

Travel Demand Forecasting Methodology for the Lincoln County Transportation System Plan

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This technical memorandum is the travel demand forecasting methodology for the Lincoln County TSP future conditions traffic operations analysis. It describes the method for forecasting 30th Highest Hour traffic volumes at study intersections.

Travel demand forecasts for study intersections in the Lincoln County TSP will be determined by analyzing the ODOT Future Volume Tables, published online. The latest tables provide current year traffic volumes, forecast traffic volumes for the year 2024, and a statistical descriptor (R-squared value) that provides the reliability of the forecast for all state highways. ODOT guidelines for using the Future Volume Tables state that forecasts with R-squared values below 0.75 should not be used. Forecasts with R-squared values above 0.75 will be used to determine an average annual growth rate for the 20-year planning period and an overall growth factor. Table 1 shows the milepost ranges used forecasting data, average annual growth rate, and overall factor for each of the four state highways with study intersections. Study intersections along Oregon Coast Highway are split into two groups.

TABLE 1
Travel Demand Forecast Growth Rates
Lincoln County TSP Study Highways

Highway Name	Milepost Data Used	Average Annual Growth Rate	20-Year Growth Factor
Oregon Coast Highway, No. 9	Drift Creek Road to Otter Crest Loop North: MP 119.22 to MP 124.36	Drift Creek Road to Otter Crest Loop North: 2.4%	Drift Creek Road to Otter Crest Loop North: 1.48
	North Beaver Creek Road to Lori Lane: MP 154.04 to MP 155.46	North Beaver Creek Road to Lori Lane: 2.2%	North Beaver Creek Road to Lori Lane: 1.45
Corvallis-Newport Highway, No. 33	MP 5.29 to MP 5.79	2.3%	1.45
Salmon River Highway, No. 39	MP 0.40 to 5.31	1.9%	1.39
Siletz Highway, No. 181	MP 23.75 to 31.19	2.1%	1.41

Source: ODOT Future Volume Tables, 2004-2024 version.

Average annual growth rates range from approximately 1.9 percent per year to 2.4 percent per year. This converts to an overall 20-year growth factor of 1.39 to 1.48. These growth factors will be applied to the balanced 2005 30th Highest Hour intersection turning movement volumes to determine 2025 30th Highest Hour volumes for operational analysis.