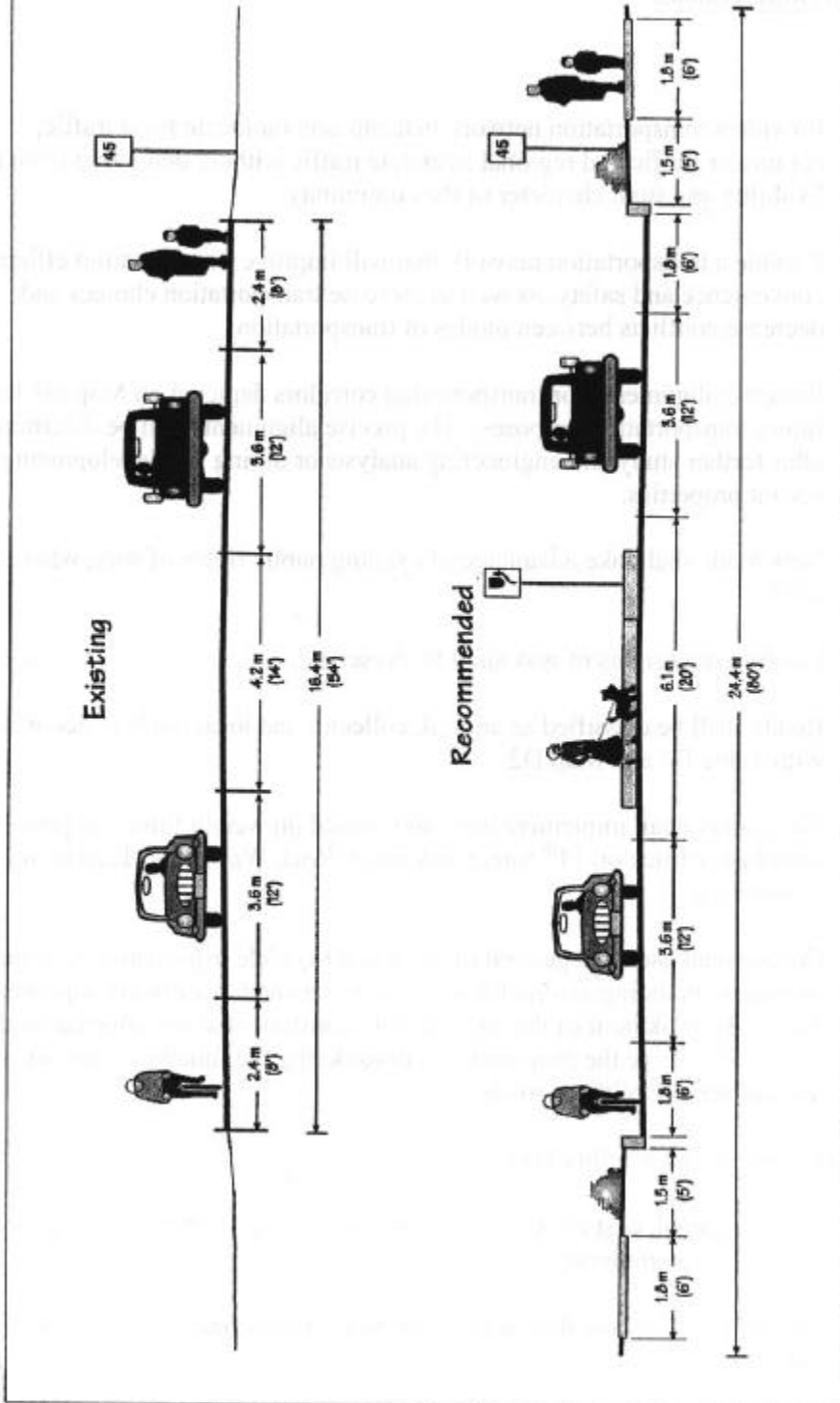


Figure D1: Highway 97 Cross-Section



Chapter 23.32 TUMALO RURAL COMMUNITY

23.32.010. Tumalo Rural Community.

23.32.020. Maps.

23.32.010. Tumalo Rural Community.

A. General.

1. Background – Historical.

Tumalo is located in the north central portion of Deschutes County, less than 3 miles northwest of the city limits of Bend. Situated at an altitude of approximately 3,200 feet, the community of Tumalo lies in the middle portion of the Upper Deschutes River Basin (river mile 157). The commercial core of Tumalo lies on the alluvial bowl bounded by the Laidlaw Butte on the west and the bluff of the Deschutes River canyon on the east. The Deschutes River bisects the community.

Originally named Laidlaw, Tumalo was platted by the Laidlaw Townsite Company in 1904. The development of Tumalo began in 1899 with incorporation of the Three Sisters Irrigation Company. Under the Carey Act, they made plans to divert water from Tumalo Creek and the Deschutes River in order to irrigate 60,000 plus acres of desert land. Town founder, A.W. Laidlaw of Portland, and his investors believed that Tumalo would become the heart of Central Oregon. There was reason to be optimistic due to the fact the railroad was coming north up the Deschutes River Canyon, which would undoubtedly follow the river into their newly platted town, and the proposed railroad to be built up the North Santiam River and across the mountains would surely guarantee the town's success. Neither of these projects came to fruition.

Out of nearly 900 lots platted, a third were sold by 1907. In those early days, Tumalo had a weekly newspaper, a barbershop, a two story hotel, two lawyer offices, a wallpaper company, a bakery, two feed stores and a bank, for example. As the town grew, it became its own voting precinct with 65 registered voters to Bend's 66 voters in 1906. By 1909, Laidlaw, being called Tumalo on occasion, still had hopes of being the junction of the two railroads, the new "metropolis" of Central Oregon. However, at the time the Columbia Southern Railroad still ended in Shaniko, and the Corvallis and Eastern rails were still stalled at the foothills on the western side of the Cascades, where they had been for approximately 15 years. With the announcement that the railroad was coming to Bend not Laidlaw, Bend had moved ahead in population by 1910. As a result, the population in Laidlaw decreased to 250 people and many businesses moved to Bend. The small town was known as Laidlaw for only six years when the Laidlaw post office was closed in 1913. The post office eventually reopened in 1923 as the Tumalo post office and thus the name of the town was forever changed.

2. Background - Population and growth.

The population for Tumalo has been extrapolated from four sources: the 1990 Census, the Deschutes County Unincorporated Land Use Inventory (October 1995), and the Residential/Vacant Lands map generated by the Deschutes County GIS data. The fourth source is a refinement of the 1995 Land Use Inventory projection for Tumalo contained in the Deschutes County Non-Urban Population Capacity Projection (November 8, 1996).

In review of the 1990 US Census for Tumalo area totaled approximately 325 persons. Historical population data for Tumalo have not been collected. However, the Tumalo Elementary School has experienced an influx of younger couples with children replacing retirees who have moved out of the area. The Tumalo elementary school has approximately 301 students at the present time with a capacity of approximately 400 serving grades K through 5th. According to the Deschutes County

Land Use Inventory (October 1995) Tumalo had 155 developed lots. Using 1990 Census data of 2.54 persons per household, the population figure would be 393. Again, this does not take into account percentages of retirement population and second homes in the Tumalo area. According to the GIS Parcel basemap (Assessors data) the developed lots in Tumalo equal 172. Using the 1990 Census figure of 2.54 persons per household, this population figure is approximately 436.

The rate of future population growth in Tumalo is difficult to estimate because growth is limited due to the substandard platted lots of the Laidlaw Platt as well as the difficulty in extrapolating data for the specific boundary of Tumalo. Deschutes County projects a county-wide growth rate of 4.5 percent until the year 2000. Recent estimates for all unincorporated areas of Deschutes County (excluding unincorporated urban growth boundary lands of Sisters, Redmond and Bend) indicate a growth rate of 4.8% annual growth between 1990-1995.

3. Background - Periodic review.

In the fall of 1994, the Land Conservation and Development Commission adopted a new administrative rule, OAR 660.22, Unincorporated Communities. As part of 1996-97 periodic review, the County updated the Comprehensive Plan and implementing regulations for Tumalo to comply with the rule.

4. Rural Community.

Tumalo meets the definition of a Rural Community because it is primarily a residential community, which also has a school, church, and a handful of local businesses that serve the community, the surrounding rural area or persons traveling through the area. The comprehensive plan designates Tumalo as a Rural Community and provides for its growth and development accordingly.

5. Tumalo Rural Community boundary.

The 1979 Deschutes County Comprehensive Plan designated Tumalo a Rural Service Center, a Goal 3 and 4 exception area, consisting of 491 acres and 288 tax lots. The 1979 Tumalo Rural Service Center boundary included the Laidlaw Plat, the southeast flank of Laidlaw Butte north of Bailey Road, the area east of the Deschutes River on the north and south sides of Tumalo Road, six lots of the Winston Ranch subdivision on the east bluff of the Deschutes River canyon and seven parcels located north of Putnam Lane.

During the 1997 update, the Tumalo Rural Community boundary was amended in the following ways to include 504.11 acres and 321 tax lots (See Map A).

- a. A parcel comprising ten acres was the subject of a zone change, plan amendment and minor partition in 1980, File #ZC-PA/80-1. This parcel is located approximately ¼ mile north of the existing boundary on the between Cline Falls Highway and the west bank of the Deschutes River. The plan designation for this area was changed from Rural Service Center to Rural Residential Exception Area.
- b. An area consisting of 33 lots of the Deschutes River Homesites subdivision was changed from a plan designation of Rural Residential Exception Area to Rural Community- Residential 5 acre. In addition, the strip of land that is located between Cline Falls Highway and the Deschutes River that links the previous Tumalo Rural Community boundary to the lots adjacent to Beaver Lane was included within the boundary and designated Residential 5 acre.
- c. One tax lot north of Putnam Lane on the west side of Hopper Road which comprises the northern lot of the Rockwood Subdivision not included with the other seven lots that are located within the boundary. The plan designation for this area was changed from Rural Residential Exception Area to Residential 5 acre.
- d. The community boundary was refined to coincide with parcel lines along the east rim of the Deschutes River canyon and along the east channel of the Deschutes River. The plan designations for these adjustments were changed from "Residential-5 acre" to Rural Residential Exception Area and Agriculture. The south boundary of the community was refined to coincide

with the southern extension of the TuR5 and TuR zoning designations in the area of designated Floodplain.

In 1999, the boundary of the community was revised to exclude tax lots 2301, 2300 and 2600 that were inadvertently excluded from the mining processing operations conducted by Bend Aggregate and Paving for many years. These parcels were mistakenly included in the community boundary in 1997. The community boundary now without these tax lots includes a total of 318 tax lots. Each of the community maps in the comprehensive plan was revised in 1999 to reflect this boundary change.

B. Land use planning.

1. Existing land uses.

The predominant land use in Tumalo is single-family residences. Commercial land uses include a market, restaurants, real estate offices, a small commercial/retail complex, and various other small-scale retail businesses located in the core of the community along Cook Avenue. There is a fire station, an irrigation district office, a church and an elementary school.

Land bordering Tumalo is zoned Exclusive Farm Use (EFUTRB) Tumalo/Redmond/Bend Subzone, Multiple Use Agriculture (MUA10 - 10 acre minimum lot size), Floodplain (FP) and Surface Mine (SM). The Deschutes County Comprehensive Plan designates EFU land for Agriculture uses and MUA10 and RR10 land for Rural Residential uses. The EFU land surrounding Tumalo is employed in large-lot, irrigated agricultural uses, whereas the MUA10 land is parcelized and developed with rural residences and small-scale agricultural uses.

A land use inventory using the County Assessor’s data (GIS parcel basemap) is shown in Table B.

Table B: Land Use Inventory - Tumalo Rural Community

Assessors Property Class	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
Miscellaneous	15	2	13
Commercial	63	26	37
Industrial	1	1	0
Tract	181	138	43
Exempt	28	5	23
Total Tax Lots	288	172	116

Zoning District	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
RD	2	1	1
RSC	48	32	16
RSRM	190	113	77
RSR5	48	26	22
Total Tax Lots	288	172	116

Source: Deschutes County Assessors Database, March 19, 1997 & Deschutes County PW GIS Parcel Basemap, March 19, 1996

2. Comprehensive Plan designations.

The 1997 Deschutes County Comprehensive Plan for the Tumalo Rural Community has the following five comprehensive plan designations (See Map B).

- a. Residential District. At the time of adoption, the boundary of the Residential district coincided with the boundary of the old Laidlaw Plat including the Deschutes River Homesites plats between Riverview Avenue and the Deschutes River. It also includes the area surrounding the Bend Aggregate site south of Highway 20. It is intended to accommodate higher density residential uses
- b. Residential 5 Acre District. The lands designated Residential-5 acre minimum included the larger parcels of land to the east across the Deschutes River and to the west on the slope of Laidlaw Butte. This plan designation is intended to remain in large parcels to maintain the rural character of the community.
- c. Commercial District. In general, the Commercial plan designation extends north from the intersection of Cook Avenue and Highway 20 to 3rd Street between Wood and Wharton Avenues. The Commercial lands also comprises a portion of land west of Highway 20 between 5th and 8th Streets. The commercial plan designation was intended to accommodate a mixture of small scale commercial and limited industrial uses that serve the rural community of Tumalo. The core commercial area was intended to focus on the area adjacent to Cook Avenue north of Highway 20.

The Commercial Land designation was expanded to accommodate a section of land between Cook Avenue and Wharton Avenue that extends south to Highway 20. This area includes the “Tumalo Mall”, an existing commercial/retail complex. The use of this building has been authorized as a nonconforming use (1986), and subsequent site plan alteration in 1987/88. The purpose of the commercial lands expanding to include this parcel is to bring the uses specified in the previous land use decisions into compliance with the uses allowed in the commercial zone. This complex contains one existing business which occupies 2/3 of the building.

- d. Research Development District (RD). This plan designation contains two parcels in one ownership located on the southeast slope of Laidlaw Butte to the west of Tumalo. This plan designation was originally created to accommodate a research and development site and its associated uses that predated the county 1979 zoning ordinance that would be compatible with the rural character of the area.
 - e. Floodplain District (FP). This plan designation contains the previous Floodplain designation that follows the channel of the Deschutes River that bisects the Tumalo Rural Community. The Floodplain Zone is identified by the Federal Insurance Administration as areas of special flood hazard in the report entitled “The Flood Insurance Study for Deschutes County, Oregon and Incorporated Areas,” dated August 16, 1988.
3. Land use policies.
- a. General land use policies.
 1. Land use regulations shall conform to the requirements of OAR 660 Division 22 or any successor.
 2. County plans and land use regulations shall ensure that new uses authorized within the Tumalo Rural Community do not adversely affect agricultural uses in the surrounding exclusive farm use zones. Zoning regulations shall require any new structure on land contiguous to EFU-zoned land which is receiving special assessment for farm use to be set back 100 feet from the common property line.
 3. To protect scenic views visible from the community, adequate setbacks shall be required for homes built along the rim forming the Deschutes River Canyon and Laidlaw Butte.
 4. Uses such as parks and open space shall be encouraged, and where feasible, the County should acquire those lands as open space.
 5. Public access to the river shall be preserved.
 6. Publicly owned lands along the river should remain as open space.

7. The County shall encourage the preservation of historical structures such as the Laidlaw Bank and Trust (1910), and the Tumalo Community Church (1907).
- b. Residential District policies.
 1. Areas designated residential on the comprehensive plan map shall be designated a corresponding residential district on the zoning map.
 2. Lands designated Residential shall be in proximity to the commercial area, while the lands designated Residential 5 acre will be on the perimeter of the community. The higher density lands designated Residential shall remain in the bowl formed by the Deschutes River canyon.
 3. Livestock shall be permitted in the residential districts subject to use limitations.
 4. The County shall plan and zone for a diversity of housing types and densities suited to the capacity of the land to accommodate water and sewage requirements.
- c. Commercial District policies.
 1. Allow small-scale commercial uses in conformance with the requirements of OAR Chapter 660, Division 22, and larger more intense commercial uses if they are intended to serve the community, the surrounding rural area and the travel needs of people passing through the area.
 2. Allow small-scale industrial uses in conformance with the requirements of OAR Chapter 660, Division 22.
 3. Where there is a choice to use a road other than Highway 20 for access, access shall not be taken from Highway 20.
 4. Design standards in the commercial district should encourage new development that is compatible with the rural character of the community and to reduce negative impacts on adjacent residential districts.
 5. Livestock shall not be permitted in the commercial districts.
 6. No additional lands shall be designated Commercial shall until the next periodic review.
 7. Residential uses or residences in conjunction with uses listed in the commercial districts shall be allowed, but they are not intended to predominate or set development standards for others uses in the commercial district.
 8. Approval standards for conditional uses in the commercial district shall take into account the impact of the proposed use on the nearby residential and commercial uses and on the capacity of the transportation and other public facilities and services to serve the proposed use.
 9. Replatting for residential purposes shall not be allowed in the commercial district.

C. Public facility planning.

1. Special Districts: Tumalo Rural Community is served by the following special districts. (1) Laidlaw Water District; (2) Deschutes County Rural Fire Protection District #2; (3) Redmond School District #2J; (4) Tumalo Irrigation District; and (5) Tumalo Town Ditch.

a. Water.

The area previously identified as the Tumalo Rural Service Center (RSC) has two water sources.

The Laidlaw Water District serving the area identified as the old Laidlaw Plat, and the area described as T16S R12E section 29 (W1/2 SW1/4), section 30 (E1/2 SW 1/4), (SW 1/4 SE 1/4), section 31(NE1/4, N1/2 SE1/4).

The Tumalo Town Ditch is the original source of water which has water rights dating back to 1924 and 1938. The system consists of 3 miles of ditch that begins near the bridge at Tumalo State Park, and runs along the river as a ditch crossing Bailey Road at the Tumalo Feed Company Restaurant, continues under Highway 20 to the commercial district of the Tumalo

community. The Tumalo Town ditch is used for irrigation purposes only, serving approximately 35 customers.

During the 1997 plan update, the Oregon Department of Water Resources commented that there is an abundant supply of potable water in multiple water bearing zones based upon a report prepared by a geologist for the Oregon Department of Geology and Mineral Industries, "Geology and Mineral Resources Map of the Tumalo Dam Quadrangle". Limitations are imposed by the lack of capacity of domestic pumps and not the capacity of the aquifer. The department has not identified Tumalo Rural Community as a groundwater limited or groundwater critical area. The Laidlaw Domestic Water District currently depends on two groundwater wells. The District's groundwater source does not exceed current EPA maximum contaminant limits. No treatment is performed; none has been required by the state Health Division. A proposed EPA groundwater disinfection rule would require continuous disinfection of the water supply. The area in the Tumalo Rural Community that is outside the District's boundary relies on individual wells for drinking water. The Water Resources Department routinely approves new groundwater wells in this area of the Tumalo Rural Community.

b. Sewer.

Tumalo does not have a community sewer system or a sewer facility plan. Land uses in the Tumalo Rural Community rely on on-site sewage disposal systems of all ages and descriptions, ranging from newer sand-filter systems to old drainfields. In some cases on-site systems are insufficient for current needs. According to the Environmental Health Division, past experience has indicated most of the soils in the area would fall under the category of rapidly draining soils. Based upon the most restrictive parameter onsite administrative rules would require a minimum lot size of one-half acre per single-family dwelling. This standard is based upon a projected sewage rate not to exceed 450 gallons per day. This is termed the loading rate pursuant to OAR 340-71-290(3)(c) and 340-71-275(3). Because of the alluvial soil profile (rapidly draining soils) a standard septic system is not feasible on smaller lots. It is often necessary to install a relatively expensive sand-filter system in order to obtain development permits for new development or for alterations to existing development. There are a few tax lots that cannot be developed or redeveloped, because they are too small to accommodate any approved on-site sewage disposal system.

The County plan and zoning regulations restrict the type and intensity of allowed uses to those which can be served by a DEQ approved on-site sewage disposal systems. The County does not allow uses or densities that cannot obtain approval for an DEQ approved on-site system. In addition, County zoning regulations set minimum lot sizes to ensure the on-site systems do not exceed the capacity of the land. Accordingly, the Environmental Health Division has stated that the minimum loading rates are addressed in the DEQ on-site rules and the minimum lot size requirements in the zoning ordinance. Due to these provisions, a public facility plan is not necessary.

c. Other.

During the 1997 update, the community expressed strong support for retaining the existing fire station in the rural community of Tumalo. The Planning Commission recommended a policy encouraging the continued presence of a fire station in Tumalo. However, the Board of County Commissioners understands that such a specific policy would be beyond its jurisdiction and control. The Board has addressed the community's concerns about fire protection in Tumalo by adopting a more general policy statement. Inclusion of this policy statement in the county's comprehensive plan should not be misconstrued as an endorsement for or against a fire station in the community but a mere finding that at this point in time, a large number of Tumalo residents believe that a fire station presence is necessary.

2. General public facility planning policies.
 - a. Residential minimum lot sizes shall be determined by the capacity of the land to accommodate available water and sewer facilities, in order to protect and promote public health and safety and to provide the efficient public facilities and services.
 - b. The County shall encourage quality fire protection in the rural community of Tumalo.
 - c. The County shall encourage early planning and acquisition of sites needed for public facilities (e.g. school, roads, water supply facility).
 - d. The County shall encourage all development within the Laidlaw Water District to connect to the system.
 - e. The County shall support replatting of lots in the area comprising the Laidlaw Plat and outside the lands designated commercial to create lots large enough to accommodate a DEQ approved on-site sewage disposal system.
 - f. The County shall support the protection of the Tumalo Town Ditch easement and its distribution system.
 - g. The County shall support the development and management of the domestic water system for the Tumalo community so that cumulative development will not result in public health hazards of adverse environmental impacts that violate state or federal water quality regulations.

D. Transportation planning.

1. Background - Transportation in Tumalo.

The Transportation plan addresses the transportation concerns of the Tumalo community. The plan meets the requirements of the state Transportation Planning Rule - OAR Chapter 660, Division 12, by designating a network of local roads, sidewalks and bikeways with associated road development standards.

a. Community transportation goals.

The livability of the Tumalo community depends on the ability of the transportation network to provide safe and convenient access in the residential and commercial areas and to the Tumalo elementary school. The community reached consensus on the following transportation goals:

1. Improve the access from Cook Avenue to and across Highway 20
2. Reduce truck traffic through the community
3. Provide safe pedestrian walkways in the commercial core and to the school
4. Provide road standards that are practical and cost effective to construct and maintain
5. Provide shoulders on county roads

b. Community profile.

Tumalo is a rural community near Bend with a mix of residential, commercial, and nearby employment, including gravel quarries and a high-tech research company. It functions as a bedroom community for Bend. Historical population data have not been compiled. The 1990 US Census for the Tumalo area totals approximately 325 persons. County Assessor's data show 172 dwellings within the Tumalo community boundary. According to the Deschutes County Land Use Inventory (October 1995) Tumalo had 155 lots. Using the 1990 Census data of 2.54 persons per household, the population figure ranges from approximately 393 to 436. According to the Redmond School District, the Tumalo Elementary School has experienced an influx of younger children in recent years. Although figures indicating the demographic mix for the Tumalo area are not available, the population appears to be a mix of families and retirees, with an average or above number of children (nondrivers).

c. Collision data.

There were 38 reported collisions on Highway 20 near Tumalo during the 10-year period from 1986 to 1995. There were 42 injuries and 1 fatality. Of the 38 crashes, 17 occurred at intersections, with seven at Cook Avenue and eight at 7th Street. The majority of crashes (27) were during daylight. Eight incidents involved a wet surface and 10 involved trucks; no

pedestrians or bicyclists were involved. These numbers place this segment of Highway 20 below the state average for accident rate.

- d. Constraints on the transportation system.
 1. Topographic Features: Tumalo is located on the valley floor of the Deschutes River canyon, bounded by rimrock on the west and east. Laidlaw Butte forms the other significant topographic feature to the west of Tumalo. The rimrock and river limit the opportunities for a network of continuous streets.
 2. Transportation Features: Highway 20 runs north-northwest through Tumalo and limits east-west street connections. There are 3 accesses to the highway: 5th Street, 7th Street/Bailey Road, and Cook Avenue/O.B. Riley Road.

Pavement runoff is handled by direct absorption into the soil since there is no community stormdrain or sewer system. This affects street design especially the use of curbs, paved surfaces, and landscaping. Special attention must be given to drainage needs and runoff into the Deschutes River.

2. Inventory of existing transportation facilities.

This section contains an inventory of the existing public roads and pedestrian and bicycle facilities in Tumalo. These data were gathered primarily from the County Department of Public Works database supplemented by site visits and aerial photographs.

- a. Roads.

The essential component of the region's transportation system is U.S. Highway 20 which runs diagonally through the community. Highway 20 has three lanes, a travel lane in each direction and a continuous two-way center left-turn lane. The traffic count at the intersection of Highway 20 and Cook Avenue in 1996 was 7600 average daily traffic (ADT). The posted speed on Highway 20 through Tumalo is 55 mph. Intrastate truck traffic and local truck traffic serving nearby mining operations comprise a significant percentage of the traffic mix.

O.B. Riley Road, which is outside the community boundary, is a rural arterial which intersects Highway 20 from the south directly across from Cook Avenue. This road bisects the gravel mining operation that abuts Highway 20.

County collector roads include Bailey, Cline Falls, Cook, and Tumalo which all intersect Highway 20 in the central portion of Tumalo. Cline Falls feeds into Tumalo from the north, Tumalo Road from the east, and Bailey Road feeds into the community from the south. There are approximately 4.7 miles of roads in Tumalo.

Table D1 (Inventory of Existing Roads), is organized by functional classification, road name and alphabetical order. The available (ADT) counts provided by the county and state are listed.

The public roads in Tumalo (see Map D1) range in pavement width from 20 feet to 24 feet. Some streets (e.g., Riverview Ave.) are in poor condition (i.e. cracking and pot holes). Most unpaved roads need grading and a fresh layer of gravel.

- b. Pedestrian facilities.

There are no sidewalks or trails in Tumalo. The bridge on Tumalo Road has a walkway on its north side. There are two designated crosswalks, one on Cline Falls Road on the north side of the Tumalo Road intersection and the other on Cook Avenue on the north side of the 4th Street intersection. Cline Falls Road is signed for 20 mph if children are present because of the nearby elementary school (the normal speed limit is 35 mph). All other pedestrian travel is on roadways with narrow or no shoulders.

Except for the school grounds, Tumalo lacks public space such as a park, square or commons to which pedestrians could be attracted. There is undeveloped public access to the river from Tumalo Road. The primary trip attractors are the school, a church and the small commercial area (gas station, market, and restaurant). There is also a restaurant on the west side of Highway 20.

c. Bicycle facilities.

Highway 20 has a four-foot paved shoulder bikeway. All other bicycle travel is on shared roadways. Cline Falls Road and Cook Avenue are popular recreational routes. There are bicycle racks at the school.

3. Future transportation needs.

A rural community such as Tumalo, located on a major highway, requires a transportation network that can accommodate local, commuter, regional, and interstate traffic without detracting from the community's livability and rural character. Accomplishing this goal requires integrated street, bicycle and pedestrian networks, appropriate street standards, and safe access to the Highway 20 corridor.

The Tumalo transportation plan is based on conventional road functional classifications; or: arterial, collector and local roads. It establishes the roles and development standards appropriate to each type of road. The design of arterial and collector roads gives priority to through traffic over access to adjacent land uses. On local roads the emphasis is on access to adjacent land uses.

a. Transportation network plan.

The transportation network plan for Tumalo identifies where the roads need to be improved and where pedestrian and bicycle facilities are warranted. The network plan has three components: roads, sidewalks and bikeways.

1. Roads. Central Tumalo is a relatively compact area without need for additional public streets; infill will access existing streets. For the roads depicted on Map D2, planned improvements take advantage of existing public right-of-way, where it exists. Lands in the low density areas are served by existing public right-of-way which are unpaved, non-maintained public roads (Beaver Lane, Putnam Lane and Hopper Road) and private drives (Research Road, Winston Loop Road). Map D2 also depicts the roads that need improvement to serve the local road network and through traffic corridors.

2. Sidewalks.

Map D2 shows where sidewalks are needed for safety and identifies a potential opportunity for a trail extending south along the west side of Deschutes River. In Tumalo, a sidewalk network is needed along Cook Avenue, 4th, 5th, 7th and 8th streets to access the school and provide safe places for people to walk in the commercial area as it develops.

Sidewalks are usually separated from the road by a curb and gutter, which function as part of the storm drain system. Tumalo does not have a storm drain system. As an alternative, sidewalks in Tumalo shall be constructed without curbs and gutters and set back from the road surface behind a drainage swale. This type of sidewalk design is adequate, less costly and is consistent with the rural character of Tumalo.

A drainage swale is a broad, manmade depression running parallel to the right of way between the roadway and the sidewalk, where water can drain into the ground. The swale also provides room for signs, mailboxes, and snow storage, leaving the sidewalk free of obstructions. Street trees should not be planted in drainage swales where they will conflict with existing or planned utility lines, whereby the tree roots may damage pipes and conduits complicating repair work.

3. Bikeways.

Two types of bikeways are appropriate in rural areas. A shared roadway for local roads with low traffic volumes and speeds, and a paved shoulder bikeway for collectors and arterials with higher volumes and speeds or significant truck traffic. In Tumalo, paved shoulder bikeways are needed on Cline Falls Highway/Cook Avenue, Tumalo Road and Bailey Road which are County collector roads, including a bicycle connection from O.B. Riley south to Tumalo State Park (see Map D2).

4 Highway 20.

The intersection of the Highway 20 and Cook Avenue has been identified by the community as a traffic safety hazard. The Oregon Department of Transportation (ODOT) will have the lead authority to develop a solution to the realignment of this intersection. Preliminary designs have been presented to the Tumalo community. The County will work with ODOT to provide a solution to this intersection and to the connecting network of County roads which includes the realignment of O.B. Riley Road through the existing mining operation on the south side of Highway 20.

Projects to complete the transportation network plan are listed in Table D2. The tables list the type of improvement and the associated cost. The priorities are based upon perceived need while being flexible to grant funding or development opportunities.

b. Road development standards.

In recent years, urban street development standards were required in unincorporated communities within the county. The urban standards required 36 feet of pavement, with curb-tight sidewalks, curbs and gutters. It became evident that this standard was not practical or necessary in Tumalo. None of the existing roads in Tumalo meet this standard. The cost to build to this standard prohibited local residents from forming Local Improvement Districts (LIDs). In addition, people resisted the urban street profile because it did not fit with the community's preference for a rural appearance. The road standards are intended to decrease the cost of road improvements and to remove barriers to the formation of LIDs, for improving local roads.

There are sound traffic engineering principles that support reduced street standards. The State Transportation Planning Rule (OAR 660.12.045(7)) directs local governments to establish standards for local streets that minimize pavement width and total right-of-way consistent with the operational needs of the facility.

Excessive standards increase the costs of construction, use up valuable land, encourage inappropriate traffic volumes and speeds and create a problem channeling stormwater runoff. In Tumalo, full urban road standards are not needed because the traffic volumes and speeds on roads in the community are low compared to city streets. Many roads serve only a few residences. However, existing County rural road standards are not adequate to serve the densities and variety of uses found in Tumalo. Local businesses and the elementary school generate more local trips than normally found in the rural county.

The Tumalo Rural Community road development standards were developed in coordination with the community planning process, the Oregon Department of Transportation (ODOT) Region 4, the state Bicycle and Pedestrian Program and with the County Planning Division and Public Works Department. These road standards are consistent with ODOT and the American Association of State Highway Traffic Officials (AASHTO) standards for rural communities. They apply to public rights-of-way other than the state highway which is under state jurisdiction.

4. Transportation policies.

a. Road Network Policies

1. The County shall adopt a Transportation System Plan for Deschutes County that incorporates adopted policies and standards for the Tumalo Rural Community.
 2. The County shall explore the potential for alternate truck routes to reduce the impacts of traffic through the Tumalo Rural Community.
- b. Road and sidewalk development policies.
1. The County shall implement road development standards for the Tumalo Community that minimize pavement width and are consistent with the rural character of the community.
 2. Specific street segments in the Tumalo Rural Community have been identified as priorities for improvement projects listed in Table D2. These priorities shall be flexible in order to take advantage of land development and grant funding opportunities.
 3. Provide functional, cost effective sidewalks that are consistent with the rural character of the community.
 4. Provide sidewalks where they are needed for safety, as set forth in Map D2.
 5. Where sidewalks are specified on community roads, they shall be constructed without curbs and gutters, set back from the road surface behind a drainage swale at a distance from property lines to allow room for utilities.
- c. Highway 20 policies.
1. The County shall support the Oregon Department of Transportation efforts to implement both short and long-term improvements to solve the Cook Avenue/Highway 20 intersection safety and access problems.
 2. The County shall consider the realignment of O.B. Riley Road through the Bend Aggregate site and coordinate with the Oregon Department of Transportation at its intersection with Highway 20.

(Ord. 2000-017 § 1, 2000; Ord. 97-031, 1997)

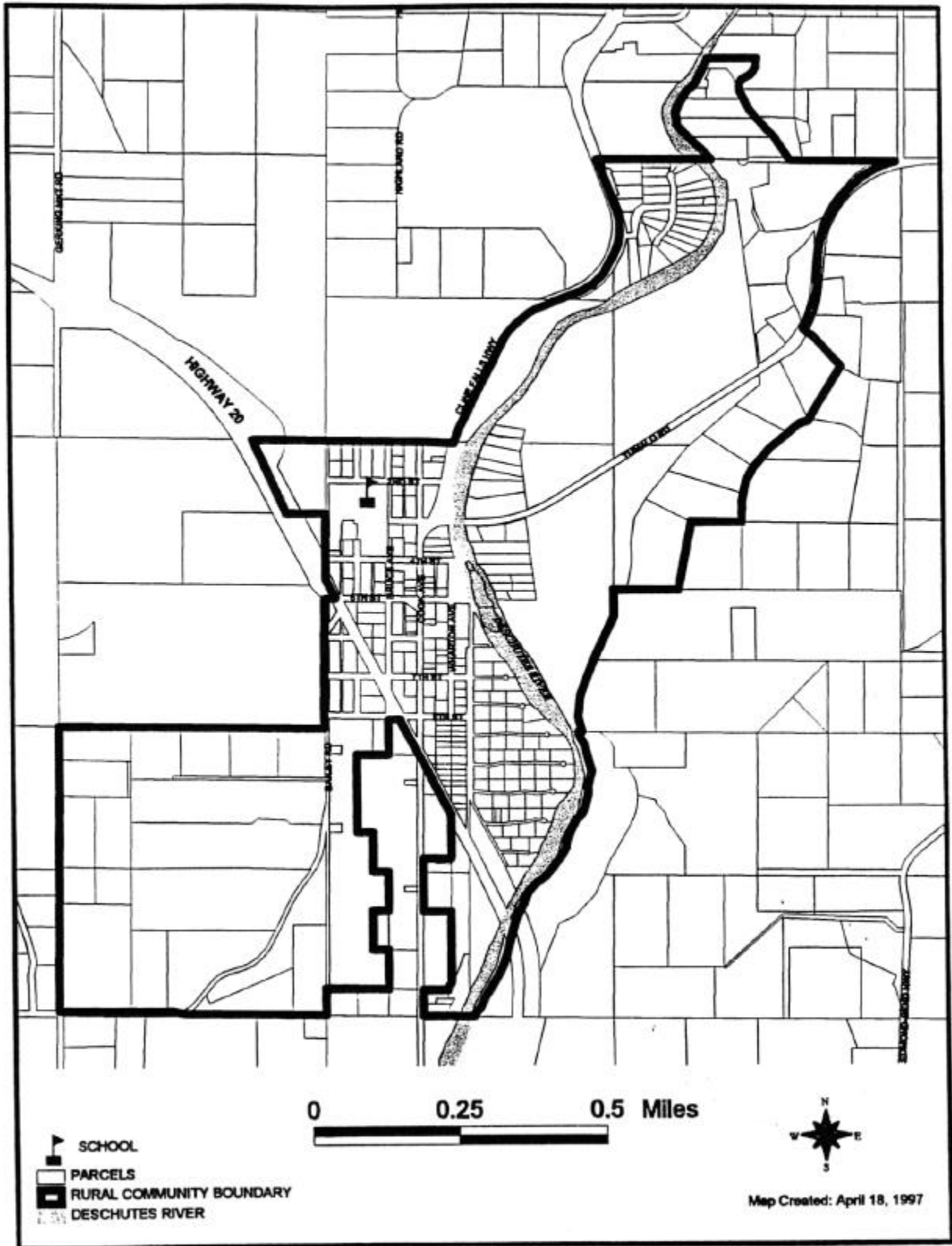
Table D1: Existing Roads by Functional Classification (source: Deschutes County Public Works, Traffic County Summary 1980 - 1996, June 1996)

Road Names	From (speed)	To	Length	Classification	Width (feet)	ADT
US Hwy 20	North URC 55 mph	south URC	1.04	Highway	48	7600
Bailey Rd.	west URC 35 mph	Hwy 20	.352	Collector	22	1239
Cook Ave.	Cline Falls Hwy	Hwy 20	.373	Collector	24	4774
Cline Falls Hwy	north URC 35 mph	Cook Ave.	.160	Collector	24	3478
Tumalo Road	Cline Falls Hwy	URC	1.13	Collector	24	2250

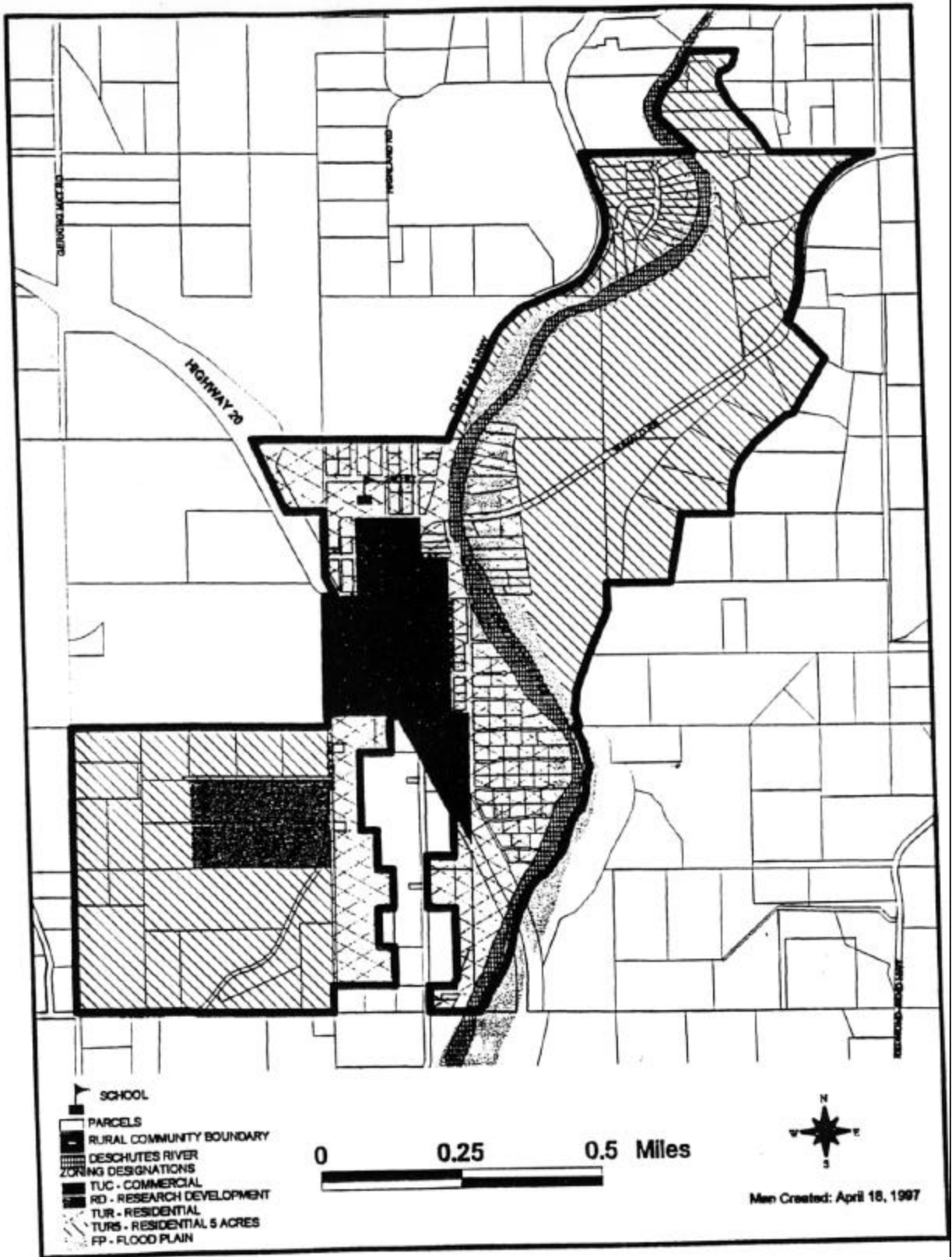
2nd St.	Wood Ave. 25 mph	Cline Falls Hwy	.151	Local	20	---
4th St.	Wood Ave. 25 mph	Cline Falls Hwy	.100	Local	---	---
4th St.	Cline Falls Hwy 25 mph	Wharton Rd.	.066	Local	24	---
5th St.	Hwy 20 25 mph	Wood Ave.	.023	Local	20	---
5th St.	Wood Ave. 25 mph	Wharton Rd.	.180	Local	24	---
7th St	Hwy 20 25 mph	Wharton Rd.	.140	Local	21	---
7th St.	Wharton Rd. 25 mph	Riverview Ave.	.023	Local	---	---
8th St.	Cook Ave. 25 mph	Riverview Ave.	.088	Local	24	---
Bruce Ave.	4th St. 25 mph	7th St.	.210	Local	22	---
Cook Ave	north end 35 mph	2nd St.	.070	Local	---	---
Cook Ave.	2nd St. 35 mph	Cline Falls Hwy	.095	Local	20	---
Riverview Ave.	north end 25 mph	8th St.	.110	Local	---	---
Riverview Ave	8th St 25 mph	south end	.150	Local	18	---
Wharton Rd.	4th St. 25 mph	8th St.	.272	Local	24	---

* URC - denotes unincorporated rural community boundary (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 97-031, 1997; PL-20, 1979)

Map A: Tumalo Rural Community Boundary

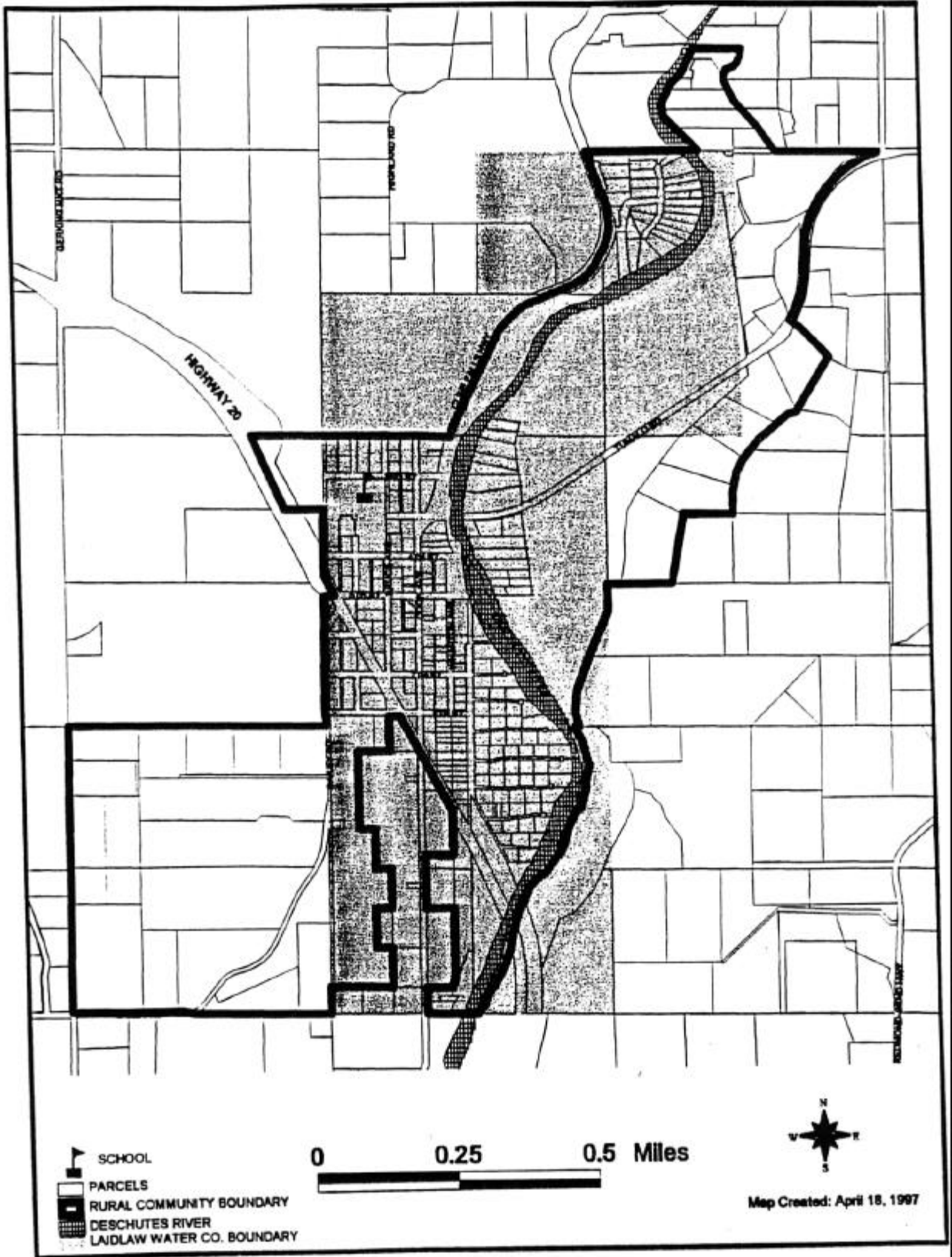


Map B: Tumalo Rural Community - Comprehensive Plan Map



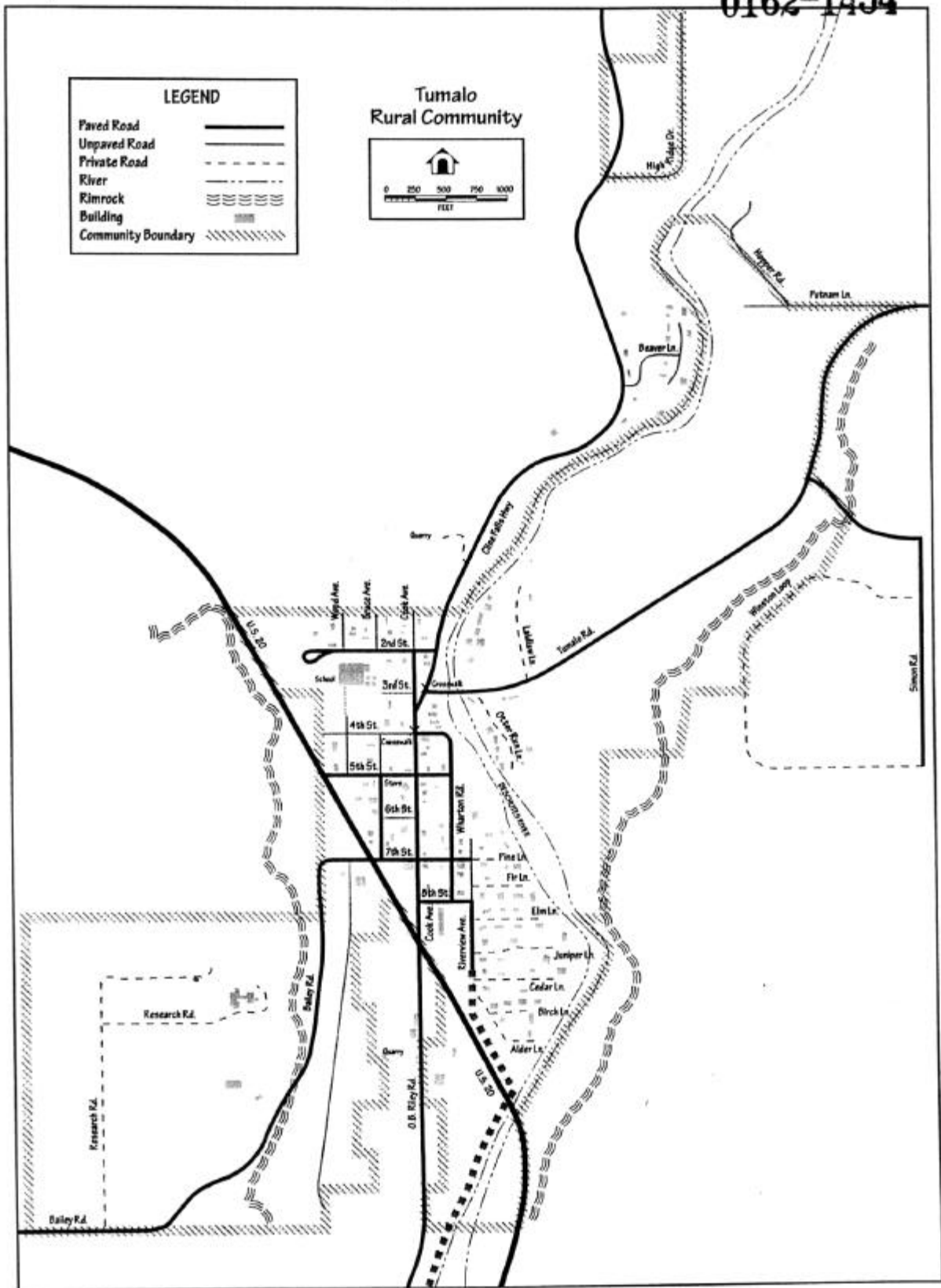
Map C: Laidlaw Water District

0 0.25 0.5 Miles



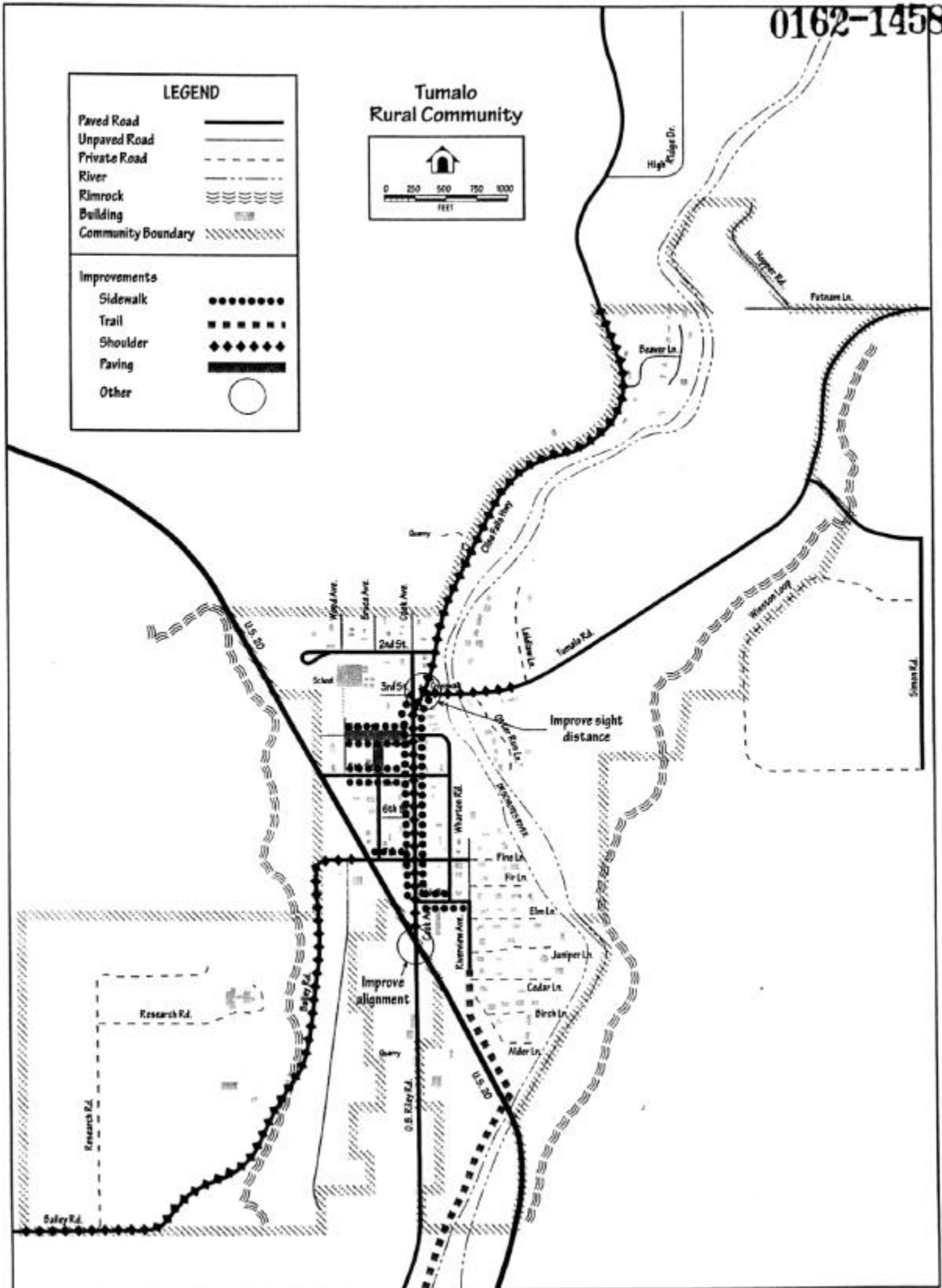
Map D1: Inventory of Existing Roads

0162-1454



Map D2: Planned Roadway, Sidewalk and Trail Improvements

0162-1458



Chapter 23.40. UNINCORPORATED COMMUNITIES

- 23.40.010. Unincorporated Communities.**
- 23.40.020. Urban Unincorporated Community - La Pine.**
- 23.40.025. Urban Unincorporated Community - Sunriver.**
- 23.40.030. Rural Communities – Terrebonne and Tumalo.**
- 23.40.040. Rural Service Centers – Alfalfa, Brothers, Hampton and Millican, Whistlestop and Wildhunt**
- 23.40.050. Resort Communities - Black Butte Ranch and Inn of the Seventh Mountain/Widgi Creek.**
- 23.40.060. Rural Commercial Deschutes Junction, Deschutes River Woods Store, Rosland and Spring River.**
- 23.40.070. Rural Industrial.**
- 23.40.080. Maps.**

23.40.010. Unincorporated Communities.

The 1979 comprehensive plan designated the following rural service centers (RSC): Alfalfa, Brothers, Hampton, and Millican. La Pine, Whistle Stop, Wickiup Junction, Terrebonne, Wild Hunt and Tumalo. These areas were designated in that plan as exception areas from Goals 3 and 4. Zoning under the Comprehensive Plan allowed for a mix of residential uses and commercial uses to support nearby residential uses. The scope of those uses was never clearly defined but, until the early 1990's, was ever much of an issue since there was little development pressure.

In 1994, LCDC adopted a new administrative rule, OAR 660 Division 22 to clarify what uses could be allowed in “unincorporated communities” without violating Statewide Planning Goals 11 and 14 relating to public facilities and urban uses. The rule identifies 4 different kinds of rural communities: Resort Community, Urban Unincorporated Community, Rural Community and Rural Service Center. In addition to the RSCs listed above the following developments were identified as communities that Deschutes County has been required to review for compliance with the rule: Black Butte Ranch and Inn of the Seventh Mountain/Widgi Creek resorts, Deschutes Junction RSC, Spring River RSC, lands zoned for Rural Industrial development and the Deschutes River Woods Country Store development. The latter four areas will be zoned in 2002 for Rural Commercial or Rural Industrial uses because they do not meet the criteria of any of the four types of unincorporated communities.

The County changed zoning for the Rosland Rural Commercial area from Rural Residential (RR-10) to Rural Commercial in 2003 because the County recognized the Rosland area as a small rural center that was established prior to the adoption of statewide zoning rules by Deschutes County. The County designated the subject property as Rural Residential Exceptions Area on the 1979 PL-15 zoning maps. This designation did not reflect the nature of the historically committed land uses on the subject property.

Since 1979, state law regarding Rural Community Centers has changed. In 2002, the County changed the designation of the smallest acknowledged RSC areas throughout the County to Rural Commercial zoning to comply with the new state administrative rules for Rural Communities. The Rosland Rural Commercial area was mistakenly left off the 1979 PL-15 zoning maps.

The small size and the rural character and intensity of the development in the Rosland Rural Commercial area makes it appropriate to apply an RC rather than an RSC designation. Additionally, OAR 660-022-0010(10)(b) states that in order for an area to be zoned “Rural Service Center” under the Unincorporated Communities rule, it must be identified in a county’s acknowledged comprehensive plan as a “rural service center” prior to the adoption of OAR 660-022, which was on October 28, 1994, or be listed with the Department of Land Conservation and Development’s January 30, 1997 “Survey of Oregon’s

Unincorporated Communities.” The Rosland Rural Commercial area does not meet either of these requirements.

The following table shows that the plan designation for each area is Unincorporated Community, and indicates which type of community the area is defined as and the year when review for compliance with OAR 660 Division 22 was completed.

(Ord. 2003-079 § 1, Ord. 2002-001 § 4; Ord. 2002-005 § 1, 2002; Ord. 2001-047 § 2; 2001; Ord. 2000-017 § 1, 2000; Ord. 98-014 § 1, 1998; Ord. 97-076 § 2, 1997)

COMMUNITY	PLAN DESIGNATION	UNINCORPORATED COMMUNITY TYPE	APPROVAL DATE
La Pine	Unincorporated Community	Urban Unincorporated Community	1996
Wickiup Junction	Unincorporated Community	Rural Service Center	1996
Terrebonne		Rural Community	1997
Tumalo	Unincorporated Community	Rural Community	1997
Sun river	Unincorporated Community	Urban Unincorporated Community	1997
La Pine – expansion to include Wickiup Junction and BLM land	Unincorporated Community	Urban Unincorporated Community	2000
Black Butte Ranch	Unincorporated Community	Resort Community	2001
Inn of the 7 th Mountain/ Widgi Creek	Unincorporated Community	Resort Community	2001
Alfalfa	Unincorporated Community	Rural Service Center	2002
Brothers	Unincorporated Community	Rural Service Center	2002
Hampton	Unincorporated Community	Rural Service Center	2002
Millican	Unincorporated Community	Rural Service Center	2002

(Ord. 2002-001 § 4; Ord. 2002-005 § 1, 2002; Ord. 2001-047 § 2; 2001; Ord. 2000-017 § 1, 2000; Ord. 98-014 § 1, 1998; Ord. 97-076 § 2, 1997)

23.40.020. Urban Unincorporated Community – La Pine.

A. Community overview

1. Planning history.

Several characteristics that are unique to the La Pine area have shaped the La Pine community. The pattern of public and private land ownership has scattered the population and made the creation of a cohesive community difficult. In the 1960s through 70s, before statewide planning, over 12,000 lots were platted south of Sunriver. The majority of the lots have on-site sewage disposal systems and are less than two acres in size. The area surrounding La Pine is fairly level and the groundwater

aquifer, the source of domestic water, is generally shallow. Water pollution problems identified in the core area of La Pine in the 1980's resulted in the construction of a sewage treatment facility. While the water quality in the core area has since improved, the potential for more widespread water pollution problems in the rural area surrounding La Pine was recognized in the mid 1990s. In addition, deer migration corridors in the area have been seriously affected and large areas of forestland have been converted to residential development.

A desire by local residents to be independent of Bend has created a demand for local commercial and public services. However, the low-density residential pattern spread over approximately 50 square miles has created serious challenges relating to public facilities and services planning, energy conservation and urbanization.

Under the 1979 comprehensive plan, La Pine was designated as a rural service center, with plan designations for residential, commercial, industrial and industrial reserve. Zoning largely reflected the comprehensive plan designations. Through a plan amendment and zone change in 1984, the industrial reserve areas were planned for industrial development in conjunction with the industrial park owned and operated by Deschutes County.

In 1996 the La Pine Rural Service Center (RSC) was designated an "urban unincorporated community" or "UUC" and the Wickiup Junction RSC retained its designation as a "rural service center" under statewide planning rules for unincorporated communities. At the same time, the County began working on the "Regional Problem Solving Project for South Deschutes County," a planning project made possible through the Oregon legislature.

Through the Regional Problem Solving (RPS) planning process, community stakeholders identified regional problems. The four major concerns identified by the stakeholders were 1) the potential pollution of groundwater which adversely affects the primary source of drinking water in the area; 2) the loss of wildlife habitat; 3) increased threat from wildfire; and 4) impacts to air quality from dust from unpaved roads. (See Regional Problem Solving, Chapter 8, Section 4 of the Comprehensive Plan).

Groundwater flow models developed in 1996 by the Oregon Department of Environmental Quality indicated that nitrate levels in the groundwater could reach unhealthy levels in the near future if steps were not taken to limit the total number of on-site disposal systems in the area. The cost of a regional sewer system was analyzed and determined to be prohibitive. Other solutions, including a building moratorium or an increase in the minimum parcel size required for an on-site disposal system, were determined to be unacceptable options for the community.

One solution that emerged from the RPS project was to create a "new neighborhood" which would be primarily residential in character and be located between La Pine and Wickiup Junction. Future growth for the South County that would otherwise occur in existing subdivision lots in the surrounding area could be redirected to the new neighborhood.

The means to accomplish this change in the pattern of growth is through a transferable development credit (TDC) program that allows the owners of vacant lots to choose whether to build on their property or sell their "rights" to develop. A market will be created for these rights because of the requirement for TDCs to build in the new neighborhood, now known as the Neighborhood Planning Area in the La Pine UUC.

In August 2000 the La Pine UUC boundary was expanded to include the following additional areas to implement the RPS project and meet other identified community needs:

Property	BLM Tract 38	Baldwin-Herndon Oregon Trust	Wickiup Junction RSC
Acreage	518	66	102

At the same time, three planning areas were created in the La Pine UUC encompassing the following acreage:

Planning Area	La Pine	Neighborhood	Wickiup Junction
Acreage	982	571*	102

*Includes Hwy 97 & Huntington Rd. R-O-W

The La Pine Planning Area encompasses the former La Pine UUC plus 13 acres of the Baldwin-Herndon Oregon Trust Property. The Neighborhood Planning Area includes all of the BLM property identified as Tract 38 and 53 acres of the Baldwin-Herndon Oregon Trust property. The Wickiup Junction Planning Area is identical to the former Wickiup Junction RSC. The La Pine UUC and the three planning areas are shown on Figure 1.

The Neighborhood Planning Area will be developed with residential uses, including single-family and multi-family dwellings, a limited amount of commercial uses, a school, senior assisted living facilities and other community/civic uses, and open space and parks.

The 13 acres of Baldwin-Herndon Oregon Trust property, between Huntington and Couch Roads near the La Pine High School, was added to the La Pine Planning Area for future community uses, such as a pool, performing arts center and community education facilities. The need for these types of facilities was identified in design workshops held in 1998 as part of the Deschutes County Regional Problem Solving planning program and reaffirmed in a subsequent workshop conducted by the La Pine Community Action Team in April 2000. A new plan designation, "Community Facility", was created to include this property and the adjacent land that consists of the existing school site. This site was formerly designated as "Residential" in the La Pine Planning Area.

In 1998 a sewer line was extended from La Pine to Wickiup Junction and as of August 2000 there were approximately 34 developed properties in Wickiup Junction connected to the sewer system. There are plans to extend a water system to Wickiup Junction. Therefore, the Wickiup Junction area consisting of 102 acres was added as a third planning area in the La Pine UUC in 2000 and the designation of Wickiup Junction as rural service center was eliminated. The mixed commercial/residential comprehensive plan designation and zoning district were retained, however, in the Wickiup Junction Planning Area.

The expansion of the La Pine UUC boundary in 2000 was done under the auspices of Regional Problem Solving. It was completed by taking an exception to statewide planning Goal 4 and addressing the criteria for enlarging a UUC under the administrative rule for Unincorporated Communities, OAR 660, Division 22.

2. Planning under the Urban Unincorporated Community Regulations.

Under the Administrative Rule for Unincorporated Communities, OAR 660, Division 22, La Pine meets the definition of an “Urban Unincorporated Community.” La Pine has the following characteristics that make it an “Urban Unincorporated Community” under the rule:

- a. Includes at least 150 permanent dwelling units including manufactured homes;
- b. Contains a mixture of land uses, including three or more public, commercial or industrial land uses;
- c. Includes areas served by a community sewer system;
- d. Includes areas served by a community water system; and
- e. Is unincorporated.

Under the administrative rule, rural unincorporated communities are required to have a public facilities plan. The public facilities plan for the La Pine UUC is set forth in the section immediately following this general discussion of the La Pine Urban Unincorporated Community.

As of 1996, 22 non-community public water systems and a public sewer system served the La Pine Planning Area. The La Pine Special Sewer District was established in 1980 to protect the groundwater in the La Pine rural area. The sewer district boundaries were expanded in 1996 to include the industrial area and again in 1998 to include the Wickiup Planning Area. Figure 2 shows the sewer district boundaries as of August 2000. The sewer treatment system allows wastewater generated in La Pine to be collected, treated and disposed of safely while at the same time allowing growth and development of the La Pine UUC.

Construction of a public water system for La Pine was started in 1998. It is expected to start providing water to the La Pine Planning Area in 2001. The La Pine Water District was established in 1997 to operate and maintain the water system. Figure 3 shows the water district boundaries as of August 2000.

The La Pine Rural Fire Protection District currently serves the La Pine Urban Unincorporated Community and surrounding rural area. Figure 4 shows the boundaries of the fire district. The district headquarters is located in La Pine. An additional fire station is located north of the La Pine UUC near Vandevent Road.

The native vegetation in the area consists primarily of lodgepole and ponderosa pines with an under story of grasses and shrubs. Much of the native vegetation in the surrounding area remains, except that trees have been thinned in conjunction with forest product operations and residential development.

The La Pine UUC is the primary service center for the surrounding rural residential development located south of La Pine State Park Road. The UUC also serves the needs of additional RR-10 development south of Sunriver and north of La Pine State Park Road. Figure 5 shows the rural area that surrounds the La Pine UUC.

The existing development in the La Pine Planning Area consists of a variety of uses which include: elementary school, high school, church, post office, library, community park, bank, motels, gas/service stations, medical offices and various retail stores, restaurants and other commercial businesses. There is also some residential development within the La Pine Planning Area.

The La Pine Planning Area also includes the Deschutes County industrial park in addition to privately owned industrial land. All the land in the Industrial District is included in the La Pine

Special Sewer District. As of 1996, the sewer district had the capacity to serve the Industrial District at build out. Because the Industrial District is in the sewer district it is anticipated that new industrial uses will connect to the sewer.

In 1996 the La Pine Industrial Group, Incorporated (LIGI) requested that Deschutes County establish a Business Park District on a 40-acre parcel of land within the Industrial District and located east of Highway 97 and south of Reed Road. The County Commissioners agreed with the La Pine Industrial Group, Inc. that a need existed in the La Pine UUC for a mix of light industrial and commercial uses to provide further economic stability within the La Pine UUC and surrounding area. In 2001 the County rezoned the 40-acre parcel to La Pine Business Park District and amended DCC Title 18 to include the Business Park District within the La Pine UUC.

In 1996, the boundary of the UUC was expanded from the former boundary of the La Pine Rural Service Center to include a large tract that is occupied by the La Pine Special Sewer District for the treatment and disposal of its effluent. The resource designation for this tract was changed from Forest to Agriculture to recognize the fact that the tract had been cleared of trees and that treated effluent is used to grow hay crops as part of the disposal process.

The most contentious issue during the process of implementing the UUC designation in 1996 was whether a sufficient amount of land had been zoned for commercial use. The plan designations adopted as part of the 1996 UUC revision included an increase in designated commercial lands along the western boundaries of the La Pine Planning Area and some areas between Foss and Finley Butte Roads and along Foss Road.

Although there was a request that additional areas to the east of Highway 97 be zoned commercial, the County declined to designate those areas commercial, giving preference for commercial expansion along Huntington Road. Also, much of the residential development to be served by the UUC is located to the north and west of the UUC and there is a need to retain areas for future residential development within the La Pine core area.

The existing development in the Wickiup Junction Planning Area consists of a variety of commercial businesses including automotive services, restaurants, a bowling alley, motels and a gas station/convenience market. Two fraternal organizations are also located in the Wickiup Junction Planning Area. Some residential development also exists and recent land use actions and development within the Wickiup Junction Planning Area have converted existing buildings to new uses. A large truck stop for commercial haulers and other travelers on Highway 97 opened in 2000.

U.S. Highway 97 runs along the majority of the western boundary of the Wickiup Junction Planning Area. Burgess Road intersects Highway 97 along the southern boundary of the planning area. Both of these roads are two lanes and paved. Highway 97 is designated as a Primary Highway by Deschutes County while Burgess Road is classified as a Collector. Local streets provide internal access to the planning area. The Burlington Northern & Santa Fe Railroad railway runs parallel to Highway 97 west of the planning area boundary. There is an at-grade railway crossing of Highway 97 near the Burgess Road/Highway 97 intersection.

The Long Prairie Slough and its floodplain form the western boundary of the La Pine Planning Area. The floodplain area is used for agricultural purposes. The Division of State Lands completed a detailed wetland inventory in January 1996. The study found that there were no other wetlands located inside the La Pine Planning Area. Except for two historic structures, no Goal 5 resources have been identified or inventoried within the boundaries of the La Pine UUC.

Land surrounding the La Pine Urban Unincorporated Community boundary is zoned Rural Residential (10 acre minimum lot size), Forest Use 1, Forest Use 2 and Exclusive Farm Use (EFU – La Pine Sub-zone). Land to the east is federal land managed by the Bureau of Land Management. Land zoned Rural Residential lies to the north and west of the La Pine UUC. The comprehensive plan designation for the surrounding properties is Forest, Agriculture and Residential.

3. Comprehensive Plan Designations and Zoning.

In 2000, the La Pine Urban Unincorporated Community was expanded to include three planning areas:

- a. La Pine Planning Area (formerly the La Pine UUC plus a 13-acre expansion).
- b. Wickiup Junction Planning Area (formerly the Wickiup Junction Rural Service Center).
- c. Neighborhood Planning Area (formerly designated as forest resource land)

The La Pine Planning Area is divided into seven comprehensive plan designations: Residential, Commercial, Industrial, Business Park, Community Facility, Park/Open Space and Agriculture (see Figure 6). This planning area includes eight zoning districts: Residential, Commercial, Industrial, Business Park, Sewer Facility, Community Facility, Community Facility Limited and Flood Plain (see Figure 7). In addition, a portion of the residential district is identified with a commercial overlay on the zoning map. A policy is included in the plan for the eventual rezoning of this overlay area from residential to commercial.

The commercial overlay area was mapped in 1996 and applies to certain properties identified for future commercial expansion. These areas were identified in 1996 when the La Pine RSC became a UUC under the administrative rules for unincorporated communities. A Community Facility plan designation was created in 2000 to include the lands north of 1st Street already developed with schools and the 13-acre portion of the Baldwin-Herndon Oregon Trust property planned for other community facilities. The former area is in the Community Facility Limited zone district whereas the 13-acre portion of the Baldwin-Herndon Oregon Trust has been zoned Community Facility.

The Wickiup Junction Planning Area contains one plan designation and one zoning district: Commercial/Residential (see Figure 8). No changes were made to the boundary, plan policies or zone standards when this area became part of the La Pine UUC in 2000, except for the elimination of the policy that referred to expanding the sewer district boundary to serve this area and the placement of transportation policies into the overall La Pine UUC section.

The Neighborhood Planning Area contains four Neighborhoods. Each neighborhood is divided into four Quadrants. See the Quadrant Plan, Figure 11, for the generalized boundaries of the Neighborhoods and Quadrants. The Neighborhood Planning Area has plan designations-- Residential, Community Facility, Commercial and Park/Open Space (see Figure 9), and seven zoning districts-- Residential General, Residential Center, Community Facility, Community Facility Limited, Neighborhood Commercial, Neighborhood Park and Open Space (see Figure 10).

Plan policies and zoning standards were adopted in August 2000 and amended in September of 2001 to ensure that the Neighborhood Planning Area develops in accordance with the overall neighborhood plan and design documents produced for the Regional Problem Solving Project. Comprehensive plan and zoning maps were also adopted to help guide future planning and development in this planning area. In 2001 the County amended the Comprehensive Plan to refine the plan designations and adopt a quadrant planning process to allow flexibility in phased development in the four Neighborhoods. The boundaries of the plan designations and zoning area districts in the Neighborhood Planning Area may be adjusted during future refinements of the master plan for the entire planning area or when specific areas are addressed with Quadrant Plans

during the subdivision plat process. The boundaries of the Zoning Districts are generalized locations that will be finalized during the Quadrant Plan approval process according to performance standards in the Neighborhood Planning Area zoning code and the policies in the this Plan.

The plan policies and zoning standards adopted in August 2000 and amended in 2001 are also intended to ensure that residential development in the Neighborhood Planning Area will include mixed housing types, provide affordable housing opportunities and require participation in a Transferable Development Credit Program.

4. Land use inventory.

The inventory information listed below is from the Deschutes County Assessor's Office data and the land use projections for the Neighborhood Planning Area compiled by the County GIS Service Center in July 2000 and is based on design work completed for Regional Problem Solving. The Neighborhood Planning Area acreages are guidelines for future development in this planning area. The final acreages will be determined when Quadrant Plans are approved for each of the four Neighborhoods in the planning area. Quadrant Plans will be required prior to any development in the Neighborhood Planning Area.

a. La Pine Planning Area:

Assessors Property Class	Tax Lots	Developed Tax Lots	Vacant Tax Lots	Centrally Assessed.
Miscellaneous	11	2	3	6
Commercial	123	86	37	
Industrial	27	21	6	
Business Park	96	0	96	0
Tract*	202	128	74	
Farm	2	0	2	
Exempt**	41	11	30	
Totals	502	248	248	6

Zoning Districts	Total Lots	Developed Lots	Vacant Lots
Commercial	133	88	45
Residential	223	129	94
Industrial	48	15	33
Community Facility	1	0	1
Business Park	96	0	96
Community Facility Limited	1	1	0
Flood Plain	1	0	1
Sewer Facility	1	1	0
Totals	504	234	270

*Residential property or property used primarily for residential purposes.

**Tax exempt properties, i.e., church, County or state government.

Maximum # Potential new lots	Approximately 1,269 - based on both public water and public sewer service. Approximately 306 - based on either public water or public sewer service.
Existing sewer connections:	181 connections.
Existing public water systems:	22 non-community water systems with 146 connections, serving 1,837 people.
Total area	982 acres
Road distance to nearest UGB	25 miles - Bend UGB

b. Wickiup Junction Planning Area:

Assessors Property Class	Tax Lots	Developed Tax Lots	Vacant Tax Lots
Commercial	40	25	15
Tract*	30	17	13
Exempt**	27	3	24
Miscellaneous	2	0	2
Totals	99	45	54

Zoning District	Tax Lots	Developed Tax Lots	Vacant Tax Lots
Commercial/ Residential	99	41	58

*Residential property or property used primarily for residential purposes.

**Tax exempt properties, i.e., church, County or state government.

Maximum # Potential new lots	92
Existing sewer connections	34
Existing public water system	One non-community system with one connection servicing 100 people
Total area	102 acres
Road distance to nearest UGB	22 miles – Bend UGB

Zoning Districts	Developed Lots	Vacant Lots
Residential General	0	All
Residential Center	0	All
Community Facility	0	All
Community Facility Limited	*1	2
Commercial	0	1
Park/Open Space	n/a	n/a
Collector r-o-w	n/a	n/a
Totals		

*Includes local right-of-way

**Park & Ride @ Burgess/Hwy 97 Intersection

Maximum # residential lots	1800, including senior housing
Existing sewer connections	None; sewer line passes through district – connection will be required
Existing public water system	None; -- connection will be required
Total area	519 acres
Road distance to nearest UGB	23 miles – Bend UGB

5. Population information.

Since 1989, Deschutes County has been the fastest growing County in the state on a percentage basis. The estimated population in 2000 for La Pine and the surrounding rural area is over 10,000 year-round residents (and a summer population upwards of 16,000). This would make this area the second largest city in Oregon east of the Cascades, exceeded only by Bend.

The La Pine area is currently experiencing rapid growth similar to the remainder of Deschutes County. The following population estimates for Deschutes County were made after the 1990 census:

Year	1990	2000	2005	2010
Population	74,958	106,671	117,887	128,868

Source: U.S. Census, 1990

Population estimates in 1990 for the La Pine UUC were as follows:

Year	1990	2000	2005	2010
Population	4,651	6,619	7,315	7,996

Source: Ratio projection model based on U.S. Census.

In 1998, Deschutes County adopted a coordinated population forecast with the cities of Bend, Redmond and Sisters in accordance with ORS 195.036. This forecast relied on information from Portland State University and the Oregon Office of Economic Analysis. The adopted forecast includes the following population estimates for Deschutes County and the incorporated cities.

Year	2000	2005	2010	2020
Population Estimate	113,23	132,23	151,43	182,35
	1	9	1	3

From 1995 through 1999, building permits, vacant lot sales and real estate sales of improved lots increased. Growth in the La Pine UUC and surrounding rural area was similar to growth experienced in the remainder of Deschutes County for this time period. This trend is expected to continue.

B. La Pine Community Public Facility Plan.

1. Introduction.

The public facilities plan describes the water, sewer and transportation systems that are needed to support the land uses designated in the planning areas in the La Pine Urban Unincorporated Community. The facilities plan includes:

- a. An inventory of the condition and capacity of existing facilities;
- b. An assessment of the level of facilities and services needed to adequately serve the planned build out within the community area boundary, including references to policies at the end of this chapter applicable to the future needs for facilities; and
- c. Coordination agreements with the special districts that operate and maintain facilities consistent with ORS Chapter 195.

This Community Facility plan is based extensively upon the *La Pine Facilities Plan for the La Pine Special Sewer District* (June 1985), the *La Pine Special Sewer District Annexation Study* (1991) and the *La Pine/Wickiup Junction Local Street, Bicycle and Pedestrian Plan* (1999). These documents are incorporated by reference as part of this community facility plan document. It is not the intent of this document to duplicate previously developed materials. Rather, it will serve as a summary of public facilities improvements anticipated by the community of La Pine.

A Water and Wastewater Feasibility Study for: New Neighborhood and Cagle Subdivision (April 1999) determined that there is capacity in the water and wastewater systems to serve the initial phases of development in the Neighborhood Planning Area. The report analyzed the overall system needs and determined the timing of improvements to the water and wastewater systems that would be needed during the development of subsequent phases in the Neighborhood Planning Area. The County contracted with a consultant to prepare a more detailed Capital Facilities Plan in 2000 for the water and wastewater systems as a result of the addition of the Neighborhood and Wickiup Junction Planning Areas to the UUC. This revision will update the capacity of these systems, evaluate/compare existing and new technological alternatives to provide capacity at build out, develop improvement plans, develop a methodology for computing rates, hook up fees and potential systems development charges (SDCs), and analyze financing options for constructing, operating and maintaining improvements. A plan policy was adopted in 2000 that requires the capital facilities plan be completed before building permits are issued or the tracts of land are sold in the Neighborhood Planning Area.

2. Inventory of existing system facilities.

a. Sewer.

The La Pine Special Sewer District was formed on September 3, 1980, to implement construction, operation and maintenance of sewage facilities in the core area in order to solve the groundwater pollution problem and allow expansion of businesses.

As a result of expansion in 2000 the La Pine UUC consists of approximately 1,655 acres. The La Pine Special Sewer District currently operates and maintains a sewage collection system and treatment plant that provides service for residences and businesses within the La Pine and

Wickiup Junction Planning Areas. District boundaries are shown on Figure 2. The District anticipates expanding its boundary to encompass the Neighborhood Planning Area. A plan policy in this chapter states that the La Pine Special Sewer District should annex all land in the UUC.

The facilities consist of on-site septic tanks and septic tank effluent pump (STEP) units, a small diameter gravity collection system with a main pump station, and a treatment and disposal system which stores the septic tank effluent during the winter and spray irrigates it during the summer. Each of the three major components is described in more detail in the *“La Pine Special Sewer District Annexation Study Request For Environmental Information Form” FMHA 1940-20*. Construction of the existing system was completed in 1988.

As of March 1996, the system was operating at approximately 40% of capacity. With the addition of the Wickiup Junction Planning Area and additional development that has occurred in the La Pine Planning Area since then, the system is estimated to be operating at approximately 75% of capacity as of August 2000. The treatment system for the Sewer District could be described as underutilized because groundwater is being appropriated and pumped to the lagoons to supplement incoming effluent. This is being done so there is adequate water for irrigation of an annual hay crop.

b. Water.

As of 1996, La Pine was served by 22 non-community, public water systems. “Public Water System” means a system for the provision to the public of piped water for human consumption, if such system has more than 3 service connections or supplies water to a public or commercial establishment which operates a total of at least 60 days per year and which is used by 10 or more individuals per day, or a facility licensed by the Division of Environmental Quality. The motels, supermarkets, restaurants and the La Pine Elementary, Junior and Senior High Schools are all served by public water systems within the La Pine Planning Area.

A community water system is being engineered as of 2000. A test well constructed in 1998 on property east of La Pine resulted in a reliable source of potable water. Construction of a transmission line is anticipated in 2001. Additional storage tanks and one or two additional production wells will be needed in the future to meet the build out demands in the La Pine UUC. A comprehensive plan policy requiring a Capital Facilities Plan will ensure that the water system will be enlarged to meet future needs. An additional policy in this chapter states that the water district should expand to include all land within the UUC boundary.

c. Roads.

1. The La Pine Planning Area Street System.

i. The Organizing Framework of La Pine-Highway 97 - The street system is the primary element that has shaped development in the La Pine Planning Area. The street system consists of a north-south/east-west grid of local streets bisected by the northeast southwest oriented Highway 97. Highway 97 is clearly the main “artery” of the community. Highway 97 is the center of commercial development. Residential and industrial users flow to, from and on Highway 97 when circulating about the community. Highway 97 is the primary route used to enter and exit La Pine, and is central Oregon’s major north-south transportation facility for transport of people and cargo.

ii. Street Inventory - The La Pine Planning Area street system currently consists of three street classifications, per the Deschutes County Transportation System Plan - Principal Arterial (State Highway 97); Rural Collectors (Huntington Road, Reed Road, Finley Butte Road, 1st Street, and 6th Street); and local streets. Table 1 identifies existing right-of-way, surface

type, travel lanes, posted speed, parking, bicycle and pedestrian facilities. The streets were inventoried through site reconnaissance and review of existing transportation-related materials.

2. The Wickiup Junction Planning Area Street System. U.S. Highway 97 runs along the majority of the western boundary of the District. Burgess Road intersects Highway 97 along the southern boundary of the District. Both of these roads are two lanes and paved. Highway 97 is designated as a Primary Highway by Deschutes County while Burgess Road is classified as a Collector. Local streets provide internal access to Wickiup Junction. The Great Northern Railroad runs parallel to Highway 97 west of the District boundary. Wickiup Junction is within the La Pine Fire Protection District.
 - i. The Organizing Framework of Wickiup Junction - Highway 97 & the BNSF Railroad: Highway 97 and the Burlington Northern & Santa Fe Railroad are the dominant physical elements of Wickiup Junction. The highway and railroad are adjacent and parallel to one another in a primarily north-south orientation. Development of the district has primarily occurred along Highway 97's east frontage and the Highway 97/Burgess Road intersection at the south end of the district.
 - ii. Street Inventory: The Wickiup Junction street system currently consists of three street classifications, per the Deschutes County Transportation System Plan - Principal Arterial (State Highway 97), Rural Arterial (Burgess Road) and local streets. East of Highway 97, the street system consists of a frontage road and Drafter Road that parallel the highway. Rosland Road is an east-west oriented road that connects Highway 97 with the south end of Drafter Road. Drafter Road connects to Highway 97 at the north end of the district. ODOT owns a 300-foot wide unimproved right-of-way that extends along the entire eastern edge of the community.

Burgess Road is an east-west oriented road that extends west from its intersection with Highway 97. Burgess Road is the southern boundary of the planning area. Several north-south oriented streets extend north off Burgess Road.

Table 2 identifies existing right-of-way, surface type, travel lanes, posted speeds, parking, bicycle and pedestrian facilities. The streets were inventoried through site reconnaissance and review of existing transportation-related documents.

3. The Neighborhood Planning Area. The Neighborhood Planning Area is bounded by Huntington Road to the west, Burgess Road to the south and Highway 97 to the east. Traffic analyses completed by consultants and County staff have been completed for this planning area as part of the Regional Problem Solving Project. As of 2000 there were no internal roads serving this planning area.
3. Facility and service Assessment – Build out needs.

- a. Sewer and water.

With regard to groundwater quality and the protection of regional groundwater, there are important reasons for improvements in the existing services provide to the La Pine area:

The local groundwater flow system in the La Pine area occurs in shallow, unconsolidated alluvium of the La Pine basin under unconfined aquifer conditions. The water used for domestic, commercial and industrial purposes is drawn almost exclusively from shallow wells sunk into the uppermost layer of the permanent groundwater table. The majority of these wells

are developed to depths of only 20 to 100 feet below the ground surface. The shallowness of these wells combined with the porous nature of the overlying alluvium make the aquifer highly susceptible to contamination from both surface and subsurface sources.

The major groundwater contaminant associated with the use and operation of septic tank/drainfield sewage treatment systems is nitrate. Nitrates are found in household and industrial waste streams and are readily transferred to the groundwater via septic drainfields.

System improvements will help eliminate the immediate contamination and public health threat from point-source septic tank drainfields and thus improve local groundwater quality and reduce public health risks.

Future facility and service changes in the La Pine UUC include an annexation project for the La Pine Special Sewer District to service the Neighborhood Planning Area and annexation of the Neighborhood and Wickiup Junction Planning Areas into the La Pine Water District boundary.

As mentioned above, the capital facilities plan to be completed in 2000 will analyze in detail the capacity of the water and wastewater systems and alternative methods to improve these systems to meet the needs of the community at build out. Rate structures, financing and the methodology for collecting system development charges (Sacs) will be part of this study. A plan policy has been adopted that requires this plan to be completed before the County can sell tracts of land or issue building permits for development in the Neighborhood Planning area.

In 1995 development of a municipal water system was determined to be necessary to provide long-term assurance to the community that there will be an abundant supply of quality drinking water. The La Pine Water District was formed in 1997. The District acquired a private well in 1999 with assistance from the County. Detailed engineering work should be completed in 2000 and pipeline construction is anticipated to occur in 2001. The capital facilities plan to be completed in 2000 will determine future expansion needs to meet the water needs of the entire UUC at build out.

b. Transportation.

As a rural community located on a major highway, the La Pine UUC requires a transportation system that will accommodate local, commuter, regional, and interstate traffic. The local transportation system needs to balance the needs of through traffic with impacts on the community's livability and rural character. Accomplishing this goal requires integrated street, bicycle and pedestrian networks, appropriate street standards, safe access to Highway 97, and safe vehicular, bicycle, and pedestrian crossing of Highway 97.

1. Highway 97 Corridor.

Highway 97 is the primary transportation element of the community. Highway 97 is Central Oregon's major north-south facility for transport of people and cargo; therefore, it is important that efficient movement through the La Pine and Wickiup Junction Planning Areas is maintained. Aside from being the primary route for transportation through these planning areas, Highway 97 is the center of commercial development, and the primary access for local residential and industrial users. While the importance of Highway 97 cannot be underestimated, it also bisects each community creating a barrier between the east and west sides.

People have a need to move throughout the communities. Currently, Highway 97 restricts safe and efficient east-west movement. The Deschutes County Transportation System Plan (TSP) identified that in unincorporated communities such as the La Pine UUC, traffic calming and pedestrian safety on Highway 97 are more important than through traffic movement.

Through technical review and public input conducted in the TSP planning process, the following key Highway 97 issues have been identified:

- i. Vehicular, bicycle, and pedestrian movement across Highway 97 is unsafe and difficult;
 - ii. There is a community sense of excessive speeding on Highway 97, although speed studies have consistently shown that drivers are traveling within the accepted parameters of the posted speed;
 - iii. Vehicular turning movements across oncoming traffic are difficult and unsafe;
 - iv. There are odd-angled intersections in the La Pine Planning Area that create unsafe turning movements;
 - v. Access to businesses and parking, to and from Highway 97, needs to be safe and convenient.
2. Street design standards.

The TSP includes County road design standards that are specific to the La Pine and Wickiup Junction Planning Areas, while ODOT has design standards for Highway 97. The Deschutes County guidelines include design standards for arterial, collector, and local streets, as well as alleys and multi-use paths that are separated from roads.

In recent years, Deschutes County required urban street development standards in some unincorporated communities in the rural portions of the County. The urban standards required 30-36 feet of pavement, with curb-tight sidewalks and gutters. This urban standard was generally not practical or necessary in unincorporated communities. As road design standards were developed for rural Deschutes County, it became evident that these rural standards may not be adequate to serve the densities and variety of uses found in unincorporated communities.

Instead, unincorporated communities can benefit from street standards that are between rural and urban standards. Therefore, when the County prepared the TSP, interim road standards were established for the La Pine Planning Area. These road standards were to be considered interim until the completion of the La Pine/Wickiup Junction Local Street, Bicycle and Pedestrian Plan.

Existing streets in the La Pine and Wickiup Junction Planning Areas are classified as follows:

- i. Principal Arterial - Highway 97;
- ii. Rural Arterial - Burgess Road;
- iii. Rural Collector - Huntington Road, 1st Street, 6th Street, Reed Road, Finley Butte Road;
- iv. Rural Local - remaining streets not identified above.

The road design standards identified in this plan for the La Pine and Wickiup Junction Planning Areas generally follow the interim road design standards identified in the TSP.

Exceptions are variations to the local street standards to allow for reduced right-of-way and pavement widths and the addition of multi-use paths that are separated from streets. Local streets in commercial and transitional areas should have sidewalks, whereas local streets in residential areas should not have sidewalks.

The exceptions to this standard include Morson Street and Foss Road, which are single-family streets that should have bicycle and pedestrian facilities due to direct connections to community activity centers, and any new or upgraded residential streets within or connecting to new subdivisions that have an average minimum lot size of 11,000 square feet or less. Figures 12 and 13 identify the functional classifications of roads and locations of existing and proposed pedestrian facilities within the La Pine Planning Area. Figure 14 identifies the functional road classifications within the Wickiup Junction Planning Area.

The Neighborhood Planning Area Street System will include a north-south Central Collector road connecting Bluewood Place to the south in the La Pine Planning Area and Burgess Road to the north. Perimeter Collector roads along the eastern edge of the neighborhood area, dividing the four Neighborhoods and east-west Neighborhood Collector roads. Figure 15 shows the conceptual street plan for the Neighborhood Planning Area. Figure 16 shows the non-motorized circulation plan including paved and unpaved and multi-use paths.

Two Perimeter Collector and three Neighborhood Collector roads will provide access from Huntington Road into the neighborhoods. The Central Collector and a Perimeter Collector will provide access from Burgess Road. The three Perimeter Collectors dividing the neighborhoods will be adjacent to open space corridors that provide buffers between the four Neighborhoods in the Neighborhood Planning Area. Driveway access will be limited onto the Central Collector and the Neighborhood Collectors. Parking in designated pullout areas will be provided along the collectors for access to open space, parks and residential lots. Direct access from residential lots onto the local streets and perimeter collectors will be permitted.

Shallow swales alongside the roads will provide for drainage. A network of multi-use paths will be developed parallel to many of the collector roads and in the open space buffer areas along Huntington Road and the eastern Perimeter Collector parallel to Highway 97.

The precise layout of these roads and multi-use paths will occur during the Quadrant Plan approval process as each Neighborhood and Quadrant are planned.

3. La Pine Planning Area Street System.

The existing street system within the La Pine Planning Area generally consists of a north-south/east-west grid of local and collector streets bisected by the northeast/southwest oriented Highway 97. The opportunity for new streets is primarily limited to undeveloped areas in the east and south sections of the community. Research and public input also identified some street realignment and intersection improvements that will increase safety and provide for enhanced traffic flow. These transportation improvements are identified below.

4. Street Maintenance. The need for ongoing street maintenance includes surface maintenance, shoulder maintenance, grading gravel streets, snow removal/storage, ice control, storm drainage, roadside vegetation management, and litter control.

5. Bicycles and Pedestrian System. There is a greater need for bicycle and pedestrian facilities in unincorporated communities than in other parts of the rural County. Generally, people are in closer proximity to destinations, therefore, there is a greater tendency to bicycle or walk. Bicycling and walking are also the only modes of transportation between destinations for some people, such as the young, elderly, and disabled population. Results of a questionnaire and comments received at community meetings during the preparation of the TSP indicate marginal support for a safely connected bicycle/pedestrian system within and between the La Pine and Wickiup Junction Planning Areas. However, the need was identified to provide safe bicycle/pedestrian connections from the La Pine and Wickiup Junction Planning Areas to the surrounding residential areas rather than just focusing on facilities within the planning areas themselves.
6. Bikeways. There are three types of bikeways appropriate in rural areas:
 - i. Shoulder bikeways are paved shoulders that allow for bicycle traffic on collector and arterial streets;
 - ii. Shared bikeways are typically local streets with low traffic volumes that allow for bicycles to share the roadway with automobiles;
 - iii. Bicycle/pedestrian are multi-use paths that are separated from streets. Multi-use paths are typically located along utility easements or in designated open spaces such as parallel to a drainage way. Bicycle/pedestrian paths are most often used for recreation, but also can connect activity centers and destinations. (In general, ODOT's 1995 Bicycle and Pedestrian Plan includes language that discourages the building of separated multi-use paths due to maintenance difficulties, lack of usage, and design challenges where paths need to cross streets and driveways.)

For the La Pine and Wickiup Junction Planning Areas, shoulder bikeways are appropriate on Highway 97, Burgess Road, Huntington Road, 1st Street, 6th Street, Reed Road, Finley Butte Road, and Hinkle Way (when the extension is completed). Shared bikeways are appropriate on the local roads. There are opportunities for bicycle/pedestrian multi-use paths that are separated from streets and included in the transportation recommendations.

The multi-use paths in the Neighborhood Planning Area alongside collector roads and in the open space buffers along Huntington Road and the eastern edge road parallel to Highway 97 will provide for shared bicycle/pedestrian use that is separated from the streets. The Non Motorized Circulation Plan, Figure 16 shows the general locations for the multi-use path in the Neighborhood Planning Area.

7. Walkway. Local streets in rural areas typically have low traffic volumes and therefore, are able to safely accommodate pedestrians, similar to the shared bikeway. On collector and arterial roads with higher traffic volumes it is appropriate to provide pedestrian facilities, i.e. sidewalks or paths separated from the traffic. Where not provided on collectors and arterials, paved shoulders should be wide enough to accommodate both pedestrians and bicyclists.

As stated in the Deschutes County TSP, moving pedestrians across arterial roads may be more important than pedestrian travel along roads. It is important to provide safe pedestrian crossings and ensure that motorists are well aware of pedestrians crossing roads. The number of at-grade crossings needs to be considered. Pedestrian crossings where no traffic signal exists can provide a false sense of security.

It is important to provide pedestrian facilities for a range of users. Within a community, pedestrian connections are needed from residential areas to schools, parks, and commercial areas. Pedestrian facilities need to connect commercial areas to and from parking.

8. Public Transportation System.

There is interest in increasing public transportation services between La Pine/Wickiup Junction and Bend. Currently there is a Dial-A-Ride provider that serves La Pine, and a rideshare facility located at the northwest corner of Highway 97 and Burgess Road in Wickiup Junction. There is the potential for a County-established rural transit district, which could provide fixed-route shuttle services between communities, i.e. La Pine and Bend.

i. Rail transportation. The Burlington Northern & Santa Fe Railroad provides significant transportation of freight through Central Oregon, including the segment through La Pine and Wickiup Junction. Railroad conflicts with other modes of transportation need to be minimized. Currently the only remaining at-grade railroad crossing of Highway 97 in Oregon is at the south end of the Wickiup Junction Planning Area near Burgess Road. Critical to the success of the eventual bypass and the function of the local street network, will be the continued operation of the existing at-grade railroad crossing. The County will work towards keeping this crossing open as a local road connecting the Neighborhood and Wickiup Planning Areas after the separated grade and highway relocation improvements are completed.

4. Coordination Agreements Consistent with ORS 195.

The Environmental Quality Commission adopted a groundwater protection rule for the Deschutes Basin Water Quality Management Plan in June 1983. This rule states that the wastewater generated within the core area of the community of La Pine shall be collected, treated and disposed of in a manner, which prevents pollution of the groundwater by not later than January 1, 1987.

The La Pine Special Sewer District Board of Directors approved a resolution on May 23, 1985 adopting final alternatives for the collection, treatment and disposal of sewage for the La Pine Core area.

5. Memoranda of Understanding.

As part of Regional Problem Solving the County entered into a separate Memorandum of Understanding (MOU) in 2000 with the La Pine Water District and the La Pine Special Sewer District. The MOUs state that the County and the districts recognize that the collaborative work done under Regional Problem Solving will continue so that water and wastewater systems will be expanded in an efficient manner to serve the entire La Pine UUC at build out.

A similar MOU recognizes that the County and the Bend-La Pine School District will cooperate on the planning of a new school site that is in compliance with the District's facilities plan. An additional MOU between the County and the La Pine Rural Fire Protection District establishes that fire suppression and prevention will be addressed in a cooperative fashion in the planning and design of the Neighborhood Planning Area.

C. La Pine Urban Unincorporated Community Plan Policies.

1. General.

a. The La Pine UUC shall contain the following planning areas: La Pine, Neighborhood and Wickiup Junction.

- b. Expansion of the boundary of the Urban Unincorporated Community (UUC) will require demonstration of a long-term need for housing and employment. Need shall be based upon population growth estimates from a reputable forecast service (such as Portland State University). Estimates shall be coordinated with those for other cities and communities in the County and shall consider:
 - 1. Plans to extend facilities and services to existing community land; and
 - 2. The infill potential of existing land in the community.
 - c. An expansion undertaken under this policy shall follow the requirements listed in OAR 660-22-040.
 - d. When reviewing individual site plans, buildings shall be sited so as to protect significant trees wherever practicable.
 - e. Site plan criteria shall require landscaping for all new commercial and industrial development.
 - f. Conditional use permits shall be required for fill and removal activities in designated wetlands.
 - g. The County shall assist the community in reviewing incorporation alternatives.
2. Transportation.
- a. The County shall coordinate with the Oregon Department of Transportation to:
 - 1. Provide safe vehicular, bicycle, and pedestrian movement across Highway 97 in La Pine;
 - 2. Reduce speeds on Highway 97 through La Pine;
 - 3. Seek funding to design and implement a four-lane section with landscaped center median between 1st and 6th streets.
 - 4. Provide safe vehicular turning movements across oncoming traffic in La Pine;
 - 5. Consider intersection realignments to provide safer turning movements at odd-angled intersections in La Pine;
 - 6. Explore safer and more convenient access, parking and pedestrian circulation to businesses fronting Highway 97;
 - 7. Participate in an access management plan for La Pine;
 - 8. Support the extension of the four-lane highway section north and south of La Pine to enable vehicle passing in advance of reaching the community;
 - 9. Explore the potential of a future Highway 97 bypass around La Pine.
 - b. Improvements to the public rights-of-way shall conform to the design standards contained in DCC Title 17 and 18.
 - c. The County shall consider improvements to the following intersections to provide for improved traffic flow, and increased vehicular, bicycle, and pedestrian safety: Huntington Road/1st Street;
 - d. The County shall consider reconfiguring the intersection of 6th Street/Morson Street/Highway 97/Finley Butte Road to provide safer connections to the state highway, and a more viable intersection that may ultimately become signalized.
 - e. The County will determine specific transportation-related improvements to Huntington Road as commercial development/redevelopment occurs.
 - f. Where new development requires the establishment of new streets, such streets shall connect to and extend the current grid street system.
 - g. The County shall establish a safe, connected bicycle/pedestrian system throughout La Pine.
 - h. The County shall pursue a countywide bicycle/pedestrian plan that provides connections to the La Pine UUC.
 - i. The County shall explore the potential for scheduled fixed-route public transportation between La Pine/Wickiup Jct. and Bend.
 - j. The County will ensure that adequate transportation facilities are provided between the La Pine and the Neighborhood Planning Areas as development occurs. Before phase one of the Neighborhood Planning Area is completed and prior to the start of phase two a traffic signal should be installed at the intersection of 1st Street and Highway 97. The County shall

contribute a proportional share of the cost, based on the number of trips generated and distribution of trips to this intersection.

- k. Planning for bicycle and pedestrian traffic shall be incorporated in new street designs.
 - l. The County shall work with the Oregon Department of Transportation to slow traffic to posted speeds, using a combination of enforcement and traffic calming techniques (extended curbs, landscaping, raised medians, etc.) along Highway 97 through the La Pine UUC.
 - m. The County shall work with the Oregon Department of Transportation to adopt and implement consistent standards regarding left turn lanes, raised medians, driveway spacing, acceleration/deceleration lanes, turn refuges and means to enhance the local street network to handle local traffic and relieve congestion along Highway 97 within the La Pine Urban Unincorporated Community.
 - n. Sidewalks shall be buffered from the streets with adequate landscaping, shoulders and/or on-street parking.
 - o. Streets shall be designed to carry anticipated traffic volumes, and rights-of-way shall provide enough space for an adequate planting strip and sidewalks or bikeways.
 - p. The County shall encourage truck traffic generated from the Industrial District to access the Highway 97 corridor via Reed Road.
 - q. The County shall explore development of a Systems Development Charge (SDC) program for transportation facilities within the La Pine UUC.
3. Public Facility and Services.
- a. New development should locate in areas where facilities are available or can be provided at least cost.
 - b. The La Pine Special Sewer District should annex all land within the UUC boundary.
 - c. The County shall support the development, re-development and expansion of a single domestic water system maintained and operated by the La Pine Water District so that cumulative development will not result in public health hazards or adverse environmental impacts that violate state or federal water quality regulations. The La Pine Water District should annex all land within the UUC boundary.
 - d. Consistent with Goal 11, the County shall support the development, re-development and expansion of the La Pine Special Sewer District's sewer system so that cumulative development will not result in public health hazards or adverse environmental impacts that violate state or federal water quality regulations.
 - e. The County site plan criteria shall require that all new developments include a drainage system that protects water quality. Alternative drainage options shall be allowed where shallow water table prohibits use of a drywell.
 - f. The County shall encourage early planning and acquisition of sites for needed public facilities (e.g., fire stations, schools, parks, roads, etc.).
 - g. The County shall cooperate with agencies and citizen's groups in improving water quality and the condition of the watershed.
 - h. A large tract to the north of the La Pine core area that is used by the La Pine Sewer District for disposal and treatment of effluent shall be designated as Agriculture under Goal 3 on the plan. It shall be zoned for sewer treatment and disposal and the uses allowed in the zoning district shall be limited to those that are consistent with Goal 3.

D. The La Pine Planning Area.

1. General.

The La Pine Planning Area shall contain the following plan designations: Residential, Commercial, Industrial, Business Park, Park/Open Space, Agriculture and Community Facility. The following zone districts shall exist in the La Pine Planning Area: Residential, Commercial, Community Facility, Community Facility Limited, Flood Plain, Industrial and Sewer Treatment. A commercial

overlay area shall be applied on the zoning map to that portion of the residential district designated as commercial on the comprehensive plan.

2. Residential District.

- a. The County shall encourage a diversity of housing options for community residents.
- b. All new residential subdivisions and partitions shall provide public, semipublic and/or private open space as part of the development, or fee in lieu of land to the extent allowed by law.
- c. Areas designated residential on the comprehensive plan shall be zoned residential district on the zoning map.
- d. New subdivisions, cluster developments, and manufactured home parks shall be connected to a Department of Environmental Quality permitted community or municipal sewer system.

3. Commercial District.

- a. The Commercial District shall be developed with small-scale, low-impact uses as defined under the Administrative Rule for Unincorporated Communities, OAR 660, Division 22. Small-scale, low impact commercial use is one that takes place in a building or buildings not exceeding 8,000 square feet of floor space.
- b. The Commercial District shall be developed with uses intended to serve the community and surrounding rural area or the travel needs of people passing through the area. The surrounding rural area includes the area south of La Pine State Park Road to the Klamath County line that is zoned Rural Residential, Forest and Exclusive Farm Use. See Figure 3.
- c. Buildings in the Commercial District shall be limited to thirty feet in height to retain the rural character of the area and preserve views of the mountains, unless an exception is allowed under zoning regulations.
- d. Community infrastructure, including sewer, water, streets, sidewalks and other transportation improvements identified in the Deschutes County Transportation System Plan shall be developed.
- e. Future commercial development shall be encouraged along Huntington Road.
- f. Future public uses should be located near the junction of Huntington Road and 1st Street, close to where existing public uses including school, County, office, public, park and fire stations have already been developed.
- g. The County shall support transfer of federal and state land to private ownership within the Commercial District whenever feasible.
- h. Residential use in conjunction with commercial uses shall be encouraged. Land divisions for residential purposes shall not be allowed in the commercial district.
- i. Lands designated Commercial on the comprehensive plan that are not served by sewer, a municipal or community water system and abutted by roads constructed to County standards shall be given Residential zoning and be identified as Commercial Overlay on the zoning map. Notwithstanding and in place of the criteria set forth in DCC 18.136.030 regarding quasi-judicial zones changes, at such time as the sewer and water are in the street adjacent to the subject property and the road abutting the subject property is brought to County standards, a zone change for such lands shall, upon application to the County, be granted from Residential to Commercial. Such changes shall be subject to applicable post-acknowledgement provisions of ORS 197.510 through 197.625. (See Figure 5 for areas identified for future commercial expansion.)

4. Community Facility Limited District.

- a. Land located west of Coach Road and north of 1st Street shall be used for schools and their associated uses.

5. Community Facility District.

- a. Land located between Huntington and Coach Roads shall be used for community and public uses identified in the design workshop conducted by LCAT in April 2000, or for other community/civic uses identified in a future public process. These uses include a senior center, performing arts center, community health center, community college education facilities and a swimming pool.
6. Industrial District.
- a. In order to maximize land available for industrial uses, new uses in the Industrial District that meet the criteria for an Oregon Department of Environmental Quality (DEQ) water pollution control facility (WPCF) permit, shall be required to connect to the La Pine Sewer Treatment Facility in lieu of obtaining a WPCF permit.
 - b. New industrial uses shall be limited to those that will not exceed the capacity of water and sewer service available to the site on December 5, 1994, or, if such services are not available to the site, the capacity of the site itself to provide water and absorb sewage.
 - c. Industrial development shall not degrade the quality of surface or groundwater.
 - d. Sitting criteria shall require adequate traffic circulation, off-street parking, and loading and service area.
 - e. The community shall attempt to diversify its industrial base.
 - f. Where the Industrial District abuts a residential district, special development standards relating to setbacks, screening, signs and building height shall be established.
 - g. Industrial zoning shall protect industrial lands from incompatible commercial development.
7. Business Park District.
- a. A variety of commercial and industrial uses which support the needs of the community and surrounding rural area.
 - b. Allow small scale, low-impact commercial uses in conformance with the requirements of OAR Chapter 660, Division 22. Larger more intense commercial uses shall be permitted if they are intended to serve the community, the surrounding rural area and the travel needs of people passing through the area.
 - c. Small-scale, low-impact industrial uses should be allowed in conformance with the requirements of OAR Chapter 660, Division 22. No more intensive industrial uses shall be allowed.
8. Flood Plain District.
- a. The area within the boundaries of the La Pine UUC that is within the flood plain mapped by Flood Emergency Management Agency (FEMA) shall be given a plan designation of "Commercial" and shall be given a zoning designation of "Flood Plain District." Notwithstanding and in place of the criteria set forth in DCC 18.136.030 regarding quasi-judicial zones changes, the owner of such property may apply for and shall receive a zone change to Commercial at such time as the owner obtains from FEMA a letter of map amendment (LOMA) or a letter of map revision (LOMR) verifying that the area is not located within the Special Flood Hazard Area (100 year flood plain). Such changes shall be subject to applicable post-acknowledgement provisions of ORS 197.510 through 197.625.
 - b. The County shall request that FEMA conduct a detailed flood elevation survey for the floodplain adjacent to the La Pine UUC.
9. Agriculture District.
- a. The tract of land to the north of the core area that is used by the La Pine Special Sewer District for disposal and treatment of effluent shall be designated as Agriculture on the plan map and be zoned Sewer Treatment District, for sewer treatment and disposal. The uses allowed in the zoning district shall be limited to those that are consistent with Goal 3.

E. The Wickiup Junction Planning Area.

1. General.

- a. The Wickiup Junction Planning Area shall contain one plan designation, Commercial/Residential and one zone district shall be established, Commercial/Residential, for residential and small-scale commercial uses.
- b. The County shall encourage mixed residential and commercial uses.

2. Transportation.

- a. The County shall support traffic safety improvements to Burgess Road where it connects with Highway 97.
- b. The County shall work with the Oregon Department of Transportation to slow traffic to posted speeds using a combination of enforcement and traffic-calming techniques (extended curbs, landscaping, raised medians, etc.) along Highway 97 through the Wickiup Junction Planning Area.
- c. The County shall work with the Oregon Department of Transportation to adopt and implement consistent standards regarding left turn lanes, raised medians, driveway spacing, acceleration/deceleration lanes, turn refuges and means to enhance the local street network to handle local traffic and relieve congestion in the Wickiup Junction Planning Area.
- d. An applicant for a new use other than a use that is permitted outright must demonstrate that the affected transportation facilities are adequate to serve the proposed use, considering the functional classifications, capacity and the level of service of such facilities.
- e. The County shall require curbs and sidewalks for new development in the Commercial/Residential District, except on Highway 97, to the extent allowed by law.
- f. The County shall coordinate with the Oregon Department of Transportation to:
 1. Reduce speeds on Highway 97 through the Wickiup Junction Planning Area;
 2. Provide safe vehicular turning movements across oncoming traffic in the Wickiup Junction Planning Area;
 3. Explore safer and more convenient access, parking and pedestrian circulation to businesses fronting Highway 97; and
 4. Participate in an access management plan for the Wickiup Junction Planning Area.
- g. Improvements to the public rights-of-way shall conform to the applicable design standards in the Deschutes County Zoning Ordinance, Title 18 of the County Code.
- h. The County shall consider improvements to the following intersection to provide for improved traffic flow, and increased vehicular, bicycle, and pedestrian safety: Huntington Road/Burgess Road;
- i. Per the Deschutes County TSP, the County shall pursue the Highway 97 realignment and grade-separated railroad crossing in the Wickiup Junction Planning Area. The northern phase of the Neighborhood Planning Area should not be constructed before the bypass is constructed or the capacity to the Burgess Road/ Highway 97 intersection is increased by some other method or ODOT and the County determine at that time that it is acceptable to proceed.
- j. Where new development requires the establishment of new streets, such streets shall connect to and extend the current grid street system.
- k. The County shall establish a safe, connected bicycle/pedestrian system throughout Wickiup Junction.
- l. The County shall ensure that adequate transportation facilities are provided between the Wickiup Junction and Neighborhood Planning Areas as development occurs.
- m. The County shall pursue methods of acquiring right-of-way needed to connect Pam Way to Drafter Road.

F. The Neighborhood Planning Area.

1. General.

- a. The Neighborhood Planning Area shall contain the following plan designations – Residential, Community Facility, Open Space/Park and Commercial.

	Maximum Density Units/ac.	Minimum Density Units/ac	Lot Size Range Single-family
NEIGHBORHOOD 1			
Neighborhood Center	12	8	2,400 – 4,500 s.f.
Neighborhood General	6	3	4,000 – 7,000 s.f.
NEIGHBORHOOD 2, 3 & 4			
Neighborhood Center	12	6	2,400 – 7,000 s.f.
Neighborhood General	6	2	7,000 – 15,000 s.f.

- b. The Neighborhood Planning Area shall have the following zones: Community Facility, Community Facility Limited, Community Commercial, Neighborhood Center, Neighborhood General, Neighborhood Park and Open Space.
- c. The Neighborhood Planning Area shall be divided into four Neighborhoods. The boundaries of the Neighborhoods shall be defined by Corridor Open Space and Perimeter Collector streets. Each Neighborhood shall be divided into four quadrants. The boundaries of the quadrants shall be defined by the collector street system and generally correspond to the Quadrant Plan map (Figure 11).
- d. Approval of a Quadrant Plans as defined in the La Pine Neighborhood Planning Area zoning ordinance shall be required prior to any development in the Neighborhood Planning Area. At a minimum a quadrant plan shall include the following:
1. Zoning boundaries for each of the zones depicted on the zoning map and meeting the performance standards for minimum acreage or dimensions for the Neighborhood Center, Neighborhood Park Zones and Open Space Districts.
 2. Lot configuration meeting the lot and density requirements of the zoning code and a tentative plan for the first phase.
 3. Locations of all collector and local streets and alleys.
- e. The Plan designations and depicted on Figure 9 and the zoning boundaries depicted on Figure 10 are generalized locations that will be defined with Quadrant Plan approval.
- f. The Quadrant Plans shall guide the development of the Neighborhood Planning Area to guide overall development towards meeting the land use and residential density guidelines set forth in the following tables:

Land Use	Acres	Percentage of total area	Total dwelling units	Density (units/ac.)
Single-family	208	40%	1326	6.4
Multi-family	29	5.6%	324	11.2
Senior housing	7	1.3%	75	10.7
Baldwin-Herndon Sr. Housing	7	1.3%	75	10.7
Subtotal	251	48.2%	1800	7.2
School	13	2.5%	n/a	n/a
Commercial	1	0.2%	n/a	n/a
Senior/Civic Medical/Facilities	10	1.9%	n/a	n/a
Community facility	8	1.5%	n/a	n/a
Open Space/ Parks	48	9.2%	n/a	n/a
Collector right-of-way	72	13.9%	n/a	n/a
Local right-of-way	116	22.4%	n/a	n/a
Totals	519	*99.8%	N/A	N/A

*Total does not equal 100% due to rounding.

Zoning Districts	Acres	Total Lots	Developed Lots	Vacant Lots
Residential General	*323	1110	0	All
Residential Center	*28	280	0	All
Community Facility	31	150	0	All
Community Facility Limited	20	3	**1	2
Commercial	2	1	0	1
Park/Open Space	60	n/a	n/a	n/a
Collector r-o-w	55	n/a	n/a	n/a
Totals	519	1800		

*Includes local right-of-way

**Park & Ride @ Burgess/Hwy 97 Intersection

Zoning Districts	Acres
Neighborhood General	Variable after Neighborhood Center, parks and open space zones are designated
Neighborhood Center	3 - 6 acres per Quadrant
Community Facility	Minimum of 10 acres in Neighborhood 1
Community Facility Limited	= / -20
Neighborhood Commercial	2 - 4 acres in Neighborhood 3
Neighborhood Park	2 – 5 acres per Neighborhood
Open Space	Variable based on Quadrant Plan

- g. The County shall approve design guidelines for the Neighborhood Planning Area prior to development of the first phase. The design guidelines shall be developed as a component of the first Quadrant Plan and shall encourage a variety of housing types and styles and quality building materials.
- h. After approval of a Quadrant Plan, each phase subsequently proposed for development shall be reviewed, prior to platting any additional lots, to ensure that it is developed in conformance with the Quadrant Plan.
- i. The County shall, to the maximum extent allowed by law, reinvest net proceeds from the development or sale of real property in the Neighborhood Planning Area into future improvements such as: roads, parks and open space development and maintenance, public buildings, and on-site and off-site water and wastewater facility improvements or expansion in the La Pine UUC, that will service the Neighborhood Planning Area, the La Pine UUC or the Regional Problem Solving study area.
- j. Before issuing any building permits or selling any tracts of land in the Neighborhood Planning Area, the TDC program will recognize the Neighborhood Planning Area as the “receiving area” for transfer of development credits and will indicate the number of credits required for an individual to obtain a building permit or the number of credits required for a developer to purchase a tract of land in the Neighborhood Planning Area. TDCs shall not be required for designated senior housing units in the Community Facility District.
- k. Before selling tracts of land or issuing building permits in the Neighborhood Planning Area, the County shall work with the La Pine Water District and the La Pine Special Sewer District to complete a capital facilities plan for community water and wastewater systems to:
 1. Evaluate existing technology and new alternatives to provide capacity for growth at build out in the La Pine UUC;
 2. Establish and implement a methodology for hook up fees or systems development charges (SDCs) for water and wastewater services; and
 3. Seek funding opportunities for needed improvements and expansion to the water and wastewater facilities.
- l. The Neighborhood Planning Area shall be developed to meet the Quality Development Objectives established by Executive Order 97-22 to:
 1. Give priority to the quality mix development that addresses the economic and community goals of the community and region.
 2. Encourage mixed use, energy efficient development designed to encourage walking, biking and opportunities for multi-modal transit use.
 3. Develop facilities that are compatible with the community’s ability to provide adequate public facilities and services.
 4. Provide facilities that are compatible with the community and regional environmental concerns and available natural resource (e.g. available water, air quality and protection of wildlife corridors).

5. Support development that provides for a balance of jobs and affordable housing within the community to reduce the need to commute long distances between home and work, thereby minimizing personal commuting cost as well as the public and societal cost of expanding transportation infrastructure.
- m. All new development in the Neighborhood Planning Area shall be connected to the La Pine Water District water system and the La Pine Special Sewer District sewage treatment facility or other Department of Environmental Quality approved sewage treatment facility. Fire hydrants shall be provided.
- n. Industrial uses shall not be allowed.
- o. Commercial development shall be limited to small-scale, low impact uses as defined in OAR 660-022. The zoning ordinance shall restrict commercial development to uses that are intended to primarily serve the Neighborhood Planning Area and shall limit the building size to less than 4,000 square feet for commercial uses.
- p. Hotels and motels shall not be allowed.
- q. Residential uses may include home occupations with restrictions as set forth by zoning standards.
- r. Manufactured homes shall be allowed as single-family dwelling units, subject to zoning regulations.
- s. Travel trailer parks shall not be allowed uses.
- t. The keeping of livestock shall be limited to uses approved through site plan review in areas designated as Community Facility.
- u. The County shall coordinate with the owners of the Baldwin-Herndon Oregon Trust property to complete a lot line adjustment or land exchange that will result in the County owning the western two quadrants in Neighborhood 1 and the Baldwin-Herndon Trust owning and amount of land in the eastern quadrants of Neighborhoods 1 and 2 that the County and the Trust through negotiations agree is an equitable boundary adjustment.
- v. The southwest Quadrant of Neighborhood 1 shall be zoned Community Facility and be used for an assisted living facility, senior housing, health care facilities or other community uses. The County shall make the land it acquires in this area available for future development of such uses at a cost that reflects the pro rata share of land purchase and infrastructure development.
- w. The County shall coordinate with the Bend La Pine School District to dedicate land in the Community Facility Limited District that is suitable for a school site at a cost that reflects the pro rata share of land purchase and infrastructure development.
- x. The County shall coordinate with the La Pine Rural Fire Protection District and the Oregon Department of Forestry to create defensible space to diminish the possibility of wildfire in and around the Neighborhood Planning Area and assist in developing design guidelines that reduce the risk of fire to structures and open space.
- y. The County shall coordinate with the Oregon Department of Housing and Community Services to provide affordable housing opportunities in the Neighborhood Planning Area.
- z. The County shall coordinate with the Oregon Department of Fish and Wildlife, the Oregon Department of Parks and Recreation and the La Pine Recreation District for technical assistance for natural resource protection and recreational facility development in the design and development of the Neighborhood Planning Area.
- aa. The County shall coordinate with the Oregon Department of Economic and Community Development in securing funding for public facilities in the Neighborhood Planning Area.
- bb. The County shall coordinate with the Oregon Department of Transportation to implement mutually agreed upon road improvement projects related to the development of the Neighborhood Planning Area. The County shall determine the pro rata share of the Neighborhood Planning Area for Burgess Road/Highway 97 separated grade improvements prior to developing phase two of the Neighborhood Planning Area.

- cc. Phasing of development in the Neighborhood Planning Area should generally begin in the south and proceed to the north as infrastructure, including sewer, water and streets are extended. The phasing should generally follow the Neighborhood Planning Area Phasing Plan depicted in Figure 18. The Board of County Commissioners may approve deviations from the Neighborhood Planning Area Phasing Plan based on infrastructure funding and phasing or community needs.
- 2. Neighborhood Planning Area Park Policies. The La Pine Neighborhood Planning Area is designed to include four developed neighborhood parks, undeveloped open space and a network of interconnected pathways for pedestrians and cyclists. The neighborhood parks are centrally located in each neighborhood within walking or biking distances of homes. Open space has been planned to separate neighborhoods, create a rural feel and buffer homes from busy streets and the state highway. Neighborhood centers are connected with paved paths on both sides of the central connector street. Sidewalks are provided in the commercial areas and in the neighborhood centers to connect higher density uses to the paved multi use path network. Soft surface paths are located in the perimeter open space and in the corridor open space separating the neighborhoods.
 - a. Public neighborhood parks shall be located in the central area of each neighborhood in the La Pine Neighborhood Planning Area. The size of a neighborhood park shall be a minimum of two acres and a maximum of five acres. The purpose of the neighborhood parks is to provide recreation opportunities in for all groups and abilities within walking distance of most homes in the neighborhoods. The neighborhood parks also provide green, open space for the neighborhood and a place for neighborhood social gatherings.
 - b. The developer or the County shall construct the Neighborhood Parks at the time the adjacent land is developed according to the Quadrant Plan.
 - c. The neighborhood parks shall be maintained by a neighborhood homeowner's association, the La Pine Park District or a Park District established for the Neighborhood Planning Area. The entity to maintain the park shall be determined as a requirement for Quadrant Plan approval.
 - d. A neighborhood park shall be located in each of the four Neighborhoods in La Pine Neighborhood Planning Area as generally depicted on the La Pine Neighborhood Planning Area Parks Plan, Figure 17. The park shall be bordered on at least three sides by public streets. Two of the public streets shall be collector streets. The park shall be accessed by the multi-use path system or sidewalks.
 - e. Neighborhood park elements may include:
 - 1. Signage.
 - 2. Picnic Areas with tables.
 - 3. Tot Play area.
 - 4. Children's play area.
 - 5. Paved Walkways.
 - 6. Open lawn play area.
 - 7. Trees.
 - 8. Basketball court or half court.
 - 9. Multi purpose court.
 - 10. Picnic shelter.
 - 11. Other small-scale recreations faculties.
 - 12. Open Space for passive recreation.
 - 13. Park is developed to serve pedestrians and bicyclists. Parking and restrooms are not typically provided.
 - f. Should funding become available a Regional Park between 10 and 25 acres in size may be established in neighborhood 3 or 4 to provide recreational facilities to serve the needs of the La Pine Unincorporated Community and the greater La Pine Region.

- g. The optional Regional Park must be located adjacent to at least two collector streets or one collector street and Huntington or Burgess Roads. The park shall have direct access to a paved multi-use path.
 - h. Regional Park elements may include:
 - 1. Any of the elements permitted in the Neighborhood Park.
 - 2. Athletic fields and grandstands.
 - 3. Aquatic Center.
 - 4. Amphitheater.
 - 5. Equestrian Facility.
 - 6. Water Feature.
 - 7. Fitness center.
3. Neighborhood Planning Area Open Space Policies.
- a. A minimum 200-foot wide buffer for open-space, multi use paths, passive recreation, visual and noise screening (earthen berm and/or vegetation) shall be provided along Highway 97.
 - b. A minimum 75-foot wide perimeter open space shall be provided adjacent to Huntington and Burgess Roads as depicted in the La Pine Neighborhood Planning Area Park Plan, Figure 17. The open space may be used for multi use paths passive recreation and visual screening.
 - c. A perimeter open space at least 50 feet wide shall be provided between the school site and existing residential lots along Huntington Road at the northwest corner of the Neighborhood Planning Area.
 - d. Open space corridors shall be established between the neighborhoods along the Neighborhood Collector streets. The Neighborhood Collector streets shall be within or adjacent to the open space corridors. The width and precise location of the open space corridor shall be established with Quadrant Plan approval. The minimum width for the open space corridor shall be 200 feet. An Open Space Buffer will not be established between Neighborhood 1 and the La Pine Planning Area.
4. Neighborhood Planning Area Transportation Policies.
- a. A network of collector streets generally depicted in Figure 15, Neighborhood Planning Area Street Plan, will define the boundaries of the four neighborhoods in the Planning Area. The precise location of the collector street rights of way shall be determined with approval of quadrant plans for each neighborhood.
 - b. Lots fronting the Central Collector and Neighborhood Collectors will have vehicle access off of alleys to enhance pedestrian and bicycle safety on the parallel multi-use paths.
 - c. Driveway access from residential lots onto the local streets and Perimeter Collectors may be permitted.
 - d. In the Neighborhood Commercial, Community Facility, Community Facility Limited and Residential Center Districts, where a paved multi-use path is not provided as required in Figure 16 (Non-Motorized Plan), sidewalks at least five feet wide shall be installed at the time of development. The sidewalks shall be property line tight and meet ADA accessibility requirements. The sidewalks shall be connected to the required paths identified on Figure 16, the Non-Motorized Plan.
- (Ord. 2003-027 § 1, 2003; Ord. 2002-005 § 1, 2002; Ord. 2001-046 §§ 1 & 2, 2001; Ord. 2001-036 § 1, 2001; Ord. 2000-017 § 1, 2000)

Table 1

LA PINE PLANNING AREA - EXISTING STREET INVENTORY							
Street	Road Classification	Right Of Way	Paved Width/ Type	# of Travel Lanes	Bicycle Facility Type	Side-walks	Features/ Conditions
HIGHWAY 97							
UUC Boundary to Reed/1 st	Principal Arterial	300'	40' AC	2	shoulder		Two 12' travel lanes w/ 8' paved shoulders; no center median. Transition from 2 lanes to 3.
Reed/1 st to Foss	Principal Arterial	100'	41' AC	3	shoulder	both sides	Center turn lane, two 12' travel lanes w/ 1'-8' paved shoulders, no median; conc. 5' sidewalk on e. Side; mix of concrete and ac sidewalks w/ some parking on w. Side.
Foss to 6 th	Principal Arterial	100'	63' AC	5	shared	both sides	Center turn lane; 8' planter strips; s. Of Morson southbound from 2 to 1 travel lanes, northbound from 1 to 2 travel lanes. No shoulder, 5' sidewalks.
6 th to UUC Boundary	Principal Arterial	100'	40' AC	2	shared	5' e. Side	A sidewalk fronts the Thriftway Market. 9' shoulder on east side, 5' shoulder on west side. Transition from 3 lanes to 2.
HUNTINGTON ROAD							
UUC Boundary to 1 st St.	Rural Collector	60'	36' AC	2	shoulder	Partial	Some sidewalks
1 st to 3 rd	Rural Collector	60'	36' AC	2	shoulder	5' w. Side only	Planter strip on west side- not landscaped; curb only on e. Side
3 rd to Hwy. 97	Rural Collector	60'	36' AC	2	shoulder	5' w. Side w/ planter	Curb only on e. Side; bike lanes not designated
Hwy. 97 to UUC Boundary	Rural Collector	60'	20' AC	2	shoulder	Limited	Sidewalk/curb w. Side behind Thriftway; sidewalk e. Side near Finley Butte
1ST STREET							
Hwy. 97 to Huntington	Collector	60'	30' AC	2	shared	5' n. Side	Storm drain (catch basin) on n. Side
Huntington to Coach	Rural Local	60'	24' AC	2	shared	5' s. Side	Additional pavement taper on s. Side; sidewalk adjacent to park

Coach to Morson	Rural Local	60'	28' AC	2	shared	5' n. Side	
Morson to end	Rural Local	60'	28' AC	2	shared	5' n. Side	

Street	Road Classification	Right Of Way	Paved Width/ Type	# of Travel Lanes	Bicycle Facility Type	Side-walks	Features/ Conditions
2nd STREET							
2 nd Street	Rural Local	60'	gravel	2	shared		Unimproved between Huntington & Morson
3rd STREET							
West of Huntington	Rural Local	80'	20' AC	2	shared	No	Gravel shoulders, appears ROW is adequate
East of Huntington	Rural Local	80'	20' AC	2	shared	5' n. Side	
4th STREET							
Huntington to Hwy 97	Rural Local	60'	24' AC	2	shared	5' both sides	New sidewalks
Huntington to Morson	Rural Local	60'	28' AC	2	shared	No	
OTHER STREETS WEST OF HIGHWAY 97							
6 th Street	Rural Collector	60'	34'-36' AC	2	shared	No	45 mph posted speed; broken curb near Hwy 97
Stillwell Street	Rural Local	60'	28' gravel	2	shared	No	No ditches, compacted gravel
Morson	Rural Local	60'	20'-22' AC	2	shared	No	Sidewalk/curb only fronting Carol's Tax/Bookkeeping; no ditches
Coach Rd.	Rural Local	60'	30' AC	2	shared	8' AC w. Side	Sidewalk in front of school w/ curb & 15' lawn between sidewalk and curb.
Bluewood	Rural Local	60'	36' AC	2	shared	5' both sides	No sidewalk on undeveloped w. Side property; curbs w/ storm drainage
Bluewood Pl.	Rural	60'	36' AC	2	shared	5' both	

	Local					sides	
Main Street	Rural Local	60'	20' AC	2	shared	No	Dead ends near Huntington/3 rd intersection; ac in bad shape
OTHER STREETS EAST OF HIGHWAY 97							
Reed Road	Rural Collector	80'	36' AC	2	shared	No	45 mph posted speed; industrial zoning; ditches
Foss Rd.	Rural Local	60'	21' AC	2	shared	No	Commercial, residential and industrial zoning; ditches

Street	Road Classification	Right Of Way	Paved Width/ Type	# of Travel Lanes	Bicycle Facility Type	Side-walks	Features/ Conditions
Finley Butte Rd.	Rural Collector	60/80'	24' AC	2	shared	No	2-10' travel lanes, 1'-AC outside fog line; 80' ROW in industrial area; 35 mph posted speed
Preble Way	Rural	60'	24' AC	2	shared	No	Residential; no ditches
Bonnie Way	Rural Local	50'	20' AC	2	shared	No	Residential; no ditches; Commercial zoning west side
Telegraph Rd.	Rural Local	?	15' gravel	1-2	shared	No	Residential; accessed south side of Foss Rd., e. Of Evans
Evans Way	Rural Local	50/60'	20' AC	2	shared	No	Residential; no ditches; 50' ROW n. Of Finley Butte, 60' ROW s. Of Fin. Butte
Hinkle Way	Rural Local	30'	20' AC	2	shared	No	Residential; no ditches
Walling Lane	Rural Local	30'	20' gravel	2	shared	No	Opposite Hinkle, s. Of Finley Butte; entrance to Community Park
Railroad frontage rd.	Rural Local	?	20' gravel	2	shared	No	Barricade s. Of Finley Butte
Russell Rd.	Rural Local	60'	36' AC	2	shared	No	Industrial area; ditches

Table 2

WICKIUP JUNCTION PLANNING AREA - EXISTING STREET INVENTORY							
Street	Road Classification	Right Of Way	Paved Width/ Type	# of Travel Lanes	Bicycle Facility Type	Side-walks	Features/ Conditions
HIGHWAY 97							
	Principal Arterial		40' AC	2	Shoulder	No	Two 12' travel lanes w/ 8' paved shoulders, no center median
STREETS EAST OF HIGHWAY 97							
Hwy 97 Frontage Rd.	Rural Local	50'	20' AC	2	Shared	No	
Rosland Road	Rural Local	60'	20' AC	2	Shared	No	
Pam Way	Rural Local	60'	30' Dirt	2	Shared	No	
Drafter Road	Rural Local	60'	30' Gravel	2	Shared	No	
STREETS WEST OF HIGHWAY 97							
Burgess Road	Rural Arterial	80'	32' AC	2	Shared	No	Two 13' travel lanes w/ 3' paved shoulders
"Old" Burgess	Rural Local	50'	24-30' AC	2	Shared	No	1 block street was Burgess prior to realignment with Hwy. 97
Railroad Street	Rural Local	50'	20-24' Grav.	2	Shared	No	
Skidgel Road	Rural Local	50'	20-24' Grav.	2	Shared	No	Section from new Burgess to old Burgess is paved at 28'+.
Antler Lane	Rural Local	50'	20-24' Grav.	2	Shared	No	
Doe Lane	Rural Local	50'	20-24' Grav.	2	Shared	No	
Pine Drive	Rural Local	50'	20-24' Grav.	2	Shared	No	
Cagle Road	Rural Local	50'	20-24' Grav.	2	Shared	No	
Murray Drive	Rural Local	50'	20-24' Grav.	2	Shared	No	
Santa Barbara Drive	Rural Local	50'	20-24' Grav.	2	Shared	No	
Elm Lane	Rural Local	50'	20-24' Grav.	2	Shared	No	
Oak Lane	Rural Local	50'	20-24' Grav.	2	Shared	No	
Ash Lane	Rural Local	50'	20-24' Grav.	2	Shared	No	

(Ord. 2003-027 § 1, 2003; Ord. 2002-001, §4, 2002; Ord. 2002-005 § 1, 2002; Ord. 2001-046 § 1 & 2, 2001; Ord. 2001-036 § 1, 2001; Ord. 2000-017 § 1, 2000)

23.40.025. Urban Unincorporated Community - Sunriver.

Under OAR 660, Division 22, Unincorporated Communities, Sunriver meets the definition for both an “Urban Unincorporated Community” and a “Resort Community.” With the help of a stakeholder advisory committee comprised of key members of the community who represent a multitude of property owners and development interests, the decision was made to proceed with the planning process for Sunriver as an Urban Unincorporated Community. It was the consensus of the committee that the provisions allotted for Urban Unincorporated Communities under the rule offered the greatest practical degree of flexibility for future growth and development in Sunriver. Subsection OAR 660.22.010(8) defines “Urban Unincorporated Community” as;

“[a]n unincorporated community which has the following characteristics:

1. Includes at least 150 Permanent dwelling units including manufactured homes;
2. Contains a mixture of land uses, including three or more public, commercial or industrial land uses;
3. Includes areas served by a community sewer system; and,
4. Includes areas served by a community water system.

A. Comprehensive Plan Findings and Policies - General.

1. Background.

a. Historical background.

Sunriver is located in the central portion of Deschutes County, approximately 15 miles south of the city limits of Bend. Sunriver lies in the Upper Deschutes River Basin, with the Deschutes River generally forming the western boundary of the community. Sunriver includes approximately 3,374 acres which are bounded by the Deschutes National Forest on the east, west and north sides. Small lot residential subdivision development is the predominant land use to the south of the community boundary. However, Crosswater, a private residential/resort community has also recently been developed in the area immediately south of Sunriver.

Development of Sunriver began in 1967 and the first subdivision plat within Sunriver was filed in 1968. Development in Sunriver began during a period of time when the unincorporated areas of Deschutes County were not zoned. In 1972, when the County first adopted a zoning ordinance (PL-5) and Comprehensive Plan, the area identified as Sunriver was zoned A-1-T and designated “planned development” on the Comprehensive Plan map. In 1973, a zone change to planned development (PD) was applied for and granted. As part of the zone change application, a “Master Plan” was developed. The Master Plan consisted of a map showing the proposed development of Sunriver. The original area of Sunriver encompassed approximately 5,500 acres. Development occurred in accordance with the PD Zone of PL-5 and the density of development was determined to be 1.5 units per acre overall.

In 1977, approximately 2,200 acres of property originally contemplated for development as part of Sunriver were sold to the U.S. Forest Service. Following the sale, a revised Master Plan for Sunriver Phase II was prepared for the undeveloped portion of Sunriver. In October 1978, the County approved the revised Sunriver Phase II Master Plan with the same PD Zoning designation.

In 1980, after a controversy over a land use application submitted for development within Sunriver, the viability of the Sunriver Master Plan was called into question. This was compounded by the fact that PL-15, the County Zoning Ordinance adopted in 1979 to replace PL-5, did not include any provisions for “planned communities.” As a result, the developer of Sunriver agreed to develop a Planned Community (PC) zoning ordinance text and new Master Plan for Sunriver subject to County review and approval. In November 1982, the County adopted an ordinance amending PL-15 to add a section providing for the Planned Community (PC) Zone and approving a new Sunriver Master Plan. Since 1982, the PC Zoning Ordinance Text and Master Plan remained relatively unchanged and were the guiding documents for the majority of existing development in Sunriver.

The PC zone adopted in 1982 included seven (7) separate district designations within the community. The districts included the following:

- Single Family Residential District -RS
- Multiple Family Residential District -RM
- Commercial District - C
- Resort District - R
- Industrial District - I
- Community Property -CP
- Airport District -A

Approximately 80 percent of the area within the Sunriver community boundary has already been developed under the past zoning ordinances and Master Plans. Past development has included a mixture of single family and multi-family residences, commercial businesses, resort and recreational amenities and public service buildings.

b. Population and growth.

The current population of Sunriver is difficult to ascertain. This is due to the large number of vacation and second homes within the community that are occupied for only part of the year. According to statistics compiled by the Sunriver Owners Association, the number of full time, year round residents of Sunriver is estimated to be 1,654 persons. During the peak tourist season, the population of Sunriver, including guests who do not own property but are renting residences within the community, is estimated to be 12,664 persons.

While the number of residential lots (both single family and multi-family) within the community and the density of development can be determined with a great degree of accuracy, the rate of future population growth in Sunriver is difficult to estimate due to the large number of residences that serve as second and/or vacation homes. Approximately 80 percent of the existing dwellings are vacant for large periods of time throughout the year. However, during the peak tourist seasons, the majority of the dwellings are occupied. Thus, Sunriver typically experiences a fluctuating population comprised of both year round and part time residents.

At the end of 1996, Sunriver had an 80 percent buildout of single-family residential lots with 2,575 single-family homes and a 95 percent buildout of townhomes and condominiums with 896 residences. When adding these together, there are a total of 3,428 single-family residences in Sunriver. When using the 1990 Census figure which estimates an average of 2.54 persons per household, the population figure is approximately 8,707 persons. Upon total buildout of the residential lots in Sunriver, the estimated population could be expected to total 10,455 persons. This does not take into account the resort/vacation component of Sunriver and the fact that many dwellings are not occupied full time. Based on information compiled by the Sunriver Owners Association, approximately 19 percent of the single family residences existing as of 1996 are occupied on a year round basis. Thus, a more accurate estimate of full time residents is 1,654 persons. If the percentage of full time residents holds relatively constant as it has in the past, the population of full time residents could be expected to be 1,906 persons upon buildout of all residential lots. Upon buildout, it is expected that the population growth will become substantially stagnant since there are no plans for expanding the community boundaries at this time.

c. Periodic review.

In the fall of 1994, the Oregon Land Conservation and Development Commission adopted a new administrative rule, OAR 660.22, Unincorporated Communities, which required counties to update land use plans and regulations for such communities. As part of Periodic Review, the County updated the Comprehensive Plan and implementing regulations for Sunriver to comply with the rule.

d. "Urban Unincorporated Community."

Sunriver meets the definition because it has historically included land developed with a mixture of residential, commercial and industrial uses. Sunriver utilities operate both a community sewer and water system which are in place and serve the existing development. Sunriver is served by its own fire and police departments and also has essential services such as a school. The Comprehensive Plan designates Sunriver as an Urban Unincorporated Community and provides for future growth and development accordingly.

e. Sunriver Urban Unincorporated Community Boundary.

Since 1977, Sunriver has included approximately 3,374 acres of land. Within this area, there are 4,700 total tax lots, including common areas. The community boundary is generally formed by the Deschutes River on the west, Spring River Road/South Century Drive on the south and the Deschutes National Forest on the north and east. This boundary has remained unchanged since 1977.

During the 1997 update, the Sunriver Urban Unincorporated Community boundary has been amended in the following way: Three hundred sixty-six acres were added to the Sunriver Urban Unincorporated Community along the east boundary to include an area that is to be used for sewage effluent storage and disposal. This area has been added per Oregon Department of Environmental Quality requirements. The effluent and storage capabilities of the existing sewage system are at or near capacity seasonally. Thus, this expansion of the community boundary was necessary to provide adequate sewage disposal services to the existing community at buildout. This area is not intended to provide additional sewer capacity to serve areas outside of the historic community boundaries. This area, currently part of the Deschutes National Forest, was changed from a plan designation of Forest to Urban Unincorporated Community - Forest.

B. Land use planning.

1. Existing land uses.

The predominant land use in Sunriver is residential, the majority of which is single-family residential development. However, since Sunriver was originally developed as a planned community, a number of other uses exist which make Sunriver a community which is somewhat self-reliant. Uses which support the residential components include a commercial core which contains a variety of retail businesses developed in a pedestrian mall setting, as well as a business park. A large component of development in Sunriver includes resort related amenities such as golf courses, a lodge, convention facilities and overnight accommodations. A fire station, police station and public works facility have also been developed in support of all uses.

Land bordering Sunriver on the north, east and west is zoned Forest Use (F-1) and is within the Deschutes National Forest. The National Forest land remains undeveloped and is primarily used for recreational purposes such as hiking, hunting, fishing, snowmobiling, etc. The forest lands and the recreational opportunities that they offer enhance the resort component of Sunriver. Land to the south of Sunriver includes primarily private property which is zoned Rural Residential (RR-10). The majority of the RR-10 properties include small lot (one-half to one acre parcels) subdivisions which were created prior to any zoning laws.

2. Comprehensive Plan Designations.

The 1997 Deschutes County Comprehensive Plan for the Sunriver Urban Unincorporated Community has eight comprehensive plan designations, shown on the comprehensive plan map attached as Map "A" at the end of this chapter and described as follows:

- a. Residential District. The Residential District designation on the Comprehensive Plan Map includes the Single Family Residential and Multiple Family Residential Districts as shown on the Zoning Map for the Sunriver Urban Unincorporated Community. This plan designation includes all properties which were previously designated for residential development under the previous Planned Community designation. No change to residential boundaries have been made.
- b. Commercial District. The majority of the land designated Commercial includes the commercial core of Sunriver which is commonly referred to as the Sunriver Village Mall. An additional Commercial District is located at the north end of the community and is developed with a grocery store and gas station. The Village Mall is developed as an outdoor pedestrian mall and includes a variety of commercial uses. Many of the existing commercial uses support the tourist component of the community and residents living within the boundaries of Sunriver. This plan designation includes all areas formerly designated for commercial use.
- c. Resort District. In general, the Resort plan designation includes properties which are developed with amenities such as the Sunriver Lodge and Great Hall, golf courses, the equestrian and marina facilities and the nature center. These amenities have been developed to foster the recreation and tourist component of Sunriver. For the most part, this designation includes the properties which are owned and managed by Sunriver Resort.
- d. Business Park District. The Sunriver Business Park lies at the southern end of the community boundary and is physically separated from the remainder of the community by Spring River Road. This plan designation was originally created to accommodate light industrial development to support the employment needs of the community and surrounding area. Since the inception of zoning ordinance regulations for this area, development has been primarily commercial in nature rather than industrial. The

zoning ordinance has been modified to reflect the existing businesses and the trend for commercial development while still allowing for industrial uses to develop.

- e. Community District. The Community plan designation includes properties which are primarily developed with public service uses which support all facets of the community. Development includes the fire station, school, community center, corporation/public works facility. Properties with this designation are primarily owned and administered by the Sunriver Owners Association.
- f. Airport District. The Airport plan designation includes areas which are currently developed with airport related amenities, such as runways, hangars, fueling stations and maintenance facilities. This district also includes areas surrounding the actual airport development which are considered to be in the sphere of influence of the airport and in which airport related impacts and risks are associated. Development in the airport district shall be limited with respect to heights of structures, public gathering places and other potential risks to persons or property related to airport uses.
- g. Utility District. This plan designation includes properties which are currently developed with amenities such as sewage pump stations, water treatment facilities, water distribution facilities and associated utility improvements. The utility plan designation is intended to provide for the development and expansion of necessary utility facilities on properties which are already devoted to such uses.
- h. Forest District. The previous boundary for Sunriver was expanded by approximately 370 acres to include an area of land to the east that has historically been zoned for forest uses and is within the Deschutes National Forest. A recent decision by the U.S. Forest Service to permit an effluent storage pond and effluent irrigation site on approximately 50 acres in this area and a potential land transfer by which ownership would be transferred to the Sunriver Utilities Company prompted inclusion of this area within the community boundary. By including this area within the community boundary, future expansion of the sewage disposal system to include the application of biosolids in addition to the effluent irrigation site and storage pond would be permitted. This will enable Sunriver to meet Oregon Department of Environmental Quality regulations for treated wastewater storage and disposal into the future, through buildout of properties in Sunriver. An exception to Goal 4 has not been taken because the only uses allowed in the expansion area are uses that are permitted in the Forest zone, consistent with Goal 4. (Ord. 98-014).

C. Public Facility Planning.

1. Utilities.

Water and sewer service within the Sunriver Urban Unincorporated Community is provided by the Sunriver Utilities Company (SRUC). SRUC is under the jurisdiction of the Public Utility Commission of Oregon. The SRUC was established as a private water and wastewater company and has provided water and sewer services within the community boundary since 1969. SRUC is the largest private water/wastewater company in the State of Oregon.

- a. Water. SRUC currently operates three main wells which are capable of pumping over 7.5 million gallons of water each day. In addition, reservoir capacity for water storage is 2 million gallons per day. This volume of water production and storage exceeds the needs of the community within the boundaries of Sunriver.

As of 1997, SRUC serves a total 3603 water customers. This total includes the following types of service connections: 2630 residential; 753 condominiums; 125 commercial; and, 95 for irrigation purposes. All service connections are metered to measure the amount of water that is being used. The meter service sizes range from typical 3/4" residential lines to 6" lines for irrigation, commercial and industrial uses.

- b. Sewer. Sunriver’s wastewater facility is under the jurisdiction of the Oregon Department of Environmental Quality (DEQ). Sewage treatment facilities are capable of handling/treating 2 million gallons of wastewater per day. This includes the 1997 expansion of effluent storage ponds on a U.S. Forest Service parcel along the eastern boundary of Sunriver. The design and flow accommodations will facilitate build out of all 4,600 lots within the community.
2. Public Services.
- a. Police. Sunriver’s police department is responsible for law enforcement within the boundary of the Sunriver Urban Unincorporated Community. In special circumstances, at the request of the Deschutes County Sheriff, the department will assist with law enforcement outside of the community boundary.
 - b. Fire. All areas within the boundary of the Sunriver Urban Unincorporated Community, except for the Business Park, are served by the Sunriver Fire Department. The Business Park is provided with fire protection by the La Pine Rural Fire Protection District.
 The Sunriver Fire Department provides fire protection and ambulance service within the Sunriver community boundary, north of South Century Drive. Additionally, the department provides these same services to areas outside of the community boundary to the east, west and north. The department has a mutual agreement with the La Pine Rural Fire Protection District to provide secondary services within each other's service boundaries on an as needed basis.
 The La Pine Rural Fire Protection District provides fire protection and ambulance service to the portion of the Sunriver community known as the Business Park. The La Pine Rural Fire Protection District has a new station located along South Century Drive approximately 1 ½ mile south of the community boundary.
 - c. Schools. Three Rivers Elementary School, which is under the direction of the Bend-La Pine School District, is currently the sole school within the boundary of the Sunriver Urban Unincorporated Community. Three Rivers Elementary offers schooling from kindergarten through 5th grade and has an enrollment of approximately 270 students. The school accepts pupils from both inside and outside the boundary of the Sunriver Unincorporated Community.
3. Other.
- a. Sunriver Owners Association. The Sunriver Owners Association has the day-to-day responsibility of overseeing the majority of the community operations. The association is governed by a Board of Directors and a General Manager. The services and departments operated by the Sunriver Owners Association, as well as the primary function of each, include:
 - 1. Public Works and Fleet Services – Maintenance of roads, recreational paths and recreational amenities under the direction of the Sunriver Owners Association.
 - 2. Design and Compliance Department – Design review for new structures, aesthetic quality of new development and compliance with development standards.
 - 3. Environmental Services – Administration of fire and fuels regulations as well as any other environmental issues of the community.
 - 4. Fire and Police Services – The Sunriver Fire Department and Police Department described above, operate under the direction of the Sunriver Owners Association.
 - 5. Administration – The administrative offices oversee the day-to-day functions of each component of the association.

The Sunriver Owners Association publishes a monthly newspaper distributed to members of the association and the public.

D. Transportation planning.

1. Background/Existing Transportation Facilities in Sunriver. The Sunriver Urban Unincorporated Community is accessed via public roadways. These include: South Century Drive and Cottonwood Road. Both of these roadways lie within public rights-of-way and are maintained by Deschutes County. South Century Drive and Cottonwood Road connect to Highway 97 which is the primary corridor for vehicular travel throughout central Oregon. South Century Drive enters Sunriver near the southern community boundary and extends to the residentially developed areas to the south and west. Cottonwood Road enters Sunriver near the northern Sunriver boundary and ends within the community.

Internal roads within Sunriver, except for roads within the Business Park, are private roads which are open to the public, and are maintained by the Sunriver Owners Association. These roads are paved and are generally 20 feet in width. Roads within the Business Park are public roads which are maintained by the County. The internal roadway network was developed as part of the original design and master plan for Sunriver. The network consists of a series of internal traffic circles or roundabouts, from which spur roads lead to various areas within the community. All areas within the community boundary are currently accessed by the privately maintained roadways.

A bicycle/pedestrian path system has been developed and integrated throughout the community. Aside from the recreational opportunities provided by the path system, the paths serve as an alternative to vehicular travel as they connect the residential, commercial, school and recreation areas of the community. The paths are paved, maintained in good condition by the Sunriver Owners Association and are used extensively during times of the year when weather permits.

2. Future Transportation Needs.

The existing privately maintained roads and bicycle/pedestrian paths adequately serve the travel needs of the residents and visitors to Sunriver. The existing roads and pathways provide access to all platted and developed areas within the community. There is no projected need for future roads to serve the anticipated development except, possibly within the Sunriver Business Park. Currently, there is only one ingress/egress point from South Century Drive to the Business Park. Future development within the Business Park may warrant an additional entrance to the Business Park from South Century Drive or improvements to the existing entrance from South Century Drive in the future.

South Century Drive and Cottonwood Road are both operating at levels below the vehicular capacity and at acceptable levels of service. In the area between the entrance to the Sunriver Village Mall and the Business Park, the 1996 average daily traffic figures for South Century Drive were approximately 3,380 trips per day. This figure is below the general capacity of 7,000 trips per day. Many of the vehicles traveling this roadway are passing through the community, not necessarily to Sunriver, as this road provides a direct link from Highway 97 to the surrounding rural subdivisions. Cottonwood Road, which only extends between Highway 97 and the community boundary, is not subject to the same volume of pass through traffic that occurs on South Century Drive. Thus, the traffic figures for this roadway are much lower at approximately 2,600 trips per day.

Road widening improvements were completed in 1996 by the County for the segment of South Century Drive between Highway 97 and the entrance to the Sunriver Business Park. Improvements to the entrance of the Business Park itself were also completed. The improvements were done to improve the safety and longevity of the roadway. Future

improvements to County roads outside of Sunriver, including the intersection of South Century Drive and Highway 97 are addressed in the County Transportation System Plan.

E. Policies.

1. Land use policies.

a. General Land Use Policies.

1. Land use regulations shall conform to the requirements of OAR 660 Division 22 or any successor.
2. County comprehensive plan policies and land use regulations shall ensure that new uses authorized within the Sunriver Urban Unincorporated Community do not adversely affect forest uses in the surrounding Forest Use Zones.
3. To protect scenic views and riparian habitat within the community, appropriate setbacks shall be required for all structures built on properties with frontage along the Deschutes River.
4. Open space and common area shall remain undeveloped except for community amenities such as bike and pedestrian paths, and parks and picnic areas.
5. Public access to the Deschutes River shall be preserved.
6. The County supports the design review standards administered by the Sunriver Owners Association.

b. Residential District Policies.

1. Areas designated residential on the comprehensive plan map shall be developed with single family or multiple family residential housing.

c. Commercial District Policies.

1. Small-scale, low-impact commercial uses shall be developed in conformance with the requirements of OAR Chapter 660, Division 22. Larger, more intense commercial uses shall be permitted if they are intended to serve the community, the surrounding rural area and the travel needs of people passing through the area.
2. Development standards in the commercial district should encourage new development that is compatible with the existing pedestrian mall style of development that serves as the commercial core of the Sunriver Urban Unincorporated Community.
3. No additional land shall be designated Commercial until the next periodic review.
4. Multiple-family residences and residential units in commercial buildings shall be permitted in the commercial area for the purpose of providing housing which is adjacent to places of employment. Single-family residences shall not be permitted in commercial areas.
5. Approval standards for conditional uses in the commercial district shall take into consideration the impact of the proposed use on the nearby residential and commercial uses and the capacity of the transportation system and public facilities and services to serve the proposed use.

d. Resort district policies.

1. Areas designated resort on the comprehensive plan map shall be designated resort, resort marina, resort golf course, resort equestrian or resort nature center district on the zoning map to reflect a development pattern which is consistent with resort uses and activities.

e. Business park district policies.

1. A variety of commercial uses which support the needs of the community and surrounding rural area, and not uses solely intended to attract resort visitors, should be encouraged.
2. Allow small-scale, low-impact commercial uses in conformance with the requirements of OAR Chapter 660, Division 22. Larger more intense commercial

uses shall be permitted if they are intended to serve the community, the surrounding rural area and the travel needs of people passing through the area.

3. Small-scale, low-impact industrial uses should be allowed in conformance with the requirements of OAR Chapter 660, Division 22. No more intensive industrial uses shall be allowed.
- f. Community district policies.
 1. Areas designated community on the comprehensive plan map shall be designated community general, community recreation, community limited or community neighborhood district on the zoning map to reflect a development pattern which is consistent community uses and activities.
 2. Lands designated community shall be developed with uses which support all facets of community needs, be they those of year round residents or part time residents and tourists.
 3. Development shall take into consideration the unique physical features of the community and be sensitive to the residential development within which the community areas are interspersed.
- g. Airport district policies.
 1. Future development shall not result in structures or uses which, due to extreme height or attraction of birds, would pose a hazard to the operation of aircraft.
 2. Future development should not allow uses which would result in large concentrations or gatherings of people in a single location.
- h. Utility district policies.
 1. Lands designated utility shall allow for development of administrative offices, substations, storage/repair yards, distribution lines and similar amenities for services such as water, sewer, telephone, cable television and wireless telecommunications.
- i. Forest district policies.

Uses and development on property designated forest that are within the Sunriver Urban Unincorporated Community boundary shall be consistent with uses and development of other lands outside of the community boundary which are also designated forest on the Deschutes County comprehensive plan map.

Forest district property shall be used primarily for effluent storage ponds, spray irrigation of effluent, biosolids application and ancillary facilities necessary to meet Oregon Department of Environmental Quality sewage disposal regulations.

The development of resort, residential or non-forest commercial activities on Forest district lands shall be prohibited unless an exception to Goal 14 is taken.

2. Public facility policies.
 - a. General public facility planning policies.
 1. Residential minimum lot sizes and densities shall be determined by the capacity of the water and sewer facilities to accommodate existing and future development and growth.
 2. New uses or expansion of existing uses within the Sunriver Urban Unincorporated Community which require land use approval shall be approved only upon confirmation from the Sunriver Utility Company that water and sewer service for such uses can be provided.
 - b. Water Facility Policies.
 1. Water service shall continue to be provided by the Sunriver Utilities Company.
 - c. Sewer Facility Policies.

1. Sewer service shall continue to be provided by the Sunriver Utilities Company.
3. Transportation policies.
 - a. Transportation system maintenance policies.
 1. Privately-maintained roads within the Sunriver Urban Unincorporated Community boundary shall continue to be maintained by the Sunriver Owners Association.
 2. The bicycle/pedestrian path system shall continue to be maintained by the Sunriver Owners Association.
 3. The County will encourage the future expansion of bicycle/pedestrian paths within the Sunriver Urban Unincorporated Community boundary in an effort to provide an alternative to vehicular travel.
 4. All public roads maintained by the County shall continue to be maintained by the County. Improvements to County maintained public roads shall occur as described the County Transportation System Plan.

(Ord. 2003-027 § 1, 2003; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-014 § 1, 1998; Ord. 97-076 § 2, 1997)

23.40.30. Rural Communities – Terrebonne and Tumalo.

A. Terrebonne Rural Community

23.40.030. Terrebonne Rural Community.

A. General background.

1. Historical background. Terrebonne is located in northeastern Deschutes County, about 6 miles north of Redmond and 22 miles north of Bend. Smith Rock State Park, located on the Crooked River, is about 2.5 miles northeast of Terrebonne.

Located on the Oregon Trunk Railroad, Terrebonne was originally called Hillman, named after James Hill and E. H. Harriman, famed railroad builders. The Terrebonne Rural Community today includes the original Hillman townsite, platted in 1909. As news of the Hillman Plan spread across the United States, people purchased property sight unseen. A few individuals never actually claimed their lots, while others came to find the promises of fertile land were embellished.

One story that persists regarding the original townsite is about a developer who reportedly sold the same lots to several different buyers and that some of the lots were not buildable. When disgruntled buyers caught up with him, he was run out of town. As news of this land fraud spread across the country, the residents of Hillman decided to change the name of their townsite, in order to improve its reputation. They held a meeting and selected the name “Terrebonne,” which means “good earth.”

As the original townsite grew and developed, Hillman/Terrebonne boasted at one time a hotel, a newspaper, a livery stable, two general stores, two barber shops, a bank, a blacksmith shop, a meat market, a realty company, various feed stores, a school, churches and a grange hall.

2. Population and growth.

The 1990 US Census classified Terrebonne as a “designated place” with a reported total population of 1,083 persons. The estimated population growth was about 3 percent annually in 1991-1992. In 1995 the population of Terrebonne Rural Service Center was estimated at 1,250 persons, with 2.57 residents per dwelling. Terrebonne’s median household income in 1990 was \$21,029, below the poverty level established by FMHA for

rural communities in Oregon. Historical population data for Terrebonne have not been collected. However, Terrebonne Domestic Water District staff have noticed an influx of younger couples with children replacing retirees who have moved out of the area. This type of change creates an increase in population without evidence of growth such as new residential construction. The Terrebonne elementary school is the fastest growing in the Redmond school district.

The rate of future population growth in Terrebonne is difficult to estimate because growth is limited until community sewer facilities allow desired growth to occur. Deschutes County projects a countywide growth rate of 4.5 percent until the year 2000.

3. Periodic review.

In the fall of 1994, the Land Conservation and Development Commission adopted a new administrative rule, OAR 660-22, Unincorporated Communities. In 1997, as part of periodic review, the county updated the Deschutes County Comprehensive Plan and implementing regulations for the Terrebonne community to comply with the rule. The description and the policies in this section of the plan reflect the outcome of that planning process.

4. Rural Community.

Terrebonne meets the definition of a Rural Community because it is primarily a residential community, which also has a school, churches, a grange hall, a post office and a handful of local businesses that serve the community, the surrounding rural area or persons traveling through the area. The comprehensive plan designates Terrebonne a Rural Community and provides for its growth and development accordingly.

5. Terrebonne Rural Community boundary.

The 1979 Deschutes County Comprehensive Plan designated Terrebonne a Rural Service Center (RSC), a Goal 3 and 4 exception area, comprising 667 acres and 577 tax lots. The 1979 Terrebonne RSC boundary included the Hillman Plat, except that portion east of the Oregon Trunk Railroad tracks. It included the area south of the Hillman Plat known as the Circle "C" Acres subdivision which occupies land west of the highway, east of 19th Street and north of Davidson Way. The 1979 Terrebonne RSC boundary also included the land in the north one-quarter of section 16, T14S, R13E, north of the Hillman Plat.

OAR 660-22-020(3)(a) states that land which has been acknowledged as an exception area and historically considered part of the community may be included in an unincorporated community boundary. As part of periodic review the Terrebonne community boundary has been amended in the following two ways to include a total of 631 acres and 551 tax lots (See Map A1):

- a. The boundary has been expanded to include the portion of the old Hillman Plat east of the railroad tracks. This land has been acknowledged as an exception area and historically considered part of the community.
- b. At the request of Circle "C" residents, the community boundary has been moved to the north, to Odem Avenue to exclude the entire Circle "C" Acres subdivision. This land has been designated Rural Residential Exception Area on the Deschutes County Comprehensive Plan map.

The comprehensive plan designation applied to the land south of Terrebonne Rural Community known as part of the Circle "C" Acres Subdivision bounded on the north by Odem Way, on the south by Davidson Way, on the east by West 19th Street and on the west by Highway 97 has been changed from Rural Service Center to Rural Residential Exception Area.

B. Land Use Planning.

1. Existing land uses.

The predominant land use in Terrebonne is single-family residences, including a manufactured home part with 26 single-family units. Commercial land uses include supermarkets, a gas station, trucking companies, farm equipment sales and service, restaurants, a hardware store, a veterinarian and various other small-scale retail businesses located along Highway 97. There is a grange hall, a post office and an elementary school. There are also several churches. A significant recent development in Terrebonne is a large new supermarket.

Land bordering Terrebonne is zoned Exclusive Farm Use Terrebonne Subzone (EFU-TR), Multiple Use Agriculture (MUA-10 acre minimum lot size), and Rural Residential (RR-10 acre minimum lot size). The Deschutes County Comprehensive Plan designates EFU land for agriculture uses and MUA-10 and RR-10 land for rural residential uses. The EFU land around Terrebonne is employed in a range of small-to large-scale irrigated agricultural uses, while the MUA-10 and RR-10 land is parcelized and developed with rural residences and small-scale agricultural uses.

According to a county land use inventory conducted in 1994, the estimated maximum number of potential new lots in Terrebonne was 1,233, based on the availability of community water service. A land use inventory compiled in 1997 using the County Assessor’s database is shown in Table B1 below.

Table B1: Land Use Inventory – Terrebonne Rural Community

Assessors Property Class	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
Miscellaneous	19	0	19
Commercial	43	35	8
Tract	445	319	126
Farm	16	8	8
Exempt	28	12	16
Total Tax Lots	551	374	177
Zoning District	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
TeC	50	41	9
TeCR	18	11	7
TeR	445	290	155
TeR5	38	32	6
Total Tax Lots	551	374	177

Source: Deschutes County Assessors Database, January 24, 1997 & Deschutes County PW GIS Parcel Basemap, November 15, 1996.

2. Comprehensive Plan Designations.

The Deschutes County Comprehensive Plan for the Terrebonne Rural Community has the following five comprehensive plan designations (See Map B1 and Table B2 and B3 on the next two pages):

- a. Residential. The land designated Residential on the Terrebonne comprehensive plan map includes the highest density area of Terrebonne, corresponding with the boundary of the old Hillman Plat. It is intended to accommodate higher density residential uses, served by community water.
- b. Residential 5-Acre Minimum. The land designated Residential-5 Acre Minimum includes the larger parcels of land in Terrebonne located to the north and south of the Hillman Plat. The Residential-5 Acre Minimum designation is intended to maintain the rural character of the community by retaining large lots where community water is not available.
- c. Commercial. The Commercial plan designation was created to accommodate existing non-conforming commercial uses on the east side of Highway 97 and to in-fill between commercial uses on both sides of 11th Street. The Commercial designation is intended to encourage development of a pedestrian-friendly commercial center on both sides of 11th Street and to discourage highway strip-commercial development.
- d. Commercial Expansion Area. The Commercial Expansion Area designates the only area for future expansion of the Commercial plan designation and Commercial zoning district. The Commercial Expansion Area is intended for future expansion of the Terrebonne commercial center with a connected road network and good pedestrian access, directed away from the highway to discourage highway strip-commercial development.
- e. Commercial-Rural. The Commercial-Rural plan designation was created to accommodate existing non-conforming, small-scale, low-impact truck and heavy equipment uses, not generally compatible with a pedestrian friendly commercial center. The businesses listed below in Table B3 were not required to go through a conditional use permit process or site plan review when the Commercial-Rural zone was applied to the properties. The business owners provided some specific information about the operating characteristics of each business on a questionnaire, recorded in county File No. TA-96-13 and in the county address file for each primary property. Applying the Commercial-Rural zone to these properties did not validate them as legal uses. The new zone gives the existing uses an opportunity that did not exist before to apply for a receive site plan and conditional use permit approval for a listed use. If these uses change or expand, they will be subject to site plan review, conditional use permit requirements and to the provisions of Title 18, chapter 18.66 of the Deschutes County Code.

Table B2: Terrebonne Comprehensive Plan Designations and Zoning Districts

Comprehensive Plan Designation	Corresponding Zoning Districts
Residential	Residential (TeR) District
Residential – 5 Acre Minimum	Residential – 5 Acre Minimum (TeR5) District
Commercial	Commercial (TeC) District
Commercial Expansion Area	Residential (TeR) District
Commercial – Rural	Commercial – Rural (TeCR) District

Table B3: December 1996 – Businesses in the Commercial-Residential District

Company Name	Tax Map	Primary Property
C.B. Foss Trucking Inc.	14-13-16AC 400 14-13-16DC 300	8805 11 th Street, Terrebonne OR
Central Oregon Trucking Co.	14-13-16AC 500 14-13-16AC 502 14-13-16AC 202	8888 11 th Street, Terrebonne OR
Deschutes Valley Equipment	14-13-16DB 113 14-13-16DB 114	710 F Avenue, Terrebonne OR
Riemenschneider RL Enterprises	14-13-16DB 100 14-13-16DB 106	736 F Avenue, Terrebonne OR

3. Land use policies.
 - a. General land use policies.
 1. Land use regulations shall conform to the requirements of OAR Chapter 660, Division 22 or its successor.
 2. County plans and land use regulations shall ensure that new uses authorized within the Terrebonne Rural Community do not adversely affect agricultural uses in the surrounding Exclusive Farm Use (EFU) zones. Zoning regulations shall require any new structure on land contiguous to EFU-zoned land which is received special assessment for farm use to set back 100 feet from the common property line.
 3. All zoning districts in the Terrebonne community shall allow residential uses.
 4. The county shall encourage the preservation of historical structures in the Terrebonne Rural Community, such as the Ladies Pioneer Club (1911), the Grange Hall (1925) and the Oregon Trunk Railroad Depot (1911).
 - b. Residential area policies.
 1. Areas designated residential on the comprehensive plan map shall be designated a corresponding residential district on the zoning map.
 2. The county shall plan and zone for a diversity of housing types and densities suited to the capacity of the land to accommodate water and sewer facilities.

3. The land designated Residential—5-Acre Minimum is intended to maintain the rural character of the community by retaining large lots where community water and sewer are not available.
 4. Lands designated Residential—5-Acre Minimum shall not be redesignated and rezoned to accommodate higher densities until public water is provided.
 5. Livestock shall be permitted in both residential districts subject to use limitations.
- c. Commercial area policies.
1. Allow small-scale, low-impact commercial and industrial uses in conformance with the requirements of OAR Chapter 660, Division 22, and larger commercial uses, if such uses are intended to serve the community and the surrounding rural area or the travel needs of people passing through the area.
 2. The commercial district shall limit the size of all industrial buildings and the type of industrial uses to assure that the industrial uses are small-scale, low-impact and do not dominate the character of the commercial district.
 3. Design standards in the commercial districts should encourage new development that is compatible with the rural character of the community.
 4. Where there is a choice to use a road other than Highway 97 for access, access shall not be taken from Highway 97.
 5. Approval standards for conditional uses in the Commercial—Rural District shall take into account the impact of proposed uses on the nearby residential and commercial uses and on the capacity of the transportation and other public facilities and services to serve the proposed use.
 6. The land designated Commercial—Rural shall not be considered for expansion into the surrounding land designated Residential or Commercial, except at next periodic review.
 7. Stand-alone residential uses or residences in conjunction with uses listed in the commercial districts shall be allowed, but they are not intended to predominate or set the development standards for other uses in the area.
 8. Land divisions or replatting for residential purposes shall not be allowed in the commercial districts.
 9. Livestock shall not be permitted in the commercial districts.
- d. Commercial expansion area policies.
1. The Commercial or Commercial Rural plan designations shall not expand on the west side of Highway 97.
 2. The area designated Commercial shall only expand to the designated Commercial Expansion Area on the Terrebonne comprehensive plan map (See Map B1). No expansion of the Commercial Expansion Area shall be considered until next periodic review.
 3. Rezoning the Commercial Expansion Area from Residential District to Commercial District shall be allowed only if no land currently zoned Commercial District can reasonably accommodate the proposed use.
 4. Rezoning the Commercial Expansion from Residential District to Commercial District may be done without a Plan Amendment and shall be allowed only if the Terrebonne Domestic Water District facilities provide, or will provide, adequate water quantity and pressure for commercial or domestic use to serve the area being rezoned; and the road rights of way serving the area being rezoned have been, or will be, improved to applicable county right of way standards for the Terrebonne Rural Community. An applicant for a zone change must be able to demonstrate that:
 - i. Road right of way improvements and public water facilities to the property are in place or will be in place when the development occurs; or

- ii. Road right of way improvements and public water facilities to the property are under construction when a permit is issued; or
- iii. Road right of way improvements and public water facilities to the property have been in a local government or special district budget.

These standards shall apply in place of the county standards for rezoning contained in Title 18, section 18.36.020 of the Deschutes County Code.

C. Public facility planning.

1. Special Districts.

Terrebonne Rural Community is served by the following special districts: (1) Terrebonne Domestic Water District (see Map C1); (2) Deschutes County Rural Fire Protection District #1 (see Map C2); (3) Redmond School District #2J (see Map C3); (4) Central Oregon Irrigation District.

a. Water.

The area identified in the 1979 Plan as the Terrebonne Rural Service Center (RSC) had two community water systems:

- 1. The Terrebonne Domestic Water District serving the area identified as the old Hillman Plat, the south $\frac{3}{4}$ of Section 16 T14S R13E; and
- 2. A separate water district serving the Circle "C" Acres subdivision located in the south portion of Terrebonne RSC.

As part of period review, the Terrebonne community boundary was amended, at the request of residents of Circle "C" Acres subdivision, to exclude the entire Circle "C" Acres subdivision. Today, the Terrebonne Domestic Water District is the only community water system in the Terrebonne Rural Community.

The District, which boundary coincides with the extent of the old Hillman Plat, serves the most densely populated area of Terrebonne. The District's Board of Directors recognized the need to improve the antiquated water system both for fire protection and for household use. In July of 1994, the Board of Directors and Deschutes County authorized H.G.E. Engineers & Planners to prepare an updated Water System Master Plan for Terrebonne Domestic Water District. The Water System Master Plan, with a 25-year planning horizon, was published in January 1995. In May 1997, Deschutes County received a federal-state, grant-loan package for constructing priority improvements to the District's water system identified in the 1995 Water System Master Plan.

OAR Chapter 660-22, Unincorporated Communities, requires the county to enter a coordination agreement with the Terrebonne Domestic Water District for Coordinated review and administration of the land use in the District's service area.

The Oregon Department of Water Resources reported there is an abundant supply of potable water in a deep aquifer under Terrebonne. The department has not identified the Terrebonne Rural Community as a groundwater limited or groundwater critical area. The Terrebonne Rural Community is a groundwater limited or groundwater critical area. The Terrebonne Domestic Water District currently depends on two groundwater wells. The District's groundwater source does not exceed current EPA maximum contaminant limits. No treatment is performed; none has been required by the state Health Division. The area in the Terrebonne Rural Community that is outside the District service area boundary relies on individual wells for drinking water. The

Water Resources Department routinely approves new groundwater wells in the areas of the Terrebonne community not served by community water.

b. Sewer.

Terrebonne does not have a community sewer system or a sewer facility plan. Land uses in the community rely on on-site sewage disposal systems of all ages and descriptions, ranging from new sand-filter systems to old drill holes. In some cases on-site systems are insufficient for current needs. Much of the area defined by the Hillman Plat is on a rocky plateau. The soils are shallow – most no deeper than 18 inches – such that a standard septic system is not feasible on smaller lots. It is often necessary to install a relatively expensive sand-filter system in order to obtain development permits for new development or for alterations to existing development. There are a few tax lots that cannot be developed or redeveloped because they are too small to accommodate any approved one-site sewage disposal system.

The county has not conducted a sewer feasibility study for the Terrebonne Rural Community. The community has not reached consensus about the need for a sewer system. However, a group of concerned citizens recognize that a sewer system is needed; both to protect the water quality and to allow development at desired densities.

The county plan and zoning regulations restrict the type and intensity of allowed uses to those that can be served by a DEQ approved on-site sewage disposal systems. In addition, county zoning regulations set minimum lot sizes adequate to ensure the on-site systems do not exceed the capacity of the land. These provisions are true for all zoning districts in Terrebonne.

2. Public facility policies.

a. General public facility planning policies.

1. Residential minimum lot sizes shall be determined by the capacity of the land to accommodate available water and sewer facilities, in order to protect and promote public health and safety and to provide efficient public facilities and services.
2. The county shall encourage early planning and acquisition of sites needed for public facilities (e.g., school, roads and water facilities).

b. Water facility policies.

1. The Terrebonne Domestic Water District 1995 Water System Master Plan shall serve as the public facility plan for water supply in Terrebonne.
2. The county shall support improvement of the community water system to meet health and safety needs.
3. Deschutes County and the Terrebonne Domestic Water District shall enter a coordination agreement, consistent with ORS Chapter 195, as required by OAR 660-22-050(2)(c).
4. New uses or expansion of existing uses requiring land use approval in the Terrebonne Domestic Water District service area shall be approved only upon confirmation from the District that the District can provide water for domestic or commercial uses to the property.
5. Deschutes County shall encourage all development in the District service area to connect to the Terrebonne Domestic Water District water system.

c. Sewer facility policies.

1. Only uses and densities that can be served by a DEQ approved on-site sewage disposal system shall be allowed in the Terrebonne Rural Community until such time as a community sewer system is available.

2. Zoning regulations shall set minimum lot sizes adequate to ensure the on-site systems do not exceed the capacity of the land until such a time as a community sewer system is available.
3. The county shall support replatting of lots in the Hillman Plat to create lots large enough to accommodate a DEQ approved on-site sewage disposal system.
4. The county shall attempt to obtain funding for a sewer feasibility study.
5. The county shall facilitate the development of a community sewer system if needed to protect public health.
6. If a sewer system is proposed, the county will review the Terrebonne comprehensive plan policies related to public services.

D. Transportation planning.

1. Background - Transportation in Terrebonne.

The transportation plan will play a role in addressing long-standing transportation issues and in maintaining the rural character of Terrebonne. This plan meets the requirements of the OAR Chapter 660, Division 12, Transportation Planning, by designating a network of local roads, sidewalks and bikeways. In addition, it establishes appropriate right of way development standards for county roads in Terrebonne and makes recommendations for increasing safety for local pedestrian and vehicle traffic on the highway.

a. Community transportation goals.

The livability of the Terrebonne community depends on the ability of the transportation network to provide safe and convenient access from residential areas to the commercial areas and to the school. It is important that the state highway be integrated into the community and that it function efficiently to transport travelers and freight through the community.

1. Local road network.

- i. Maintain the existing roads.
- ii. Provide sidewalks only where they are warranted for safety.
- iii. Protect utility trenches located in the public right of way from damage by tree roots.

2. Appropriate local road standards.

- i. Provide transportation facilities that are practical and cost effective to construct, use and maintain and in character with the rural community.

3. Highway 97 corridor.

- i. Slow traffic on Highway 97.
- ii. Provide safe, convenient pedestrian crossings on the highway near the school.
- iii. Reduce misuse of the center turn lane.
- iv. Redesign Highway 97 intersections to balance the needs of truck and pedestrian traffic, particularly at the "B" Avenue and "C" Avenue and the 11th Street intersections.

b. Community profile.

The 1990 US Census shows that compared to the population of the state, Terrebonne is a community of relatively young families. About 21 percent of the people in Terrebonne are five to 15 years old, too young to drive. About 14 percent of the community is over 64. This age group will likely increase after 2010 due to national demographic trends. Both of these user groups would benefit from sidewalks separated from vehicle traffic in key locations to increase pedestrian safety and convenience.

Terrebonne is a bedroom community for surrounding cities in Central Oregon. US Census data for 1990 showed that out of 454 workers (42% of the population), 355 (78%) drove alone to work, 66 (15%) carpooled, 14 (3%) worked at home and 19 (4%)

reported other means of transportation to work. No workers reported walking or bicycling to work. The commute time (for those who did not work at home) was less than 10 minutes for 11% and less than 20 minutes for 69% of the population.

- c. Highway 97 collision data.

The State of Oregon recorded 29 collisions on Highway 97 in Terrebonne from 1991 to 1995. Seventeen crashes caused 28 injuries and one crash resulted in two deaths. Nineteen of the collisions occurred at intersections, mostly from Central Avenue south to 11th Street. There were ten mid-block collisions. Most of the collisions occurred in daylight, but two involved pedestrians after dark.
- d. Constraints of the transportation system.
 1. Topographical Features. Topography and irrigation canals limit opportunities to connect the existing discontinuous road network. A large area of Terrebonne is located on a rocky plateau characterized by steep rimrock outcrops on the north, east and west. Roads constructed through the rimrock have up to 10 percent grades. Many rights of way mapped on the rimrock cannot be developed except possibly as stairways. Some roads end against rimrock. In addition, two irrigation canals, the lateral H and the lateral H-1, divide the public rights of way in many places.
 2. Transportation Features. Highway 97 and the Oregon Trunk Railroad tracks restrict east-west road connections. In the central, developed area of Terrebonne, there are four highway crossings and two railroad crossings.

Many segments of public right of way, originally dedicated as part of the Hillman Plat, have been vacated, resulting in a fragmented network of undeveloped right of way.

2. Inventory of existing transportation facilities. This section contains an inventory of the existing public roads, pedestrian and bicycle facilities in Terrebonne. The data were gathered primarily from existing sources supplemented by site visits and aerial photographs.

- a. Roads.

Terrebonne has good transportation access. Highway 97, the north-south state highway east of the Cascade Range, bisects the community. Highway 97 in Terrebonne has three lanes, a travel lane in each direction and a continuous center turn lane. The traffic count on Highway 97 at "A" Avenue in Terrebonne in 1994 was 12,500 Average Daily Traffic (ADT). The posted speed through the community is 45 mph. Interstate truck traffic comprises a significant percentage of the traffic mix passing through Terrebonne.

Highway 97 is intersected in Terrebonne by Lower Bridge Way and Smith Rock Way, which function as county arterial roads. County collector roads in Terrebonne are West 19th Street and East 1st Street (numbered as part of the Redmond grid) and Odem Avenue. These collectors define the west, east and south boundaries of the Terrebonne community. "C" Avenue and 11th Street function as collector roads in the community. Totaled, there are about 13.5 miles of roads in the community. Table D1: "Inventory of Existing Public Roads," is organized by road functional classification, then by road name in numerical and alphabetical order. It lists the available ADT counts provided by the state for Highway 97 and by the county. There is additional inventory information contained in Map D1: "Inventory of Existing Public Roads." (See Table D1.)

The public roads in Terrebonne (see Map D1) range in width from 20 feet to 32 feet. Some are in poor condition due to cracking, spalling, pot holes and raveling. Lack of adequate crown and roadway drainage result in puddling. Most of the unpaved roads need to be graded and graveled.

b. Pedestrian facilities.

Until recently, pedestrian facilities were not provided in Terrebonne. Terrebonne has one new sidewalk, a 700-foot, curb-tight sidewalk in the public right of way on the south side of “B” Avenue west of Highway 97. The sidewalk is curbed but lacks ramps at the three crosswalks that link it to the north side of “B” Avenue near the school.

There is a crosswalk on “C” Avenue at 7th Street on the north side of the school. Another crosswalk spans the highway from the north side of “B” Avenue. All roads with crosswalks have school crossing signs. The highway has an overhead sign with a flashing light at the “B” Avenue intersection.

All other pedestrian travel is on shared roadways with narrow or no shoulders. The primary pedestrian destinations are the school, post office, grocery stores and other businesses in the commercial area.

c. Bicycle facilities.

Highway 97 south of Lower Bridge Way has a four-foot paved shoulder bikeway. All other bike travel is on shared roadways. There are bike racks at the Terrebonne Market and at the school.

3. Future transportation needs.

A bedroom community such as Terrebonne, located in a major highway, requires a transportation network that can accommodate local traffic, commuter traffic and regional interstate traffic without detracting from the livability and rural character of the community. Accomplishing this goal requires a combination of approaches and techniques, which are summarized below in the following order:

- a. Transportation network plan with roads, pedestrian and bicycle facilities;
- b. Road development standards for the Terrebonne community; and
- c. Highway 97 corridor recommendations for increasing safety for local pedestrian and vehicle traffic.

The Terrebonne transportation plan is based on conventional road functional classifications—arterial, collector and local roads. It establishes development standards appropriate to each type of road. The design of arterial and collector roads gives priority to through traffic rather than access to adjacent land uses. On local roads the emphasis is on access to adjacent land uses.

d. Transportation network plan.

The transportation network plan for Terrebonne identifies where new roads will be needed and where pedestrian and bicycle facilities are warranted. The network plan has three components: (1) Roads, (2) Sidewalks and (3) Bikeways.

1. Roads. Map D2: “Planned Roads,” depicts the general alignments of transportation corridors needed in the future to complete the local road network. The precise road alignments will be determined after further study and engineering analysis and during the development of vacant properties. The transportation corridors depicted on Map D2 take advantage of existing public rights of way, where they exist. It will be important to preserve the existing road rights of way. Where there are gaps in the existing network of public right of way, the county will need to secure 60-foot rights of way along the future transportation corridors.

2. Sidewalks. Map D3: “Planned Pedestrian Improvements,” shows where sidewalks are needed for safety and where there are opportunities for trails. Sidewalks provide a smooth hard surface, a safe place for pedestrians, separated from the road. In Terrebonne, sidewalks are warranted on 11th Street and “C” Avenue which function as collectors in Terrebonne. Sidewalks are warranted on some local roads to provide access to the school. They are also warranted in the Commercial District to provide safe places for people to walk as the commercial area develops and redevelops. Sidewalks are warranted on Highway 97 from Central Avenue south to 11th Street for pedestrian safety and convenience.

Sidewalks are usually separated from the roadway by a curb and gutter, which function as part of the storm drain system. Terrebonne does not have a storm drain system. Curbs are not necessary for drainage control until densities reach four units per acre. The highest density in Terrebonne is about three units per acre. Sidewalks in Terrebonne shall be constructed without curbs and gutters, set back from the road surface behind a drainage swale. This type of sidewalk is adequate, less costly and has a more rural appearance. On the highway, sidewalks may have curbs and gutters and would be buffered to help calm traffic. They may require drainage system improvements.

A drainage swale is a broad, man-made depression running parallel to the right of way, between the roadway and the sidewalk, where water can drain into the ground. The swale also provides room for signs, mailboxes and snow storage, leaving the sidewalk free from obstructions.

Street trees should not be planted in a drainage swale when they will conflict with the Terrebonne Domestic Water District’s existing or planned utility trenches. These trenches are dug, often cut through rock, and lined with sand. In Terrebonne, where soils are shallow over bedrock, tree roots seek out the utility trenches, both damaging pipes and conduits and complicating repair work.

3. Bikeways. The network plan specifies where shoulder bikeways are needed for bicycles to safely use arterial roads. On local roads where traffic volumes and speeds are low, bicycles share the roadway with motor vehicles. On arterial and collector roads that carry high traffic volumes at higher speeds, bicycles need paved shoulders to use the roads safely.

Projects to complete the transportation network plan are grouped into three categories listed in Table D2: “Road Projects;” Table D3: “Shoulder Projects;” and Table D4: “Sidewalk & Trail Projects.” These tables list and rank the projects, high, medium and low priority. The priorities are based on perceived need; they are intended to be flexible to development opportunities and grant funding.

- e. Road development standards.

In previous years, the county required urban road development standards in unincorporated communities in the rural county. The urban standards required 36 feet of pavement, with curb-tight sidewalks, curbs and gutters. It became evident that this standard was not practical or necessary in Terrebonne. Few of the existing roads in Terrebonne meet this standard. The cost per lineal foot to build to this standard prohibited local residents from forming Local Improvement Districts (LIDs) to improve local roads. In addition, people resisted the urban road profile because it did not fit with the community’s preference for a rural appearance. These road standards

are intended to decrease the cost of road improvements and to remove barriers to the formation of LIDs for improving local roads.

There are sound traffic engineering principles that support reduced road standards. The State Transportation Planning Rule (OAR 660-12-045(7)) directs local governments to establish standards for local roads that minimize pavement width and total right of way consistent with the operational needs of the facility. Excessive standards increase the costs of construction, use up available land and encourage inappropriate traffic volumes and speeds. In Terrebonne, full urban road standards are not needed because the traffic volumes and speeds on community roads are low compared to city streets. Many roads serve only a few residences. However, the road development standards applied in the rural county are not adequate to serve the densities and variety of uses found in Terrebonne. Businesses, a school, a post office and other uses generate many local trips, more than generally found in the rural county.

Road improvement standards applicable in Terrebonne Rural Community were developed in coordination with the community planning process, the Oregon Department of Transportation (ODOT) Region 4, the state Bicycle and Pedestrian Program and with the Deschutes County Planning Division and Public Works Department. These road development standards, based on conventional road classifications, are recognized by ODOT and the American Association of State Highway Traffic Officials (AASHTO) for rural communities. They apply to public rights of way other than the state highway which is under state jurisdiction.

f. Highway 97 corridor.

The Terrebonne transportation plan accounts for the need to coordinate with ODOT to assure that improvements to Highway 97 address community goals.

1. Highway 97 Corridor Strategy. The Deschutes County Board of Commissioners adopted a resolution supporting the Oregon Department of Transportation's Highway 97 Corridor Strategy (Strategy) on October 11, 1995. The Strategy guides improvements to the highway in Terrebonne. It states that most rural sections of the highway will need to be expanded to four lanes. However, it also states that in small rural communities, such as Terrebonne, La Pine, Chemult and Crescent, the focus will be on slowing traffic to posted speeds using a combination of enforcement and traffic calming techniques.

The Strategy contains objectives relevant to balancing the needs of local traffic and through traffic on Highway 97. State objectives seek to maintain the function of the state highway to efficiently transport regional and interstate travelers and freight, but also recognize that a community needs to safely and conveniently use the highway. To protect the function of a major highway, it is often necessary to limit access and control turning movements on the highway. When carefully implemented, these measures combined with traffic calming, can improve safety for local traffic, particularly pedestrians, because they slow traffic, guide turning movements and improve pedestrian crossing areas. However, these techniques can make accessing local businesses from the highway more difficult.

The Strategy encourages local land use and transportation plans to orient commercial development and access on to parallel local road, such as 11th Street in Terrebonne, as an alternative to using the highway as the main commercial road. This objective addresses the difficulty of maintaining the function of a major highway and at the same time making it a safe, convenient community main street.

The Strategy objectives, if met, may help reduce the need to add travel lanes to the highway in Terrebonne and encourage improvements to alternative commercial roads in the community.

2. Design for Highway 97 in Terrebonne. The existing three-lane highway with a center turning lane, splits the community in half and is dangerous to cross. The Deschutes County Comprehensive Plan for Terrebonne directs commercial development to the east side of the highway and designates and zones the land on both sides of 11th Street for commercial uses. There is widespread community support for improved pedestrian crossing places on Highway 97, particularly at the “B” and “C” Avenue intersections and for slowing traffic on the highway to posted speeds. A feasible design for Highway 97 in Terrebonne is illustrated on Map D3: “Planned Pedestrian Improvements” and Figure D1: “Highway 97 Cross-Section.”
4. Transportation policies.
 - a. Road network policies.
 1. Roads.
 - i. Provide a transportation network that can accommodate local traffic, commuter traffic and regional interstate traffic without detracting from the livability and rural character of the community.
 - ii. Provide a transportation network that will improve transportation efficiency, convenience and safety, as well as increase transportation choices and decrease conflicts between modes of transportation.
 - iii. Preserve alignments for transportation corridors depicted on Map D2 for future transportation purposes. The precise alignments will be determined after further study and engineering analysis or during the development of vacant properties.
 - iv. New roads shall take advantage of existing public rights of way, where they exist.
 - v. Existing road rights of way shall be preserved.
 - vi. Roads shall be classified as arterial, collector and local roads in accordance with Table D1 and Map D2.
 - vii. The county shall implement measures, based on weight limits, to prohibit or limit heavy truck on 11th Street and Smith Rock Way in the Terrebonne Rural Community.
 - viii. Commercial uses that generate more than 20 vehicle trips to and from the premises, including automobiles, truck-trailers and other heavy equipment, during the peak hour of the day, shall demonstrate that the affected roads are adequate to serve the proposed use, considering the function, capacity and level of service of those roads.
 2. Sidewalks and bicycle facility policies.
 - i. Provide functional, cost effective sidewalks that are in keeping with the rural character of the community.
 - ii. Provide sidewalks where they are warranted for pedestrian safety, as set forth in Map D3.
 - iii. Where sidewalks are specified along county public roads, they shall be constructed without curbs and gutters, set back from the road surface behind a drainage swale at a distance from property lines to allow room for utilities.
 - iv. Sidewalks identified on Map D3 shall be constructed either at the time of development, subject to site plan review, or later through formation of a local improvement district (LID). Applicants for conditional use permits or site plan approval electing to defer constructing sidewalks, shall be required to submit and have recorded in the County Clerk’s office a waiver of remonstrance,

signed by the land owner. The waiver shall waive the landowner's right to have his/her objection count against the formation of an LID.

- v. The utility trenches located in the public right of way should be protected from damage by tree roots. Street trees should not be planted in the public right of way where they will conflict with existing or planned utility trenches.
 - vi. On local roads where traffic volumes and speeds are low, bicycles shall share the road with automobiles. Bicycles shall be accommodated on paved shoulder bikeways on Lower Bridge Way and Smith Rock Way, which are county arterial roads, and on county collector roads that carry high traffic volumes.
- b. Road development standards policies.
- 1. The county shall provide transportation facilities that are practical and cost effective to construct, use and maintain and in keeping with the rural character of the community.
 - 2. The county shall implement road development standards for the Terrebonne community that minimize pavement width and are consistent with the operational needs of the transportation facility.
 - 3. Specific road, bicycle and pedestrian facility improvement projects for the Terrebonne community are listed in Tables D2, D3 and D4 respectively. The projects are ranked high, medium and low priority based on perceived need. These priorities shall be flexible to take advantage of development opportunities and funding.
- c. Highway 97 corridor policies.
- 1. The county shall work with ODOT to increase safety on Highway 97 in Terrebonne by using a combination of enforcement and traffic calming techniques to slow traffic to posted speeds, to safely handle local traffic and to improve pedestrian crossings.
 - 2. The county shall work with ODOT to provide safe, convenient sidewalks and bikeways on both sides of Highway 97 in the Terrebonne community, between Central Avenue and the south 11th Street intersection, particularly in the vicinity of the school.
 - 3. Sidewalks on Highway 97 may have curbs and gutters and shall be buffered behind a planting strip to calm traffic and provide pedestrian safety. Curbed sidewalks would require drainage system improvements.
 - 4. The county shall work with ODOT to provide improved pedestrian crossings places on Highway 97, between Central Avenue and the south 11th Street intersection, particularly at the "B" Avenue and "C" Avenue intersections, to increase pedestrian safety in the vicinity of the school.
 - 5. The county shall work with ODOT to adopt means to enhance 11th Street parallel to the highway, to safely handle local business traffic, in particular, enhance the intersections and pedestrian crossings and access, to make better use of 11th Street as the main local commercial road.
 - 6. The county shall support limiting Highway 97 to no more than three lanes between the Central Avenue and south 11th Street intersections, to protect the livability of the community, to address pedestrian safety and the need to reduce traffic speeds on the highway in Terrebonne.
 - 7. Large trucks shall be accommodated with wide turning radius corners where necessary, as determined by truck routes established by the Deschutes County Transportation System Plan, thereby minimizing corner radii at all other intersections. Other design features such as rolled curbs or medians shall be used

as necessary to minimally accommodate large trucks in the Terrebonne community.

8. The county shall support improvements to Highway 97 primarily in conjunction with highway rehabilitation or reconstruction projects.

Table D1: Inventory of Existing Public Roads

Arterial Roads

Road Names	From	To	Length in miles	ADT
Lower Bridge Way	Highway 97	West 19 th	.583	3601
Smith Rock Way	Highway 97	Street	.305	2391
Smith Rock Way	RR xing	RR xing East 1 st Street	.284	1434

Collector Roads

Road Names	From	To	Length in miles	ADT
East 1 st Street	Odem Avenue	Wilcox Avenue	.979	--
East 1 st Street	Avenue	End (N)	.145	--
11 th Street	Wilcox Avenue	Smith Rock Way	.189	--
11 th Street	Avenue	Way	.576	--
West 19 th Street	Highway 97	Highway 97	.760	--
West 19 th Street	Smith Rock Way	C Avenue	.736	--
C Avenue	Way	Lower Bridge Way	.295	900
C Avenue	Odem Avenue	Way	.495	--
Odem Avenue	Avenue	Highway 97	---	--
	C Avenue	West 19 th Street		
	Highway 97	West 19 th Street		
	10 th Street	Street		
1 st Street	C Avenue	End (N)	.161	--
2 nd Street	Central Avenue	End (N)	.152	--
3 rd Street	C Avenue	End (N)	.095	--
4 th Street	B Avenue	End (N)	.065	--
4 th Street	C Avenue	End (N)	.075	--
4 th Street	Forester Drive	E Avenue	.152	--
5 th Street	End (S)	B Avenue	.050	--
5 th Street	B Avenue	E Avenue	.264	--
5 th Street	E Avenue	End (N)	.189	--
6 th Street	C Avenue	Central Avenue	.096	--
6 th Street	Central Avenue	E Avenue	.157	--
7 th Street	End (S)	B Avenue	.189	--
7 th Street	C Avenue	End (N)	.242	--
8 th Street	C Avenue	End (N)	.210	--
9 th Street	C Avenue	End (N)	.173	--
9 th Street	End	F Avenue	.057	--

12 th Street	Lower Bridge	End (N)	.133	--
13 th Street	South End	End (N)	.303	--
15 th Street	C Avenue	E Avenue	.175	--
16 th Street	C Avenue	End (N)	.484	--
17 th Street	End	Smith Rock Way	.114	--
A Avenue	6 th Street	7 th Street	.066	--
A Avenue	11 th Street	End (E)	.189	--
B Avenue	West 19 th Street	End (E)	.095	--
B Avenue	5 th Street	Highway 97	.247	--
Central Avenue	5 th Street	Highway 97	.248	--
Central Avenue	15 th Street	16 th Street	.038	--
E Avenue	4 th Street	9 th Street	.246	--
E Avenue	15 th Street	16 th Street	.038	--
F Avenue	West 19 th Street	End (E)	.066	--
F Avenue	4 th Street	6 th Street	.090	--
F Avenue	End (W)	Highway 97	.080	--
F Avenue	11 th Street	16 th Street	.243	--
F Avenue	16 th Street	End (E)	.066	--
Forester Drive	4 th Street	F Avenue	.189	--
G Avenue	16 th Street	1 st Street	.189	--
H Avenue	16 th Street	End (E)	.105	--

Table D2: Road Projects.

Street	From	To	Length, feet	Improvement	Priority	Cost*
Existing Roads						
U.S. 97	Central Ave.	11 th St. South	1,500	Traffic calming and crossing improvements	High	Unknown
Connect or	U.S. 97 south of Lower Bridge Way	11 th Street	100	Improve for truck use	High	\$5,000
11 th Street	Central Ave.	U.S. 97 South	1,950	Widen from 22' to 24' with parking swale and concrete strip (see also sidewalks)	High	\$40,000
11 th Street	U.S. 97 south	Intersection alignment		Realign T-intersection to right angle	Medium	\$10,000
Other	Various	Various	16,900	Pave existing gravel streets (see Fig. 8)	Low	\$750,000
Future Roads						
7 th Street	South end	South	Unknown	Extend ROW as necessary		Unknown

13 th Street	North	North end	Unknown	Extend ROW as necessary	When development occurs	Unknown
13 th Street	"E" Ave.	400' south of "A" Ave.	1,400	Develop and extend ROW		\$65,000
15 th St.	"H" Ave.	"F" Ave.	850	Develop existing ROW		\$8,000
15 th St.	"C" Ave.	400' south of "A" Ave.	1,320	Extend ROW		\$60,000
16 th St.	North	North end	Unknown	Extend ROW as necessary		Unknown
"E" Ave.	11 th St.	Canal	800	Develop existing ROW		\$35,000
"G" Ave.	West	U.S. 97	Unknown	Extend ROW as necessary		Unknown
"H" Ave.	11 th St.	13 th St.	600	Develop existing ROW		\$25,000
Other	Various	Various	Unknown	Create as needed (see Fig. 8)	Unknown	

The estimated cost is for a typical facility built in Oregon and includes engineering, installation, minor contingencies, striping and signing. The cost does not include administration, special grading and fill operations, unusual construction (e.g. bridges and tunnels) or land acquisition. Estimated costs are particularly useful for comparing projects.

Table D3: Shoulder Projects.

Street	From	To	Length, ft.	Improvement	Priority	Cost*
Smith Rock Way	U.S. 97	1 st St.	3,110	Widen from 26' to 34' with 5-ft shoulders	High	\$74,700
Lower Bridge Way	West 19 th St.	U.S. 97	3,080	Widen from 26' to 34' with 5-ft shoulders	High	\$74,000

*The estimated cost is for a typical facility built in Oregon and includes engineering, installation, minor contingencies, striping and signing. The cost does not include administration, special grading and fill operations, unusual construction (e.g. bridges and tunnels) or land acquisition. Estimated costs are particularly useful for comparing projects.

Table D4: Sidewalk & Trail Projects.

Street	From	To	Length, ft.	Improvement	Priority	Cost*
Hwy. 97	Central Ave.	400' south of "A" Ave.	1,800	Both sides (6 ft.)	High	\$108,000
11 th St.	Central Ave.	U.s. 97	1,850	Both sides	High	\$92,500
"B" Ave.	5 th St.	U.S. 97	1,500	North side only	High	\$37,500
"C" Ave.	19 th St.	U.S. 97	1,560	South side only	High	\$40,000
Smith Rock Way	U.S. 97	15 th St.	1,250	Both sides	High	\$62,500
"C" Ave.	U.S. 97	16 th St.	2,615	South side only	Medium	\$65,000

13 th St.	“C” Ave.	400’ south of “A” Ave.	1,200	Both sides (future)	Low	\$60,000
15 th St.	“C” Ave.	400’ south of “A” Ave.	1,250	Both sides (future)	Low	\$62,500
“A” Ave.	11 th St.	15 th St.	1,000	Both sides (future)	Low	\$50,000
Trails						
Lateral “H”	13 th St.	12 th St.	300	Unpaved, requires easement along canal	Medium	\$1,500
Lateral “H”	12 th St.	400’ south of “A” Ave.	1,200	Unpaved	Medium	\$5,500
“B” Ave.	East end of west segment	West end of east segment	700	Stairs for 300’	Medium	\$21,000
“E” Ave.	East end of west segment	West end of east segment	700	Stairs for 300’	Low	\$21,000
“E” Ave.	West of lateral “H”	East of Lateral “H”	200	Unpaved connector, requires easement and bridge	Low	\$20,000
4 th St.	North	Forster Dr.	700	Stairs for 300’	Low	\$21,000

*The estimated cost is for a typical facility built in Oregon and includes engineering, installation, minor contingencies, striping and signing. The cost does not include administration, special grading and fill operations, unusual construction (e.g., bridges and tunnels) or land acquisition. Estimated costs are particularly useful for comparing projects. Cost of sidewalk is for 5-ft wide concrete unless otherwise noted. Cost of trail is for 10-ft. wide unpaved sandseal unless otherwise noted.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 97-001, 1997; Ord. 92-051, § 3, 1997; PL-20, 1979) (Ord. 2002-001, §4, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 97-001, 1997; Ord. 92-051, § 3, 1997; PL-20, 1979)

Tumalo Rural Community.

A. General.

1. Background – Historical.

Tumalo is located in the north central portion of Deschutes County, less than 3 miles northwest of the city limits of Bend. Situated at an altitude of approximately 3,200 feet, the community of Tumalo lies in the middle portion of the Upper Deschutes River Basin (river mile 157). The commercial core of Tumalo lies on the alluvial bowl bounded by the Laidlaw Butte on the west and the bluff of the Deschutes River canyon on the east. The Deschutes River bisects the community.

Originally named Laidlaw, Tumalo was platted by the Laidlaw Townsite Company in 1904. The development of Tumalo began in 1899 with incorporation of the Three Sisters Irrigation Company. Under the Carey Act, they made plans to divert water from Tumalo Creek and the Deschutes River in order to irrigate 60,000 plus acres of desert land. Town founder, A.W. Laidlaw of Portland, and his investors believed that Tumalo would become the heart of Central Oregon. There was reason to

be optimistic due to the fact the railroad was coming north up the Deschutes River Canyon, which would undoubtedly follow the river into their newly platted town, and the proposed railroad to be built up the North Santiam River and across the mountains would surely guarantee the town's success. Neither of these projects came to fruition.

Out of nearly 900 lots platted, a third were sold by 1907. In those early days, Tumalo had a weekly newspaper, a barbershop, a two-story hotel, two lawyer offices, a wallpaper company, a bakery, two feed stores and a bank, for example. As the town grew, it became its own voting precinct with 65 registered voters to Bend's 66 voters in 1906. By 1909, Laidlaw, being called Tumalo on occasion, still had hopes of being the junction of the two railroads, the new "metropolis" of Central Oregon. However, at the time the Columbia Southern Railroad still ended in Shaniko, and the Corvallis and Eastern rails were still stalled at the foothills on the western side of the Cascades, where they had been for approximately 15 years. With the announcement that the railroad was coming to Bend not Laidlaw, Bend had moved ahead in population by 1910. As a result, the population in Laidlaw decreased to 250 people and many businesses moved to Bend. The small town was known as Laidlaw for only six years when the Laidlaw post office was closed in 1913. The post office eventually reopened in 1923 as the Tumalo post office and thus the name of the town was forever changed.

2. Background - Population and growth.

The population for Tumalo has been extrapolated from four sources: the 1990 Census, the Deschutes County Unincorporated Land Use Inventory (October 1995), and the Residential/Vacant Lands map generated by the Deschutes County GIS data. The fourth source is a refinement of the 1995 Land Use Inventory projection for Tumalo contained in the Deschutes County Non-Urban Population Capacity Projection (November 8, 1996).

In review of the 1990 US Census for Tumalo area totaled approximately 325 persons. Historical population data for Tumalo have not been collected. However, the Tumalo Elementary School has experienced an influx of younger couples with children replacing retirees who have moved out of the area. The Tumalo elementary school has approximately 301 students at the present time with a capacity of approximately 400 serving grades K through 5th. According to the Deschutes County Land Use Inventory (October 1995) Tumalo had 155 developed lots. Using 1990 Census data of 2.54 persons per household, the population figure would be 393. Again, this does not take into account percentages of retirement population and second homes in the Tumalo area. According to the GIS Parcel basemap (Assessors data) the developed lots in Tumalo equal 172. Using the 1990 Census figure of 2.54 persons per household, this population figure is approximately 436.

The rate of future population growth in Tumalo is difficult to estimate because growth is limited due to the substandard platted lots of the Laidlaw Platt as well as the difficulty in extrapolating data for the specific boundary of Tumalo. Deschutes County projects a countywide growth rate of 4.5 percent until the year 2000. Recent estimates for all unincorporated areas of Deschutes County (excluding unincorporated urban growth boundary lands of Sisters, Redmond and Bend) indicate a growth rate of 4.8% annual growth between 1990-1995.

3. Background - Periodic review.

In the fall of 1994, the Land Conservation and Development Commission adopted a new administrative rule, OAR 660.22, Unincorporated Communities. As part of 1996-97 periodic review, the County updated the Comprehensive Plan and implementing regulations for Tumalo to comply with the rule.

4. Rural Community.

Tumalo meets the definition of a Rural Community because it is primarily a residential community, which also has a school, church, and a handful of local businesses that serve the community, the

surrounding rural area or persons traveling through the area. The comprehensive plan designates Tumalo as a Rural Community and provides for its growth and development accordingly.

5. Tumalo Rural Community boundary.

The 1979 Deschutes County Comprehensive Plan designated Tumalo a Rural Service Center, a Goal 3 and 4 exception area, consisting of 491 acres and 288 tax lots. The 1979 Tumalo Rural Service Center boundary included the Laidlaw Plat, the southeast flank of Laidlaw Butte north of Bailey Road, the area east of the Deschutes River on the north and south sides of Tumalo Road, six lots of the Winston Ranch subdivision on the east bluff of the Deschutes River canyon and seven parcels located north of Putnam Lane.

During the 1997 update, the Tumalo Rural Community boundary was amended in the following ways to include 504.11 acres and 321 tax lots (See Map A).

- a. A parcel comprising ten acres was the subject of a zone change, plan amendment and minor partition in 1980, File #ZC-PA/80-1. This parcel is located approximately ¼ mile north of the existing boundary on the between Cline Falls Highway and the west bank of the Deschutes River. The plan designation for this area was changed from Rural Service Center to Rural Residential Exception Area.
- b. An area consisting of 33 lots of the Deschutes River Homesites subdivision was changed from a plan designation of Rural Residential Exception Area to Rural Community- Residential 5 acre. In addition, the strip of land that is located between Cline Falls Highway and the Deschutes River that links the previous Tumalo Rural Community boundary to the lots adjacent to Beaver Lane was included within the boundary and designated Residential 5 acre.
- c. One tax lot north of Putnam Lane on the west side of Hopper Road which comprises the northern lot of the Rockwood Subdivision not included with the other seven lots that are located within the boundary. The plan designation for this area was changed from Rural Residential Exception Area to Residential 5 acre.
- d. The community boundary was refined to coincide with parcel lines along the east rim of the Deschutes River canyon and along the east channel of the Deschutes River. The plan designations for these adjustments were changed from "Residential-5 acre" to Rural Residential Exception Area and Agriculture. The south boundary of the community was refined to coincide with the southern extension of the TuR5 and TuR zoning designations in the area of designated Floodplain.

In 1999, the boundary of the community was revised to exclude tax lots 2301, 2300 and 2600 that were inadvertently excluded from the mining processing operations conducted by Bend Aggregate and Paving for many years. These parcels were mistakenly included in the community boundary in 1997. The community boundary now without these tax lots includes a total of 318 tax lots. Each of the community maps in the comprehensive plan was revised in 1999 to reflect this boundary change.

B. Land use planning.

1. Existing land uses.

The predominant land use in Tumalo is single-family residences. Commercial land uses include a market, restaurants, real estate offices, a small commercial/retail complex, and various other small-scale retail businesses located in the core of the community along Cook Avenue. There is a fire station, an irrigation district office, a church and an elementary school.

Land bordering Tumalo is zoned Exclusive Farm Use (EFUTRB) Tumalo/Redmond/Bend Subzone, Multiple Use Agriculture (MUA10 - 10 acre minimum lot size), Floodplain (FP) and Surface Mine (SM). The Deschutes County Comprehensive Plan designates EFU land for Agriculture uses and MUA10 and RR10 land for Rural Residential uses. The EFU land

surrounding Tumalo is employed in large-lot, irrigated agricultural uses, whereas the MUA10 land is parcelized and developed with rural residences and small-scale agricultural uses.

A land use inventory using the County Assessor’s data (GIS parcel basemap) is shown in Table B.

Table B: Land Use Inventory - Tumalo Rural Community

Assessors Property Class	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
Miscellaneous	15	2	13
Commercial	63	26	37
Industrial	1	1	0
Tract	181	138	43
Exempt	28	5	23
Total Tax Lots	288	172	116

Zoning District	Total Tax Lots	Developed Tax Lots	Vacant Tax Lots
RD	2	1	1
RSC	48	32	16
RSRM	190	113	77
RSR5	48	26	22
Total Tax Lots	288	172	116

Source: Deschutes County Assessors Database, March 19, 1997 & Deschutes County PW GIS Parcel Basemap, March 19, 1996

2. Comprehensive Plan designations.

The Deschutes County Comprehensive Plan for the Tumalo Rural Community has the following six comprehensive plan designations (See Map B).

- a. Residential District. At the time of adoption, the boundary of the Residential district coincided with the boundary of the old Laidlaw Plat including the Deschutes River Homesites plats between Riverview Avenue and the Deschutes River. It also includes the area surrounding the Bend Aggregate site south of Highway 20. It is intended to accommodate higher density residential uses
- b. Residential 5-Acre District. The lands designated Residential-5 acre minimum included the larger parcels of land to the east across the Deschutes River and to the west on the slope of Laidlaw Butte. This plan designation is intended to remain in large parcels to maintain the rural character of the community.
- c. Commercial District. In general, the Commercial plan designation extends north from the intersection of Cook Avenue and Highway 20 to 3rd Street between Wood and Wharton Avenues. The Commercial lands also comprises a portion of land west of Highway 20 between 5th and 8th Streets. The commercial plan designation was intended to accommodate a mixture of small-scale commercial and limited industrial uses that serve the rural community of Tumalo. The core commercial area was intended to focus on the area adjacent to Cook Avenue north of Highway 20.

The Commercial Land designation was expanded to accommodate a section of land between Cook Avenue and Wharton Avenue that extends south to Highway 20. This area includes the “Tumalo Mall”, an existing commercial/retail complex. The use of this building has been authorized as a nonconforming use (1986), and subsequent site plan alteration in 1987/88. The purpose of the commercial lands expanding to include this parcel is to bring the uses specified in the previous land use decisions into compliance with the uses allowed in the commercial zone. This complex contains one existing business which occupies 2/3 of the building.

- d. Research Development District (RD). This plan designation contains two parcels in one ownership located on the southeast slope of Laidlaw Butte to the west of Tumalo. This plan designation was originally created to accommodate a research and development site and its associated uses that predated the county 1979-zoning ordinance that would be compatible with the rural character of the area.
 - e. Floodplain District (FP). This plan designation contains the previous Floodplain designation that follows the channel of the Deschutes River that bisects the Tumalo Rural Community. The Floodplain Zone is identified by the Federal Insurance Administration as areas of special flood hazard in the report entitled “The Flood Insurance Study for Deschutes County, Oregon and Incorporated Areas,” dated August 16, 1988.
 - f. Industrial District (TuI). The TuI plan designation was established to recognize nonconforming industrial uses related to surface mining activities located outside of the Surface Mining zone in the Tumalo Rural Community.
3. Land use policies.
- a. General land use policies.
 1. Land use regulations shall conform to the requirements of OAR 660 Division 22 or any successor.
 2. County plans and land use regulations shall ensure that new uses authorized within the Tumalo Rural Community do not adversely affect agricultural uses in the surrounding exclusive farm use zones. Zoning regulations shall require any new structure on land contiguous to EFU-zoned land which is receiving special assessment for farm use to be set back 100 feet from the common property line.
 3. To protect scenic views visible from the community, adequate setbacks shall be required for homes built along the rim forming the Deschutes River Canyon and Laidlaw Butte.
 4. Uses such as parks and open space shall be encouraged, and where feasible, the County should acquire those lands as open space.
 5. Public access to the river shall be preserved.
 6. Publicly owned lands along the river should remain as open space.
 7. The County shall encourage the preservation of historical structures such as the Laidlaw Bank and Trust (1910), and the Tumalo Community Church (1907).
 - b. Residential District policies.
 1. Areas designated residential on the comprehensive plan map shall be designated a corresponding residential district on the zoning map.
 2. Lands designated Residential shall be in proximity to the commercial area, while the lands designated Residential 5 acre will be on the perimeter of the community. The higher density lands designated Residential shall remain in the bowl formed by the Deschutes River canyon.
 3. Livestock shall be permitted in the residential districts subject to use limitations.
 4. The County shall plan and zone for a diversity of housing types and densities suited to the capacity of the land to accommodate water and sewage requirements.
 - c. Commercial District policies.
 1. Allow small-scale commercial uses in conformance with the requirements of OAR Chapter 660, Division 22, and larger more intense commercial uses if they are intended to serve the

community, the surrounding rural area and the travel needs of people passing through the area.

2. Allow small-scale industrial uses in conformance with the requirements of OAR Chapter 660, Division 22.
 3. Where there is a choice to use a road other than Highway 20 for access, access shall not be taken from Highway 20.
 4. Design standards in the commercial district should encourage new development that is compatible with the rural character of the community and to reduce negative impacts on adjacent residential districts.
 5. Livestock shall not be permitted in the commercial districts.
 6. No additional lands shall be designated Commercial shall until the next periodic review.
 7. Residential uses or residences in conjunction with uses listed in the commercial districts shall be allowed, but they are not intended to predominate or set development standards for others uses in the commercial district.
 8. Approval standards for conditional uses in the commercial district shall take into account the impact of the proposed use on the nearby residential and commercial uses and on the capacity of the transportation and other public facilities and services to serve the proposed use.
 9. Replatting for residential purposes shall not be allowed in the commercial district.
- d. Industrial District policies.
1. Only the following new or expanded industrial uses shall be allowed in unincorporated communities:

(a) Uses authorized under Goals 3 and 4; [Farm and forest uses]

(b) Expansion of a use existing on the date of this rule;

(c) Small-scale, low impact uses;

(d) Uses that require proximity to rural resource, as defined in OAR 660-004-0022(3)(a);

(e) New uses that will not exceed the capacity of water and sewer service available to the site on the effective date of this rule, or, if such services are not available to the site, the capacity of the site itself to provide water and absorb sewage;

(f) New uses more intensive than those allowed under subsection (a) through (e) of this section, provided an analysis set forth in the comprehensive plan demonstrates, and land use regulations ensure:

(A) That such uses are necessary to provide employment that does not exceed the total projected work force within the community and the surrounding rural area;

(B) That such uses would not rely upon a work force employed by uses within urban growth boundaries; and

(C) That the determination of the work force of the community and surrounding rural area considers the total industrial and commercial employment in the community and is coordinated with employment projections for nearby urban growth boundaries.

C. Public facility planning.

1. Special Districts: Tumalo Rural Community is served by the following special districts. (1) Laidlaw Water District; (2) Deschutes County Rural Fire Protection District #2; (3) Redmond School District #2J; (4) Tumalo Irrigation District; and (5) Tumalo Town Ditch.

a. Water.

The area previously identified as the Tumalo Rural Service Center (RSC) has two water sources.

The Laidlaw Water District serving the area identified as the old Laidlaw Plat, and the area described as T16S R12E section 29 (W1/2 SW1/4), section 30 (E1/2 SW 1/4), (SW 1/4 SE 1/4), section 31(N E1/4, N1/2 SE1/4).

The Tumalo Town Ditch is the original source of water which has water rights dating back to 1924 and 1938. The system consists of 3 miles of ditch that begins near the bridge at Tumalo State Park, and runs along the river as a ditch crossing Bailey Road at the Tumalo Feed Company Restaurant, continues under Highway 20 to the commercial district of the Tumalo community. The Tumalo Town ditch is used for irrigation purposes only, serving approximately 35 customers.

During the 1997 plan update, the Oregon Department of Water Resources commented that there is an abundant supply of potable water in multiple water bearing zones based upon a report prepared by a geologist for the Oregon Department of Geology and Mineral Industries, "Geology and Mineral Resources Map of the Tumalo Dam Quadrangle". Limitations are imposed by the lack of capacity of domestic pumps and not the capacity of the aquifer. The department has not identified Tumalo Rural Community as a groundwater limited or groundwater critical area. The Laidlaw Domestic Water District currently depends on two groundwater wells. The District's groundwater source does not exceed current EPA maximum contaminant limits. No treatment is performed; none has been required by the state Health Division. A proposed EPA groundwater disinfection rule would require continuous disinfection of the water supply. The area in the Tumalo Rural Community that is outside the District's boundary relies on individual wells for drinking water. The Water Resources Department routinely approves new groundwater wells in this area of the Tumalo Rural Community.

b. Sewer.

Tumalo does not have a community sewer system or a sewer facility plan. Land uses in the Tumalo Rural Community rely on on-site sewage disposal systems of all ages and descriptions, ranging from newer sand-filter systems to old drainfields. In some cases on-site systems are insufficient for current needs. According to the Environmental Health Division, past experience has indicated most of the soils in the area would fall under the category of rapidly draining soils. Based upon the most restrictive parameter onsite administrative rules would require a minimum lot size of one-half acre per single-family dwelling. This standard is based upon a projected sewage rate not to exceed 450 gallons per day. This is termed the loading rate pursuant to OAR 340-71-290(3)(c) and 340-71-275(3). Because of the alluvial soil profile (rapidly draining soils) a standard septic system is not feasible on smaller lots. It is often necessary to install a relatively expensive sand-filter system in order to obtain development permits for new development or for alterations to existing development. There are a few tax lots that cannot be developed or redeveloped, because they are too small to accommodate any approved on-site sewage disposal system.

The County plan and zoning regulations restrict the type and intensity of allowed uses to those which can be served by a DEQ approved on-site sewage disposal systems. The County does not allow uses or densities that cannot obtain approval for a DEQ approved on-site system. In addition, County-zoning regulations set minimum lot sizes to ensure the on-site systems do not exceed the capacity of the land. Accordingly, the Environmental Health Division has stated that the minimum loading rates are addressed in the DEQ on-site rules and the minimum lot size requirements in the zoning ordinance. Due to these provisions, a public facility plan is not necessary.

c. Other.

During the 1997 update, the community expressed strong support for retaining the existing fire station in the rural community of Tumalo. The Planning Commission recommended a policy encouraging the continued presence of a fire station in Tumalo. However, the Board of County Commissioners understands that such a specific policy would be beyond its jurisdiction and control. The Board has addressed the community's concerns about fire protection in Tumalo by adopting a more general policy statement. Inclusion of this policy statement in the county's comprehensive plan should not be misconstrued as an endorsement for or against a fire station in the community but a mere finding that at this point in time, a large number of Tumalo residents believe that a fire station presence is necessary.

2. General public facility planning policies.

- a. Residential minimum lot sizes shall be determined by the capacity of the land to accommodate available water and sewer facilities, in order to protect and promote public health and safety and to provide the efficient public facilities and services.
- b. The County shall encourage quality fire protection in the rural community of Tumalo.
- c. The County shall encourage early planning and acquisition of sites needed for public facilities (e.g. school, roads, water supply facility).
- d. The County shall encourage all development within the Laidlaw Water District to connect to the system.
- e. The County shall support replatting of lots in the area comprising the Laidlaw Plat and outside the lands designated commercial to create lots large enough to accommodate a DEQ approved on-site sewage disposal system.
- f. The County shall support the protection of the Tumalo Town Ditch easement and its distribution system.
- g. The County shall support the development and management of the domestic water system for the Tumalo community so that cumulative development will not result in public health hazards of adverse environmental impacts that violate state or federal water quality regulations.

D. Transportation planning.

1. Background - Transportation in Tumalo.

The Transportation plan addresses the transportation concerns of the Tumalo community. The plan meets the requirements of the state Transportation Planning Rule - OAR Chapter 660, Division 12, by designating a network of local roads, sidewalks and bikeways with associated road development standards.

a. Community transportation goals.

The livability of the Tumalo community depends on the ability of the transportation network to provide safe and convenient access in the residential and commercial areas and to the Tumalo elementary school. The community reached consensus on the following transportation goals:

1. Improve the access from Cook Avenue to and across Highway 20
2. Reduce truck traffic through the community
3. Provide safe pedestrian walkways in the commercial core and to the school
4. Provide road standards that are practical and cost effective to construct and maintain
5. Provide shoulders on county roads

b. Community profile.

Tumalo is a rural community near Bend with a mix of residential, commercial, and nearby employment, including gravel quarries and a high-tech research company. It functions as a bedroom community for Bend. Historical population data have not been compiled. The 1990 US Census for the Tumalo area totals approximately 325 persons. County Assessor's data show 172 dwellings within the Tumalo community boundary. According to the Deschutes County Land Use Inventory (October 1995) Tumalo had 155 lots. Using the 1990 Census data of 2.54 persons per household, the population figure ranges from approximately 393 to 436. According to the Redmond School District, the Tumalo Elementary School has experienced an

influx of younger children in recent years. Although figures indicating the demographic mix for the Tumalo area are not available, the population appears to be a mix of families and retirees, with an average or above number of children (nondrivers).

c. Collision data.

There were 38 reported collisions on Highway 20 near Tumalo during the 10-year period from 1986 to 1995. There were 42 injuries and 1 fatality. Of the 38 crashes, 17 occurred at intersections, with seven at Cook Avenue and eight at 7th Street. The majority of crashes (27) were during daylight. Eight incidents involved a wet surface and 10 involved trucks; no pedestrians or bicyclists were involved. These numbers place this segment of Highway 20 below the state average for accident rate.

d. Constraints on the transportation system.

1. Topographic Features: Tumalo is located on the valley floor of the Deschutes River canyon, bounded by rimrock on the west and east. Laidlaw Butte forms the other significant topographic feature to the west of Tumalo. The rimrock and river limit the opportunities for a network of continuous streets.

2. Transportation Features: Highway 20 runs north-northwest through Tumalo and limits east-west street connections. There are 3 accesses to the highway: 5th Street, 7th Street/Bailey Road, and Cook Avenue/O.B. Riley Road.

Pavement runoff is handled by direct absorption into the soil since there is no community stormdrain or sewer system. This affects street design especially the use of curbs, paved surfaces, and landscaping. Special attention must be given to drainage needs and runoff into the Deschutes River.

2. Inventory of existing transportation facilities.

This section contains an inventory of the existing public roads and pedestrian and bicycle facilities in Tumalo. These data were gathered primarily from the County Department of Public Works database supplemented by site visits and aerial photographs.

a. Roads.

The essential component of the region's transportation system is U.S. Highway 20 which runs diagonally through the community. Highway 20 has three lanes, a travel lane in each direction and a continuous two-way center left-turn lane. The traffic count at the intersection of Highway 20 and Cook Avenue in 1996 was 7600 average daily traffic (ADT). The posted speed on Highway 20 through Tumalo is 55 mph. Intrastate truck traffic and local truck traffic serving nearby mining operations comprise a significant percentage of the traffic mix.

O.B. Riley Road, which is outside the community boundary, is a rural arterial which intersects Highway 20 from the south directly across from Cook Avenue. This road bisects the gravel mining operation that abuts Highway 20.

County collector roads include Bailey, Cline Falls, Cook, and Tumalo which all intersect Highway 20 in the central portion of Tumalo. Cline Falls feeds into Tumalo from the north, Tumalo Road from the east, and Bailey Road feeds into the community from the south. There are approximately 4.7 miles of roads in Tumalo.

Table D1 (Inventory of Existing Roads), is organized by functional classification, road name and alphabetical order. The available (ADT) counts provided by the county and state are listed.

The public roads in Tumalo (see Map D1) range in pavement width from 20 feet to 24 feet. Some streets (e.g., Riverview Ave.) are in poor condition (i.e. cracking and pot holes). Most unpaved roads need grading and a fresh layer of gravel.

b. Pedestrian facilities.

There are no sidewalks or trails in Tumalo. The bridge on Tumalo Road has a walkway on its north side. There are two designated crosswalks, one on Cline Falls Road on the north side of the Tumalo Road intersection and the other on Cook Avenue on the north side of the 4th Street intersection. Cline Falls Road is signed for 20 mph if children are present because of the nearby elementary school (the normal speed limit is 35 mph). All other pedestrian travel is on roadways with narrow or no shoulders.

Except for the school grounds, Tumalo lacks public space such as a park, square or commons to which pedestrians could be attracted. There is undeveloped public access to the river from Tumalo Road. The primary trip attractors are the school, a church and the small commercial area (gas station, market, and restaurant). There is also a restaurant on the west side of Highway 20.

c. Bicycle facilities.

Highway 20 has a four-foot paved shoulder bikeway. All other bicycle travel is on shared roadways. Cline Falls Road and Cook Avenue are popular recreational routes. There are bicycle racks at the school.

3. Future transportation needs.

A rural community such as Tumalo, located on a major highway, requires a transportation network that can accommodate local, commuter, regional, and interstate traffic without detracting from the community's livability and rural character. Accomplishing this goal requires integrated street, bicycle and pedestrian networks, appropriate street standards, and safe access to the Highway 20 corridor.

The Tumalo transportation plan is based on conventional road functional classifications; or: arterial, collector and local roads. It establishes the roles and development standards appropriate to each type or road. The design of arterial and collector roads gives priority to through traffic over access to adjacent land uses. On local roads the emphasis is on access to adjacent land uses.

a. Transportation network plan.

The transportation network plan for Tumalo identifies where the roads need to be improved and where pedestrian and bicycle facilities are warranted. The network plan has three components: roads, sidewalks and bikeways.

1. Roads. Central Tumalo is a relatively compact area without need for additional public streets; infill will access existing streets. For the roads depicted on Map D2, planned improvements take advantage of existing public right-of-way, where it exists. Lands in the low density areas are served by existing public right-of-way which are unpaved, non-maintained public roads (Beaver Lane, Putnam Lane and Hopper Road) and private drives (Research Road, Winston Loop Road). Map D2 also depicts the roads that need improvement to serve the local road network and through traffic corridors.

2. Sidewalks.

Map D2 shows where sidewalks are needed for safety and identifies a potential opportunity for a trail extending south along the west side of Deschutes River. In Tumalo, a sidewalk network is needed along Cook Avenue, 4th, 5th, 7th and 8th streets to access the school and provide safe places for people to walk in the commercial area as it develops.

Sidewalks are usually separated from the road by a curb and gutter, which function as part of the storm drain system. Tumalo does not have a storm drain system. As an alternative, sidewalks in Tumalo shall be constructed without curbs and gutters and set back from the road surface behind a drainage swale. This type of sidewalk design is adequate, less costly and is consistent with the rural character of Tumalo.

A drainage swale is a broad, manmade depression running parallel to the right of way between the roadway and the sidewalk, where water can drain into the ground. The swale also provides room for signs, mailboxes, and snow storage, leaving the sidewalk free of obstructions. Street trees should not be planted in drainage swales where they will conflict with existing or planned utility lines, whereby the tree roots may damage pipes and conduits complicating repair work.

3. Bikeways.

Two types of bikeways are appropriate in rural areas. A shared roadway for local roads with low traffic volumes and speeds, and a paved shoulder bikeway for collectors and arterials with higher volumes and speeds or significant truck traffic. In Tumalo, paved shoulder bikeways are needed on Cline Falls Highway/Cook Avenue, Tumalo Road and Bailey Road which are County collector roads, including a bicycle connection from O.B. Riley south to Tumalo State Park (see Map D2).

4 Highway 20.

The intersection of the Highway 20 and Cook Avenue has been identified by the community as a traffic safety hazard. The Oregon Department of Transportation (ODOT) will have the lead authority to develop a solution to the realignment of this intersection. Preliminary designs have been presented to the Tumalo community. The County will work with ODOT to provide a solution to this intersection and to the connecting network of County roads which includes the realignment of O.B. Riley Road through the existing mining operation on the south side of Highway 20.

Projects to complete the transportation network plan are listed in Table D2. The tables list the type of improvement and the associated cost. The priorities are based upon perceived need while being flexible to grant funding or development opportunities.

b. Road development standards.

In recent years, urban street development standards were required in unincorporated communities within the county. The urban standards required 36 feet of pavement, with curb-tight sidewalks, curbs and gutters. It became evident that this standard was not practical or necessary in Tumalo. None of the existing roads in Tumalo meet this standard. The cost to build to this standard prohibited local residents from forming Local Improvement Districts (LIDs). In addition, people resisted the urban street profile because it did not fit with the community's preference for a rural appearance. The road standards are intended to decrease the cost of road improvements and to remove barriers to the formation of LIDs, for improving local roads.

There are sound traffic engineering principles that support reduced street standards. The State Transportation Planning Rule (OAR 660.12.045(7)) directs local governments to establish standards for local streets that minimize pavement width and total right-of-way consistent with the operational needs of the facility.

Excessive standards increase the costs of construction, use up valuable land, encourage inappropriate traffic volumes and speeds and create a problem channeling stormwater runoff. In Tumalo, full urban road standards are not needed because the traffic volumes and speeds on roads in the community are low compared to city streets. Many roads serve only a few residences. However, existing County rural road standards are not adequate to serve the densities and variety of uses found in Tumalo. Local businesses and the elementary school generate more local trips than normally found in the rural county.

The Tumalo Rural Community road development standards were developed in coordination with the community planning process, the Oregon Department of Transportation (ODOT)

Region 4, the state Bicycle and Pedestrian Program and with the County Planning Division and Public Works Department. These road standards are consistent with ODOT and the American Association of State Highway Traffic Officials (AASHTO) standards for rural communities. They apply to public rights-of-way other than the state highway which is under state jurisdiction.

4. Transportation policies.
 - a. Road Network Policies
 1. The County shall adopt a Transportation System Plan for Deschutes County that incorporates adopted policies and standards for the Tumalo Rural Community.
 2. The County shall explore the potential for alternate truck routes to reduce the impacts of traffic through the Tumalo Rural Community.
 - b. Road and sidewalk development policies.
 1. The County shall implement road development standards for the Tumalo Community that minimize pavement width and are consistent with the rural character of the community.
 2. Specific street segments in the Tumalo Rural Community have been identified as priorities for improvement projects listed in Table D2. These priorities shall be flexible in order to take advantage of land development and grant funding opportunities.
 3. Provide functional, cost effective sidewalks that are consistent with the rural character of the community.
 4. Provide sidewalks where they are needed for safety, as set forth in Map D2.
 5. Where sidewalks are specified on community roads, they shall be constructed without curbs and gutters, set back from the road surface behind a drainage swale at a distance from property lines to allow room for utilities.
 - c. Highway 20 policies.
 1. The County shall support the Oregon Department of Transportation efforts to implement both short and long-term improvements to solve the Cook Avenue/Highway 20 intersection safety and access problems.
 2. The County shall consider the realignment of O.B. Riley Road through the Bend Aggregate site and coordinate with the Oregon Department of Transportation at its intersection with Highway 20.

(Ord. 2005-017, § 1, Ord. 2000-017 § 1, 2000; Ord. 97-031, 1997)

Table D1: Existing Roads by Functional Classification (source: Deschutes County Public Works, Traffic County Summary 1980 - 1996, June 1996)

Road Names	From (speed)	To	Length	Classification	Width (feet)	ADT
US Hwy 20	North URC 55 mph	south URC	1.04	Highway	48	7600
Bailey Rd.	west URC 35 mph	Hwy 20	.352	Collector	22	1239
Cook Ave.	Cline Falls Hwy	Hwy 20	.373	Collector	24	4774
Cline Falls Hwy	north URC 35 mph	Cook Ave.	.160	Collector	24	3478
Tumalo Road	Cline Falls Hwy	URC	1.13	Collector	24	2250
2nd St.	Wood Ave. 25 mph	Cline Falls Hwy	.151	Local	20	---
4th St.	Wood Ave. 25 mph	Cline Falls Hwy	.100	Local	---	---
4th St.	Cline Falls Hwy 25 mph	Wharton Rd.	.066	Local	24	---
5th St.	Hwy 20 25 mph	Wood Ave.	.023	Local	20	---
5th St.	Wood Ave. 25 mph	Wharton Rd.	.180	Local	24	---
7th St	Hwy 20 25 mph	Wharton Rd.	.140	Local	21	---
7th St.	Wharton Rd. 25 mph	Riverview Ave.	.023	Local	---	---
8th St.	Cook Ave. 25 mph	Riverview Ave.	.088	Local	24	---
Bruce Ave.	4th St. 25 mph	7th St.	.210	Local	22	---
Cook Ave	north end 35 mph	2nd St.	.070	Local	---	---
Cook Ave.	2nd St. 35 mph	Cline Falls Hwy	.095	Local	20	---
Riverview Ave.	north end 25 mph	8th St.	.110	Local	---	---
Riverview Ave	8th St 25 mph	south end	.150	Local	18	---

23.40.040 Rural Service Centers – Alfalfa, Brothers, Hampton, Millican, Whistlestop and Wildhunt.

A Rural Service Center is characterized as an unincorporated community consisting primarily of commercial or industrial uses providing goods and services to the surrounding rural area or to persons traveling through the area, but which also includes some permanent residential dwellings.

A. Introduction.

The predominant land use in the areas surrounding the Alfalfa, Brothers, Hampton and Millican, Rural Service Centers is farming and ranching. The predominant land use in the areas surrounding Whistlestop and Wildhunt is forest, ranching and rural residential. The unincorporated rural service centers serve the needs of the surrounding rural areas as well as the needs of the traveling public. Three of the communities are located on Highway 20 east of Bend. Millican is 26 miles, Brothers is 42 miles and Hampton is 64 miles east of Bend. Alfalfa is located approximately 11 miles east of Bend on Willard Road.

Whistlestop is located approximately 30 miles southwest of Bend on Burgess Road. Wildhunt is located approximately 26 miles south of Bend at the junction of Highway 97 and Highway 31.

The communities of Alfalfa, Brothers and Hampton have approved public water systems that serve the school and combination store/café/post office in Brothers and the stores in Alfalfa and Hampton. The Central Oregon Irrigation District provides water for agricultural uses surrounding Alfalfa. The land around Millican, Brothers and Hampton is part of large ranches or is Bureau of Land Management land. Most of the land is used for dry land grazing. Well water provides irrigation for land adjacent to Hampton. Millican Brothers and Hampton are surrounded by land that is designated as antelope habitat.

The area surrounding these communities is sparsely populated. Each community has a few residences within its boundary.

1. Periodic Review

In order to comply with OAR 660-022, Deschutes County updated the Comprehensive Plan and implementing zoning regulations in 2002 for the communities of Alfalfa, Brothers, Hampton, Millican, Whistlestop and Wildhunt. The Comprehensive Plan and zoning map boundaries for all of the Rural Service Centers were amended to comply with the requirements of the administrative rule and to reconcile historic mapping inconsistencies between the plan designation and zoning and inconsistencies between community boundaries and historic development patterns.

2. Community Boundary

The Alfalfa Rural Service Center boundary includes 21.83 acres, with Willard Road as the predominant northern boundary and the remainder surrounded by agricultural lands zoned Exclusive Farm Use.

The Brothers Rural Service Center boundary includes 48.95 acres. Highway 20 bisects the community from east to west, while Camp Creek Road enters from the north and connects with the highway. The entire community is surrounded by agricultural land zoned Exclusive Farm Use.

The Hampton Rural Service Center boundary includes 35.37 acres. Highway 20 forms the southern boundary with the remainder surrounded by agricultural lands zoned Exclusive Farm Use.

The Millican Rural Service Center boundary includes 29.55 acres. Highway 20 forms the northern boundary with the remainder surrounded by agricultural lands zoned Exclusive Farm Use.

The Whistlestop Rural Service Center boundary includes 7.93 acres. Burgess Road runs east/west and dissects the community from north to south with forest and rural residential uses to the north and east. The Wildhunt Rural Service Center boundary includes 11.29 acres. Highway 97 forms the western boundary. Highway 31 forms the southern boundary, with forest and rural residential uses to the north and east.

B. Land Use Planning

1. Existing Land Uses

The existing land uses in the eastern Rural Service Centers of Alfalfa, Brothers, Hampton and Millican is commercial and residential surrounded by agricultural uses. In addition to a few residences each of the communities includes commercial development. Alfalfa has a store/gas station and a church/community hall. Brothers includes a school, a combination market/café/post office/gas station, a state highway maintenance field office, and a highway rest area. Hampton has a café and recreational vehicle park. Millican has a market/gas station.

The existing land uses in the rural Service Centers of Whistlestop and Wildhunt is commercial and residential surrounded by forest.

2. Comprehensive Plan Designations

The Deschutes County Comprehensive Plan designates each of the communities of Alfalfa, Brothers, Hampton, Millican as an Unincorporated Community.

C. Policies

1. Land use regulations shall conform to the requirements of OAR 660, Division 22 or any successor.
2. Rural Service Center zoning shall be applied to Alfalfa and Brothers and shall consist of three districts: Commercial/Mixed Use; Residential; and Open Space.
3. Rural Service Center zoning shall be applied to Hampton, Whistlestop and Wildhunt and shall consist of a single Commercial/Mixed Use District.
4. The area in the Brothers Rural Service Center Boundary that is north of Highway 20 and east of Camp Creek Road shall be zoned as Rural Service Center - Open Space District (RSC-OS).
5. In April 2002, Alfalfa area residents expressed a desire to keep the community “the way it is” and to limit commercial activity to 2-acres south of Willard Road that is the site of the Alfalfa Community Store and the community water system. These two acres are designated as a mixed used commercial district in the Comprehensive Plan and shall be zoned mixed use commercial. The remaining 20 acres of the Rural Service Center will continue to be zoned Rural Service Center – Residential District, with a 5-acre minimum lot size.

Since the Board of County Commissioners finds it may be necessary to accommodate the need for future commercial expansion 2 acres north of Willard Road are being designated on the Comprehensive Plan for future commercial uses. A zone change to mixed use commercial can be considered only for a specific use and upon findings that the existing commercial area is fully developed.
6. County Comprehensive Plan policies and land use regulations shall ensure that new uses authorized within the Alfalfa, Brothers, Hampton, Millican, Whistlestop and Wildhunt Rural Service Centers do not adversely affect agricultural and forest uses in the surrounding areas.
7. Zoning in the area shall promote the maintenance of the area’s rural character. New commercial uses shall be limited to small-scale, low impact uses that are intended to serve the community and surrounding rural area or the travel needs of people passing through the area. The Commercial/Mixed use zoning regulations shall allow a mixed use of residential or small-scale commercial uses.
8. Residential and commercial uses shall be served by DEQ approved on-site sewage disposal systems.
9. Residential and commercial uses shall be served by on site wells or public water systems.

10. Community water systems, motels, hotels and industrial uses shall not be allowed.
11. Recreational vehicle or trailer parks and other uses catering to travelers shall be permitted.
12. The County shall consider ways to improve services in the area consistent with the level of population to be served.

(Ord. 2002-027 § 1, 2002; Ord. 2002-001 § 4, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 96-045, 1996)

23.40.050. Resort Communities – Black Butte Ranch and Inn of the Seventh Mountain/Widgi Creek.

A Resort Community is characterized as an unincorporated community that was established primarily for, and continues to be used primarily for recreation and resort purposes (OAR 660-022-0010)(6)). It includes residential and commercial uses and provides for both temporary and permanent residential occupancy, including overnight lodging and accommodations. (Ord. 2001-047, § 2,2001)

Black Butte Ranch and Inn of the Seventh Mountain/Widgi Creek

A. General Information

1. Historical Background:

Black Butte Ranch:

Black Butte Ranch is located in the northwestern portion of Deschutes County, 8 miles west of the city limits of Sisters. Black Butte Ranch is in the Indian Ford Creek watershed, a tributary to Squaw Creek, itself a tributary to the Deschutes River, and is surrounded by lands within Deschutes National Forest. Since the late 1800's Black Butte Ranch has been a cattle ranch. Cattle operations continue today.

Black Butte Ranch includes 1,830 acres developed in the early 1970's as a planned residential development with both permanent and vacation homes on 1,252 lots and three separate condominium areas. Recreation amenities include two 18-hole golf courses, four swimming pools, 23 tennis courts, horse stables, a sports field, basketball courts and trails for bicycling, jogging and cross country skiing. Conference rooms, a restaurant, lounge and property sales in the Main Lodge, a general store and pro shops at both golf courses provide additional amenities for residents, guests and visitors.

Black Butte Ranch allows public access to its restaurant, golf courses and horse stables, but is primarily oriented to its year-round residents and seasonal guests. Black Butte Ranch is considered by many people to be a "destination resort", however development at Black Butte Ranch precedes the adoption of statewide Goal 8 and the County's mapping of lands for the siting of destination resorts. Approximately 96 percent of the area within Black Butte Ranch community boundary has already been developed.

Development of Black Butte Ranch began in 1970 and the first subdivision plat within Black Butte Ranch was filed in 1970. In 1972, when the County first adopted a zoning ordinance (PL-5) and comprehensive plan, the area identified as Black Butte Ranch, although smaller than today, was zoned "Planned Development" and designated as a "Destination Resort" on the comprehensive plan map. In 1979 the County adopted revised zoning and comprehensive plan maps. Black Butte Ranch, in its current configuration, was zoned Rural Residential, RR-10, and was designated

"Destination Resort" on the comprehensive plan map. In 1992 Black Butte Ranch was designated as a rural residential exception area on the comprehensive plan map (Ord No. 92-061).

Inn of the Seventh Mountain/Widgi Creek:

The Inn of the Seventh Mountain and Widgi Creek Golf community are located approximately 5 miles southwest of the Bend Urban Growth Boundary on Century Drive and bounded by the Deschutes River on the south.

The site for Inn of the Seventh Mountain (Inn) has been developed since the late 1960s and has historically been considered to be a stand-alone resort community with overnight lodging and recreation facilities for tourists. It currently has 230 condominium units, spread among 22 buildings. The initial boundary was established in 1972 and encompasses 22.65 acres. The Inn includes horse stables, tennis courts, golf course, skating rink, swimming pools and other recreation amenities, and a restaurant, meeting rooms and multi-story lodging units for resort guests. Many of the dwelling units at Inn are occupied seasonally but some residences are occupied year round. Commercial uses open to overnight guests and the public includes the restaurant, skating rink and golf course, guided raft trips on the Deschutes River and a retail/rental sport shop.

Widgi Creek was approved in 1983 as a 237-acre expansion to the Inn including a golf course with surrounding residential lots consisting of 107 lots for single-family dwellings and 103 lots for condominium units.

The use of the site as a destination resort was initiated previous to implementation of the statewide planning goals in Deschutes County. Upon implementation of the statewide planning goals, the property was designated as "forest" in compliance with Goal 4, and the use continued to be permitted as a "destination resort". However, in 1993 HB 3661 estimated destination resorts as a use in the forest zone except as allowed under Goal 8. This property was not approved as a destination resort pursuant to Goal 8 until the year 2001 when a "built and committed" exception was taken for the entire Inn/Widgi community.

2. Population and Growth:

Black Butte Ranch

The population of Black Butte Ranch is difficult to ascertain due to the large number of vacation and second homes within the community that are occupied for only part of the year. In 2001, the Black Butte Ranch Association estimated the number of full time, year round residents at 337 persons. During the peak tourist season, the population, including guests who do not own property but are renting residences within the community, is estimated to rise to 5,000 persons.

Inn of the Seventh Mountain/Widgi Creek

Almost all of the residential use at the Inn of the Seventh Mountain is tourist accommodations. During the peak tourist season, the population, including guests who do not own property but are renting residences within the community is estimated to be approximately 500 people.

In 2001, the number of full time and part time residents at Widgi Creek is approximately 120, consisting of 80 single-family residents and 39 condo residents. Since there are only 4 condo units available for rental, there is no significant increase in the population during the peak tourist season. As currently planned, when the development is fully built out, the population increase to a total of 200 full time and part time residents in 107 single family homes and 46 condominium units.

3. Periodic Review

In the fall of 1994, the Oregon Land Conservation and Development Commission adopted a new administrative rule, OAR 660, Division 22, entitled Unincorporated Communities. The rule requires counties to update land use plans and regulations for such communities. Deschutes County has updated land use plans and regulations for such communities. Deschutes County has updated the Comprehensive Plan and implementing zone regulations for Black Butte Ranch and the Inn/Widgi Creek to comply with the rule as part of periodic review.

4. "Resort Community" Defined

Black Butte Ranch and the Inn of the Seventh Mountain/Widgi Creek meet the definition of "resort community" because they have historically developed with a mixture of residential and recreation or resort amenities. Commercial-type uses also exist, such as the restaurant and stables. Other retail operations, such as the golf pro shops and retail sales at the tennis shop are associated with specific recreation activities and are not designed as stand alone retail operations intended by themselves to attract the traveling public to Black Butte Ranch or the Inn/Widgi.

Black Butte Ranch operates both a community sewer and water system that are in place and serve the existing development. Black Butte Ranch is served by its own fire and police departments. The Comprehensive Plan designates Black Butte Ranch as a Resort Community and provides for future growth and development accordingly.

The Inn/Widgi sewer service (except approved on-site septic systems) and fire protection is provided for Inn/Widgi by the City of Bend. Water is provided by on-site wells, security service is provided by the Inn/Widgi Resort Community and Deschutes County Sheriff provides police services.

5. Community Boundary

Black Butte Ranch:

The Black Butte Ranch community boundary includes a total of 1912 acres consisting of: 1) 1830 acres including the main resort development, the resort's recreational amenities, and the residential areas, and 2) 82 acres located contiguous to the northwest corner of the other land within the resort community used for industrial uses in support of Ranch operations. The community boundary abuts Highway 20 on the northeast. National Forest Service lands and private landholders bound it on the south and west.

Inn of the Seventh Mountain/Widgi Creek

The Inn of the Seventh Mountain/Widgi Creek community boundary includes 260 acres (23 for the Inn and 237 for Widgi Creek). The property is used for the resort's recreational amenities, rental and residential units. The western boundary is the Century Drive. The south boundary is generally the Deschutes River canyon. The entire resort community is bordered by the Deschutes National Forest.

B. Land Use Planning

1. Existing Land Uses

Black Butte Ranch: The predominant land use in Black Butte Ranch is residential, the majority of which is single-family residential development. However, since Black Butte Ranch was originally developed as a planned community, a number of other uses exist which make Black Butte Ranch a community that is somewhat self-reliant. Uses that support the residential components include a commercial core, which contains a variety of retail businesses developed in a pedestrian mall setting, as well as a business park. A significant component of development in Black Butte Ranch includes recreation amenities such as golf courses, and resort facilities, such as a lodge, meeting

facilities and a restaurant. A fire station and public works facilities for sewage treatment and water delivery have also been developed in support of all uses. The Black Butte Fire Department serves all areas within the boundary of Black Butte Ranch. Utility services will continue to be provided in the current manner.

Inn of the Seventh Mountain/Widgi Creek

The predominant land use at the Inn is resort use with overnight lodging and recreation facilities for tourists, in addition to a restaurant, meeting rooms and a retail/rental sport shop. The predominant land use for Widgi Creek is residential, with single-family residential development and condominium units, in addition to a golf course. Fire and sewer services are currently provided by the City of Bend, with water service provided by on-site well. Utility services will continue to be provided in the current manner.

2. Comprehensive Plan Designations

The 2001 Deschutes County Comprehensive Plan designates Black Butte Ranch and the Inn of the Seventh Mountain/Widgi Creek as a Resort Communities.

C. Policies

1. Land Use Policies

A. General resort Community Policies

1. Land use regulations shall conform to the requirements of OAR 660 Division 22 or any successor.
2. County comprehensive plan policies and land use regulations shall ensure that new uses authorized within the Black Butte Ranch Resort Community do not adversely affect forest uses in the surrounding Forest Use Zones.
3. Designated open space and common area shall remain undeveloped except for community recreation uses. Areas developed as golf courses shall remain available for that purpose or for open space/recreation uses.
4. The provisions of the Landscape Management Overlay Zone shall apply in Resort Communities where the zone exists along Century Drive, Highway 26 and the Deschutes River.
5. Residential minimum lot sizes and densities shall be determined by the capacity of the water and sewer facilities to accommodate existing and future development and growth.
6. The resort facility and resort recreation uses permitted in the zoning for Black Butte Ranch and the Inn of the Seventh Mountain/Widgi Creek shall serve the resort community.

Black Butte Ranch Policies

1. The County supports the design review standards administered by the Architectural Review Committee.
2. Residential, resort and utility uses shall continue to be developed in accordance with the Master Design for Black Butte Ranch and the respective Section Declarations.
3. Industrial activities, including surface mining, shall only occur in the area zoned Black Butte Ranch Surface Mining, Limited Use Combining District (Black Butte Ranch SM/LU) located in the northwest corner of Black Butte Ranch.
4. Employee housing shall be located in the area zoned Black Butte Ranch-Utility/Limited Use Combining District (Black Butte Ranch-U/LU).
5. Any amendment to the allowable use(s) in either the Resort Community District or the Limited Use Combining District shall require an exception in accordance with applicable statewide planning goal(s), OAR 660-04-018/022 and DCC 18.112 or any successor.
6. The westerly 38-acres zoned Black Butte Ranch Surface Mining, Limited Use Combining District (Black Butte Ranch SM/LU) shall be used for the mining and storage of aggregate

resources. Uses that do not prevent the future mining of these resources, such as disposal of reclaimed effluent and woody debris disposal from thinning and other forest practices may be allowed concurrently. Other resort maintenance, operational and utility uses, such as a solid waste transfer station, maintenance facility or equipment storage may be allowed only after mining and reclamation have occurred.

7. The 18.5 acres zoned Black Butte Ranch-Utility/Limited Use Combining District (Black Butte Ranch-U/LU) may be used for the disposal of reclaimed sludge.
8. The area west of McCallister Road and east of the area zoned Black Butte Ranch may be used for large equipment storage, general storage, maintenance uses, RV storage, telephone communications, administration offices, housekeeping facilities and employee housing.
9. Employee housing shall be set back at least 250 feet from the eastern boundary of the area zoned Black Butte Ranch Surface Mining, Limited Use Combining District (Black Butte Ranch SM/LU).

Surface mining within the Black Butte Ranch community boundary shall adhere to the following Goal 5 ESEE "Program to Meet Goal" requirements:

10. Only the western most 38 acres of the site shall continue to be mined.
11. Setbacks shall be required for potential conflicting residential and other development. A minimum 50-foot setback shall be maintained from the perimeter of tax lot 202 for all surface mining activity.
12. Noise impact shall be mitigated by buffering and screening.
13. Hours of operation shall be limited to between 7:00 a.m. and 6:00 p.m. weekdays. No operations shall be allowed on weekends and holidays.
14. Processing shall be limited to 45 days in any one year, to be negotiated with Deschutes County in the site plan process in consultation with the Oregon Department of Fish and Wildlife (ODFW).
15. The conditions set forth in the August 10, 1989, letter of ODFW shall be adhered to.
16. Extraction at the site shall be limited to five acres at a time with on-going incremental reclamation (subject to DOGAMI review and approval).
17. Mining operations, siting of equipment, and trucking of product shall be conducted in such a manner that applicable DEQ standards are met and minimizes noise and dust.
18. DOGAMI requirements for a permit once mining affects more than five acres outside the 8.6-acre exemption shall be met.
19. A conditional use permit shall be obtained from Deschutes County, under the provisions of section 18.128.280. Surface mining of resources exclusively for on-site personal, farm or forest use or maintenance of irrigation canals, before mining activity affects more than five acres outside the 8.6-acre exempt area.

Inn of the Seventh Mountain/Widgi Creek Policies

1. Any amendment to the allowable uses(s) in either the Resort Community District or the Widgi Creek Residential District shall require an exception in accordance with applicable statewide planning goal(s), OAR 660-04-018/022 or any successor, and DCC 18.112 or any successor.
2. Public Facility Policies
 - A. General Public Facility Planning Policies**
 1. Police protection services for both communities shall be provided under contract with the Deschutes County Sheriff.
 - A. Black Butte Ranch**

1. The Black Butte Ranch Water Distribution Company and the Black Butte Ranch Corporation shall confirm the water and sewer service, respectively, can be provided for new uses or expansion of existing uses that require land use approval.
2. The Black Butte Ranch Water Distribution Company shall provide water service for the Black Butte Ranch Resort Community.
3. The Black Butte Ranch Corporation shall provide sewer service for Black Butte Ranch.
4. The Black Butte Ranch Fire Protection District shall provide fire protection services for Black Butte Ranch.
5. The roads and the bicycle/pedestrian path system within the Black Butte Ranch Resort Community boundary shall be maintained by the Black Butte Ranch Owners Association.

**B. Inn of the Seventh Mountain/
Widgi Creek**

1. Water service shall be supplied by on-site wells for the Inn/Widgi Resort Community.
2. New uses or expansion of existing uses that require land use approval shall be approved only upon confirmation from the City of Bend that sewer service can be provided.
3. Fire protection services for the Inn/Widgi shall be provided through a contract with the City of Bend until such time as Inn/Widgi develops another plan to provide adequate fire protection.
4. The Resort Community, not Deschutes County, shall maintain roads in the community.
5. The bicycle/pedestrian path system shall be maintained by the Inn/Widgi Owners Association.
6. Emergency access between Widgi Creek and the Inn of the Seventh Mountain shall be provided in accordance with the approved development plan for the Elkai Woods town homes. The respective resort property owners shall maintain emergency access between the Inn and Widgi Creek.

(Ord. 2001-047 § 2, 2002)

23.40.060. Rural Commercial – Deschutes Junction, Deschutes River Woods Store, Rosland and Spring River.

The Rural Commercial plan designation is applicable to residential and commercial lands located outside unincorporated communities and urban growth boundaries.

The County has also applied the new Rural Commercial plan designation to the Rosland commercial center which has historically been committed to commercial type uses and has served the area as such since prior to adoption of zoning regulations. No new exceptions are required as the subject properties are in an acknowledged exception area.

A. Introduction

The 1979 Comprehensive Plan designated the areas of Deschutes Junction, Deschutes River Woods Store and Spring River as Rural Service Centers. Since that time, the Unincorporated Communities Rule (OAR 660-022) has defined “rural service centers” in such a way that these areas no longer qualify as rural service centers. As a part of Periodic Review, Deschutes County is applying a new comprehensive plan designation of Rural Commercial to Deschutes Junction, Deschutes River Woods Store and Spring River.

No new exceptions to Goals 3 or 4 or new non-resource lands were taken as a result of the change in designation from Rural Service Center to Rural Commercial. The Rural Commercial designation is only applied to acknowledged exception areas.

The rural uses and services are limited in size and scope and are intended to serve the immediate rural area and travelers passing through the area. The plan policies and zoning standards restrict new commercial uses

to those that are less intensive than those authorized in other types of unincorporated communities. The uses and densities are limited by the zoning, thereby maintaining these areas as rural lands.

Upper Deschutes River Basin, with the Deschutes River generally forming the western boundary of the community. Sunriver includes approximately 3,374 acres which are bounded by the Deschutes National Forest on the east, west and north sides. Small lot residential subdivision development is the predominant land use to the south of the community boundary. However, Crosswater, a private residential/resort community has also recently been developed in the area immediately south of Sunriver.

1. Periodic Review

In order to comply with state rules for Periodic Review (OAR 660-025), Deschutes County has reviewed and updated the County comprehensive plan and land use regulations for the areas of Deschutes Junction, Deschutes River Woods Store and Spring River. Each of these communities was identified as an unincorporated community under OAR 660-022, Unincorporated_Communities. OAR 660-022 defines several types of unincorporated communities and provides limitations on the types and sizes of uses permitted, generally restricting uses that are inappropriate considering available water, sewer, and transportation service, or uses that would tend to undermine the viability of nearby urban areas.

During its review of lands identified as rural service centers, the County determined that Deschutes Junction, Deschutes River Woods Store and Spring River do not qualify as any of the four types of unincorporated communities identified under OAR 660-022. The Rural Commercial plan designation and zoning brings each of these three areas into compliance with state rules by adopting zoning to ensure that they remain rural and that the uses allowed are less intensive than those allowed in unincorporated communities as defined in OAR 660-022.

As part of Periodic Review, the Comprehensive Plan and zoning map boundaries for all of the Rural Commercial areas were amended to comply with the requirements of the administrative rules and to reconcile historic mapping inconsistencies between the plan and the zoning maps.

2. Post-Acknowledgment Plan Amendment

The owner of the Rosland commercial center sought approval of a post-acknowledgment plan amendment in 2002. The amendment was sought to confirm her right to continue to operate the commercial center as it has been operated since 1973. The center was recognized because it is small and rural in character and would qualify for a goal exception as the land is physically developed with rural commercial uses.

3. Rural Commercial

The Deschutes Junction Rural Commercial boundary includes 1.77 acres, bounded by Tumalo Road on the South, Highway on the East, with the remainder surrounded by agricultural lands (EFU).

The Deschutes River Woods Store Rural Commercial boundary includes 4.99 acres bounded by Baker Road on the North, Highway 97 on the East, railroad tracks and Cheyenne Road on the West and Morningstar Christian School on the South. The surrounding land is zoned Rural Residential (RR-10). The Deschutes River Woods residential subdivision is adjacent to this property.

The Rosland Rural Commercial boundary includes approximately 4.5 acres near the intersection of Burgess and River Pine Roads. The remainder is surrounded by exceptions land zoned RR-10.

The Spring River Rural Commercial boundary includes 9.16 acres bounded by Spring River Road on the North, Lunar Drive on the East and additional commercial and residential uses on the South and West. The surrounding land is zoned Rural Residential (RR-10).

B. Land Use Planning

1. Existing Land Uses

The existing land uses in all of the Rural Commercial areas are primarily commercial with a few residences existing in conjunction with businesses. The surrounding zoning is agricultural, forest, and Rural Residential.

The Deschutes County Comprehensive Plan designates Deschutes Junction, Deschutes River Woods Store, Rosland and Spring River as Rural Commercial.

C. Policies

1. Land use regulations shall ensure that the uses allowed are less intensive than those allowed for incorporated communities in OAR 660, Division 22 or any successor.
2. Rural Commercial zoning shall be applied to Deschutes Junction, Deschutes River Woods Store, Rosland and Spring River.
3. In Spring River, there shall be a Limited Use Combining zone.
4. County Comprehensive Plan policies and land use regulations shall ensure that new uses authorized within the Deschutes Junction, Deschutes River Woods Store, Rosland and Spring River areas do not adversely affect agricultural and forest uses in the surrounding areas.
5. Zoning in the area shall ensure that the uses allowed are rural as required by Goal 14, Urbanization, and less intensive than those allowed for unincorporated communities as defined in OAR 660-022. New commercial uses shall be limited to those that are intended to serve the surrounding rural area or the travel needs of people passing through the area.
6. New commercial uses shall be limited in size to 2500 square feet, or 3500 square feet, if for an agricultural or forest-related use.
7. A lawful use existing on or before November 5, 2002, not otherwise allowed in a Rural Commercial zone, may continue to exist subject to the county's nonconforming use regulations.
8. An existing lawful use may expand up to 25 percent of the total floor area existing on November 5, 2002.
9. The Rural Commercial zoning regulations shall allow a mixed use of residential or rural commercial uses.
10. Residential and commercial uses shall be served by DEQ approved on-site sewage disposal systems.
11. Residential and commercial uses shall be served by on site wells or public water systems.
12. Community sewer systems, motels, hotels and industrial uses shall not be allowed.
13. Recreational vehicle or trailer parks and other uses catering to travelers shall be permitted.

(Ord. 2003-079§ 1, 2003; Ord. 2002-018 § 2, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 96-045, 1996)

23.40.080. Maps.

(Ord. 2003-079, § 1, 2003; Ord. 2002-026, § 1, 2002; Ord. 2002-018, § X, 2002; Ord. 2002-001 § 4, 2002; Ord. 20001-047 § 2, 2001; Ord. 2000-017 § 1, 2000)

23.40.070. Rural Industrial.

The Rural Industrial plan designation is applicable to industrial lands located outside unincorporated communities and urban growth boundaries.

The purpose of the Rural Industrial designation is to recognize existing industrial uses in rural areas of the county and to allow the appropriate development of additional industrial uses that are consistent with the rural character, facilities and services.

A. Periodic Review

In order to comply with state rules for Periodic Review (OAR 660-025), Deschutes county has reviewed and updated the county comprehensive plan and land use regulations for the rural industrial sites of: Redmond Military, Deschutes Junction, Bend Auto Recyclers and Wickiup Junction. OAR 660-022, the State Unincorporated Communities Rule, defines the types of unincorporated communities and specifies that industrial uses be limited to buildings containing no more than 10,000 square feet of floor space. Rural industrial uses outside of unincorporated communities must be less intense than those allowed within an incorporated community.

B. Rural Industrial Designated Area Descriptions

The Redmond Military site consists of tax lot 1513000000116 and is 35.42 acres, bounded by the Redmond Urban Growth Boundary to the west and Exclusive Farm Use lands surrounding the remainder of the property.

The Deschutes Junction site consists of the following tax lots: 161226CO00102 (15.61 acres), bounded by 161226C000111 (6.23 acres) and 161226C000301 (6.12 acres). These tax lots are bounded by Deschutes Market Road to the north and east and Highway 97 to the west, tax lot 161226CO00106 is bounded by Deschutes Market Road to the north, and other rural industrial lands to the east, south and west. Tax lot 161226C000107 is bounded by Deschutes Market Road to the north, EFU land to the west, and other rural industrial lands to the east and south.

Bend Auto Recyclers consists of tax lot 1712030000111 and is 13.41 acres, bounded by Highway 97 to the west, and Multiple Use Agricultural lands to east, north and south.

Wickiup Junction consists of tax lot 2110360000104 and is 12.67 acres, bounded by Rosland Road on the southwest with forest lands surrounding the remainder of the property.

C. Policies

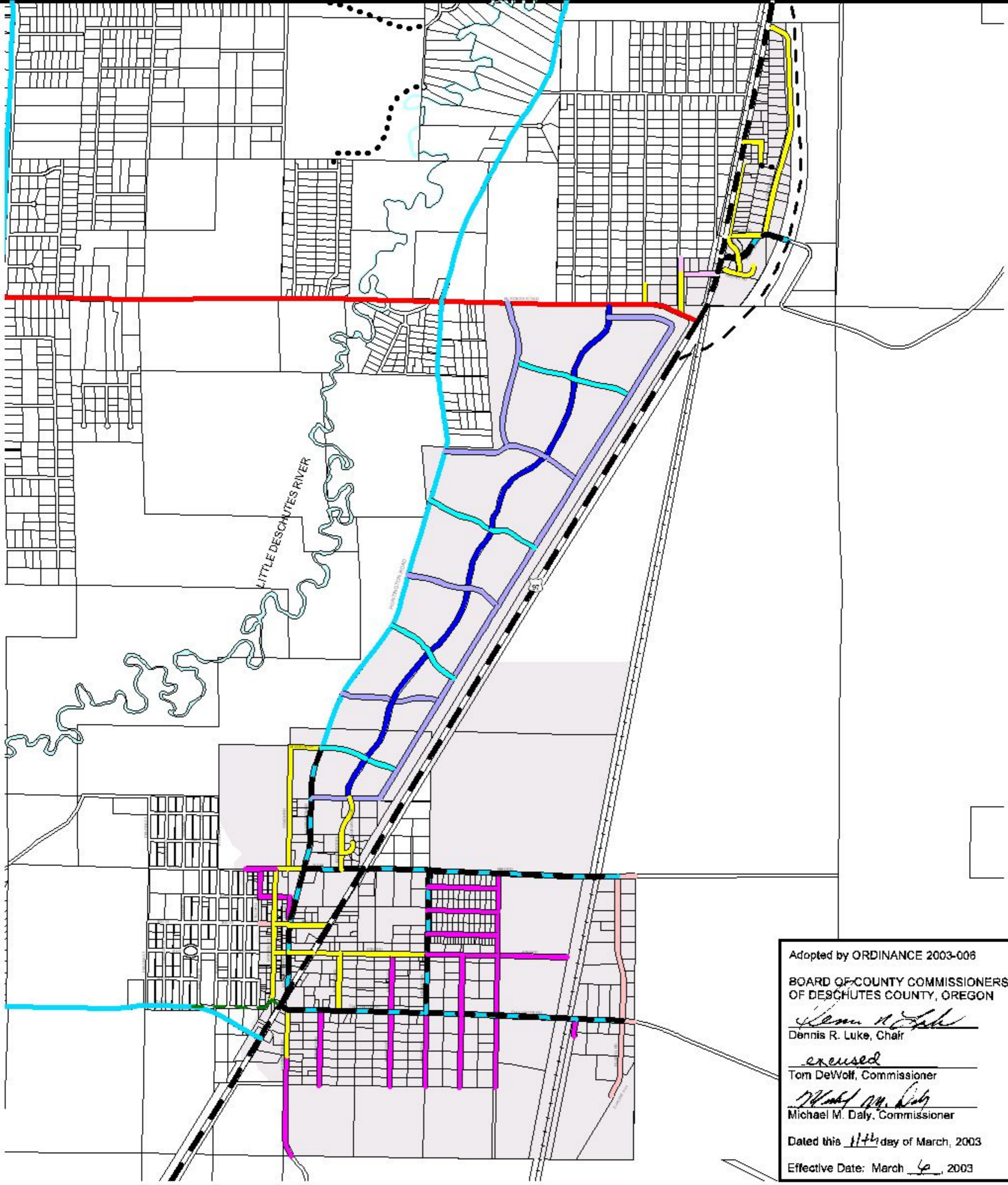
1. To assure that urban uses are not permitted on rural industrial lands, land use regulations in the Rural Industrial zones shall ensure that the uses allowed are less intensive than those allowed for incorporated communities in OAR 660, Division 22 or any successor.

2. Limited Use Combining zones shall be applied to the Redmond Military (Tax lot 1513000000116), Deschutes Junction (Tax lot 161226C000301), and Wickiup Junction (Tax lot 2110360000104) to ensure that permitted uses are compatible with surrounding farm and forest lands.
3. Land use regulations shall ensure that new uses authorized within the Rural Industrial sites do not adversely affect agricultural and forest uses in the surrounding areas.
4. New industrial uses shall be limited in size to a maximum floor area of 7,500 square feet per use within a building, except for the primary processing or raw materials produced in rural areas, for which there is no floor area per use limitation.
5. A lawfully established use that existed on or before February 2, 2003, not otherwise allowed in a Rural Industrial zone, may continue to exist subject to the county's nonconforming use regulations
6. A lawfully established use that existed on or before February 2, 2003 may be expanded to occupy a maximum of 10,000 square feet of floor area or an additional 25 percent of the floor area currently occupied by the existing use whichever is greater.
7. Residential and industrial uses shall be served by DEQ approved on-site sewage disposal systems.
8. Residential and industrial uses shall be served by on-site wells or public water systems.
9. Community sewer systems shall not be allowed in Rural Industrial zones.

(Ord. 2002-126, § 1, 2002)

23.40.080. Maps.

(Ord. 2002-026, § 1, 2002; Ord. 2002-018, § X, 2002; Ord. 2002-001 § 4, 2002; Ord. 20001-047 § 2, 2001; Ord. 2000-017 § 1, 2000)



Adopted by ORDINANCE 2003-006
 BOARD OF COUNTY COMMISSIONERS
 OF DESCHUTES COUNTY, OREGON
Dennis R. Luke
 Dennis R. Luke, Chair
Tom DeWolf
 Tom DeWolf, Commissioner
Michael M. Daly
 Michael M. Daly, Commissioner
 Dated this 11th day of March, 2003
 Effective Date: March 4, 2003

SYMBOLS

- Draft Road Plan**
- Commercial Local
 - Conceptual Highway Alignment
 - Principal Arterial
 - Forest Highway
 - Future Collector
 - Future Local
 - Future Arterial
 - Neighborhood Road
 - Central Road
 - Perimeter Road
 - Potential Realignment
 - Residential Local
 - Residential Local <250 ADT
 - Residential Local >250 ADT
 - Rural Arterial
 - Rural Collector
 - Urban Collector
 - Railroad
 - Taxlots
 - River
 - La Pine UUC Boundary

Figure 12

**La Pine Planning Area
 Transportation Plan
 Road Functional Class**

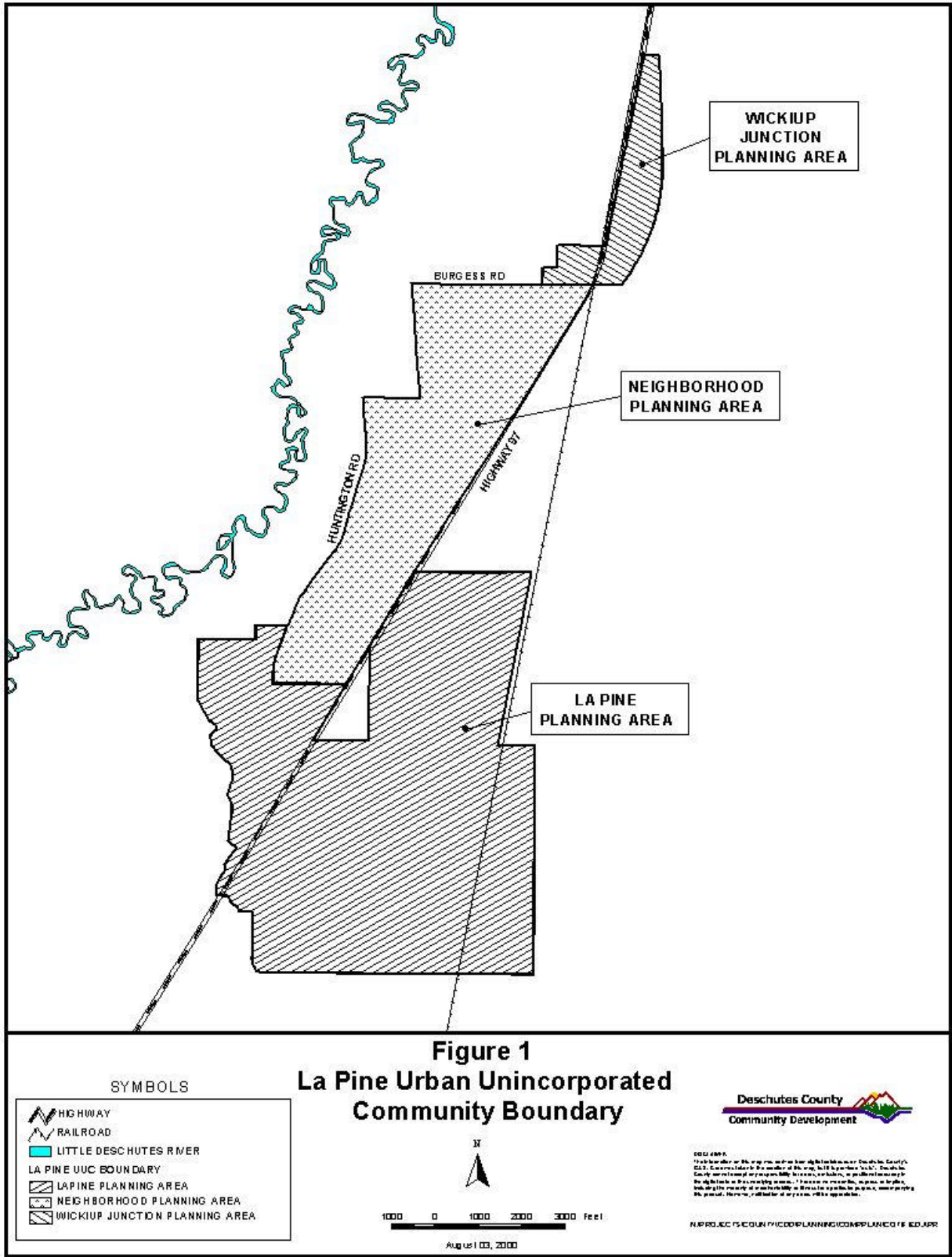
March 5, 2003

0.25 0 0.25 0.5 Miles



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23.40.030. Figures.



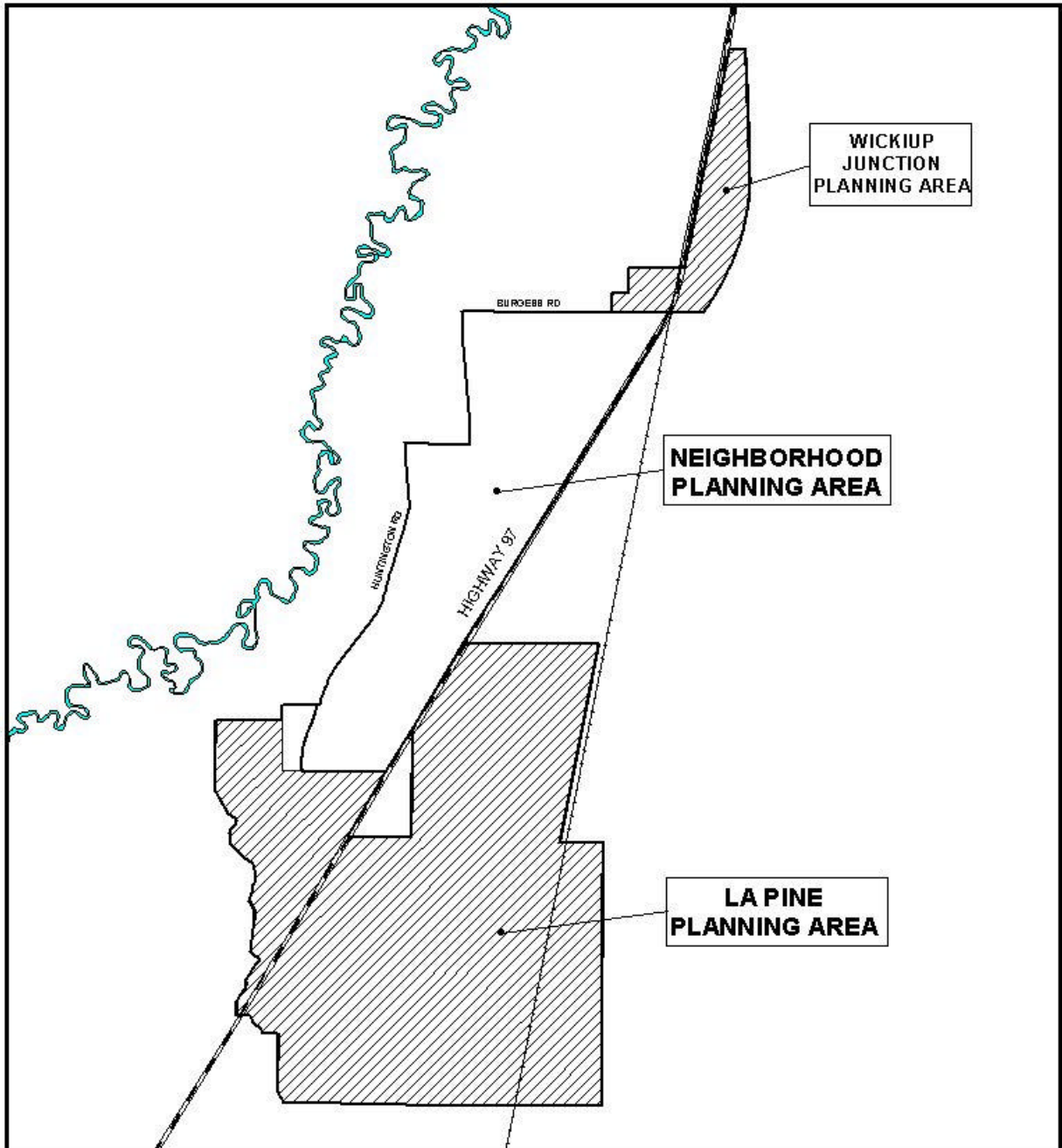
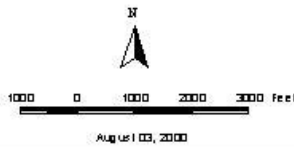


Figure 2

La Pine Special Sewer District

SYMBOLS

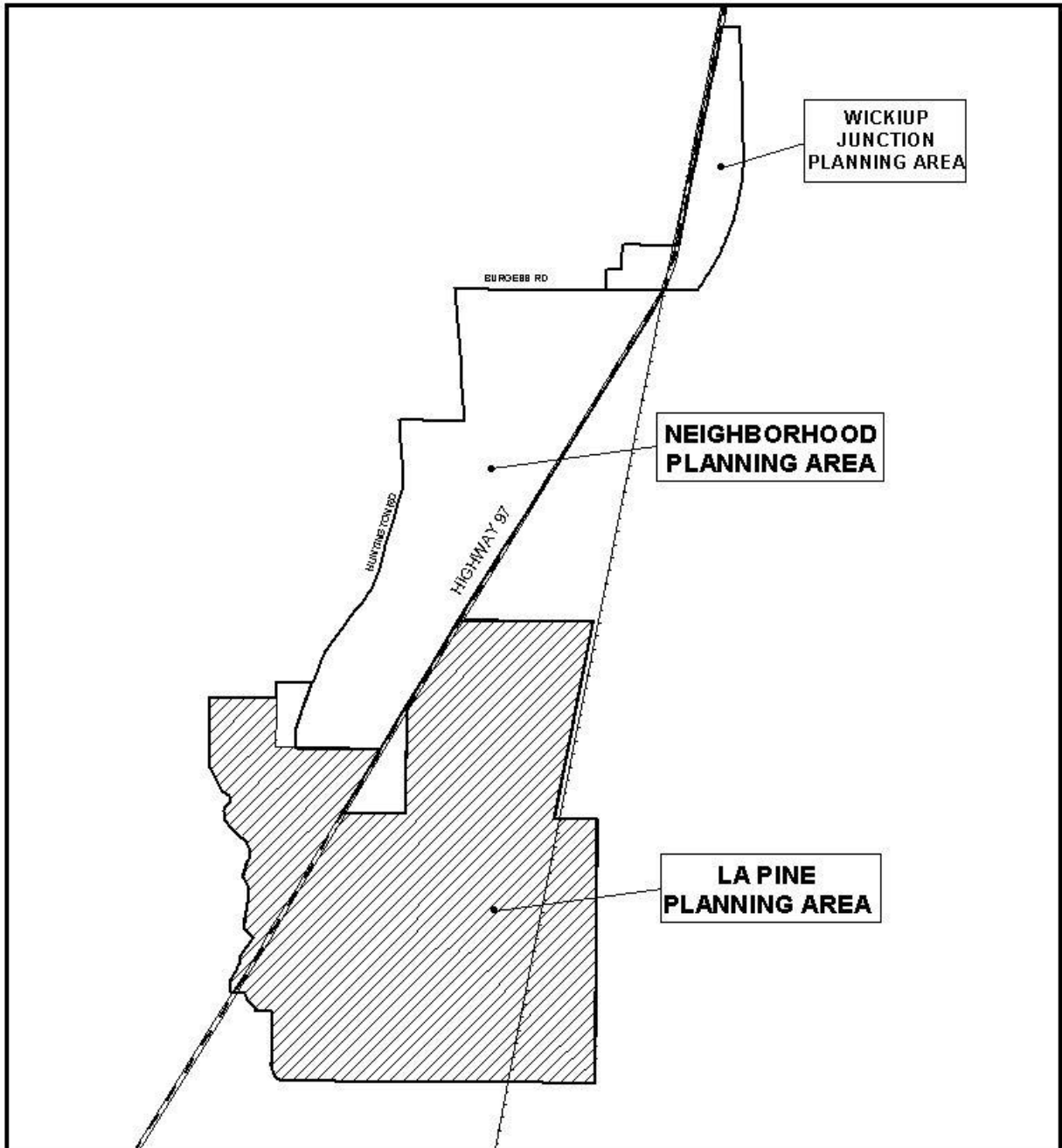
	RAILROAD
	HIGHWAY
	LA PINE UUC BOUNDARY
	LITTLE DESCHUTES RIVER
	LA PINE SPECIAL SEWER DISTRICT



Deschutes County
Community Development

DDC 489A
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NEC US FOR COUNTY UUC COMPLANNING COMPLANCY S.E.O. APR



SYMBOLS






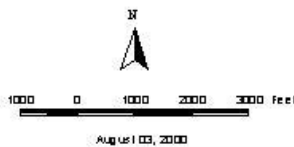
-  RAILROAD
-  HIGHWAY
-  LA PINE UUC
-  LA PINE WATER DISTRICT
-  LITTLE DESCHUTES RIVER

Figure 3
La Pine Water District



Deschutes County
Community Development

DDC 400A
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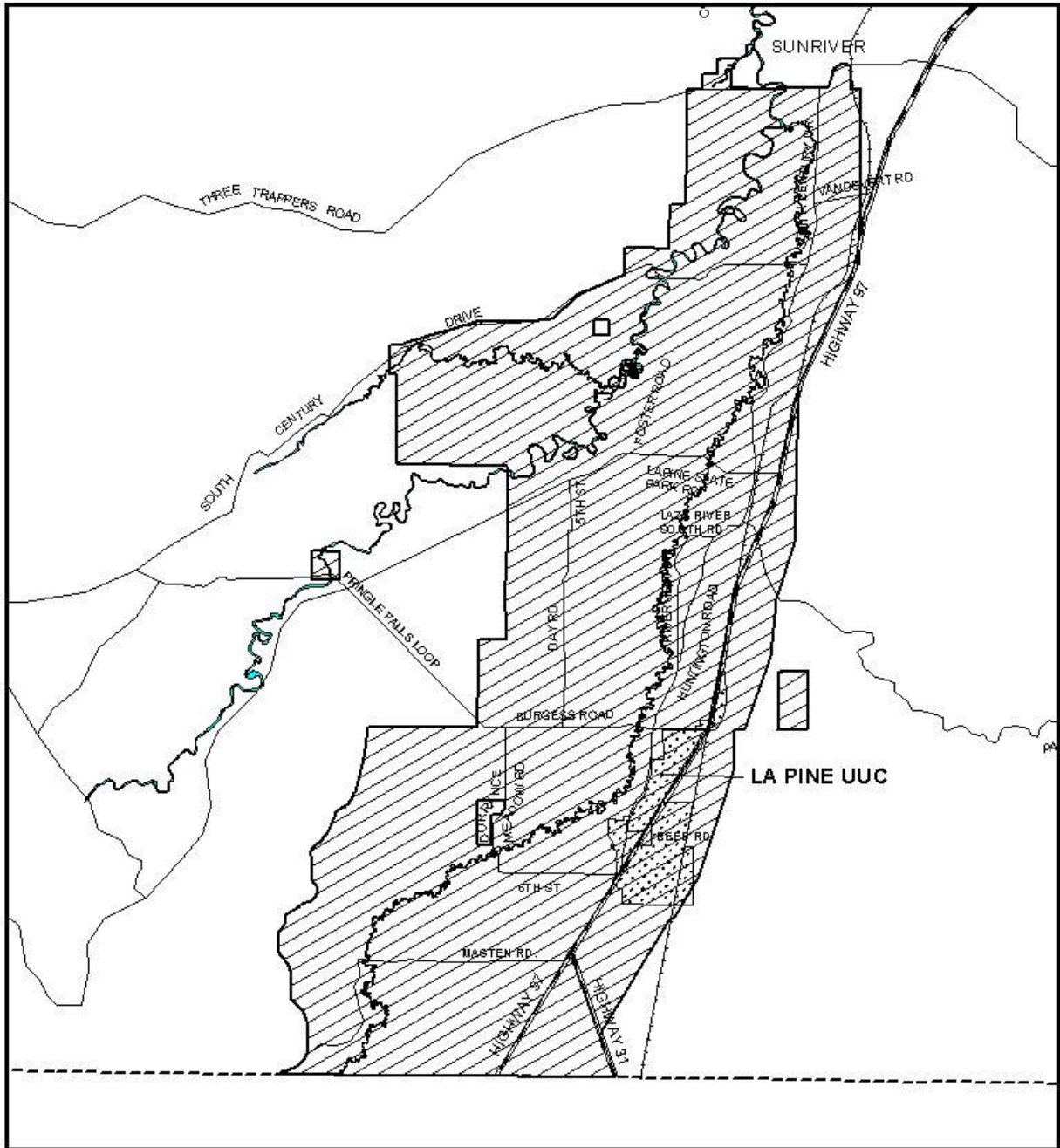
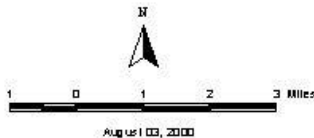


Figure 4
La Pine Rural
Fire Protection District

SYMBOLS

	COUNTY BOUNDARY
	RAILROAD
	HIGHWAY
	LITTLE DESCHUTES RIVER
	LA PINE URBAN UNINCORPORATED COMMUNITY
	LA PINE RURAL FIRE PROTECTION DISTRICT



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PLANNING AND COMMUNITY DEVELOPMENT COMPLIANCE SECTION

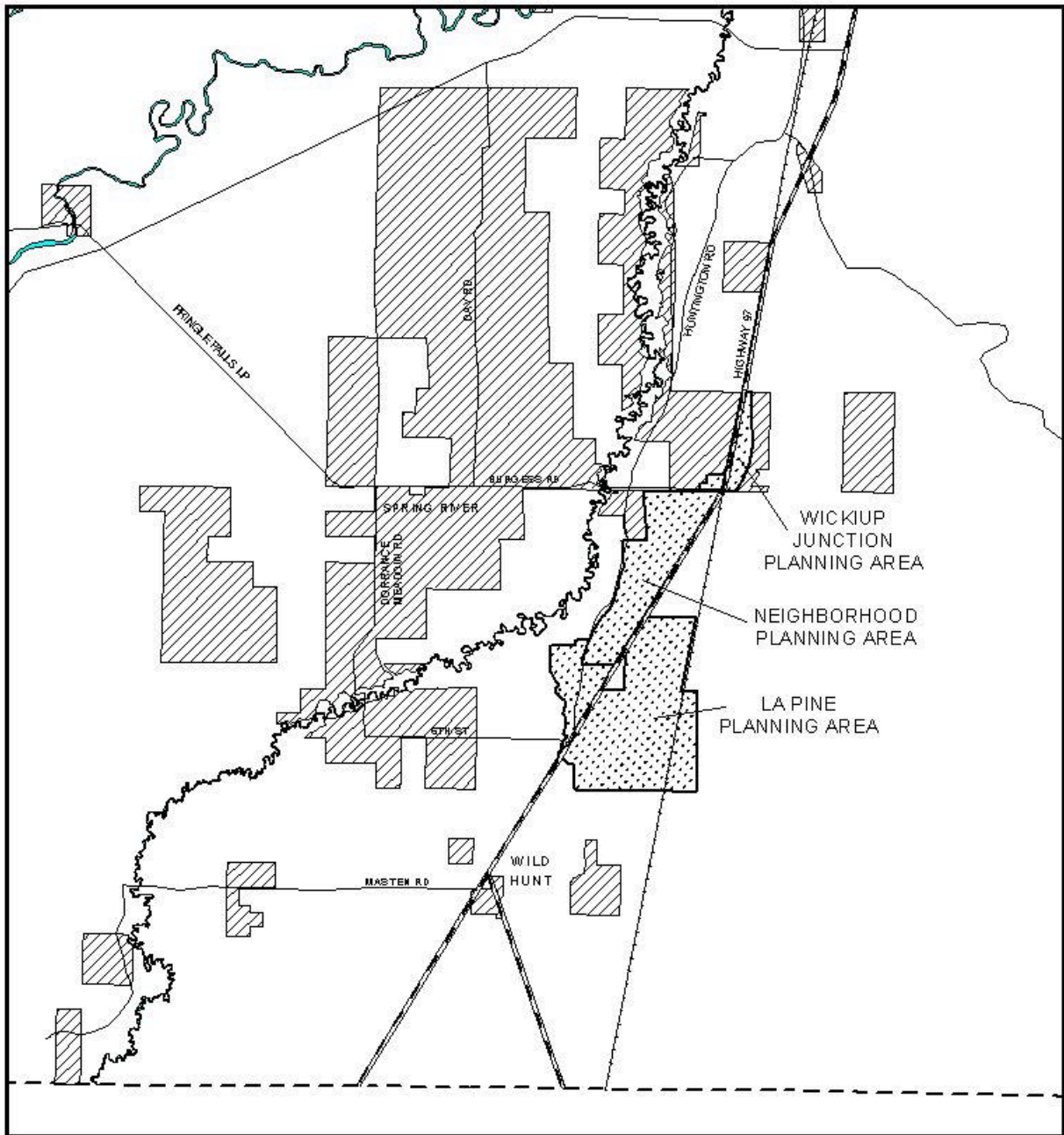
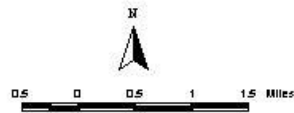


Figure 5
Rural Residential Area
Surrounding La Pine UUC

SYMBOLS

	COUNTY BOUNDARY
	MAJOR ROAD
	RAILROAD
	HIGHWAY
	LITTLE DESCHUTES RIVER
	LA PINE UUC
	RR10 ZONE



Deschutes County
 Community Development

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PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

Aug 11 02, 2000

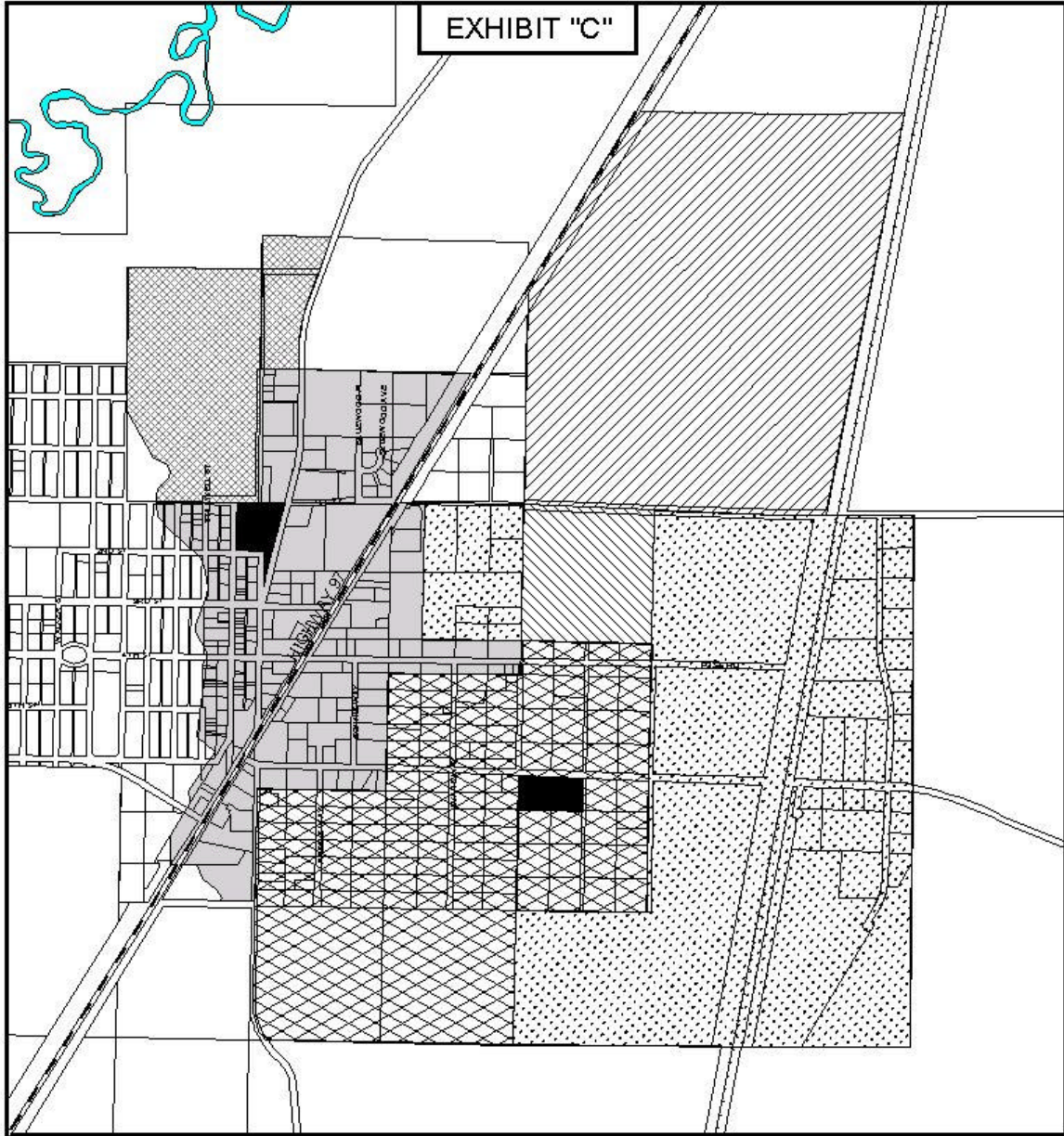


EXHIBIT "C"

SYMBOLS

- RAILROAD
- HIGHWAY
- LITTLE DESCUTES RIVER
- TAXLOTS
- COMPREHENSIVE PLAN DESIGNATIONS
 - COMMUNITY FACILITY
 - COMMERCIAL
 - PARK / OPEN SPACE
 - INDUSTRIAL
 - RESIDENTIAL
 - AGRICULTURE
 - BUSINESS PARK

Figure 6
 La Pine Planning Area
 Comprehensive Plan Designations
 Exhibit "C" To Ordinance No. 2001-046

October 10, 2001



1000 0 1000 Feet



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DESCHUTES COUNTY COMMUNITY DEVELOPMENT



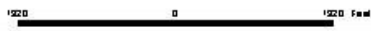
EXHIBIT "D"

SYMBOLS

- RAILROAD
- HIGHWAY
- LITTLE DESCHUTES RIVER
- TAXLOTS
- ZONING DISTRICTS**
- BUSINESS PARK
- COMMUNITY FACILITY
- COMMUNITY FACILITY LIMITED
- COMMERCIAL
- COMMERCIAL OVERLAY
- FLOOD PLAIN
- INDUSTRIAL
- RESIDENTIAL
- SEWER TREATMENT PLANT

Figure 7
La Pine Planning Area
Zoning Districts
 Exhibit "D" To Ordinance No. 2001-046

October 10, 2001



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PLANS 2001-046 COMMUNITY DEVELOPMENT COMPLAINT # 10-01-001

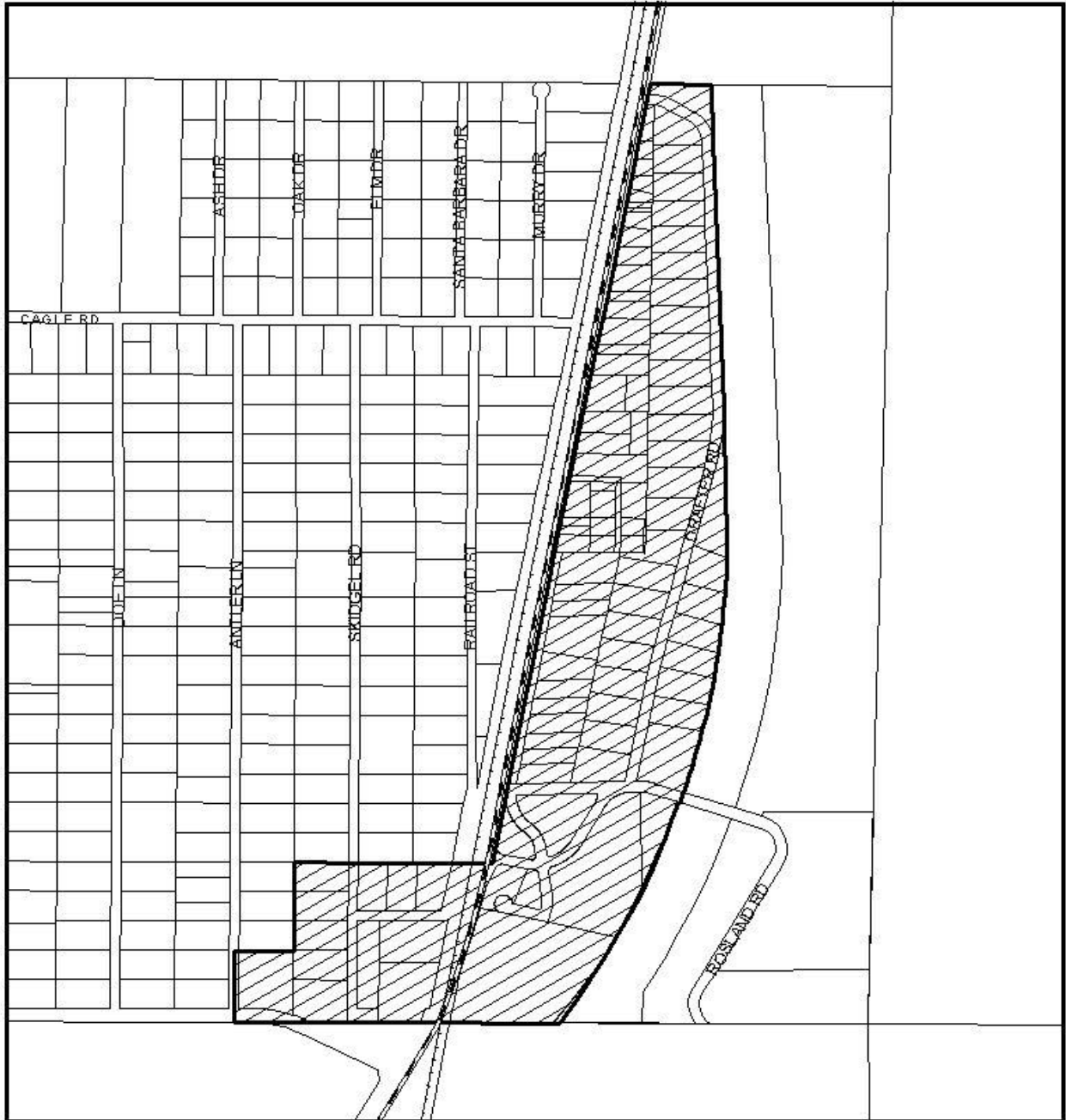


Figure 8
Wickiup Junction Planning Area
Comprehensive Plan Designation & Zoning District

SYMBOLS

	RAILROAD
	HIGHWAY 97
	TAXLOTS
	COMPREHENSIVE PLAN AREA
	ZONING AREA
	COMMERCIAL / RESIDENTIAL



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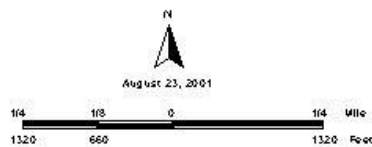
DESCHUTES COUNTY COMMUNITY DEVELOPMENT



Figure 9
Neighborhood Planning Area
Comprehensive Plan Designations

SYMBOLS

- Collector Road Rights-of-way
 - Neighborhood Planning Area Boundary
 - Taxlots
- COMPREHENSIVE PLAN DESIGNATIONS**
- COMMERCIAL
 - COMMUNITY FACILITY
 - RESIDENTIAL
 - PARK/OPEN SPACE



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VICDOT TRANSPORTATION REVIEW PROJECTS



SYMBOLS

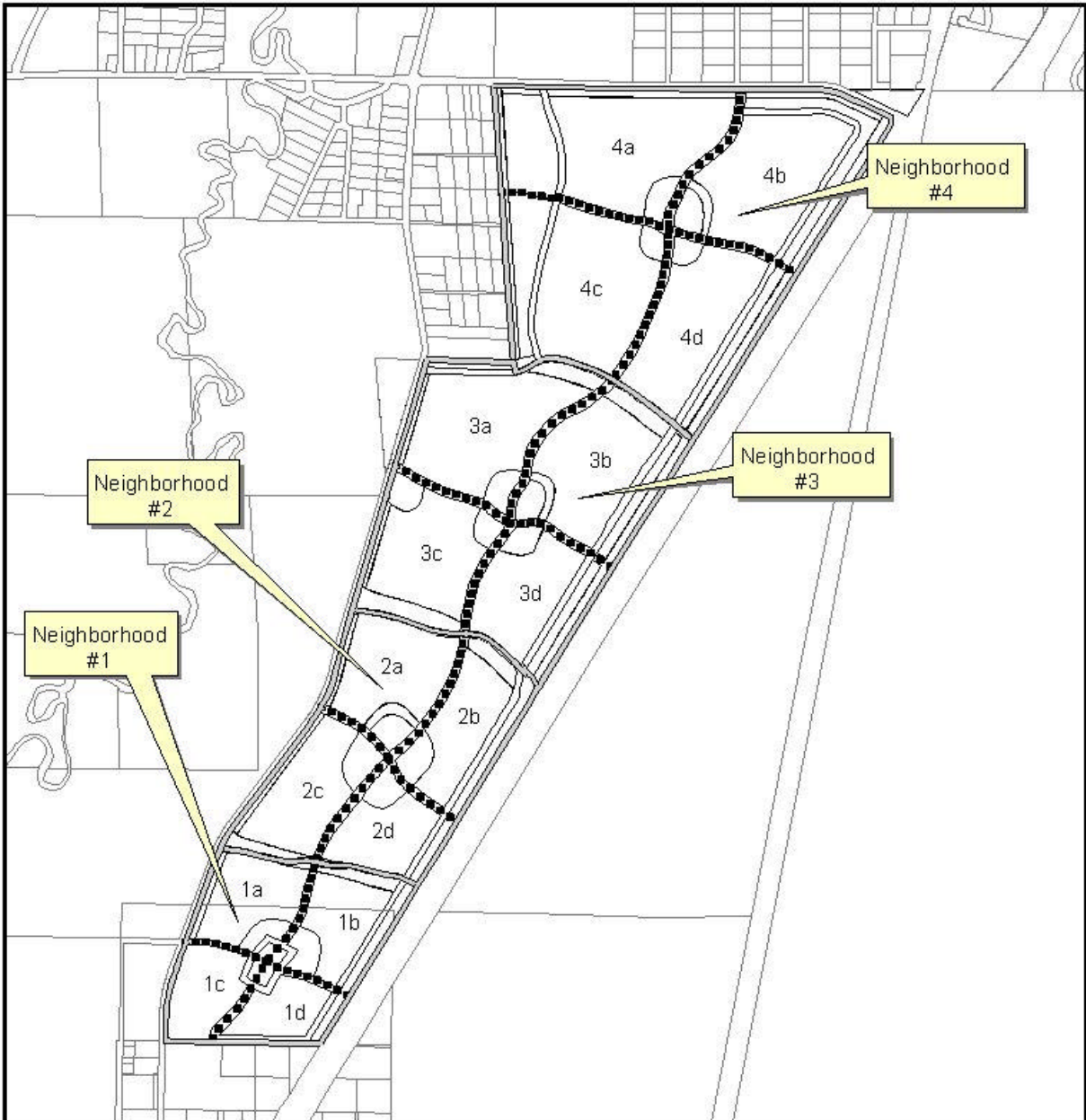
- Collector Road Rights-of-way
 - Neighborhood Planning Area Boundary
 - Taxlots
- ZONING DISTRICTS**
- Community Facility Limited
 - Community Facility
 - Neighborhood Commercial
 - Neighborhood Park
 - Residential Center
 - Residential General
 - Open Space

Figure 10
Neighborhood Planning Area
Zoning Districts




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VIC/ODD TRANSPORTATION/ARCHIVE/PROJECTS



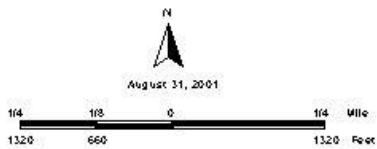
SYMBOLS

-  Collector Road Rights-of-way
-  Neighborhood Boundary
-  Quadrant Boundaries
-  Taxlots

**Figure 11
Neighborhood Planning Area
Quadrant Plan**



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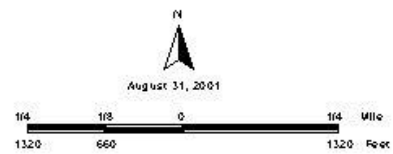
VICOR TRANSPORTATION ARCHIVE PROJECTS



SYMBOLS

- LA PINE PLANNING AREA
- URBAN COLLECTOR
- COMMERCIAL LOCAL
- RESIDENTIAL LOCAL (>250 ADT)
- RESIDENTIAL LOCAL (<250 ADT)
- RURAL COLLECTOR
- LA PINE PLANNING AREA BOUNDARY
- Railroad
- Taxlots
- River

Figure 12
La Pine Planning Area
Transportation Plan
Road Functional Class



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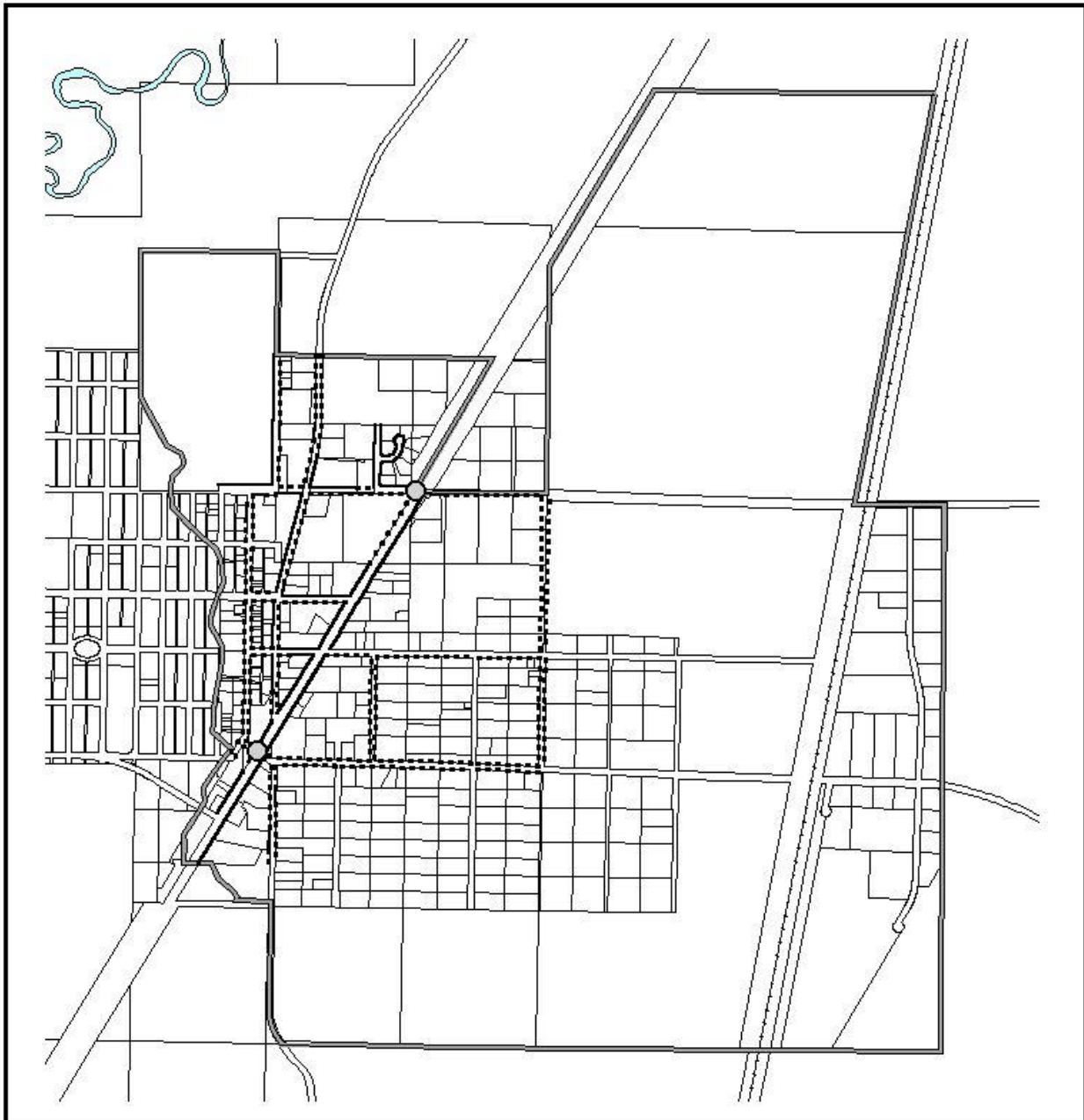
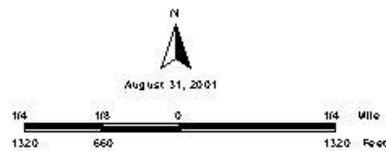


Figure 13

**La Pine Planning Area
Transportation Plan
Bicycle and Pedestrian Facilities**

SYMBOLS

- LA PINE NON-MOTORIZED PLAN
- EXISTING SIDEWALKS
- PLANNED SIDEWALKS
- LA PINE PLANNING AREA BOUNDARY
- Railroad
- Taxlots
- River
- POSSIBLE TRAFFIC SIGNAL LOCATION



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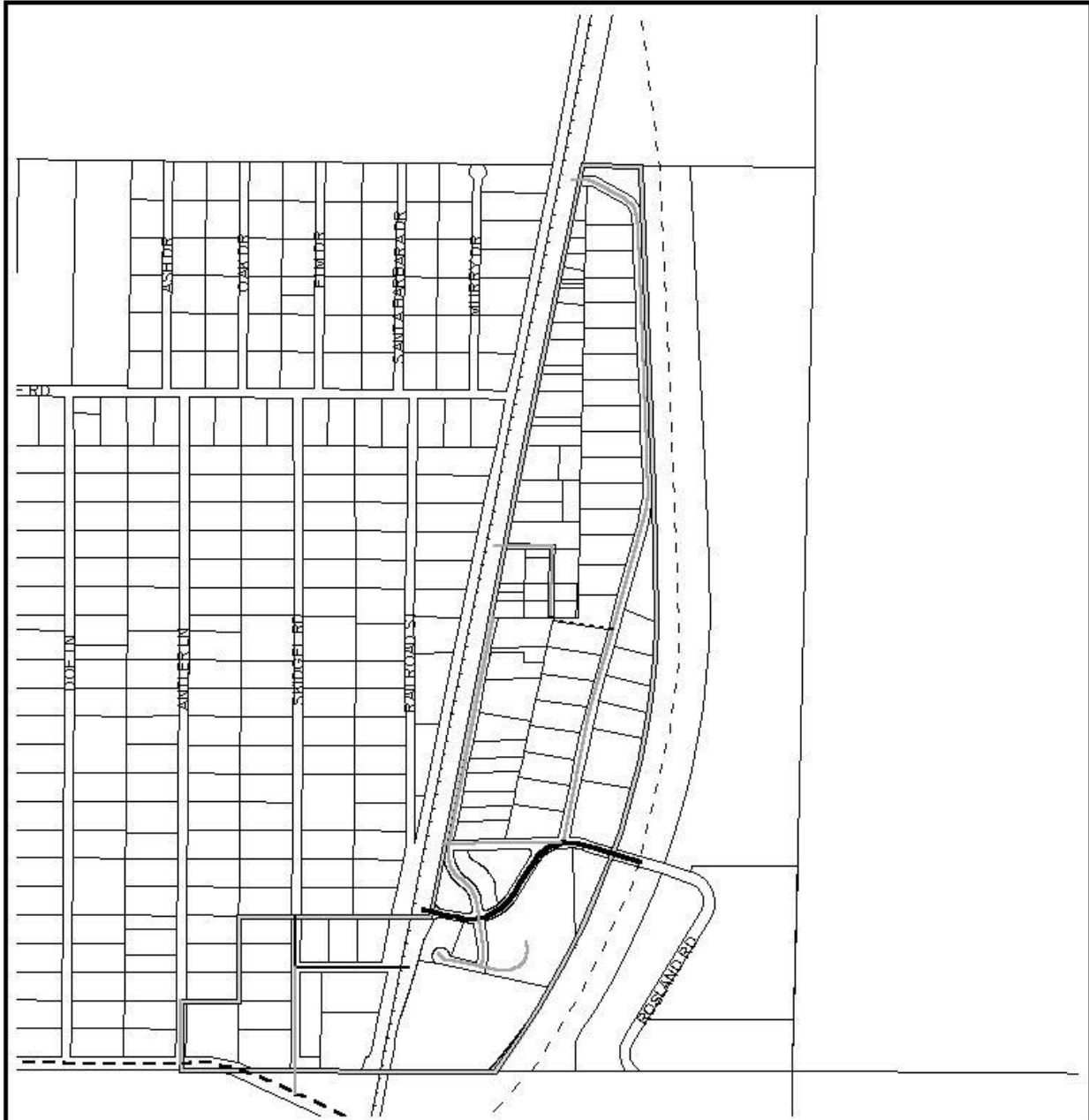


Figure 14

**Wickiup Jct. Planning Area
Transportation Plan
Road Functional Class**

SYMBOLS

- WICKIUP JUNCTION PLANNING AREA
- URBAN COLLECTOR
- COMMERCIAL LOCAL
- CONCEPTUAL HIGHWAY ALIGNMENT
- RURAL ARTERIAL
- RESIDENTIAL LOCAL
- FUTURE LOCAL
- WICKIUP JUNCTION PLANNING AREA BOUNDARY
- Railroad
- Taxlots
- River



August 31, 2001



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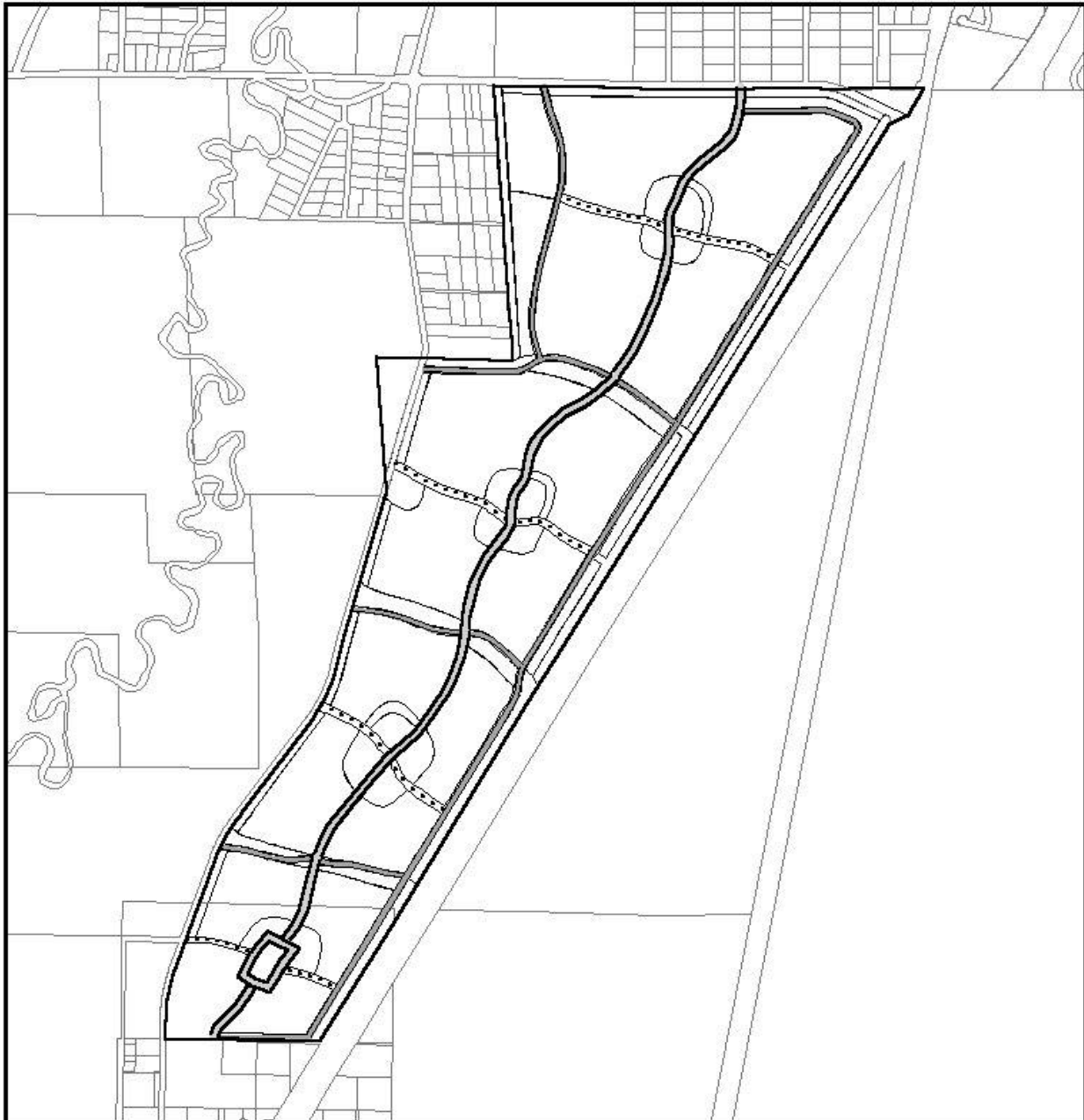







Figure 15
Neighborhood Planning Area
Street Plan

SYMBOLS

-  Neighborhood Planning Area Boundary
-  Central Collector
-  Perimeter Collector
-  Neighborhood Collector
-  Taxlots



August 31, 2001



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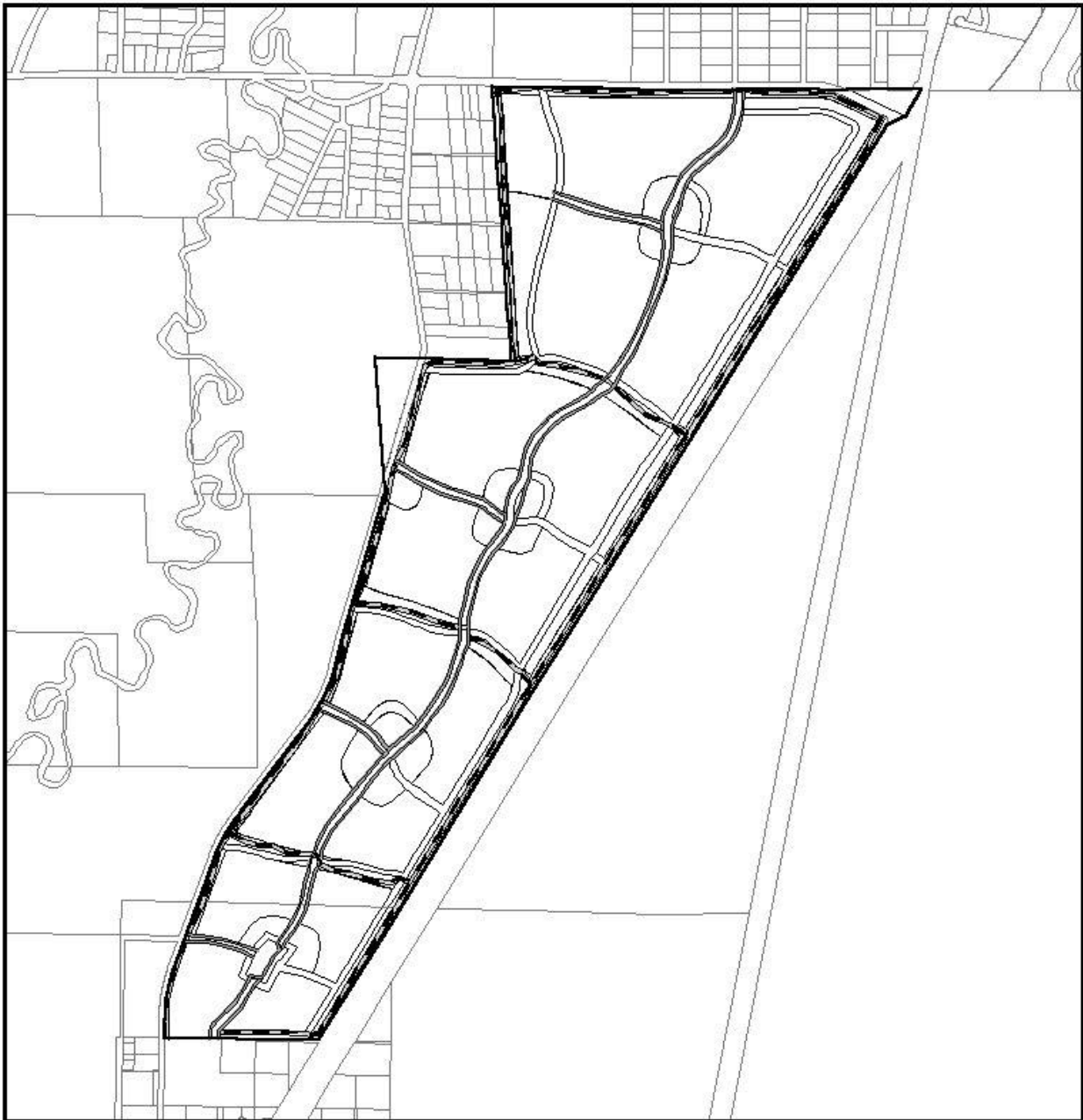





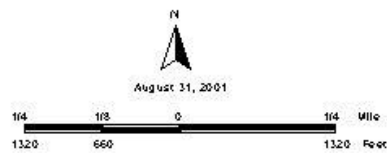


Figure 16
Neighborhood Planning Area
Non-Motorized Plan

SYMBOLS

	Collector Road Rights-of-way
	Neighborhood Planning Area Boundary
	Paved Path
	Unpaved Path
	Tax lots



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VICEDOT TRANSPORTATION/SCAPEVIEW PROJECTS

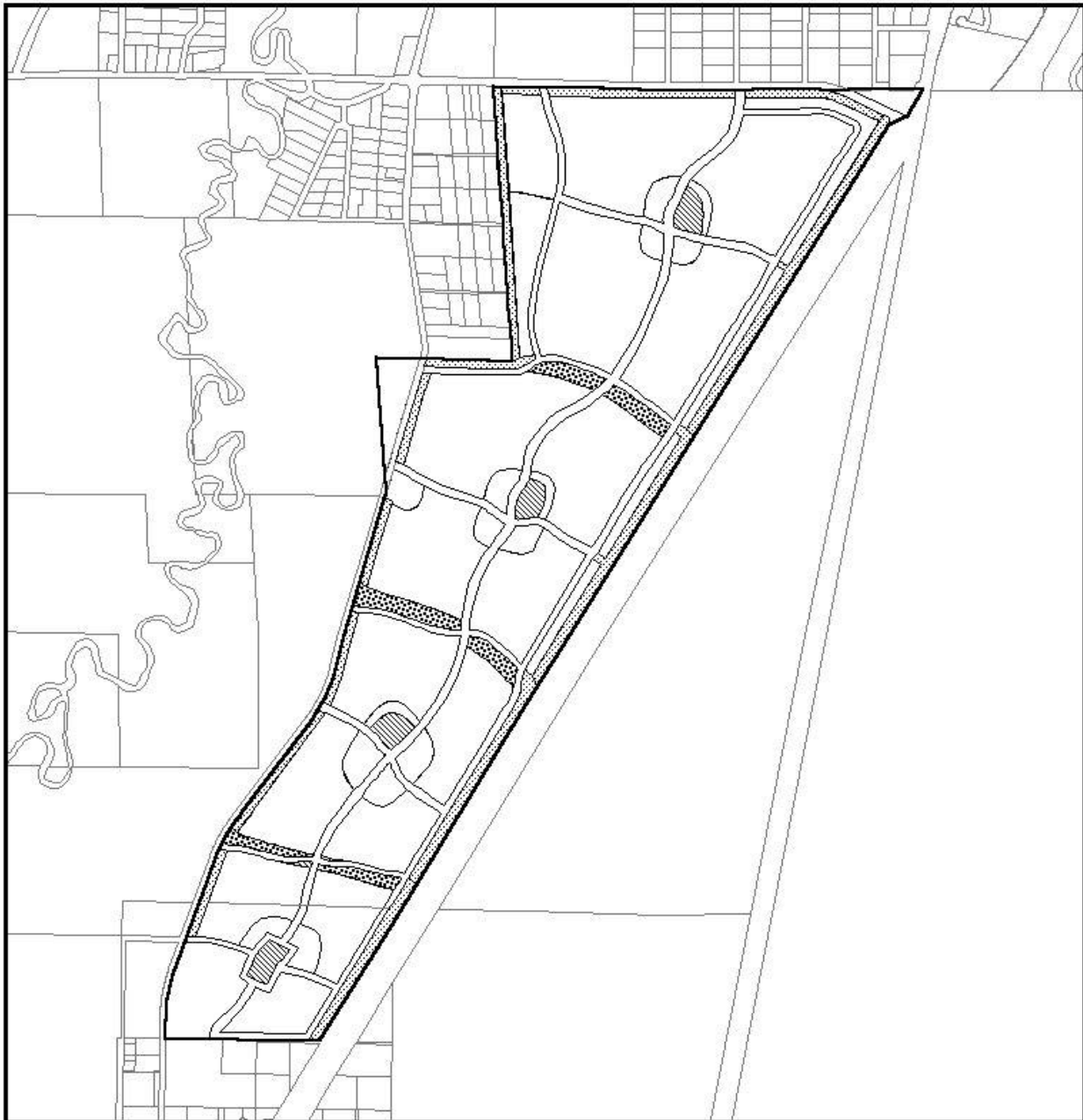


Figure 17

**Neighborhood Planning Area
Parks and Open Space Plan**

SYMBOLS

	Collector Road Rights-of-way
	Neighborhood Planning Area Boundary
	Neighborhood Part
	Perimeter Open Space
	Corridor Open Space
	Taxlots

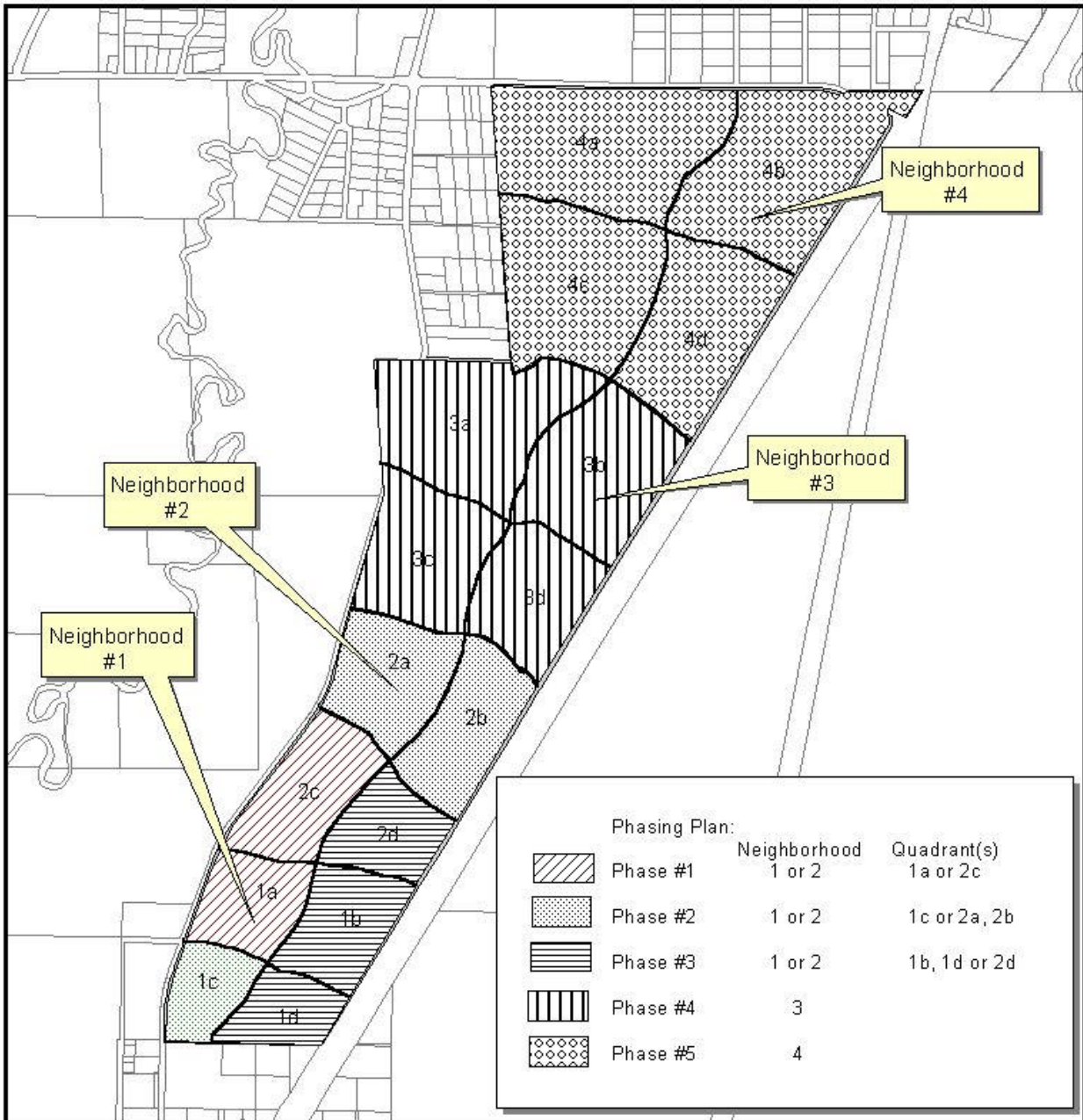


August 31, 2001



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VLCD007 TRANSPORTATION/ARCVIEW PROJECTS



**Figure 18
Neighborhood Planning Area
Phasing Plan**

SYMBOLS

**Deschutes County
Community Development**
Progress Through Partnership

DESCHUTES COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
1100 NE 2nd Street, Suite 100, Bend, Oregon 97701
503.325.7300
www.deschutescountycd.com

VIC DOT TRANSPORTATION/VIEW PROJECTS

August 31, 2001





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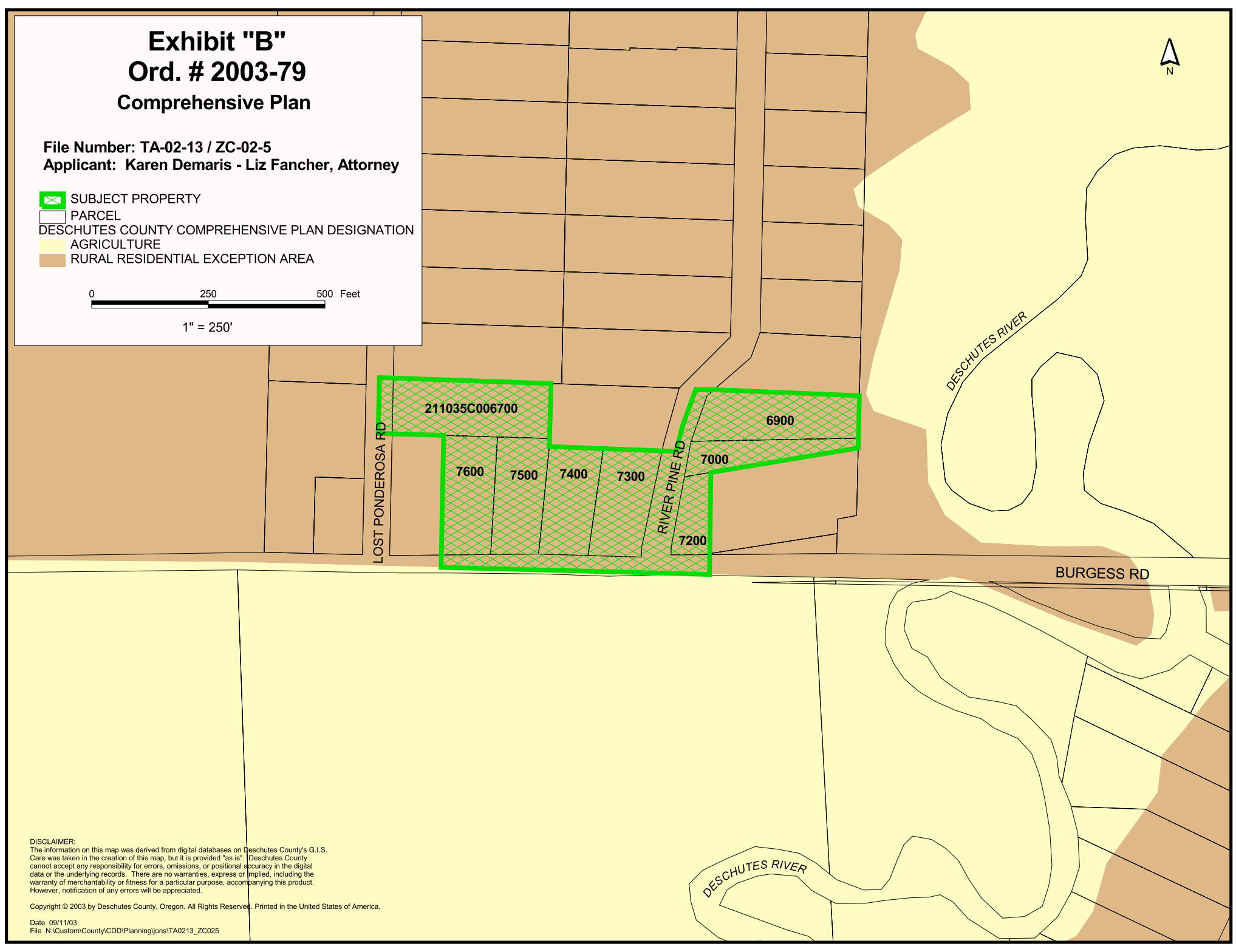
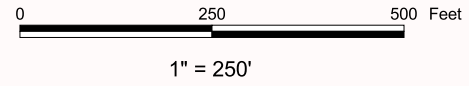
Exhibit "B"

Ord. # 2003-79

Comprehensive Plan

File Number: TA-02-13 / ZC-02-5
Applicant: Karen Demaris - Liz Fancher, Attorney

-  SUBJECT PROPERTY
-  PARCEL
-  DESCHUTES COUNTY COMPREHENSIVE PLAN DESIGNATION
AGRICULTURE
-  RURAL RESIDENTIAL EXCEPTION AREA



DISCLAIMER:
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Date: 09/11/03
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Chapter 23.44. Regional Problem Solving for South Deschutes County

23.44.010. Regional problem solving for South Deschutes County.

23.44.020. Goals.

23.44.030. Strategies.

23.44.040. Map.

23.44.010. Regional problem solving for south Deschutes County.

A. Overview.

In the 1960's and early 1970's, before statewide planning occurred in Oregon, over 15,000 lots were created in subdivisions platted south of Sunriver. Most of these parcels are less than two acres in size and use on-site septic systems to dispose of sewage. Many of them are located in areas where development is now restricted, such as floodplains, wetlands and areas with a high groundwater table where septic approval is unlikely.

Since 1989, Deschutes County has been the fastest growing county in the state on a percentage basis. The rural character, attractive location on or near the Deschutes and Little Deschutes Rivers, and relatively inexpensive land prices in South Deschutes County have led to a burgeoning population. The current estimated population of up to 16,000 residents (over 10,000 permanent) would make this area the second largest city in Oregon east of the Cascades were it incorporated, exceeded only by the city of Bend. Impacts to groundwater, the source of drinking water in this area, air quality, wetlands and mule deer migration and the risks to human life and property from wildfires have increased significantly over time.

In 1996, Deschutes County and the Department of Land Conservation and Development recognized that significant consequences could occur from the pattern of development and began a collaborative project known as Regional Problem Solving Project for South Deschutes County. The Regional Problem Solving (RPS) project area encompasses approximately 42 square miles between Sunriver to the north and La Pine to the south, and includes thousands of small-subdivided lots, and some larger parcels, throughout southern Deschutes County. The attached map identifies Study Areas 1, 2 and 3 within the project area.

The RPS project area is a landscape with a geologic history that produced sediments of volcanic origin that were deposited in a basin over past eons. These conditions are the result of lava flows from the west (Cascades) and east (Newberry) that periodically dammed and shifted the course of the Deschutes River, creating the La Pine Basin, where the deposition of sediments has occurred, sometimes burying older forests. Volcanic eruptions such as the one at Mt. Mazama (Crater Lake) approximately 6,800 years ago have contributed significantly to the volume of sediment deposited in the basin. The Mt. Mazama eruption is the source of volcanic material that has formed the predominant soil in the area.

At an elevation of 4200 feet, the climate in the region is one of cool nighttime temperatures with a short frost-free summer that averages less than 100 days annually and a winter period of five or six months where snow can reside on the ground at any time. The rivers receive significant input from cool spring fed waters. The groundwater is mostly derived from snowmelt in the high Cascades to the west, and is also relatively cool.

The development of thousands of small lots in the RPS project area is therefore superimposed upon highly permeable, rapidly draining soils and a high groundwater table with relatively cold-water temperatures. The overwhelming majority of the lots are served by on-site sewage disposal systems (septic systems), including standard drain fields, cap and fill systems, and more recently sand-filter systems. Nitrates, a by-product of septic systems and an indicator of human pathogens, are poorly retained in the fast draining soils and do not easily break down due to the cool groundwater temperature.

As a result, loading of nitrates occurs in the shallow groundwater aquifer that underlies this region. The presence of a high level of nitrates is of great concern because this same aquifer is the source of drinking water for the residents in the area.

A recent US Geological Survey study of groundwater in Central Oregon concludes that groundwater in the area is connected to nearby surface waters, including the Deschutes and Little Deschutes Rivers. Through the sampling of numerous wells in the RPS project area the Oregon Department of Environmental Quality (DEQ) is predicting that nitrate in the groundwater will approach unsafe levels, principally as a result of the cumulative effect of sewage disposal with on-site septic systems, in the near future. Levels of nitrate are elevated in several localized areas within the RPS project area. However the majority of wells show very low nitrate levels at this time and surface water contamination has not been documented.

Due to the existing pattern and density of development DEQ is predicting that nitrate levels will continue to increase over time, even if measures were taken now to alter the development pattern in the RPS project area. If measures are delayed much longer, the consequences could become more serious, possibly resulting in unsafe levels of nitrates in groundwater and drinking water.

More definitive information is expected to be available in the next few years, regarding the timing of nitrate movement in groundwater and the overall impact of nitrate from septic systems to groundwater and possible surface water pollution. The DEQ and Deschutes County will complete additional groundwater investigations and testing of innovative sewage treatment and disposal systems to reduce the impact on groundwater from nitrogen in household sewage, with grants from the US Environmental Protection Agency. The results from these studies will not be known for several years. Studying different approaches to on-site sewage treatment and disposal may lead to affordable technological advances that can be applied to new and possibly existing systems. In the meantime, the region will continue to grow and nitrate loading from on-site systems will continue to increase.

Some measures may need to be implemented in the future to address groundwater pollution and other impacts that could result from the development of the thousands of small size subdivided lots in South Deschutes County. The creation of a new neighborhood between La Pine and Wickiup Junction as an alternative to building fewer houses on the remaining vacant small lots appears to hold much promise. A market-driven transferable development credits program could assist in the redirection of growth from the existing subdivisions into this new neighborhood.

A development standard or sewage disposal rule that requires an effective lot area of 1.5 acres for new dwellings served by an on-site septic system may need to be considered. The acreage requirement would need to be based on the long-term balance between nitrate loading from septic systems and dilution from precipitation that infiltrates the land. An effective lot area should include contiguous or non-contiguous vacant land within a specified distance from the proposed building site.

For these reasons, Deschutes County has determined that it is appropriate to adopt comprehensive plan goals and policies to recognize the importance in protecting groundwater and other resources and the need to continue to work on the Regional Problem Solving project for South Deschutes County.

B. Nitrates - Health and groundwater impacts; septic system impacts and studies.

High levels of nitrates in drinking water are a cause of methemoglobinemia (blue baby syndrome) in infants and have been linked to cancer and weakening of immune system in the elderly. Recent epidemiologic studies indicate that chronic long-term exposure to low levels (2.5 mg/L) of nitrates can increase the risks for certain types of cancers. Nitrate levels are often used as an indicator for the transmission capabilities of other pathogenic agents. Surface waters are very sensitive to eutrophication by the addition of nutrients; nitrate is an indicator of nutrient loading.

A natural background level of nitrates would be less than 1 mg/L. The Environmental Protection Agency (EPA) has set the safe water drinking standard (Maximum Contaminant Level or MCL) for nitrate at 10 mg/L. The DEQ is required to declare a region a Groundwater Management Area if nitrate concentration reaches 7 mg/L. This would require a plan to protect and restore groundwater quality. Deschutes County Planning and Environmental Health are only slightly ahead by starting and developing their plans proactively.

On-site septic systems are the only significant source of nitrates in the La Pine sub-basin. The La Pine sub-basin has many conditions that allow for little denitrification of wastewater to occur: rapidly draining soil, shallow, well oxygenated groundwater, very short growing season, cold temperature, not much hydraulic gradient. Most of the development has taken place in the very bottom of the sub-basin over shallow groundwater and on small lots served by wells from an unconfined aquifer.

In 1980-81 contamination of the aquifer from septic systems had already occurred in the La Pine core area as of 1980-81 (La Pine Aquifer Management Plan, Century West, 1982). A community sewer system was required to remedy the situation. A 1995 well monitoring study by DEQ showed that after 11 years of sewer, the nitrate levels in the La Pine core area had receded but were still at "unsafe levels." This is an indication that the recovery time for the aquifer is lengthy.

The 1995 monitoring study also revealed the existence of five areas in the RPS project area, not including the core area of La Pine, where nitrate levels are greater than usual background levels. Nitrate levels are as high as 4.8 to 5.9 mg/L in three of these areas and as high as 3 mg/L in the other two.

The 1995 monitoring study was part of a modeling effort by the DEQ to estimate the impact of septic systems on the groundwater. The initial results of the model indicate that at existing (1994) development the aquifer would reach nitrate levels of 7 mg/l by 2005. Since the collection of samples in 1994 there are approximately 700 additional residences in the RPS project area using on-site septic systems. The model is limited because it is two-dimensional and does not account for flow in or out of its boundaries.

A grant from the US Environmental Protection Agency will allow significant work to begin in 1999 to help with a solution to the problem of high nitrate levels. The primary purpose of the grant is to study new technologies in on-site septic systems. Part of the grant will be used to continue increasing the groundwater monitoring network and complete additional analysis of nitrate movement in the groundwater using a three dimensional model.

The innovative septic system program was started in 1998 through the RPS project and DEQ grant funding and is expected to increase significantly with the new federal grant. The purpose is try new technologies that appear to be capable of reducing nitrate levels. Besides nitrate reduction there are many other aspects of new technology that need to be examined before widespread applications for the general public can occur.

Over the past five years the US Geological Survey (USGS) has developed a groundwater flow model of the entire Upper Deschutes Basin. The model will be used as the basis for an analysis of the impacts of nitrates from on-site systems to help answer the following three questions:

1. Where should additional monitoring wells be set up for continuous monitoring of nitrate plumes from residential development?
2. What density does development need to be set at to minimize impact on groundwater quality?
3. What variations of impact due to location are there in the La Pine sub-basin?

The DEQ rules require a minimum of an acre for standard system and a half-acre for pressure or sand filters in rapidly draining soils. This is a statewide rule and the authors were probably looking at rainfall amount from a typical Willamette Valley year to provide dilution.

Mixing wastewater from a typical single-family residence with the recharge provided by yearly precipitation in Southern Deschutes County, it requires 2.5 acres for a standard system and 1.5 acres for a sand filter to maintain a recharge concentration at or below 7 mg/l. This estimate is on the conservative side because it does not account for inflow, outflow, or upflow from other areas.

Areas such as Fall River Estates, Wild River and Ponderosa Pines do not require as much acreage to achieve an adequate amount of mixing and dilution of nitrates because they are located in areas of higher precipitation at the western edge of the aquifer. Also, the aquifer gradient is steeper resulting in more dilution due to higher groundwater flow rates. La Pine and portions of Oregon Water Wonderland and Stage Stop Meadows subdivisions served by sewer systems are also not contributing to the overall nitrate-loading problem in the region.

C. Legislation.

In October 1998, Congress passed legislation to assist Deschutes County in purchasing a 540-acre tract of land from the Bureau of Land Management. This tract is located between La Pine and Wickiup Junction, west of Highway 97 and east of Huntington Road. A sewer line between the communities of La Pine and Wickiup Junction runs through the property.

This property is intended to be the site of a new neighborhood that will be serviced by sewer and water systems, and paved roads. Residential use will predominate, although community needs such as a senior center, library, assisted living facility and limited neighborhood commercial uses may be developed. A design process known as a “charette” occurred in November 1998. This design workshop occurred over a three-day period with the participation of over 80 people from the community.

The initial design encompasses a neighborhood primarily residential in character with sewer, water and a road network of paved streets and access roads without curbs. A setback of 300 feet from Highway 97 has been incorporated into the eastern boundary of the design. A senior center and assisted living facilities are included in the southern part of the property adjacent to the community of La Pine. This preliminary design will be evaluated to determine lot sizes and density, development costs, phasing of development and the ability to use transferable development credits as a tool for the overall development of the new neighborhood.

D. Transferable development credits.

A TDC (Transferable Development Credit) Program has been developed to redirect some of the future development of residential dwellings from lots served by on-site sewage disposal (septic) systems to the residentially zoned districts in the Neighborhood Planning Area in the La Pine UUC that will be connected to water and sewer systems.

A TDC is a severable interest in real property that represents the right to construct a single-family dwelling and an on-site sewage disposal system. The TDC program code has been adopted in compliance with the provisions of ORS 94.531.

The essential elements of the TDC program are to be codified in DCC Title 11, County Owned Land and Property, of the County Code. The TDC program is intended to redirect some of the future residential growth from existing subdivisions in South Deschutes County, also identified as the “sending

area” where TDC's are allocated to eligible lots, into the Neighborhood Planning Area, also referred to as the “receiving area” where TDC's are required to be redeemed based on a net developable acreage formula. If successful the TDC program will reduce the overall impact from development in flood plains, wetlands, deer migration corridors and areas susceptible to groundwater pollution from nitrates. It will also help to maintain open space and preserve the rural character of the area by reducing the overall density of development that would otherwise exist in the future if a dwelling were built on every legal lot. In the sending area the TDC program will operate in a voluntary, market-driven manner. Those property owners who choose to sell their TDC's will retain ownership of the underlying land on which certain uses, such as camping, wood cutting, vegetation management, agricultural use and construction of a small storage structure will be allowed. A Conservation Easement will be placed on the property that will prohibit the construction of a single-family dwelling and on-site sewage disposal system on the property. Property owners who sell their TDC's and enter into a Conservation Easement restricting future uses on their property may elect to sell the deed for the underlying property to a willing buyer.

E. Public participation.

The RPS project has involved all aspects of the community, including property owners, interest groups, public agencies and government at the local, state and federal levels. Over 20 stakeholder meetings and 5 public forums were held. Eight newsletters and other mailings have been sent out to an extensive mailing list of property owners and other interested individuals, community organizations and local governments. The local press has covered this topic with a number of articles and news reports on several occasions.

According to written surveys the top three priorities for the residents of South Deschutes County are: 1) to retain open space to maintain the rural character of the area; 2) to not allow septic systems in areas of high groundwater; and, 3) to allow for experimentation with alternative methods of sewage disposal. Among the least favored options was extending sewer throughout the region due to the high cost associated with this expansion. However, several small sewer systems exist in the region and people commented and testified at public meetings and hearings that the option of using sewer systems to dispose of sewage should continue to be explored.

To ensure that public involvement was as great as possible regarding proposed amendments in 1998 to the comprehensive plan and zoning ordinance, an additional newsletter was mailed that contained a notice of public hearings before the Deschutes County Planning Commission and the Board of County Commissioners. The newsletter also described various aspects of the RPS program, characterized design elements of the new neighborhood as a result of the design charette and encouraged people to attend a community workshop held in early December to learn more about the amendments. This newsletter was mailed to over 5,000 property owners, including the owners of all lots in the RPS project area which are zoned RR-10 and less than 2 acres in size, and the stakeholders, interest groups, agencies, etc., who had previously participated or expressed an interest in the RPS project.

More detailed information about the RPS project including information on nitrates, experimental on-site technology, alternative solutions, transferable development credits and a bibliography of the studies and other sources of information used to analyze the region's problems and to formulate solutions was made available at the hearings.

F. LCDC Acknowledgement.

In September 2000 the Oregon Land Conservation and Development Commission (LCDC) conducted a hearing and approved the County's request to expand the La Pine UUC to include the area formerly recognized as the Wickiup Junction Rural Service Center and the New Neighborhood area. The Neighborhood area includes a tract of land the County purchased from the Bureau of Land Management and a privately owned parcel.

LCDC also approved the County's comprehensive plan designation and rezoning of the area added to the La Pine UUC from resource lands zoned exclusive farm use to various planning districts that allow for the creation of a residential subdivision served by municipal water and sewer systems and paved roads.

(Ord. 2002-009 § 1, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1; 2000; Ord. 98-085 § 1; 1998)

23.44.020. Goals.

1. To preserve water and air quality, reduce wildfire hazards and protect wildlife habitat.
2. To ensure that domestic water derived from groundwater meets safe drinking water standards.
3. To develop an equitable, market-driven system, that reduces the potential development of existing lots in floodplains, wetlands, mule deer migration corridors and areas susceptible to groundwater pollution.
4. To create a new neighborhood, primarily residential in character, between La Pine and Wickiup Junction, that provides services efficiently, sustains economic development and reduces adverse impacts to groundwater quality in South Deschutes County.
5. To explore innovative sewage treatment and disposal methods.

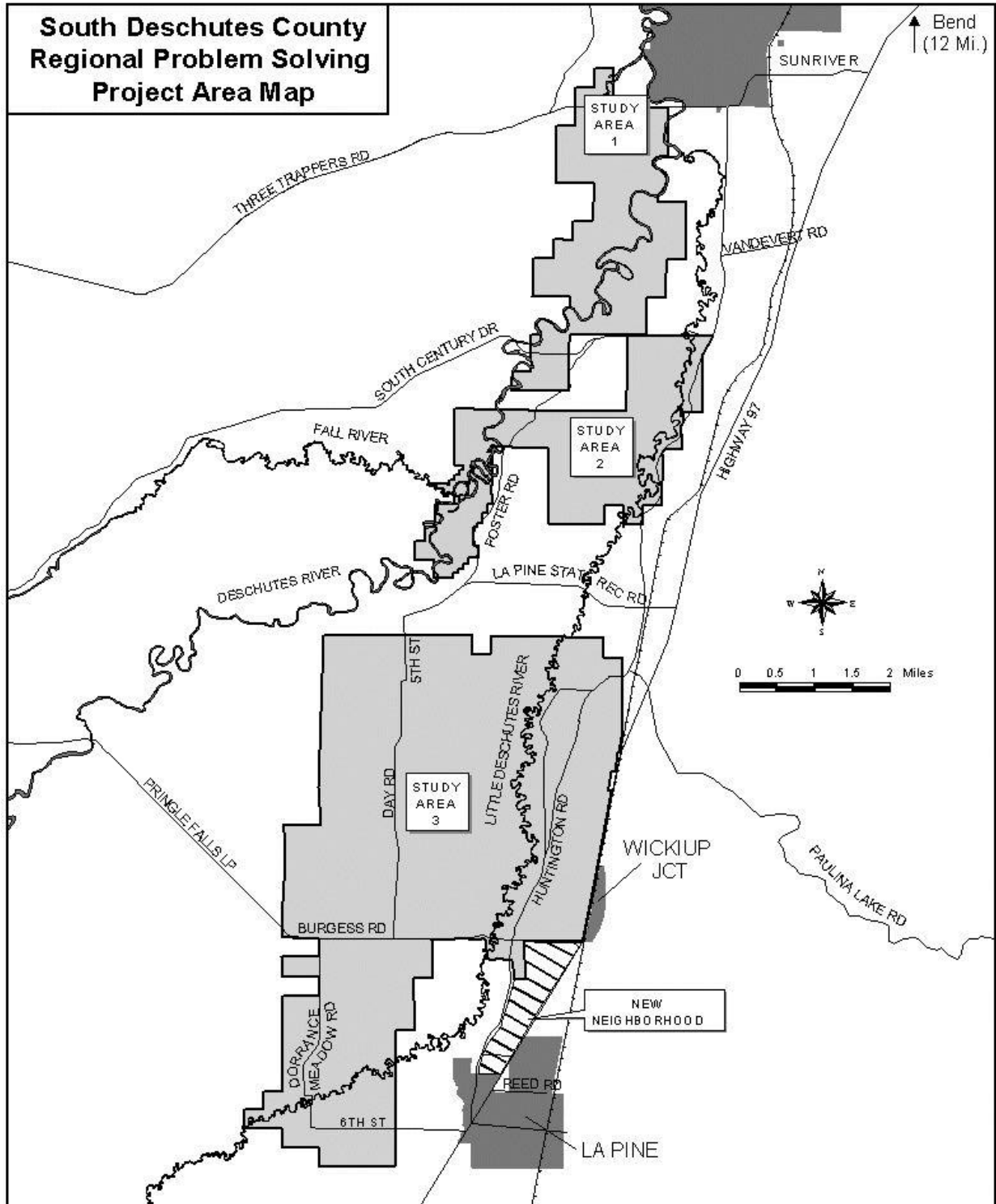
(Ord. 2002-009 § 1, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1; 2000; Ord. 98-085 § 1; 1998)

23.44.030. Strategies.

1. The County shall continue to work with landowners, citizens, community organizations and governmental agencies at the local, state and federal level to:
 - a. Continue collaborative work on the Regional Problem Solving project.
 - b. Develop, review and implement land use policies and development standards that will ensure that agreed-upon solutions from the RPS project are enacted to the maximum extent possible.
 - c. Acquire land from the BLM between La Pine and Wickiup Junction, west of Highway 97, to develop as a new neighborhood.
 - d. Conduct feasibility studies regarding development of a new neighborhood. Such studies may include, but are not limited to: a master design plan, development costs and funding options, water and sewer system feasibility, traffic impacts, and zoning codes and governance issues.
 - e. Install and monitor innovative on-site sewage treatment and disposal (septic) systems on privately owned parcels in the RPS project area as part of the La Pine National Decentralized Wastewater Treatment Demonstration Project funded by the U.S. Environmental Protection Agency and in cooperation with the Oregon Department of Environmental Quality.
 - f. Work cooperatively with the U.S. Geological Survey and Oregon Water Resources Department during well water sampling and analysis to advance three-dimensional groundwater and nutrient fate and transport modeling in the south Deschutes County area.
2. The County shall implement and monitor in accordance with DCC 23.44.030(D), a Transferable Development Credit program as a means to redirect potential growth away from residential lots in subdivisions throughout the region into the La Pine Neighborhood Planning Area. The County shall establish a TDC Review Committee to assist in analyzing and recommending any changes deemed appropriate to the TDC program.
3. The County shall continue to evaluate means to reduce nitrate loading from on-site sewage disposal systems by exploring innovative on-site sewage treatment and disposal technology, retrofitting of existing substandard or inappropriately located disposal systems, expansion of sewer systems, development of standards such as an effective lot area or variable lot area requirements, or other measures that will accomplish the goals.
4. New residential subdivisions and partitions in the La Pine Urban Unincorporated Community shall be connected to a community water system and either the La Pine Special Sewer District sewage treatment system or a community waste water treatment facility that meets Oregon Department of Environmental Quality standards.

(Ord. 2002-009 § 1, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1; 2000; Ord. 98-085 § 1; 1998)

23.44.040. Maps.



Chapter 23.48. URBANIZATION

23.48.010. Urbanization.

23.48.020. Goals.

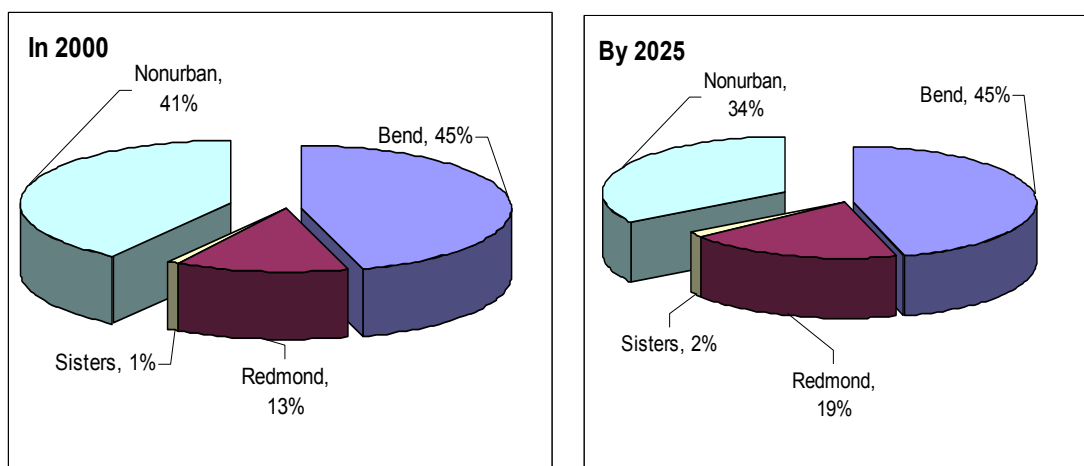
23.48.030. Policies.

23.48.010. Urbanization.

A major emphasis in Oregon's land use planning is locating the majority of new development in urban areas. The rural areas are primarily to be protected for natural resource utilization. Between the urban areas (incorporated cities) and the rural areas lies what is referred to as the urbanizing area. Usually under the jurisdiction of the County, this is the area where the future population will be located and where the city's services must be extended.

In Deschutes County the three incorporated cities have been given the authority, by the County, to prepare plans for their respective urban areas. These plans are coordinated with the County's planning effort and will eventually be adopted as part of the County's comprehensive plan. In addition to a plan each city also prepares an urban area zoning ordinance and a cooperative agreement for mutually administering the urbanizing area.

All three incorporated cities were growing at rapid rates by the time the Deschutes County Year 2000 Comprehensive Plan was adopted in 1979. At that time, the County estimated Bend's urban area contained a population of 33,000 people, Redmond's was approximately 7,500, and Sisters' approximately 900. All of the cities were expected to continue their growth to the year 2000. The 2000 Census results for Bend, Redmond, and Sisters were 52,029, 13,481, and 959, respectively. In 2000, 58 percent of the County's population lived in urban areas. By the year 2025, the County's population is forecasted to reach 240,811 people. This forecast includes 109,389 people in Bend, 45,724 people in Redmond, and 3,747 people in Sisters. If population growth occurs as forecasted, 66 percent of the County's population will reside in urban areas by 2025.



Such growth will undoubtedly create severe problems for the provision of public services and adequate amounts of residential, commercial and industrial lands. Other problems are the protection of important aesthetic values, needed improvements in appearance and function of existing developments, safety and aesthetic problems, as well as energy and service costs, created by strip development; and problems with

coordination and cooperation between the various agencies serving the public in urban areas, a problem which already exists.

Some opportunities also exist. Cities in Deschutes County are located in one of the most beautiful and livable environments in the State. All of the communities have within their authority the power to guide their community's growth for the public's benefit. Cooperation and mutual effort between the cities, special districts and the County could mean urban environments that not only function efficiently but are attractive and desirable places to live.

The purposes of DCC 23.48 are to provide the link between the urban and rural areas, and to provide some basic parameters within which the urban areas of Deschutes County shall develop, although the specific urban area plan for each community shall be the prevailing document for guiding growth in its respective area. These policies will permit the County to review each urban area plan against common criteria and assure consistency County-wide.

(Ord. 2004-012 § 4, 2004; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

23.48.020. Goals.

1. To provide for an orderly and efficient transition from rural to urban lands.
2. To assure that planning and implementation of plans in the urban areas are consistent with the best interest of both urban and urbanizing area residents.
3. To retain and enhance the character and quality of the urban areas as growth occurs. To recognize and respect the unusual natural beauty and character of the area.
4. To provide a sound basis for urbanization by establishing proper relationships between residential, commercial, industrial and open land uses; fostering intergovernmental cooperation; and providing an efficient transportation system.
5. To retain and enhance desirable existing areas and to revitalize, rehabilitate and redevelop less desirable existing areas; to encourage and promote innovations in development techniques in order to obtain maximum livability and excellence in planning and design for development.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

23.48.030. Policies.

1. Urban boundaries. Urbanization policies refer to urban areas and are intended to assist in the decision making about the conversion of rural to urban uses, and to help in the development of consistent urban area plan. More detailed policies for the urban areas of Bend, Redmond and Sisters are specified in the urban area plans and they shall be the primary documents for coordination and land use decisions in their respective areas.
 - a. Urban growth boundaries identify and separate urbanizable land from rural land. Conversion of urbanizable land to urban uses shall be based on consideration of:
 1. Orderly and economic provision for public facilities and services;
 2. Availability of sufficient land for the various uses to insure choices in the marketplace; and
 3. Encouragement of development within urban areas before conversion of urbanizable areas.
 - b. Urban growth boundaries shall be established or expanded based upon the following:
 1. Demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC goals;
 2. Need for housing, employment opportunities and livability;
 3. Orderly and economic provision for public facilities and services;
 4. Maximum efficiency of land uses within and on the fringe of the existing urban area;
 5. Environmental, energy, economic and social consequences;
 6. Retention of agricultural land as defined, with Class I being the highest priority for retention and Class VI the lowest priority; and,

7. Compatibility of the proposed urban uses with nearby agricultural activities.
2. Coordination.
 - a. Within an urban growth boundary City and County land use regulations and standards shall be mutually supportive, jointly proposed and adopted, administered and enforced, and plans to integrate the type, timing and location of development of public facilities and services in a manner to accommodate demand as urbanizable lands become more urbanized, and to guide the community's growth.
 - b. Urban development shall be permitted in areas where services are available or can be provided in a manner which will minimize costs related to necessary urban services such as schools, parks, highways, police, garbage disposal, fire protection, libraries and other facilities and services.
3. Residential development.
 - a. Residential developments should be located so that they are convenient to places of employment and shopping facilities, and they should be developed in ways which are consistent with the character of the topography and soils on the site. Residential areas should offer a wide variety of housing densities in locations best suited to each.
 - b. Residential densities indicated on general plans should be respected and reflected in City and County codes, ordinances and development policies.
 - c. In residential areas, development should be encouraged which have side yards or rear yards along arterial streets as a means of reducing congestion through turning movements in and out of driveways.
 - d. Higher density residential areas should be concentrated near commercial services and public open space.
4. Commercial.
 - a. Commercial facilities should be allocated in a reasonable amount and in a planned relationship to the people they will serve. Any future expansion of commercial uses should be developed as centers rather than strips and very carefully considered so that they do not cause unnecessary traffic congestion and do not detract from the appearance of the community.
 - b. Neighborhood commercial shopping areas, parks, school and public uses may be located within residential districts and should have development standards which recognize the residential area. Development standards should be established for those commercial uses which will provide off-street parking, landscaping, access control, sign regulations and design review.
 - c. Strip commercial developments along highways should not be extended. Commercial uses along major streets and highways shall be subject to special development standards relating to landscaping, setbacks, signs and median strips. No further commercial development outside urban growth boundaries, rural service centers, planned developments, or destination resorts shall be permitted.
 - d. All commercial shopping centers shall be subject to special development standards relating to setbacks, landscaping, physical buffers, screening, access, signs, building heights and design review. Care shall be taken to control the size of any new commercial developments that may be required as growth occurs. Sites shall not be oversized to a point where additional uses which would generate traffic from outside the intended service area are necessary to make the development an economic success.
5. Industrial.
 - a. Community efforts should be directed toward preserving prime industrial lands for industrial purposes. Industrial areas shall be protected from incompatible commercial and residential uses.
 - b. Industrial areas of the community shall be located where necessary services can be provided and with good access to transportation facilities.

- c. Community efforts should be directed toward improving the general appearance of commercial and industrial areas so that they make a positive contribution to the environment of the community.
 - d. Industrial areas shall provide for new industry in a park-like setting.
 - e. All industrial centers shall be subject to special development standards relating to setbacks, landscaping physical buffers, screening, access, signs, building heights and design review.
6. Community appearance.
- a. Because of slow natural growth and their effective use as a visual and noise buffer, and their relationship to air quality, trees or stands of trees shall be protected whenever feasible in industrial, commercial, residential and other urban developments.
 - b. Community appearance shall continue to be a major concern. Landscaping, sign regulations and building design review shall contribute to an improved environment. Major natural features such as rock outcrops, stream banks, canyons, or stands of trees should be preserved as a community asset as the area develops.
 - c. Attempts by each community to identify those characteristics which give the community its individual identity and to preserve and expand those characteristics as growth occurs shall be encouraged by the County.
 - d. Sign regulations shall be adopted which limit the size, location and number of signs in commercial and industrial areas and have amortization provisions to remove existing signs which do not conform with the regulations within a reasonable period of time.
7. Urban transportation.
- a. Expressways and arterial streets should have landscaped median strips wherever possible together with left-turn refuge lanes. Public transportation routes should be encouraged throughout the area and, if necessary, special provisions made in street design to accommodate ways.
 - b. Streets and highways should be located and constructed in a manner which will accommodate both current and future traffic needs. Implementation of arterial and collector road systems should be joint County and City effort with strict time schedules and priorities.
 - c. Interurban transportation facilities should be located in or near the central business district or main highway. Special consideration will be needed to evaluate public transportation needs and possibilities within the urban area.
 - d. Except for major arterial and collector streets, street patterns in residential areas should be designed to provide convenient access to each living unit but not encourage through-traffic. Major and collector streets should be secured and developed under a strict time frame so that a reasonable circulation pattern will result.
 - e. Provisions should be considered which will permit mass transit vehicles on arterial and collector streets within residential areas in the future.
8. Facilities and services.
- a. Efforts should be made over a sustained period of time to place utility lines underground in existing and new residential areas.
 - b. Parks should be located within walking distance of every dwelling unit in the community. Parks should be centrally located and easily accessible to the areas they are intended to serve (see Recreation).
 - c. Certain private recreational uses such as golf courses or riding stables can be successfully integrated into residential areas provided the location, design and operation are compatible with surrounding residential developments.
 - d. Fire protection in the planning area should be considered as a common problem by the City, County, water district and the fire protection district, and equipment should reflect the character of land uses in the community.
 - e. Efforts should be made to encourage Federal and State agencies to locate in urban areas.

- f. Efforts should be made to group public offices in a more or less common location as a convenience to the public.
9. Other.
- a. In many cases, home occupations are a legitimate use within residential areas and should be permitted provided that the use displays no outward manifestations of business other than a small business sign attached to the wall of the house.
 - b. Recreation vehicle storage should be permitted in planned residential areas and these facilities shall be landscaped and otherwise screened from adjacent residential uses.
 - c. Consistent with policies in the Historic and Cultural chapter rehabilitation and/or redevelopment of older residential areas shall be encouraged.
 - d. All development in Deschutes County shall comply with all applicable state and federal rules, regulations and standards.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

Chapter 23.52. ECONOMY

23.52.010. Economy.

23.52.020. Goals.

23.52.030. Policies.

23.52.010. Economy.

Basic to the preparation of all comprehensive plans is an understanding of the economy in the study area. Knowing the employment characteristics, the economic trends and the likely new economic opportunities helps a community make useful decisions about its future. This knowledge can permit a better perception of the traits and numbers of the anticipated new population as well as help allocate adequate amounts of land for various purposes at the correct locations. Further, an economic analysis can point out resources (both human and natural) which are underutilized, and the analysis can permit the community to avoid errors that might otherwise occur.

Much of the following information is taken from the Deschutes County Overall Economic Development Plan.

Deschutes County's economy is fairly typical of a rural County experiencing rapid growth as it changes from its former rural economy to one more characteristic of an urban area. Resource activities such as farming, timber and mining once played far more dominant roles than is true today. Agricultural employment and income have declined, although recent years have witnessed relatively stable production and an increase in gross agricultural income. Timber and wood processing has remained an important economic element and although future years should see some employment growth despite the same or a small decrease in the allowable cut, it will likely decline in relative importance as the character of the economy continues to change. Mining's importance has continued to decline and employment will likely remain fairly constant.

An industry often found in rural parts of Oregon is tourism. The magnificent scenery, clean environment and numerous, as well as varied, sites for recreation make Deschutes County a popular vacation area. Much of the initial and a considerable portion of today's commercial investment was and is related to serving tourists.

Tourism and recreation rank second to timber as an income producer for the County. Recently questions about gasoline availability, loss of scenic attractiveness due to development and the desirability of an industry with relatively low wage rates have raised serious doubts about tourism's future locally.

The most dramatic changes occurring in Deschutes County's economic picture seem to be related to the growth taking place locally; contract construction plus services and miscellaneous have grown dramatically. Wholesale and retail sales, as well as finance-insurance-real estate, are also growing significantly. The only service industry not increasing its relative importance is government, which is declining as a percentage of those employed.

Manufacturing has been growing in the County but at a slower rate than non-manufacturing. Part of the problem has been the relative isolation of the area from major markets but this may change in the future as Redmond's industrial park is completed. If Redmond is successful in attracting significant new industrial employment it is possible that manufacturing could become a much more important part of the local economic situation. Usually manufacturing employment does provide significant improvements in local incomes, although the resulting rise in the cost of living can adversely effect those on low or fixed income.

In addition to the attraction of non-transportation dependent industries, there is also interest in attracting more tourism, particularly conventions. Also the increasing number of new shopping centers is expected to somewhat enlarge Bend's market area and perhaps improve the community's position as a regional trade center. Bend is already the major service center in Central Oregon.

Table 1
Alternative Future Employment Scenarios*

CATEGORY	1970		Percent Change		2000 A		2000 B	
	Number Employed	Percent of Total	A	B	Number Employed	Percent of Total	Number Employed	Percent of Total
Manufacturing								
Lumber & Wood Products	1620	16.36	322.78	Same	6849	13.32	6849	12.87
Food Products	110	1.11	-62.73	Same	41	0.08	41	.07
Other Products	610	6.16	414.26	1761.64	3137	6.10	11356	19.69
Total Manufacturing	2340	23.64			10027	19.5	18246	32.63
Non-Manufacturing								
Contract Construction	480	4.85	856.67	450.42	4592	8.93	2642	4.58
Transportation Comm. Util.	570	5.76	356.49	Same	2602	5.06	2602	4.51
Wholesale & retail Trade	2230	22.53	451.79	Same	12305	23.93	12305	21.33
Finance, Ins., Real Est.	710	7.17	446.46	Same	3882	7.55	3882	6.73
Service & Miscellaneous	1510	15.25	498.34	Same	9035	17.57	9035	15.66
Government	2060	20.81	335.83	Same	8978	17.46	8978	15.56
Total Non-Manufacturing	7560	76.36			41394	80.50	39444	68.37
Total	9900	100.00			51.421	100.00	57690	100.00
Scenario A = Assumes trends evident during 1970-1978 continue, and percent of population in total Employed remains unchanged.								
Scenario B = Assumes major new industries locate in Deschutes County, contract construction stabilizes and declines somewhat in relative importance because of scale, and there is an increase in the labor force up to 45% of the population as additional women enter								
* Scenarios are not meant to be precise predictions but only illustrative examples of possibilities.								

The population is likely to continue growing, although the present 6.3 per cent annual growth is expected to slow to an average of 4.5 per cent annually, until the year 2000. Interestingly, even though the population growth rate is the highest in the State, the labor force has been growing even faster. Some people speculate this is due to the number of seasonal employees attracted, while others believe it demonstrates the inadequacy of present population estimates. Even with the high unemployment characteristic of rapidly growing areas, it appears Deschutes County is increasing its employment at an amazing rate. This probably also implies considerable local under-employment as people take whatever job is available. People apparently are somewhat willing to sacrifice employment for improved livability.

To see the people of Deschutes County to the year 2000 the following goals have been prepared. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-203, 1980; PL-20, 1979)

23.52.020. Goals.

1. To diversify and improve the economy of the area.

2. To enhance and maintain the existing natural resource, commercial and industrial segments of the local economy.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-203, 1980; PL-20, 1979)

23.52.030. Policies.

1. Tourism.
 - a. The importance of tourism to the local economy is well known, but there also exists considerable potential for strengthening and improving this segment of the economy. The County shall assist in the development of a long-range plan to encourage tourism (including destination resorts) and recreation locally (see Recreation Chapter for additional information). This study will include consideration of the impacts likely to be created by increasingly expensive gasoline.
 - b. Private commercial activities consistent with other County policies which enhance tourism shall be encouraged by the County.
 - c. The County shall encourage the development of a convention center and multi-purpose civic auditorium in Bend to further encourage additional tourism. The County's support may include providing County-owned land should that be determined to be appropriate and legal.
 - d. Consistent with policies in the Recreation and Open Space chapters, cooperation with Federal and State agencies shall be sought by the County in preserving and developing, as appropriate, scenic and recreational resources.
 - e. Improved transportation to winter recreation areas shall be encouraged by better snow removal on roads to such areas, as well as by seeking programs providing alternative transportation methods.
2. Natural resources.
 - a. The County shall protect agricultural land to assure continued agricultural production and the benefits to tourism (see Agricultural chapter).
 - b. Where consistent with other County policies on open spaces and tourism Deschutes County shall support Deschutes National Forest land use alternatives which stabilize or increase the annual allowable cut. Reforestation of the national forest is of particular importance. The County will continue to support the concept of multiple use.
 - c. Deschutes County shall support additional Wilderness Area only if there is no significant reduction to the annual allowable harvest, or when it can be shown that the added Wilderness Area will result in local economic benefits equal or greater than those available from the harvesting of the timber.
 - d. The County shall encourage the development of alternative additional uses for non-metallic minerals (non-aggregate materials only - see Surface Mining chapter).
- 3 Land.
 - a. Adequate lands for commercial and industrial requirements shall be set aside (see Rural Development and Urbanization chapters).
 - b. In order that local residents have adequate employment the County shall encourage programs that appropriately increase employment opportunities and assist, where feasible, public plans and programs to develop industrial land.
 - c. While medium and heavy industry which meets State and Federal pollution standards shall be accommodated, the County shall seek and encourage only non-polluting (most likely light industry) manufacturers which are compatible with existing air and water quality.
 - d. Deschutes County and the City of Bend will explore the feasibility of using the BLM land adjacent to the northern boundary of the original Bend Urban Growth Boundary, and fronting on the east side of Highway 97, as future industrial land. The County shall work with the BLM to protect this land for possible industrial use until a final land use determination is made.
 - e. Publicly owned land is a community resource that should be used as trading stock and otherwise to implement this plan thereby assisting and meeting the community's future needs.

- f. Where there is a demonstrated public need for conversion of public land to private use, the County should continue to sell such land at public auction.
- g. Deschutes County shall cooperate with other local agencies in the preparation of a County-wide economic development plan and as an interim plan shall adopt as part of this plan the Deschutes County Overall Economic Development Plan.
- h. Deschutes County recognizes that the City of Redmond may need additional land for future industrial use. Thus, the 909 acres within County jurisdiction immediately to the south of the Redmond Airport, located outside of the Urban Growth Boundary, and further described as the southern half of Sections 27 and 28, and that portion which lies to the west of the COI North Unit Canal in the southern half of Section 26, all in Township 15 South, Range 13 East, shall be considered for future industrial use. The County will take the necessary steps to preserve this area and preclude development which would be incompatible with industrial development.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.56. HOUSING

23.56.010. Housing.

23.56.020. Goals.

23.56.010. Housing.

There were 19,022 housing units in Deschutes County during 1977, of which about 13 percent (2,547 units) were considered to substandard. This is an unexpectedly high number of substandard housing units.

Study by the Central Oregon Intergovernmental Council reveals that approximately 10 percent of the County housing supply is comprised of second homes. These second home owners are usually not Deschutes County residents. Given the assumed dominance of recreation locally this 10 percent figure seems to be somewhat low.

In 1977 the median family income for Deschutes County was \$15,779.00. This indicates that half of the County's families would be over-burdened trying to purchase a \$28,000.00 home with 10 percent down, on a 29-year mortgage. Few homes in Deschutes County are available at prices anywhere near \$28,000.00. Obviously there is a need for more median and low-income family housing.

The most recent housing vacancy information from the Oregon State Housing Division indicates the following as of December, 1976:

Deschutes County Housing Availability

	Single-Family Vacancy	Apartment Vacancy	Mobile Home Vacancy
Bend	1.0	1.2	6.7
Bend Rural Area	1.4	2.5	6.3
Total	1.1	3.8	6.3
Redmond	0.7	2.7	5.3
Redmond Rural Area	1.8	4.3	5.6
Total	1.2	3.0	5.6

Since a vacancy rate of 5 percent or less is generally considered to indicate an inadequate housing supply, which does not afford sufficient choice of type or price range, it is apparent that except for mobile homes serious housing shortages exist locally.

Given that the population is expected to continue to grow to an estimated 128,200 by the year 2000, and in light of the continuing trend toward smaller households, it appears that an additional 38,682 housing units will be needed in the next 20 years. Given the likelihood of few major shifts in housing preference in coming years this would indicate a need for 25,492 new single family homes, 5,682 new multi-family units, and 7,508 new mobile homes. It is possible that increasing fuel costs and governmental incentives for higher densities could increase the multi-family unit needs while lowering single-family home requirements.

Sufficient flexibility in County plans and zoning to accommodate such a shift may be necessary. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.56.020. Goals.

1. To provide adequate number of housing units at price ranges and rent levels commensurate with the financial capabilities of local households.

2. To allow flexibility of housing location, type and density in Deschutes County.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.53.030. Policies.

Because housing is one of the most important issues with which a comprehensive plan deals, many of the other chapters (i.e., rural development, urbanization, energy, public facilities) also directly or indirectly affect housing.

The preparation of the policies in this chapter were generally accepted throughout the process and changed little. The only exception was mobile homes. Repeatedly the issue of whether to permit doublewide mobile homes as permitted uses anywhere in the County was debated. Several differing conclusions were reached by various groups, usually depending on how that group balanced the need for lower priced housing against esthetic values and neighborhood objections. The Board of County Commissioners was finally able to reach a compromise which is to be found below.

1. Doublewide mobile homes (960 square feet or larger) with roof pitches, overhangs and siding comparable to site- built homes shall be outright uses outside urban growth boundaries, unless proposed in one of the four areas of the County where mobile homes were prohibited prior to the adoption of this plan or where protective covenants exclude such housing.
2. Singlewide mobile homes shall be permitted in selected residential areas, and as part of mobile home parks or planned developments; however, singlewide mobile homes should not be permitted on individual lots in urban density residential areas which have already substantially developed with conventional housing, unless singlewide mobile homes were part of the original development plan.
3. In order to keep housing costs as low as possible the procedural and application processes in the County Planning, Sanitation and Building Departments shall be reviewed and streamlined as much as possible.
4. To enable and encourage later in-filling of large lot subdivisions in urbanizing areas the subdivisions should be preplanned for later division into smaller lots at the time of the original platting.
5. In order that the most efficient housing pattern may be obtained the County shall encourage the in-filling of existing subdivisions before additional land division occurs.
6. Subdivision approval shall be dependent upon adequate provision of public facilities and services, which may require phased construction of the development; and to further reduce costs and provide amenities such as open space and esthetics the clustering of housing is to be encouraged.
7. To reduce costs and to encourage variety in design, County standards shall permit a variety of housing styles and setbacks, as well as appropriate reductions in road widths and other requirements.
8. Because clustering development can minimize the cost of land and services, as well as provide more amenities, clustered housing for all income brackets shall be encouraged.
9. In order to reduce costs for initial construction, as well as for maintenance, new construction of low-income housing shall be located in urban areas or rural service centers.
10. To develop adequate amounts of low income housing the regional housing authority shall be responsible for coordinating and implementing housing assistance programs in Deschutes County. The County shall maintain an on-going study of all income levels of housing in order to provide information on local housing needs.
11. Because of the relatively high need for housing rehabilitation locally the County shall study local and State programs to assist housing rehabilitation, and in conjunction with other local governments, take appropriate action to encourage necessary rehabilitation.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 280-203, 1980; PL-20, 1979)

Chapter 23.60. TRANSPORTATION

23.60.010. Transportation.

23.60.010. Transportation.

A. Introduction.

The Deschutes County Comprehensive Plan Transportation Chapter addresses both short and long-term transportation needs. This Chapter looks at the next 20 years in Deschutes County, and identifies through goals and policies, how best to efficiently move people and goods throughout the County. Planning for the transportation needs within the Bend, Redmond and Sisters urban growth boundaries is covered by those cities' respective comprehensive plan transportation elements.

The purpose of DCC 23.60 is to develop a transportation system that meets the needs of Deschutes County residents, while also considering regional and state needs at the same time. This plan addresses a balanced transportation system that includes automobile, bicycle, rail, transit, air, pedestrian and pipelines. It reflects existing land use plans, policies and regulations that affect the transportation system.

Much of the background documentation, facility inventory and forecast data referenced in this chapter are located in the Transportation System Plan (TSP), which is located in the Resource Element of the Comprehensive Plan. The TSP also contains a list of prioritized short and long-term projects.

B. Existing road system.

Deschutes County is responsible for maintaining approximately 943 total miles within the County system. Out of the total miles maintained by the County, approximately 750 miles are paved and 193 are unpaved. An additional 1,200 miles of unpaved roads are dedicated to the public but not in the County system. Most of the rural roads are located in the western part of the County along the major state highway corridors. In the other, mostly unpopulated areas, roads totaling approximately 410 miles are under the jurisdiction of the U.S. Forest Service, U.S. Bureau of Land Management, the Oregon State Forestry Division, or the Oregon State Parks Division. Of the 750 paved miles of public roads located in the County, many are controlled by the local jurisdictions within the three incorporated cities (Bend, Redmond and Sisters). However, the County maintains approximately 120 miles of urban roadways within UGBs. Of the 120 urban road miles the County maintains, approximately 27 miles are within city limits. An additional 200 miles of roadways (state highway system) are controlled by ODOT.

C. Types of roads in Deschutes County.

There are many types of roads in Deschutes County. The following are some definitions and examples of the types of roads commonly found in the County.

1. Road - means the entire right of way of any public or private way that provides ingress to or egress from property by means of vehicles or other means or that provides travel between places by means of vehicles. "Road" includes, but is not limited to: (1) "Ways" described as streets, highways, throughways or alleys; (2) Road related structures that are in the right of way such as; (3) Tunnels, culverts or similar structures; and (4) Structures, such as bridges, which provide for continuity of the right-of-way.
2. Public Road. A road over which the public has a right of use that is a matter of public record. Maintenance of public roads, including plowing and repair, is the responsibility of the adjoining property owners. There are far more miles of public roads in rural Deschutes County than there are miles of County roads or state highways.

3. **County Road.** A public road under the jurisdiction of a county that has been designated as a county road under ORS 368.016. County roads are maintained (paved, repaired, plowed, bladed) by the County. A public road becomes established as a County Road by order of the County Commissioners. Huntington and Burgess Roads are examples of County Roads.
4. **Local Access Road.** A public road that is not a county road, state highway or federal road.
5. **Private Road.** Private roads that have not been dedicated to the public. These roads do not come under County, City or State jurisdiction. Examples of private roads include those in Sunriver, Eagle Crest and Black Butte Ranch. Roads created by easements between two parties can also be considered private roads.
6. **Easement.** An access or road easement occurs when one person allows another person to drive (cross) their property. The property owner granting the easement still owns the land under the easement, but the other party has a legal right to use the easement. The public, except for invited visitors, does not have a right to use the easement.
7. **State Highway.** A State Highway is a public road, maintained by the Oregon Department of Transportation.
8. In addition, the US Forest Service and the Bureau of Land Management have roads on their lands in Deschutes County that they maintain and have jurisdiction over.

Many improved, gravel surfaced or paved roads were constructed as a condition of approval of a subdivision of land. Other public roads have been improved through the formation of a Special Road District. People living within an area, such as a subdivision, may form a special road district to improve and maintain the roads within a specially designated geographical area. The residents forming the district agree to pay property taxes to support the special district. Road District Commissioners are appointed by the Deschutes County Board of Commissioners to operate the special road district. The special road district improves and maintains the roads within the district to the level agreed to by the residents of the district.

County residents may also petition the Deschutes County Board of Commissioners to form a Local Improvement District (LID) to get their road improved, usually involving the paving of a gravel or dirt road. Public roads improved under the LID process may be accepted by the Deschutes County Commissioners as a County-maintained road. Under the LID, property owners agree to pay for road improvements.

D. Road system configuration.

Functional classification describes how the public road system should operate. Roads are grouped by their similar characteristics in providing mobility and/or land access. Within the County, there are six rural road classifications and nine urban classifications. An explanation of the various road classifications used in Deschutes County is found in Table 1. There are three designated urban areas within the County where the urban standards generally apply, with the rest of the County using the rural standards. Table 2.2.T1 in the Transportation chapter of the Resource Element, provides a mileage and maintenance responsibility breakdown of the various County road classifications.

The following represents a general overview of state highways, street functional classifications and a listing of County roads falling under each category. Complete data lists for County highways, arterials, collectors, and local roads can be found in Appendix F of the Transportation chapter of the Resource Element.

Table 1
Road Functional Classifications

Rural	
Principal Arterial	Trip length and travel density characteristics representative of substantial statewide or interstate travel; and
	Penetrates urban boundaries, or comes within 10 miles of the center of an urban area of 25,000 population or greater, and are within 20 minutes travel time (off-peak) of the center of the area via a minor arterial road.
	Movement of interstate goods and services.
Arterial:	Links cities, larger towns, and other major traffic generators, providing interregional and inter-county service; and
	Spaced at distances so that all developed areas are within reasonable distance of an arterial highway; and
	Provides service to corridors with trip length and travel density greater than that predominately served by rural collector or local systems.
	Serves the more important intra-county travel corridors.
	Movement of goods and services.
	Includes Federal Forest Highways
Collector:	Spaced at intervals to collect traffic from local roads and provide all developed areas a reasonable distance from a collector road; and
	Provides service to the remaining smaller communities; and
	Links locally important traffic generators with rural destinations.
Local:	Primarily provides access to adjacent land/properties; and
	Accommodates travel over short distances as compared to arterials and collectors.
Urban	
Principal Arterial:	Serves the major activity centers in a metropolitan area, and also serves the highest traffic corridors and satisfies the longest trip desires; and
	Carries the major portion of trips entering and leaving the urban area, as well as the majority of the through traffic desiring to bypass the city
Arterial:	Provides service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials; and
	Distributes travel to geographic areas smaller than those served by principal arterials, while not penetrating specific neighborhoods; and
	Spacing varies from 1/2 to 1 mile in downtown areas, to 2 to 3 miles in areas outside downtown.
Collector:	Provides both land access and traffic circulation within residential neighborhoods, commercial, and industrial areas; and
	Distributes trips from arterials through these areas to their final destination, and conversely, collects traffic from local streets and channels it onto arterials
Local:	Provides access to adjacent land and access to higher classified roads; and
	Provides lowest level of travel mobility including no bus routes; and
	Normally carries less than 1,700 vehicles per day.

1. Highways / Principal arterials.

- a. Highways have the responsibility of facilitating traffic movement through and between urban areas, regions and between states. The 1991 Oregon State Highway Plan identifies four levels of functional importance (LOI) assigned to highways, and these can either be U.S., Oregon State, or local highways; Interstate, Statewide, Regional, and District.

All state highways in Deschutes County are classified as “principal arterial” roads. The principal arterial system consists of a connected network of continuous routes having the following characteristics:

1. Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.
2. Serve all, or virtually all, urban areas of 50,000 population and over and a large majority of those with population of 25,000 and over.
3. Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise.

With the exception of interstates, Deschutes County has representative examples of every highway road classification.

b. The U.S. highways in the County consist of:

1. US Highway 97 - The Dalles-California Highway.
2. US Highway 20 - Various segments are commonly known as the Santiam Highway, the Sisters-Bend Highway, or the Millican-Burns Highway.

c. The Oregon State highways consist of:

1. OR Highway 126 - The McKenzie Highway.
2. OR Highway 31 - The Fremont Highway.
3. OR Highway 242 - The Old McKenzie Highway.
4. OR Highway 27 - The Crooked River Highway.
5. OR Highway 372 - The Cascade Lakes Highway (and Century Drive in Bend).
6. OR Highway 370 - The O'Neil Highway.
7. Powell Butte Highway - A former state highway that is now a rural arterial within Deschutes County. In Crook County, this highway is still a state facility.

2. Urban and rural minor arterials/rural collectors.

Lower down in the functional classification hierarchy are the minor arterial (including federal forest highways) and collector streets and roads that enable people to move between the neighborhoods where they live, to the places they work, shop, and go to school. Streets are generally classified in the following order according to the amount of traffic they are designed to handle, and their allowable design speeds.

The County has jurisdiction over several segments of urban minor arterial road segments located within or adjacent to UGB areas. These roads generally play a larger role in their relationship to the adjacent city's transportation network, than the County network.

a. Characteristics. The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics:

1. Link cities and larger towns (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and inter-county travel.
2. Be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway.
3. Provide (because of the previous two characteristics) service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local

systems. Minor arterials constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.

The complete listing of all County arterial and collector roads, as well as local roads, can be found in the TSP, located in the Resource Element of the Comprehensive Plan.

E. Traffic control devices.

1. Traffic Signals: There are no traffic signals in the rural areas of the County.
2. Flashing Warning Lights: Red and/or yellow flashing warning lights generally are located at intersections where a full stop light control is not yet warranted and four-way stop signs would not meet the need to balance safety concerns and through traffic movement. Locations are identified in the TSP.

F. Traffic volumes.

The Deschutes County Road Department conducts average daily traffic (ADT) and peak hour traffic volume counts on a rotating basis for most arterials and collector roads in the County. Each road is counted on average, once every two to four years. The traffic count information was assembled in spreadsheets. For road segments not counted in 1996, a trend analysis was used to establish a 1996 estimated traffic volume. The ADT information for County roads and state highways within Deschutes County can be found in the TSP.

G. Level of service.

In order to effectively communicate about traffic flow and traffic capacity conditions, the engineering and planning professions have adopted a concept of level of service to describe traffic conditions and associated traffic flow rates. Six levels of service designations ranging from A to F are typically recognized by the transportation professions.

For rural, two-lane roads in the County, the peak hour traffic volumes were assumed to be ten percent (10%) of the average daily traffic amount, then further adjusted to reflect a desirable flow rate. For a ten-percent (10%) peak hour flow (“K” factor), the corresponding ADT and LOS are identified in Table 2.

Table 2
Maximum Average Daily Traffic Allowed for Various Levels of Service

K Factor	Level of Service					
	A	B	C	D	E	F
	Average Daily Traffic (ADT) (ideal conditions, i.e., level terrain, etc.)					
10%	1,700	3,400	5,700	9,600	16,300	16,300

H. Accident statistics.

In 1996, the grant-funded Deschutes County Safe Communities program was initiated in an effort to reduce transportation-related injuries of all types. The program links accident data with medical information to identify the most significant problems and then develop solutions. Focus areas include safety equipment for bicyclists and safe cycling education programs for school children. Program Staff used the state accident database, from the Accident Data Unit at ODOT, to evaluate accident data for the period 1991 - 1996. Crash data and a summary of accident issues can be found in the TSP.

I. Pavement type / condition.

Out of the 943 roadway miles that the County maintains, 625 miles (66%) are paved while the other 318 miles (34%) are either dirt or aggregate.

Bridge Condition: The County Road Department maintains a list (see the TSP) of the 120 various bridges throughout Deschutes County and their weight limits. Many of the bridges are relatively new, constructed of reinforced concrete, and are able to withstand many years of use before repairs or replacement is necessary. However, some others are old flatbed railroad cars that were converted to bridges.

J. Bike facilities.

The Deschutes County Bicycle Advisory Committee was formed in 1988 (pedestrian component added in 1996). In March 1992, the County adopted a Bicycle Master Plan as a resource element of the Deschutes County Year 2000 Comprehensive Plan. The Bicycle Master Plan provides recommendations for policies, classifications of bike facilities, location of bike facilities, bicycle parking and other transportation issues related to bike facilities. Bicycle facilities include bikeways, both paved and unpaved, and parking.

1. Currently, bikeway design falls under the general design criteria section of the County's Title 17 (Subdivision Ordinance). It states that:
 - a. Bikeways shall be designed in accordance with the current standards and guidelines of the State of Oregon Bicycle Master Plan, American Association of State Highway and transportation Officials (AASHTO) Guide for the Development of New Bicycle Facilities, and the Deschutes County Bicycle Master Plan.
 - b. All collectors and arterials shown on the County Transportation Plan map shall be constructed to include bikeways as defined by the Deschutes County Bicycle Master Plan.
 - c. If interim road standards are used, interim bikeways and/or walkways shall be provided. These interim facilities shall be adequate to serve bicyclists and pedestrians until the time of the road upgrade.
2. Paved bikeways.

Bicycles are legally classified as vehicles, which may be ridden on most public roadways in Oregon. There are four basic types of paved bicycle facilities in Deschutes County:

 - a. Shared Roadway: On a shared roadway facility, cyclists share the normal vehicle lanes with motorists.
 - b. Shoulder Bikeway: Smooth, paved, rural roadway shoulders provide a good area where cyclists can ride with faster moving motor vehicle traffic with few conflicts. The majority of bicycle travel on the state highway system is accommodated on shoulder bikeways.
 - c. Bike Lane: Where bicycle travel is substantial and where adequate width is available, a portion of the roadway may be designated for preferential use by cyclists. Bike lanes are more common in urban rather than rural areas.
 - d. Bike / Multi-use Path: A bike path is a bikeway that is physically separated from motorized traffic by open space or a barrier. They generally serve corridors not served by other bikeways or pedestrian facilities and where there are few crossing roadways.
3. Unpaved bikeways.

With the advent of mountain bikes, previously unused trails and poor roads are opened up to potential use as inexpensive bike routes that require little more than right-of-way and signage. Deschutes County has many primitive roads and trails, most of which are on National Forest or Bureau of Land Management land, some of which are located close to urban areas.

 - a. Mountain bike trail/route: This category is designed to accommodate bicycle travel on unpaved roads and trails. Mountain bike trails are primarily recreational, although in some cases they may provide an interim or commuter transportation facility.
4. Alternative routes.

Alternative routes are usually the most cost effective or immediate way to provide for bicycle movement through a difficult section. Several high traffic sections with bike facilities in the County have alternative routes identified in Table 2.2.T11 of the Transportation chapter of the Resource Element.

5. Other facilities - Resort communities.

In Deschutes County, there are four resort communities that have developed independent bicycle networks. These networks, being privately owned, funded and maintained, are available to owners and guests of the individual communities and are not open to the general public. However, these bike facilities shall meet County construction standards and shall not impede movement within the countywide system.

K. Pedestrian sidewalks/walkways.

Sidewalks are currently required along some street frontages for new developments only in the Unincorporated Communities of La Pine, Terrebonne and Tumalo. The County standard for sidewalk width is five feet. Although most of the County's improved sidewalks occur in La Pine, there are also short sections along the south sides of B Avenue and Smith Rock Way in Terrebonne.

L. Public transportation.

1. Intercity.

- a. Greyhound.
- b. CAC Transportation.
- c. The People Mover.
- d. Porter Stage Lines.
- e. Valley Retriever Bus Lines.

2. Fixed route transit.

There is currently no traditional fixed-route local transit service in Deschutes County. However, the Mt. Bachelor Ski Resort Super Shuttle does operate during the winter months on a fixed-route and schedule.

- a. Mt. Bachelor Super Shuttle and Employee Shuttle.

3. Local demand responsive transportation.

Deschutes County has a network of special transportation providers who serve the elderly and disabled population. In most cases, the general public does not have access to these special transportation services. There are several providers of special transportation services in the County, ranging from public to private, both profit and non-profit.

- a. City of Bend Dial-A-Ride.
- b. Central Oregon Council on Aging (COCOA) Dial-A-Ride (La Pine, Redmond and Sisters).
- c. Opportunity Foundation of Central Oregon.
- d. Residential Assistance Program (RAP).
- e. Disabled American Veterans.
- f. Volunteer Services.
- g. Central Oregon Resources for Independent Living (CORIL).
- h. Access Express.

M. Transportation Demand Management (TDM)

Currently, the County, ODOT and the City of Bend jointly fund Commute Options for Central Oregon. This organization began in 1990 as a volunteer citizen's group working towards solutions to traffic congestion and pollution. They are responsible for maintaining the Central Oregon Rideshare list, promoting Commute Options Week each Spring, and acting as transportation consultants to businesses, cities, counties and other agencies interested in alternative commuting methods such as carpooling and teleworking.

1. Rideshare (Park and Ride) facilities.

This plan makes reference to rideshare lots, which are more appropriate for the carpooling emphasis in Deschutes County, rather than park & ride lots which usually involve a fixed route transit stop (such as the Mt. Bachelor Super Shuttle).

2. Central Oregon Rideshare.

Central Oregon Rideshare is a carpool matching service available to Deschutes, Crook and Jefferson County residents free of charge. The matching service is essentially a database of interested individuals, which is maintained by Commute Options for Central Oregon.

N. Railroad.

1. Passenger rail. Other than the occasional (annual) excursion train from Portland to Bend, no regular passenger rail service is currently available in Deschutes County.
2. Freight rail. The recent merger between the Burlington Northern and Santa Fe railroads provides freight operations on a trunk line running through Deschutes County. This line connects with the Union Pacific main line at Biggs in the north and with the Southern Pacific mainline at Chemult to the south.

O. Motor freight/trucking.

U.S. Highways 97, 20 and OR 126 all carry intercity and interstate freight trucking. Approximately 14 trucking companies currently operate in Deschutes County. No state highways within Deschutes County are currently designated as State Trucking Routes.

P. Air transportation.

With the passage of SB 1113 in 1995, ODOT is proposing that the County establish an “airport zone” for each of the public use airports in the County to assure the continuation of airport and airport-related uses there. State Rule OAR 660-13, was adopted in December 1996 by the Land Conservation and Development Commission. In July 1997, the state passed HB 2605 which modified Oregon Statutes regarding airport planning and will have an as yet undetermined effect on OAR 660-13.

1. Public-Use Airports - Publicly-Owned (Municipal).
 - a. Redmond Municipal Airport.
 - b. Bend Municipal Airport.
2. Public Use Airports - Privately-Owned.
 - a. Sunriver .
 - b. Sisters Airport.
3. Privately-owned, private-use airports and heliports: Recognized by ODOT as having three or more based aircraft in 1994:
 - a. Cline Falls Airpark (6 mi. W of Redmond at Cline Falls).
 - b. Juniper Airpark (10 mi. SE of Bend).
 - c. Pilot Butte Airport (S. of Pilot Butte in City of Bend)
 - d. Less than three based aircraft in 1994:
 1. Don Stevenson Ranch Airport (4 mi. S of Bend).
 2. Fall River Fish Hatchery Airport (31 mi. SSW of Bend at Fall River).
 3. Gopher Gulch Airport (3 mi. NW of Bend).
 4. Pine Ridge Ranch Airport (5 mi. NE of Sisters).
 5. The Citadel Airport (9 mi. NE of Sisters).
 6. St. Charles Heliport (2 mi. E of Bend at the Medical Center).
 7. Whippet Field Airport (6 mi. NE of Sisters).
 8. La Pine Heliport (S edge of La Pine).
 9. Freight Wagon Field Airport (5 mi. S. of Redmond).
 10. Sage Ranch Airport (9 mi. SE of Sisters).
 11. Cinder Butte Heliport (3.4 mi. N of Redmond).

4. Airfreight service. Airfreight is available at the Redmond Airport through United Express and Horizon Air. Express package services are provided by Federal Express (FedEx), Airborne, United Parcel Service (UPS), and the U.S. Postal Service Express Mail.

Q. Water-borne transportation.

No commercial river transport services or port districts are located in Deschutes County.

R. Pipeline transportation.

The Pacific Gas Transmission Company operates two natural gas transmission lines from Canada to California that generally follow the Highway 97 corridor through Deschutes County.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-033, 1993; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.64. TRANSPORTATION SYSTEM PLAN

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- 23.64.240. Transportation System Management (TSM) and Transportation Demand Management (TDM).**
- 23.64.250. Deschutes County Transportation Project List.**

23.64.010. Transportation System Plan.

In late 1994, the County initiated work on a long-range transportation system plan (TSP), which was a requirement of OAR 660-12, the Transportation Planning Rule (TPR). The State of Oregon approved the Rule in 1991. The purpose of the Transportation System Plan is to guide the development of a safe, convenient and efficient transportation system that promotes economic prosperity and livability for all County residents.

- A. As required by the TPR, Deschutes County developed the standards and policies in the Transportation System Plan (TSP) that comply with the requirements to provide a multi-modal approach to solving transportation issues. The Rule identifies the specific actions required of jurisdictions based on their population. For most urban areas, the Rule requires an alternatives analysis to compare various new project options versus an alternative that proposes to build only existing funded and committed projects. Many of the alternatives have goals such as an increase in mode split share and reduced vehicle miles traveled (VMT). These goals are measurable in many urban areas or areas with a Metropolitan Planning Organization (MPO), but not in rural Deschutes County. The logical alternative choices in the County were to:
 - 1. Pursue an alternative that programs only the identified projects in the current County Major Roads Capital Improvement Plan (MRCIP) and gradually shifts funding from new capital projects to more preservation and maintenance. Over time, capital improvements to address traffic and safety problem areas will proceed on a prioritized basis. The long-term effect is that preservation and

maintenance of the existing system becomes a higher priority than relieving congestion and solving safety issues. This is often referred to as the “no build” alternative.

2. Adopt a “build” alternative, which tries to keep pace with anticipated growth by focusing funding on building capacity-enhancing and safety oriented projects, while also attempting to maintain the existing road network.
3. Adopt a combination alternative, as recommended in the Deschutes County Transportation System Plan (TSP, located in the transportation chapter of the Resource Element), which includes a mixture of new projects to enhance roadway capacity, improve safety while also maximizing preservation and maintenance. The alternative also shifts emphasis to non-auto modes as much, as is practical to meet the intent of the Transportation Planning Rule (TPR).

This Plan balances the need to reduce the reliance on single occupant vehicles given the County’s needs, geography and demographics, with the need to solve safety and operational problems. At the same time, the system needs a significant effort in maintenance over the next twenty years to preserve the investment already made by the community. Additionally, the Plan encourages ridesharing, telecommuting and eventually fixed-route transit.

- B. The TSP makes recommendations regarding short-term and long-term transportation projects on state and County facilities that will be needed over the next 20 years.
 1. The project list was based on:
 - a. Evaluating the capacity of the County road system and the state highway network within Deschutes County.
 - b. The results of state accident database analysis.
 - c. Input from the County Road Department.
 - d. Efforts to enhance alternative modes of transportation through compliance with the Transportation Planning Rule.
 - e. The input received from the citizen review committee (County Planning Commission) and the public outreach process in general.
 2. The identified projects were prioritized based on the following criteria:
 - a. Most Important: Solving safety problems
 - b. Important:
 1. Maximizing the use of pedestrian and bicycle facilities.
 2. Location of schools and fire stations.
 3. Project cost, cost per average daily trip.
 4. Anticipated traffic volumes (2016).

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.020. Coordination and implementation of the Transportation System Plan.

Based on the requirements of the Transportation Planning Rule (TPR), Deschutes County has established an ongoing procedure to periodically analyze, prepare and plan for the transportation needs of Deschutes County residents and visitors. The following goals and policies are intended to implement the Deschutes County Transportation System Plan, and thereby meet the requirements of the TPR.

1. Goals.
 - a. Achieve an efficient, safe, convenient and economically viable transportation and communication system. This system includes roads, rail lines, public transit, air, pipeline, pedestrian and bicycle facilities. The Deschutes County transportation system shall be designed to serve the existing and projected needs of the unincorporated communities and rural areas within the County. The system shall provide connections between different modes of transportation to reduce reliance on the single-occupancy vehicle.
 - b. Have an ongoing transportation planning process and maintain a transportation plan that meets the needs of the County and its residents. The transportation plan and facilities of Deschutes

County shall be coordinated with the plans and facilities of incorporated cities within Deschutes County, adjacent counties and the State of Oregon.

2. Policies. Deschutes County shall:
 - a. Identify local, regional and state transportation needs;
 - b. Develop a transportation plan that shall address those needs;
 - c. Review and update the plan every three to five years;
 - d. Continue to coordinate transportation planning with local, regional and state plans by reviewing any changes to Deschutes County local transportation plans, regional transportation plans, the Oregon Transportation Plan and ODOT's State Transportation Improvement Plan (STIP); and
 - e. Continue public and interagency involvement in the transportation planning process.
 - f. Deschutes County shall notify ODOT concerning:
 1. All land use proposals or actions that would create access onto a state highway or add >100 ADT to any County road intersection with a state highway;
 2. Any proposed land use or development within 500 feet of a state highway or public use airport within the County; and
 3. Required ODOT road approach permits.
 - g. Deschutes County shall protect approved or proposed transportation project sites through:
 1. Access control measures;
 2. Review of future large development and transportation projects that significantly affect the County's transportation system; and
 3. The imposition of conditions of approval on developments and transportation projects that have a significant effect on the County's transportation system.
 - h. Deschutes County shall coordinate local plans and land use decisions with state transportation plans, including the Oregon Transportation Plan, modal plans and corridor plans. These plans provide ODOT policies and performance standards for statewide highways within Deschutes County. The statewide plans also provide the framework for access management on state facilities to protect the capacity and function of the highways.
 - i. The lead agency for transportation project review in Deschutes County shall be:
 1. Deschutes County for projects outside UGBs;
 2. The affected city for projects within the UGBs; and
 3. The State of Oregon, Deschutes County and affected cities on projects involving state-owned facilities.
 - j. Transportation Projects.

The County shall have a list of transportation projects, adopted by the Board of County Commissioners in accordance with the policies set forth below.

 1. The initial Transportation Project List shall be set forth in Table 5.11.T1 of the Transportation System Plan adopted as part of the Resource Element of the Comprehensive Plan. The Board shall update the Transportation Project List periodically by resolution adopted by the Board, without need of a formal amendment to the TSP.
 2. New transportation projects shall be included on the County's Transportation Project List. A transportation project proposed for addition to the list shall be subject to an individual land use review only if applicable administrative rules or land use regulations require such review.
 3. Transportation or development projects that require a plan text amendment or a conditional use permit may be required to fulfill conditions or implement mitigation measures before approval is granted. Mitigation and conditions may include, but are not limited to:
 - i. Improvement of surrounding roads;
 - ii. Limits on level of development;
 - iii. Revision of development placement;
 - iv. Addition or redesign of access;

- v. Addition of traffic management devices such as traffic signals, medians, turn lanes or signage; and/or
 - vi. Improvements that reduce transportation impacts.
 - k. Deschutes County acknowledges that land use designations have a significant impact on the overall transportation system and any alterations shall be completed with consideration to traffic impacts on the County road system.
 - l. The findings of compliance with applicable statewide planning goals, acknowledged comprehensive plan policies and land use regulations, shall be coordinated with the preparation of any Environmental Impact Statement (EIS) required for a proposed transportation facility that is identified on the Deschutes County Transportation System Plan.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.030. Arterial and collector roads.

- 1. County road Network.. The findings in the TSP conclude that the County road network currently in place, except for several specific road segments, should be adequate to serve the County needs over the next twenty years. Given the rural nature of Deschutes County and the fact that the majority of new development will take place on existing lots with existing access, few additional roads are anticipated. New road corridors to isolated subdivisions and new roads linking urban and rural areas are the main exceptions. Any new roads that will be created most likely will be the result of new developments and would therefore be part of land use development review or would be for secondary access or emergency ingress/egress to isolated subdivisions. Unforeseen large developments such as destination resorts normally have a private road system but their impacts to the County road network would be assessed at the time of land use approval.

The majority of road-related projects will consist of safety-related or other upgrades, maintenance and repair. Upgrades, maintenance and repair should be actively pursued to maintain the integrity of the system and not jeopardize the current conditions. Pedestrian, bicycle and transit modes of transportation require wider, smoother roadways. These improvements also benefit automobile and truck traffic by making the roads safer and more efficient. The main purpose of the County-owned road network is to move people and goods as efficiently as possible between and to the incorporated cities in the County, not as a means of increasing urban scale developments in the unincorporated communities of the County. The County recognizes the importance of having a natural and seamless transition of jurisdiction for County roads within urban growth boundaries to their respective city jurisdictions as the cities continue to grow.

- a. Goal. Establish a transportation system, supportive of a geographically distributed and diversified industrial base, while also providing a safe, efficient network for residential mobility and tourism.
- b. Policies.
 - 1. Deschutes County shall:
 - a. Consider the road network to be the most important and valuable component of the transportation system; and
 - b. Consider the preservation and maintenance and repair of the County road network to be vital to the continued and future utility of the County's transportation system.
 - 2. Deschutes County shall not add any miles of new road to the system unless the following issues are satisfied:
 - a. The need for the road can be clearly demonstrated;
 - b. The County can financially absorb the additional maintenance requirements;
 - c. The condition of the road proposed for acceptance into the County system must meet County road standards;
 - d. An accrued benefit can be shown to the County's economic growth; and
 - e. An overall increase in efficiency in the County road network can be demonstrated.

3. Deschutes County shall make transportation decisions with consideration of land use impacts, including but not limited to, adjacent land use patterns, both existing and planned, and their designated uses and densities.
 4. Deschutes County shall consider roadway function, classification and capacity as criteria for plan map amendments and zone changes to assure that proposed land uses do not exceed the planned capacity of the transportation system.
 5. Roads in Deschutes County shall be located, designed and constructed to meet their planned function and provide space for motor vehicle travel and bike and pedestrian facilities where required.
 6. Deschutes County shall manage the development process to obtain adequate street right-of-way and improvements commensurate with the level and impact of development. New development shall provide traffic impact analysis to assess these impacts and to help determine transportation system needs. The guidelines for traffic impact analysis shall be located within the Deschutes County Road Standards and Specifications document upon its adoption.
 7. Transportation system improvements in Deschutes County shall comply with the Americans with Disabilities Act.
 8. Transportation safety in Deschutes County shall improve for all modes through approved design practice and sound engineering principles.
 9. Deschutes County shall acquire the necessary right-of-way through the development process to correct street intersections, substandard road geometry or other problems in order to improve the safety of a road alignment, consistent with constitutional limitations.
 10. Deschutes County shall support efforts to educate the public regarding hazards related to travel on the transportation system.
 11. Deschutes County shall support public and private efforts to acquire right-of-way for new secondary access roads to isolated subdivisions.
2. Arterial and collector roads - State Highways.

Each of the Access Oregon Highways (AOH) in Deschutes County has a specific role in the statewide transportation network, as well as the County system. The 1991 Oregon Highway Plan specifies the design, access management and level of service requirements that need to be applied to these highways. Deschutes County supports ODOT policy to develop highways through a “four-phased” approach. The four phases of development take place incrementally as the traffic volumes increase and the level of service decreases. Beginning with a standard two-lane rural highway, the improvement phases are as follows:

- a. Addition of passing or climbing lanes.
- b. Widening to a four-lane section.
- c. Adding grade-separated interchanges and raised medians.
- d. Develop full grade-separated interchanges and frontage roads.

Through a coordinated analysis effort between ODOT and County staff, the probable locations of future passing and climbing lanes on the state highways in Deschutes County were identified. Also identified were the four-lane extension to Highway 97 from La Pine south to Highway 31, along with the probable locations of future grade-separated interchanges. The projected conceptual highway lane additions and interchanges are shown on Figures 5.2.F1 and 5.2.F2 in the Transportation chapter of the Resource Element. Actual locations and design would be the result of detailed engineering work occurring during project development. No signals are appropriate on state highways outside of UGBs, Terrebonne or La Pine. Instead, as intersections develop safety or operational problems, they shall be grade-separated, restricted or closed (where there is alternative access).

The following descriptions identify the roles the state highways are expected to play in Deschutes County over the next twenty years.

3. Arterial and collector roads - US Highway 97.

Congestion on Highway 97 has been mostly a problem within the communities of Bend and Redmond, due to the increasing volumes of truck traffic combined with local traffic generated by the rapid growth experienced in recent years. The Highway 97 Strategy (Appendix D of the Transportation chapter of the Resource Element) contains the goals and policies that govern the future development of the Highway 97 corridor. Outside of urban areas, the highway is characterized by two, three, and four-lane sections. The ultimate plan is for a continuous four-lane section to be built throughout the corridor, except for the sections through unincorporated communities such as Terrebonne. In those communities, traffic calming and pedestrian safety are more important than through traffic movement. In most cases, the time delay to drivers passing through the small rural communities is insignificant compared to the overall travel time along the corridor.

Highway 97 is considered a Category 2 access management facility outside of urban areas, except for the specific sections through the communities of Terrebonne, Wickiup Junction and La Pine which are Category 4 (definitions can be found on page 17). The Category 4 section in Terrebonne extends from Lower Bridge Way south to 11th Street. The section in Wickiup Junction extends from Drafter Road south to Burgess Road. The La Pine section extends south from 1st Street to 6th Street. The Terrebonne section has already been redesigned to be pedestrian-friendly by the eventual inclusion of sidewalks, landscaped strips, bulbed intersection corners and a center median. The La Pine section will be studied in 1998 as part of an approved state Transportation and Growth Management (TGM) grant. The La Pine section will be challenging due to the existing four-lane section through the community. Issues regarding Highway 97 in Deschutes County include:

- a. The increasing traffic volumes north of Terrebonne, especially at Lower Bridge Way;
- b. Traffic calming through Terrebonne, Wickiup Junction and La Pine;
- c. Local road and direct driveway access onto the highway;
- d. North and south connections to the Redmond "bypass";
- e. The needed grade-separated interchange at South Century Drive (Sunriver);
- f. The excessive speeds through the rural communities; and
- g. The possible grade separation between Yew Avenue and Deschutes Junction.
- h. The opportunity to enhance the parallel local road network to redistribute local trips that would otherwise need to use the highway (such as paving FS Rd. #41 between Sunriver and Bend).

4. Arterial and collector roads - US Highway 20.

The ODOT Highway 20 corridor planning process is currently underway, and not expected to be completed before this TSP is adopted. However, policy direction and identified projects resulting from the corridor work can be added to the County's adopted TSP when completed.

The Tumalo section was studied (with Terrebonne) in 1997 as part of an approved state Transportation and Growth Management (TGM) grant. The community focused on the need to reduce accidents and ease the burden of crossing three lanes of high-speed traffic on Highway 20. The high volume of truck trips in the Tumalo area is seen as a contributor to the overall problem, and is not anticipated to diminish during the next twenty years.

Highway 20 is considered a Category 3 access management facility west of the Sister's UGB, Category 4 within Sisters (similar to Terrebonne), Category 2 between Sisters and the Bend UGB, and Category 4 east of the Bend UGB.

The critical areas of the corridor are:

- a. The increasing traffic volumes west of Sisters that may necessitate additional passing lanes;
- b. The intersection of Cook Avenue in Tumalo which will require an eventual grade separation;

- c. Safety problems at the intersection of the Old Redmond-Bend Highway, which will also require an eventual grade separation;
 - d. Local road and direct driveway access onto the highway between Sisters and Bend; and
 - e. Improvements to the Powell Butte Highway intersection if land uses intensify at the Bend Airport and/or accelerated growth occurs in Crook County.
5. Arterial and collector roads - Oregon Highway 126 (OR 126).

With the completion of the Cline Falls interchange in 1997, there are few transportation issues remaining or anticipated on this facility. No new interchanges or medians are proposed. The primary issues are related to the highway as it passes through the City of Redmond. Areas outside of the Redmond UGB that could develop problems include:

- a. The intersection of Helmholtz Way if rapid development in and around Redmond continues;
 - b. Access to a possible new state park expansion at Cline Falls;
 - c. Local road and direct driveway access onto the highway between Sisters and Redmond; and
 - d. The substandard section east of Redmond.
 - e. The connection of 74th Street to the Cline Falls interchange.
6. Arterial and collector roads - other Oregon Highways (OR 27, OR 31, OR 370 & OR 372).

The remaining highways in the County are not considered AOH facilities, and as such, do not warrant the same priority for projects nor are they anticipated to carry significant traffic volumes. Each of these highways, except for OR 27, is currently considered a Category 4 facility. None has identified high accident rates or safety problems. With the exception of OR 370 (O'Neil Highway), none has much direct private access or potential for intensified land use. There are no plans to pave OR 27 which is considered a Category 6 facility.

Deschutes County recognizes that Crook County is incrementally paving a new road extending south from their industrial area towards Deschutes County. Ultimately this new road may connect to Highway 20 west of OR 27 near Millican. When and if this new road connects to Highway 20, ODOT may choose to designate this new route as OR 27.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.040. Access Management.

Roads accommodate two types of travel: local travel and through traffic. Arterial streets are intended for through movement of traffic while local roads are designed to give direct access to the abutting properties. Collector roads provide a link between the local and arterial roads, balancing accessibility and function. Historically, the state and local governments corrected many congestion problems by constructing new bypasses, grade separations or major street improvements. However, such solutions are expensive and are fast becoming infeasible under current funding levels.

Arterial roads without access management can over time become overused for short distance trips and local access to property. Land use changes along these overburdened arterials results in increased trip generation and traffic conflicts, as businesses normally desire to locate on high traffic arterials. The lack of adequate access management and insufficient coordination of land use development, property division and access review can contribute to the deterioration of both the arterial and collector road network. Traffic signals, new road approaches and driveways can decrease speed and capacity, and increase both congestion and hazards. Access management includes the control of vehicular access to major roadways. Partial access control, which is often found on major arterials and highways, is provided by limiting or prohibiting driveway access, left turn movements and cross traffic at intersections. These limitations increase the capacity of an arterial to carry through traffic at the desired speeds without requiring the addition of more travel lanes. Coordination, planning and proper policies can help avoid these problems and costly solutions.

- 1. Goal.

- a. Establish an access management system adequate to protect the quality and function of the arterial and collector street system.
2. Policies.
 - a. Deschutes County shall designate access and land uses appropriate to the function of a given road.
 - b. Deschutes County shall require new development to minimize direct access points onto arterials and collectors by encouraging the utilization of common driveways.
 - c. Wherever practical, access to state highways shall be provided via frontage roads, alternative local roads or other means, rather than direct access to the highway.
 - d. A non-traversable median on state highways shall be installed by ODOT when operational or safety issues warrant installation. Directional breaks in the median shall be provided as needed to allow safe traffic operation.
 - e. Access requests onto Deschutes County arterials and collectors for new partitions, subdivisions and commercial and industrial development shall be processed with the following access management classification system in mind:
 1. Public road access spaced at no less than every 500 feet on arterials and 300 feet on collectors.
 2. If either safety or environmental factors, or the unavailability of adequate distance between access points requires placing access points at lesser intervals, then access will be denied or the best alternative placement will be chosen. On road segments that are already severely impacted by numerous access points or on road segments which abut exception areas, adherence to the above standards may be either unreasonable or counterproductive to infill of exception areas. In such cases, these standards may be relaxed by the County Road Department Director to accommodate the aforementioned special conditions.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.050. Functional classification.

Functional classification describes how the public road system should operate. Roads are grouped by their similar characteristics in providing mobility and/or land access. Within the County, there are six rural road classifications and nine urban classifications. Further coordination is needed between the County and cities in Deschutes County regarding the functional classification of County roads within city limits and urban growth boundaries. Currently, the County maintains approximately 123 miles of roadway within city limits and urban growth boundaries. The County lacks funds to upgrade these roads to city urban standards. Strengthening and revising Urban Growth Management agreements with cities may be an effective way to pursue tight coordination on this important issue and reduce the long-term financial burden to the County. As an example, the County and the City of Bend have agreed that as of July 1, 1998, all roads within the Bend UGB will become the responsibility of the City of Bend. This shift reduces the County’s urban road mileage by approximately 70%.

The following changes to functional classification are identified on the Deschutes County Transportation Plan Map, designated as Exhibit “A” to Ordinance No. 98-044, and also identified on the more detailed maps located in the Transportation System Plan which is part of the Resource Element of the Comprehensive Plan.

1. Bend TSP.

The draft Bend Transportation System Plan is proposing only one change in functional classification to a County road within the UGB. However, with the recent management agreement, this road will become the jurisdiction of the City of Bend. The functional classification of all other roads that cross the Bend UGB between the City and the County have been coordinated.

 - a. Yeoman Road from 18th street east to the outer (ultimate) urban growth boundary is currently classified as either a future or current arterial depending on segment. It is proposed to change to a corresponding future and current collector.

2. Redmond TSP.

The draft Redmond Transportation System Plan proposes several classification changes to County roads within and around the UGB. The Redmond TSP also splits the existing arterial classification into two new categories, “major arterial” replaces “principal arterial” and “minor arterial” replaces “arterial”. The collector category is also changed by creating a “Major” and “Minor” classification. The difference is that bike lanes are not required on “Minor” collectors. The designation of County roads outside of UGBs shall remain consistent with the County functional classes of Rural Arterial and Rural Collector. The County shall require at least a four-foot shoulder bikeway along those sections of road within the County that are extensions of designated Minor Arterials and Major Collectors on the Redmond Plan.

a. Rural Arterial to Rural Collector:

1. Hemholtz Way (43rd) between Maple Avenue and Obsidian Avenue.
2. Northwest Way north of Maple Avenue.
3. Maple Avenue between Hemholtz Way (43rd) and Northwest Way (27th).

b. Rural Collector to Rural Arterial:

1. 27th Street between Maple Avenue and Hemlock Avenue.

c. Other Changes:

1. 9th Street classification as future arterial north of Maple Avenue / Negus Way is eliminated.

3. County roads.

Several roads within the rural areas of the County road network are in need of reclassification. The reclassification of these roads is warranted based on either their current and projected average daily traffic (ADT), or planned functional role in the transportation network. In most cases, a projected level of service “D” or worse triggered the change from collector to arterial. One exception to this is the reclassification of Forest Service Road #45. This road is expected to have high peak seasonal use between Sunriver and Mt. Bachelor, and should therefore be reconstructed to a rural arterial standard.

Several roads currently classified as arterial are recommended to revert to collector status because they don’t have a projected level of service of “D” or worse, and serve as a parallel route to a state highway. The original Transportation Element of the County Comprehensive Plan made several recommendations as to reclassifications at that time. As time has passed, some of these roads have not experienced the anticipated traffic while others are playing larger roles than originally planned due to accelerated development pressure. The County emphasis is for County roads to remain rural, have lower traffic speeds, and reduced cost to upgrade, repair and maintain.

New local roads for secondary access to rural isolated subdivisions have been identified as part of the Regional Problem Solving Project. In some cases, there is an existing dirt road across private or government land, but no dedicated right-of-way. Figures 5.2.F3a and 5.2.F3b of the Transportation chapter of the Resource Element identify proposed new roads as “corridors”, subject to future engineering and design, rather than specific alignments. The Sunriver Business Park is also in need of a future secondary access or intersection treatment such as a roundabout. With increasing development of commercial uses in the Park along with the increasing traffic volumes on South Century Drive, the single entrance/exit onto South Century Drive will become inadequate. Any solution may be problematic due to the established development pattern, the electric substation location, the forest-zoned land, and the Harper town site to the south. Figure 5.2.F3c in the Transportation chapter of the Resource Element identifies possible solutions to the problem by establishing a new access to Huntington Road. In the interim, an upgrade project to South Century Drive is identified in the Project List in the Transportation chapter of the Resource Element. The project would add a continuous two-way center turn lane from the entrance at Sunriver to the intersection at Spring River Road.

Roads classified as "future" in Figures 5.2.F4a-5.2.F4e of the Transportation chapter of the Resource Element are currently in need of either dedicated right-of-way, paving to County standard or both. The County makes the following changes in functional classification based on the current and projected traffic volumes, as well as the need for coordination between jurisdictions:

- a. Upgrade Functional Class - Rural Collector to Rural Arterial.
 1. Baker Road from US 97 to Brookswood Blvd.
 2. Burgess Road from US 97 to Day Road.
 3. South Century Drive from US 97 to Spring River Road.
 4. Cline Falls Highway from OR 126 to Second St. (Tumalo).
 5. Spring River Road from South Century Drive to FS Road #45.
 6. Forest Service Road #45 from Spring River Road to Century Drive.
 - b. Upgrade Functional Class - Rural Local to Rural Collector.
 1. Stevens Road from Bend UGB to Ward Road.
 2. Nelson Road from Waugh Rd. to Powell Butte Highway.
 3. Billadeau Road from Ward Rd. to Arnold Market Rd.
 4. Reed Road from US 97 to Darlene Way (edge of La Pine Community).
 5. Hunnell Rd. from Tumalo Rd. to Bend UGB.
 6. Rogers Rd. from Old Redmond-Bend Hwy. to Hunnell Rd.
 - c. Upgrade Functional Class - Rural Local to Future Rural Collector.
 1. Lazy River Drive to Tamarack Dr.
 2. Tamarack Drive from Lazy River Dr. to 4th Street.
 3. 4th Street to Whittier Drive.
 4. Whittier Drive to La Pine State Recreation Road.
 5. Solar Drive to Milky Way.
 6. Upland Road from Milky Way to Savage Drive.
 7. Savage Drive from Upland Road to Winchester Drive.
 8. Winchester Drive From Savage Drive to Browning Drive.
 9. Browning Drive from Winchester Drive to Stagestop Drive.
 10. Stagestop Drive from Browning Drive to Bonanza Lane.
 11. Bonanza Lane from Stagestop Drive to South Century Drive.
 12. Sunrise Blvd. from Day Rd. to Burgess Rd.
 - d. Downgrade Functional Class - Rural Arterial to Rural Collector.
 1. Holmes Road from OR126 to Lower Bridge Way .
 2. OB Riley Road from Bend UGB to Johnson Market Road.
 3. Lower Bridge Way from Holmes Road to 43rd Street.
 4. Deschutes Market Road from US 97 to Bend UGB.
 - e. Downgrade Functional Class - Rural Collector to Rural Local.
 1. Horse Butte Road from Knott Road to end.
 2. Arnold Market Road from Rickard Rd. to Billadeau Rd.
4. Goal. Deschutes County functional classification goals and policies are as follows: Designate access and land uses appropriate to the function of a given road.
 5. Policies.
 - a. Deschutes County shall:
 1. Coordinate the County Transportation System Plan with the transportation system plans of the cities of Bend, Redmond and Sisters. The County shall emphasize continuity in the classification of roads and appropriate design standards for roads that link urban areas with rural areas outside the urban growth boundaries. Prior to the finalization of any UGB amendment, the County and affected city shall agree on the functional classification and design standards of County roads within the proposed UGB area.

2. Request the transfer, or an agreement to transfer with specific timelines and milestones, jurisdiction of County roadways within the urban growth boundaries to their respective cities at the time of annexation. County policy also directs that any developer of property who proposes annexation and who has frontage on a road that does not meet city standards shall have the primary responsibility for upgrading the road to applicable city specifications. Roads shall be upgraded prior to or at the time of annexation, or the developer shall sign an agreement with the city to upgrade the road, at the time of development. Transfer of road jurisdiction shall require the approval of both the County and affected city in accordance with the provisions in ORS 373.270.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.060. Road and street standards.

Historically, County road and street standards and specifications have been located in various places throughout the County Zoning and Subdivision Ordinances, making it a difficult task to implement standards uniformly and update them as needed. The County pledges to create a separate standards and specifications document, which will enable the County to periodically update or change specifications or road project procedures without a Comprehensive Plan amendment. The likely location for the new document or chapter will be in Title 12 (Road Department) of the Deschutes County Code. The new document will reflect the County's desire to no longer have urban road standards, only rural road standards, including specific standards for the unincorporated communities of La Pine, Terrebonne and Tumalo.

1. Goals.
 - a. Develop and adopt a document or chapter of Road Standards and Specifications that shall control all aspects of construction related to roads, pedestrian walkways and bicycle facilities occurring outside designated urban growth boundaries in Deschutes County.
 - b. Develop and adopt criteria for the requirement of various levels of traffic analysis for each new rural development. The traffic analysis requirements shall be located in the Road Standards document.
2. Policies.
 - a. After County adoption of the Deschutes County Road Standards and Specifications document, all new Deschutes County rural roads and reconstructed rural roads shall be built to those identified standards. In the interim, rural road dimensions outside of the unincorporated communities of Terrebonne and Tumalo shall match the requirements set forth in Table 5.2.T1, which replaces current Table "A" located in Title 17 of the Deschutes County Code. The City of Sisters Road Development Standards shall apply within the Sisters Urban Area. The Road requirements for the unincorporated communities of Tumalo and Terrebonne are governed by the previously adopted tables included in Appendix G of the Transportation System Plan located in the Resource Element.
 - b. Road, pedestrian and bicycle projects occurring in unincorporated areas within urban growth boundaries shall be governed by the respective city's road and street standards. Those requirements shall be coordinated between the city, the County and the applicant during the land use process according to procedures to be identified in the Deschutes County Road Standards and Specifications document.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.070. Road management system.

Road management is an orderly scheduling of pavement preservation, maintenance, repairs and improvements to meet serviceability goals and provide safe, comfortable and economical transportation while striving to achieve the best possible value from available funds. Routine maintenance activities are carried out on a daily basis. Road sections requiring more extensive work are prioritized and then selected for improvements based on an evaluation of pavement condition.

Local road standards need to evolve over time as a given road experiences more traffic. A dirt or aggregate surfaced road may be adequate for access to individual properties. However, as additional properties begin to use that road for access, it may no longer be adequate. At a certain point, the owners of property using the road for access will need to join together and participate in the improvement of the road through the formation of a special road district or local improvement district.

1. Goal. Maintain the County road network pavement in good to excellent condition.
2. Policies.
 - a. Deschutes County shall continue to maintain and preserve the County road network through its pavement management system which guides a program of paving, repairing, reconstruction, drainage clearance and vegetation control.
 - b. After safety-related issues, the highest volume road segments shall be the next priority for County road maintenance and repair.
 - c. If and when gravel or dirt roads are paved by the County, the main controlling criteria shall be: density of surrounding development, traffic volumes, road classification, gap filling, potential school bus routing efficiency and emergency evacuation potential.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.080. Level of service.

Levels of service (LOS) describe the service quality on two lane roads or highways as determined by average travel speed, percent of time delay due to the inability to pass, roadway capacity utilization, or intersection delay. LOS ratings generally apply to collector and arterial streets only.

LOS is defined by a range of designations from “A” to “F”. LOS “A” is completely unimpeded traffic flow while “F” is highly congested. Table 5.2.T2 in the Transportation chapter of the Resource Element identifies the relationship between two-way average daily traffic (ADT) volumes, level of service and the percentage of daily traffic that occurs during the peak travel hours of the day (K factor) on two-lane highways. While several road segments are expected to reach LOS “E” over the next 20 years, most County roads will be at LOS “D” or better as long as population growth does not exceed the projections. ODOT highway policies dictate that anything over LOS “C” outside of urban areas is unacceptable. For rural highway segments in Deschutes County, ODOT projects several to exceed LOS “D” over the next 20 years.

Table 5.2.T2
Maximum Average Daily Traffic Allowed for Various Levels of Service

K Factor	Level of Service				
	A	B	C	D	E
	Average Daily Traffic Volume (ideal conditions, i.e., level terrain, etc.)				
10%	2,400	4,800	7,900	13,500	22,900

1. Goal. Maintain a level of service of “D” or better during the peak hour throughout the County arterial and collector road system over the next 20 years.
2. Policy. Deschutes County shall continue to monitor road volumes on the County arterial and collector network. The County Road Department shall continue to be the department responsible for monitoring volumes and shall strive to count each arterial and collector at least once every four years. The Road Department shall periodically examine the traffic volumes to identify level of service deterioration.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.090. County Roads.

Traffic volumes on County roads were estimated using a combination of trending analyses and the Potential Development Impact Analysis work done by ODOT for Deschutes County. It was assumed that any road segment with fewer than 9,600-projected ADT in 2016 would operate at an LOS of “D” or better, and that LOS “D” is acceptable for County arterial and collector roads. Of all the County roads, only Baker Road (LOS “E”) leading into Deschutes River Woods is projected to operate at worse than LOS “D” in 2016. Additional roads *approaching* LOS “E” are located in the South County and include:

- a. Burgess Road west of Huntington Road in La Pine.
- b. South Century Drive near Sunriver.

These two road segments shall be monitored by the County Road Department and counted at least every two years instead of the usual 4-year cycle.

23.64.100. ODOT State Highways.

ODOT provides yearly traffic counts on all the state highways running through Deschutes County. ODOT used historical growth rates based on the last twenty years of traffic volume data. The yearly growth ranged from 0.0 to 11.4 percent.

1. It was also assumed that the number of access points remained constant. Whereas the County road analysis related LOS directly to ADT levels, several highway segments may have high ADT levels but a correspondingly low LOS because of the presence of multilane and passing lane sections. Therefore, the most important analysis tool for highway sections becomes the LOS value rather than ADT. For multilane sections in the County, the forecasted traffic volumes are well within the capacity limits through the year 2016. However, several sections of the state highways will be reaching capacity thresholds for two-lane sections. The sections projected to approach capacity and operate at level of service (LOS) “D” or worse are:
 - a. Highway 126 through downtown Sisters and on either side of the City of Redmond.
 - b. Most of Highway 20/126 between the Jefferson County line, through Sisters and Bend to Powell Butte Highway.
 - c. Highway 97 from the Jefferson County line through Terrebonne and Cottonwood Drive south to La Pine.
 - d. Highway 372 from Bend to Dillon Falls Road on the way to Mt Bachelor.
2. Goal. Maintain the current arterial and collector system in the County and prevent degradation of the capacity of the system.
3. Policies.
 - a. Deschutes County shall monitor County arterials and collectors to help in the determination of when road improvement projects are necessary.
 - b. Deschutes County shall continue to work with the ODOT and the Cities of Bend, Redmond and Sisters to coordinate solutions to highway and non-highway road issues that cross over jurisdictional boundaries.
 - c. The County shall establish requirements and adopt standards for secondary access roads to isolated rural subdivisions.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.110. Bridges.

Deschutes County owns and manages approximately 120 bridges throughout the County. The County Road Department performs routine maintenance and repairs as necessary. Several of the bridges are signed for weight limitations in the five to fifteen-ton range because they are structurally deficient. Five bridges on higher volume roads are signed with 25-ton weight limits. Since the recent replacement of the Fall River Bridge in 1995, no significant bridge problems have been identified for correction or reconstruction.

1. Goal. Maintain a safe and efficient network of bridges on County roadways.

2. Policy. Deschutes County shall monitor the condition of County bridges on a regular basis, and perform routine maintenance and repair when necessary. The County shall also explore additional funding sources when major reconstruction or replacement of bridges is necessary.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.120. Truck routes.

Currently Deschutes County has no designated truck routes or hazardous materials routes on County roads. However, several roads are signed to *not* allow trucks over a certain weight due to bridge limitations. Oregon is one of the few states that currently allow oversized tractor-trailer vehicles referred to as Longer Combination Vehicles (LCV's) on certain highways. Two types of Luvs, triple trailers and heavier double trailers (105,000-lb weight limit) are allowed to operate in Oregon without a special permit. Truck traffic is generally confined to industrial, commercial and surface mining areas. State highways serve the majority of truck traffic and are most suitable for truck use. The County shall continue to designate state highways as the desired through truck routes in the County. The draft 1998 Oregon Highway Plan proposes to designate U.S. 97 as a State Trucking Route. This designation could mean that additional funds would be available for improvements to U.S. 97. Outside of the state highway system, trucks should be limited to travel only on arterial roads.

1. Goal. Develop a plan of designated truck routes.
2. Policy. Deschutes County shall require that long-haul, through trucks be limited to operating on Principal Arterial and Rural Minor Arterial roads as designated in the County transportation network, except in emergency situations and when no reasonable alternative arterial road is available for access to commercial or industrial uses.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.130. Hazardous material routes.

The transport of non-radioactive hazardous materials (NRHM) is guided by Part 397 of the Federal Motor Carrier Safety Regulations. The Federal Department of Transportation defines hazardous materials (HAZMAT) and regulates their packaging and shipping. ODOT designates the NRHM routes in Oregon. Currently, there are no designated NRHM routes in Central Oregon, which means HAZMAT can be transported through Deschutes County without any restrictions. In order to establish a new NRHM route, the County would need to work with ODOT to make findings on various federal criteria such as population density and proximity to hospitals and schools. The creation of NRHM routes requires a deeper understanding of the movement of these shipments than is currently available, therefore no routes shall be designated in this Plan. However, the County shall work with ODOT to determine if any Deschutes County highways should be candidates for designation as NRHM routes.

1. Goal. Develop a plan of designated hazardous materials (NRHM) routes.
2. Policy. Deschutes County shall work with ODOT to determine the feasibility of designating NHRM route(s) through Deschutes County.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.140. Facility/safety improvements.

In 1996, the grant-funded Deschutes County Safe Communities program was initiated in an effort to reduce transportation-related injuries of all types. Program staff used the state accident database, from the Accident Data Unit at ODOT, to evaluate accident data for the period 1991- April 1995. During this time period there were a total of 2,518 crashes reported on County roads and highways outside of urban areas. Of the total number of accidents, 70 were fatal, 1,073 involved injury (170 serious), and 1,375 were property damage only accidents. Safe Communities staff has also identified the difference in accident rates between the County in general and the rural areas.

Countywide, fatal accidents accounted for 1.2 percent of the total number of accidents, while fatal accidents just in the rural area accounted for 2.8 percent of the total. Injury accidents made up 4.4 percent of the

County total, while in just the rural areas; they accounted for 6.8 percent of the total. The Safe Communities Group identified the process of reengineering high incident areas, where the greatest number of accidents occur, as the most important issue that should be addressed within the first year of the program. However, it could also be argued that the number of accidents alone is not the only indicator of need for corrective measures. A location with very high traffic volumes and a high accident rate may be safer than a location with low volumes but a high accident per average daily trip (ADT) rate. The “high priority” projects in the Project List section of the Transportation chapter of the Resource Element include improvement projects recommended to improve safety.

1. Goal. Maintain a safe and efficient network of roadways.
2. Policy. Deschutes County shall maintain a prioritized inventory of safety-deficient facilities on the County road network and give highest priority to correcting safety issues.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.150. Public transportation – Special transit services.

1. Fixed-route transit. There is currently no traditional fixed-route local transit service in Deschutes County. However, the Mt. Bachelor Ski Resort Super Shuttle does operate during the winter months on a fixed-route and schedule. The County shall continue to work with service providers such as Mt. Bachelor to secure additional funding as well as increase promotion of their services.
2. Future fixed-route transportation options. In 1997, ODOT funded a study to address the issue of a fixed-route, commuter shuttle transit system between Bend and Redmond. The Study includes a commuter survey, information regarding potential ridership and costs. The results indicated that the most feasible operation would be a 3-van system with reasonably direct routing and few stops. The travel time between Bend and Redmond would average 30 minutes. The capital costs would be approximately \$150,000, with annual operating costs of \$200,000. Average daily ridership could average 100 if fares were \$3.00 or less. Further study would be required prior to implementation.

If the County were to establish a rural transit “district” to include a Bend-Redmond shuttle, another potential transit route could be from La Pine to Bend. Although no formal study has been done on this, similar results as the Bend-Redmond Study would be expected. A major difference in a La Pine-Bend shuttle would be the limited number of stops in La Pine and Wickiup Junction, and a probable diversion to serve Deschutes River Woods.

To achieve its potential, a commuter shuttle service needs good connections to sidewalks, bikeways, fixed-route transit and rideshare lots. Currently, there is no fixed-route transit in Bend or Redmond. The sidewalk and bicycle networks are generally fragmented and there are few rideshare lots. Because of these limitations, a shuttle service should attempt point-to-point travel as much as possible, which means working with larger employers to encourage the service. Figure 5.3.F1 in the Transportation chapter of the Resource Element identifies the potential routes and stops for a County rural transit system.

The need for a public transit center has been identified and shall be supported by Deschutes County. The center would include adequate parking and restroom facilities, and provide the opportunity to transfer between multiple intercity and local service providers. The most likely transit center location is in Bend, but additional locations in Redmond and possibly La Pine/Wickiup Junction may also be established. The County shall cooperate with ODOT and local jurisdictions in establishing future transit facilities as needed.

3. Local demand-responsive transportation. Deschutes County has a network of special transportation providers who serve the elderly and disabled population. In most cases, the general public does not have access to these special transportation services. There are several providers of special transportation services in the County, ranging from public to private, both profit and non-profit. The following are the existing service providers in the County:

- a. City of Bend Dial-A-Ride.
- b. Central Oregon Council On Aging (COCOA) Dial-A-Ride.
- c. Opportunity Foundation of Central Oregon.
- d. Residential Assistance Program (RAP).
- e. Disabled American Veterans.
- f. Volunteer Services.
- g. Central Oregon Resources for Independent Living.
- h. Access Express.

With limited funding options, no significant expansions in these demand responsive programs are planned. Short-term capital needs have been identified for several dial-a-ride service providers and are included in the Project List.

- 4. Intercity bus and passenger rail.
 - The following intercity bus services are planned to continue as the primary (and only) public transit options in the County.
 - a. Greyhound.
 - b. CAC Transportation.
 - c. The People Mover.
 - d. Porter Stage Lines.
 - e. Valley Retriever.

The focus is to maximize the efficiency of these services as land use changes occur. The County realizes it has no control over the market driven forces that allow private transit providers to thrive or just survive. Increased emphasis shall be placed on the transit/rideshare connections possible in the South County as the population increases. The County will continue to work with the cities of Bend and Redmond as they investigate the possibility of fixed-route local transit systems. Without a local transit system to distribute trips, a commuter system linking the rural and urban areas of the County is less likely to succeed.

The Oregon Transportation Commission in November 1992 adopted the Oregon Rail Passenger Policy and Plan. It provides a comprehensive long-range plan for railroad passenger service in Oregon in coordination with the Oregon Transportation Plan. Unfortunately, passenger rail service for Central Oregon was ruled out as not being cost-effective. However, as conditions change and the population of Deschutes County continues to increase, the County will monitor the feasibility for future passenger rail service and work with ODOT and the community on future transit/rail options.

- 5. Goal.
 - a. Enhance the opportunity for intermodal connections throughout the County transportation system.
 - b. Increase the existing level of special services provided.
 - c. Establish rural transit service for Deschutes County residents.
 - d. Decrease barriers to the use of existing services.
- 6. Policies.
 - a. Deschutes County shall work with ODOT, the cities of Bend, Redmond and Sisters, and transit service providers to study countywide rideshare facility needs, and investigate public transit possibilities including potential transit stops for a regional or commuter-based transit system. Those possibilities shall include bus and rail, and if economically feasible, the County shall seek such services as are found to be safe, efficient, and convenient in serving the transportation needs of the residents of Deschutes County.
 - b. Deschutes County shall continue to work with special service providers, ODOT, and the cities of Bend, Redmond and Sisters to secure additional funding as well as increase promotion of those special transit services that may be underutilized.

- c. Deschutes County shall monitor the needs of the transportation disadvantaged and attempt to fill those needs.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.160. Bikeways and pedestrians.

In March 1992, the County adopted a Bicycle Master Plan as a resource element of the Deschutes County Year 2000 Comprehensive Plan. The Bicycle Master Plan provides recommendations for policies, classifications of bike facilities, location of bike facilities, bicycle parking and other transportation issues related to bike facilities. Many of the goals and objectives of that Plan have been implemented and/or are still valid. With the adoption of the latest version of the Oregon Bicycle and Pedestrian Plan by the Oregon Transportation Commission on June 14, 1995, portions of the 1992 County Bicycle Master Plan are no longer relevant. The new state Plan contains several changes from earlier versions, which will have an effect on the Deschutes County Bicycle Master Plan. The most significant change is the new emphasis on pedestrian facilities, which were not addressed in the previous Plan.

Based on need and road characteristics, all roads open for public use should be considered for the potential to improve bicycling and walking. Facilities should safely accommodate the majority of users. Roads designed to accommodate cyclists with moderate skills will meet the needs of most riders; special consideration should be given close to school areas, where facilities designed specifically for children should be provided. Roads designed to accommodate young, elderly and disabled pedestrians serve all users well.

1. Rural bikeways.

On most rural roadways, shoulder bikeways are appropriate, accommodating cyclists with few conflicts with motor vehicles. In general, the minimum shoulder widths recommended by Oregon Bicycle and Pedestrian Plan for rural highways are adequate for bicycle travel. These standards take into account traffic volumes and other considerations.

Shared roadways are adequate on low-volume rural roads, where motor vehicle drivers can safely pass bicyclists due to the low likelihood of encountering on-coming traffic. Shoulder bikeways can be added to roads with high bicycle use, such as in semi-rural residential areas or close to urban areas. It may be appropriate to stripe and mark shoulders as bike lanes near schools or other areas of high use. Even adding minimal-width shoulders can improve conditions for bicyclists on roads with moderate traffic volumes. On roads with high use, it may be necessary to add full-width shoulders in areas of poor visibility due to topography.

2. Rural walkways.

In sparsely populated areas, the shoulders of rural roads usually accommodate pedestrians. There are, however, roadways outside urban areas where the developing urban character creates a need for sidewalks, such as on highly developed commercial strips or in residential clusters along county roads or state highways.

How and where pedestrians cross arterial roads is potentially more important than pedestrian travel along roads. Road volumes will dictate at what locations special pedestrian treatments may be warranted. It is anticipated that much of the focus will be on the state highways as they travel through rural communities. These locations have the highest concentrations of pedestrians and activity centers. Pedestrian treatments will be analyzed in concert with traffic calming strategies on the highways. Where sidewalks are not provided, paved shoulders should be wide enough to accommodate both pedestrians and bicyclists. Paved multi-use paths provided on one or both sides of a roadway in a rural community may be appropriate for providing access to schools. These paths will also serve the needs of young bicycle riders.

Through the site plan review process, the County will continue to monitor pedestrian facility design, and require appropriate facility designs to comply with provisions of the Americans with Disabilities Act (ADA).

The TSP identifies policies, bike and pedestrian facility classifications, design standards and construction and maintenance guidelines. Many of the design standards apply to urban rather than rural areas. However, they are in this plan because they may apply to specific projects, new neighborhoods, or urban unincorporated communities. This TSP contains a list of suggested improvements on the Deschutes County Road System to accommodate bike and pedestrian facilities. Completion of these projects will considerably enhance the network of bike and pedestrian facilities throughout the County.

The TSP recommends standards and design guidelines for bicycle and pedestrian facilities set by the 1995 Oregon Bicycle and Pedestrian Plan. All traffic devices used in conjunction with bikeways are required to meet the standards set forth in the national Manual on Uniform Traffic Control Devices (MUTCD).

3. Goals.
 - a. Adopt a Countywide system plan for bike and pedestrian facilities which provide access to various destinations within unincorporated communities and between urban areas and unincorporated communities.
 - b. Provide and maintain a safe, convenient and pleasing countywide bicycle and pedestrian system that is integrated with other transportation systems.
 - c. Establish bicycle safety, education and enforcement programs for all ages, improve riding skills, achieve observances of traffic laws, increased awareness of cyclist's and pedestrian rights, and monitor and analyze bicycle accident data to determine safety problem areas.
4. Policies.
 - a. Deschutes County shall coordinate local plans for pedestrian and bicycle facilities with the 1995 Oregon Bicycle and Pedestrian Plan. The statewide plan provides a framework for a local bicycle and pedestrian system and design standards.
 - b. Deschutes County shall require bike facilities at locations that provide access within and between residential subdivisions, schools, shopping centers, industrial parks, and other activity centers when financially feasible.
 - c. Deschutes County shall:
 1. Balance the plan with a variety of facilities to meet the needs of different cyclists;
 2. Plan for bicycle access between the County's urban and rural areas;
 3. Develop a bikeway system, to be updated yearly and including a map for the public that describes the opportunities for bicycling in Deschutes County;
 4. Establish priorities for facility construction and maintenance based on need and resource availability;
 5. Evaluate the plan regularly to monitor how well the facilities meet the goals of the Plan;
 6. Upgrade rural road shoulder widths to County standards during road modernization or maintenance projects involving overlays as funding allows;
 7. Require bicycle and pedestrian facilities to satisfy the recreational and utilitarian needs of the citizens of Deschutes County;
 8. Make potential use, safety and the cost of bikeway construction, the primary considerations when designing specific bikeways;
 9. Emphasize the designation of on-road bikeways, where conditions warrant due to safety reasons and the cost of construction and maintenance of separate bike paths;
 10. Expend resources for the maintenance of existing bikeways and to keep pace with the development of new bikeways;

11. Designate that the Deschutes County Bicycle and Pedestrian Advisory Committee facilitate the coordination of all bicycle and pedestrian planning in the County to assure compatibility;
12. Designate that the Deschutes County Bicycle and Pedestrian Advisory Committee assure that the Plan remains up-to-date and that implementation proceeds according to the Plan;
13. Work with affected jurisdictions to acquire, develop and maintain a series of trails along the Deschutes River, Tumalo Creek, and the major irrigation canals so that these features can be retained as a community asset; and
14. Adopt standards for trail system right-of-ways and trail improvements that are based on the type of planned trail use and reflect the standards of the 1995 Oregon Bicycle and Pedestrian Plan.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.170. On-road route selection.

The integrity and usefulness of the bicycle system mandates that future development is designed with bicycling in mind.

1. Goal. Coordinate on-road County bikeways with known existing and proposed state and city bikeways.
2. Policies.
 - a. New public and private land developments in Deschutes County shall accommodate and tie into the bicycle system, and shall provide their residents and employees with appropriate bicycle facilities.
 - b. County arterials and collectors may use shoulder bikeways or shared roadways. These bikeways shall be upgraded to bike lanes when highway reconstruction occurs and the traffic volumes warrant lanes.
 - c. Deschutes County shall facilitate safe and direct bicycle and pedestrian crossings of arterial roads.
 - d. On-road bikeways shall be constructed in accordance with the specifications set forth in the 1995 Oregon Bicycle and Pedestrian Plan.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.180. Off-road route selection.

1. On-road bike facilities are generally preferred due to their lower cost and easier maintenance. However, paved and unpaved off-road bike paths could cater more to the recreational and fitness riders, and also offer an automobile-free route for inexperienced and younger cyclists. Well-placed paths could also serve commuting traffic. A paved multi-use path should be of sufficient width to accommodate multiple user groups such as jogging strollers and rollerbladers. The opportunity exists in Deschutes County to create off-road, separate multiple-use paths in some circumstances:
 - a. Along maintenance “ditchrider” roads adjacent to main irrigation canals.
 - b. Major utility easements.
 - c. Short connector routes between adjoining subdivisions, and between subdivisions and adjoining schools and parks.
 - d. Abandoned roadways.
 - e. Additional bicycle paths within destination resorts and new recreational communities now in the planning stage.
 - f. Heavily impacted forest trails.
2. Goal. Identify a system of off-road paved multiple use paths to be included in the County transportation system.
3. Policies.
 - a. Developers in Deschutes County are encouraged to design paths that connect to the countywide 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. However, the use of a bike path shall not change the on-road bikeway requirement for arterials and collectors.

- b. Deschutes County shall facilitate mountain bike routes and the creation of paved off-road multiple-use paths. The County shall identify routes and incorporate them into its transportation system where appropriate. Particular attention shall be given to obtaining and keeping rights-of-way for uninterrupted routes linking areas within the County. Natural corridors such as rivers, irrigation canals, ridges and abandoned roadway and rail lines shall receive special attention. Proposed developments may be required to provide such identified rights-of-way as part of their transportation scheme in order to maintain the integrity and continuity of the countywide system.
- c. The County shall work with local agencies and jurisdictions to acquire, develop and maintain those sections of trail that are located outside of UGBs, but are part of a trail plan or map that has been adopted by the local jurisdiction and the County.
- d. Off-road paved multiple use paths shall be constructed in accordance with the specifications set forth in the 1995 Oregon Bicycle and Pedestrian Plan.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.190. Facility requirements.

The TPR has various requirements relating to bicycle facilities such as bike parking amounts and areas, and employee considerations such as shower and changing facilities. Most of these requirements have already been implemented through Deschutes County ordinances, but are reinforced here with goals and policies.

1. Goal. Maintain the existing development requirements for bicycle facilities in Deschutes County.
2. Policy. Deschutes County shall maintain and update as necessary the existing ordinance requirements for bicycle facilities found in Title 18.116.031, or such other location that it may be moved to within the Deschutes County Development Code.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.200. Airports.

The continued operation and vitality of airports registered, licensed or otherwise recognized by the Department of Transportation is a matter of State and County concern. There are currently 18 registered airports in Deschutes County. Four of these are public use airports; two of which, Bend Municipal and Redmond Municipal-Roberts Field are publicly owned while Sisters Eagle Air and Sunriver airports are privately owned. These airports have improved (paved) runways, and offer a range of services, from the availability of commercial passenger flights arriving and departing daily at Redmond Municipal Airport, to the Sisters (Eagle Air) Airport which offers no services or runway navigational aids.

The Redmond Airport, which is located completely within the City limits of Redmond, is owned and controlled by the City of Redmond. It has a master plan, which was updated in 1998 and adopted by the City. The Plan guides the future land use(s) at the airport. The Master Plan includes an inventory of existing facilities, land uses, aviation forecasts, a demand/capacity analysis, airport layout plan and a development program.

Unlike the Redmond Airport, the Bend Municipal Airport is located outside the Bend City limits and UGB, therefore the County has land use jurisdiction over it. In order to guide airport land uses, the County adopted and utilizes the 1994 Bend Municipal Airport Master Plan, as amended in 2002 the "Supplement to 1994 Airport Master Plan" incorporated by reference herein. This is the guiding document for airport planning and development. This document incorporates a range of facility improvements for the Bend

Municipal Airport over the 20-year planning horizon (2021), including short, intermediate, and long-term projects to improve safety and function at the airport.

Currently, LCDC has administrative regulations (OAR 660-13) which were adopted in 1996. These regulations apply to airports that, in 1994, were the base for three or more aircraft. However, with the passage of HB 2605, the regulations were revised by the 1997 Oregon Legislature, which will require DLCD to update the rules to incorporate the changes made by the Legislature. For purposes of this TSP, the County will not alter current land use regulations in response to the current regulations (OAR 660-13) which have been revised by the Oregon Legislature. While the content of the new regulations is not yet known, the County policy shall be to develop ordinances to comply with the new regulations once they are adopted by DLCD.

1. Goal. Protect the function and economic viability of the existing public-use airports, while ensuring public safety and compatibility between the airport uses and surrounding land uses for public use airports and for private airports with three or more based aircraft.
2. Policies.
 - a. Deschutes County shall protect public-use airports through the development of airport land use regulations. Efforts shall be made to regulate the land uses in designated areas surrounding the Redmond, Bend, Sunriver and Sisters (Eagle Air) airports based upon adopted airport master plans or evidence of each airports specific level of risk and usage. The purpose of these regulations shall be to prevent the installation of airspace obstructions, additional airport hazards, and ensure the safety of the public and guide compatible land use. For the safety of those on the ground, only limited uses shall be allowed in specific noise impacted and crash hazard areas that have been identified for each specific airport.
Protecting the privately owned, private-use airports, with three or more based aircraft, will be accomplished by development of specific land use regulations for these types of airports. The function and economic vitality of privately owned, private-use airports with two or fewer based aircraft will also be accomplished through land use planning. Each airport's specific level of risk and usage shall be used to guide the continued safe aeronautical access to and from these airports considering the type of aircraft approved to use the airfield.
 - b. Deschutes County shall:
 1. Continue to recognize the Redmond (Roberts Field) Airport as the major commercial/passenger aviation facility in Deschutes County and an airport of regional significance. Its operation, free from conflicting land uses, is in the best interests of the citizens of Deschutes County. Incompatible land uses shall be prohibited on the County lands adjacent to the airport;
 2. Cooperate with the cities of Bend, Redmond and Sisters in establishing uniform zoning standards, which will prevent the development of hazardous structures and incompatible land uses around airports;
 3. Through adoption of appropriate zoning restrictions, take steps to ensure that any proposed uses shall not impact airborne aircraft because of height of structures, smoke, glare, lights which shine upward, radio interference from transmissions or any water impoundment's or sanitary landfills which would create potential hazards from waterfowl to airborne aircraft;
 4. Through adoption of appropriate zoning restrictions, allow land uses around public-use airports that will not be adversely affected by noise and safety problems and will be compatible with the airports and their operations;
 5. Work with, and encourage airport sponsors to work with the Federal Aviation Administration (FAA) to enforce FAA-registered flight patterns and FAA flight behavior regulations to protect the interests of County residents living near airports.
 6. Adopt zoning restrictions to ensure that developments in the airport approach areas will not be visually distracting, create electrical interference or cause other safety problems for aircraft or

- persons on the ground. In addition, efforts shall be made to minimize population densities and prohibit places of public assembly in the approach areas;
7. Continue efforts to prevent additional residential encroachment within critical noise contours or safety areas without informed consent;
 8. Specifically designate any proposed airport facility relocations or expansions within County jurisdiction on an airport master plan or airport layout plan map, as amended, and establish the appropriate airport zoning designation to assure a compatible association of airport growth with surrounding urban or rural development;
 9. Maintain geographic information system (GIS) mapping of the Airport Safety Combining Zones and provide timely updates;
 10. For those airports in Deschutes County without adopted master plans, the County shall, as a minimum, base any land use decisions involving airports on LCDC airport regulations, upon adoption of those regulations by LCDC, which implement HB 2605;
 11. Participate in and encourage the County-adoption of airport master plans for all public use airports and at least an airport layout plan for the remaining ODOT-recognized airfields in Deschutes County;
 12. Encourage appropriate federal, state and local funding for airport improvements at public-owned airports; and
 13. Discourage future development of private landing fields when they are in proximity to one another, near other public airports and potential airspace conflicts have been determined to exist by the Federal Aviation administration (FAA) or ODOT Aeronautics.
- (Ord. 2003-035 § 1, 2003; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.210. Railroads.

1. Goals.
 - a. Maintain the existing levels of freight rail activity throughout the County while also encouraging expanded usage by commercial and industrial companies.
 - b. Increase the safety of existing at-grade crossings and work towards the eventual replacement of all at-grade crossings with gate-protected or grade-separated crossings.
2. Policies. Deschutes County shall:
 - a. Work cooperatively with affected local jurisdictions and railroad operators to reduce land use conflicts and increase safety at all at-grade crossings;
 - b. Encourage efforts to improve the condition of rail lines throughout the County in order to retain the effectiveness and competitiveness of freight rail;
 - c. Not endorse the abandonment of any rail lines unless they are to be converted to trail use through the federal "Rails to Trails" program. Once converted, the trails will be incorporated into the County Bikeway/Trail System;
 - d. Not endorse any activities that would diminish existing rail service; and
 - e. Work cooperatively with affected local jurisdictions, businesses and railroad operators to protect all rail spurs that currently serve businesses or have the potential to serve freight rail uses from abandonment or incompatible zoning.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.220. Waterways.

A water-borne transportation plan is not applicable in Deschutes County.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.230. Pipelines.

Many miles of pipeline in Deschutes County currently carry power transmission lines, cable television, telephone, natural gas, water and sewage. The County encourages the continued use of pipelines to carry goods across County boundaries and for distribution within the County.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.240. Transportation System Management (TSM) and Transportation Demand Management (TDM).

Although not urban, Deschutes County still has the potential to use several TSM and TDM strategies in order to help preserve the function of major County roads and state highways.

1. Transportation System Management (TSM).
 - a. TSM improvements focus on optimizing the carrying capacity of roads by alleviating congestion and reducing accidents. Examples of TSM strategies include:
 1. Minimizing the number of access points.
 2. Channelization of turning movements.
 3. Creation of continuous turning and merging lanes.
 4. Raised medians.
 5. Signalization.

An important aspect of TSM is that public agencies work closely with affected businesses to fully evaluate impacts from changes to access. In addition, TSM must account equally for the needs of all modes of travel, particularly that bike, pedestrian and transit movements and safety are not compromised in exchange for improving roadway capacity.
 - b. Goal. In order to optimize the carrying capacity of the County road system, provide cost effective transportation improvements and implement strategies that shall improve the efficiency and function of existing roads.
 - c. Policies.
 1. Deschutes County shall adopt land use regulations to limit the location and number of driveways and access points on all collector and arterial roads.
 2. Deschutes County shall ensure that land use actions support the access management policies of the Oregon Department of Transportation (ODOT) along state highways.
 3. Deschutes County shall implement transportation system management measures to increase safety and reduce traffic congestion on arterial and collector streets, and protect the function of all travel modes.
 4. Deschutes County shall promote safety and uninterrupted traffic flow along arterials via the following planning considerations:
 - a. Clustering of all types of development and provisions for an internal traffic circulation pattern with limited arterial access shall be encouraged;
 - b. A minimum setback of 50 feet from arterial rights-of-way shall be required;
 - c. Recommendations on speed limits shall be forwarded to the State Speed Control Board.
2. Transportation Demand Management (TDM).
 - a. Unlike TSM strategies, which focus on physical changes, TDM targets driver behavior, mode choice and employers to lower the traffic demands on the roads, especially during the peak travel times of the day. Examples of TDM strategies include:
 1. Alternative or flexible work schedules.
 2. Ridesharing/carpooling.
 3. Transit use.
 4. Bicycling/walking.
 5. Parking management.
 6. Working at home/telecommuting (teleworking).

TDM strategies often involve and education and promotion effort to encourage changes in single occupant driving behavior. Therefore, TDM strategies require a concerted community and/or employer effort and commitment to realize the greatest results. A “tool box” of TDM strategies suitable for Central Oregon is included in Appendix M of the Transportation chapter of the Resource Element. Also significant is that, of all the different strategies used to relieve

- congestion, TDM efforts in Bend, Redmond, Sisters, Prineville, and Madras can all affect the County and each city because of the employee commute patterns throughout the tri-county area.
- b. Goal. Reduce peak hour traffic volumes on County roads and diminish the exclusive use of single-occupant vehicles.
 - c. Policies. Deschutes County shall:
 1. Encourage businesses to participate in transportation demand management efforts through the development of incentives and/or disincentives. These programs shall be designed to reduce peak hour traffic volumes by encouraging ridesharing, cycling, walking, telecommuting, alternative/flexible work schedules and transit use when it becomes available;
 2. Work with business groups, large employers and school districts to develop and implement transportation demand management programs;
 3. Continue to support the work of non-profit agencies working towards the same TDM goals as Deschutes County;
 4. Encourage programs such as van or carpooling (rideshare) to increase vehicle occupancy and reduce unnecessary single-occupant vehicle travel;
 5. Continue to pursue the development of park and ride facilities and consider the siting of a rideshare facility, based on identified needs, when realigning County roadways, considering the sale of surplus property, or reviewing land use applications for developments that could benefit from such a facility;
 6. Pursue the development and utilization of telecommunication technologies that facilitate the movement of information and data;
 7. Support efforts to educate the public regarding the actual costs related to travel on the transportation system and encourage transportation demand management alternatives; and
 8. Establish and make available a transportation demand management program to County employees, to serve as a role model for the community.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

23.64.250. Deschutes County Transportation Project List.

1. The list of expected transportation projects needed over the next twenty years is provided in the Transportation chapter of the Resource Element. The projects chosen were a result of:
 - a. Analysis of County roadway accident data provided by the state.
 - b. Using capacity analysis on County roads based on the forecasted growth.
 - c. Knowledge and experience of the County Road Department.
 - d. Public input.
 - e. Efforts to enhance non-auto modes of transportation to conform to requirements of the State Transportation Planning Rule (OAR 660-12).
2. The project list is broken down into two categories:
 - a. A list of previously-committed projects, which in most cases, the County has an obligation to fund and/or construct; and
 - b. A prioritized detailed project list of the remaining needs in Table 5.11.T1 of the Transportation chapter of the Resource Element.
 - c. The method used to prioritize the projects involved a criteria-ranking system. The complete ranking matrix is located in Appendix J of the Transportation chapter of the Resource Element. Categories were created then divided up by level of importance as follows:
 1. Most Important: Solving safety problems.
 2. Other Important Criteria Included: Maximizing the use of pedestrian and bicycle facilities; Location of schools, parks and fire stations; Project cost, cost per average daily trip (ADT); Pavement condition index; Anticipated traffic volumes (2016).
 - d. Safety related issues were automatically placed at the top of the list, then were ranked by cost and future traffic volumes within their category. Projects that add or enhance bicycle and

pedestrian facilities and/or have access to schools, parks or fire stations, received extra credit. The rankings for each category were added together to result in a numerical score or “rank total”. The lower the “rank total” number was, the higher the project was rated. The rankings for bike and pedestrian projects within the communities of Terrebonne and Tumalo were defined by a community planning process that took place in 1996-'97, and were to be used as general guidelines.

3. Goal. Have an annual review of the Transportation Project List for the purposes of prioritizing, adding or deleting projects.
4. Policies.
 - a. The Deschutes County Board of Commissioners shall review the Transportation Project List annually to add, delete, and/or reprioritize projects, and may do so by adoption of a resolution.
 - b. The County Board of Commissioners has the authority to add projects to the list at any time if whole or partial private sector (developer) funding becomes available through the land use process, and the potential financial benefit to the County can be demonstrated to the satisfaction of the Board.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-044, 1998)

Chapter 23.68. PUBLIC FACILITIES AND SERVICES

23.68.010. Public facilities and services.

23.68.020. Policies.

23.68.010. Public facilities and services.

A. Introduction.

In a County growing as fast as Deschutes County the provision of public services is a major issue. Adequate services at the right locations are the result of planning, hard work and money. The present growth rate has exceeded the previous plans and hard work by local governments has not always been able to keep up with the demand, especially since there is a growing reluctance to pay the higher taxes it takes to obtain the public services. In addition, the scattered low-density development that has occurred in some places is so inefficient in supplying services that the needed facilities are excessively expensive or completely unprovidable.

B. Utilities.

Utility services are more easily, and less expensively, provided when development occurs in and around areas with existing utility lines. Large lots require long lines resulting in higher costs, and often discourage later redivision into smaller lots.

Small community sewage systems often have problems because of isolated peak use resulting in a discontinuity of waste. Often these systems are not properly operated or maintained. Once a breakdown occurs correction of the problem is difficult or uncertain. However, places such as Black Butte, Sunriver and Juniper Utilities have worked well because many homesites were served and the expense was acceptable to the families involved.

Because water is crucial to public health and safety it must be protected from contamination by waste discharge, poor well construction and high concentration of septic tank systems. This protection has not always occurred in the past. And small water systems have difficulty with maintenance and operation.

One proposal which is continually raised is the metering of water to reduce use and costs.

Of all public facilities (aside from roads) the extension of sewer and water service are the most critical to planning. Decisions as to where and when services will be provided can significantly reduce the costs of these, and other, services.

C. Law enforcement.

There are frequent complaints about inadequate police protection and a check of national averages indicates that in 1978 the County was eight officers short of equaling the national average of 1 officer per 1000 citizens. At the present rate of growth, and especially in the light of construction of such facilities as shopping centers, many additional officers and support personnel will be needed. In 1977 alone all types of crimes increased 12 per cent for the County Sheriff's Department. Increases in the cities were even higher. Yet, recent levies to obtain more Sheriff's officers have been rejected by the voters.

D. Schools.

One of the basic problems with larger amounts of residential development is that it rarely pays in property taxes for the services that must be provided. This is particularly true for the most expensive public facility--schools. Increasing permanent residences require more facilities and teachers. In the past much of the new development was expected to be seasonal recreation and therefore not likely to require schools. With the realization that much of the seasonal development is now becoming full-time

residences that require school services the school districts have been forced to seek additional funds for new buildings and more teachers. In addition, since many of the new residences are in rural areas requiring ever more expensive busing the costs have risen even faster than expected. In School District 1 students bused increased from 26.5 percent in 1970 to 41 percent in 1977 and in one year (1977-78) jumped to 46.6 percent. This busing requires approximately 7 percent of the total District budget. In School District 2J about 60 percent of the students are bused. In both districts the operating cost for busing (not including bus purchase) is nearly \$1.00 per-mile.

E. Fire. (See Natural Hazards Chapter also)

Perhaps the public service most often forgotten is fire protection. In many areas of the County no fire agency is responsible for fires which occur. To solve this problem fire districts are often formed in rural areas or fire protection contracts signed with fire protection agencies. However, even when fire districts exist the annexation of new developments may take over a year and in the past the Bend Fire District has had to put a moratorium on any new annexations because of facility shortages.

Many people assume protection is available from Federal or State agencies, but these offices have no authority or responsibility on private lands. Usually they are not trained to fight structure fires, and in the winter their firefighting equipment is drained and stored away.

As the County continues to grow many firefighting agencies are becoming increasingly concerned about the lack of proper controls to reduce fires in subdivisions, the inadequacy of firefighting equipment and training, and the need for more cooperation and mutual aid agreements between the various agencies. Proper planning and subdivision control is seen as critical in dealing with the situation.

F. Health.

County health departments have important impacts on development locally. Concern about water quality and available health facilities, as well as needs generated by different types of development, often bring the health and planning functions together.

As the community continues to grow, additional nurses, sanitarians, etc., are required. Without (the new) employees approvals may take weeks to obtain.

Sometimes people can be substituted for facilities as when Home Health nurses provide older people an opportunity to stay at home rather than requiring the construction of new hospital or nursing home units. At present, sufficient nursing home units exist locally.

Each of the County's hospitals is preparing a master plan to guide its growth. The effects of community growth are evident at St. Charles Hospital where growth, such as the new Mountain View High School, has created traffic congestion interfering with emergency hospital operations.

Providing public facilities is a complex and difficult task, but one critical to the community's growth.

G. Solid Waste.

In the past the County has had six landfills. Three of the landfills (Alfalfa, La Pine and Fryrear) have been closed in 1988, 1989 and 1990 and replaced with transfer and recycling stations. A fourth landfill, Negus, will be closed in 1992 and replaced with a transfer recycling station. The two remaining landfills, Knott and Demolition, will remain open and are expected to have a useful life until approximately 2010.

The Knott landfill receives the transfer and recycling waste from the four transfer stations. The Demolition landfill receives wood and demolition material. The Demolition site will be used as a source of approximately 1.5 million cubic yards for the Bend Parkway project. According to the Public Works Department's latest calculations, 24 percent of the waste stream is diverted from burial at the landfills through composting at the landfill site, the bottle bill, and the recycling of tires, cardboard, aluminum, oil, glass, newsprint, appliances, office and computer paper and plastic milk jugs.

H. Goals. To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as framework for urban and rural development, and thereby a system or plan that coordinates the type, location and delivery of public facilities and services in a manner that best supports the existing and proposed land uses.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; PL-20, 1979)

23.68.020. Policies.

1. General.

- a. Public facilities and services shall be provided at levels and in areas appropriate for such uses based upon the carrying capacity of the land, air and water, as well as the important distinction that must be made between urban and rural services. In this way public services may guide development while remaining in concert with the public's needs.
- b. While clear distinctions are not always possible between urban and rural services, those facilities (such as sewage treatment plants, water systems, schools and fire stations), which are necessary to service concentrations of people shall be known as key facilities and shall be located in urban areas or in rural service centers, if necessary, to meet the needs of existing rural residents. Key facilities shall be built to encourage urban, rather than increased rural, residential development. Rural services such as sheriff's patrol, snowplowing, schools and school busing shall be kept at levels adequate to meet public needs but not in excess to encourage additional development. Rural Service Centers are a logical location for future rural key facilities so that services may be used and constructed in as efficient a manner as possible (see Rural Development Chapter). Key facilities outside urban areas or Rural Service Centers shall be discouraged unless the facility is needed to serve existing development, is at the most efficient and economic location and is consistent with the capabilities of the land and the planned growth of the County.
- c. Future development shall depend on the availability of adequate local services in close proximity to the proposed site. Higher densities may permit the construction of more adequate services than might otherwise be true. Cluster and planned development shall be encouraged.
- d. The County shall prepare a Capital Improvements Plan which considers the costs and benefits of construction at various sites. Sites which are less expensive in the long run shall be given priority to less efficient sites.
- e. Deschutes County shall encourage the formation of special service districts to serve rural needs rather than becoming involved with serving those needs. The County will foster coordination and mutual planning between the County, special districts, utility companies and service corporations. This shall include common trenching where appropriate.
- f. Deschutes County shall coordinate with the cities and other service providers in urban areas to assure that all urban services are provided in an equitable manner and construction phased, based upon the time required to provide the service, the reliability of the service, the financial cost, and the levels of service needed. All services shall be provided consistent with the provisions of all other required services.
- g. Because of the increasing cost of development which must be borne by local residents, the County shall investigate various methods to control or obtain funds for providing new public service levels. This investigation is to include review of a Systems Development Charge. The County shall conduct a review of systems development charges for areas outside the urban growth boundary by January 1, 1995.

2. Utilities.

- a. Utility companies shall be offered an opportunity to comment on their ability to serve proposed developments.
- b. New development shall not be located so as to overload existing or planned facilities, and developers or purchasers should be made aware of potentially inadequate power facilities in rural areas.

- c. When feasible all utility lines and facilities shall be located on or adjacent to existing public or private rights-of-way so as to avoid dividing existing farm units, and transmission lines should be located within existing corridors as much as possible.
 - d. Power generation sites shall be landscaped and the site plan reviewed as part of the conditional use applications.
 - e. Electrical substations shall be a permitted use in all appropriate zones with final approval based upon County Planning Department acceptance of a detailed site plan. Minimum lot sizes shall not apply to substations, but adequate area for equipment, storage, buffer and potential expansion shall be required.
 - f. All new development shall be consistent with adopted sewage plans, and new community systems in urban areas shall be designed to fit into the municipal system. Also, in urban areas, where connection to a sewer system is not appropriate now but will be required in the future, dry sewer lines may be required for future use (this does not apply in larger lot subdivisions where no future sewers are anticipated).
 - g. Mutual agreements between the County and the cities shall assure sewer and water systems are extended in a planned manner.
 - h. Sewage treatment plants offer both problems and opportunities. To decrease the impact of noise and odor a large buffer area shall be required. The treated sewage (both septic tank sludge and municipal water) should be used as a resource and drill hole disposal discouraged.
 - i. Well marked recreational vehicle dump stations are needed locally and the County shall encourage such facilities in parks, service stations and other appropriate locations.
 - j. The capability for County land to be annexed into a city shall depend upon the availability of adequate services, such as water.
 - k. Metering of existing and future water systems shall be fostered.
 - l. Oregon Water Wonderland Unit 2 Sewer District. Through County file nos. PA-02-5 and ZC-02-3, the Board of County Commissioners approved a zone change for certain property in Section 25 of Township 20 South, Range 10 E.W.M. to Rural Residential with a Limited Use Combining Zone. The Board adopted the Limited Use Combining Zone to limit the uses that could be established on the subject property to those approved through its written decision dated March 28, 2003 and listed as follows: a sewage treatment facility, effluent ponds, ground application of treated effluent, agricultural use, and propagation and harvesting of a forest product.
3. Solid Waste.
 - a. Existing solid waste sites should be protected and either expansion areas or new sites found. The Solid Waste Management Plan shall serve as the major document for site determinations.
 - b. In order to discourage open burning and to encourage recycling the County shall continue to offer a no-cost dump service and to consolidate dumping.
 4. Law enforcement.
 - a. Because of the difficulty in providing County-wide sheriff's patrol all future development shall be reviewed for the adequacy of police protection.
 - b. The County will seek to improve rural police protection, including the development of sheriff's substations, where feasible.
 5. Schools.
 - a. In light of existing problems with providing school facilities all new development shall be reviewed for its impact on the schools. Substantial expansion of school bus routes shall be discouraged, and the County shall require the dedication of adequate land for new schools required to meet the needs generated by major new developments. In addition, the County shall consider designating appropriate County lands for school sites.
 - b. Plans for schools shall consider the policies within the Oregon State Standards:

Minimum
Enrollment Site (acres)

Elementary School	550	10
Intermediate School	800	20
Senior High Schools	1300	30

- c. School districts shall cooperate with other affected agencies for efficient construction of recreation facilities (i.e., bike paths) and other public facilities.
 - d. School district boundaries should be regularly reviewed to best serve County residents.
6. Fire.
- a. Land for a fire station shall be dedicated in large developments.
 - b. The minimum diameter for water distribution mains on which fire hydrants are located shall be six inches.
 - c. Hydrant spacing should not exceed 1000 feet with minimum fire flow of 500 gallons per minute on subdivisions or developments with a population density of 2 or less single family units per acre; on subdivisions or developments where population density exceeds two single family dwellings per acre, hydrant spacing should not exceed 500 feet with a minimum fire flow of 750 gallons per minute. Where structural considerations warrant, additional requirements should be considered. Urbanizing area standards shall be those of the incorporated city. In rural fire protection districts final determination of standards will be made after discussion with the R.F.P.D.
 - d. Water source or storage shall have a capacity to support the required fire flow for a period of two hours in addition to maximum daily flow requirements for other consumer uses. Refer to "Water Supply Systems for Rural Fire Protection" NFPA Pamphlet #1231, 1975.
 - e. Fire protection and law enforcement agencies should strictly enforce solid waste disposal ordinances.
 - f. Fire stations should be built in an architectural style that will blend into the area of location.
7. Health.
- a. Assured health care for Deschutes County residents is an important public and private service. The County shall encourage and support public health programs for low income families and regular school health programs, as well as services like Home Health Care, and services to the elderly, disabled, blind and juveniles such as day care and foster homes. County support may be in the form of allocations from the County budget, political support, appropriate zoning or other useful action.
 - b. Adequate hospital and medical facilities shall be encouraged and County plans will consider the effect of incompatible land uses, noise and pollutants, as well as transportation and other factors, on these services.
 - c. Provisions for adequate cemetery sites shall be made, and alternative designs which conserve lands shall be encouraged.
8. Other.
- a. Adequate access to good public library service is important to many residents of Deschutes County and actions to assure such access shall be fostered.
 - b. Any major irrigation waterway within 100 feet of a proposed development shall be placed in a pipe at the developer's cost to protect young children from the hazard, subject to engineering feasibility and approval by the irrigation district.
 - c. All development in Deschutes County shall comply with all applicable state and federal rules, regulations and standards.

(Ord. 2003-015 § 3, 2003; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 92-051, 1992; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.72. RECREATION

23.72.010. Recreation.

23.72.020. Goals.

23.72.030. Policies.

23.72.010. Recreation.

Recreation holds a prominent position in the minds of the people of Deschutes County. Not only because tourist recreation contributed \$68 million to the County's economy in 1977, but also because to so many of the people who were born locally, and even more so for those who have moved here, it is the recreational opportunities that make the quality of life in the County so high. As the population continues to grow so will the demand for recreational facilities and services. Without prior protection of our recreational resources and planning to accommodate more people, local citizens could lose not only livability but tourist dollars as well.

Often in the past, duplication or conflicting developments by governmental agencies and private groups have resulted in fragmentation and inefficiency in the recreational system. With ever growing funding problems, it is becoming increasingly important that a well defined and coordinated recreation system be developed. This plan is not meant to be that detailed plan, but it is meant to serve as an analysis of local needs and to set into motion activities aimed at fulfilling those needs and protecting those resources which will be required.

Urban and urbanizing areas are particularly in need of parks. Often by planning ahead, better parks may be obtained for considerably less cost than that which would have been required otherwise. Also, it is often possible to combine parks with other public facilities, such as schools and fire stations, which permits even greater savings in land, personnel and maintenance.

To provide a common basis of understanding, the following park definitions were developed for use by the Recreation CAC:

Park Passive Areas = 1 - 3 acres

Neighborhood Parks = 1 - 5 acres

Community Parks = 5 - 25 acres

Regional Parks = 25 + acres

Both state parks (most state parks in the County need some form of rehabilitation) and Federal recreation areas are receiving much more use from both the local population and tourists. Particular concern has been expressed over (a) Wilderness Areas, where popular lakes and trails are beginning to show the effects of heavy use; (b) Campgrounds and Picnic Areas, where facilities are inadequate for present demands; (c) Fishing Areas, because access to more remote locations is being requested; (d) Skiing Facilities, where demand of such uses as restrooms and warming facilities is exceeding present capacities; and (e) Off-Road Vehicle Activity, because desires to expand present roads or play areas conflict with solitude-dependent recreation and wildlife.

Other often identified needs are bicycle-pedestrian- equestrian trails and planned recreation activities (including educational programs). Coordination between public and private facilities would result in more recreational opportunities for everyone, and, because tourism is so important locally, a better employment and income environment.

Recreational needs in rural areas are often different than urban areas. While the urbanizing areas require more athletic and pool facilities, the rural areas need more Natural Areas and Research Natural Areas (selected by well- defined scientific criteria) to maintain and improve our knowledge of the environment.

One type of recreation which deserves special recognition is the winter sports activities of the area. Known for its good skiing, Deschutes County attracts many thousands of visitors each winter. Facilities for these people are rapidly becoming inadequate and new areas and services can be anticipated in the future.

Presently, the County is not involved with providing recreation facilities. No change in that situation is anticipated; however, the County's help in obtaining land dedications for parks, in regulating off-road vehicles (such as have caused considerable damage when used inappropriately east of Horse Ridge), and in other ways, could assist existing recreation providers to meet the anticipated needs.

Because of the preceding findings the following goals have been established.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-003, 1993; Ord. 92-051, 1992; PL-20, 1979)

23.72.020. Goals.

1. To satisfy the recreational needs of the residents of and visitors to Deschutes County.
2. To maximize utilization of economic and personnel resources through increasing intergovernmental and public-private cooperation in the provision of recreation facilities and services.
3. To provide, concomitant with growth, sufficient uniformly distributed land and facilities for park purposes throughout the County.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-003, 1993; Ord. 92-051, 1992; PL-20, 1979)

23.72.030. Policies.

1. Coordination.
 - a. Developmental cooperation and coordination should be maximized. On significant projects, the originating agency should communicate in the spirit of cooperation with other agencies regarding planning, acquisition, development and operation of programs and facilities. The private sector should be included to the greatest extent possible and should, whenever possible, be responsible for the acquisition, development, operation and maintenance of recreational facilities.
 - b. Rehabilitation, facility improvement or expansion and recreational program from the State and Federal agencies shall be encouraged. A County Recreation Committee with both private and public representation should be the coordinator of such activities. Input from groups with special needs should be encouraged so as to develop appropriate programs, with tolerable impact to resources and surrounding residents and wildlife. Park rehabilitation, replacement, minor betterment, repair and ordinary maintenance activities which do not significantly impact land uses will be allowed outright.
 - c. In order to obtain greater efficiency in providing services, local input to State and Federal agencies on land management policies should emphasize appropriate multi-use utilization.
 - d. The Oregon State Parks System Plan and Master Plans shall serve as the State Parks guide for improvements locally, and act as the basis for coordination and cooperation between State Parks and local recreation agencies.
 - e. The County will continue to coordinate the various recreational needs for the County and urban areas with the U. S. Forest Service, Bureau of Land Management, State Parks Divisions, Bend Metro Parks and Recreation District, the Central Oregon Parks and Recreation District and other recreation providers.
 - f. The County shall work with private and public agencies to develop a plan to provide needed warming, restroom and parking facilities for existing winter sports areas, as well as encouraging the designation of additional areas. The plan should seek to combine cross-county skiing and

snow play areas, while separating these uses from snow mobiling areas. Private and public provisions for additional downhill skiing areas compatible with the environment should be sought and adequate transportation to ski areas, utilizing methods other than automobiles, should be developed.

- g. The County shall assist State and Federal efforts to protect Oregon Natural Areas and the U.S.F.S. Research and Experimental Areas.

2. Facilities.

- a.. The following guidelines for assessing the adequacy of available parks shall be established:

Park Passive Areas and Neighborhood Parks = 2.5 acres per 1000 population

Community Parks = 2.5 acres per 1000 population

Regional Parks = 5.0 acres per 1000 population

- b. The County shall require the dedication of land or fees for park purposes, consistent with the preceding standards, as a condition of subdivision approval. Developments with private recreation areas may be credited against any dedication requirements, if public park standards are met (including facilities under control of a legally established homeowners association).
- c. The most critical need for new parks occurs in urbanizing areas. Acquisition and development of urban recreational areas consistent with community growth shall be the responsibility of the local park districts and cities. However, the County shall cooperate with recreation providers in establishing zoning to protect existing parks from incompatible adjacent uses, setting aside or acquiring suitable public land for park purposes, and encouraging annexation into a park district of lands added to an urban growth boundary.
- d. Park districts and the cities, where no park district exists, shall seek to acquire centrally located park areas, especially in high-density neighborhoods. Joint use of the land for park use and such facilities as schools or fire stations shall be encouraged.
- e. Recognizing that streams, rivers, and irrigation canals are natural attractors for recreation, the County shall encourage the development of public multi-use trails along these features, in areas where conflicts with natural resources would not result. Trails should be designed to accommodate pedestrians, bicyclists, and equestrians, as appropriate to the area.
- f. While some flexibility is required, once a park plan has been prepared and adopted by local regulatory agencies, it shall remain as the controlling document for guiding development of that park.
- g. Depending on the determination of each community, the County shall support local efforts for a public pool for each County-incorporated community.
- h. Unincorporated communities shall be encouraged to assess their recreational needs and to identify lands required to serve those needs. The County shall encourage civic organizations and public agencies attempting to meet those identified needs.
- i. The County shall provide the bicycle and pedestrian connections between schools, residential areas, parks and other recreation attractions, shopping centers, and other commercial and industrial centers.
- j. Because it is recognized that the over-use of the motor vehicle has detrimental effects on the County, the use of bicycling, and walking, and mass transit, carpooling, shall be encouraged as a means of accessing recreation areas.
The State Parks Department shall be encouraged to include trailer dumps and sanitary facilities in their development of the Juniper Waysides between Bend and Redmond.
 - 1. Recognizing the needs of recreational bicycling, the County shall maintain or improve the quality of rural routes.
- k. Public outdoor recreation facilities such as outdoor theaters are needed to accommodate gatherings and other uses in each of the County's major population centers.

- l. To facilitate learning about and experiencing outdoor activities an outdoor education camp is needed, and a sportsman's park (rifle, archery, off-road vehicles, etc.) shall be designated near Bend.
 - m. The Oregon High Desert Museum is an example of the type of outdoor education project that the County shall encourage.
 - n. Other specific needs to be met by public and private recreation providers that have been identified are:
 1. Additional camping and/or picnic sites at Sparks, Elk, Lava and Cultus Lakes, as well as at Crane Prairie and Wickiup Reservoirs;
 2. A group camping area at La Pine State Park;
 3. A hiker's camp at Tumalo State Park;
 4. More water sport opportunities;
 5. Additional wilderness areas (as demand warrants and consistent with the local economy and protection of fragile areas);
 6. Maintenance of existing and identification of additional off-road vehicle areas.
 - o. All development in Deschutes County shall comply with all applicable state and federal rules, regulations and standards.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-003, 1993; Ord. 92-051, 1992; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.76. ENERGY

23.76.010. Energy.

23.76.020. Goals.

23.76.030. Policies.

23.76.010. Energy.

Deschutes County is presently an importer of energy. After 1983 the Bonneville Power Administration will no longer assure 100 per cent distribution of electrical power. As with the rest of the nation, Deschutes County can anticipate increasingly expensive and possibly even shortages of gasoline. Therefore, it is likely that the County will face serious problems in the near future unless precautions are taken in time.

Hydropower generation in the County is limited to two sites, which are operating at capacity. There is another potential site at Wickiup Dam.

There is a possibility for fossil fuel development in the eastern portion of the County, but it is presently unfeasible. Local natural gas supplies could increase in the mid-1980's with the construction of a second natural gas pipeline through Central Oregon. There also exists a possibility for a third gas line in the future.

There is presently some geothermal investigation occurring in the County near Newberry Crater and also near the Three Sisters Mountains. Environmental impact statements to permit appropriate exploration in the Cascades have already been prepared. Problems with objectionable smells from released gases, possible groundwater contamination, earth subsidence or quakes are all hazards to be considered in geothermal energy use. Loss of recreational lands and esthetic qualities are also possibilities.

It appears Deschutes County would have few, if any, appropriate sites for coal or natural gas thermal generation plants, according to the State-wide Siting Task Force Report.

The County does have some possibility for other types of energy production. Wind generation may be feasible if it can be tied to the existing power grid. Waste wood burning is popular and feasible and one local manufacturer has constructed a 9000 KW facility, while another will save 6.9 million cubic feet of natural gas each year using waste wood. County Pollution Control Bonds can be used to finance conversion from fossil fuels to wood waste because it reduces a major solid waste problem, as well as reducing energy costs to local industries and the outflow of local money for imported energy.

Energy conservation is another important resource that can reduce pollution, free existing energy resources for other uses and reduce the outflow of money for energy. Education is possibly the most obvious way to promote conservation. Coordination through the Extension Service and by establishing a paid coordinator could do much to encourage conservation. Another way to obtain conservation is by regulation, such as by establishing higher building and subdivision standards. Sometimes education and regulation can be combined to require thermal ratings for new buildings so people can determine more efficient lay-outs, or by requiring the heat loss analyses performed by utility companies to be kept on file for public review.

Recycling is also an energy saver. For example, aluminum when reclaimed takes only four percent of the energy required to process raw ore, including handling and transportation costs. Recycled copper requires only 11 percent of the energy needed to obtain the metal from raw ores. Some recycling already exists locally but much more is possible.

Solar energy is a real possibility for Deschutes County. Proper siting of housing with a solar orientation can permit critical sunlight access. Passive solar methods, such as proper window placement and seasonal shading, can have significant impact.

Certainly one of the biggest energy issues to face Deschutes County is transportation. State-wide transportation consumes 36 percent of total State-wide energy use, and it constitutes 56 percent of an average household's energy use. As a rural area, Deschutes County is heavily dependent on automobiles and thereby consumes considerable gasoline. Efforts to reduce motorized vehicles would be difficult but the effect would be lower energy use, pollution levels and expenses. Just the reduction of road construction and maintenance (re-sealing, snowplowing, etc.) would save considerable energy.

In light of local conditions and trends the following goals were chosen.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-003, 1993; Ord. 92-051, 1992; Ord. 85-001, 1985; PL-20, 1979)

23.76.020. Goals.

1. To protect local natural energy sources.
2. To manage land uses to maximize the conservation of all forms of energy.
3. To assist, as appropriate, in the provision for adequate local energy supplies.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-003, 1993; Ord. 92-051, 1992; Ord. 85-001, 1985; PL-20, 1979)

23.76.030. Policies.

1. General.
 - a. The County shall review and promote the development and use of local alternative energy sources in order to prepare for future shortages and to reduce the outflow of local dollars to buy energy.
 - b. Coordinated planning between local energy providers, particularly electrical, and the County Planning Department shall be sought. This planning is to be directed at determining energy needs in all parts of the County and assisting in the provision of adequate supplies and capital facilities.
 - c. Construction of large thermal or nuclear plants locally should be discouraged unless approved by a public vote.
 - d. Energy Assessment. During major plan updates, or more often as necessary, the County shall assess its energy use and the potential for energy conservation. The County shall use information available from the state and federal governments and utility companies.
2. Alternative energy sources - Geothermal resources policies.
 - a. Public involvement.
 1. The Planning Division shall ensure that citizens, land owners, and lease holders are given ample opportunity to be involved in all phases of geothermal planning and decision-making that occur under the County's jurisdiction. This involvement program shall provide for continuity of citizen participation, and for information that enables citizens to identify and comprehend geothermal issues.
 2. Federal and state agencies exercising geothermal responsibilities in the County shall be expected and encouraged to make use of the County's existing citizen involvement program whenever appropriate.
 - b. Intergovernmental coordination
 1. The County shall encourage the formulation of federal and state land and resource management policies which are consistent with the County's geothermal policies. In this regard the County shall endeavor to become a partner with the federal and state governments in determining the future of geothermal energy in the County.

2. In view of the multiplicity of governmental jurisdiction over geothermal resources, the County shall seek close coordination with all affected local, state, and federal agencies. In this regard the Planning Division shall maintain regular communications with federal and state agencies that are exercising geothermal responsibilities in the County, and shall keep local officials informed of federal and state actions accordingly.
- c. Resource assessment.
 1. In order to identify and protect the undefined values of its geothermal resources, the County shall support continued resource assessment activities by the public and private sectors. In this regard, the Planning Division shall monitor such activities and collect additional resource data wherever possible for inclusion in the Geothermal Element during updates or amendments.
 2. In recognition of the public benefit derived from greater resource knowledge, the County may undertake its own resource assessment activities where such work is expected to ultimately benefit the local economy. The results of County-sponsored resource assessment will be given the widest possible dissemination in order to facilitate further geothermal development consistent with County policies.
 - d. Resource Utilization.
 1. The County supports utilization of geothermal resources, either with heat pumps, direct applications, or for purposes of generating power. However, such support is conditioned on the determination that the proposed use can be developed in a timely, orderly, and environmentally-sound manner, and that adequate protection of the resource is provided so as to ensure its continued availability and productivity over time. Further, such support is limited to those resource areas where conflicting uses are not considered predominant, as identified in Policy 5(F).
 2. When County facilities are to be renovated or newly constructed, consideration shall be given to the use of geothermal resources in these facilities when such use is technically and economically advantageous. The County shall encourage other local entities to conduct similar geothermal evaluations during their facility planning processes.
 - e. Economic development.
 1. The County's support for geothermal development shall be closely coordinated with its economic development program. The County believes that its low and moderate-temperature resources may offer a significant comparative advantage to business and industry, and it shall support geothermal projects that serve to retain or create employment opportunities in the County.
 - f. Land-Use
 1. For purposes of compliance with Statewide Planning Goal 5, the County believes its geothermal resources and the conflicting uses identified in Section 4 of the Element should be balanced according to site-specific relative merits. Implementation measures shall provide protection for conflicting uses by conditionally allowing geothermal exploration and production, thereby balancing the benefits to the County from both geothermal resources and conflicting uses. This policy shall apply to all resource areas inventoried in Section 2 of the Element, except in those areas where the conflicting uses listed in Table 4.1 of the Element shall be fully protected as follows:
 - a. Exploration and Production Prohibited.
 - i. That portion of the Newberry Volcano resource area lying within the exclusion area boundary shown in Exhibit "B."
 - ii. Those areas presently defined by the Deschutes National Forest Land & Resource Management Plan, incorporated hereby reference, as ineligible for leasing, specifically: Wilderness, Research Natural Areas, Experimental Forest, Bend Municipal Watershed, Developed Recreation Areas, and Dispersed Recreation Unroaded Winter Areas.
 - b. Production Prohibited (Exploration Allowed).

- i. Those areas presently defined by the Deschutes National Forest Land & Resource Management Plan, incorporated hereby by reference, as being limited to no surface occupancy, specifically: Experimental Forest, Dispersed Recreation Unroaded Areas, Dispersed Roaded Areas, Developed Recreation Areas, Protection Management Areas, Special Management Areas, Potential Research Natural Areas, and Threatened and Endangered Species Areas.
The County has determined that conflicting uses shall be fully protected in the foregoing areas because of the greater economic, social, and environmental benefits that accrue from the conflicting uses. In researching this determination, the County has relied upon the discussion of conflicting uses and their consequences contained in Sections 4 and 5 of the Geothermal Element; the Rural Development, Economy, and Recreation sections of the Growth Management Element of the Comprehensive Plan; the Forest Lands, Open Spaces, Fish & Wildlife, and Historic & Cultural sections of the Resource Management Element of the Comprehensive Plan; the Recreation, Fish & Wildlife, Special Uses, Visual Quality, Economy, Employment, and Forest Dependent Community Concept sections of the Deschutes National Forest Land & Resource Management Plan; and the Oregon Department of Economic Development 1983 Annual Economic Report for Deschutes County. It is the County's determination that the conflicting use information contained in these references constitutes sufficient evidence of the greater importance of the conflicting uses to the County, thereby warranting exclusion of geothermal exploration and/ or production in the areas cited above.
- ii.. The County recognizes that if utilization of geothermal energy is to be optimized, the designation of land-uses for areas overlying geothermal resources must accommodate those uses to which the resources can be applied. In this regard, the County shall incorporate geothermal utilization as a determinant in land-use planning; and, where appropriate, shall review permitted uses that can utilize geothermal resources if and when suitable resources are confirmed in an area. However, geothermal end-uses shall be permitted only where their compatibility with surrounding land-uses can be demonstrated with certainty.
- g. Environmental protection.
 - 1. In all cases the County's support for geothermal development shall be conditioned upon satisfactory evidence that sufficient environmental safeguards are provided. Environmental concerns of the County shall include, but not be limited to: air quality, water quality, noise, subsidence, induced seismicity, water consumption, fish and wildlife, vegetation, historic and cultural resources, visual and scenic qualities, erosion and earth stability, waste disposal, and public safety and health.
- h. Public facilities and services.
 - 1. In addition to Policy G(1), in all cases the County's support for geothermal development shall depend on the extent of impacts to public facilities and services. In this regard, the County's concerns shall include, but not be limited to: roads, drainage, schools, law enforcement, fire protection, water supply, sewage disposal, solid waste disposal, and general administrative services.
 - 2. The Planning Division, in consultation with the Public Works Department, shall monitor geothermal activities in order to forecast impacts to public facilities and services; and shall prepare capital improvement or related plans accordingly so as to support geothermal development in a timely and orderly manner with a level of facilities and services appropriate to such development.
- i. Fiscal responsibilities.
 - 1. In recognition of specialized administrative demands that may be placed on the County by geothermal developers, the County shall require said developers to defray County expenses associated with processing a geothermal permit request, or conduction related studies or

monitoring programs, directly required by a geothermal project. This Policy shall also extend to any government agency engaged in geothermal development.

3. Alternative energy sources.
 - a. Wind. Because the wind is a non-polluting, renewable energy source, major wind devices and associated facilities shall be conditional uses in agricultural, forest and other rural zones. Also, small scale (less than 20 KW) private use of wind generators or pumps shall be encouraged.
 - b. Wood and slash wood. Given the availability and usefulness of waste and slash wood the County shall maintain a waste wood dump for processors where the material shall be made available to the public, and shall encourage U.S. Forest Service projects which make slash wood available.
 - c. Solar. Because it is renewable and in plentiful supply locally the County shall encourage the use of solar energy by:
 1. Promoting the construction of housing with its long axis in the east-west direction and having solar access three hours before and after solar noon (variances because of topography, rock outcroppings or alternative solar access means may be permitted);
 2. Providing avenues for establishing solar property rights (see ORS 215.110) by such methods as solar sky space protective covenants in new developments and creating standard methodology for adjacent properties to establish solar sky space easements; and,
 3. Allowing for future centralized solar generation of electricity in the large vacant areas in the eastern portions of the County (particularly on BLM lands).
 - d. Internal Operations. The County shall, when practicable, make energy efficiency and the use of renewable resources a regular practice in its design and operation of buildings, equipment and public facilities and services.
 - e. Recycling.
 1. Recycling is an effective method of energy conservation. The County has adopted a County-wide recycling program in compliance with Senate Bill 405. The primary responsibility for this program is through the County Solid Waste Division. The ongoing recycling program will provide for the following:
 - a. Identify projects and methods to achieve the specific goals; and
 - b. Require and annual review of program status.
 2. The County shall consider the designation of a County employee as Recycling Coordinator who is responsible for:
 - a. Encouraging recycling throughout the County;
 - b. Fostering communications about recycling among local governmental agencies, organizations and the public; and,
 - c. Providing assistance to the County Solid Waste Advisory Committee in considering and implementing ways to increase local recycling activities.
 3. The County shall also consider recycling when enacting ordinances, issuing contracts and franchises and when purchasing supplies.
 4. The County shall study the possibility of initiating pilot projects regarding source separation of recyclables and their collection in existing or new garbage franchises.
 5. The County shall seek funds to provide staff assistance and resources for developing recycling drop-off and storage centers in the Bend, Redmond, Sisters and La Pine areas.
 - f. Conservation.
 1. All homes constructed in Deschutes County shall meet State insulation standards. The County shall consider more stringent standards (both prescriptive and equivalent performance criteria) and encourage innovative building design which meets the intent of the prescriptive standards.
 2. To assist the public in understanding energy conservation in their homes the County will rate the "thermal effectiveness" of new or existing dwellings, if an owner requests, based on such factors as window placement, shading, insulation values and thermal mass, and other

factors similar to the City of Davis, California, Community Development Department Standards.

3. Because multi-family housing and other types of common wall construction is more energy efficient the County shall encourage such development in urban areas.
4. Since "leapfrog" and scattered development is wasteful of energy in the provision of services (school buses, fire protection, utilities and transportation) these patterns shall not be permitted (see Rural Development and Urbanization chapters), and future development should occur in higher densities along existing corridors in urban areas.
5. Public/Private Actions: The County shall encourage local residents and businesses to conserve energy, to use renewable resources and to recycle materials. The County shall coordinate its efforts with those of local organizations, special districts, utility companies and state and federal agencies.

At the time of subdivision review, the County shall see that: Covenants which prevent energy conservation, such as roofline requirements precluding solar panels, bans on clotheslines and prohibitions on street motorcycles, shall not be established in proposed developments.

6. The County shall account for its 1% bicycle funds from the State Highway Funds, and shall provide this accounting to the Bicycle Advisory Committee on an annual basis. The 1% funds shall be the minimum spent to provide bicycle and pedestrian facilities within the County. The County shall establish methods for funding pedestrian and bicycle facilities that are not within the public right-of-way and therefore are not eligible for the 1% funds. The County shall consider setting aside monies which might otherwise be used for expanding motorized traffic ways and apply them toward a non-motorized transportation system which accesses educational, recreation, employment and shopping areas as well as connects to new development.
7. Oregon imports 45% of its energy as fuel for motorized vehicles. Nonmotorized transportation is recognized as an important way to conserve energy. The County shall provide bicycle and pedestrian connections between schools, residential areas, parks and other recreation attractions, shopping centers, and other commercial and industrial centers. In addition, the County shall encourage nonmotorized modes through the use of techniques such as designating nonmotorized areas (pedestrian malls), installing traffic cells and traffic calming designs, allocating a greater share of street space to nonmotorized modes, restricting motor vehicle parking, and other pedestrian and bicycle-oriented land use patterns.
8. As much as possible non-motorized systems should be favored over motorized transportation systems.
9. New major consumers of energy, such as commerce and industry, shall be located whenever possible near established energy distribution centers.
10. The County should set an example by weatherizing its buildings and considering passive or active solar heat, perhaps with assistance from retrofit grants.
11. To promote public awareness of the reasons and need for energy conservation the County shall develop an educational program for use County-wide.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-003, 1993; Ord. 92-051, 1992; Ord. 85-001, 1985; Ord. 80-203, 1979; PL-20, 1979)

Chapter 23.80. NATURAL HAZARDS

23.80.010. Natural hazards.

23.80.020. Goals.

23.80.030. Policies.

23.80.010. Natural hazards.

Natural hazard areas may be defined as areas subject to natural events that are known to result in death or to endanger works of man, such as stream flooding, wildfire, ground water, erosion and deposition, landslides, earthquakes, weak foundation soils and other hazards unique to local or regional areas.

Deschutes County is fortunate to have only a few areas of geologic or topographic hazard. The major fault which runs through the County (Brothers Fault) is believed by State geologists to be stable. Landslides are scarce and seem to be largely located in the national forest, although some potential exists in the Hampton Butte area should development occur there. Rockfalls have been noted in rimrock areas but this again is rare. Some potential for flash flooding exists near Millican and Brothers; however, little conflicting development is anticipated in those areas. The two most likely hazards in the County are stream flooding and wildfire. Floods have done significant damage along the Little Deschutes River and Squaw Creek and the Deschutes and Dry Rivers also have similar potential.

Undoubtedly, the most obvious natural hazard is wildfire. Each year, several fires occur locally. Some are nature-caused (lightning) but many are man-caused. The subdivisions scattered throughout the timbered areas, particularly in the Lodgepole Pine area, increase not only the risk of people being hurt or killed but also increase the likelihood of a fire. Inadequate access, inappropriate building materials, insufficient fire-fighting equipment and personnel, a naturally dry climate all pit to wildfire being a serious threat to residents of Deschutes County. Probably, the least understood natural hazard is drought. Central Oregon is a semi-arid climate subject to many years without adequate precipitation. Planning which does not consider the effects of these dry years could create serious problems. Further discussion of water occurs in the Water Resources Chapter of the Plan. The State's goal is seen as appropriate for this area.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 200; Ord. 92-051, 1992; Ord. 88-031, 1988; PL-20, 1979)

23.80.020. Goal:

To protect life and property from natural disasters and hazards. In order to accommodate the new population anticipated for Deschutes County in a safe and beneficial manner, a number of policies have been prepared for implementation.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 200; Ord. 92-051, 1992; Ord. 88-031, 1988; PL-20, 1979)

23.80.030. Policies.

1. Review. Provision shall be made in County land use regulations to assure proposed developments will receive a review of potential natural hazards (stream flooding, flash flooding, landslides, wildfires, etc.) and that sufficient authority exists to modify or deny applications where such hazards exist.
2. Flooding.
 - a. The flood hazard areas of Deschutes County are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

- b. These flood losses are caused by the cumulative effects of obstructions in areas of special flood hazards, which increase flood heights and velocities, and when inadequately floodproofed, elevated or otherwise protected from flood damage, also contribute to the flood loss.
 - c. In order to accomplish the purposes of this plan, the Zoning Ordinance shall provide for:
 - 1. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increase in erosion or in flood heights or velocities.
 - 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
 - 3. Controlling the alteration of natural flood plains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;
 - 4. Controlling filling, grading, dredging and other development which may increase flood damage; and
 - 5. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.
 - d. No structures shall be allowed in areas except areas of shallow flooding. Fill should be allowed in the flood plain only to the extent that it is necessary to allow for utility facilities and stream bank stabilization which cannot be located outside of the flood plain. All uses which could have any effect upon the hazards set forth above shall be conditional uses and subject to rigorous review to insure that use of the flood plain is only a last resort to allow necessary facilities and some beneficial use of pre-existing lots of record.
 - e. No new parcels shall be created which would allow the construction of new dwelling units in the flood plain.
 - f. Only variances to dimensional standards of a lot or setback restrictions shall be considered. No use variance or variances to the minimum standards established by the Federal Emergency Management Agency shall be allowed.
 - g. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Deschutes County", with accompanying Flood Insurance Maps, is hereby adopted by reference and declared to be a part of this Ordinance. The Flood Insurance Study is on file at the Deschutes County Community Development Department Planning Division.
 - h. The Flood Plain Zone shall include all areas designated as "Base Flood" areas by the Flood Insurance Study for Deschutes County. When Base Flood data has not been provided in accordance with the Flood Insurance Study for Deschutes County, the basis for establishing the Flood Plain Zone shall be based upon any base flood information or floodway data reasonably available from a federal, state or other source.
- 3. Drought. Plans (public and private) shall consider and reflect the effect of drought on the proposed projects.
 - 4. Fire.
 - a. Design public use areas, such as parks, recreation sites and picnic areas, so that fires starting in them cannot escape to development or to surrounding wildlife.
 - b. In timber, rangeland or other appropriate areas subdivisions and other types of development should plan for fire truck access to within 16 feet of lakes, ponds, streams or other water sources.
 - c. For easy resident evacuation and ready access for fire and emergency equipment all new subdivision or other major land development shall provide at least two different ingress-egress routes.
 - d. To accommodate heavy firefighting equipment, cul-de-sacs shall be limited to 600 feet in length and terminated by a paved turnaround not less than 38 feet in diameter, unless another equally protective alternative is provided which is acceptable to the County and fire fighting agencies responsible for fire control in that area.

- e. Bridges shall be constructed to meet the requirements of the appropriate fire district, as to width and weight standards, so as to assure access for heavy firefighting equipment.
- f. All existing roads shall be maintained by either the appropriate public or private agency or by the development residents unless an adequate alternative route is provided so as to not deny access beyond the subdivision for firefighting equipment.
- g. To avoid delays in responding to fire calls all roads, streets, and buildings shall be designated by name or number clearly visible from the main travel roadway, before occupants move in. This will include the installation of street and road signs of durable and permanent materials at all intersections in the subdivision.
- h. The Uniform Building Code provides adequate fire protection for residential construction but the County should adopt the Uniform Fire Code to assure adequate fire protection for commercial and industrial construction and support establishment of fire protection facilities in accordance with recommendations of the National Board of the Fire Underwriters in appropriate areas.
- i. When subdivision or developments are created in the County, a minimum width for a fuel break, as determined by the local fire authority, shall be required by the County to be constructed and maintained around all buildings or structures, so as to reduce structural exposure to flames and radiant heat.
- j. During preliminary subdivision review, the Planning staff, in coordination with the fire district and/or other firefighting agencies, shall indicate whether or not the development plan has adequately provided for fire protection. Annexation to or contract with a fire district or creation of a new fire district or private firefighting agency may be required conditions for development approval.
- k. All development in Deschutes County shall comply with all applicable state and federal rules, regulations and standards.

Additional standards for firefighting facilities can be found in the Public Facilities and Services Chapter. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 200; Ord. 92-051, 1992; Ord. 88-031, 1988; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.84. DESTINATION RESORTS

23.84.010. Destination resorts.

23.84.020. Goals.

23.84.030. Policies.

23.84.010. Destination resorts.

The numerous beneficial impacts of destination resorts are recognized by Statewide Planning Goal 8 and by implementing statutes. The past experiences with destination resorts in Deschutes County have generally been very positive.

The development of destination resorts can serve as an important element to diversify the economic base of the County. This was recognized by the County in the comprehensive plan adopted in 1979. Under the 1979 plan and implementing ordinances, destination resorts are allowed as conditional uses in the F-2, F-3, OS&C, MUA-10 and RR-10 zones.

Since 1979 destination resorts have increased in importance to the economy of Deschutes County. A new resort, known as Eagle Crest has been sited since that time. Existing resorts, such as Sunriver and the Inn of the Seventh Mountain, have expanded. Tourism in general has increased in importance to the Oregon economy, particularly as the timber industry has gone into decline.

Recognizing the importance of tourism to the economy of the State of Oregon, the state legislature and LCDC have taken steps to make it easier to establish destination resorts on rural lands in the state. Statewide Planning Goal 8, the recreation goal, was amended to specify a process for locating destination resorts on rural land without taking an exception to Goals 3, 4, 11 and 14, which govern development in rural resource lands. This was followed by legislation incorporating Goal 8 into Oregon's land use statutes. By these actions, the State of Oregon recognized destination resorts as a legitimate rural land use. Under these changes, destination resorts may be sited in EFU zones where they weren't allowed before. Another action at the state level affecting the siting of destination resorts in the forest rule adopted by LCDC in March 1990. This rule allows destination resorts to be sited on forest lands pursuant to Goal 8.

The County recognizes that the siting of destination resorts would be severely limited if such developments were not allowed in farm and forest zones.

Implementation of destination resort siting under Goal 8 is optional. The Goal 8 legislative process in Deschutes County was prompted by an application by the owners of Eagle Crest for legislative changes in the County's comprehensive plan and implementing land use ordinances. The Eagle Crest owners wished to expand their current destination resort onto adjacent lands and wished to do so without going through the exceptions process.

Goal 8 requires that the County adopt a map showing which lands in the County are available for destination resort development. The purpose of the map is to provide greater certainty concerning destination resort siting than is available under the exceptions process. To protect forest and farm resources, Goal 8 prescribes that certain classes of lands are off limits to destination resort development. The final map must reflect exclusion of such areas. A detailed description of the mapping process engaged in by the County is found in the Resource Element of the comprehensive plan.

Goal 8 and the state statute also recognize that destination resorts can have negative impacts on neighborhoods and the rural quality of life. These impacts can be substantially mitigated, however. The County recognizes the importance of balancing protection mechanisms for resource lands and rural land

uses with the economic benefits destination resorts provide. The County further recognizes that this balance can be struck by the manner in which areas are designated as being available for destination resort development and by developing balanced siting criteria.

The County recognizes that it has the option to be more restrictive than state law in the areas it chooses to exclude from destination resort siting through the mapping process.

The Board of County Commissioners has determined that it should proceed to implement Goal 8 in a manner consistent with Goal 8 and state law that will allow proposed destination resorts to apply for approval. Because of the County's need as part of periodic review to update its comprehensive plan and ordinances to implement the forest rule and to study current farm uses in the County, it is appropriate to implement Goal 8 in a phased fashion. Accordingly, the County has first considered siting destination resorts on the following EFU lands not excluded by Goal 8: (1) unirrigated EFU land, (2) irrigated EFU lands in contiguous ownership having fewer than 40 acres of contiguous irrigation, and (3) irrigated EFU lands having 60 or more acres of non-contiguous land in the same ownership. Second, following the County's implementation of the forest rule, the County will consider development of destination resorts on forest lands. Third, following a review of the County's farm lands as part of the periodic review process, the farm lands not considered for destination resorts in the first stage will be considered.

Notwithstanding the phased approach to destination resort zoning, it is appropriate to develop siting standards for destination resorts generally. If further refinements are needed when forest lands and farm lands not considered in the first mapping phase are considered, such refinements can be made at the time. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-029, 1993; Ord. 92-029, 1992; Ord. 92-001, 1992)

23.84.020. Goals:

To provide for development of destination resorts in the County consistent with Statewide Planning Goal 8 in a manner that will be compatible with farm and forest uses, existing rural development, and in a manner that will maintain important natural features, such as habitat of threatened or endangered species, streams, rivers and significant wetlands.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-029, 1993; Ord. 92-029, 1992; Ord. 92-001, 1992)

23.84.030. Policies.

1. Mapping for destination resort siting.
 - a. To assure that resort development does not conflict with the objectives of other Statewide Planning Goals, destination resorts shall pursuant to Goal 8 not be sited in Deschutes County in the following areas:
 1. On a site with 50 or more contiguous acres of unique or prime farm land identified and mapped by the Soil Conservation Service or within three miles of farm land within a High-Value Crop Area;
 2. On predominantly Cubic Foot Site Class 1 or 2 forest lands which are not subject to an approved Goal exception;
 3. On areas protected as Goal 5 resources in an acknowledged comprehensive plan protected in spite of identified conflicting uses ("3A" sites designated pursuant to OAR 660-16-010(1));
 4. Especially sensitive big game habitat, as generally mapped by the Oregon Department of Fish and Wildlife in July 1984 and as further refined through development of comprehensive plan provisions implementing this requirement.

- b. In addition, destination resorts shall not be located in areas zoned EFU-320, EFU-80, OS&C and F-1 (as designated pursuant to the implementation of the forest rule by Ordinance 92-026) or on resource lands within one mile outside of urban growth boundaries.
 - c. Federal lands not otherwise excluded under these policies shall not be mapped with the DR overlay zone. Federal land not otherwise excluded that becomes privately owned through land exchanges or other federal disposition can be considered for destination resort siting consistent with these policies and mapped as available for destination resort development.
 - d. The County shall adopt a map showing where destination resorts can be located in the County. Such map shall become part of the Comprehensive Plan and Zoning Ordinance and shall be an overlay zone designated Destination Resort (DR).
2. Ordinance provisions.
- a. The County shall ensure that destination resorts are compatible with the site and adjacent land uses through enactment of land use regulations that, at a minimum, provide for the following:
 - 1. Maintenance of important natural features, including habitat of threatened or endangered species, streams, rivers, and significant wetlands; maintenance of riparian vegetation within 100 feet of streams, rivers and significant wetlands; and
 - 2. Location and design of improvements and activities in a manner that will avoid or minimize adverse effects of the resort on uses on surrounding lands, particularly effects on intensive farming operations in the area.

Such regulations may allow for alterations to important natural features, including placement of structures, provided that the overall values of the feature are maintained.
 - b. Minimum measures to assure that design and placement of improvements and activities will avoid or minimize the adverse effects noted in Policy 5(b) shall include:
 - 1. The establishment and maintenance of buffers between the resort and adjacent land uses, including natural vegetation and where appropriate, fenced, berms, landscaped areas, and other similar types of buffers.
 - 2. Setbacks of structures and other improvements from adjacent land uses.
 - c. The County may adopt additional land use restrictions to ensure that proposed destination resorts are compatible with the environmental capabilities of the site and surrounding land uses.
 - d. Uses in destination resorts shall be limited to visitor- oriented accommodations, overnight lodgings, developed recreational facilities, commercial uses limited to types and levels necessary to meet the needs of visitors to the resort, and uses consistent with preservation and maintenance of open space.
 - e. The zoning ordinance shall include measure that assure that developed recreational facilities, visitor-oriented accommodations and key facilities intended to serve the entire development are physically provided or are guaranteed through surety bonding or substantially equivalent financial assurances prior to closure of sale of individual lots or units. In phased developments, developed recreational facilities and other key facilitated intended to serve a particular phase shall be constructed prior to sales in that phase or guaranteed through surety bonding.
3. Phased implementation. The County shall implement Goal 8 in a phased sequence as follows:
- a. The County shall adopt a zoning ordinance including all provisions required by Goal 8.
 - b. The County shall identify countywide any lands excluded by Goal 8 from destination resort siting. Based on *Alliance for Responsible Land Use in Oregon v. Deschutes County*, 23 Or LUBA 476, affirmed, 15 Or App 621 (1992), land within three miles of the county border shall be excluded under Goal 8 countywide at this time. The exclusion will be reconsidered when land located in adjoining counties and within three miles of Deschutes County has been inventoried to determine whether any of that land constitutes high value crop areas in a manner adequate to determine whether any land in Deschutes County is within three miles of a high value crop area located in a neighboring county.
 - c. The County shall map lands available for destination resort siting in a phased sequence. The County shall first consider unirrigated EFU lands and irrigated EFU lands having fewer than 40

acres of contiguous irrigated land or 60 acres of non-contiguous land in the same ownership where such lands are not otherwise excluded from destination resort siting under these policies and Goal 8. Next, as the county proceeds to implement the Goal 4 forest land rule as part of periodic review, the County shall consider to what extent destination resorts may be sited on lands presently zoned for forest uses. Finally, after the County has completed a farm study pursuant to periodic review, the County shall consider to what extent destination resorts may be sited on EFU lands not considered during the first phase of implementation of Goal 8.

As to those lands not considered in this first phase of destination resort mapping and not otherwise excluded by Goal 8 and Policies 2 and 3 herein, nothing in these policies shall affect the County's consideration in the future as to whether such lands should be made available for destination resort siting. The County shall complete consideration of forest lands and remaining EFU lands for destination resort siting in conjunction with periodic review.

As successive phases of the destination resort process are taken up by the County, the county may make amendments to the comprehensive plan and zoning maps to add additional areas to the destination resort map.

- d. Until the Goal 8 mapping process is complete, no application for quasi-judicial plan map changes and zone changes to apply to DR zone to areas not designated under the Goal 8 process shall be accepted, unless such applications are filed through the Goal 2 exceptions process.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 93-029, 1993; Ord. 92-029, 1992; Ord. 92-001, 1992)

Chapter 23.88. AGRICULTURAL LANDS

23.88.010. Agricultural lands.

23.88.020. Goal.

23.88.030. Zoning Policies.

23.88.010. Agricultural lands.

The protection of farmland is a public policy goal of the federal government (USDA, Secretary's Memo #1828, Revised, Oct. 30, 1978), most states in the United States and many other countries. In Oregon, the 1975 Planning Goals, as amended, set statewide standards which must be met by local governments. For farmlands, ORS 215 and 197 and OAR 660, Division 5 set forth the criteria for compliance. The principal concept is that standards in the EFU zones must provide protection for the continuation of commercial-scale agriculture in the County, including farm operations, marketing outlets and the agricultural support system. In Deschutes County, where some lands have severe limitations for the commercial production of agricultural products, this has resulted in considerable debate and occasional hostility. The County has found itself between angry landowners who do not wish to protect what they see as marginal agricultural land, other County residents who are adamant that agricultural land is a non-renewable resource that must be preserved and a State law mandating specific actions that must be taken to protect the land defined as agricultural land.

Commercial agriculture in Deschutes County consists primarily of field crops (alfalfa, other hay, some peppermint, potatoes and seed crops) and livestock operations. The high elevation (2700-3500 feet) and low rainfall make difficult conditions for crop farming. A short growing season and the risk of crop damage from frost or mid-summer hailstorms must be factored into agriculture investment planning. Irrigation is essential for crops and is used extensively for irrigated pastures. Without irrigation, little soil is classified better than SCS Soil Capability Class IV. These factors, along with limited marketing alternatives, often produce a frustrating and discouraging experience for local farmers, although some do manage to be successful.

However, agriculture still is an important economic element of the County, contributing significantly to the local economy. Agriculture also provides secondary benefits such as open space and scenic appearance; benefits which may also pay economic returns in the form of tourist dollars.

Since detailed soils mapping existed for only a portion of the County in 1979, it was necessary to develop a more elaborate definition than that found in the State Goal. The definition finally agreed to by the County used the available information on agricultural lands and laid a foundation for future additions or deletions as better soils information became available.

Agricultural lands were defined as those lands identified as possessing Soil Conservation Service Agricultural Capability Class I-VI soils (S.C.S. Land Capabilities Classification Map) or, where detailed soils information was not available, land identified by having been listed as on Farm Tax Deferral within the five years preceding the adoption of the 1979 plan (as indicated on the Existing Land Use Map compiled from County Assessor's records) and/or by the fact that the land was indicated on the County Planning Department's Irrigated Lands Map.

Having a definition was only the first step, as it was then necessary to differentiate between the various types of agriculture to be found locally and to identify the various areas they characterized. Members of the Planning Staff, the Agricultural CAC and the Overall CAC identified seven types of agriculture and areas characterized by such agriculture. These types included High Desert Sagebrush and Juniper Land,

located east of Horse Ridge and characterized by extensive livestock grazing; Riparian Meadows, located along the Upper Deschutes River, the Little Deschutes River and in the Sisters area and characterized by sub-irrigated pasture and meadow hay; Irrigated Commercial Crop Land, located in Lower Bridge and characterized by field crops; Irrigated Marginally Commercial Land, located in the Alfalfa, Cloverdale and Terrebonne areas and characterized by pasture and forage; Dry Rangeland, located near Odin Falls and characterized by dry land grazing; Marginal Farm Land - Undeveloped, located east of Bend and near Redmond, Tumalo and Sisters and characterized by pasture and forage; and Marginal Farm Land - Developed, located in the Bend, Plainview and Tumalo areas and characterized by pasture and forage.

As part of periodic review in 1992, the County conducted a study of commercial agriculture in Deschutes County. The purpose of the study was to ensure that EFU zone boundaries and standards for farm divisions and dwellings were consistent with Goal 3 and relevant administrative rules. The results of the study are detailed in the completion report dated June 1992, and are incorporated into the Resource Element of the Comprehensive Plan. The study identified 7 agricultural subzones: Lower Bridge, Sisters/Cloverdale, Tumalo/Redmond/Bend, Terrebonne, Alfalfa, La Pine and Horse Ridge East. For each subzone, standards were determined for minimum parcel sizes for farm divisions. The standards are designed to protect the commercial agriculture land base.

One of the primary findings of the study is that irrigated acres is the controlling variable for defining commercial agriculture. Therefore, the standard for defining what constitutes a farm parcel is keyed to the number of irrigated acres typically found on commercial farms in each subzone. The study also found that farms in Deschutes County usually contain a mix of irrigated and nonirrigated land, as well as a mix of soils of different classes. Since the assessed farm use value is linked to the productive capability of property, it provides a surrogate for irrigated acres by acknowledging the presence and role of unirrigated soils in farm operations. The assessed farm use value can be used in place of the irrigated acreage figure where the land value is set to equal that of the irrigated land (i.e., median irrigated acres in subzone x farm use value of best irrigated land in subzone = threshold assessed land value).

Notwithstanding the preceding, the La Pine Subzone is somewhat different from the other subzones in that farm sales are less than farm use values. In general, this is due to agricultural practices that depend to a much greater degree than in the other subzones on livestock grazing on non-irrigated pasture. To address this situation, median irrigated acreage and median assessed farm use value are used to set the basic commercial standards.

Following the completion of the 1992 farm study and submission of the County's periodic review package to LCDC, the Oregon legislative session and LCDC amended the statutes and rules governing uses in the farm zones. The County's ordinances and the policies that follow have been amended as necessary to conform to those changes.

Recognizing the importance of protecting agricultural land the following policies were chosen to meet State requirements and local needs.

(Ord. 2002-005 § 1, 2002; Ord. 2000-17 § 1, 2000; Ord. 95-017, 1995; Ord. 80-203, 1980; PL-20, 1979)

23.88.020. Goal.

To preserve and maintain agricultural land.

(Ord. 2002-005 § 1, 2002; Ord. 2000-17 § 1, 2000; Ord. 95-017, 1995; PL-20, 1979)

23.88.030. Zoning Policies.

1. All lands meeting the definition of agricultural lands shall be zoned Exclusive Farm use, unless an exception to State goal 3 is obtained so that the zoning may be Multiple Use Agriculture or Rural Residential.
2. Lands not meeting the agricultural lands definition but having potential for irrigation according to the Bureau of Reclamation Special Report - Deschutes Project, Central Division, Oregon, although presently without water, shall receive exclusive farm use zoning.
3. Public lands meeting the criteria for EFU zoning shall be so zoned unless some other resource (i.e., forest) or public use exists on the land.
4. No more than 25 percent of a given agricultural subzone shall be composed of lands not of the same agricultural type. Any agricultural lands not zoned EFU agriculture shall be identified in the County Exception Statement. Zoning districts shall be at least 40 acres in size.
5. Zones and minimum parcel sizes shall be established to assure the preservation of the existing commercial agricultural enterprise of the area.
6. For purposes of profiling the existing commercial agricultural enterprises of the County, the County shall consider as one land unit all tracts in contiguous ownership (including those parcels separated only by a road) zoned EFU.
7. The County will consider as its pool for profiling the nature of the existing agricultural enterprises of the area those farms that make the highest 90% contribution to the local agricultural economy.
8. In recognition that irrigated acres per farm unit is the key variable identifying commercial agricultural enterprises in the County, the County shall use the median number of irrigated acres per farm unit in the area or subzone as its principal standard for defining what size of tract constitutes a farm parcel.
9. Following from the June 1992 OSU Extension Service completion report detailed in the resource element, the County has identified 7 subzones representing distinct groupings of agricultural types. The County's EFU zoning shall reflect those identified subzones, generally described as follows and as more particularly detailed in the resource element of the comprehensive plan:

Subzone	Profile
Lower Bridge	Irrigated field crops, hay and pasture
Sisters/Cloverdale	Irrigated alfalfa, hay and pasture, wooded grazing and some field crops
Terrebonne	Irrigated hay and pasture
Tumalo/Redmond/ Bend	Irrigated pasture and some hay
Alfalfa	Irrigated hay and pasture
La Pine	Riparian meadows, grazing and meadow hay
Horse Ridge East	Rangeland grazing

10. For the purposes of determining relevant characteristics (i.e., farm use values, multipliers, irrigated acres and assessed farm use values) of commercial farms, the County will rely on those farms and those statistics identified in the completion report prepared by the OSU Extension Service dated June 1992 and set forth in the resource element of the comprehensive plan.
11. In order to provide some flexibility in the zoning and to assist farmers who may need to sell an isolated unproductive piece of land in order to assure continued operation of the farm, individual isolated partitions (creation of one or two new nonfarm parcels) establishing parcels less than the EFU irrigated minimum lot size in EFU areas shall be permitted. The remaining farm parcel must be at least the irrigated minimum established by the EFU subzone.

In order to provide some flexibility in the zoning, while still maintaining the rural character of the area and limiting the costs of providing services to rural residents, the county shall allow non-farm residential divisions on nonirrigated land, in accordance with state law, with a minimum lot size of five acres.

12. So that a farmer who has lived on his land for 10 years or more may retire and sell his property while retaining the use of his existing home, a homestead exception may be permitted which allows the homesteader to retain a life estate lease on the home and some of the surrounding land. The lease will end with the death(s) of the homesteader and spouse. This exception shall not permit the creation of another residence on the property in question.
 13. A division of land for non-farm uses, except dwellings, may be approved as long as the parcel for the non-farm use is no larger than the minimum size necessary for the use. The parcel shall be at least one acre in size.
 14. Parcel size exceptions may be granted because of survey errors when original section lines were established, so that standard section divisions may be achieved (i.e., 160, 80, 40, 10, etc., acres). Man-made barriers such as roads or canals, over which the applicant has no control, may serve as adequate justification for granting a parcel (lot) size variance.
 15. Normal agricultural practices (i.e., aerial pesticide applications, machinery dust and noise, etc.) shall not be restricted by non-agricultural interests in exclusive farm use zones. The County shall consider requiring noise, dust, fly, etc., easements to be granted to adjoining farmers where non-agricultural uses are permitted.
 16. Coordination between public and private landowners to encourage farm use shall be encouraged. And projects to increase productivity and to bring new land into agricultural production shall be fostered.
 17. Control of noxious weeds through educational programs should be continued.
 18. Farm and non-farm uses in rural areas shall be consistent with the conservation of soil and water.
 19. Prior to the next periodic review of its comprehensive plan and to the extent allowed by state law, the County Planning Department shall initiate a study of EFU-zoned lands to develop a recommendation as to whether marginal lands or secondary lands would be appropriate.
- (Ord. 2002-020 § 1, 2002; Ord. 2002-005 § 1, 2002; Ord. 2000-17 § 1, 2000; Ord. 95-017, 1995; Ord. 92-062, 1992; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.92. FOREST LANDS

23.92.010. Forest lands.

23.92.020. Goals.

23.92.030. Policies.

23.92.010. Forest lands.

Much of the beauty, and the employment, in Deschutes County is directly related to the large expanse of forestland. For these reasons, this resource is of particular importance to the County's two major industries, timber/wood products and tourism. The great majority of the timber harvested consists of Ponderosa and Lodgepole pine.

One major problem is the increasing threat to local timber supplies created by scattered developments occurring in forested areas. This is particularly true if the development is located outside destination resorts or fire districts where fire protection is available.

In order to meet the State Land Conservation and Development Commission's requirement for an adequate inventory of forest site capability the County Planning Department worked with the State Department of Forestry. The resulting capabilities map is found in the plan's resource element. As shown on the map most of the land with high through moderate capability lies in the Deschutes National Forest.

The U.S. Forest Service and the Bureau of Land Management have responsibility for regulating use of federally-owned forest lands in the County pursuant to their own respective management plans. The decisions and actions of these agencies have, and will continue to have, major effects on the economic, social and natural environment of Deschutes County.

Subsequent to the acknowledgement of the County's plan in 1979, the Department of Land Conservation and Development promulgated an administrative rule setting forth allowed uses, siting conditions and minimum lot sizes in forest zones (forest rule). Previous to that enactment, there was no uniform criteria embodied in state law other than Goal 4's general policy guidance regulating forest zones. The rule requires that Counties implement its provisions no later than the time set for periodic review. In 1992, as part of periodic review of its comprehensive plan and zoning ordinances, the County proceeded to implement the forest rule by revising its forest zones. At the same time, the Forest Lands Goals and Policies in the Comprehensive Plan were reviewed and revised to conform them to the forest rule provisions. The Goals and Policies, as amended by Ordinance 92-024 and 94-037, reflect the forest rule. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-037, 1994; Ord. 92-024, 1992; Ord. 80-203, 1980; PL-20, 1979)

23.92.020. Goal.

Because of the local importance of forest lands the following goal has been set: To conserve forest lands for forest uses.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-037, 1994; Ord. 92-024, 1992; PL-20, 1979)

23.92.030. Policies.

1. Deschutes County shall designate forest lands on the comprehensive plan map consistent with Goal 4 and OAR 660, Division 6.
2. Deschutes County shall zone forest lands for uses allowed pursuant to OAR 660, Division 6. In addition to forest practices and operations and uses auxiliary to forest practices, as set forth in

ORS 527.722, Deschutes County shall allow in the forest environment the following general types of uses:

- a. Uses related to, and in support of, forest operations;
 - b. Uses to conserve soil, air and water quality and to provide for fish and wildlife resources, agriculture and recreational opportunities appropriate in a forest environment;
 - c. Locationally dependent uses such as communication towers, mineral and aggregate resources use, etc.;
 - d. Dwellings authorized by ORS 215.720 to 215.750; and
 - e. Other dwellings under prescribed conditions.
3. In order to conserve and maintain the unimpacted forest land base for forest use the County shall identify and zone as F-1 those lands which have the following characteristics:
- a. Consist predominantly of ownerships not developed by residences or non-forest uses.
 - b. Consist predominantly of contiguous ownerships of 160 acres or larger in size.
 - c. Consist predominantly of ownerships contiguous to other lands utilized for commercial forest or commercial farm uses.
 - d. Accessed by arterial roads or roads intended primarily for forest management.
 - e. Primarily under forest management.
4. In order to conserve and maintain impacted forest lands for forest use the County shall identify and zone as F-2 those lands which have the following characteristics:
- a. Consist predominantly of ownerships developed for residential or other non-forest uses;
 - b. Consist predominantly of ownerships less than 160 acres in size;
 - c. Consist of ownerships generally contiguous to tracts containing less than 160 acres and residences, or adjacent to acknowledged exception areas;
 - d. Provided with a level of public facilities and services, including roads, intended primarily for direct services to rural residences.
5. Except as identified in this plan non-forest uses shall be discouraged in existing forested areas.
6. Forest management in Deschutes County shall be governed by the Oregon State Forest Practices Act.
7. Better coordination and cooperation between the U.S. Forest Service and Deschutes County shall be fostered, particularly as it relates to restrictive use of such Forest Service lands as Mt. Bachelor Ski Area and the Bend Watershed. As a basis for mutual cooperation and coordination, the Land Management Plan for the Deschutes National forest shall be used.
8. Notwithstanding any other quasi-judicial plan or zone change criteria, lands designated as Forest under the Plan and zoned Forest Use 2 under the zoning ordinance may upon application be redesignated under the Plan from Forest to Agriculture and rezoned under the zoning ordinance from Forest Use 2 to Exclusive Farm Use if such lands:
- a. Do not qualify under state law for forestland tax deferral,
 - b. Are not necessary to permit forest operations or practices on adjoining lands and do not constitute forested lands that maintain soil, air, water and fish and wildlife resources,
 - c. Have soils on the property that fall within the definition of agricultural lands as set forth in Goal 3,
 - d. Are a tract of land 40 acres or less in size,
 - e. Do not qualify under state law and the terms of the Forest Use 2 Zone for a dwelling, and;
 - f. Were purchased by the property owner after January 1, 1985 but before November 4, 1993. Such changes may be made regardless of the size of the resulting EFU-Zoning district. Such changes shall be processed in the same manner as other quasi-judicial plan or zoning map changes.”

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-037, 1994; Ord. 92-024, 1992; Ord. 80-203, 1980; PL-20, 1979)

Chapter 23.96. OPEN SPACES, AREAS OF SPECIAL CONCERN, AND ENVIRONMENTAL QUALITY

23.96.010. Open spaces, areas of special concern, and environmental quality.

23.96.020. Goals.

23.96.030. Policies.

23.96.010. Open space, areas of special concern, and environmental quality.

A major factor in the local economy and a basic reason for much of the present population growth are the desirable scenic and natural environmental qualities of the County. Seasonal and many permanent residents, as well as the many tourists, repeatedly explain that their reasons for coming to Deschutes County are the high natural beauty, the numerous and diverse areas of scenic, geologic, archeological and biological significance, and the high quality of the air and water. Also, many of the resource industries, such as timber and agriculture, are also dependent on, as well as contributors to, that same environment.

Open spaces include not only parks, but also agricultural, forested, natural areas, mining sites and historical areas, as well as scenic waterways and other locations of unique scenic, environmental, social or cultural character. Often the protection of the scenic views from roads, trails and waterways is as important as the travelways themselves.

Segments of the Deschutes River in Deschutes County have been designated as a State Scenic Waterway.

Segments of the Deschutes River and Squaw Creek have been designated as Federal Wild, Scenic or Recreational River.

Presently, no major air quality problems exist within the County; however, surface inversions, topographic conditions, certain activities (i.e., slash and field burning), wind- carried soils and increasing population can create significant potential for air quality degradation unless properly managed.

Some water pollution problems have been identified. The La Pine core area has been shown to have significant problems and septic tanks have failed in the Terrebonne area. The two major urban areas are presently developing sanitary sewer systems and treatment facilities.

The Oregon Department of Environmental Quality and Environmental Protection Agency have existing standards and programs affecting air and water quality as well as noise levels. DEQ presently maintains an air and water quality-sampling program in Deschutes County which is important to knowledge about existing and changing conditions.

Private land suitable for open space designation are eligible for special property tax consideration (ORS 308.740-790), because they provide public benefits as regards maintaining scenic environmental quality.

Because open spaces, areas of special interest and environmental quality are so important to the local economy, environment and social well being of Deschutes County, the following goals have been chosen. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 95-038, 1995; Ord. 94-003, 1994; Ord. 92-051, 1992; Ord. 86-019, 1986; PL-20, 1979)

23.96.020. Goals.

1. To conserve open spaces and areas of historic, natural or scenic resources.

2. To maintain and improve the quality of the air, water and land resources of Deschutes County.

However, despite general consensus that the environmental quality and amenities are important to this area's people, as well as to people statewide, there is also concern that regulation and policies to protect that environment could become too restrictive. The following policies have been developed with the intent of reaching the identified goals but in ways that restrict only as is necessary and with consideration of the individuals who may be affected by the needs of the public.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 95-038, 1995; Ord. 94-003, 1994; Ord. 92-051, 1992; Ord. 86-019, 1986; PL-20, 1979)

23.96.030. Policies.

1. On lands outside urban growth boundaries and rural service centers along Highway 97, 20 and 126, as well as along Century Drive, South Century Drive, portions of Three Creeks Lake Road, Fall River Road, roads from Highway 97 to Smith Rocks, Pine Mountain Road and roadways for which landscape management is prescribed on the 1990 Comprehensive Plan, a case-by-case site plan review shall be required. This area is to extend 1/4 mile on either side from the centerline of roadways, and shall include all areas designated as State and Federal Wild, Scenic or Recreational Waterways and within 660 feet from either side of designated rivers and streams as measured from the ordinary high water level.
2. Deschutes County shall include areas outside of the urban growth boundaries and rural service centers and within 1/4 mile of the centerline of the following roads in the Landscape Management Zone.
 - a. U.S. Highway #97
North County Line to Redmond UGB
Redmond UGB to Bend UGB
Bend UGB to South County Line
 - b. U.S. Highway #20-126
North County Line to Sister UGB
 - c. U.S. Highway #126
Sisters UGB to Redmond UGB
 - d. U.S. Highway #20
Sisters UGB to Bend UGB
 - e. Smith Rock Road
Highway #97 to Smith Rock
 - f. Sisemore Road
From Cloverdale to Bend UGB
 - g. Skyliner Road
 - h. Century Drive
Bend to Mr. Bachelor
 - i. South Century Drive
 - j. Cascade Lakes Highway
 - k. Waldo Lake Road
 - l. Cultus Lake Road
 - m. Little Cultus Lake Road
 - n. Twin Lakes Road
 - o. Keefer Road (East Crane Prairie Road)
 - p. East Deschutes Road
 - q. Deschutes Road
 - r. Wickiup Road
 - s. Pringle Falls Loop

- t. La Pine Recreation Area Access Road
 - u. Pauline-East Lake Road
 - v. Lava Cast Forest Road
 - w. Highway #20 East to the County Line
 - x. Pine Mountain Road
 - y. Ford Road
 - z. Three Creek Lakes Road
 - aa. Three Trappers Road
 - bb. Dillon Falls Road
 - cc. Matsen Road
 - dd. State Highway #31
 - ee. Road to Benham Falls
 - ff. State Highway 242 McKenzie Highway
3. Within the Landscape Management Zone, new structures or additions to existing structures (excluding fences or structures less than \$1,000.00 in total value) shall be subject to landscape management site plan review by the County prior to issuance of a building permit.
 4. Approval of any such development in the Landscape Management Zone will be dependent on site screening by existing natural cover and/or compatibility with the landscape as seen from the river, stream or road.
 5. Outdoor advertising signs should be informational only and oversized displays discouraged.
 6. The primary purpose of the landscape management site plan review shall be to obtain a structure as compatible with the site and existing scenic vistas as is possible, rather than to establish arbitrary standards for appearance or to otherwise restrict construction of appropriate structures.
 7. Rimrocks, along streams shall receive special review to assure that visual impacts of structures viewed from rivers or streams are minimized. A 50-foot setback shall be required from rimrocks on all newly created lots. Existing lots may receive exceptions to rimrock setbacks subject to conformance with criteria which individually review the structure, location and consider impacts in a manner which minimize the visual impact of the structure when viewed from the river or stream.
 8. Public ownership of scenic, open space and historic areas should be maintained and increased where feasible, and a variety of open space and recreational sites should be maintained to protect the existing natural diversity and to serve the varying needs of both tourists and residents. The natural capabilities of each site should determine its level of use.
 9. The concepts of developmental rights transfer, tax credits and conservation easements as ways to protect open space should be studied and encouraged at both local and State levels.
 10. As part of subdivision or other development review the County shall consider the impact of the proposal on the air, water, scenic and natural resources of the County. Specific criteria for such review should be developed. Compatibility of the development with those resources shall be required as deemed appropriate at the time given the importance of those resources to the County while considering the public need for the proposed development.
 11. Because management of State and Federal lands affects areas under the County's jurisdiction and vice versa, better coordination of land use planning between the County, U.S. Forest Service, State Land Board, Bureau of Land Management and other agencies shall be sought.
 12. Zoning should be established to protect areas of special interest such as eagle nests, endangered species areas or points of geologic interest.
 13. Because of their slow growth and usefulness as a visual and noise buffer and their relationship to air quality, tree removal from utility lines, sewers, roads and other construction shall be minimized by planning for the continued maintenance of the streets in the development. All development proposals will be reviewed for this factor by the County Planning staff before approval of the applicant's development.

14. Although DEQ has existing environmental standards with which the County shall coordinate, in instances where such standards are inadequate or non-applicable because of local conditions, the County may establish more stringent regulations. Noise regulations are an example of such program.
 15. Deschutes County shall prior to December 21, 1994 complete a Goal 5 review in accordance with OAR 660-16-000 for the "1B" Areas of Special Concern identified in the Areas of Special Concern inventory of the Resource Element, adopted by Ordinance 92-052.
 16. The County shall conduct an inventory of outstanding scenic resources not sufficiently protected by the Landscape Management Zone. The inventory shall be conducted in accordance with OAR 660-16. Comprehensive Plan policies and implementing ordinances to protect resources identified in the inventory shall be adopted prior to Department of Land Conservation and Development initiation of the next periodic review process, pursuant to ORS 197.633(3)(a).
 17. The County shall encourage the formation of nonprofit land trusts for the protection of open space, scenic and natural areas. The County should provide support and assistance when deemed appropriate by the Board of County Commissioners.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 95-038, 1995; Ord. 94-003, 1994; Ord. 92-051, 1992; Ord. 92-033, 1992; Ord. 86-019, 1986; Ord. 80-203, 1980, PL-20, 1979)

Chapter 23.104. FISH AND WILDLIFE

23.104.010. Fish and wildlife.

23.104.020. Goals.

23.104.030. Policies.

23.104.040. Goal 5 - Wildlife Inventory.

23.104.050. Tables.

23.104.060. Goal 5 - Bird Inventory.

23.104.010. Fish and wildlife.

The protection of fish and wildlife resources has been a on-going controversy in Deschutes County. Both those committed to the protection of the resources and those who wish to subdivide or otherwise develop in sensitive wildlife areas have often pressed their positions, sometimes resulting in court action to resolve the conflict.

It is recognized that failure to protect fish and wildlife resources will result in loss of habitat and loss of endangered species, declining tourist expenditures, loss of recreational opportunities and loss of quality of life. Already, Deschutes County has witnessed the serious degrading of the cold-water fishery by irrigation withdrawals, loss of sensitive deer winter rangelands to development and the disturbance of deer migration corridors due to residential and recreational construction.

Testimony by representatives of the Oregon Department of Fish and Wildlife indicates that their studies have shown that there is significant deer migration from the Deschutes National Forest west of the Deschutes River to wintering ranges east of the river identified as the North Paulina, Devil's Garden and Hole in the Ground Ranges. They further expressed a belief, based on their training and experience, that rural housing at a density of more than one residence per 40 acres can seriously threaten deer winter survival, and that rural residents often own dogs which, especially in packs allowed to run at large, are a threat to all wildlife.

One type of area of particular concern is the riparian area or wetlands along streams and lakes. These areas not only serve as essential habitat for many species and as migration corridors for big game, but are particularly in need of protection because of their limited nature.

Not only do the wetter, more forested areas of the County provide wildlife habitat, but the dry high plains in the eastern portion of the County have large populations of sage grouse and antelope. These wildlife species are highly dependent on the open relatively undeveloped character of this area for their survival.

Throughout committee discussions and public testimony, the public expressed concern that local fish and wildlife resources be protected. As part of the County periodic review of the comprehensive plan, the goals and policies have been reviewed by the public, the Oregon Department of Fish and Wildlife, the Planning Commission and the Board of County Commissioners. During periodic review the County also updated the fish and wildlife inventories and completed Economic, Social, Environmental and Energy analysis of conflicting uses and developed programs to protect the significant Goal 5 wildlife resources.

To protect important fish and wildlife resources the following goals and policies are established. (Ord. 2002-005 § 1, 2002; Ord. 2001-018 § 1, 2001; Ord. 2000-17 § 1, 2000; Ord. 95-038, 1995; Ord. 92-040, 1992; Ord. 80-203, 1980, PL-20, 1979)

23.104.020. Goals.

1. To conserve and protect existing fish and wildlife areas.
2. To maintain all species at optimum levels to prevent serious depletion of indigenous species.
3. To develop and manage the lands and waters of this County in a manner that will enhance, where possible, the production and public enjoyment of wildlife.
4. To develop and maintain public access to lands and waters and the wildlife resources thereon.
5. To maintain wildlife diversity and habitats that support the wildlife diversity in the County.

(Ord. 2002-005 § 1, 2002; Ord. 2001-018 § 1, 2001; Ord. 2000-17 § 1, 2000; Ord. 95-038, 1995; Ord. 92-040, 1992; Ord. 80-203, 1980, PL-20, 1979)

23.104.030. Policies.

1. In light of the need to protect deer winter range and to be consistent with plan policies restricting rural sprawl, the Metolius, North Paulina, Tumalo and Grizzly deer winter ranges shall be protected by special zones. The winter ranges shall be as designated on the Big Game Habitat – Wildlife Area Combining Zone Map contained in this plan’s resource element. Within the winter ranges the minimum lot size shall be 40 acres, except that in the Rural Residential Zone and the Multiple Use Agricultural Zone planned or cluster developments are required for new land divisions. In planned and cluster developments man’s activities must be limited to 20 percent of the development’s lands with 80 percent left as open space. The density of planned and cluster developments shall be determined by the underlying zone.
2. The County shall enforce an animal control ordinance which prohibits dogs to be at large or not under the complete control of a capable person.
3. In the Bend/La Pine deer migration corridor identified in the comprehensive plan resource element, new land divisions, where the underlying zone is Rural Residential – 10, shall be cluster developments.
4. Because public access to fish and wildlife areas is so important to the economic and livability aspects of Deschutes County, walking easements and periodic boat access points shall be provided in areas where public river access is limited, as determined appropriate by the County and State Department of Fish and Wildlife.
5. Consistent with Policy 4 and in order to protect the sensitive riparian areas, as well as to protect people and property from flood damage, the zoning ordinance shall prohibit development (except floating docks) within 100 feet of the mean high water mark of a perennial or intermittent stream or lake. Exceptions may be permitted on lots created prior to November 1, 1979 where adherence to the 100-foot setback would cause a hardship.
6. In addition to State and Federal laws, County ordinances shall require all identified nesting sites for eagles, ospreys, prairie falcons or other species listed on the Oregon State or Federal threatened or endangered species list shall be protected.
7. Sensitive bird habitat sites (bald eagle, golden eagle, osprey, great grey owl, prairie falcon nests, great blue heron rookeries, and sage grouse leks) and mammal habitat sites (Townsend’s big-eared bat hibernating and nesting caves) identified in the Resource Element of this plan shall be protected by a Sensitive Bird and Mammal Overlay Zone. A protection program acceptable to the Oregon Department of Fish and Wildlife for the nests or sites shall be submitted by the applicant for a development or land use permit and used implemented during and after construction of the development.
8. The antelope range and antelope winter range identified on the Big Game Habitat-Wildlife Area Combining Zone Map included in the Resource Element of this plan shall be protected by a wildlife area combining zone. The minimum lot size for new parcels shall be 320 acres. The Rural Service Centers of Brothers, Hampton and Millican shall be exempt from the provisions of the Wildlife Area Combining Zone.

9. The areas containing land identified as significant elk habitat on the Big Game Habitat Map – Wildlife Area Combining Zone Map included in the Resource Element of this plan shall be protected by a wildlife area combining zone. The minimum lot size for new parcels shall be 160 acres in the combining zone.
 10. The County shall notify the Oregon Department of Fish and Wildlife of all land use applications for lands located in the WA Combining Zone or the Sensitive Bird and Mammal Overlay Zone.
 11. The County shall work with ODFW and the Deschutes Basin Resource Committee to review existing protection of riparian and wetland area vegetation and recommend comprehensive plan and ordinance amendments, if necessary, by December 31, 1993.
 12. When site specific information is available to the County on the location, quality and quantity of threatened and endangered fish and wildlife species listed by State or Federal wildlife agencies and the Oregon Department of Fish and Wildlife develops protection criteria for the species, the County shall proceed with a Goal 5 ESEE analysis in compliance with OAR 660 Div.16.
 13. The County shall review the La Pine and Bull Flat elk habitat areas and the Metolius deer migration corridor designated as “1B” Goal 5 resources during the next periodic review or as additional information on the location, quality and quantity of the habitat areas becomes available.
 14. The County shall maintain an inventory of County-owned property in the Bend/La Pine deer migration corridor. Prior to sale or exchange of County owned property in the corridor, the County shall consult the Oregon Department of Fish and Wildlife to determine the value of the land for deer migration and make reasonable efforts to consolidate properties to maintain habitat characteristics important to preserving the migration corridor.
 15. The County shall work with ODFW to identify specific areas where the County and ODFW shall encourage public retention and acquisition of land or seek conservation easements for the protection of the deer migration corridor.
 16. The County shall retain and encourage public ownership of significant fish and wildlife habitat and riparian areas.
 17. County-owned land shall be managed to protect and enhance fish and wildlife habitat except where a conflicting public use outweighs the loss of habitat.
 18. The County shall notify the Oregon Division of State Lands and the Oregon Department of Fish and Wildlife of any development applications for land within a wetland identified on the National Wetlands Inventory maps.
 19. The County shall encourage the formation of nonprofit land trusts for the protection of fish and wildlife habitat, wetland, riparian and natural areas. The County should provide support and assistance when deemed appropriate by the Board of County Commissioners.
- (Ord. 2002-005 § 1, 2002; Ord. 80-203, 1980)

23.104.040. Goal 5 - Wildlife Inventory.

GOAL 5 WILDLIFE INVENTORY – Table 1

DESCHUTES COUNTY WILDLIFE

Deschutes County Planning Unit, 1992.

*Selected List

Species	Use		Relative Abundance	Use Period Key X = Year Around S = Summer W = Winter	Relative Abundance Key R = Rare F = Few C = Common A = Abundant U = Unknown
	Use Period	Relative Abundance			
Birds					
American Avocet	S	F			
American Bittern	S	F			
American Coot	X	C			
American Goldfinch	S	C			
American Osprey	X	C			
American Widgeon	X	C			
Anna's Hummingbird	S	F			
Ash-throated Flycatcher	S	F			
Bald Eagle	X	F			
Bank Swallow	S	F			
Barn Owl	X	C			
Barn Swallow	S	C			
Barred Owl	X	U			
Belted Kingfisher	X	F			
Bewick's Wren	X	F			
Black-backed Woodpecker	X	F			
Black-billed Magpie	X	C			
Black-capped Chickadee	W	F			
Black-chinned Hummingbird	S	F			
Black-crowned Night Heron	S	F			
Black-headed Grosbeak	S	F			
Black-throated Grey Warble	S	F			
Blue Grouse	X	F			
Blue-winged Teal	S	F			
Bohemian Waxwing	W	F			
Boreal Owl	X	F			
Brewer's Blackbird	X	C			
Brewer's Sparrow	S	F			
Brown Creeper	X	F			
Brown-headed Cowbird	S	C			
Bufflehead	X	C			
Burrowing Owl	S	R			
California Valley Quail	X	C			
Calliope Hummingbird	S	F			
Canada Goose	X	C			
Canyon Wren	X	C			
Caspian Tern	S	F			
Cassin's Finch	X	C			
Cedar Waxwing	X	C			
Chipping Sparrow	S	C			
Chukar Partridge	X	R			
California Gull	X	C			
Clark's Nutcracker	X	C			
Cliff Swallow	S	C			
Common Bushy-tit	X	C			
Common Crow	X	R			
Common Loon	S	R			
Common Merganser	X	C			
Common Nighthawk	S	C			
Common Raven	X	C			
Common Snipe	S	F			
Coopers Hawk	X	C			

GOAL 5 - WILDLIFE INVENTORY (cont'd)

DESCHUTES COUNTY WILDLIFE

Deschutes County Planning Unit, 1992.

***Selected List**

Species	Use	Relative	Use		Relative
	Period	Abundance	Period Key	Abundance Key	Abundance Key
			X = Year Around	R = Rare	
			S = Summer	F = Few	
			W = Winter	C = Common	
				A = Abundant	
				U = Unknown	
Dark-eyed Junco	X	A			
Dipper	X	F			
Double-crested Cormorant	S	C			
Downy Woodpecker	X	C			
Dusky Flycatcher	S	F			
Eared Grebe	W	F			
Eastern Kingbird	S	F			
Evening Grosbeak	X	C			
Ferruginous Hawk	S	F			
Flammulated Owl	S	F			
Fox Sparrow	S	C			
Franklin's Gull	S	F			
Gadwall	W	F			
Golden Eagle	X	F			
Golden-crowned Kinglet	X	F			
Goldeneve	X	C			
Goshawk	X	F			
Gray Jay	X	C			
Gray Partridge	X	R			
House Sparrow	X	C			
House Wren	S	F			
Killdeer	X	C			
Lark Sparrow	S	F			
Lazuli Bening	S	F			
Least Sandpiper	S	F			
Lesser Goldfinch	X	R			
Lesser Scaup	W	C			
Lewis' Woodpecker	S	F			
Lincoln's Sparrow	X	F			
Loggerhead Shrike	X	F			
Long-billed Curlew	S	R			
Long-billed Marsh Wren	S	F			
Long-eared Owl	X	F			
MacGillivray's Warbler	S	F			
Mallard	X	C			
Merlin	W	R			
Mountain Bluebird	X	C			
Mountain Chickadee	X	C			
Mourning Dove	X	C			
Nashville Warbler	X	F			
Northern Harrier	X	F			
Northern Oriole	S	F			
Northern Phalarope	S	F			
Three-toed Woodpecker	X	F			
Olive-sided Flycatcher	S	C			
Orange-crowned Warbler	S	F			
Osprey	S	C			
Peregrine Falcon	X	R			
Pileated Woodpecker	X	F			
Pine Grosbeak	X	R			
Pine Siskin	X	C			
Pinon Jay	X	C			
Pintail	W	C			
Prairie Falcon	X	C			

GOAL 5 - WILDLIFE INVENTORY (cont'd)

DESCHUTES COUNTY WILDLIFE

Deschutes County Planning Unit, 1992.

*Selected List	Use Period Key	Relative Abundance Key
	X = Year Around S = Summer W = Winter	R = Rare F = Few C = Common A = Abundant U = Unknown
Species	Use Period	Relative Abundance
Purple Finch	X	F
Pygmy Nuthatch	X	C
Pygmy Owl	X	F
Red Crossbill	X	F
Red-breasted Nuthatch	X	C
Redhead	W	F
Red-shafted Flicker	X	C
Red-tailed Hawk	X	C
Red-winged Blackbird	X	C
Ring-billed Gull	X	C
Ring-neck Duck	W	F
Ring-necked Pheasant	X	F
Robin	X	C
Rock Dove	X	C
Rock Wren	S	C
Rosy Finch	X	R
Rough-legged Hawk	W	C
Rough-winged Swallow	S	F
Ruby-crowned Kinglet	X	F
Ruffed Grouse	X	F
Rufous Hummingbird	S	F
Rufous-sided Towhee	X	F
Sage Grouse	X	F
Sage Sparrow	S	R
Sage Trasher	S	C
Sandhill Crane	S	F
Song Sparrow	X	F
Sora	S	F
Spotted Owl	X	F
Spotted Sandpiper	S	F
Starling	X	C
Steller's Jay	X	F
Swainson's Hawk	S	R
Swainson's Thrush	S	F
Townsend's Solitaire	X	C
Tree Swallow	S	C
Turkey	X	C
Turkey Vulture	S	C
Varied Thrush	X	F
Vaux's Swift	S	F
Vesper Sparrow	S	F
Violet-green Swallow	S	C
Virginia Rail	S	F
Warbling Vireo	S	F
Water Pipit	X	F
Western Bluebird	S	F
Western Flycatcher	S	F
Western Grebe	S	C
Western Kingbird	S	F
Western Meadowlark	S	C
Western Sandpiper	S	F
Western Tanager	S	F
Western Wood Pewee	S	F
White-breasted Nuthatch	X	F

GOAL 5 - WILDLIFE INVENTORY (cont'd)

**DESCHUTES COUNTY WILDLIFE
Deschutes County Planning Unit, 1992.**

*Selected List			Use Period Key	Relative Abundance Key
Species	Use Period	Relative Abundance	X = Year Around S = Summer W = Winter	R = Rare F = Few C = Common A = Abundant U = Unknown
White-crowned Sparrow	S	F		
White-headed Woodpecker	X	F		
Wigeon	X	F		
Williamson's Sapsucker	X	F		
Willow Flycatcher	S	R		
Wilson's Phalarope	S	R		
Wilson's Warbler	S	F		
Winter Wren	X	F		
Wood Duck	S	F		
Yellow Warbler	S	F		
Yellow-bellied Sapsucker	X	F		
Yellow-headed blackbird	S	F		
Yellowthroat	S	F		

Amphibians and Reptiles

Bullfrog	X	F		
Cascades Frog	X	F		
N. Grasshopper Mouse	X	F		
Northern Water Shrew	X	F		
Norway Rat	X	F		
N. Pocket Gopher	X	U		
Ord's Kangaroo Rat	X	C		
Pacific Mole	X	U		
Pallid Bat	S	U		
Pine Marten	X	C		
Pinon Mouse	X	F		
Porcupine	X	C		
Pronghorn Antelope	X	C		
Raccoon	X	C		
Red Fox	X	F		
River Otter	X	C		
Rocky Mtn Elk	X	C		
Roosevelt Elk	X	C		
Sagebrush Vole	X	C		
Shorttail Weasel	X	F		
Silver-haired Bat	S	U		
Small-footed Myotis	S	U		
Snowshoe Hare	X	F		
Striped Skunk	X	C		
Townsend Ground Squirrel	X	C		
Townsend's Big-eared Bat	X	F		
Trowbridge Shrew	X	F		
Vagrant Shrew	X	U		
Water Vole	X	C		
Western Gray Squirrel	X	C		
Western Harvest Mouse	X	C		
Western Jumping Mouse	X	F		
Western Pipistrel	S	U		
Whitetail Jackrabbit	X	R		
Wolverine	X	R		
Yellow Pine Chipmunk	X	C		
Yellow-bellied Marmot	X	F		
Yama Myotis	X	F		
Common Garter Snake	X	F		

GOAL 5 - WILDLIFE INVENTORY (cont'd)

DESCHUTES COUNTY WILDLIFE
Deschutes County Planning Unit, 1992.

*Selected List		Use Period Key	Relative Abundance Key
Species	Use Period	Relative Abundance	
Ensatina	X	R	
Gopher Snake	X	C	
Great Basin Spadefoot Toad	X	F	
Long-toed Salamander	X	F	
Night Snake	X	U	
Northern alligator Lizard	X	F	
Pacific Tree Frog	X	C	
Racer	X	F	
Red-legged Frog	X	F	
Roughskin Newt	X	R	
Rubber Boa	X	F	
Sagebrush Lizard	X	F	
Sharp-tailed Snake	X	U	
Short-horned Lizard	X	R	
Side-blotched Lizard	X	U	
Spotted Frog	X	F	
Striped Whipsnake	X	U	
Tailed Frog	X	F	
Western Fence Lizard	X	C	
Western Rattlesnake	X	F	
Western Skink	X	F	
Western Toad	X	F	

R = Rare
F = Few
C = Common
A = Abundant
U = Unknown

X = Year Around
S = Summer
W = Winter

(Ord. 2002-005 § 1, 2002; Ord. 2001-018 § 1, 2001; Ord. 2000-17 § 1, 2000; Ord.95-038, 1995;Ord. 92-040, 1992;Ord. 80-203, 1980, PL-20, 1979)

23.104.050. Tables.

TABLE 2 - FISH SPECIES DISTRIBUTION IN DESCHUTES COUNTY

	Atlantic Salmon	Coho Salmon	Rainbow Trout	Brown Trout	Cutthroat Trout	Brook Trout	Lake Trout	Dolly Varden Trout	Kokanee	Mountain White fish	Large mouth Bass	Blue gill	Brown Bull-head	Bridgip Sucker	Tui Chub	Gayling	Crayfish
Tyee Creek						2											
Hell Creek						2											
Spring River				2		2				1					2		1
Tumalo Creek			1			2											
Bridge Creek						2											
Fall Creek						2											
Satan Creek						2											
Soda Creek						2											
Crater Creek						2											
Goose Creek						2											
Indian Ford Creek			1			2								2			
Trout Creek			1														
Alder Creek			1														
Squaw Creek			1			2											
Pole Creek						2											
Snow Creek			1			2											
Deschutes River		3	*	2		2			3	1					2		1
Little Deschutes River			1	2		2				1			2		2		1
Park Creek						2											
Three Creeks Creek			3			3											
Sink Creek						2											
Deer Creek			1			2											
Quinn River			*			2			2	1					2		1
Quinn Creek	3					2											
Cultus Creek			*			2											
Cultus Lake, Big			3			2	2			1					2		1
Cultus Lake, Little			2			3											
Cultus River						2			2	1							
Moore Creek						2											
Charlton Creek						2											
Long Prairie Slough													2				2
Browns Creek			2	2		2			#	1							1
Fall River			*	2		2				1					2		1
Paulina Creek			3												2		1
Cache Creek			1														
Crane Prairie Res.			*			#			2	1	2				2		1
Wickiup Reservoir		3	3	#					#	1					2		1
Three Creeks Lake			3			3											
Devil's Lake			3			2											
Hosmer Lake	3					3											1
Irish Lake						3											

- 1 - Native, naturally reproducing
- 2 - Introduced, naturally reproducing
- 3 - Introduced, periodic stocking required to maintain population
- * - 1 and 3
- # - 2 and 3

TABLE 3

Stream	Recommended Minimum Flows for Fish Life, Deschutes Basin, Deschutes County *1											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Deschutes River (1)	200	200	200	200	200	200	200	200	200	200	200	200
Deschutes River (2)	400	400	400	400	400	400	400	400	400	400	400	400
Deschutes River (3)	660	660	660	660	660	660	660	660	660	660	660	660
Deschutes River (4)	300	300	300	300	300	300	300	300	300	300	300	300
Deschutes River (5)	80	80	80	80	80	80	80	80	80	80	80	80
Deschutes River (6)	40	40	60	60	60	40	40	40	60	60	60	60
Squaw Creek (7)	20	10	10	10	10	10	10	10	10/20	30	20	20
Squaw Creek (8)	10	10/20	30	30	30	20	10	10	10	10	10	10
Indian Ford Creek	4	3	3	3	3	3	3	3	3/4	6	4	4
Tumalo Creek	35	35	47	47	47	5	10	10	10/35	47	35	35
Spring River	300	300	300	300	300	300	300	300	300	300	300	300
Little Deschutes River	80	80	80	200	200	150	100	100	100	100	200	200
Fall River	70	70	100	100	100	70	50	50	50	100	100	100
Browns Creek	15	15	25	25	25	15	15	15	25	25	25	25
Quinn River	20	20	20	20	20	20	20	20	20	20	20	20
Cultus Creek	20	20	32	32	32	20	5	5	5/20	32	20	20
Cultus River	50	50	50	50	50	50	50	50	70	70	70	70

Recommended Minimum Flows for Fish Life, Deschutes Basin, Deschutes County *1

Stream	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Snow Creek	15	15	30	30	30	20	15	15	15	30	30	20
Quinn Creek	20	20	20	12	12	12	12	12	12/20	35	35	35
Soda Creek	20	20	20	6	6	6	6	6	6/20	31	31	31
Fall Creek	35	35	35	20	20	20	20	20	20/35	46	46	46
Goose Creek	7	7	7	4	4	4	4	4	4/7	10	10	10
Three Creek	7	7	10	10	10	7	2	2	2/7	10	7	7

*1 Flows are expressed in cubic feet per second. The recommended flows should arrive at the point of recommendation and continue to the mouth of the stream or to the next point for which a different flow is recommended. Stream flows recommended in Appendix 1 are designed for game fish production and are not necessarily adequate for wildlife, especially waterfowl and furbearers. Neither would they necessarily be recommended below future impoundments.

- (1) Bend to Round Butte Reservoir
- (2) L. Deschutes R. to Spring River
- (3) Spring River to Bend
- (4) Wickiup Dam to Little Deschutes River
- (5) Crane Prairie Dam to Wickiup Reservoir
- (6) At USGS Gate 14-0500
- (7) Below USGS Gage 14-0750
- (8) Below Camp Polk

TABLE 4
3/11/92
INSTREAM WATER RIGHT PROGRAM
DATABASE SUMMARY REPORT

BN	STREAM > PARENT STREAM	UPSTREAM LIMIT	DOWNSTREAM LMT	SPECIES	APP NO	CERT #	DATE
**							
BASIN							
05							
05	DESCHUTES R > COLUMBIA R	CRN PRAIRIE RES	WICKIUP RES	RB, BT, BR, CO,K,	070764		10/11/90
05	DESCHUTES R > COLUMBIA R	LITTLE LAVA LK	CRN PRAIRIE RES	RB, BT, K, WF,	070763		10/11/90
05	DESCHUTES R > COLUMBIA R	193.0	190.0		MPS	59777	11/03/83
05	DESCHUTES R > COLUMBIA R	227.0	193.0		MPS	59776	11/03/83
05	DESCHUTES R > COLUMBIA R	190.0	165.0		MPS	59778	11/03/83
05	FALL R > DESCHUTES R	GAGE 14057500	MOUTH	RB, BT, BR, WF,	070762		10/11/90
05	INDIAN FORD CR > SQUAW CR	HEADWATERS	MOUTH	RB,	070760		10/11/90
05	LITTLE DESCHUTES R > DESCHUTES R	CRESCENT CR	MOUTH	RB, BT, BR, WF,	070757		10/11/90
05	METOLIUS R > DESCHUTES R	METOLIUS SPRING	CANYON CR	BUT, K,	070699		09/24/90
05	SNOW CR > DESCHUTES R	HEADWATERS	MOUTH	RB, BT,	070756		10/11/90
05	SQUAW CR > DESCHUTES R	S FK SQUAW CR	INDIAN FORD CR	RB, BT,	070754		10/11/90
05	TUMALO CR > DESCHUTES R	S FK TUMALO CR	MOUTH	RB, BT, BR,	070752		10/11/90

(Ord. 2002-005 § 1, 2002; Ord. 2001-018 § 1, 2001; Ord. 2000-17 § 1, 2000; Ord.95-038, 1995;Ord. 92-040, 1992;Ord. 80-203, 1980, PL-20, 1979)

23.104.060. Goal 5 - Bird Inventory.

A. Bald Eagle Habitat Sites.

DE0035-00 and DE0035-01

Inventory: The Oregon Department of Fish and Wildlife (ODFW) has identified two bald eagle nests in Township 15S, Range 10E, Section 23, Tax Lot 1400. The ODFW identifiers for these sites are DE0035-00 and DE0035-01. The sites are also known as Cloverdale. The sites are described in the Oregon Department of Fish and Wildlife Central Region Administrative Report No. 93-1.

The sensitive habitat area is identified as the area east of Highway 20 that is within a 1/4-mile radius of each nest site. The nest sites and the sensitive habitat area are mapped on Exhibit "A".

B. Bald Eagle Habitat Site.

DE0036-00

Inventory: The Oregon Department of Fish and Wildlife (ODFW) has inventoried a former bald eagle nest site in Township 17S, Range 11E, Section 26, Tax Lot 5900. The ODFW identifier for this site is DE0036-00. The site is also known as Shevlin Park. The site is described in the Oregon Department of Fish and Wildlife Central Region Administrative Report No. 93-1.

C. Heron Rookery - Black Butte Ranch.

Inventory: The Oregon Department of Fish and Wildlife (ODFW) identified a great blue heron rookery in Township 14S, Range 9E, Section 10 SENE. The County inventoried and adopted this site as a Goal 5 resources in Ordinance 92-041.

D. Bald Eagle Nest Site Inventory Nest Sites on Non-Federal Land or with Non-Federal Sensitive Habitat Areas.

ODFW Site#	Map & Tax Lot	Quarter Section	Site Name
DE 0035-00	15-10-00-1400	23/NWNE	Cloverdale NW
DE 0035-01	15-10-00-1400	23/NENE	Cloverdale NE
DE-0046-00	20-10-34-3401	34/NWSE	Bates Butte

E. Bald Eagle Habitat Site.
DE0037-00

Inventory: The Oregon Department of Fish and Wildlife (ODFW) has identified a bald eagle nest in Township 22S, Range 09E, Section 04, Tax Lot 500. The ODFW identifier for this site is DE0037-00, Wickiup Reservoir. The site is described in the Oregon Department of Fish and Wildlife Central Region Administrative Report No. 93-1.

F. Bald Eagle Habitat Site.
DE0038-00

Inventory: The Oregon Department of Fish and Wildlife (ODFW) has identified a bald eagle nest in Township 22S, Range 09E, Section 34, Tax Lot 500. The ODFW identifier for this site is DE0038-00, Haner Park. The site is described in the Oregon Department of Fish and Wildlife Central Region Administrative Report No. 93-1.

The nest site and the sensitive habitat area are mapped on Exhibit "A". The sensitive habitat area includes the area within one-quarter mile of the nest site.

G. Bald Eagle Habitat Site.
DE0039-00

Inventory: The Oregon Department of Fish and Wildlife (ODFW) has identified a bald eagle nest in Township 22S, Range 09E, Section 06, Tax Lot 500. The ODFW identifier for this site is DE0039-00, Wickiup Dam. The site is described in the Oregon Department of Fish and Wildlife Central Region Administrative Report No. 93-1. The nest site and the sensitive habitat area are mapped on Exhibit "A".

H. Bald Eagle Habitat Site.
DE0046-00

Inventory: The Oregon Department of Fish and Wildlife (ODFW) has identified a bald eagle nest in Township 20S, Range 10E, Section 34, Tax Lot 3401. The ODFW identifier for this site is DE0046-00, Bates Butte. The site is described in the Oregon Department of Fish and Wildlife Central Region Administrative Report No. 93-1. The sensitive habitat area includes the area within one-quarter mile of the nest site. The nest site and the sensitive habitat area are mapped on Exhibit "A".

I. Golden Eagle Nest Site Inventory Nest Sites on Non-Federal Land or with Non-Federal Sensitive Habitat Area.

ODFW Site #	Map & Tax Lot	Quarter Section	General Location
DE-0002-00	14-13-11-100	11/SENE	Smith Rock State Park
DE-0002-01	14-13-11-100	11/SENE	Smith Rock State Park
DE-0002-02	14-13-11-100	11/SENE	Smith Rock State Park
DE-0002-03	14-13-11-100	11/NWNE	Smith Rock State Park
DE-0002-04	14-13-11-100	11/NWNE	Smith Rock State Park
DE-0002-05	14-13-11-100	11/NWNE	Smith Rock State Park
DE-0002-06	14-13-11-100	11/NWNE	Smith Rock State Park
DE-0006-00	15-12-00-1502	35/SENE	Mid Deschutes
DE-0006-01	15-12-00-1502	35/SENE	Mid Deschutes
DE-0006-02	15-12-00-1502	35/SENE	Mid Deschutes
DE-0006-04	15-12-00-1502	35/SENE	Mid Deschutes
DE-0006-05	15-12-00-1503	35/NESE	Mid Deschutes
DE-0009-00	14-12-22D-300	23/NWSW	N. Odin Falls
DE-0011-00	15-12-00-100	1/NWSE	Radio Tower/Deschutes
DE-0011-01	15-12-00-100	1/NESE	Radio Tower/Deschutes
DE-0012-00	15-11-00-800	3/NENE	Upper Deep Canyon
DE-0014-00	16-11-00-7800	29/NWSE	Tumalo Dam
DE 0015-01	14-11-00-400	3/NENW	Squaw Creek
DE 0015-00	14-11-00-400	3/SESW	Rimrock Ranch
DE-0029-00	20-17-00-3801	36/NWSE	Twin Pines
DE-0034-00	15-10-00-1400	15/SENE	Lazy Z/USFS
DE-0034-01	15-10-00-1400	15/SENE	Lazy Z/USFS

J. Prairie Falcon Nest Site Inventory Nest Sites on Non-Federal Land or with Non-Federal Sensitive Habitat Area.

ODFW Site #	Map & Tax Lot	Quarter Section	General Location
DE 0016-00	22-16-00-100	12/SWSE	Dickerson Flat
DE 0031-00	16-11-00-5600	20/NESE	Tumalo Dam
DE 0031-01	16-11-20-400	20/SESW	Tumalo Dam
DE 0794-01	14-13-11-100	11/NWSW	Smith Rock State Park

K. Osprey Nest Site Inventory Nest Sites on Non-Federal Lands or with Non-Federal Habitat Area.

ODFW Site #	Map & Tax Lot	Quarter Section	General Location
DE 0080-00	20-11-00-1300	07/NWNE	Sunriver/ Meadowland

L. Upland Game Bird Habitat.

Inventory: The following upland game birds are found in Deschutes County:

Estimated upland game population in 1980 (ODF&W 1985):

Ring-necked Pheasant	200
Valley Quail	10,000
Mountain Quail	50
Chukar Partridge	300
Turkey	50
Blue Grouse	900
Sage Grouse	1,800
Ruffed Grouse	100
Mourning Dove	8,000

M. Sage Grouse Lek Inventory Leaks on Non-Federal Lands or with Non-Federal Sensitive Habitat Areas.

ODFW Site #	Map & Tax Lot	Quarter Section	General Location
DE 0994-01	20-18-00-700	05/SWSE	Circle F Reservoir
DE 0995-01	20-19-00-800	06/NWSE	Merril Rd
DE 0996-01	22-17-00-600	06/SWSW	Dickerson Well
DE 0997-01	20-16-00-2400	25/SENE	Moffit Ranch
DE 0997-02	20-16-00-2400	26/NENE	Moffit Ranch Satellite
DE 0998-01	20-14-00-400	10/NWNW	Evans Well
DE 0998-02	20-14-00-400	10/SWNW	Evans Well Satellite
DE 0999-01	19-14-00-2200	26/SESE	Millican Pit

(Ord. 2002-005 § 1, 2002; Ord. 2000-17 § 1, 2000, PL-20, 1979)

Chapter 23.108. HISTORIC AND CULTURAL

23.108.010. Historic and cultural.

23.108.020. Goals.

23.108.030. Policies.

23.108.040. Goal 5 Inventory - Historic resources.

23.108.050. Sites with insufficient information.

23.108.010. Historic and cultural

A. Introduction. Deschutes County's rural area represents a proud heritage of exploration, settlement, and agriculture as well as the experiences of communities and people. Deschutes County's countryside is a rich and descriptive historical document. It tells us how generations of people from vastly different backgrounds adapted to and exploited a land of lakes and rivers, mountains and hills, forests and high deserts. Buildings teach us valuable lessons. They show us how and why the area developed and what building materials were available. The ways in which they were constructed tell us about their functions and the influence of the land and elements. In addition to buildings, significant information is provided by rock shelters, cemeteries and individual graves, stones, ranches, trails, wagon train routes, islands, townsites, millsites, fish hatcheries, river crossings, bridges and other unique resources.

B. Process.

On November 1, 1979, the Board of County Commissioners adopted the Deschutes County Year 2000 Comprehensive Plan, including goals and policies for protection of historic resources, identification and listing of sites as "potential historic sites"; and provisions that the County establish a Historical Landmarks Commission and adopt an ordinance to protect designated historic sites. The approximately 140

potential historic sites identified in the Comprehensive Plan resulted from information provided by the Oregon State Historic Preservation Office and from input provided by the County-appointed Deschutes County Historic and Cultural Areas Citizen Advisory Committee, and with help of the Deschutes County Historical Society.

On September 17, 1980, the Board of County Commissioners adopted Ordinance PL-21, which established a Historical Landmarks Commission, set forth a designation process, and provided for regulation of exterior alterations and demolitions of designated structures and landmarks. PL-21 was subsequently amended by Resolution 82-001 and Ordinance 88-008. The ordinance outlines designation of historic buildings, sites and districts; standards and procedures for exterior alterations and demolitions; reviews of redevelopment and neighborhood improvement projects; inventory processes; and other functions and duties. Historic designation hearings are held before the Historical Landmarks Commission with final action by the Board of County Commissioners.

In September 1981, Oregon Administrative Rules, Chapter 660, Division 16, established the Goal 5 Rule for a wide variety of types of resources. The Rule requires jurisdictions to determine if a site is significant; to determine the location, quantity and quality; to identify conflicting uses and their attendant economic, social, environmental and energy consequences, analyzing them relative to the consequences of protecting the site as an historic resource; and to develop a program to achieve the Goal. The Historic Preservation Ordinance (Ordinance 88-008) was developed as the County's program.

From 1983 to 1985, the Historical Landmarks Commission systematically evaluated nearly 300 within and outside

the incorporated cities. Of these, approximately one-half were newly identified sites with little or no previous information. Following a public hearing before the Commission, sites found to be significant were recommended to the Board of County Commissioners for historic designation. In 1990, the Commission followed the same process, reviewing over 100 sites in the County and the three cities identified as potential sites between 1983 and 1985. Of 54 sites in the unincorporated area, three were recommended for historic designation.

Potential conflicting uses were identified through discussions with property owners during site visits. In addition, public testimony at both hearings identified potential conflicting uses. The analysis required under Goal 5 was prepared by Staff. Decisions regarding how each site is to be protected were made by the Commission. Certain sites require additional analysis regarding significance, conflicting uses and other requirements of Goal 5. The Commission will conduct the analyses at a later date.

On December 18, 1991, the Board of County Commissioners held the initial public hearing to consider designating sites recommended by the Commission under the Goal 5 Rule. On March 18, 1991, the Board designated those sites found significant that lie within the unincorporated area and outside of lands managed by the United States Forest Service and the Bureau of Land Management.

C. Historic and cultural.

Historic and cultural areas are lands with sites, structures or objects that have local, regional, statewide or national historical significance or refer to an area characterized by evidence of an ethnic, religious or social group with distinctive traits, beliefs or social forms. Rapid growth and the subsequent loss of such sites and areas have made the protection

of this County's important historic and cultural resources of significance locally. The program and policies recommended by the Historic and Cultural Citizen's Advisory Committee received support and approval throughout the committee reviews and public hearings and changed little during the planning process.

Based upon the following findings:

1. Public awareness of our history and cultural background has been and will continue to be an important source of knowledge, pride, education and enjoyment for this and future generations.
2. Rapid growth and development make it imperative that the County's historic and cultural resources be identified and protected.
3. Lack of private owner incentive for preservation has led to historic site deterioration or loss.
4. Inventorying, assessment and recording of historic and cultural resources are an ongoing process which must be kept current, particularly in the face of rapid growth and development.
5. Properly preserved and utilized historical or cultural resources enhance the economy of the area.
6. There exist State and Federal laws which protect cultural resources from disturbance or distraction and in light of the chosen alternative which seeks to enhance cultural amenities as well as housing policies encouraging housing rehabilitation, the citizens committee accepted the recommended goal.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-006 §§ 1 and 2, 1994; Ord. 92-018, 1992, PL-20, 1979)

23.108.020. Goals.

1. To preserve and protect historic and cultural resources of Deschutes County.
2. To achieve the identified goal a number of policies were developed.

These policies reflect concerns that there be a specific agency responsible for protecting historic and cultural resources and that the agency's specific authority and duties needed to be identified. Also, that appropriate means by which the new agency, the cities and the County could protect the resources had to be found.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-006 §§ 1 and 2, 1994; Ord. 92-018, 1992, PL-20, 1979)

23.108.030. Policies.

1. A joint Cities/County Historical Landmarks Commission shall be created by the incorporated cities and Deschutes County. The joint commission is meant to assure greater coordination in regard to identifying historical and cultural resources, protecting those resources, being fully representative of the various communities, serving in an advisory capacity to all local governing bodies and their agents, as well as promoting greater efficiency and better information in protecting the resources. The duties of the commission would be to:
 - a. Create a local register and priority value for historic and cultural resources of the County.
 - b. Review applications for designation of historical sites.
 - c. Advise governing bodies on ordinances and permits for demolition or alteration of historic or archeological sites.
 - d. Advise and help resolve land use conflicts affecting such resources.
 - e. Devise standards for historical markers.
2. Preservation of historic and cultural sites of high priority rating or that have been identified on the Deschutes County Inventory of Historical Places should take

precedence over other developmental uses.

3. Emphasis shall be on preservation of the exterior appearance of historic buildings. Interior modifications and exterior changes compatible with the continued maintenance of the historic appearance of the structure shall be approved upon such findings of compatibility by the Historic Landmarks Commission.
4. Plans for the protection of an identified historic or cultural site shall be submitted to the Historic Landmarks Commission for approval with any application for subdivision or development of such site or area.
5. Incentives should be developed to encourage private preservation and utilization of historical resources.
6. Redevelopment, Neighborhood Improvement Projects and other similar mechanisms shall be encouraged for areas of significant historical or architectural interest.
7. If funding is available, the County shall complete the Goal 5 process required for the Tumalo Grange, Terrebonne Grange, Central Oregon Irrigation District (numerous locations), and Rock O' the Range Bridge sites in accordance with OAR 660-16 by the end of the 1994-95 State Historic Preservation Office grant period.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-006 §§ 1 and 2, 1994; Ord. 92-018, 1992, Ord. 80-203, 1980; PL-20, 1979)

23.108.040. Goal 5 Inventory - Historic resources.

1. Alfalfa Grange: Grange building and community center, built in 1930, located on Willard Road, Alfalfa. 17-14-26 TL 400.
2. Allen Ranch Cemetery: Oldest cemetery in Deschutes County. 30' by 40' fenced cemetery plot. Situated 100 yards west of South Century Drive, one-half mile south of Road 42. Two marble

- gravestones, two wooden markers. 20-11-7 TL 1300.
3. Fall River Fish Hatchery "Ice House": The hatchery "Ice House" dates from the beginning of fishery management in Oregon, circa 1920. It is an 18 foot by 18 foot improvement, the only original building remaining on the property, and the only significant building or structure on the site. Located at 15055 S. Century Drive, E½; NE¼; Section 32, Township 20S, Range 10 E, Tax Lot 100. (Ordinance 94-006 §1, 1994).
 4. Long Hollow Ranch – Black Butte: Headquarters complex of historic ranch, located on Holmes Road in Lower Bridge area, including headquarters house, ranch commissary, equipment shed, barn and bunkhouse. 14-11-1 TL 101.
 5. Swamp Ranch – Black Butte: The present day site of the Black Butte Ranch was part of the vast holdings of the Black Butte Land and Livestock Company in 1904. No buildings from the period exist. 14-9-10A, 10B, 15B, 15C, 16A, 21A, 21B, 21C, 22A, 22B.
 6. Brothers School: Only one-room schoolhouse currently in use in Deschutes County, located on Highway 20 in Brothers. 20-18-00 TL 3200.
 7. Bull Creek Dam: The Bull Creek Dam, a component of the Tumalo Irrigation Project was constructed in 1914 to form a water storage reservoir to increase the amount of irrigated acreage at Tumalo. It is a gravity type of overflow dam. Two cut off walls are extended into solid formation, one at the upper toe and the other at the lower toes of the concrete dam. The dam proper is about 17 feet high from the foundation, although the completed structure is about 25 feet. Located on Tumalo Reservoir-Market Road. 16-11-33 TL 2700 SW-¼; SW-¼.
 8. Bull Creek Dam Bridge (Tumalo Irrigation Ditch Bridge): Built in 1914, the bridge, which spans the dam, consists of five continuous filled spandrel, barrel-type concrete deck arch spans, each 25 feet long. The concrete piers are keyed into notches in the arch structure. The structure is the oldest bridge in Deschutes County. On Tumalo Reserve-market Road. 16-11-33 TL 2700/ SW-¼; SW-¼.
 9. Camp Abbot Site, Officers' Club: Officers' Club for former military camp, currently identified as Great Hall in Sunriver and used as a meeting hall. 20-11-5B TL 112.
 10. Camp Polk Cemetery: One of the last remaining pioneer cemeteries, located off Camp Polk Road near Sisters. The site is composed of a tract of land, including gravestones and memorials, containing 2.112 acres in the Southwest Quarter of the Southeast Quarter of Section 27, Township 14 South, Range 10 E.W.M., TL 2100, described as follows:
Beginning at a point North 20 degrees 06' 20" West 751 feet from the corner common to Sections 26, 27, 34 and 35 in Township 14 South Range 10 E.W.M. and running thence South 88 degrees 30' West 460 feet; thence North 1 degree 30' East 460 feet; thence South 1 degree 30' 200 feet to the point of beginning.
 11. Camp Polk Military Post Site: One of the oldest military sites in Deschutes County. Located on Camp Polk Cemetery Road. Site includes entire tax lots, listed as follows 14-10-34 TL 100, 300.
 12. Cline Falls Power Plant: Early hydropower site on the Deschutes River, located off Highway 126 on White Rock Road west of Redmond. Site includes dam, penstock and powerhouse. 15-12-14 TL 901.

13. Cloverdale School: One-room school building in Cloverdale, located near 68515 George Cyrus Road. First building built in Cloverdale. 15-11-7 TL 600.
14. Eastern Star Grange: Grange hall for earliest grange organized in Deschutes County, located at 62850 Powell Butte Road. 17-13-19 TL 1900.
15. Enoch Cyrus Homestead Hay Station and Blacksmith Shop: The Enoch Cyrus Homestead was the original homestead of Oscar Maxwell, built in 1892 and purchased in 190 by Enoch Cyrus. Important stage/store stop for early travelers. The homestead house, including a back porch and cistern, and the Blacksmith Shop are designated. 15-11-10 TL 700.
16. Fremont Meadow: A small natural meadow on Tumalo Creek in Section 34, Township 17 South, Range 11 East, lying within Shevlin Park. TL 5900. Campsite for 1843 Fremont expedition. 17-11-34 TL 5900.
17. Harper School: One-room schoolhouse, located west of South Century Drive, south of Sunriver, moved halfway between the Allen Ranch and the Vandever Ranch from the former townsite of Harper. 20-11-17 TL 1900.
18. Improved Order of Redmond Cemetery: Historic cemetery used by residents of La Pine/Rosland area. Located on Forest Road 4270, east of Highway 97. A 40-acre parcel described as:
The Southwest one-quarter of the Southeast one-quarter (SW-¼; SE-¼) Section 7, Township 22 south, Range 11, East of the Willamette Meridian, Deschutes County, Oregon.
19. Laidlaw Bank and Trust: One of the few remaining commercial buildings from the community of Laidlaw, located at 64697 Cook Avenue, Tumalo. 16-12-31A TL 2900.
20. La Pine Commercial Club: Building was built in 1912 as a community center, serving as a regular meeting place for civic organizations and occasionally served as a church. One of the oldest and continuously used buildings in La Pine. Located at 51518 Morrison Street, La Pine. 22-10-15AA TL 4600.
21. Lynch and Roberts Store Advertisement: Ad advertising sign painted on a soft volcanic ash surface. Only area example of early advertising on natural material. Lynch and Roberts established mercantile in Redmond in 1913. Roberts Field near Redmond was named for J. R. Roberts. Site includes the bluff. 14-12-00 TL 1501.
22. Maston Cemetery: One of the oldest cemeteries in County. Oldest grave marker is 1901. About one-half mile from site of Maston Sawmill and Homestead. Site includes the gravestones and memorials and the entire tax lot, identified as 22-09-00 TL 1800.
23. George Millican Ranch and Mill Site: Ranch established in 1886. Well dug at or near that date. Remains of vast cattle ranching empire. 19-15-33 Tls 100, 300.
24. George Millican Townsite: Town established 1913. Site includes store and garage buildings, which retain none of the architectural integrity from era. 19-15-33 TL 500.
25. Petersen Rock Gardens: The Petersen Rock Gardens consist of stone replicas and structures erected by Rasmus Petersen. A residence house and museum are part of the site. The site has been a tourist attraction for over 60 years. Located at 7930 SW 77th, Redmond. Site includes entire tax lot. 16-12-11 TL 400.
26. Pickett's Island: After originally settling in Crook County, Marsh Awbrey moved to Bend and then

- homesteaded on this island in the Deschutes River south of Tumalo. The site was an early ford for pioneers. Located in Deschutes River near Tumalo State Park. 17-12-6 NE-¼ TL 100. Portion between Deschutes River and Old Bend Road is designated.
27. Rease (Paulina Prairie) Cemetery: Historic cemetery on Elizabeth Victoria Castle Rease and Denison Rease's homestead. Earliest known grave is of their son, George Guy Rease, born in 1879, who was also a homesteader on Paulina Prairie. George Guy Rease died of smallpox on the Caldwell Ranch on May 2, 1903. Other known burials are William Henry Caldwell, 1841-October 15, 1910, died on the Caldwell Ranch of injuries sustained on a cattle drive; Melvin Raper, 1892-1914, died in a tent of tuberculosis; Addie Laura Caldwell, 1909-November 16, 1918, died of the Spanish influenza epidemic; and Emma Nimtz Deedon, 1886-April 15, 1915, died of complications from a pregnancy. There are several unmarked graves. The cemetery is a county-owned one-acre parcel on the north edge of Paulina Prairie, two miles east of Highway 97. 210-11-29, SE-¼; NW-¼ TL 99.
28. Terrebonne Ladies Pioneer Club: The Club was organized in 1910. The building has been a community-meeting place since 1911. Located at 8334 11th Street, Terrebonne. 14-13-16DC TL 700.
29. Tetherow House and Crossing: Site is an excellent example of an early Deschutes River crossing. Major route from Santiam Wagon Road to Prineville. Tetherow House was built in 1878. The Tetherows operated a toll bridge, store and livery stable for travelers. Oldest house in County. Site includes house and entire tax lot. 14-12-36A TL 4500.
30. Tumalo Creek – Diversion Dam and Headgate of Feed Canal: Constructed in 1914, the Feed Canal's purpose was to convey water from Tumalo Creek to the reservoir. The headworks of the Feed Canal consist of a low overflow weir dam, 94.2 feet in length. The entire structure is of reinforced concrete. 17-11-00 TL 5900.
31. Tumalo Community Church: The building is the oldest church in the County, built in 1905. It stands in the former town of Laidlaw, laid out in 1904. Located at 64671 Bruce Avenue, Tumalo. 16-12-31A TL 3900.
32. Tumalo Project Dam: Concrete core, earth-filled dam 75 feet high. First project by State of Oregon to use State monies for reclamation project. On Tumalo Creek. 16-11-29.
33. William P. Vandever Ranch Homestead House: The Vandever Ranch House stands on the east bank of the Little Deschutes River at 17600 Vandever Road near Sunriver. The homestead was established in 1892, and has been recently relocated and renovated. Vandever family history in the area spans 100 years. 20-11-00 TL 1900.
34. Kathryn Grace Clark Vandever Grave: Kathryn Grace Vandever, daughter of William P. Vandever, died of influenza during the epidemic of 1918. Her grave is located across a pasture due south of the Vandever House, 50 feet east of the Little Deschutes River. Site includes gravestone and fenced gravesite measuring is approximately 15 feet by 25 feet. 20-11-00 TL 1900.
35. Young School: Built in 1928, it is an excellent example of a rural "one-room" school which served homesteaders of the 1920s. Located on Butler Market Road. 17-13-19 TL 400.

36. Inventory note: Unless otherwise indicated the inventoried site includes only the designated structure. No impact areas have been designated for any inventoried site or structure.

37. Agnes Mae Allen Sottong and Henry J. Sottong House and Barn. House and barn are constructed with lumber milled on the property in a portable sawmill run by the Pine Forest Lumber Company in 1911. Henry was awarded homestead patent 7364 issued at The Dalles on Dec 1, 1904. Henry was president of the Mountain States Fox Farm. A flume on the Arnold Irrigation District is named the Sottong Flume. The structures are also associated with William Kuhn, a president of the Arnold Irrigation District; Edward and Margaret Uffelman, who were part of the group that privatized and developed the Hoo Doo Ski Resort; and Frank Rust Gilchrist, son of the founder of the town of Gilchrist and Gilchrist Mill and president of the Gilchrist Timber Company from the time of his father's death in 1956 to 1988. Frank R. Gilchrist served on the Oregon Board of Forestry under four governors and was appointed by the governors to serve as a member of the Oregon Parks and Recreation Advisory Committee. He served on the Oregon State University's Forest Products Research Lab and was a director and president of the National Forest Products Association. T18 R12 Section 22, 00 Tax lot 01600.

the Swalley Canal; Tumalo Grange - 16-12-31A TL 3900.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-006 §§ 1 and 2, 1994; Ord. 92-018, 1992, PL-20, 1979)

(Ord. 2005-028 § 1, 2005; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-006 §§ 1 and 2, 1994; Ord. 92-018, 1992, PL-20, 1979)

23.108.050. Sites with insufficient information.

Central Oregon Irrigation District – numerous locations; Terrebonne Grange - 14-13-16DC TL 700 (south half); Rock O' the Range Bridge- Bowery Land where it crosses

Chapter 23.112. WATER RESOURCES

23.112.010. Water resources.

23.112.020. Goals.

23.112.030 Policies.

23.112.040. Goal 5 Inventory – Riparian areas.

23.112.010. Water resources.

Water in adequate quality and quantity is important to all communities, but in a semi-arid region such as where Deschutes County is located it is of particular importance. Drought is a recurring natural phenomenon which has done much to direct the County's growth and to determine its economic base.

Unfortunately, inadequate information exists on water supplies and on water quality. The County health Department, Oregon Health Division, Oregon Department of Environmental Quality, and U.S. Geological Survey are all presently involved with studies or ongoing programs to provide a greater understanding of the area's water resources. Given the expected continued growth of the area and the existence of water quality and quantity problems already the results of these studies will prove useful in updating this plan and safely accommodating the new growth while protecting existing industries and residents.

It does appear that little additional water for agricultural expansion may be expected locally, except for some new wells in such areas as Lower Bridge and Cloverdale. The use of irrigation water for domestic purposes has not only reduced available water supplies for agriculture but also raised questions about possible health hazards resulting from people drinking from irrigation ditches. Some water quality problems have been identified as resulting from domestic effluent and agricultural operations. At present the domestic effluent is clearly a more pressing concern than agricultural activities (because of local soils, climate, topography and farm operations). The continued use of drill holes for sewage disposal has been noted as a subject of particular concern.

To indicate the County's concern and to serve as important long range objectives the following goals have been identified.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-003, 1994; PL-20, 1979)

23.112.020. Goals.

1. To maintain existing water supplies at present quality and quantity.
2. To improve the efficiency with which water is supplied to meet the growing needs of Deschutes County residents.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-003, 1994; PL-20, 1979)

23.112.030 Policies.

In order to achieve the desired results three general policy directions have been determined, each general topic composed of several specific policies.

1. Resource Study: To obtain better information than that presently available so as to assure the safe use of the area's water resources the following policies shall be adopted:
 - a. Obtain funding to conduct a complete County-wide hydrology study. Particular emphasis shall be placed on study of urban areas, irrigation water seepage into local water tables, stream flow and limits to water availability.
 - b. The County, in conjunction with appropriate State and Federal agencies, shall conduct a study on the location and characteristics of local aquifers and streams, emphasizing the La Pine area first.

- c. The County shall conduct a study of the legal, economic and environmental consequences of the use of irrigation water for non-agricultural uses.
 - d. When information is available on the location, quality and quantity of groundwater resources, the county will determine the significance of the resource and complete the Goal 5 process for groundwater resources in accordance with OAR 660-16.
2. Water supply. The second general topic is the protection and improvement in efficiency of local water supplies.
- a. The County shall work with local irrigation districts, private and municipal water suppliers as well as adjacent Counties and the State to assist water management planning.
 - b. Consistent with acceptable environmental, social and economic impacts, the County shall cooperate with State and Federal agencies in irrigation canal lining, reservoir construction and watershed management.
 - c. The County shall continue to serve as a sponsor for Federal and State grants for water system improvements.
3. Water quality. The final general policy direction is the protection and improvement of the area's water quality so that the County's new population can be safely accommodated without serious public safety, environmental and economic costs.
- a. The County shall work with State and Federal agencies in planning for water quality (i.e., Sections 208 and 303e) and in the enforcement of anti-pollution regulations. Also, if found necessary, create and enforce local anti-pollution ordinances.
 - b. The County, through educational programs and other similar activities, should encourage the use of non-toxic, rapidly biodegradable chemicals.
 - c. Plans, ordinances, cooperative agreements and other legal and educational tools shall be fostered by the County to protect watersheds, reduce erosion and inappropriate run-off, and otherwise preserve local water quality from undesirable building, agriculture or other practices.
 - d. Any project which would endanger the purity of local ground water shall be vigorously discouraged.
 - e. To protect the public's health and safety irrigation ditch water shall not be an approved domestic water source for subdivisions, partitions or other developments after adoption of this plan. This will not affect existing legal subdivisions, partitions or other developments.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-003, 1994; Ord. 80-203, 1980; PL-20, 1979)

23.112.040. Goal 5 Inventory – Riparian areas.

1. Inventory: Riparian areas are areas adjacent to rivers, streams, lakes or ponds where there is vegetation that requires free or unbound water or conditions that are more moist than normal. Riparian areas form an interconnected system within a watershed. At the water's edge they define the transition zone between aquatic systems and terrestrial systems. Riparian areas often contain a diversity of vegetation not found in upland areas. Riparian areas are limited in Deschutes County and are important habitats for both fish and wildlife.
- In Deschutes County significant riparian habitat is located in one or more of the following three areas:
- a. The area within 100 feet of the ordinary high water mark of an inventoried river or stream.

The 100 foot wide area may contain both riparian vegetation and upland vegetation. Wetlands and flood plain are also frequently within 100 feet of a stream or river. In some cases the riparian vegetation may extend beyond 100 feet from the ordinary high water mark if it is a designated wetland or flood plain.

In forested areas, the Oregon Department of Forestry identifies the riparian management area along Class 1 streams as an area on each side of a stream averaging three times the stream width but not averaging less than 25 feet or more than 100 feet.

The Oregon Department of Fish and Wildlife (ODFW) Land Use Planning Guide contains a section identifying protection policies and standards for various habitats and species. The recommended model ordinance for riparian areas in the handbook identifies a 100-foot area as measured from the ordinary high water line of all Class I and Class II streams.

- b. The area adjacent to an inventoried river or stream and located within a flood plain mapped by the Federal Emergency Management Agency and zoned Flood Plain by the County.

The flood plain may extend beyond 100 feet from the ordinary high water mark of the stream and may contain wetland.

- c. The area adjacent to a river or stream and inventoried as a wetland on the National Wetlands Inventory Map.

A riparian wetland may extend beyond 100 feet from the ordinary high water mark and may be included in a flood plain.

The County has not conducted an inventory of riparian areas adjacent to lakes and ponds on private land. However, many of these areas are included in the National Wetland Inventory Maps and are subject to County, State and/or Federal wetland fill and removal regulations. Riparian areas adjacent to the many lakes on federal lands are managed and protected under the federal land and resource management plans and are not included in the County inventory and are not considered in the ESEE analysis of conflicting uses.

The three areas described above are further identified in the Deschutes County/City of Bend River Study, the Federal Emergency Management Agency (FEMA) Flood Plain maps, the U.S. Department of the Interior National Wetlands Inventory maps, the Deschutes County Comprehensive Plan and Title 18 of the Deschutes County Code.

- 2. Deschutes County/City of Bend River Study. The Deschutes County/City of Bend River Study (1986) inventoried the following significant riparian habitat and completed an ESEE analysis of this habitat. The River Study inventory and ESEE analysis for riparian habitat are incorporated herein by reference.

The River Study resulted in adoption of a 100-foot setback for structures and septic systems, fill and removal regulations, provisions for conservation easements and prohibition of hydroelectric facilities on certain reaches of the Deschutes River and its tributaries.

- a. Riparian Area Inventoried In River Study.

Table 6-2

STREAMS	ACRES
Deschutes River	1,440
Little Deschutes River	2,920
Paulina Creek	846
Fall River	43
Crooked River	38
Squaw Creek	47
Tumalo Creek	50
Indian Ford Creek	573
TOTAL	5,966

- b. FEMA maps. The Federal Emergency Management Agency (FEMA) maps flood plain adjacent to the following rivers and streams. The flood plain along these rivers and streams is zoned Flood Plain (FP) by Deschutes County.

Deschutes River
 Little Deschutes River
 Squaw Creek
 Crooked River
 Paulina Creek
 Long Prairie
 Dry River
 Spring River
 Indian Ford Creek

Portions of Indian Ford Creek and the Deschutes River near Sunriver have not been surveyed and mapped by FEMA. These areas are not zoned flood plain. However, the Flood Plain Zone, Title 18.96.020, states: "When base flood elevation data has not been provided in the flood insurance study, the Planning Division will obtain, review and reasonably utilize any base flood elevation or flood way data available from federal, state or other sources in determining the location of a flood plain or flood way."

3. National Wetlands Inventory Maps. The U.S. Department of Interior National Wetlands Inventory Maps are the County inventory of wetland habitat. These mapped wetlands are subject to County, state and federal fill and removal regulations.
4. Deschutes County Comprehensive Plan. The Deschutes County Comprehensive Plan, adopted in 1979, mapped riparian areas along the following rivers and streams.

<u>River or Stream</u>	<u>Ownership</u>
Deschutes River	Private/Federal
Little Deschutes River	Private/Federal
Fall River	Private/Federal
Tumalo Creek	Private/Federal
Three Creek	Private/Federal
Squaw Creek	Private/Federal
Trout Creek	Private/Federal
Dry Creek	Private/Federal
Cache Creek	Private/Federal
Indian Ford Creek	Private/Federal
Cultus River	Federal
Charlton Creek	Federal
Deer Creek	Federal
Cultus Creek	Federal
Quinn Creek	Federal
Fall Creek	Federal
Moore Creek	Federal

Title 18.88, the Wildlife Area Combining Zone, contained a provision which required advice from the Oregon Department of Fish and Wildlife to determine the minimum lot sizes in these mapped riparian areas. This provision was deleted from Title 18.88 by Ordinance 92-042 because it was

not a clear and objective standard. The Comprehensive Plan map was repealed and replaced with a Wildlife Habitat Combining Zone Map that does not include mapped riparian areas.

5. Title 18 - Deschutes County Zoning Ordinance. DCC 18.04.030 includes the following streams in the definition of "perennial stream." These streams, in addition to all those listed above, are subject to the 100-foot setback for structures and septic systems.

Perennial Streams Listed in DCC 18.04.030

Bottle Creek	Metolius Creek
Bridge Creek	Park Creek - East Fork
Brush Draw	Park Creek - West Fork
Bull Creek	Pole Creek
Cache Creek	Rock Creek
Charlton Creek	Snow Creek
Cultus Creek	Soap Creek
Cultus River	Spring Creek
Deer Creek	Soda Crater Creek
Dry Creek	Squaw Creek-North Fork
Fall Creek	Three Creek
First Creek	Todd Lake Creek
Full Creek	Trout Creek
Goose Creek	Tumalo Creek-North Fork
Indian Ford Creek	Tumalo Creek-Middle Fork
Jack Creek	Tumalo Creek-South Fork
Kaletan Creek	

All of these streams, except portions of Indian Ford Creek, Cache Creek and Dry Creek, are located on federal land and are subject to either the Deschutes National Forest or the Bureau of Land Management Resource Management Plans.

6. Goal 5 Inventory – Wetlands. Inventory: Deschutes County Ordinance 92-045 adopted all wetlands identified on the U. S. Fish and Wildlife Service National Wetland Inventory Maps as the Deschutes County wetland inventory. Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 94-003, 1994; PL-20, 1979)

Chapter 23.116. DESCHUTES RIVER CORRIDOR

23.116.010. Deschutes River Corridor – Water resources.

23.116.020. Goals and policies.

23.116.030. Energy goals and policies.

23.116.040. Fish goals and policies.

23.116.050. Wildlife goals and policies.

23.116.060. Open space goals and policies.

23.116.070. Recreation goals and policies.

23.116.080. Archaeological goals and policies.

23.116.090. Historic and cultural goals and policies.

23.116.100. Deschutes Basin Resource Committee.

23.116.010. Deschutes River Corridor – Water resources.

It is recognized that many of the following goals are beyond the scope of county or city jurisdiction and require action by state agencies or the Legislature. These goals are included because they have a crucial role in the preservation and revitalization of the Deschutes River Basin.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.020. Goal and policies.

A. Goal: Stabilize the flow regime of the upper Deschutes River Basin so as to maintain or enhance a healthy aquatic and riparian environment while providing for irrigation and recreation needs. The minimum streamflows recommended by the Oregon Department of Fish and Wildlife should be considered as target minimum flows for the respective river reaches.

1. Policies:

a. Deschutes County shall establish a water conservation committee including, but not limited to, local representatives from the irrigation districts, Department of Water Resources, Department of Fish and Wildlife (ODFW), United States Forest Service (USFS), Deschutes County and City of Bend Planning Departments, and Deschutes County and City of Bend Planning Commissions to provide an ongoing forum regarding water management on the Deschutes River and its tributaries and to make recommendations to appropriate agencies. The committee should:

1. Request assistance through Bonneville Power Administration's (BPA's) technical assistance program for technical improvements in methods of irrigation and means of conservation of both water and energy.
2. Request assistance from the Water Resources Department, Bureau of Reclamation, and Soil and Conservation Districts to initiate an in-depth study of, and to set priorities for, actions that should be taken to improve the irrigation districts' delivery systems.
3. Assist the County and City of Bend in the implementation of the goals and policies of DCC 23.116.010.

B. Goal: Support the designation of instream use of water as a beneficial use.

1. Policies:

- a. Deschutes County shall petition the Water Resources Department to amend the appropriate provisions in the Deschutes River Basin Plan to reflect the recommendations of the River Study Task Force and the committee established under Goal A of DCC 23.116.010.
- b. Deschutes County shall petition the State Legislature to amend state law to designate instream use as a beneficial use to ensure that rights designated to instream use shall not be subject to downstream appropriation by holder of equal or junior rights, and petition the Water Resource

Department to adopt a uniform, easily-accomplished process for the transfer of water rights in the Deschutes River Basin to instream use.

C. Goal: Increase streamflow in the Deschutes River below Wickiup Dam during the non-irrigation season. Establish a flow release during the irrigation season that will reduce bank erosion while providing for irrigation, fisheries, wildlife and recreation needs.

1. Policies:

- a. Deschutes County shall petition the Bureau of Reclamation to conduct a feasibility study on the Monner Reservoir site, including: (1) the non- irrigation flow required for filling, (2) to what extent gravity feed irrigation would be possible, and (3) to what extent low flows below Wickiup Dam could be augmented during the non-irrigation season.
- b. Deschutes County shall petition the Bureau of Reclamation, USFS, United States Geological Survey (USGS), and the Oregon Department of Environmental Quality (DEQ), to establish a bedload sediment monitoring program and to determine an appropriate maximum discharge from Wickiup Dam, which program addresses the effects of bank erosion on rehabilitation of spawning habitat, riverfront property, recreation, and scenic values, and accomplishes the determination of flow regime through interagency cooperation with the affected irrigation districts.
3. Deschutes County shall petition the Bureau of Reclamation to determine what the consequences would be to irrigation districts, recreation use, and the stabilizing of water releases below Wickiup Dam by maintaining a lower level of water in Crane Prairie Reservoir, and diking off known high loss areas within the reservoir to minimize excess seepage.

D. Goal: Implement and enforce incentives for water conservation.

1. Policies:

- a. Deschutes County shall encourage the Water Resources Department, irrigation districts, and municipalities utilizing diverted waters to enforce the "without waste" provision in appropriated water rights.
- b. Deschutes County shall support efforts by the irrigation districts to provide financial incentives to conserve water, such as a water use fee on the minimum amount of water required (commensurate with the plant/soil requirements determined by the soil and water conservation districts) and an excess charge for water used over the base amount.
- c. Deschutes County and the irrigation districts should explore the development of an intergovernmental agreement to provide that developers partitioning land and attendant water rights shall be responsible for the affected irrigation district's approval before final plat approval by the County. The irrigation district shall not deliver water to the subdivision greater than that which would have been due to the parcel as a whole (i.e., the district shall not replace water lost by subdivision distribution).
- d. Deschutes County shall request the irrigation districts to continue to give consideration to shortening the summer irrigation season when soil moisture conditions and cistern reserves allow.
- e. Deschutes County shall support efforts by the irrigation districts within the upper and middle Deschutes River Basin to allow expansion of irrigated land within a district's boundaries, as part of a means to share conserved water, for those districts that implement water conservation and instream flow enhancement programs.
- f. Deschutes County shall encourage irrigation districts to discontinue the policy of winter water runs.

E. Goal: Maintain streamflows in the Little Deschutes River and its tributaries that will provide for irrigation, fisheries, wildlife and recreation needs.

1. Policy: Deschutes County shall encourage ODFW and Tumalo Irrigation District to negotiate a minimum release out of Crescent Lake.
- F. Goal: Increase instream flow below the North Canal Dam during periods of water diversion.
1. Policy: Deschutes County shall encourage examination by irrigation districts and the Water Resources Department of options for providing additional flows below the North Canal Dam during the irrigation season. These additional flows shall not take the place of the current 30 CFS spilled by agreement with Central Oregon Irrigation District (COID) and North Unit Irrigation District (NUID). Options that might be considered include shared conserved water, public participation in irrigation district improvement, public "buy down" of interest rates on improvement loans, and public or private purchase/transfer of water rights for instream use.
- G. Goal: Increase streamflow below the irrigation diversions on Tumalo Creek during periods of water diversion.
1. Policies:
 - a. Deschutes County shall encourage the City of Bend to continue to implement a water conservation program that emphasizes enforcement, metering, and other methods to avoid wasting water.
 - b. Deschutes County shall encourage the City of Bend to continue to replace the Tumalo water supply pipeline and, when this pipeline is complete, to install gates at the intake, which would help stabilize withdrawals from Tumalo Creek,
 - c. Policies: Deschutes County shall encourage the City of Bend and Tumalo Irrigation District to explore options to improve instream flows in Tumalo Creek, including apportionment of water draws to maximize the use of the Tumalo Feed Canal rather than the Columbia Southern Canal, in order to increase water flows through Shevlin Park and minimize the excessive water losses that now occur in the Columbia Southern Canal.
 - d. Policies: Deschutes County shall encourage the Tumalo Irrigation District to explore means to eliminate the Columbia Southern Canal and to revert a portion of the water saved to instream use to maintain a minimum flow in Tumalo Creek below the Tumalo Feed Canal diversion.
- H. Goal: Increase streamflow below the main irrigation diversion on Squaw Creek during periods of water diversion.
1. Policies:
 - a. Deschutes County shall encourage the Squaw Creek Irrigation District and the Water Resources Department to help explore options for providing additional flow below the irrigation diversions on Squaw Creek, including shared conserved water, public participation in irrigation district improvements, public "buy down" of interest rates on improvement loans, and public or private purchase/transfer of water rights for instream use.
 - b. Deschutes County shall request the ODFW to petition the Water Resources Department to withdraw Squaw Creek from any further appropriations.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.030. Energy goals and policies.

1. Goal: Encourage development of hydroelectric resources when they are consistent with 1) fish, wildlife, recreation, open space, and scenic resource values, and 2) state and regional energy plans.
2. Policies:
 - a. Deschutes County shall continue to strongly support and promote the conservation of all forms of energy resources through cooperation with the Northwest Power Planning Council, BPA program, recycling, solar ordinances, energy-efficient building standards, and appropriate development of geothermal resources.

- b. Hydroelectric projects that are not physically connected to an existing dam, diversion, or conduit are prohibited.
 - c. Deschutes County shall develop a program to assure that hydroelectric projects located within existing man-made transmission systems and using existing flow regimes, or physically connected to an existing dam, diversion, or conduit, but not using existing flow regimes, are subject to the following provisions:
 - 1. Are consistent with federal and state law.
 - 2. Hydroelectric projects shall not increase the maximum surface area of an impoundment behind an existing dam or diversion.
 - 3. Shall not be located in significant/sensitive fish or wildlife areas unless it can be demonstrated that the project, if constructed, would restore significant/sensitive fish or wildlife habitat in the reach affected by the project.
 - 4. Hydroelectric projects shall stabilize streamflows, restore degraded trout habitat, and provide public access to as great an extent as practical.
 - 5. Hydroelectric projects shall avoid adverse impacts if possible. Where not practicable, impacts shall be minimized, while providing for restoration on already adversely impacted areas along the river or stream. Restoration does not necessarily have to be in the immediate project vicinity.
 - 6. Hydroelectric projects shall have no adverse impact to water-related and water-dependent recreation unless it can be shown that existing water-related and water-dependent recreation of the same type, quality, and quantity as that which may be lost can be restored or enhanced in the project vicinity. Recreation activities include those activities which occur now and which may reasonably be expected to occur in the future.
 - 7. Hydroelectric projects shall include a river restoration/enhancement plan documenting both on-site and off-site restoration and enhancement strategies consistent with adopted goals and policies. The plan shall identify costs, time schedules, and coordination actions with all affected parties. The plan shall address, but not be limited to, stabilizing water flows, trout habitat restoration, and public access. No hydroelectric project shall be permitted until the plan has been approved through the public review process.
 - 8. Hydroelectric projects shall post a performance and restoration bond to ensure implementations of the approved restoration/ enhancement plan.
 - 9. Hydroelectric projects shall be consistent with the provisions of the Columbia River Fish and Wildlife Program and the Northwest Power Plan as adopted by the Northwest Power Planning Council.
 - d. The County shall advise the Northwest Power Planning Council and Oregon Department of Energy as to the potential hydroelectric resource in Deschutes County.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.040. Fish goals and policies.

- 1. Goals:
 - a. Increase the number of wild trout through restoration of degraded habitat, enhancement of tributary spawning areas, and stabilized flows.
 - b. Increase public access along rivers and streams for fishing.
 - c. Increase public awareness of riparian habitat protection.
- 2. Policies:
 - a. All spawning areas for trout shall be considered significant habitat and shall be protected.
 - b. To the extent funds are available, Deschutes County shall retain in public ownership, after foreclosure, tax delinquent lands located near or adjacent to rivers and streams.
 - c. Deschutes County shall support efforts by the ODFW and local trout clubs to continue spawning habitat enhancement work.

- d. Deschutes County shall encourage and assist DEQ in developing a program to prevent surface water pollution due to inadequate or failing septic systems along rivers and streams.
 - e. Deschutes County shall encourage the ODFW to develop a program for state acquisition of fishing easements along rivers and streams.
 - f. Deschutes County shall encourage the ODFW and the Parks and Recreation Division of the Department of Transportation to develop a joint program for increasing fishing access at and adjacent to Cline Falls, Tumalo, and La Pine State Parks,
 - g. Deschutes County shall adopt regulations pertaining to fill-and-removal of material in waterways and adjacent wetlands.
 - h. Deschutes County shall support efforts by the ODFW, Bureau of Reclamation, Warm Springs Indian Tribe, Portland General Electric, and the USFS to begin efforts to identify ways to assure that steelhead and salmon juveniles are able to travel downstream over the dams. A pilot program for steelhead should be initiated on Squaw Creek.
 - i. Deschutes County shall support efforts by the ODFW to manage appropriate reaches of rivers and streams for wild (naturally reproducing) trout.
 - j. As part of the ODFW's effort to develop a wild trout management plan for the upper Deschutes River Basin, Deschutes County shall petition the Bureau of Reclamation to participate in the planning and, if appropriate, financing of habitat restoration and improvement of those rivers and streams affected by water facilities designed and/or financed by their agency, through coordination with the ODFW, USFS, irrigation districts, and other public and private interests.
 - k. Deschutes County shall encourage and assist in the education of river property owners on the State Riparian Tax Incentive Program and other programs that would benefit fish and wildlife.
 - l. Deschutes County, in cooperation with the irrigation districts, USFS, ODFW, and Bureau of Reclamation, should explore means to restore and stabilize riparian and wetland habitats. Emphasis should be on stabilizing flows caused by water regulations. Consideration should also include, but not be limited to, bank erosion control, revegetation programs, and elimination of inappropriate levels of riparian livestock grazing along rivers and streams.
 - m. Deschutes County shall request the ODFW to ensure that all irrigation diversions are properly screened. The irrigation districts should be encouraged to conduct the studies to monitor screen efficiency and to make necessary improvements.
 - n. Deschutes County shall continue to use conservation easements to protect riparian habitat.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.050. Wildlife goals and policies.

- 1. Goal: Ensure the long-term protection and enhancement of wildlife sensitive riparian habitat, and natural plant and animal communities along the Deschutes River and its tributaries.
- 2. Policies:
 - a. Deschutes County, in cooperation with the ODFW and USFS, shall modify land use practices and consider acquiring land or development rights where conflicts arise with any of the following:
 - 1. Sensitive wildlife habitats necessary for feeding, nesting, reproduction or rearing.
 - 2. Sensitive elk and deer winter range habitat.
 - 3. Sensitive elk and deer migration corridors.
 - b. Deschutes County, in cooperation with the ODFW and USFS, shall consider wetlands and riparian areas as sensitive wildlife habitat due to their scarcity and unique characteristics to serve a wide range of wildlife species and shall protect them. Modification/ alteration of these areas may only be permitted in unique situations and after consultation with the ODFW.

- c. Deschutes County shall support periodic or seasonal closures of roads, trails or areas in sensitive wildlife areas to motorized vehicles. The County should also request the USFS to continue to support these closures in order to minimize human disturbance.
- d. Deschutes County, in cooperation with the USFS and ODFW, shall protect and enhance lands containing sensitive wildlife habitat.
- e. Deschutes County shall petition the Oregon Fish and Wildlife Commission to close the Sheep Springs area to hunting during the bald eagle migration and feeding period.
- f. Deschutes County shall promote and support educational programs on riparian natural history, river maintenance and courtesies, impacts of habitat alteration and habitat disturbance by domestic animals and human activities.
- g. Deschutes County shall request that the USFS and ODFW adopt a winter elk management plan for the Benham Falls elk herd. Emphasis should be given to identification of their sensitive habitat in order to minimize potential conflict with development and recreation activities.
- h. Deschutes County shall support the continued consumptive and non-consumptive use of wildlife.
- i. Deschutes County shall support efforts by local conservation clubs to develop a waterfowl and wetlands habitat improvement program along the Deschutes River.
- j. Deschutes County shall encourage and assist citizens, the Department of Forestry, USFS and private landholders in adopting forest management practices along rivers and streams that consider the needs of wildlife, such as preserving snags, riparian cover, and other habitat characteristics that will maintain optimal use by wildlife. Desired changes in habitat conditions resulting from forest management practices should concurrently avoid adverse impacts to water quality and visual quality for the specific reach.
- k. Deschutes County shall continue to use conservation easements as a means to preserve wildlife habitat.
- l. Deschutes County shall adopt regulations pertaining to fill-and-removal of material in waterways and adjacent wetlands.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.060. Open space goals and policies.

- 1. Goal: Existing goals sufficient.
- 2. Policies:
 - a. Deschutes County shall include areas along the Deschutes River, Little Deschutes River, Crooked River, Spring River, Fall River, Tumalo Creek, Paulina Creek and Squaw Creek into the Landscape Management (LM) zone. In these areas, the LM zone may include all riparian areas, wetlands and canyons.
 - b. Deschutes County shall support a greenway project whose purpose would be to identify appropriate segments of river frontage that should be acquired for public use and benefit.
 - c. Deschutes County shall encourage the creation and assist in the operation of a non-profit, private organization to facilitate the acquisition of river property to further the goals of preserving areas for their scenic, recreational, fish and wildlife values.
 - d. Deschutes County may require public access for any land use action adjacent to the Deschutes River, Little Deschutes River, Crooked River, Spring River, Fall River, Tumalo Creek, Paulina Creek and Squaw Creek limited to foot traffic only.
 - e. Deschutes County shall include in all access easements provisions addressing safety, security, vandalism, litter and any other maintenance concerns expressed by the landowner. The cooperation of the State Police and County Marine Patrol should be sought in working with these landowners and in maintaining the easement agreement.

- f. Deschutes County shall explore the possibility of property tax relief when public access is required by the County.
- g. Deschutes County may accept, by donation, full fee title ownership to any riparian land for which public access is required. If the County refuses to accept ownership, any required public access shall be waived.
- h. Deschutes County may grant exceptions to the public access requirement where access would be near the nest sites of protected or sensitive wildlife species. In such cases, the County shall instead require a conservation easement to protect the nest sites from harassment and disturbance, using the assistance of the USFS, ODFW, and citizens knowledgeable of the nesting requirements of these species prior to drafting the easement.
- i. Deschutes County shall request the Legislature to allow the County Assessors to recognize public access easements in their assessment policies.
- j. Deschutes County shall cooperate with the Parks and Recreation Division, USFS, and BLM during the State's Scenic Waterways Study.
- k. Deschutes County shall prohibit or restrict development on reaches of rivers that are being studied or recommended for inclusion in either the State or Federal Scenic Rivers System unless construction would not preclude inclusion of the reach in the state or federal system.
- l. Deschutes County shall request the USFS to preserve or continue to preserve appropriate areas within the vicinity for their scientific and educational value.
- m. Deschutes County, in cooperation with the Nature Conservancy, USFS, and Parks and Recreation Division, shall encourage that appropriate reaches of the Deschutes River in the vicinity of the La Pine State Recreational Area are incorporated into the Oregon Natural Heritage Plan.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.070. Recreation goals and policies.

- 1. Goals:
 - a. Secure designation of appropriate segments of the Deschutes River, Fall River, Little Deschutes River and Crooked River under the Federal Wild and Scenic Rivers Program and the State Scenic Waterways Program.
 - b. Increase the opportunity for people to enjoy and appreciate undeveloped river and stream corridors.
 - c. Maintain, when appropriate, a semi-primitive recreation development standard along the banks of rivers and streams that are in public ownership.
- 2. Policies:
 - a. Deschutes County shall support the 1) removal of fences from the river, and 2) donation of the County of portage/walking easements that increase opportunities by the public to fully enjoy water recreation on rivers and streams.
 - b. Deschutes County shall regulate recreation-related land uses and density levels to accommodate the needs of wildlife where the recreation activity interferes with sensitive wildlife habitat.
 - c. Deschutes County shall encourage the BLM and USFS to prohibit the use of motorized vehicles, including motorbikes, ATV's, and snowmobiles, adjacent to rivers and streams where they conflict with non-motorized recreation activities.
 - d. Deschutes County shall encourage and participate in the USFS planning process to eliminate specific vehicular access points to and along the Deschutes River.
 - e. Deschutes County shall encourage the USFS and Parks and Recreation Division to acquire private property in the La Pine State Recreation Area adjacent to the Deschutes River and Fall River.

- f. Deschutes County shall encourage the BLM to consolidate ownership of public lands along the Deschutes River, Little Deschutes River, and Squaw Creek.
- g. Deschutes County shall support the USFS in controlling permitted levels of commercial whitewater boating.
- h. Deschutes County shall support wilderness designation of the Steelhead Falls Wilderness Study Area on the Deschutes River and lower Squaw Creek.
- i. Deschutes County shall request the BLM to designate Big Falls as an "Outstanding Natural Area" if a mutually agreeable land exchange program can be developed.
- j. Deschutes County shall advise the State Marine Board of public concerns regarding safety with respect to the use of motorboats on the Deschutes River.
- k. Deschutes County should recommend that the Transportation Commission include in the State Scenic Waterways Programs the Deschutes River from below Wickiup Dam downstream to the first COI diversion, and from Sawyer Park north to the County line.
- l. Deschutes County shall support the designation of appropriate segments of Fall River, Little Deschutes River, and Crooked River as state and/or federal scenic waterways.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.080. Archaeological goals and policies.

- 1. Goal: Maintain an ongoing program of archaeological inventory, investigation, interpretation, and education and preservation.
- 2. Policies:
 - a. Deschutes County shall request the BLM and USFS to complete archaeological inventories along the river and stream corridors within or adjacent to federal land.
 - b. Deschutes County shall request the BLM and USFS to postpone logging, campground, trail, and road development along rivers and streams until archaeological site review and determination of site value has been made.
 - c. Deschutes County shall continue to conduct archaeological survey work and excavation on private lands based on the availability of private/ public contributions and grant funds.
 - d. Deschutes County may require archaeological site review of any development activity (including residential development), to be conducted with the assistance of archaeologists familiar with Central Oregon archaeology, and with the cooperation of landowners and developers. Plans for archaeological site review shall be submitted to the Historical Landmarks Commission for approval.
 - e. Deschutes County shall support efforts by the Deschutes County Historical Society, Oregon High Desert Museum, BLM, and USFS to educate the public on the history and significance of native American culture.
 - f. Deschutes County shall encourage and assist law enforcement agencies in the prevention of vandalism and enforcement of laws designed to protect archaeological sites on non-federal land.
 - g. Deschutes County shall encourage private landowners to have significant archaeological sites nominated to the National Register of Historic Places.
 - h. Deschutes County shall investigate potential incentives (in addition to those offered by the National Register program) for private landowners who would allow scientific and/or educational study of archaeological sites on their property.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.090. Historic and cultural goals and policies.

- 1. Goal: Existing goals sufficient.
- 2. Policies:

- a. Deschutes County shall encourage private landowners to have significant historic and cultural sites nominated to the National Register of Historic Places.
- b. Deschutes County shall encourage and assist the landowner of the Tetherow Crossing site to preserve this area for its outstanding archaeological, historic, and educational value.
- c. Deschutes County shall review any excavation work proposed for the Camp Polk site and shall assist the landowners to work out a means of preserving this area for its outstanding historic and educational value.
- d. Deschutes County shall encourage and assist the landowner in preserving the Vandever Homestead for its outstanding historic and educational value.
- e. Deschutes County shall encourage and assist the landowner in preserving the Shevlin-Hixon Lumber Mill for its outstanding historic and educational value.
- f. Deschutes County shall encourage and assist the USFS in preserving the Benham Falls site for its outstanding historic and educational value.
- g. Deschutes County shall support the creation of a private, non-profit land trust as a means of helping landowners preserve property of historic and cultural significance.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

23.116.100. Deschutes Basin Resource Committee.

- 1. Purpose: The purpose of the Deschutes Basin Resource Committee is to recommend to the Deschutes County Board of Commissioners and the Bend City Commission the means to accomplish the water resource goals and policies contained within the River Study and to provide an ongoing forum for direction and policy for maintaining and enhancing the Deschutes River Basin.

Because many of the goals and policies are beyond the scope of City of County jurisdiction and require action by state agencies or the Legislature, the committee's purpose is to review and monitor state laws and to recommend to the County Planning Commission and the Bend Urban Area Planning Commission changes in such laws necessary to carry out the goals and policies contained in the River Study.

- 2. Authority: The Water Conservation Committee is an advisory committee charged with making recommendations to the governing bodies of Deschutes County and the City of Bend on how to implement the water resources goals and policies of the River Study and other matters dealing with the Deschutes River and its tributaries.
- 3. Committee members: The Water Conservation Committee shall be made up of the following members, to be appointed by the Deschutes County Board of Commissioners and the Bend City Commission:
 - a. A representative from each of four irrigation districts.
 - b. One representative from the Oregon Department of Water Resources.
 - c. One representative from the Oregon Department of Fish and Wildlife.
 - d. One representative from the U.S. Forest Service.
 - e. One representative from the Deschutes County Planning Commission.
 - f. One representative from the Bend Urban Area Planning Commission.
 - g. One representative from a non-consumptive water resource user (e.g., recreator).
 - h. One representative from a local environmental organization.
 - i. Two representatives from the public at large.
 - j. The County and City shall provide adequate staff and material support for the committee.
- 4. Responsibilities:
 - a. Consultation: In providing advice to the governing bodies, the Water Conservation Committee should:

1. Request assistance through Bonneville Power Administration's (BPA's) technical assistance program for technical improvements in methods of irrigation and means of conservation of both water and energy.
 2. Request assistance from the Water Resources Department, Bureau of Reclamation, and the soil and conservation districts, to initiate an in-depth study and priority of actions that should be taken to improve the irrigation districts' delivery system.
- b. Review and study of state laws.
 - c. Study and make recommendations consistent with policies of comprehensive plans related to water resources.
 - d. Reporting to County/City Planning Commissions at least semi-annually.
- (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-019, 1986)

Chapter 23.120. GOAL EXCEPTION STATEMENT

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23.120.010. Introduction.

The purpose of this document is to identify the lands where Deschutes County shall request the Oregon Land Conservation and Development Commission grant an exception to meeting the requirements of either Planning Goal 3 (Agricultural Lands) or Goal 4 (Forest Land). Further, this statement shall also explain the findings and reasoning which justifies such an exception be granted.

During the preparation of the Deschutes County Comprehensive Plan it became apparent that many of the rural areas in the County had already received substantial development. These lands have largely been sold and become committed to no-resource lands while recognizing that development which exists, and establishing a more efficient development pattern.

Because of the rural development there have been created Rural Service Centers to provide necessary public (i.e., schools) and private services to the rural population. These Service Centers reduce transportation requirements and serve as a focus for social and some economic activities. Deschutes County has chosen to emphasize the Rural Service Centers as the appropriate location for the services and facilities needed by the rural residents and to encourage most additional rural residences to be constructed in the Rural Service Centers. This development of the Service Centers would then permit some limited rural living opportunities, while insuring they occur in areas of existing development at higher densities, compatible with the rural environment and consistent with future transportation and utility networks. To accommodate the Rural Service Centers some of the less productive resource lands are being committed to non-resource uses. The commercial areas are

those lands already developed or committed to commercial use, while the residential areas are relatively small surrounding areas where some development has already occurred.

The other areas being used for non-resource uses are those lands included within the urban growth boundaries. Each of the three urban areas has identified an urban growth boundary (UGB). Inside the UGB the ultimate use of the land is to be of an urban nature. Each urban area plan contains the findings and reasoning which justifies the lands contained within the UGB; therefore, this statement will not address resource lands, which are included in the urban areas.

The flexibility which the exceptions process permits will allow Deschutes County to accommodate the existing and future needs of the County's ever-growing population, while serving as a base upon which the County can construct its plans for the protection of the resource lands which are so important to the local economy and environment.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-203, 1980; PL-20, 1979)

23.120.020. Methodology.

To determine where an exception to the State goals is required it was first necessary to obtain adequate data as to the location of the lands with agricultural and timber capabilities. The Resource Element of the Deschutes County Comprehensive Plan contains maps, which reflect the information that was gathered, and serves as much of the basis by which the County has determined which lands have agricultural and/or forest capabilities.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.120.030. Agricultural lands.

One of the most hotly debated issues in the preparation of the Deschutes County Plan was agricultural lands. Considerable testimony and evidence was submitted which indicated that the County is a relatively marginal agricultural producer. Other information pointed to the livestock capability of the area and the stability of agricultural production locally.

Complicating the issue further was (and is) a lack of detailed soils information, which would have permitted the identification of lands with agricultural capability Classes I-VI. The General Soil Map that was available for the County-wide area did not reflect the character of the soils locally. Much of the soil in the western and southern areas of the County is derived from pumice and ash that has been deposited in depressions in the underlying basalt. The result is pockets of soil with adequate rooting depth intermixed with some very low productivity areas. The result is certain areas, such as Lower Bridge, Terrebonne, Cloverdale, Alfalfa, Tumalo and Redmond, have a mixture of cropland, rangeland and non-productive land. Other areas do not have the cropland and may find the rangeland varying in its ability to support livestock.

An example of the difficulty in using the General Soils Map is the Deskamp Association, which has the best agricultural capabilities in the County. Of that association six percent of the soils have "good" irrigation capability (the rating system uses excellent, good, fair, poor and very poor). "Fair" soils constituted 89 percent of the soils and the rest are poor or very poor. Yet a look at the topsoil capabilities of the soil indicate 50 percent is "good", "fair" is 12 percent, while "poor" is 38 percent. A look at the U.S. Soil Conservation Service (SCS) data indicated the Deschutes Soils are generally Class VI but can be classed as II and III when irrigated, while Deskamp Soils are Classes III and IV when irrigated and otherwise Class VI. Some other less productive soils also are part of this association. What this seems to indicate is that even in the "best" County soils the agricultural capability is limited, there is considerable mixing with poor soils and that without irrigation water the land is only suitable for livestock. Obviously, what was needed was more detailed soils mapping.

The local SCS office was able to furnish the County Planning Department with detailed soils mapping and agricultural capability maps for only that portion of the County near Terrebonne, Redmond, Bend and Tumalo, this small area constituting only a portion of the known agricultural lands. To supplement the soils information the County obtained high altitude infrared photography of the county, which clearly revealed the irrigated lands. To determine the rangeland areas the County Assessor's records were surveyed to obtain all lands on farm tax deferral. Because the County had an active deferral program it was determined that combining the soils, irrigated lands and farm deferral information would produce a reasonable representation of all the private agricultural lands in the County. Public lands in agricultural areas were assumed to be agricultural for purposes of zoning while public lands in forested areas were assumed to be timber areas, unless some other use was known to exist on a particular site.

Using the preceding information and assumptions, the County was finally able to determine the local agricultural lands in an objective and empirical manner.
(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.120.040. Forest lands.

The identification of lands with timber producing capabilities was not characterized by as much controversy. Working with the Oregon Department of Forestry, the County Planning staff utilized a document entitled, *A Technique for Mapping Forest Land by Site Productivity Using Soil Survey Information*. The techniques supplied by this document, coupled with the experience of local ODOF foresters, permitted the drafting of the Timber Productivity Map, which can be found on Page 86 of the Comprehensive Plan's Resource Element. Utilizing this map, it was possible to determine the lands with commercial timber potential (High-state Class 4 through Moderate-site Class 6). It was immediately apparent that the La Pine and Black Butte areas, which have received significant recreational and rural development, were going to be in conflict with the requirements of the Forest Lands goal. However, before taking any formal action, it was necessary to determine the extent of the lands already developed, and what remained to be utilized for timber.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.120.050. Exceptions analysis.

To determine which lands are already committed to development, aerial photography at a scale of 2"=1 mile was obtained and used as a base map. Areas of concern not covered by the aerial photography were few and in these instances other maps were obtained.

A. La Pine:

First the public lands were identified. Since these areas are to be zoned for timber, they were excluded from consideration. Next private agricultural and timberlands were identified and marked for an appropriate zone complying with the State goals. Thirdly, all lands upon which a house had been constructed were identified. And, finally, all lands, which had been subdivided or partitioned into parcels less than 10 acres in size, were added to the map. The result was a series of overlays indicating which areas are substantially committed to residential development, committed to timber or agriculture, and uncommitted. In the La Pine area these categories amount to the following:

Residential Committed	13,083 acres
Resource Committed	18,232 acres
Uncommitted	4,825 acres

(Amended by Ord. 80-203)

B. Redmond:

The major concern in the northern portions of the County was compatibility with the Agricultural Lands Goal. Again, on the aerial photo base map, the private and public lands were identified. The public lands were marked for agricultural (or other resource) use. Lands which met the agricultural definition (SCS Class I-VI soils), or where detailed soils information was unavailable, identification as having obtained Farm Tax Deferral in the five years preceding the Plan or fund under irrigation as shown on the County's Irrigated Lands Map) were determined. Then the houses, which had been constructed, and the lands which had been subdivided were added. From the resulting map, it was possible to determine those areas where substantial development had taken place, and, therefore, to be identified as committed lands. In areas where agricultural continued to be the predominant use, the development was seen as not committing the area to further division and the area was to be zoned as an agricultural district.

In addition to the agricultural and forest lands, there is a 56-acre parcel containing aggregate deposits, which is being accepted in the Tumalo area. This parcel is surrounded on three sides by existing residential development, which would be incompatible with mining the resource, particularly when alternative aggregate sites exist.

The Redmond map reflects the following figures:

Residential Committed	18,579	acres
Resource Committed	69,348	acres
Uncommitted	14,780	acres

C. Bend:

The process followed in the Bend area was the same as that for the Redmond area and the results were very similar, although even more residential development has occurred because of proximity to the City of Bend.

Residential Committed	9,894	acres
Resource Committed	46,718	acres
Uncommitted	7,815	acres

In addition to the preceding, 95,227 acres east of Horse Ridge are being designated for Exclusive Farm Use. The remainder of the private lands in the County are either in private forest lands being protected for timber production or within one of the three urban growth boundaries. Near the Bend Urban Growth Boundary an additional 360-acre area originally identified as Surface Mining Reserve has been changed to agricultural because of testimony indicating incompatibility with surrounding development. There also existed testimony that other sites were available which would not be so offensive.

The Bend Municipal Airport lies approximately two miles east of the Bend Urban Growth Boundary, at the intersection of Butler Market Road and the Powell Butte Highway. Originally established in 1942, this public transportation facility is an important part of the County's transportation and economic planning. An airport master plan has been prepared by the City and the land use elements accepted by Deschutes County. This master plan provides adequate demonstration of the need for such a facility and that its present location is the only viable site available. Further, sufficient planning has occurred to insure the environmental, economic, social and energy consequences are acceptable and compatible with adjacent uses. Therefore, this area of 354 acres shall be excepted from compliance with State Land Use Planning Goal 3. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-203, 1980; PL-20, 1979)

23.120.060. Exception Area Plan.

It is apparent that Deschutes County has had significant rural development in the past. From the perspective of the State Land Use Goals, perhaps this rural growth is unfortunate; however, it is an existing reality. The County's efforts shall be aimed at recognizing those areas that are omitted and servicing them in the most efficient and equitable manner possible. On the other hand, there are also policies in several sections of the Comprehensive Plan (particularly the Rural Development - DCC 23.24.010; Agriculture - DCC 23.88.010; Forest Lands - DCC 23.92.010; and Public Facilities - DCC 23.56.010. - sections) which seek to prevent further losses of resource lands. Each of the three areas is dealt with separately and a program drafted to fit that area's particular needs. The major differences in the programs largely result from whether they involve agriculture or forest land.

A. La Pine:

The subdivisions in La Pine are characterized by small lots (one acre or less) and to a great extent have already been sold. Some have been purchased for retirement, others for speculation and some for an immediate permanent residence. In those areas where subdivision, construction and existing rural services have largely committed the land to residential use (see La Pine map), Deschutes County proposes to zone the area for rural residential, rather than forest lands. The rural residential zone would permit the construction of homes, but the new 10-acre minimum lot size would prevent further significant division. These areas would then satisfy the need for residential and lower cost rural lots in the County. Other County actions to encourage clustering, foster adequate public facilities and prevent development in hazardous or resource areas, would insure the growth of the area is consistent with appropriate economic, social environmental and energy considerations (see the Rural Development chapter - DCC 23.24.010 - of the Comprehensive Plan).

Resource areas would be committed to resource use, as would be the uncommitted lands. The encouragement of small forest land management for the smaller acreage timber lands that can be found between the residential and larger ownership timber areas shall be a County policy. In this way the small timber owners are compatible with each adjoining use, while buffering the residential and timber areas from each other.

B. Redmond:

On the committed lands, the county will establish a Multiple Use Agricultural (MUA) Zone which will encourage the use of these lands as agricultural, although as a "hobby farm" or non-commercial level which requires a subsidy of the agricultural operation by employment elsewhere. Here again the county seeks to supply the need for rural living opportunities and the need to subsidize more marginal farm land by non-agricultural employment to maintain the area's farm production (see Agricultural - DCC 23.88.010 - of the Comprehensive Plan). But equally important is the recognition that the development and services exist already and must be dealt with. County policies shall seek to encourage clustering of housing and to otherwise improve the efficiency of supplying services to these existing areas while preventing substantial increases in the rural population. Better review of proposed development is also established with the new plan and ordinances to assure the long-range economic, social, environmental and energy effects are acceptable.

The MUA areas also serve to provide a buffer between residential and agricultural lands, while permitting some people to enjoy a rural lifestyle. More stringent enforcement of the goal would save little agricultural land and would not make farming more viable than will the proposed course of action. A stricter policy would certainly adversely affect a large segment of the population and raise serious questions in regard to the County's ability to satisfy State Land Use

Goal 10 (housing), which requires the County to provide a variety of housing opportunities to meet the needs of the area's population.

C. Bend:

The conditions in the area covered by the Bend map are the same as those in the Redmond area. Actions proposed for the Bend area are the same as the Redmond area.

D. Rural Service Centers:

Rural Service Centers are a special situation. Originally established to provide needed public and commercial services to rural areas, thereby increasing public services while receiving transportation costs, these Centers have had mixed results. Some have been very useful in providing necessary facilities, while others have been used to foster sprawl.

One of the purposes of the new County Comprehensive Plan is to identify which of the existing Rural Service Centers should be continued and where new ones shall be established. The plan identifies nine RSCs and leaves the possibility of another in the future as an option if needed. The nine identified are Alfalfa, Brothers, Hampton, La Pine, Millican, Terrebonne, Tumalo, Whistlestop and Wickiup Junction. Of these, only Brothers, Hampton and Millican are not on the three aerial photo base maps. All the others, except Alfalfa, are within the areas identified as having significant existing development and are designated as already committed to development.

Alfalfa is a special case in that existing development consists of a small store, a public school and a few nearby farm and non-farm residences. The land identified for the Center is that containing the store and lands owned by the Central Oregon Irrigation District and Alfalfa Water Users Association. The expectation is that these lands will be needed for facilities necessary to the continued existence of Alfalfa, which may include some limited commercial use and residences (at a five-acre density three houses would be permitted). No other sites exist for the location of the Center and the land is not presently creating agricultural products. The proposed development would certainly be compatible with existing and proposed uses and consistent with the County's long-range environmental, economic, social and energy policies.

Brothers, Hampton and Millican are small communities along Highway 20, in the eastern portion of the county. Each community has small existing commercial and residential areas. These uses serve important functions for the residents of the area and transients through the area. Without these Centers local residents would have a long (sometimes impossible) drive into Bend for gasoline, groceries, etc. The areas identified in the plan are those already in existence. Once again, the County is simply recognizing that which exists. The Centers are also important public service and social activity focal points. No alternative sites are available or desirable, and their anticipated environmental, social, economic and energy consequences are seen as beneficial.

E. Total Area:

The total area to be excepted from the State Land Use Planning Goals is 41,556 acres. These lands are those residentially developed, committed to development or needed for Rural Service Centers. Once again, the County's purpose here is to recognize that which exists, while attempting to foster an efficient and equitable plan for the County's growth. (Amended by Ord. 80-203)

F. Concluding Remarks:

This exceptions statement is not meant to be an elaborate document. Deschutes County is not proposing large new areas for rural development. The primary concern is simply to acknowledge the development which exists, and to seek reasonable ways to deal with those

committed lands. Many areas which have some development, but not enough to justify identification as committed lands, have been placed in resource zones which will permit non-resource uses only by conditional use on non-productive sites. Only those areas with significant amounts of development have been identified and the County has developed those policies to promote greater efficiency in the growth of those areas. In light of County policies encouraging other alternatives (i.e., Rural Service Centers and urban plans) when combined with increasing service and energy costs, it is anticipated actual development will not actually use all the excepted areas. To obtain approval of any future rural development will be more difficult than in the past, and shall be compatible with County needs and State planning goals. (Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-203, 1980; PL-20, 1979)

23.120.070. Bend Municipal Airport Exceptions Statement.

A. Introduction

The Bend Airport is fundamental to the City and County transportation network. The Bend Airport Master Plan, as approved by the Federal Aviation Administration, sets forth the basic policies relating to the Bend Airport. These policies are on equal footing with other policies within the Deschutes County Comprehensive Plan, and are to be used by the decision makers as they interpret the plan and weigh various alternatives. Based on the long-standing existence of the Bend airport, an exception for the Airport is not required by Goal 2. However, it is recognized through growth that the impact of the Airport may grow beyond the present commitment for airport uses. In order to insure an orderly land balanced process relating to the Airport and overall planning on adjacent properties, an exception for this property from Agricultural Goal No. 3 may be beneficial.

During an earlier attempt to take an exception from Agricultural Goal 3 for certain properties, the Land Use Board of Appeals ruled that insufficient findings of compatibility were made with respect to adjacent properties.

B. Background

The Airport was established during World War II as an Army Air Corps training center. After the war, the facility was deeded to the City as a municipal airport so long as it was used for airport purposes. Since 1942, use of the Airport has grown from two planes to approximately 120 planes presently. The Airport currently owned by the City encompasses 340 acres. There is one main paved runway and two dirt runways. On the west side of the existing paved runway, adjacent to Powell Butte Highway, there are hangars, a fixed base operator, parking, tie downs, and navigational aids. Those areas not physically developed upon the airport property are used as buffers to absorb noise from aircraft landings and other such contingencies. Lands adjacent to the Airport are presently zoned for agricultural uses (Multiple Use Agriculture, ten-acre minimum; Exclusive Farm Use, twenty-acre minimum; and Exclusive Farm Use, forty-acre minimum). The Airport is served by Powell Butte Highway, a State Highway, and Butler Market Road, a County arterial. Both of these roads have adequate capacity for the Airport's existing and expected traffic. The City has installed a well to furnish domestic water and sewage is disposed of through an improved subsurface system. Private and public facilities are adequate or can be expanded to meet the Airport's existing and expected growth.

C. The Bend Airport Exception

The exceptions process is set forth in Goal 2, Part II, quoted below:

When, during the application of the State-wide goals to plans, it appears that it is not possible to apply the appropriate goal to specific properties or situations, then each proposed exception to a goal shall be set forth during the plan preparation phases and also specifically noted in the

notices of public hearing. The notices of hearing shall summarize the issues in an understandable and meaningful manner. If the exception to the goal is adopted, then the compelling reasons for that conclusion shall be completely set forth in the plan and shall include:

1. Why these or other uses should be provided for;
2. What alternative locations within the area could be used for the proposed uses;
3. What are the long term environmental, economic, social and energy consequences to the locality, the region or the State from not applying the goal or permitting the alternative use;
4. A finding that the proposed use will be compatible with other adjacent uses.

The Airport is an integral part of the transportation system that meets the public need for a general aviation facility. It does not compete with Redmond's Airport, and complements this facility.

The Airport is an existing use. The Airport property is completely used for airport and airport-related uses.

The City of Bend had independently planned for the Bend Airport through a Bend Airport Master Plan under the direction of the Federal Aviation Administration and approved by them.

The Airport is an integral part of the community's economic system, allows for the improvement and diversification of those economic factors relating directly to the community that it serves. Since the economic status of the Bend area is directly affected by the Airport, and since Goal 9 provides that the provision for diversity and improvement of economy shall be preserved, Goal 9 requires that the Bend Airport be protected to the highest degree, or an exception to that Goal need be taken.

The public facilities available to the Airport are adequate for the existing and proposed future planned growth.

Preparation of the Airport Plan and the Deschutes County Comprehensive Plan involved advisory committees and public hearings that meet the requirements of Goals 1 and 2. The Airport Technical Advisory Committee included residents from the Airport area.

The City received the Airport property from the Federal Government with the condition that the property be used only as public airport.

Goal 12, Guideline 2, provides as follows:

Transportation systems, to the fullest extent possible, should be planned to utilize existing facilities and rights-of-way within the State provided that such use is not inconsistent with the environmental, energy, land use, economic or social policies of the State.

The City is utilizing an existing facility to meet the increasing need for air travel in the Bend area. This is a prudent policy and one that recognizes the City's, Deschutes County's, the State of Oregon's, and Federal Government's expenditures at this location for the last 38 years. The Airport Master Plan considered the environmental and social impacts, and further expansion using ADAP funds require environmental assessments before monies can be expended.

The LCDC Exceptions Policy Paper dated May 23, 1979, states under Number 14:

An exception to the Agricultural Lands Goal is not required if the proposed land use decision involves one of the farm or non-farm uses permitted in an EFU zone under ORS 215.203-213. An exception to the Forest Lands Goal is not required if the proposed land use decision is consistent with Forest Uses as defined in Goal 4.

For other proposed land use decisions, an exception is not required for Goals 3 and 4 if findings can be made that the land is:

Physically developed or built upon, or, irrevocably committed to non-farm or non-forest uses in urban or rural area. (emphasis added)

This facility exists physically developed upon the land and all of the Airport property is irrevocably committed to airport uses in conjunction with its role as a transportation facility in the area. This commitment is further established by the contractual relationship between the City of Bend, Oregon, and the Federal Government under the Federal ADAP program. The site is totally used in that the current area has three runways, assorted buildings, and as much buffer land as financially feasible to absorb noise impacts on and around the Airport property. Current Ldn noise contours are compatible with all land use upon the Airport property and adjacent properties.

The Airport is a needed transportation facility, as has been shown in the existing Airport Master Plan, testimony, the relationship with the City's economy, and all past County planning with respect to this Airport and area.

D. Exceptions Criteria

1. Why should these other uses be provided for?

- a. The Airport was acquired by the City from the Federal Government and the condition of transfer was the use of the land as an airport facility.
- b. The City has agreed in its contract with the Federal Aviation Administration for ADAP funds to continue the Airport for the next 20 years.
- c. The report, *AIRPORT COMPATIBILITY PLANNING*, by the Oregon Department of Transportation, indicates that areas subject to substantial (Ldn 75+) noise impact "should be acquired by the airport owner and incorporated in the airport development zone." Areas with 65+ Ldn should be restricted. The Airport Plan shows the majority of lands within the 65 Ldn, in the Year 2000 forecast, within the Airport property. This is a reasonable step by the City to create a buffer and insure compatibility between the Airport and its neighbors.
- d. The Bend Airport Master Plan outlines the current City ownership at the Bend Airport. It depicts the existing areas in use and they are:
 - i. The existing hangar, FBO, tie downs, parking and roads along Powell Butte Highway.
 - ii. The existing paved runway 16-34 and taxiway.
 - iii. The two dirt runways 11-29 and 2-20.
 - iv. The site buffer to the surrounding properties.
 - v. Clear zones at the ends of each runway.
 - vi. Required building free areas off the centerline of each runway.
 - vii. The areas planned for expansion as shown on the Master Plan.
- e. While some lands are not currently developed as shown on the Airport maps, they are committed to airport usage as buffer areas and areas to contain noise levels.
- f. The County has adopted an AH Airport Height Combining Zone based on the recommendation of the Master Plan for obstruction zoning. Since the only EFU lands impacted by reduced heights in the AH zone comprise only portions of the individual ownerships, its impact is negligible. The properties affected have lands outside the AH zone where restricted activities can be located. Other lands have been granted an exception to be zoned MUA, a rural zone that was found to be compatible with the Airport and its development.
- g. The noise corridor zoning recommended by the Master Plan has been adequately handled by the existing County zoning which established MUA-10, EFU-20 and EFU-40 zoning that have a low density. These zones do not restrict agricultural activities.

- h. One of the clear zones shown on the Master Plan has been acquired by the City. Acquisition of clear zone for the proposed crosswind runway will take place as needed in the future. Once acquired by the City, no conflicts will exist or be allowed to occur.
 - i. The approach safety zone recommends controls that would preclude uses attracting large numbers of people or concentrations of housing. It also recommends that uses or activities that might attract birds should be discouraged, i.e., solid waste sites, sewer lagoons or ponds. This is a restriction that would limit pond locations in some areas zoned EFU. However, a review of the zoning maps and aerial photos reveal that none of the EFU parcels would be totally restricted and area would be available for additional ponds if needed. It also appears that these limitations would not restrict the normal agricultural practices as far as irrigation is concerned. Restrictions on ponds were required by the State Aeronautics Division and Federal Aviation Administration.
 - j. The airport usage is needed by the Bend area. The City and County are required by Goal 12 to provide for all modes of transportation. The Airport Master Plan indicates that 50 percent of the based aircraft come from outside the City Limits, some from as far away as Sunriver and Redmond. Thus, the Airport is meeting the needs of the whole County, not just the urban area. The Airport can thus be described as a key facility that meets the needs of the rural and urban resident, and, due to its peculiar operating characteristics, is most compatible in a rural setting.
 - k. The Bend Municipal Airport is a public facility which is an integral part of the National Airport system administered by the FAA and the State Airport System administered by the State Aeronautics Division. It is the seventh busiest airport in the State. It is an essential part of the County's transportation system.
 - l. The use of aircraft for business purposes is increasing, and there is very little aircraft for "joy riding." The Bend Airport's importance to the area's economy will continue to increase as the use of aircraft increases.
 - m. The anticipated noise impact caused by the growth of the Bend Municipal Airport has committed the Airport for airport uses. Few residential homes and homesites exist on lands contiguous to the Bend Municipal Airport.
 - n. The Ldn 65 noise contour does not exceed accepted noise limits for agricultural uses on adjoining properties. The Airport property provides a significant buffer to noise impact of the Bend Municipal Airport on adjacent agricultural lands.
2. What alternative locations within the area could be used for the proposed uses?
- a. The property under consideration is an existing facility, in which the public has expended \$600,000 in improvements to meet the existing general aviation needs.
 - b. The City is committed to maintaining the Airport as mentioned above, due to financial and environmental difficulties associated with any new location.
 - c. Restrictions on Airport growth may impair the Bend area's ability to attract new industry, thwarting the City's and the County's economic policies to diversify employment opportunities.
 - d. The Bend Municipal Airport was established in 1942 on land covered by sagebrush. Since its inception, it has never been used for agricultural purposes, and the City of Bend does not ever intend to use it for agricultural purposes. All of the 340 acres comprising the Airport are used for airport purposes. In addition to the land occupied by runways, taxiways, hangars, buildings and the like, the "open space" at the Airport has been and continues to be used as a buffer to absorb Airport noises, as unobstructed space in which aircraft can maneuver for landings and takeoffs and to provide a safety area for aircraft that may have problems in taking off or landing.
 - e. To provide for timely and orderly growth and development in Airport Development (A-D) Zone, appropriately providing for compatible uses and restricting incompatible

- uses is necessary for Airport lands and lands to eventually be encompassed within the high noise level areas to insure ongoing airport uses without conflict.
- f. The Ldn 65 noise contour does not exceed acceptable noise limits for agricultural uses.
 - g. Adequate public facilities exist to serve the Airport property.
 - h. The Year 2000 Ldn 65 forecast identifies minimal noise impact on adjacent agricultural lands.
 - i. The Bend Airport Master Plan has been approved by the Federal Aviation Administration.
3. A finding that the proposed uses will be compatible with other adjacent uses.
- a. The rural hobby farms and agricultural uses are compatible with the Airport, and its planned expansion. Other uses are identified in the Bend Airport Master Plan as being compatible with airports. When conditions change, or need established for other uses, they may be permitted by the exception process. The Airport is compatible with the surrounding uses because the City has:
 - i. Provided buffer land as part of the Airport site that contains or will contain the majority of the expected noise impacts;
 - ii. The Airport Plan includes plans for the City to acquire areas expected to be impacted by Ldn 70 noise levels;
 - iii. The Airport Plan has limited the growth of the facility even though demand forecasts indicate a greater need; and
 - iv. The County Comprehensive Plan provides that expansion of the 65 Ldn contour will permit additional airport development zoning to assure compatibility and greater acceptance of the growth of the neighbors.
 - b. The County in grant/adopting exceptions for the areas zoned MUA-10 has found that these areas are compatible with the Airport and its development, as required by the exceptions procedure of Goal 2.
 - c. The expected increase in activity will not adversely impact any of the existing agricultural uses as shown in the report, AIRPORT COMPATIBILITY PLANNING, by the Oregon Department of Transportation.
 - d. The existing uses were surveyed within the Airport Overlay Zone area and no commercial poultry, rabbit or mink producers were found to exist. Marvin Young, Deschutes County Extension Agent, indicates that the history of agriculture in Deschutes County suggest there is little likelihood for commercial poultry or mink operations to locate in the County now, due to climatic factors, suitable supplies and market.
 - e. Agricultural uses employed on property around airports are compatible with the Airport use. Prior to the hearings on rezoning the Airport which began after November 1, 1979, the City of Bend had began not received any indication that the expanding usage of its airport was creating any problem for adjacent agricultural uses. During the hearings, very little evidence of any conflict between the Airport and adjacent uses was produced. Airports throughout the State and nation commonly have adjacent agricultural uses which include commercial crop, livestock, and poultry operations (both chickens and turkeys). There was no evidence that anything other than livestock and forage crops had ever been or would ever be raised on lands adjacent to the Bend Airport. The present level of activity of the Bend Airport does not interfere unreasonably with adjacent agricultural uses and there is no reason to believe that the increased activity forecast for the Airport will create a problem.
 - f. Noise impact from the Bend Municipal Airport is compatible with agricultural uses on those lands that are designated agricultural adjacent to the Airport property.

E. Findings For Commitment

1. The Bend Municipal Airport was established in 1942, as a public facility on 340 acres covered by sagebrush. It has never been used for agricultural purposes. Since 1942, it has been developed to a general aviation facility which is part of the National and State airport system, with approximately 125 based aircraft, and is the seventh busiest airport in the State. Over the years, the Federal Aviation Administration and State Aeronautics Division have provided over \$631,000 for improvements to the Airport. The investment by the City of Bend in the Airport is substantial. The evidence supports increasingly substantial public investment by the Year 2000. All public agencies involved with the Airport and the users of the Airport have relied on its existence and capability to meet the general aviation requirements of the area and continue to do so.
2. The Bend Municipal Airport could not be relocated to any other site. The FAA and State Aeronautics Division have regarded and planned the Bend Municipal Airport as the general aviation facility for Deschutes County (to complement the air carrier facility at the Redmond Airport). The City of Bend has committed itself to make the Bend Municipal Airport available to fulfill this function for the next twenty years in consideration of the funding provided by the FAA and the State Aeronautics Division.
3. All of the 340 acres comprising the Airport are used for airport purposes. In addition to the land occupied by runways, taxiways, hangars, buildings and the like, the "open space" at the Airport has been and continues to be used as a buffer to absorb airport noises, as unobstructed space in which aircraft can maneuver for landings and takeoffs and to provide a safety zone for aircraft that may have problems.
4. No testimony or evidence was introduced at the hearing to show that less than the 340 acres comprising the Airport property was committed for airport uses.

F. Conclusion

The Bend Municipal Airport is a necessary facility for Deschutes County. The Airport's ability to expand must be provided for if the needs of the County's residents are to be met and compliance with State Land Use Goals obtained. However, recognition must be given to the impact on nearby residents. The predominant adjoining land use to the Bend Airport is agricultural. Agricultural uses are compatible with airport uses within the expected noise contour levels. It is expected that the Bend Municipal Airport will expand. The Bend Municipal Airport Master Plan and Deschutes County Comprehensive Plan have adequately addressed these concerns. Encroachment from incompatible uses has been provided for, while a future need to take exceptions for additional lands as noise levels increase on the Airport has been recognized in the Plan policies. At such time as impacts from noise have increased, land available for exception will be based not only upon the noise impacts, but the public need for airport development zoning on the properties. A reasonable balance has been achieved and the County must now proceed to take exception to Agricultural Goal 3 for the Airport ownership to allow necessary and expected usage of the Airport property.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 80-222, 1980; Ord. 80-203, 1980)

23.120.080. La Pine UUC Boundary.

In conjunction with approval of PA 9-7 and ZC 97-4, a plan amendment and zone change for an area of land zoned exclusive farm use and physically developed with the Mid State Electric Co-op, Inc. Facility, exceptions to Statewide Planning Goal 3, Agricultural Land, Goal 11, Public Facilities and Services and Goal 14, Urbanization was taken. The goal exceptions allowed the subject land to be included in the La Pine UUC boundary and be planned and zoned for commercial use. Findings to support the goal exceptions for this land are set forth in Exhibit "C" to Ordinance 98-001, incorporated herein by reference.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-001, 1998)

23.120.090. Spring River Rural Service Center.

A reasons exception was taken from Goal 14 to allow for the establishment of the Spring River Rural Service Center on residential-designated lands for which an exception had already been taken from Goals 3 and 4. The rural service center was approved because the Board of County Commissioners found that it would primarily serve the needs of the residents of nearby subdivisions, such as Deschutes River Recreational Homesites. Findings to support the reasons exception to Goal 14 were made in Paragraph 7 of the Board of County Commissioners' decision (attached to Ordinances 90-009 and 90-010) and those findings are incorporated by reference herein. Findings to support the reasons exception accompanying Ordinances 96-022 were made on Pages 12 - 18 of the Hearings Officer's findings supporting that decision and those findings are incorporated herein by reference.

To ensure that uses in the rural service center would be limited in a manner to comply with Goal 14 exception, a limited use combining zone was imposed, by which the allowed uses were limited to a list of specific uses. Those uses are listed in the Rural Development Chapter (DCC 23.24.010) of this comprehensive plan in conjunction with a description of the Spring River Rural Service Center and also in the zoning ordinance. Additional uses were added to the Zone by Ordinances 96-022 and 96-045. Findings to support the reasons exception accompanying Ordinance 96-045 were made on pages 12-18 of the Hearings Officer's findings supporting that decision and those findings are incorporated herein by reference.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 96-045, 1996; Ord. 96-022, 1996; Ord. 90-010, 1990; Ord. 90-009, 1990)

23.120.100. Burgess Road and Highway 97.

In conjunction with approval of CU-94-44, for the construction of a road improvement project at the intersection of Burgess Road with Highway 97, an exception to Statewide Planning Goal 4, Forest Lands, was taken to allow for the subject road improvement on forest land. Reasons justifying why the state policy embodied in Goal 4 should not apply in this situation are as set forth in Exhibit C to Ordinance 97-060, which findings are incorporated herein by reference. (1997)

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 97-060, 1997)

23.120.110. Rural Industrial Zone.

In conjunction with approval of PA-98-2/ZC-98-1, an "irrevocably committed" exception to Statewide Planning Goal 3, Agricultural Lands, and a reasons exception to Goal 14 was taken to allow for the subject comprehensive plan and zone change on agricultural land. The plan amendment and zone change will allow Rural Industrial plan and zoning designation with a Limited Use Combining Zone for the specific use of storage, crushing, processing, sale and distribution of pumice only. Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit "D" to Ordinance 98-081, which findings are incorporated herein.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-081, 1998)

23.120.120. Prineville Railway.

In conjunction with approval of PA 97-9/ZC 97-5, an exception to Statewide Planning Goal 3, Agricultural Lands, was taken to allow for the subject comprehensive plan and zone change on agricultural land. The plan amendment and zone change will accommodate the relocation of the Redmond Railway Depot to the subject property and the use of this site for an historic structure to be utilized in conjunction with the Crooked River Dinner train operation. Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit "D" to ordinance 98-017, which findings are incorporated herein by reference.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 98-017, 1998)

23.120.130. Resort Communities.

In conjunction with approval of PA-98-5 and TA-98-9, an exception to Statewide Planning Goal 4, Forest Lands, was taken for the Black Butte Ranch and The Inn of the Seventh Mountain / Widgi Creek resort communities. These exceptions were taken at the same time that both resorts were designated “Resort Communities” under the State rules for unincorporated communities, OAR 660-022.

A “reasons” exception was taken for Black Butte Ranch (the Ranch) to justify the addition of 80 acres of land to the resort community boundary. A “physically developed” exception was taken for The Inn of the Seventh Mountain/Widgi Creek (the Inn/Widgi) in recognition that this resort is for all practical purposes fully developed.

The 80-acre addition to the Ranch is zoned as a Surface Mining /Limited Use Combining District (38 acres) and a Utility /Limited Use Combining District (44 acres). The uses allowed are limited to those indicated in the County Zoning Ordinance, DCC 18. Any additional uses will only be allowed if an additional plan amendment (including exceptions findings) and text amendment are approved that justify such uses.

The findings to support these exceptions are set forth in Exhibit “H” to Ordinance No. 2001-047. These findings are incorporated herein by reference. The uses allowed in these communities are set forth in Exhibit “B” to Ordinance No. 2001-048. (Ord. 2001-047 § 3, 2001)

23.120.140. Barclay Meadows Business Park.

In conjunction with approval of PA-99-4/ZC-99-1, a “reasons” exception to Statewide Planning Goal 3, Agricultural Lands, was taken to include certain property within the City of Sisters Urban Growth Boundary (UGB). Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit “C” to Ordinance 2003-010, which findings are incorporated herein by reference. (Ord 2003-011 § 1, 2003)

23.120.150. Sisters School District #6.

In conjunction with approval of PA-99-5/ZC-99-3, a “reasons” exception to Statewide Planning Goal 3, Agricultural Lands, was taken to include certain property within the City of Sisters Urban Growth Boundary (UGB). Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit “C” to Ordinance 2003-013, which findings are incorporated herein by reference. (Ord 2003-011 § 1, 2003)

23.120.160. Sisters Organization of Activities and Recreation and Sisters School District #6.

In conjunction with approval of PA-01-4/ZC-01-4, a “reasons” exception to Statewide Planning Goal 4, Forest Lands, was taken to include certain property within the City of Sisters Urban Growth Boundary (UGB). Reasons justifying why the state policy embodied in Goal 4 should not apply in this situation are set forth in Exhibit “C” to Ordinance 2003-016, which findings are incorporated herein by reference. (Ord 2003-017 § 1, 2003)

23.120.170. Oregon Water Wonderland Unit 2 Sewer District.

In conjunction with the Board’s approval of County file nos. PA-02-5/ZC-02-3, a “reasons” exception to Statewide Planning Goals 4, Forest Lands, and 11, Public Facilities & Services, was taken for certain property. The plan amendment changed the plan designation to Rural Residential

Exception Area and the zone change changed the zoning to Rural Residential with a Limited Use Combing Zone to allow only the uses approved through the Board's decision on PA-02-5/ZC-02-3. Reasons justifying why the state policies embodied in Goals 4 and 11 should not apply in this situation are set forth in Exhibit "C" to Ordinance 2003-012, which findings are incorporated herein by reference.

(Ord. 2003-015 § 1, 2003)

23.120.180. 2004 City of Bend Urban Growth Boundary Amendment (Juniper Ridge).

In conjunction with approval of PA-04-2, for the amendment of the City of Bend urban growth boundary to include 513 acres of land for industrial purposes, an exception to Statewide Planning Goal 3, Agriculture, was taken to allow for the subject amendment of the city's urban growth boundary. Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are as set forth in Exhibit D to Ordinance 2004-017, which findings are incorporated herein by reference. (2004)

(Ord 2004-017 § 2, 2004; Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 97-060, 1997)

23.120.190. Joyce Coats Revocable Trust Johnson Road and Tumalo Reservoir Road Properties.

In conjunction with approval of PA-04-4/ZC-04-2, an "irrevocably committed" exception to Statewide Planning Goal 3, Agricultural Lands was taken to allow for the rezoning of Surface Mine Sites 306 and 307 from Surface Mining (SM) to Multiple Use Agriculture (MUA10) and change of comprehensive plan designation from Surface Mine (SM) to Rural Residential Exception Area (RREA). Additionally, the County determined that Surface Mine Site 306 is non-resource land. Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit "E" to Ordinance 2005-031, which findings are incorporated herein.

(Ord. 2005-031, § 1, 2005)

23.120.200. Watson/Generations Development Inc.

In conjunction with approval of CU-04-97/RC-05-2, an exception to Statewide Planning Goal 3, Agricultural Lands, was taken to include a portion of a certain property zoned Exclusive Farm Use Tumalo/Redmond/Bend Subzone (EFU-TRB). Reason, justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit "B" to Ordinance 2005-015, which findings are incorporated herein by reference.

(Ord. 2005-015 § 1, 2005)

23.120.210. Oregon Department of Transportation.

In conjunction with approval of CU-04-113, an exception to Statewide Planning Goal 3, Agricultural Lands, was taken to include a portion of a certain property zoned Exclusive Farm Use Tumalo/Redmond/Bend Subzone (EFU-TRB). Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit "B" to Ordinance 2005-019, which findings are incorporated herein by reference.

(Ord 2005-019 § 1, 2005)

23.120.220. Conklin / Eady Property.

In conjunction with approval of PA05-3, an exception to Statewide Planning Goal 3, Agricultural Lands, was taken to include a portion of a certain property zoned Exclusive Farm Use Sisters-Cloverdale (EFU-S/C). Reasons justifying why the state policy embodied in Goal 3 should not apply in this situation are set forth in Exhibit "C" to Ordinance 2005-035, which findings are incorporated herein by reference.

(Ord 2005-035 § 1, 2005)

23.120.230. City of Sisters Property.

In conjunction with approval of PA05-3, an exception to Statewide Planning Goal 4, Forests Lands, was taken to include a portion of a certain property zoned Forest 1 (F1). Reasons justifying why the state policy embodied in Goal 4 should not apply in this situation are set forth in Exhibit “C” to Ordinance 2005-037, which findings are incorporated herein by reference.

(Ord 2005-037 § 1, 2005)

23.120.240. McKenize Meadows Property.

In conjunction with approval of PA05-3, an exception to Statewide Planning Goal 4, Forests Lands, was taken to include a portion of a certain property zoned Forest 2 (F2). Reasons justifying why the state policy embodied in Goal 4 should not apply in this situation are set forth in Exhibit “C” to Ordinance 2005-039, which findings are incorporated herein by reference.

(Ord 2005-039 § 1, 2005)

Chapter 23.124. CITIZEN INVOLVEMENT

23.124.010. Introduction

23.124.020. Goals.

23.124.030. Policies.

23.124.010. Introduction.

The preparation of a comprehensive plan requires great amounts of time and involvement by the public if the plan is to be truly reflective of the people's needs and desires. Deschutes County was fortunate to have had such an extensive citizen involvement in the preparation of this plan. However, what is often forgotten is that continued public involvement is equally important in the updating and implementing of the comprehensive plan and its attendant ordinances.

Now that Deschutes County has prepared its comprehensive plan, it must involve people in a productive manner with the ongoing planning process. Therefore, the following goals have been prepared by the Planning Commission acting as the County Citizen Involvement Committee and adopted by the Board of County Commissioners.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-067, 1986; PL-20, 1979)

23.124.020. Goals.

- A. To promote and maintain better communication between the community's various segments (i.e., governmental agencies, business groups, special districts and the general public).
- B. To provide the opportunity for the public to identify issues of concern and encourage their involvement in planning to addresses those issues.
- C. To serve as a liaison between elected and appointed bodies and citizens of the county.
- D. To provide educational opportunities for the people to learn about planning and how it may be used to assist their community and themselves.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-067, 1986; PL-20, 1979)

23.124.030. Policies.

- A. To assure that county and appointed officials are aware of citizen needs and attitudes and to permit effective two-way communication, the County shall perform the following:
 - 1. Conduct surveys as needed regarding citizen needs, attitudes and characteristics;
 - 2. Sponsor workshops and presentations by known specialists and experts;
 - 3. Prepare pamphlets explaining routine planning procedures;
 - 4. Write and distribute information newsletters;
 - 5. Prepare and present slide shows and/or films on such topics as growth versus conservation, the subdivision process, and the usefulness of planning; and
 - 6. Make presentations to special groups and school children.
- B. The County Planning Commission will be the Citizen Involvement Committee to review and change the County's Citizen Involvement Program so as to ensure its continued efficiency and usefulness.
- C. Between updates, special committees representative of geographic areas or possessing special knowledge of specific topic shall be formed to assist with planning studies.
- D. The County Planning Commission shall be kept aware of the activities and results of the special committees and will be informed of studies and activities of the County Planning Division which will assist them in the role as advisors.

- E. Primary responsibility for coordination between the County, public, and other agencies shall be the county local coordinator. It shall also be the Planning Director's responsibility to assure the Planning Division studies are provided to members of the County Planning Commission.
- F. During each plan update process, a committee broadly representative of the county's areas and interests shall be formed. The actual make-up of the committee will be determined by the Board of County Commissioners based upon a report by the County Planning Director regarding the issues and concerns needing addressing during the update process. If during the update process, additional issues are raised, the Board of County Commissioners may change the composition of the update committee to assure those new concerns are adequately addressed.
- G. The plan update process shall occur at least every five years and be open to public view and involvement; public hearings to ascertain citizen views shall be held at the beginning and end of the process.
- H. The County may, as required, change its Citizen Involvement Program to assure public involvement and access to information at all stages of the planning process and provide for an efficient and effective planning program.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; Ord. 86-067, 1986; PL-20, 1979)

Chapter 23.128. PLAN FLEXIBILITY AND UPDATING

23.128.010. Introduction.

23.128.020. Flexibility.

23.128.030. Updating.

23.128.010. Introduction.

There are two questions always asked when a new plan is prepared. First, how flexible will the plan be after it is adopted? Second, how will changing conditions be incorporated into the plan?

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.128.020. Flexibility.

The answer to the first question is that all land use plans reduce the flexibility with which land may be used. That is, after all, one of the purposes of preparing a plan. However, considerable study is conducted during the preparation of the plan in order to assure that the needs and desires of the public are accommodated, natural resources and the requirements of individual property owners. In addition, the application of the plan is intended to achieve certain desired results. To accomplish these goals it will be the job of the County's elected and appointed officials, as well as professional staff, to make interpretations of the plan with the primary emphasis on the achievement of the goals rather than technicalities. However, that does not mean policies or criteria may be ignored. They are to be followed unless it can be shown they are inconsistent in this particular instance due to the unique character of the question at issue. Given this unique situation then new regulations may be adopted or exceptions not otherwise granted may be given. If all this sounds like it is rather complex and difficult that is because it is!

While the plan will answer many of the questions about development in the County situations are bound to arise where the answer is not so clear cut and the appropriate officials will have to use their best judgment based upon the goals of the people, as reflected in the plan, in making a final determination. An example would be where a commercial area is designated on the plan. As with all plans this area is shown as an area of color. No attempt is made on the map to specifically identify the exact limits of that commercial area. Guidelines are written into the plan and they must be interpreted at the time a development is proposed. The result may be that the final commercial area could be a little larger or a little smaller than originally shown, depending on interpretations made as the plan is used.

In summary, while the plan will undoubtedly reduce flexibility it will still retain the opportunity for unique situations to be interpreted in a manner most conducive to the public's general welfare, as well as allow for interpretation to occur in places where the exact boundaries for a particular use may require a final evaluation at the time of a specific development proposal. Perhaps most importantly all of this evaluation and review will occur in public view and subject to written guidelines so that the process is open and understandable to all interested persons.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

23.128.030. Updating.

A. As regards the second question, State regulations specifically require that at least every two years the County review and update its plan in order to assure that the changing character of the people and the land be reflected in appropriate goals and policies.

Usually these changes are adjustments to boundaries on the plan map or establishment of new policies. The final goals to be attained rarely change.

In order to know what changes may be necessary at the time of an update it is necessary to establish a process for the regular collection of data so that the reasons for changes may be seen. The required

program would collect information on demographic changes, such as are reflected in population growth and building construction. Also monitoring of capital improvements, like streets and sewers, would indicate trends and compliance with the plan. And, review of applications made for subdivisions, zone changes, site reviews or other administrative permits, would allow another perspective to be gained on development.

- B. The final program should seek to determine for all interested parties:
 - 1. Progress in implementing the plan;
 - 2. Adequacy of the plan to guide land use actions;
 - 3. Whether the plan continues to neglect community desires;
 - 4. If a major action or trend in small actions and/or annexations is consistent with the comprehensive plan; and,
 - 5. Whether the overall effect of changes and/or actions has reduced the pertinence of the plan.
- C. Along with the gathering of data about specific events there must also be an ongoing process of attitude surveying, citizen involvement programs, and other methods of community interaction so that County officials have an up-to-date knowledge of the public's interests and positions on topics of interest. This type of ongoing process will go far in assuring public support and plan effectiveness.
- D. Updating a comprehensive plan is a complicated and delicate task, but one that must be done if the plan is to remain an effective and equitable tool for guiding community development. The resources committed to this process will be well spent if the process is made to work correctly.
- E. Flexibility in administration and updating are both ways communities seek to assure their plans accurately reflect local conditions and allow for the best possible final result. Officials must be allowed some discretion in the making of decisions. Therefore parameters are established within which they are to work and by which their work may be appraised. Keeping these guidelines current, useful, and reflective of the people's interests is the purpose of the updating process.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

Chapter 23.132. THINGS YET TO BE DONE

23.132.010. Things yet to be done.

23.132.010. Things yet to be done.

The completion of a comprehensive plan is never the end of the planning process. There always exist things yet to be done. Not only are there the issues where insufficient time existed for them to be adequately considered during the planning, but also entirely new questions can be raised because of the improved level of understanding about the community which point to issues previously generally unrecognized. All of this results in additional studies that must be performed so that a more accurate reflection of conditions can be obtained and the necessary changes made to better the plan.

In Deschutes County, a number of additional studies and reports should be performed. The following list gives a short description of each of these suggested reports:

- A. Forest Lands: More in-depth data on the species, potential and volumes available, the effects of different uses at increasingly intensive levels, and the alternatives that may exist for local utilization and benefit.
- B. Agricultural Lands: Further study into marginal agricultural lands and when conversion to developed uses is appropriate.
- C. Surface Mining: More precise information about available resources, the impacts of development and the range of utilization.
- D. Wind Power: Study the feasibility of wind-powered generation sites in the County.
- E. Recycling: Create a recycling plan for Deschutes County by January 1, 1981.
- F. Geothermal: Study of the feasibility of exploring local geothermal sites.
- G. Solar: In-depth review of the practicality of using solar power locally, with an orientation toward methods presently feasible.
- H. Soils: A detailed identification of local soils to enable better planning and development decisions, utilizing a coordinated study between appropriate governmental agencies.
- I. Historical and Archeological Sites: An on-going program to continue the identification of significant historical and archeological sites and the preparation of a more detailed protection plan.
- J. Air Quality: Greater review of existing air quality conditions, and development of an understanding of the carrying capacity of the area's airsheds under a variety of potential situations.
- K. Areas of Special Interest: Detailed studies of sites, views and areas that have unusual or unique qualities and greater specificity about protection and compatible uses. This should include a text on these areas for Planning staff use.
- L. Population: Better information about demographic trends and characteristics to ensure plans accurately reflect the needs of the public.
- M. Attitude Analysis: To better understand the desires and interests of area residents specific surveys and other methods need to be utilized, particularly as regards attitudes toward development and economic diversification.
- N. Economy: Significant gaps presently exist in available data on how the local economy functions and what may be anticipated in the future, as well as how possible changes may affect local economic and

social conditions, as well as land use patterns. An in-depth study is required, and shall be completed by November 1, 1980.

- O. Transportation: Further in-depth analysis of traffic circulation needs and potentials, plans for critical transportation corridors, as well as determination of the feasibility of various non-automobile transportation systems. Also necessary is a better understanding of how transportation and the local economy interrelate.
- P. Public Facilities and Services: Further study into appropriate levels and locations of public facilities and creation of a sophisticated analysis mechanism for determining acceptable phasing and sizes of facilities.
- Q. Housing: An improved analysis of area needs; study of how the local housing market functions; and identification of suitable programs for encouraging the types of housing necessary locally.
- R. Urban Coordination: Several studies designed to identify how each urban area in the County is developing and how the County may most efficiently and equitably represent the public's interests and coordinate with other local and special district governments.
- S. Rural Development: More detailed analysis of recreational and rural development and the impacts (social, economic and environmental) resulting therefrom, as well as development for a methodology for how best to guide appropriate development.
- T. Hazards: A more detailed study of the probabilities and locations of natural hazards.
- U. Implementation: Study and review of various alternative methods for the implementation of the comprehensive plan by such means as environmental criteria and performance zoning.
- V. Landscape Management: Specific studies and plans for all areas identified in the comprehensive plan as landscape management areas.
- W. County Land: Study of the capabilities and opportunities provided on County-owned land.
- X. Compensatory Actions: A study of various methods by which private property owners may be compensated for the effects of planning and zoning shall be undertaken.

Many of these subjects have been addressed in this plan, but from a more general County-wide perspective. These studies, when combined with specific, more detailed studies of smaller portions (sub-area) of the County, would enable a "fine tuning" of the plan so that it even more accurately reflects the needs of the County's people and identifies appropriate means for achieving the necessary results. In addition, the information from these studies would assist in the updating process, thereby assuring a plan reflective of current conditions.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

Chapter 23.136. IMPLEMENTATION

23.136.010. Implementation.

23.136.020. Table 1.

23.136.010. Implementation.

A comprehensive plan is only pieces of paper and colorful maps until it is implemented. Zoning and subdivision ordinances are the most widely recognized tools used in applying the ideas of a plan to the realities of the land.

- A. Zoning Ordinances. Zoning Ordinances contain a series of categories (land use zones) which specify what uses are allowed within those categories. The uses listed are those felt to be compatible with each other. In addition, a number of conditional uses are usually also included. These activities are allowed only by special permit after conditions have been attached which mitigate the probable negative impacts anticipated to be created by the proposed use. The zoning categories are determined by the policies established in the comprehensive plan. Once the appropriate zoning categories have been created then using additional policies and criteria set in the plan these zones are applied to the land.
- B. Comprehensive plan maps. Comprehensive plan maps show generally how various uses will be allocated throughout the jurisdiction, but the zoning map takes this general prescription and specifically identifies how each individual piece of property is to be zoned. However, zoning attempts only to provide sufficient zoned land for development as will be required for three to five years, while the remainder is placed in holding or protective zones allowing only limited change. For example, a commercial area may be designated on a plan map and appear to be approximately 200 acres in size. The actual zoning initially may provide only 50 acres of commercial zoning, with the remainder held in a commercial buffer zone or a residential zone. As time passes additional land for businesses in that location will be required and will be so zoned, either by the property owner requesting a zone change or by the County initiating the action and legislatively changing the zone. The final result is that by the end of the plan's useful life approximately 200 acres of that area have been zoned commercially and used as such for everyone's collective benefit. In this way zoning serves as an implementing tool bringing into reality, through phased development, the goals and policies first identified in the comprehensive plan.
- C. Subdivision Ordinances. Less controversial, but normally a more important development ordinance, is the subdivision ordinance. In Oregon the process of dividing the land into smaller parcels is done within three categories. Minor partitions are the creation of two or three lots, where formerly only one existed, without the establishment of a street or way. Major partitions create two or three lots with a street or way. And, subdivisions create four or more lots with or without a street or way. Predictably the requirements become increasingly stringent as one progresses from minor partition to subdivision. Because subdivision regulations establish requirements for facilities to be provided, allow review of the design to assure the safety and general welfare of the future residents, as well as permit requirement of deed restrictions (protective covenants) to enable neighborhoods once established to retain their character, the subdivision ordinance very often will do more to determine the long term character of an area than will the zoning ordinance.

Therefore, it is of critical importance that subdivision and partitioning ordinances be properly formulated, complementary to the zoning ordinance and strictly adhered to if the community is to benefit from their administration.
- D. Planned Developments. In addition many jurisdictions offer an opportunity for planned developments (PD) which permit a less than strict adherence to both zoning and subdivision regulations in order that developments may create a better overall design which still meets the policies established for that

particular area. These planned developments most often occur in places where unusual conditions exist such that a conventional development would not be able to most efficiently utilize the site. This may be true because of characteristics such as rock outcrops or because the area contains deer range, agricultural land, unique historical remains, or other resources that must be protected from development.

- E. Other Ordinances. In some areas local governments do not establish all their land use restrictions within the zoning ordinance. Flood plain, mobile home, design review and airport ordinances are often created separately and administered in addition to the requirements of the zoning ordinances. In Deschutes County these regulations will all be joined into the zoning ordinance to provide ease of access and understanding for the public.
- F. Capital Improvements Plans. Zoning and subdivision ordinances are the most common types of regulations but there are many other means used in implementing a comprehensive plan. Capital improvement plans are commonly used. These plans lay out for a five to six year period how and where streets, sewers, and other public facilities will be constructed. The provision of these services often determines the feasibility of numerous types of community growth patterns.
- G. Easements. Conservation easements, or other types of less than fee acquisition, are becoming increasingly popular. An easement, lease, or purchase of a certain right can often be obtained from a property owner and thereby a specific use may be prohibited or some special resource protected. The purchase of this easement is less expensive than the purchase of the property, and for certain uses may even be granted without cost to the public. These arrangements thereby seek to eliminate the charge that the local government has "taken" the property through its zoning ordinance. A "taking" occurs when zoning is so restrictive all or substantially all the value of the land has been removed by the restrictions of the zone established on the property. Zoning has usually been held as a reasonable exercise of the State's police powers unless a "taking" does occur.
- H. Coordination agreements. Coordination agreements are another common tool for implementing a plan. Often local governments (cities and counties) have overlapping interests within certain areas, such as urban growth areas, as well as overlaps with other public bodies, such as special districts (i.e., school and irrigation districts) and Federal agencies. Establishment of cooperative arrangements reduces the probability of conflicts arising and assures that all these public agencies are working toward common goals, thereby increasing efficiency and the likelihood of achieving these goals.
- I. Tax Incentives. Use of tax incentives to promote appropriate use of land is also receiving increased attention. Exclusive Farm Use zoning is an example of this. Land set aside and used for farm use may only be taxed for that farm value, rather than any potential development value. This then enables the farmer to better afford remaining on the farm.
- J. Land Trading. Another implementation tool is the trading of land. Deschutes County is lucky to have available County lands which can be traded with private individuals and public agencies to better achieve the goals of the plan.
- K. Performance Zoning. In addition, innovative methods are being created and tried which permit greater flexibility while assuring appropriate standards are met. Performance zoning is an example of this type of regulation. With this type of ordinance a zone is established on property but instead of stating the type of uses that will be permitted it sets a number of standards that must be satisfied. These criteria set limits on pollution, traffic generated, noise, population density, height, etc. The developer is then free to construct any use he desires, as long as the performance standards are met. Should the use not comply it will have to be modified so that it does or be shut down. Unfortunately, performance zoning requires a relatively large staff using sophisticated equipment if it is to be successful, and it is therefore used mostly in larger jurisdictions where sufficient budgets exist.
- L. Administrative Policies. Not only are there ordinances and plans adopted by official action of the governing body but administrative decision makers, like the Planning staff, Hearings Officer, or

Planning Commission, often establish criteria for use in reviewing applications brought to them. Naturally these criteria are consistent with existing regulations, plans and policies. They simply serve as a way for assuring equitable treatment of all applicants and that all pertinent issues are addressed. An example of such a mechanism is Table 1, taken from the American Society of Planning Officials publication (by M.M. Meshenverg), *Environmental Planning: 1 Environmental Information for Policy Formation*. This table lists the various categories of environmental features (i.e., land, water, air, cultural, etc.) which may be encountered, then lists probable development problems that may be encountered. Restrictions on use are suggested, as are methods for implementing the policies on restrictions. The list of restrictions also usually suggests some mitigating measures that may be used to ameliorate the potential hazards.

- M. Implementation. Whatever methods are used, it is important that their intent be to implement the policies established in the Comprehensive Plan. However, of greatest consequence is that these methods actually achieve the goals set by the people in their plan. It is not enough that there be good intentions, there must *also* be good results. Both means and ends must be brought together in an appropriate way. Good results need to be obtained in the right way. Every community must decide what is the proper manner for their plan to be implemented, and therefore no two implementation programs are the same.

Deschutes County's implementation program, as specified in this plan, will be a combination of zoning, subdivision and other necessary ordinances. There will also be tax incentives and the possibility for land swaps. Investigation into the feasibility of conservation easements and performance zoning may yield new and better tools for implementation. And certainly the staff will be seeking administrative criteria to use in their evaluation. Yet, despite all of the complexity built into the system efforts will be made to keep these processes as simple as possible and provide for the expeditious handling of all applications. The resulting process will seek to achieve the desired "good results in the right way;" however, for this to happen it will require not only the efforts of the elected and appointed officials as well as the professional staff but also the people of Deschutes County. This area is ours to live in and to pass on to our posterity. If we work together we will be successful in passing on the environment we all enjoy so much.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

Table 1

TOLERANCE AND SUITABILITY OF ENVIRONMENTAL FEATURES TO DEVELOPMENT

Category	Feature	Description	Tolerance/Suitability	Development Policies	
				Permitted Associated Uses	Restrictions on U
Land Soil and Topography	Wet Soil	Soil with a high moisture content because of a high water table or poor drainage; often a seasonal problem.	Such soils perform an important water storage function; when septic tanks are used, water supply may be contaminated; foundations settle and crack; stagnant pools may exist during certain periods.	"Floating" or other specially constructed structures may be permitted when supplied with public water and sewerage; selective drainage or filling may be permitted if it does not interfere with the water supply.	No septic tanks; deep permitted but only development can be tolerated if septic tanks are absent.
	Impervious Soil	Dense soil inhibiting the free flow of water; such soils usually have a high clay content.	Impermeability of soil may cause septic tanks to overflow and contaminate water supply; unsuitable for development without public water supply and sewerage.	No special development limitation with public water supply and sewerage.	
	Poor Load-bearing Soil	Soils unable to support structures such as roads and buildings; usually easily compacted because of moisture content, particle size, or where excessive internal spaces or voids are present; filled lands, or mineral or industrial waste piles often have these characteristics.	Generally unsuitable for intensive development because of difficulty and cost of construction.	Certain types of light or flexible structures; recreation areas; agriculture.	Heavy structures must be in bedrock.
	Flat land	Land with no significant slope.	Depending on other conditions, flat land is highly suitable for and tolerant to development.	All uses.	No restrictions except control (social, economic, etc., factors may suggest limitations.)
	Low Slope	Slope generally between 5 and 10 percent.	Fairly tolerant to development although excessive removal of ground cover may cause erosion; generally are good sites for residential development.	Residential development, intensive and extensive recreation, agriculture and grazing.	Densities may be fairly high; grading controls and limit vegetation removal and sedimentation.

	Moderate Slope	Slope generally between 10 and 25 percent (exact percentage may vary).	Very high construction costs; loss of ground cover may cause erosion and frequently land slippage; often of scenic beauty.	Limited development, contour agriculture, forest.	Density of about one house per acre; maintenance of cover; erosion control; walls' roads turned slightly from contour lines; special development zoning can minimize grading; drainage
	Steep Slope	Slope greater than about 25 percent.	Development causes major erosion problems by increasing runoff velocity; major site engineering necessary; difficult to farm; suitable for extensive recreation; often of scenic beauty.	Open space uses; reforestation when necessary; recreation.	No development (or regulated and e development of very low density)
	Ridge Lines	Line separating drainage basins, i.e., where water on either side flows in opposite directions; may be hardly noticeable in flat country but highly pronounced in hilly areas.	No particular reasons for restricting development on minor ridge lines.	Any use permitted on <u>minor</u> ridge lines – changes in topography are barely noticeable.	No restrictions.
			Major ridge lines often can have visual impact ("skyline" effect).	Limited development on major ridge lines to preserve scenic beauty.	Height and density restrictions
	Valley	Generally a long narrow depression in the earth's surface with sloping land along its sides; old valleys, however, may be wide with extensive plains on either side.	Suitable for development except where (1) other features suggest limitations, or (2) scenic qualities can be preserved.	No restrictions except those associated with other features such as engineering design for structural stability on steep slopes and limited development in floodplains or public sewerage where aquifers are the surface; preserve for scenic value only where particularly abundant of special aesthetic value.	
	Gorge and Canyon	A deep and narrow valley with steep sides often vertical or undercut; usually in relatively arid regions.	Unsuitable for development because of construction difficulty; their rarity suggests use for recreational purposes; tourist attractions.	Low intensity development for scenic-recreational purposes.	No development except enhance recreational and value.
	Glacial Moraine	A deposit of material beneath, at sides, or at terminal points of melted glaciers.	Scientific and educational role in understanding of geologic history; poor drainage in ungraded types of deposits.	Preservation of selected areas in natural state for recreation and scientific investigation.	No restrictions in areas for private development where drainage problem present.
	Promontory	A crag or point of high land jutting out over low land, usually associated with a body of water or valley; often associated with scenic views.	No particular ecological role; often suitable for high-rise development to take limited advantage of view.	Selective development for high-rise, medium-density purposes.	View protection.

	Abrupt Relief Changes	Lines separating distinctly different land forms; usually associated with piedmont-plains area and with significant vertical displacement along fault lines.	Generally no special ecological roles although may be barrier to movement depending on geologic formations; sometimes can have visual impact; faulted areas may be subject to earthquakes.	Uses limited to those which heighten the visual effect of the character of open space uses as a row of trees can be effective (see also Substructure, below).
<u>Land</u> Rock	Area of Weak Substructure	Underground formation incapable of supporting heavy loads; often associated with certain types of rock, e.g., cavernous limestone, compressible peats, etc., and dynamic characteristics, e.g., faulting volcanic activity, or with compressible or expansive sedimentary deposits and filled land.	Development may be hazardous because of possible subsidence or other earth movement, especially under earthquake conditions.	Limited low-intensity, low-rise development. Special construction measures to assure stability; areas with earthquake potential require engineering design and protection against structural damage; in areas where potential is great, no development should be permitted.
<u>Land</u> Minerals	Mineral Deposit	Site currently used or potentially available for extraction of minerals, including sand, gravel, limestone, rock, coal, etc.	Source of important mineral resources; other development may preclude extractive operations; however, requires special regulations to ensure compatibility with surroundings during and following completion of operations, and prevention of water supply contamination.	Reservation for extractive operation. Open-pit operations require appropriate screening performance standards to control noise, dust, etc.; cannot be done without water quality; plan for mining reclamation for site reuse.
<u>Water</u> Surface	Surface water and riparian land	Any body of water including lakes, streams, rivers, and oceans and their shorelines, estuaries (see below) and tidelands.	Value for water supply, waste dispersion, transportation, recreation, power generation, source of food, scenic beauty; quality and quantity of water needs to be maintained.	Harbors, water/sewage treatment plants, recreation, marinas, water-related industry, cluster development, public-access points. No polluters (including industrial tanks); no nonwater development; no development that will produce undesirable surface or subsurface quality.

	Floodland	The land area adjacent to a water body that is covered by excess water during periods of flooding; may be divided into zones based on frequency, e.g., channel, floodway, floodplain, especially for land-use and development controls.	Essential role in carrying excess water during floods; danger to life and property; provides recreational land; filling, damming or leveeing decrease storage capacity and flood velocity increasing flood potential downstream; soils often vary fertile and suitable for agriculture; usually contains substantial groundwater.	Those unharmed or improved by flooding, e.g., those associated with Surface Water and Riparian Land, and forestry, some types of agriculture, extensive recreation, institutional open space, open space for housing and other uses, impoundment basins.	Same restrictions as for Water and Riparian Land proof development; fill diking only where essential where flow is not restricted.
	Wetland: marsh, bog, swamp	Tracts of low-lying land which are saturated with moisture and usually overgrown with vegetation, (Marsh: general treeless and covered with water; swamps: generally supporting tree vegetation and not permanently covered with water; bog: consists largely of decaying vegetation [distinctions are imprecise].)	Act as sponges to absorb excess runoff; reduces flooding potential; important wildlife habitats; recreational, educational, scientific values; some agricultural value; often have scenic beauty; filling may cause flooding elsewhere.	Recreation: hunting, fishing, sailing, observing; scientific investigation; certain types of agriculture.	No on-site or development which will with maintenance ecosystem, especially its storage and wildlife management ability.
	Estuary	A water passage where the tide meets a river current, especially an arm of the sea at the lower end of a river; the area where seawater mixes with fresh water; frequently includes marshes and other low-lying wetland.	As the breeding ground for a great variety of organisms, estuaries are particularly intolerant to waste disposal, dredging, and filling; these activities can destroy important plant and animal communities such as oyster beds and spawning areas.	Fishing, shell fishing and other harvesting, recreation, limited associated urban development.	No development which the ability of the estuary to plant and animal life, e.g. discharges, dredging, excessive recreation overharvesting.
Water Subsurface	Aquifer	A water-bearing layer of sand, gravel, or porous rock.	As major source of water, quality must be maintained; removal must not exceed rate of replenishment.	Varies depending on permeability of overlying strata; generally, any use which maintains high water quality and quantity.	No development which will the quality and quantity of be structurally adverse presence or withdrawal groundwater.

	Aquifer - recharge area	Area of interchange between an aquifer and the surface; the point at which precipitation and surface water infiltrate the aquifer.	Intolerant to development because of danger of polluting water supply.		No disposal of possible ; specifically no septic tank must be sealed to avoid investigate effects disturbance to area : channel digging or dredging, filling that mig the intrusion of pollutants.
<u>Air</u>	Air Corridor	A term describing the path of movement of the air, generally physically bounded by valley walls; important in terms of micro-climate considerations and air pollution dispersal.	An analytical tool that helps determine development suitability depending on micro-climate and location of polluters; may affect urban form, compatibility of users and orientation of structures.	Depending on wind speed, air direction and other meteorological factors, sources and receptors of pollution should not be permitted in the same corridor; reforestation would help to relieve summer heat and humidity.	Highly restricted develop sources of pollution; stringent source controls.
<u>Vegetation and Wildlife</u>	Woodland	A tract of land dominated by trees but usually also containing woody shrubs, grasses, and other vegetation.	Where extensive, woodlands are intolerant to intensive development because of their role in the water cycle, oxygen replenishment, wildlife support, recreation, and as a source of raw materials; also have special aesthetic value in urban areas.	Depends largely on water-related role; dense forests can maintain housing of, say, one family per acre but only where abundant; well-managed commercial forestry recreation.	Vary limited developr maintain vital ecological aesthetic appearance; lin cutting for developr sustained commercial yiel
	Wildlife Habitat	The natural environment of an animal species; usually associated with other - features such as marshes or woodland.	Tolerance to development depends on species, some habitats should be maintained for scientific, recreational and educational purposes; destruction of habitat may affect other parts of the ecosystem.	Passive recreation including limited hunting and fishing, maintenance in a natural state to minimize disruption of animal communities; outdoor education laboratory.	In managed habita development except acce and recreation-e structures; cabins if dispersed.
	Prime Agriculture Land	Fertile cropland producing a high-value yield, often of a generally scarce nature such as vineyards, orchards, and truck farms.	Of limited extent in some areas development renders such land unsuitable for agriculture.	Agricultural uses only, except where such land is plentiful in a particular area.	Where other developable abundant, zoning for agricultural use (e.g., minimum lots) is justifiable
	Pasture Land	Land used for grazing of domestic animals.	Depending on slope, soil and subsurface conditions, this land is often tolerant to and suitable for development.	Development where land is plentiful; where scarce, it should be retained in open space.	No development in urb lacking sufficient open spa

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)

Chapter 23.140. CONCLUDING REMARKS

23.140.010. Concluding remarks.

23.140.010. Concluding remarks.

The plan seeks to protect the important resources in Deschutes County, yet it is not a no-growth plan. Growth is being anticipated and accommodated in urban areas. Rural Service Centers, like Tumalo and Terrebonne, are being adjusted to serve the growing needs of the rural areas. Plans to assist La Pine in becoming a full service community and eventually leading to incorporation and the ability to serve a better organized rural area are being laid down. And even though rural development is restricted, provisions for small farms and rural homes is being included in areas and at densities appropriate for such activity. Also, important areas and sites with unusual characteristics are being identified for protection. And adequate provision is being made to allow, in an appropriate manner, the commercial and industrial areas we will be needing.

Perhaps most importantly this is the beginning of a process that will continue to obtain better, more useful information so that the changing character of the County can be accommodated and regulations sufficiently flexible, but accurately reflecting local conditions and needs, may be promulgated.

(Ord. 2002-005 § 1, 2002; Ord. 2000-017 § 1, 2000; PL-20, 1979)