

Chapter II. Transportation Needs

INTRODUCTION

Transportation, like many other public services, can be analyzed in terms of supply and demand. Supply can be defined in terms of the availability, capacity, and location of facilities and services for each transportation mode. Demand can be measured in terms of volume (i.e., the number of persons or vehicles using a particular transportation mode) or level of service (LOS).

In the context of the Transportation Planning Rule (TPR), the "Needs Element" of a transportation system plan (TSP) establishes the future demand or "needs" of the system in terms of existing and anticipated volume. The inventory establishes the existing availability, location, and capacity of transportation facilities, or the "supply" of transportation facilities and services. The "transportation needs" are determined by comparing the demand for services and the existing supply of facilities. This analysis leads to identification of specific transportation needs.

This chapter contains an analysis of population and employment trends in Lakeside—trends that will affect the future need for transportation facilities in Lakeside. We also present a cursory analysis of land-use trends and development potential in Lakeside.

POPULATION TRENDS

Table 1 shows a summary of population trends in Lakeside and Coos County between 1930 and 1990. The data indicate that Coos County and Lakeside experienced relatively high population growth rates (between two and three percent annually) between 1930 and 1960. Population slowed in the County during the 1960s—to a rate of less than 0.3 percent annually. Although data for Lakeside are not available for this period, the City probably experienced a similar trend. Both areas experienced a population loss during the 1980s. This is consistent with trends throughout Oregon during this period and is primarily due the severe economic recession Oregon experienced during the early 1980s.

Table 1. Lakeside & Coos County Population 1930-1990

Year	Lakeside	Percent Change	Coos County	Percent Change
1930	921	-	28,373	-
1940	1,241	34.7%	32,466	14.4%
1950	1,714	38.1%	42,265	30.2%
1960	-	-	54,955	30.0%
1970	-	-	56,515	2.8%
1980	1,453	-	64,047	13.3%
1990	1,437	-1.1%	60,273	-5.9%

Source: U.S. Bureau of Census

Table 2 shows population estimates for Lakeside and Coos County for the 10-year period between 1984 and 1994. The table also shows the percentage of Coos County residents that live in the City of Lakeside. The data show that Coos County grew at an average annual rate of 0.3 percent between 1984 and 1994 while Lakeside grew at a rate of 1.3 percent. Total population in Lakeside increased by about 15 percent (210 persons) between 1984 and 1995.

The data show population growth has not been even during this period. The City experienced two periods of population decline between 1984 and 1994 (see Table 2). Population declined by 1.8 percent between 1985 and 1986. A more pronounced decline was recorded between 1989 and 1991. However, the City has experienced an increase in population every year since 1990, the largest being a 9.9 percent increase between 1993 and 1994.

Table 2. Population, Lakeside and Coos County, 1984-1994

Year	Lakeside		Coos County		Percent of County Population
	Population	Percent Change	Population	Percent Change	
1984	1,405	-	61,000	-	2.3%
1985	1,420	1.1%	60,150	-1.4%	2.4%
1986	1,395	-1.8%	57,500	-4.4%	2.4%
1987	1,425	2.2%	57,500	0.0%	2.5%
1988	1,425	0.0%	58,800	2.3%	2.4%
1989	1,500	5.3%	60,300	2.6%	2.5%
1990	1,437	-4.2%	60,273	0.0%	2.4%
1991	1,405	-2.2%	61,200	1.5%	2.3%
1992	1,410	0.4%	62,100	1.5%	2.3%
1993	1,470	4.3%	62,500	0.6%	2.4%
1994	1,615	9.9%	62,800	0.5%	2.6%
AAGR 1984-1994	1.4%		0.3%		1.1%

Source: Center for Population Research & Census; U.S. Bureau of Census

POPULATION PROJECTIONS

Table 3 presents high, medium, and low population projections for Lakeside. The medium projections represents the most likely scenario for the community. The projections indicate that Lakeside can expect to grow to a population of about 2,000 by 2015.

Table 3. Lakeside Population Projection

Year	High (1.5%)	Medium (1.0%)	Low (0.5%)
1994	1,615	1,615	1,615
1995	1,639	1,631	1,623
2000	1,766	1,714	1,664
2005	1,902	1,802	1,706
2010	2,049	1,894	1,749
2015	2,208	1,990	1,793

Source: MLP Associates, 1995.

EMPLOYMENT TRENDS

Historically, Coos County and Lakeside have had economies reliant upon resource-based industries. Despite a national trend away from natural resource-based industries towards service industries, Coos County has maintained a large timber sector.

Table 4 shows employment by industry in 1990 for Lakeside, Coos County and Oregon. The data reveal some significant differences between these three geographic areas. The data indicate that Lakeside has a significantly smaller service sector than either Coos County or the state. This is probably due in part to Lakeside's small population and its location in proximity to the Coos Bay/North Bend area. Lakeside has a much higher percentage of workers employed in manufacturing than the state or Coos County.

These data are indicative of Lakeside's location and economic advantages. Lakeside plays several roles as a community. The first is that it is increasingly becoming a retirement community. Second, Lakeside is a bedroom community to the Coos Bay area. Finally, recreational amenities found in the Lakeside area create some economic opportunities in this sector.

Table 4. Employment by Industry, Lakeside, Coos County & Oregon, 1990

Category	Lakeside		Coos County		Oregon	
	Number	Percent	Number	Percent	Number	Percent
Employed Persons 16 and over	463	100.0%	23,293	100.0%	1,479,960	100.0%
Agriculture, forestry, & fisheries	15	3.2%	1,690	7.3%	66,730	4.5%
Mining	2	0.4%	32	0.1%	2,479	0.2%
Construction	33	7.1%	1,106	4.7%	74,206	5.0%
Manufacturing	116	25.1%	3,967	17.0%	233,208	15.8%
TCPU	56	12.1%	1,740	7.5%	86,289	5.8%
Wholesale trade	8	1.7%	870	3.7%	61,938	4.2%
Retail trade	95	20.5%	4,478	19.2%	239,010	16.1%
FIRE	9	1.9%	1,162	5.0%	78,671	5.3%
Services	113	24.4%	7,048	30.3%	583,296	39.4%
Public Administration	16	3.5%	1,200	5.2%	54,133	3.7%

Source: U.S. Bureau of Census.

Table 5 shows historical total employment by sector for Coos County between 1990 and 1993. The data indicate total employment grew at an average annual rate of about 0.5 percent between 1990 and 1993. The largest increase (5.7 percent annually) was recorded in the finance, insurance, and real estate (FIRE) sector. Retail trade and local government also grew at a rate of about three percent annually during this period. Manufacturing and agriculture/fishing declined at a rate of nearly five percent annually.

Table 5. Historical Total Employment by Sector, Coos County 1990-1993

Sector	1990	1991	1992	1993	AAGR
Agriculture/Fishing	515	513	455	445	-4.8%
Mining	46	50	48	45	-0.7%
Construction	634	710	679	617	-0.9%
Manufacturing	3,618	3,191	3,158	3,126	-4.8%
Transportation	1,343	1,382	1,350	1,375	0.8%
Wholesale Trade	738	721	707	715	-1.0%
Retail Trade	4,199	4,316	4,302	4,584	3.0%
FIRE	645	662	693	761	5.7%
Services	3,256	3,298	3,236	3,304	0.5%
Federal Govt.	496	434	479	461	-2.4%
State Govt.	495	490	509	493	-0.1%
Local Govt.	3,466	3,647	3,702	3,801	3.1%
Other	284	19	32	41	-
Total	19,469	19,405	19,423	19,769	0.5%

Source: *Oregon Covered Employment and Payroll*, Oregon Employment Department.

EMPLOYMENT PROJECTIONS

To develop employment projections, we reviewed a variety of population and employment data. These data allow us to develop employment projections based on a compound methodology. No previous employment projections exist for the City of Lakeside.

According to the U.S. Census, employment in Coos County decreased about five percent (1,200 jobs) between 1980 and 1990. The employment projections are based on growth rates slightly lower than the population estimates. This reflects the lower rate of growth employment has experienced in the area. The increasing number of retirees locating in Lakeside provides some rationale for using a lower growth rate for employment.

Table 6 shows employment projections for the City of Lakeside. Again, we developed high, medium, and low projections. The high projection is based on an annual growth rate of 1.2 percent, while the low is based on an annual growth rate of 0.3 percent. The medium estimate uses an 0.7 percent annual growth rate.

Because of the population demographics and employment characteristics of Lakeside, we anticipate that employment will grow at a rate lower than population. This reflects the in-migration of retirees and the influence of recreational amenities on both population and employment in Lakeside.

The data indicate that employment in Lakeside will increase by about 90 jobs between 1990 and 2015. Total employment in 2015 could range between 500 and about 625 jobs.

Table 6. Lakeside Employment Projections

Year	High 1.2%	Medium 0.7%	Low 0.3%
1990	463	463	463
1995	491	479	470
2000	522	496	477
2005	554	514	484
2010	588	532	492
2015	624	551	499

Source: MLP Associates, 1995.

LAND USE

The relationship between transportation and land-use has long been recognized by planners and engineers. For small communities like Lakeside, the primary consideration is whether existing arterials have sufficient capacity to accommodate full buildout of existing vacant land. In this section we analyze existing land use patterns, recent development trends, and development potential in Lakeside.

Existing Land Use

The City of Lakeside Comprehensive Plan defines seven land use plan designations. These are listed below:

- GC – General Commercial
- MC – Marine Commercial
- PF – Public Facilities
- RR – Recreation Residential
- GR – General Residential
- OS – Open Space
- IND – Industrial

The majority of land in Lakeside is designated for residential uses. In fact, the City reclassified its remaining industrial land to residential uses in 1994.

The highest development density occurs in an area of town located north of South Ten Mile Lake and south of the railroad tracks. This area is the oldest part of Lakeside and streets are laid out in a basic grid pattern. In addition to having the highest population density, this area also includes the majority of the community's commercial development. This area also represents the highest density of traffic generators in the City.

Land Use Trends

Land use trends in any community are influenced by the local economy. Lakeside's economy is heavily dependent on the recreation industry. The community is also increasingly becoming a popular place for retirees – due to the presence of recreational amenities. Thus, much of the recent development has been housing oriented towards recreational amenities found in Lakeside.

Lakeside has always had a high percentage of mobile and manufactured homes. This trend has increased in recent years. In addition to manufacture homes, development of a 300+ unit development for "park model" recreational vehicles was approved in 1994. While these units are technically in an RV park, they generate demand for transportation facilities similar to any other single family residence.

Review of recent land-use trends and conversations with local officials lead us to conclude these trends will continue. Lakeside should continue to see moderate growth in housing, much of which will be manufactured housing. As population grows, we anticipate that demand will be generated for various commercial services and that a modest amount of commercial development will also occur in the City. Because the City has no land designated for industrial uses, its location, and the status of the wood products industry, we expect little industrial development to occur in Lakeside.

Development Potential

Our analysis of development potential is based on a vacant lands inventory and a set of assumptions about what density future development might occur at in Lakeside. This analysis is intended to place an upper bound on the **maximum** amount of development that might occur in Lakeside given current planning policies.

Table 7 shows vacant land in Lakeside based on a parcel-level analysis of Coos County Assessor's data. The table shows total vacant acres, constrained vacant acres, and unconstrained vacant areas. The constrained vacant acres column represents lands that have one of the four overlay zones in Lakeside: Airport Overlay (AA), Steep Slopes (SS), Floodplain (FP), or Younger Stabilized Dunes (YD). These overlays do not in many instances preclude development of a parcel; rather they identify significant environmental constraints. We did *not* analyze lands for development suitability. Thus, Table 7 does not represent what is probably a smaller number of vacant buildable acres.

Table 7 shows that Lakeside has about 637 acres of vacant land. The majority – nearly 500 acres – is in residential designations. The community also has about 86 acres of vacant commercial land, 42 acres of open space, and 10 acres of public facilities land. The community currently has no vacant industrial land.

Table 7. Vacant Land Summary

Plan Designation	Total Vacant Acres	Constrained Vacant Acres	Unconstrained Vacant Acres
MC - Marine Commercial	52.3	51.6	0.8
GC - General Commercial	34.2	7.0	27.2
IND - Industrial	0.0	0.0	0.0
OS - Open Space	42.3	42.1	0.3
PF - Public Facilities	10.3	10.3	0.0
GR - General Residential	316.2	125.2	191.0
RR - Recreational Residential	181.5	154.5	27.1
Total	636.9	390.6	246.3

Source: MLP Associates, 1995

Using an assumption of four dwelling units per gross acre¹ Lakeside has a total residential development potential of nearly 2,000 units. Considering only unconstrained acres, the City has a residential development potential of about 870 units.

¹ Planners typically calculate densities in terms of *gross* and *net* acres. A gross acre refers to the number of units developed on a single acre. Net acres subtract dedications for streets and other public facilities typically provided in cities. Public facilities can account for 25 percent to 35 percent of land in a residential development. Using an assumption of 25 percent, a density of 4 units per gross acre would be

The population projections presented earlier in this chapter indicate that Lakeside will grow by between 200 and 600 persons between 1990 and 2015. The average household size for Lakeside Households in 1990 was 2.4 persons. Dividing the population increase by household size yields a rough estimate of needed housing units: 83 to 250.

The conclusion is that Lakeside has a large surplus of residential land.

Although we have not analyzed development potential for commercial land, we also conclude that Lakeside has a surplus of commercial land. The city has about 86 acres of commercial land. Demand for commercial development will come from two factors: population growth, and recreational development. We believe that many of the recreational support services that would generate demand for commercial land already exist in the community. Further, future population growth will not create significant demand for commercial development.

Because the community currently has no land designated for industrial uses, we assume that no industrial development that would be a significant traffic generator will occur in the community until the City designates new land for industrial development. Further, historical land use trends suggest that little demand for major industrial development exists in Lakeside.

a net density of 5.3 units per net acre (1 gross acre - .25 acre for public facilities = .75 net acres. .75 acre / 4 units = 5.3 units per net acre).