Tillamook County Futures
Measuring Progress: 2006
Tillamook County Benchmarks

Prepared for:

Tillamook County Futures Council
1906-A Third Street
Tillamook, Oregon 97141

Prepared by:

Community Planning Workshop
1209 University of Oregon
Eugene, OR 97403
Email: cpw@uoregon.edu
http://darkwing.uoregon.edu/~cpw

Project Manager:
Robert Parker

Project Researchers:
Jessica Nunley
Jonathan Pheanis

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Community Planning Workshop

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EXECUTIVE SUMMARY

Tillamook County, Oregon

Located on the Pacific coast of northwest Oregon, Tillamook County is a land dominated by natural features**,** including coniferous forests, farmland, rivers, bays, and shoreline. Its population, of just over 25,000[1] is concentrated primarily in small communities that dot the north-south coastal artery of Highway 101. Incorporated communities range in size from Nehalem with 210 residents to the county seat, Tillamook, which has a population of roughly 4,300. This relatively small population lives a rural lifestyle, and the economy is based in great part on natural resource-driven industries. Demographics have changed in recent years, however, as Tillamook County becomes increasingly recognized for its high standard of living for second homeowners and retirees. Such shifts are having an impact on the economy, which is diversifying and becoming increasingly service-oriented.

The Tillamook County Strategic Vision

In February of 1999, the Tillamook County Futures Council released the Tillamook County Strategic Vision. Based on extensive resident and landowner input, the Strategic Vision sets forth a shared vision of the desired condition of Tillamook County in the year 2020. Specifically, the Vision establishes community goals and strategies concerning the county's growth and development, natural environment, economy, and society and culture.

Benchmarks

This benchmarks report—the third edition of the Tillamook County Benchmarks—is a follow up effort by the Futures Council to assess the condition of Tillamook County by quantitatively evaluating the Vision's goals. Its purpose is to update baseline data and trends, which will aid policy makers in working toward Tillamook County's Strategic Vision. The Futures Council will continue to track these and other benchmarks to update the publication and further establish county-wide trends.

Like the Vision, this report is divided into the four sections of growth and development, natural environment, economy, and society and culture. The following summary provides an overview of this report's findings. Expression icons indicate positive, negative, or no-change countywide trends and/or comparisons to statewide figures.

[1] Population data is from the Portland State University Population Research Center's publication, "2005 Oregon Population Report."

Growth and Development

The Growth and Development section evaluates goals relating to concentrated growth, improved infrastructure, affordable housing, and alternative transportation. Key findings include:

☺ 1.2 Dwelling Approvals in Exclusive Farm Use Zones and Forest Lands

Between 2000 and 2003, Tillamook County approved 12 dwellings on forestland and 2 dwellings on farm land. Though these numbers show a slightly higher increase in building permits on forestland, the average annual number of residential building permits issued on resource lands remains low. This indicates that Tillamook County is successfully directing development away from resource lands.

☺ 1.4 Percentage of Tillamook County Residents Served by Public Drinking Water that Meets Health Based Standards.

In 1997, only 66% of Tillamook County residents were served by community-based water systems that met health-based standards. By 2004, 89% of County residents were served by systems meeting standards. The Environmental Protection Agency and the state of Oregon have established a goal of 95% by 2005.

☺ 1.5 Percentage of Tillamook County Households with On-Site Sewage Disposal Systems that Do Not Meet Government Standards.

Between 1988 and 2001, approximately one percent of all on-site wastewater disposal (septic) systems failed in Tillamook County, or an average of about 45 failures per year. Though the average increased to 48 failures per year from 2001 to 2004, annual failures per year since 2001 are decreasing.

☺ 1.6a Percentage of State Road Miles Within Tillamook County District that Meet Prescribed Standards

The conditions of state-owned roads in Tillamook County have improved slightly. In 1997, approximately 37% of state-owned roads were in very good or good condition. This increased from 52% in 2001 to 54% in 2004.

☹ 1.6b Percentage of County Road Miles in Tillamook County that Meet Prescribed Standards

The condition of County roads classified as Good to Satisfactory decreased 13% from 2001 to 2004. Fair to Poor conditions increased the same percentage from 2001 to 2004.

Natural Environment

The Natural Environment section evaluates goals relating to the management of riparian zones, water quality, forest habitats, the abundance of salmonids and wildlife, and recycling. Key findings include:

☺ 2.1 Trends in Stream Water Quality Index

Since 2001, two of Tillamook County's eight rivers have increased their Oregon Water Quality Index (OWQI) ratings, while none decreased. Where data were available, other trends remained unchanged in OWQI ratings. The Wilson River at Highway 6 maintained an excellent rating, the Wilson River at Highway 101, Trask and Nestucca remain in good condition, and the Tillamook remains in poor condition.

☺ 2.4a Wild Salmon and Steelhead Population Levels.

In Tillamook County, wild Coho populations suffered the greatest declines between 1992 and 1998 but have dramatically increased in numbers since 1998. While the Nehalem River had the most dramatic increase in its Coho populations during the time of the last update, wild Coho populations have increased more then 80% within the Tillamook Bay and Nestucca drainage basins.

☹ 2.4b Wild Salmon Population Viability

Two of the three wild Coho drainage basins within Tillamook County have failed indicators of overall population viability – a factor that must be considered along with the success of overall population levels.

☹ 2.5a Solid Waste Generated and Disposed Per Capita.

Tillamook County's pounds of solid waste generated and disposed of per capita have steadily increased between 1992 and 2003, while the amount of waste recovered has remained constant. Between 1994 and 2004, Tillamook County's per capita solid waste disposal has increased 40% from 1,192 to 1,668 pounds per capita during this time period. During this same time period, the increase per capita for the state of Oregon has increased only 7%. Anecdotal evidence suggests that the increase in solid waste generated is largely due to a corresponding increase of new construction in the area.

😐 2.5b Solid Waste Recovered Per Capita.

Between 1992 and 2003, recovery of solid waste in Tillamook County declined from 31% in 1992 to 27% in 2003 with a 12-year average of 27%, away from its goal of 30%. During this same time period, the state's recovery rate rose from 27% to 44% towards its goal of 50%.

Economy

The Economy section evaluates goals relating to the maintenance, expansion, and diversification of business and industry; per capita income; and the inclusion of youth in economic development activities. Key findings include:

☺ 3.1 Net Job Growth

Since the 2000 Benchmarks Report, the average net job growth rate for Tillamook County has dropped significantly. However, job growth jumped up to 8.3% in 2004. On average from 1990 to 2004, Tillamook County added 7.13 jobs per 1,000 eligible workers. Since 2000 however, the average increase dropped to only 1.5 jobs per 1,000 eligible workers. Statewide, approximately 12.1 jobs were added per 1,000 eligible workers since 1990, dropping to –1 since 2000.

☹ 3.2a Employment in the Forest Industry

Employment in timber manufacturing has decreased since 2000, dropping from 548 employees to 390 in 2001. In the last few years, employment has slightly increased to 440 in 2004.

☺ 3.2bAnnual Pay for Lumber and Wood Manufacturing Jobs

From 2000 to 2004, annual pay within the timber manufacturing industry for Tillamook County increased by $7440, while the entire previous decade's increase was only $4,003 from 1990 to 2000 (in 2004 dollars)

☺ 3.3a Total farm Employment

Total farm employment decreased until 2001, dropping from 33% in 1991 to 25% in 2001. Since 2001 however, the percentage of farm employees within Tillamook County has increased slightly from 25% to 28%.

😐 3.3b Total Agricultural Employment

Total agricultural employment within the County has remained stable at around 4.8% since 2000.

☺ 3.4 Average Annual Payroll per Covered Worker

Although Tillamook County's average annual payroll is still below that of the state and slightly below that for other rural counties, its payroll rate is rising at a faster rate than for the other two. Over the decade from 1994-2004, the average annual payroll rate for Tillamook County rose by 18%, compared to 16% for Oregon and 12% for other rural counties.

☺ 3.5 Per Capita Income as a Percentage of U.S. Per Capita Income.

Per capita income in Tillamook County has risen to an average of 80% of the U.S. per capita income for 1992-2003; up from an average of 76% for 1990-2002. Tillamook County's per capita income has remained higher than that of other rural counties.

☺ 3.6 Percentage of Population Below Poverty Level

The poverty rate in Tillamook County has dropped steadily since 1998 and has been consistent with the overall rate for Oregon since 2003.

☹ 3.7 Number of Students Receiving Free or Reduced-Cost Lunches

The average number of students receiving free or reduced-cost lunches has steadily increased since 1998, although it has fluctuated by school district. From 1998 to the present, the total percent of Tillamook County students receiving free or reduced-cost lunches increased by 9.3%.

😐 3.8 Total Unemployment Rate

After hitting a low point in 2000, Tillamook County's rate rose by 2% over the next four years to end up at 7.1% in 2004. The county's rate is still lower than the rates for other rural counties and for Oregon overall.

☹ 3.9 Status of Tillamook County and its Cities as "Distressed Areas"

Tillamook County is non-distressed, with an index value of 1.04. However, three communities within Tillamook County are classified as distressed areas: Garibaldi, Tillamook, and Bay City. The community of Garibaldi is classified as "severely distressed" because it falls below the Oregon Economic and Community Development Department threshold values in all four categories of measurement.

😐 3.10 Employment Diversification

351 jobs were added in Tillamook County from 2001-2004 with growth in several industry sectors. Only three sectors saw a net loss of jobs, while six sectors declined in market share of employment. According to the Hachman Index of economic diversification, Tillamook County's employment distribution went down slightly—from 0.87 in 2000 to 0.80 in 2005—as compared to employment distribution in Oregon.

☺ 3.11 Tourism Spending and Employment in Tillamook County

Tourism spending in Tillamook County has continued to increase over the past decade, although it is increasing at a slightly lower rate than for Oregon. Travel generated employment has remained steady over the past several years and is slowly becoming a larger share of total Tillamook County employment.

☹ 3.12 Number of Tourists Visiting the Tillamook County Creamery

Although the Tillamook County Creamery is still a popular tourism attraction, the number of visiting tourists has declined by over 77,000 from 2001-2005.

☹ 3.13 Number of Students Enrolled in Vocational Supplementary or Preparatory Classes at Tillamook Bay Community College

Attendance in vocational supplementary or preparatory classes at Tillamook Bay Community College has declined by 41% since the 1997-98 school year. Among other internal factors, the decline in enrollment is largely due to a significant decrease in state funding prior to the 2002-2003 school year that resulted in reduced staffing and course offerings at the college.

Society and Culture

The Society and Culture section evaluates goals relating to the health and welfare of county youth, community involvement in schools, and citizen participation in local government. Key findings for each benchmark include:

☺ 4.1 Tillamook County High School Dropout Rate

Although the rate of High School dropouts has fluctuated over the years in Tillamook County it has been declining since 2001 and has remained lower than the rate for Oregon as a whole.

☺ 4.2 Percentage of 8th Graders Who Achieve Established Skills in Reading and Math

Reading and math scores have both fluctuated in Tillamook County over the years, but both are on an improving trend. Since 1997, reading scores have improved by 8.4%, while math scores improved by 14%. Currently, Tillamook County's scores in both areas are lower than those for the state but comparable with scores in other rural counties.

😐 4.3 Tillamook County School Report Cards

From 2001-2005, every school but one in Tillamook County's three school districts was ranked as either satisfactory or strong. In the four-year period, four schools improved from satisfactory to strong, while five schools declined from strong to satisfactory.

☺ 4.4 Pregnancy Rate per 1000 Females Age 10-17

In the past ten years the teen pregnancy rate in Tillamook County has fluctuated significantly. In 1994 the rate reached a low point with only 7 teens out of 1000 getting pregnant. The rate then rose to 21 out of 1000 teens in 1999, higher than either the state or other rural counties. As of 2003, the rate is once again declining and is below the rate for Oregon and other rural counties.

☹ 4.5a Percentage of 8th Grade Students Who Have Used Alcohol, Cigarettes, or Illicit Drugs in the Past 30 Days

After declining numbers of users in 2000 and 2002, alcohol and drug use among 8th graders increased in 2004. Tillamook County 8th graders are using more alcohol and drugs than their peers in other rural counties and in Oregon overall: in Tillamook County, 36% used alcohol and 23% used drugs compared to 30% using alcohol and 17% using drugs in Oregon.

☺ 4.5b 8th Grade Students Who Have Used Cigarettes in the Past 30 Days

On a positive note, cigarette use continues to decline in Tillamook County and around the state. Since 1998, cigarette use among 8th grade students in Tillamook County has declined by almost 19%.

☺ 4.6 Total Juvenile Arrests Per 1000 Juveniles Per Year

After having substantially higher crime rates than other rural counties and Oregon—for crimes against persons in 1997 and crimes against properties in 1994—Tillamook County's juvenile crime rate dropped significantly in both categories and became lower than Oregon or rural counties. However, since 2001, juvenile crime rates in Tillamook County have again risen and are slightly higher than the overall rate for Oregon.

☺ 4.7 Percentage of Registered Tillamook County Voters Who Voted in General Elections

Voter turnout has risen steadily in Tillamook County, especially in presidential election years. There was 86% voter turnout for the 2004 election compared to only 77% for the election in 1996. Voter participation in Tillamook County has remained equal to or higher than state averages from 1996-2004.

Table S-1. Summary of 2006 Benchmarks

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Trend
Growth and Development Benchmarks																	
1.1 Agricultural Land Preservation																	
Total Tillamook County Farmland			39,559					36,551									Data Not Yet Received
Total Tillamook County Pastureland			22,600					21,366									Data Not Yet Received
1.2 Dwelling Approvals in Farm and Forest Land																	
Exclusive Farm Use Zones								4	0	1	1	0	0	1			Improving
Forest Land				2	1.0%	2	2	2	3	2	3	5	1	3			No Change
1.3 Buildable Lands Supply																	Data Not Yet Received
1.4 Residents Served by Safe Drinking Water								66%				69%			89%		Improving
1.5 Wastewater Disposal System Failures	26	37	67	60	32	47	30	48	51	53	48	56	53	52	44	41	Improving
1.6 Road Conditions																	
State-owned																	
Very Good/Good								37				52			54		Improving
Fair/Poor								63				49			46		Improving
County-owned																	
Good/Satisfactory												64			51		Worsening
Fair/Poor												36			49		Worsening
1.7 Commuting by Carpooling and Alternative Means	30.3%										29.2%						Data Not Yet Received
1.8 Owner-Occupied Households	71.3%										71.8%						Data Not Yet Received
1.9 Cost-Burdened Households (Total)	26.4%										25.3%						Data Not Yet Received
Owners	16.7%										21.7%						Data Not Yet Received
Renters	32.9%										31.6%						Data Not Yet Received
Natural Environment Benchmarks																	
2.1 Stream Water Quality Index																	Improving
Excellent/Good				2					4				6				
Fair/Poor				6					4				2				
2.2 Water Quality Limited Streams and TMDLs																	No Update
Waterbodies listed as Water Quality Limited													29				No Update
Number of TMDLs approved													2				No Update
2.3 Bacteria and Sediment Entering Bay																	No Update
2.4 Wild Coho Populations	3,388	11,023	4,164	5,953	6,209	5,573	3,696	3,851	3,764	9,742	19,859	30,037	49,198	57,722			Improving
2.5 Materials Recovery Rate			31%	27%	28%	27%	26%	26%	26%	28%	26%	28%	28%	27%			No Change
Solid Waste per Capita			904.0	1041.2	1191.5	1132.3	1316.5	1208.9	1269.5	1454.4	1465.6	1489.8	1496.3	1569	1668		Worsening

Table S-1. Summary of 2006 Benchmarks

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Trend
Economy Benchmarks																	
3.1 Net Job Growth per 1,000 Eligible Workers	15.5	15.5	1.0	6.1	18.9	10.9	13.8	1.5	4.1	10.8	2.6	-0.6	0.7	-2.2	8.3		Improving
3.2 Forest Industry Employment																	
Jobs	389	410	434	491	516	536	498	518	541	555	548	390	410	410	440		Worsening
Wages in 2000 Dollars	$31,205	$30,883	$32,070	$30,421	$32,751	$31,128	$33,578	$34,591	$34,820	$34,969	$34,714	$36,397	$38,797	$43,279	$45,308		Improving
3.3 Farm Sector Employment (#)		3000	2940	2970	3280	3110	3110	2820	2880	2731	2849	2652	3233	3230	3146		Improving
Agricultural		650	600	560	580	590	570	540	530	520	520	505	520	540	550		Minimal Change
3.4 Average Annual Payroll per Covered Worker in 1995 Dollars		$18,409	$18,374	$18,958	$19,195	$19,349	$19,485	$19,598	$20,182	$20,690	$21,267	$21,787	$26,452	$27,092	$27,726		Improving
3.5 Per Capita Income as a Percentage of US Per Capita Income	76.0%	77.0%	76.2%	76.8%	78.4%	78.5%	81.1%	80.1%	80.2%	81.3%	79.5%	80.8%	81.5%	80.1%			Improving
3.6 Population Below Poverty Level	9.7%	9.7%	14.1%	12.8%	15.0%	13.2%	13.2%	13.6%	14.3%	11.4%	11.8%	11.9%	11.8%	11.1%	11.0%	11.2%	Improving
3.7 Students Receiving Free or Reduced-Cost Lunches (All Districts)							44.3%	48.2%	52.7%	39.6%	40.3%	43.4%	42.4%	47.5%	46.0%	48.9%	Worsening
3.8 Unemployment Rate	5.9%	6.0%	6.8%	6.1%	4.9%	5.0%	5.7%	6.3%	6.4%	5.1%	5.1%	6.1%	6.6%	7.3%	7.1%		Minimal Change
3.9 Distressed Status of Tillamook County												Not Distressed (ND)				ND	Worsening
Number of Distressed Cities													3			3	
3.10 Employment Diversification											0.87					0.80	Minimal Change
3.11 Tourism Spending and Employment																	Improving
Spending (In $Millions)					$96.5	$100.8	$107.1	$112.4	$116.5	$121.5	$128.9	$139.4	$143.9	$145.2	$151.3		Improving
Tourism Generated Employment					1,640	1,660	1,710	1,700	1,790	1,800	1,830	1,960	1,990	1,970	1,970		Minimal Change
3.12 Tourists Visiting Tillamook Creamery					893,944	900,331	814,537	878,295	906,208	900,666	917,185	1,021,633	969,587	966,980	976,748	944,497	Worsening
3.13 Students in Vocational Training at TBCC (Headcount)							955	1294	1394	1251	1195	1229	1051	910	825	819	Worsening
Society and Culture																	
4.1 High School Dropout Rate	5.6%	3.8%	4.1%	3.2%	3.5%	4.8%	5.9%	5.5%	4.4%	4.9%	3.7%	3.8%	4.6%	4.3%	4.0%		Improving
4.2 8th Graders Achieving Skills Levels																	Improving
Reading								49.5%	47.3%	44.3%	63.8%	56.9%	52.8%	56.7%	55.4%	57.9%	Improving
Math								46.1%	48.8%	52.6%	56.1%	51.6%	45.3%	56.1%	63.5%	60.1%	Improving
4.3 School Report Cards (All Districts)																	Minimal Change
# Rated as Strong													4	2	1	4	
# Rated as Satisfactory													8	6	6	7	
4.4 Teen Pregnancy Rate per 1000	23.8	19.4	16.3	13.3	7.1	15.7	17.3	15.2	15.6	21.0	7.8	8.5	14.4	6.7			Improving
4.5 Substance Use Among 8th Graders in last 30 Days																	Worsening
Alcohol									34.3%		32.1%		27.3%		36.4%		Worsening
Drug Use									23.1%		19.3%		9.4%		23.2%		Worsening
Cigarette Use									26.8%		14.0%		12.7%		7.9%		Improving
4.6 Juvenile Arrests per 1,000 (Total)			26.6	34.5	52.7	39.1	32.2	26.4	32.2	16.5	12.5	11.0	12.1	17.8			Improving
Crimes Against Persons			3.9	6.6	7.1	6.4	5.3	8.7	8.3	5.7	3.2	1.5	1.9	4			Improving
Property Crimes			22.7	27.9	45.6	32.7	27.0	17.7	23.9	10.8	9.3	9.5	10.2	13.8			Improving
4.7 Voter Participation	81.1%		86.8%		76.6%		77.1%		69.9%		80.0%		71.7%		85.9%		Improving

TILLAMOOK COUNTY, OREGON

From the "Land of Many Waters"...

Used by the Killamuck tribe to define the richness of a land shaped by water, today the word "Tillamook" defines not just a place but also an identity. When, in the mid - eighteenth century, European settlers first arrived in the Native Americans' "land of many waters," they encountered a region of apparently endless natural resources. Coastal rivers, which teemed with salmon, roared down the western slope of coastal mountains dominated by towering coniferous forests. Where they met the sea, these rivers fed fertile valleys and estuaries rich with aquatic and terrestrial life. These resources, and the water that continues to sustain them, have characterized this place and its inhabitants for centuries.

… to "Cheese, Trees, and Ocean Breeze"

Since its settlement by Europeans in 1853, Tillamook County has used its abundant supply of natural resources to build its economy and carve a special way of life into the coastal lands of Northwest Oregon. Logging and fishing have provided long term economic benefits to Tillamook's communities, but in a county where cows outnumber people, it is dairy farming that defines this region. Made fertile through centuries of rich river deposits, settlers found Tillamook County's lowland areas ideal for pastureland and small dairies. In 1909, seven local cheese factories allied to create a cooperative known as the Tillamook County Creamery Association. Today, the "Creamery", as it is known locally, is a mainstay of Tillamook County's economy and has become nationally recognizable for its high quality cheeses and other dairy products.

A direct link to Tillamook County's past, ironically the Creamery also provides a look at the county's future. In addition to providing high quality dairy products, the Creamery has also become one of Oregon's most-visited tourist destinations—often ranking only behind Multnomah Falls, Crater Lake, and/or tribal gaming casinos, depending on the year. This fact reflects an important trend in Tillamook County's economic and cultural development. Over the past decade or so, the county has witnessed a gradual shift from an economy comprised primarily of resource extraction industries to one that also maintains a growing service industry.

What spawned this change? First, although resource-based industries have almost single-handedly developed the county economy, it has not come without cost. Many salmonid runs have been in steep decline for decades, diminished water quality often closes bays to recreational and

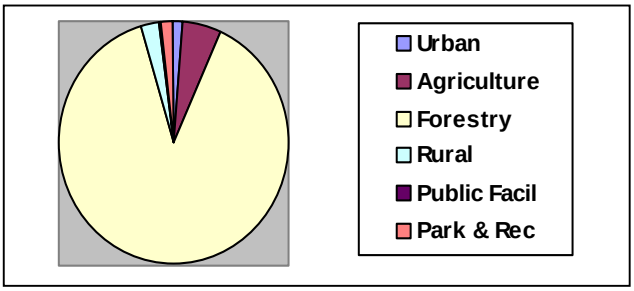
commercial shellfish harvesting, and resource-based industries have declined under increasing scrutiny from the environmental community and government regulators. Second, throughout the West, many will explain that "the secret of the Oregon coast is out." Breathtaking coastal vistas combined with moderate winters and warm, sunny summers have made Tillamook County increasingly popular for seasonal tourism, second home development, and retirement living. Together, these factors continue to transform the county's economic, political, and cultural landscapes. Like the steady breezes that blow off its coast, these trends will continue to bring change to Tillamook County and its residents.

The Land…

Located west of Portland, Tillamook County comprises 1,125 square miles of forests, farms, and small communities. The majority of Tillamook County is zoned for forest use followed by agriculture, rural residential, parks and recreation, urban zones, and public facilities.[2]

Coniferous forests dominate virtually all of the land found within the Tillamook County coast range. The Oregon Department of Forestry owns roughly 310,000 acres of forestland within the Tillamook State Forest. A large portion of these lands were held in trust for the county after they were burned in a series of fires known collectively as the "Tillamook Burn." The four major fires occurred at six-year intervals between 1933 and 1951. Virtually all of the lost forest has regenerated, and much of it stands ready to harvest.

2002 Land Use, Tillamook County



Source: Tillamook County Department of Community Development

Dairy farms and a small amount of cropland comprise the majority of Tillamook County's unurbanized low elevation lands.

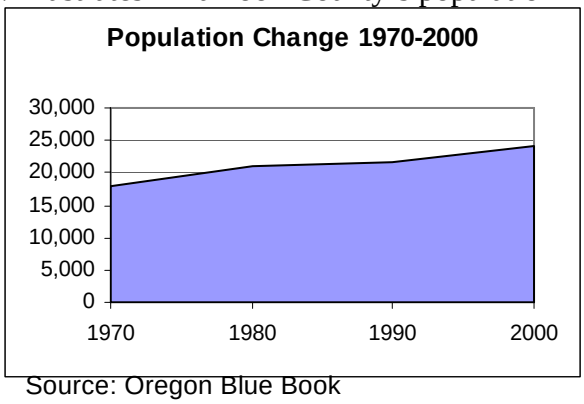
In addition to several small unincorporated communities, the county contains seven incorporated communities ranging in population from Nehalem with 210 residents to the City of Tillamook with 4,300.[3] All of these communities lie on or near Highway 101, which runs along the Tillamook County coastline.

Eight major rivers systems drain Tillamook County, and five major estuaries provide critical habitats for a range of aquatic and terrestrial species. Tillamook County's northernmost estuary, Nehalem Bay, is fed by the Nehalem River. To the south, the Tillamook Bay basin is drained by the Miami, Kilchis, Wilson, Trask, and Tillamook Rivers. Small coastal systems drain into Netarts Bay and Sand Lake, while the Nestucca and Little Nestucca Rivers empty into the Nestucca Bay in southern Tillamook County. All of the rivers boast runs of anadramous salmonids, though the numbers of these fish have declined considerably as a result of ocean harvest and alterations to terrestrial and aquatic habitats.

[2] 2006 data for county land uses is currently unavailable.
[3] 2005 population estimates, "2005 Oregon Population Report," Population Research Center, Portland State University, 2005.

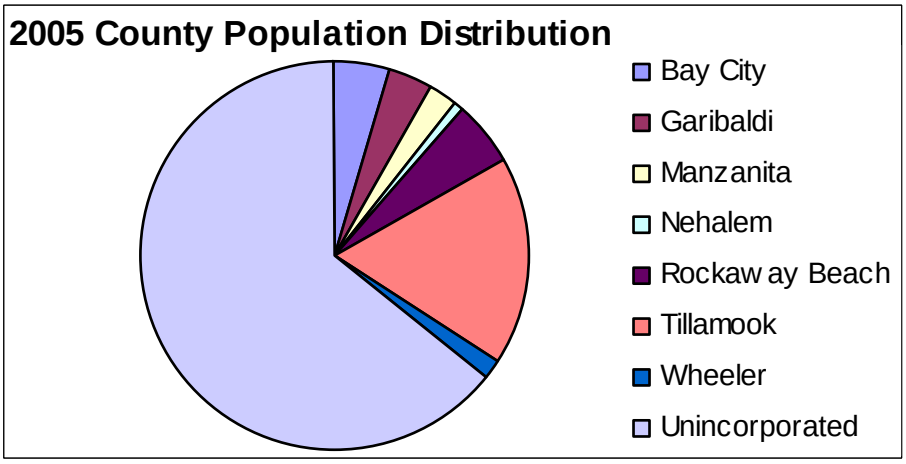
…and its People

Tillamook County's estimated 2005 population is 25,205. This amounts to a 4% growth rate from its 2000 population of 24,262. The graph below illustrates Tillamook County's population change from 1970 to 2000. The decade from 1980 to 1990 shows a relatively flat growth rate, with a population change of only 2%. On the other hand, the decade from 1990 to 2000 enjoyed a strong growth rate and population increased by 12%.



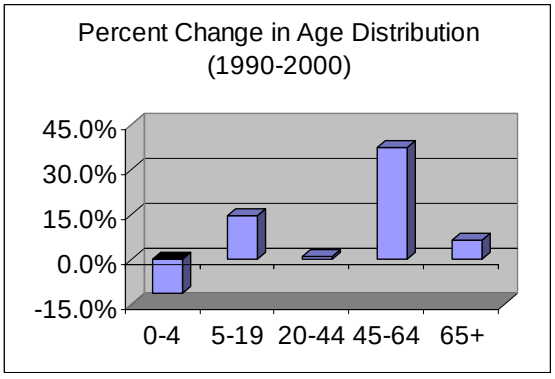
Source: Oregon Blue Book

The pie chart below shows the 2005 population distribution of Tillamook County. As the chart illustrates, 64% of the population of Tillamook County resides in unincorporated areas. As Tillamook County gained population from 2000 to 2005, two of the top areas of population growth were the community of Manzanita and unincorporated areas. The population of Manzanita increased by 105 residents, or 17%, while unincorporated areas saw growth of 5%.



Source: Portland State University Population Research Center

According to 2000 U.S. Census data, the average age of Tillamook County's citizens is increasing. In 1990, almost 44% of county citizens were over the age of 45. By 2000, nearly 48% were over 45. During the same period, Tillamook County's youth population declined. From 1990 to 2000, the population of children ages newborn to four declined by more than 11%. The figure on the right summarizes changes in county age distribution.



Source: U.S. Census, 1990 & 2000

According to the 2000 U.S. Census, in 1999, 93.2% of Tillamook County's population was White, 5.1% Hispanic, and slightly more than 1% African American and Native American combined. County planners anticipated an increase in the

Hispanic population since the 1990 census. Indeed, after comprising 1.7% of the population in 1990, the Hispanic population more than doubled between 1990 and 2000.

Reflecting the growing retiree population, sixty percent of Tillamook County households receive personal income from social security and retirement income sources. Nearly 40% of households receive personal income from investment sources including rent, dividends, and interest payments. About 7% of households receive income from transfer payments (Social Security Income and public assistance). Finally, 84% of households receive income derived from wages, salary, or self-employment.

INTRODUCTION TO BENCHMARKS

Background: Strategic Visioning in Tillamook County

In October 1997, the Tillamook County Commissioners appointed a 12-member Futures Council to create the Tillamook County Strategic Vision. The commissioners charged the group to "develop a long range vision for the county through broad-based citizen input representing the various geographic regions and full range of interests that exist within the county."

To engage Tillamook County residents and landowners in the Visioning exercise, the Futures Council initiated a six-month public outreach process. This process focused on defining issues common throughout Tillamook County communities. Specifically, it used local input to devise countywide goals as well as the strategies that should be implemented to achieve them. During the Visioning process, the Futures Council:

Conducted 17 focus group meetings to identify the insights and concerns of community stakeholder groups;

- Distributed a survey to more than 4,000 households to insure widespread community input; and
- Held a series of public meetings, which used electronic voting, to identify and prioritize strategies that would help the county reach its Vision.

This process yielded feedback from more than 1,000 Tillamook County residents and landowners. Using their input, the Futures Council created the Tillamook County Strategic Vision. Published in February of 1999, the Strategic Vision or Big Book, as it has come to be known, represents Tillamook County residents' views on a wide range of issues. The Vision is divided into four sections representing economy, growth and development, the natural environment, and society and culture. Within each of these four sections, the Vision defines long-range community goals. In support of these goals, the Vision lays out strategies that can be implemented to achieve them and benchmarks that will measure the county's progress. These benchmarks are the subject of this report.

Shortly after the release of the Vision, the Futures Council initiated an effort to quantify the benchmarks contained in the Vision. The objective of the benchmarking process was to establish baseline data that reflect the current status of the county in regard to the goals contained in the Vision. The benchmarks contained in the 2000 Benchmarks Report update this baseline data and, where possible, provide past data to show trends. This update provides the most recent data available as of March 2006, and illustrates trends since the original benchmark report.

Purpose of Benchmarks

Will Rogers once said, “you can’t figure out where you are going until you know where you’ve been." As Tillamook County works towards its 2020 Vision, the community must first assess its current condition. Benchmarks provide the tool for this. In simplest terms, benchmarks provide numerical measurements of some part of the world in which we live. Whether they count the numbers of fish in our rivers or the percentage of residents living below the poverty line, benchmarks measure some element of our community that is of value to us. As a community measuring stick, they are vital to the long term visioning process. By assessing our condition in the present, benchmarks help guide policies in the future. Through tracking benchmarks over the long term, we ensure that our steps take us in the right direction and our communities develop according to the values of their residents. Ultimately, benchmarks tell us how we are doing as a society in the present and provide a yardstick for the future.

This publication represents the third edition of Tillamook County benchmarks in an ongoing series of benchmarking efforts. Over the years to come, the Futures Council will continue to periodically revisit (and perhaps revise) the benchmarks contained here. In fact, some of the benchmarks contained in this third edition were modified from the initial set of benchmarks due to data limitations. Through this ongoing process of updating and revising the initial benchmarks, the Futures Council will determine trends in the community’s overall health and welfare. As an unbiased advisory board, they will then be able to counsel policy makers on the county’s success in responding to those issues that are most vital to area residents and landowners.

Methods Used in Creating Benchmarks

The benchmarks contained in the Strategic Vision are modeled after the Oregon Progress Board’s benchmarks for the state of Oregon and its counties. Like the Progress Board, the Futures Council uses benchmarks as a means of monitoring the success of achieving its Vision. Consequently, the Futures Council attempts to use the Oregon Progress Board’s benchmarks wherever they are appropriate and local data are available. It should be noted that unlike those contained in Oregon Shines (the state of Oregon’s Strategic Vision), the benchmarks contained within this report do not prescribe numerical targets to reach at a future date. The Futures Council views its role in public policy as an organization that monitors the Vision and facilitates processes that help achieve it. The Council leaves the task of prescribing targets to those who are most actively involved with the policies touched upon in the Strategic Vision.

In selecting benchmarks to assess the goals contained in the Strategic Vision, the Futures Council applies two primary criteria. First, they use those benchmarks for which data are consistently and readily available. Because it is important to show trends, it is vital that the data selected for the benchmarks will be available in the future. Second, benchmarks must reflect the goals contained in the Vision. The Strategic Vision is based entirely on public input. As a result, benchmarks must assess indicators vital to the interests of the community.

Organization of this Report

This report is divided into four sections, each corresponding to the four major elements of the Strategic Vision: economy, the natural environment, community growth and development, and society and culture. Each of the four sections begins with a summary of the benchmarks and how they relate to the goals contained in the Vision. An important part of this discussion is a summary of the unique obstacles encountered in quantifying the benchmarks found in a given section.

Following this introduction is a section explaining the changes in the benchmarks since the 2002 Benchmarks Report. The subsequent sections detail the benchmarks analyzed by the Futures Council. Specifically, each benchmark contains the following information:

- Background information**,** including why it is important to Tillamook County and what goal(s) it relates to;
- Data sources**,** including a reference to the corresponding Oregon Progress Board Benchmark (where appropriate); and
- Findings**,** including a brief discussion of the data which is accompanied by tables and figures.

A Final Note on this Report - The Limitations of Benchmarks

Many policy makers are attracted to benchmarks because they provide a relatively quick and accurate report card on the effectiveness of policies. Failure to recognize the obstacles discussed above can prove costly, however. Because some goals are easily assigned a corresponding benchmark and data are readily available, the potential exists for the importance of those goals to become inflated relative to less measurable goals. Likewise, policy makers run the risk of diminishing the importance of those goals that cannot be easily measured through benchmarks. In monitoring the goals contained in the Strategic Vision, policy makers must not lose sight of the fact that poorly measured goals are no less important to the community's interests than those which allow for quick and easy measurement.

No simple solution exists for this problem. Policy makers will be tempted to focus only on those goals for which their investments of time and money show clear and measurable benefits. Likewise, they may be tempted to discard benchmarks all together because of the inconsistencies that exist. Instead of 'throwing the baby out with the bath water', however, policy makers must recognize the importance of those goals that cannot be easily measured. To address all of the goals contained in the Strategic Vision, including both those that are easy and difficult to measure, policy makers must focus on implementing the strategies contained in the Vision instead of working solely towards individual benchmarks. Implementation of the strategies will insure that even those goals not easily measured will be pursued through on-the -ground efforts. For those community goals that cannot be measured, the Futures Council will continue to seek to develop appropriate benchmarks.

MODIFICATIONS TO BENCHMARKS

Background: Review of Benchmarks

As part of the benchmark update process, Community Planning Workshop (CPW) reviewed the Futures Council 2002 Benchmarks. In reviewing the 2002 benchmarks, CPW found that some benchmarks relied on data that are not regularly available or are very difficult to obtain. Other benchmarks did not adequately address the Futures Council's goals. CPW reviewed its findings with the Futures Council and revised the benchmarks per the Council's direction. These changes are intended to strengthen the Futures Council's benchmarks and improve the benchmark update process in the future. Following is an explanation of the modifications made to the benchmarks in this update.

Growth and Development

Percent of agricultural land in 1987 still preserved for agricultural use. As of 2006, no current compatible data sources exist for this benchmark. Data on agricultural lands comes from two main sources: the United States Department of Agriculture 2002 Agricultural Census and the Tillamook County Community Development Department. Although the 2002 Agricultural Census provides the latest official data, the census data conflicts with current data from the Tillamook County Community Development Department. Therefore, this benchmark was unable to be updated in 2006 and will await further clarification prior to the next update.

Buildable land supply. Though this benchmark was introduced during the 2002 update, no new or accurate data was available in 2006. Additionally, the 2002 update concluded that data were very difficult to collect for this benchmark, and the numbers provided for the 2000 Benchmarks Report were "best guesses," which do not provide accurate, systematic data that can be tracked over time. Therefore this benchmark could not be updated. Original data on the County's buildable land supply were provided by the Director of the Tillamook County Community Development Department.

Percentage of state and county road miles within Tillamook County that meet prescribed standards. The prescribed standards for county road miles changed since 2002. Like the state of Oregon, it uses a 100-point scale. However, the county and the state use different categories, so it is not possible to compare the two sets of data. These changes suggest that county road mile data for 2002 may not be accurately compared to 2006 data.

Percentage of Tillamook County residents who commute to and from work by means other than a single occupancy vehicle. The data source for this benchmark is the U.S. decennial census. Because new data will not be available until 2010, no new data exists for this benchmark.

Percentage of households that are owner-occupied The data source for this benchmark is the U.S. decennial census. Because new data will not be available until 2010, no new data exists for this benchmark.

Percentage of Households Spending More than 30% of their Household Income on Housing (Including Utilities). The data source for this benchmark is the U.S. decennial census. Because new data will not be available until 2010, no new data exists for this benchmark.

Natural Environment

Trends in Water Quality Limited Streams and TMDL Approvals The Oregon Department of Environmental Quality maintains a database of streams that have been deemed Water Quality Limited. Streams are removed from this list once a Total Maximum Daily Load (TMDL) Plan has been approved by the US Environmental Protection Agency. Data obtained from the 2002 update indicates that the Tillamook Bay watershed and Nestucca Bay received U.S. EPA approvals in 2001 and 2002, respectively. However, no new or available water quality data exits for these regions.

Bacteria and Sediment Loads Entering Tillamook Bay. This benchmark cannot be updated since new data are costly to collect and will only be collected every 5-10 years. The Futures Council should update this benchmark when new data become available.

Wild Salmon and Steelhead Populations Levels. The dramatic increase in Wild Coho can not be the sole indicator of healthy population levels without other determinants. This benchmark has been slightly modified to look at population levels as well as trends in population viability. The update includes criteria for population viability based on specific Oregon Fish and Wildlife standards.

Economy

Status of Tillamook County and its Cities as "Distressed Areas." Each year the Oregon Economic and Community Development Department (OECDD) updates its list of distressed communities. The methodology for this benchmark was recently revised due to technical and data difficulties in previous years. The revised methodology is explained below and can also be found online at: www.econ.state.or.us/distMethods.htm.

To determine whether a **county** is distressed or not, four factors were used to create an index. These factors are:

- Employment change (over the most recent period for which data is available);
- Average wage change (over the most recent period for which data is available);
- Annual unemployment rate relative to state (latest year for which data is available); and
- Per capita personal income relative to state (latest year for which data is available).

The index is a composite of these four factors. A county is distressed if its index is less than 1.0 and non-distressed otherwise. If a county is distressed, all of its parts are considered to be

distressed. An index less than one shows that, on average, economic conditions worsened for a county relative to the state over the period under consideration.

To determine whether an **incorporated city or sub-city area in a non-distressed county** is distressed, four factors were used:

- Poverty rate (i.e. percent of the population in poverty);
- Per capita personal income;
- Percent of population aged 25+ with college education; and
- Unemployment rate.

If three or more of these factors were worse than a threshold value, then that place was identified as distressed. The threshold value is a representative value for each of the four factors in distressed counties.

Employment Diversification. Beginning in 2001, industries are classified using the NAICS code system instead of the SIC code system. Because of significant differences between these methods of classification, data for 2001 are not comparable with prior years.

Society and Culture

Total Juvenile Arrests Per 1000 Juveniles Per Year. The 2002 update of the benchmarks shows three categories of juvenile crime: behavioral, crimes against persons, and crimes against property. The Oregon Progress Board currently only has data for two categories of juvenile crime: crimes against persons and crimes against property. Therefore, only the two categories of crime were updated and the behavioral crime category was left out of this update.

CHAPTER 1: GROWTH AND DEVELOPMENT BENCHMARKS

Benchmark 1.1	Percentage of Agricultural Land in 1987 Still Preserved for Agricultural Use
Benchmark 1.2	Dwelling Approvals in Exclusive Farm Use Zones and Forest Lands
Benchmark 1.3	Buildable Land Supply in Tillamook County
Benchmark 1.4	Percentage of Tillamook County Residents Served by Public Drinking Water that Meets Health Based Standards
Benchmark 1.5	Percentage of Tillamook County Households with On-Site Sewage Disposal Systems that Do Not Meet Government Standards
Benchmark 1.6	Percentage of State and County Road Miles within Tillamook County that Meet Prescribed Standards
Benchmark 1.7	Percentage of Tillamook County Residents who Commute to and from Work by Means Other than a Single Occupancy Vehicle
Benchmark 1.8	Percentage of Households that are Owner-Occupied
Benchmark 1.9	Percentage of Households Spending More than 30% of their Household Income on Housing (including utilities)

GROWTH AND DEVELOPMENT BENCHMARKS

Introduction

In 1973, the state legislature created the Oregon Statewide Land Use Planning System. The driving force behind the creation of this system was the desire among Oregonians to control growth and development in a manner that maintains livable communities while conserving Oregon's vast supply of natural resources. Not surprisingly, during the Visioning process, Tillamook County residents echoed many of the same sentiments that provided the foundation of the statewide program 25 years ago. The preservation of farm and forest land, concentrated development, maintained infrastructure, affordable housing; during the Visioning process, all of these principles emerged as vital to the interests of Tillamook County residents and landowners. As a result, the Strategic Vision offers an array of strategies that focus on these four goals. Like the state program, the dominant theme throughout the Growth and Development section is to direct development in a way that creates livable communities while preserving the county's rural character and abundant natural resources.

About the Growth and Development Benchmarks

Growth and development issues emerge at many levels of government. Local communities face a wide range of growth and development issues and challenges, while state and county governments formulate policies that foster prudent land use. This poses an interesting challenge to benchmarking. While it is important to record the unique growth and development issues confronting each town and city, it is impractical to devise benchmarks that measure individual communities. As a result, the benchmarks presented in this chapter evaluate countywide data to determine regional trends that affect the greatest number of communities.

These benchmarks respond to the concerns of county residents by evaluating the Growth and Development goals presented in the Strategic Vision. Goal 1.1, which focuses on concentrating growth, is measured using the percentages of agricultural land preserved; approvals for the construction of dwellings on forest and farm lands; and the supply of buildable land. The maintenance of infrastructure, presented in Goal 1.2, is assessed by evaluating existing sewage, water treatment, and road systems. This chapter evaluates Goal 1.3, the use of alternative modes of transportation, by measuring the use of transportation modes other than the automobile. Finally, Goal 1.4, which promotes affordable housing, is assessed by measuring owner-occupancy rates and the numbers of residents for whom housing is a cost burden.

In the years to come, the Futures Council will continue to track these benchmarks. As trends develop, these benchmarks will assist policy makers in determining the county's success at maintaining sustainable, livable communities, where all may share in and preserve the unique qualities of Tillamook County.

The list below contains a summary of the goals found in the Growth and Development section of the Tillamook County Strategic Vision. Beneath each goal is listed the benchmark(s) with which the Futures Council has chosen to assess it.

Goal 1.1 Manage growth in a manner that creates vibrant towns while maintaining the rural character of the countryside by concentrating growth in existing communities and by protecting our farms, forests, rivers, bays, beaches and coastline.

- Benchmark 1.1 Percentage of Agricultural Land in 1987 Still Preserved for Agricultural Use
- Benchmark 1.2 Dwellings Approvals in Exclusive Farm Use Zones and Forest Lands
- Benchmark 1.3 Buildable Land Supply in Tillamook County

Goal 1.2 The infrastructure (e.g. roads, schools, sewer, water, fire, medical services, etc.) that serves our communities is improved and maintained.

- Benchmark 1.4 Percentage of Tillamook County Residents Served by Public Drinking Water that Meets Health Based Standards
- Benchmark 1.5 Percentage of Tillamook County Households with On-Site Sewage Disposal Systems that Do Not Meet Government Standards
- Benchmark 1.6 Percentage of State and County Road Miles within Tillamook County that Meet Prescribed Standards

Goal 1.3 Alternative modes of transportation (including bicycles, rail, air, etc.) are encouraged.

- Benchmark 1.7 Percentage of Tillamook County Residents who Commute to and from Work by Means Other than a Single Occupancy Vehicle

Goal 1.4 Our County offers an array of affordable housing.

- Benchmark 1.8 Percentage of Households that are Owner-Occupied
- Benchmark 1.9 Percentage of Households Spending More than 30% of their Household Income on Housing (including utilities)

Benchmark 1.1 Percentage of Agricultural Land in 1987 Still Preserved for Agricultural Use

No compatible new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark addresses Goal 1.1:

> *Manage growth in a manner that creates vibrant towns while maintaining the rural character of the countryside by concentrating growth in existing communities and by protecting our farms, forests, rivers, bays, beaches and coastline.*

One of the principles that gave rise to the Oregon Statewide Land Use Planning System was the desire among Oregonians to preserve farm and forest land. By protecting farm and forest lands, Oregonians insure that the cultural and economic contributions provided by farming and logging are not lost to the rapid growth that is so prevalent throughout the west. The Statewide Planning Program is vital to an area like Tillamook County, where increasing development could otherwise threaten the industries upon which the region was founded.

During the Visioning process, Tillamook County residents clearly indicated a desire to see their rural areas conserved, and the ethic of protecting farm and forests is embedded in many of the Strategic Vision's goals. Farming received particular attention during the Futures Council's March 1998 Tillamook County Household Survey, with 72% of respondents agreeing that protecting farmland is essential to the county's economy. In addition, 69% agreed or strongly agreed with the statement that "farmland provides open space that is essential to [residents'] quality of life." This benchmark measures how effectively Tillamook County is preserving its agricultural land.

As of 2006, no current compatible data sources exist for this benchmark. Data on agricultural lands comes from two main sources: the United States Department of Agriculture 2002 Agricultural Census and the Tillamook County Community Development Department. Although the 2002 Agricultural Census provides the latest official data, the census data conflicts with current data from the Tillamook County Community Development Department. Therefore, this benchmark was unable to be updated in 2006 and will await further clarification prior to the next update.

Data Sources

Data were obtained for this benchmark through:

- United States Department of Agriculture: Natural Resource Conservation Service, 1999 Natural Resource Inventory
- United States Department of Agriculture, 1997 Agricultural Census
- Bill Campbell, Director, Tillamook County Community Development Department

State Benchmark

- Oregon Progress Board Benchmark # 80, 81

Findings

Table 1-1 and Figure 1-1 indicate that between 1987 and 1997, Tillamook County's total farmland area declined by 993 acres. It may appear that this decline was caused by converting farmland to other uses. However, from 1982 to 1987, the State-mandated Exceptions Process required the County to recognize existing single-family residential use on a total of 4,300 acres in a mixed rural residential, agriculture, or forestry zone. The 933 acres were pare of that 4,300-acre total.

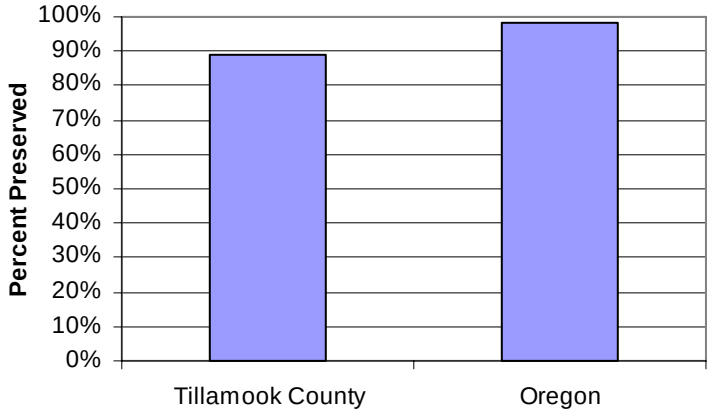
So while the State-mandated recognition gives the appearance of converting farmland to other uses, in fact, the amount of Tillamook County pastureland has held steady since 1987 (Table 1-1, last row). The dairy industry's recent success in preserving its pastureland is likely due to a number of forces, including the economic health of the Tillamook County Creamery Association, as well as the TCCA's commitment to "no net loss of pastureland" among its producers.

Table 1-1
Acreage in Farm Production in Oregon and Tillamook County (1987–1997)

	1982	1987	1992	1997	Percent Preserved 1982-1997
Total Tillamook County Farmland	N/A	39,913	39,559	35,580	89.14%
Total Oregon Farmland	17,739,782	17,809,165	17,609,497	17,449,293	97.98%
Tillamook County Pastureland	25,800	22,400	22,600	22,500	87.21%

Sources: USDA Agricultural Census and NRCS Natural Resources Inventory

Figure 1-1
Percentage of Land Preserved for Agricultural Use in Oregon and Tillamook County since (1982–1997)



Source: USDA Agricultural Census

Benchmark 1.2 Dwelling Approvals in Exclusive Farm Use Zones and Forest Land

Background

This benchmark measures the success of achieving Goal 1.1:

> *Manage growth in a manner that creates vibrant towns while maintaining the rural character of the countryside by concentrating growth in existing communities and by protecting our farms, forests, rivers, bays, beaches, and coastline.*

During the Visioning process, survey respondents expressed very strong support for encouraging development within the established cities and communities and for preserving rural resource lands and uses. More than two thirds of respondents agreed with the statement, "we need to direct development to already established towns in order to protect our farms and forests and maintain our rural quality of life." Only nine percent of those responding disagreed with this statement.

As development occurs, these areas lose their rural character, taking on the appearance of towns without the benefit of urban services. Moreover, rural development often conflicts with rural resource use, including farming and forestry, and it may adversely impact natural features such as rivers, bays, and beaches.

This benchmark measures the effectiveness of attempts to direct development to existing cities and communities by tracking the number of dwelling approvals in exclusive farm use and forest land zones—the fewer the number of permits, the more effective the attempts. This is related to Benchmark 1.1 in that it indirectly measures resource land conservation of farm and forestland. Over time this benchmark will provide a clear indication of how much construction is occurring on resource lands and how effectively policy makers are responding residents' desires.

Data Source

Data were obtained for this benchmark through:

- Department of Land Conservation and Development, Rural Lands Division, *2003 Forest Report*, "Dwelling Approvals on Forest Land", and *2003 Farm Report*, "Dwelling Approvals on Exclusive Farm Use Land" www.lcd-state.or.us/rural/

Related State Benchmark

- Oregon Progress Board Benchmarks #80 and #81

Findings

Tables 1-2a and 1-2b list the number of building permits granted for residential dwellings on Forest Lands and Exclusive Farm Use Lands, respectively, between 2000 and 2003. As Oregon attempts to preserve all forestlands at 92% of 1970 levels, minimizing approvals and permits is extremely important to Tillamook County. The small number of annual dwelling approvals on both forest and farmlands indicates that Tillamook County is successfully directing development away from resource lands.

Table 1-2a
Dwelling Approvals on Forest Land. 2000-2003

	2000	2001	2002	2003
Tillamook County	3	5	1	3
Oregon	341	407	266	303

Source: Department of Land Conservation and Development

Table 1-2b
Dwelling Approvals on Exclusive Farm Use Lands, Tillamook County, 1997-2003

	1997	1998	1999	2000	2001	2002	2003
Tilamook County	4	0	1	1	0	0	1
Primary Farm	1	0	1	0	0	0	0
Lot of Record	0	0	0	0	0	0	0
Non-Farm Dwellings	3	0	0	1	0	0	1
Oregon	530	404	389	384	482	444	404

Source: Department of Land Conservation and Development

Benchmark 1.3 Buildable Land Supply in Tillamook County

No new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark measures the success in achieving Goal 1.1:

> *Manage growth in a manner that creates vibrant towns while maintaining the rural character of the countryside by concentrating growth in existing communities and by protecting our farms, forests, rivers, bays, beaches, and coastline.*

During the Visioning process, survey respondents expressed very strong support for encouraging development within the established cities and communities and for preserving rural resource lands and uses. More than two thirds of respondents agreed with the statement, "we need to direct development to already established towns in order to protect our farms and forests and maintain our rural quality of life." Only nine percent of those responding disagreed with this statement.

As development occurs, these areas lose their rural character, taking on the appearance of towns without the benefit of urban services. Moreover, rural development often conflicts with rural resource use, including farming and forestry, and it may adversely impact natural features such as rivers, bays, and beaches.

This benchmark measures the effectiveness of the state planning requirement that cities provide a 20-year supply of buildable land, and the amount of development potential in rural unincorporated communities.

The data source for this benchmark is the Tillamook County Department of Community Development.

Data Source

Data were obtained for this benchmark through:

- Tillamook County Community Development Department. Bill Campbell, Director, (503) 842-3408, http://www.co.tillamook.or.us/gov/comdev/planning (see the Periodic Review page)

Related State Benchmark

None

Findings

Table 1.3a shows developable residential land in Tillamook County's unincorporated communities and rural areas. Some development is allowed to occur in rural unincorporated communities and in rural areas that are granted exceptions to statewide goals restricting development on farm and forest lands. Table 1.3a shows that Tillamook County has substantial development potential in rural areas. While this development does not directly affect farm and forest lands, rural development can create demand for services and land use conflicts that are inconsistent with agricultural and forestry operations. Table 1.3b shows development potential in incorporated cities. The potential parcels column accounts for land divisions and is for all land uses.

Table 1.3a
Developable Residential Land in Tillamook County's Unincorporated Communities and Rural Areas

Unincorporated Communities	Total Land Area (Acres)	Developable Residential Land (Gross Acres)	Potential Lots for Residential Development
Barview-Watseco-Twin Rocks	269	230	798
Beaver	262	177	289
Cape Meares	171	116	277
Cloverdale	154	111	515
Falcon Cove	66	49	54
Hebo	122	80	133
Idaville	34	8	17
Mohler	8	1	2
Neahkahnie	298	224	498
Neskowin	1,500	na	1,426
Netarts	398	na	655
Oceanside	372	na	671
Pacific City-Woods	674	na	2,194
Siskeyville	151	86	179
Tierra del Mar	317	278	466
Subtotal	**4,796**	**1,360**	**8,174**
Rural Exception Areas	**13,858**	**8,155**	**3,589**
Total	**18,654**	**9,515**	**11,763**

Source: Tillamook County Community Development Department, 2002

Table 1.3b
Development potential in Urban Growth Boundaries

City	Total Acres	Number of Parcels	Developed Parcels	Potential Parcels
Bay City	881.3	1,205	611	2,716
Garibaldi	226.1	500	491	382
Manzanita	467.2	1,510	1,195	1,909
Nehalem	557.8	686	424	3,733
Rockaway Beach	383.0	1,753	917	1,633
Tillamook	885.2	2,024	1,854	1,332
Wheeler	242.5	463	220	1,082
Total	3643.1	8,141	5,712	12,787

Source: Tillamook County Community Development Department, 2002

Benchmark 1.4 Percentage of Tillamook County Residents Served by Public Drinking Water[4] that Meets Health Based Standards

Background

This benchmark provides a measure of success for Goal 1.2:

> *The infrastructure (e.g. roads, schools, sewer, water, fire, medical, etc.) that serves our communities is improved and maintained.*

For much of the last decade, the U.S. Environmental Protection Agency has provided funding to state governments to improve water treatment and manage pollution of surface and ground water supplies. This is reflected in the continuing progress enjoyed by the State of Oregon in regard to its supply of clean water. The Futures Council's Vision indicates that residents' primary concern is to accommodate Tillamook County's growth. Likewise, it shows that many residents want infrastructure to be a priority of county government. Rapid growth can quickly outstretch a community's capacity to provide adequate services to its residents. Because a clean water supply is a vital factor in both adequate infrastructure and environmental health, it is not surprising that residents expressed a desire to clean up Tillamook County's surface water bodies.

This benchmark evaluates the number of residents receiving clean drinking water from community water systems, all non-transient non-community systems, and transient non-community systems serving more than 500 people per day. If growth occurs too quickly in Tillamook County's communities and their capacity to provide clean water does not increase, this benchmark will reflect such a trend over time. County-level data on the percentage of residents receiving clean drinking water have been updated with 2004 figures provided by the Department of Human Services' Drinking Water Program.

Data Source

Data for this benchmark were obtained through:

- Oregon Department of Human Services, Drinking Water Program. "Pipeline: Oregon Drinking Water News," Annual Reports on Oregon's Public Drinking Water http://www.ohd.hr.state.or.us/dwp/pipeline.htm
- Paul Cymbala, Natural Resource Specialist, Drinking Water Program, Oregon Department of Human Services, 503-731-4317.

Related State Benchmark

- Oregon Progress Board Benchmark # 69

[4] This benchmark measures the percentage of Tillamook County residents served only by community-based systems. See Appendix B for additional information.

Findings

Oregon and the US Environmental Protection Agency have set a goal that by 2005, 95% of Oregon residents will be served by public drinking water that meets health-based standards. Figure 1-4 shows that in 1997, public drinking water systems throughout Oregon served 89% of the state's population with water that meets standards. This was a marked increase from 49% only three years earlier. By 2004, the state of Oregon met the EPA goal of 95%.

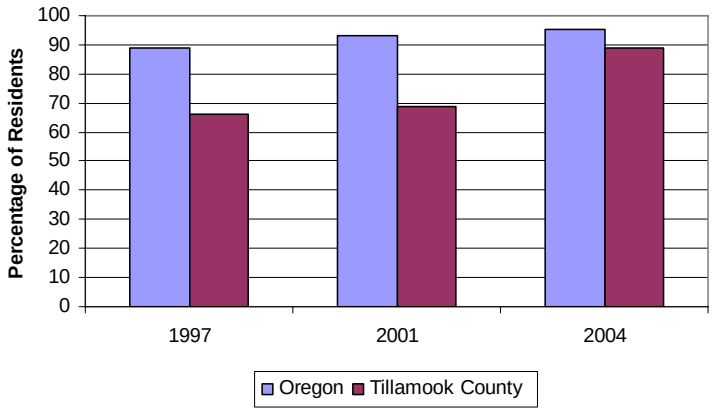
Tillamook County's percentage of water systems that fail health based standards is improving dramatically. Table 1-4 shows that the total number of County water system failures decreased from a high of 21 in 1998 to only 6 in 2004. Figure 1-4 shows that 66% of county residents were served by water systems meeting health standards in 1997. This increased to 69% in 2001, and 89% in 2004. As of 2004 the County's percentage is only 6% below the EPA goal of 95%.

Table 1-4
Number of County and State Water Systems that Fail Health Based Standards by Year

System	1996	1997	1998	1999	2001	2002	2003	2004
County System Failures	13	20	21	18	11	6	8	6
Total State Failures	277	318	311	203	173	158	162	166

Source: Oregon Department of Human Services

Figure 1-4
Percent of County Water Systems that Meet Health Based Standards by Year



Source: Oregon Department of Human Services

Benchmark 1.5 Percentage of Tillamook County Households with On-Site Sewage Disposal Systems that Do Not Meet Government Standards

Background

This benchmark is a measure of success for Goal 1.2:

> *The infrastructure (e.g. roads, schools, sewer, water, fire, medical, etc.) that serves our communities is improved and maintained.*

The Tillamook Bay National Estuary Project (TBNEP) highlighted bacterial contamination (and other contaminants) of surface waters as one of Tillamook Bay's priority problems. The TBNEP identified on-site sewage (septic) disposal systems[5] as a potential contributor of bacteria loading into Tillamook Bay (and other surface water bodies throughout the county). Sewage disposal is a critical infrastructure issue that ties closely to the water quality concerns expressed in the Natural Environment section of the Strategic Vision. More than 90% of respondents to the Futures Council's countywide survey agreed or strongly agreed that there must be adequate sewage treatment in the county.

Roughly 5,000 Tillamook County households rely on on-site wastewater disposal (septic) systems. The Tillamook County Health Department, however, estimates that 30% of on-site wastewater disposal systems are in intermittent use due to Tillamook County's seasonal population shifts. As these systems age, many will be prone to failure. Using the number of repair permits issued by the county, this benchmark measures the percentage of Tillamook County households with on-site sewage disposal systems that are out of compliance with government standards.

Data Source

Data were obtained for this benchmark through:

- Sanitation Division, Tillamook County Department of Community Development.

Related State Benchmark

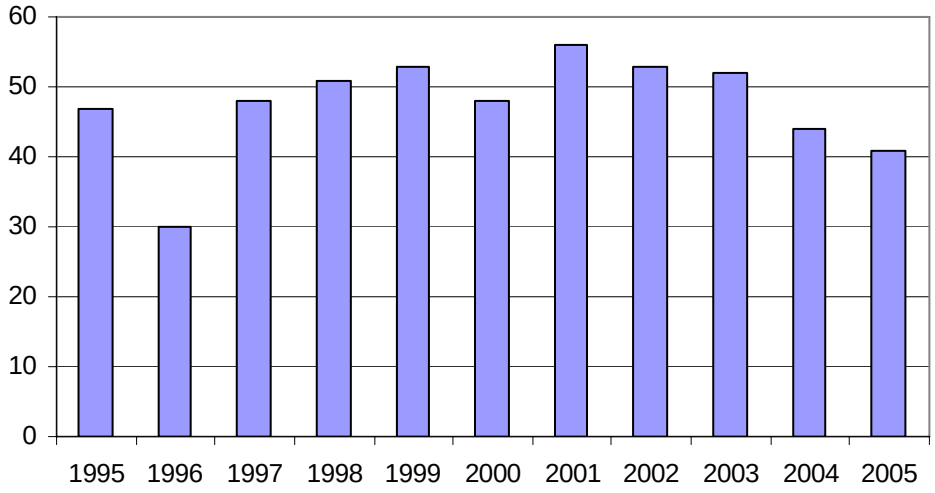
None

[5] Public sanitary sewage treatment plants were identified as a larger contributor of bacteria. This benchmark evaluates on-site sewage disposal systems, however, because public sanitary sewage treatment plants are regularly in compliance with state standards and contribute significant loads of bacteria only during storm events. See Appendix B for more information.

Findings

Figure 1-5 below indicates that the rate of failures (measured by the number of major repair permits issued[6]) in these systems has decreased from a high of 56 failures in 2001 to 41 in 2005. The average number of failures between 1998 and 2001 was 52 failures per year. Between 2001 and 2005 the average decreased to 47.5 failures per year.

Figure 1-5
Number of Major Permits Issued for
On-Site Wastewater Disposal Systems (1995-2005)



Source: Tillamook County Department of Community Development

[6] Because the number of permits issued is used as the indicator of failures, the actual number of failures may be higher. Any error between actual failures and permits issued is assumed to be consistent over the years examined.

Benchmark 1.6 Percentage of State and County Road Miles Within Tillamook County that Meet Prescribed Standards

Background

This benchmark is a measure of success for Goal 1.2:

> *The infrastructure (e.g. roads, schools, sewer, water, fire, medical, etc.) that serves our communities is improved and maintained.*

While one of the Vision's stated goals is to improve other means of transportation around the county, the vast majority of residents still rely on their automobile for their basic transportation needs. As its population grows and Tillamook County becomes an increasingly popular tourist destination, the county's roads will endure increasing stress. Because of the wet climate and often-steep topography, road washouts and slides are a common occurrence in the county. During the Visioning process, county residents placed a high priority on the maintenance of roads and other county infrastructure.

The condition of county roadways is a very good indicator of their ability to handle the daily traffic of Tillamook County. This benchmark uses new data from the Oregon Department of Transportation and the County Community Development Department to measure the effectiveness of both the state and county in maintaining roads in Tillamook County.

Data Source

Data were obtained for this benchmark through:

- Pavement Management Systems, Oregon Department of Transportation, (503) 986-3116. http://www.odot.state.or.us/otms/pavement/
- Patrick B. Oakes, P.E., Engineering Project Supervisor, Tillamook County Public Works, Tillamook County Development Department, (503) 842-3419.

Related State Benchmark

- Oregon Progress Board Benchmark #72

Findings

The Oregon Department of Transportation uses a 100-point scale to assess road conditions throughout the state. Table 1-6a shows that the conditions of state-owned roads in Tillamook County have improved. In 1997, approximately 37% of state-owned roads were in very good or good condition. This has increased to nearly 54% in 2004. The percentage of roads classified as fair to poor decreased from 63% in 1997 to 46% in 2004.

Table 1-6a
Condition of State-Owned Roads in Tillamook District

Condition	Number of Miles 2004	Percent of Miles 2004	Percent of Miles 2001	Percent of Miles 1997
Very Good	57.14	18%	12%	37%
Good	117.18	36%	40%	
Fair	68.10	21%	38%	43%
Poor	82.61	25%	11%	20%
Good or Very-Good	174.32	54%	52%	37%
Total	325.03	100%	100%	100%

Source: Oregon Department of Transportation

Since the first benchmark report, the county has changed its rating system. Like the state of Oregon, it uses a 100-point scale. However**,** the county and the state use different categories, so it is not possible to compare the two sets of data. Despite this limitation, Table 1-6b shows that county-owned road conditions have worsened since 2001. The percentage of county-owned roads classified as good to satisfactory have decreased from 64% in 2001 to 51% in 2004. This means that the percentage of county-owned roads in Tillamook County classified as fair or poor increased from 36% to 49% during this same period.

Table 1-6b
Condition of County-Owned Roads in Tillamook County

Condition	PCI Range	2004 Percent of Network	2001 Percent of Network
Good	70-100	29%	17%
Satisfactory	50-69	22%	47%
Fair	25-49	23%	19%
Poor	<25	26%	17%

Source: Tillamook County Community Development Department

Benchmark 1.7 Percentage of Tillamook County Residents who Commute to and From Work by Means Other than a Single Occupancy Vehicle

No new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark is a measure of success for Goal 1.3:

> *Alternative modes of transportation (including bicycles, rail, air, etc.) are encouraged.*

Tillamook County is a rural region with a small population that must travel significant distances between communities and areas of commerce. These factors lend themselves poorly to transportation modes other than the automobile, so single occupant vehicles are a common sight on county roadways. The demands of a growing population and the increased traffic that goes along with it, however, now provide the opportunity for Tillamook County to explore a wider range of transportation modes. The recently-developed bus system, known as The Wave, provides many county residents an alternative to cars in certain instances. But demand is relatively low and its effectiveness in reducing traffic congestion is negligible. Unlike public transportation in major cities, The Wave was not created to diminish traffic congestion but primarily to supply transportation to those who would otherwise have difficulty traveling throughout the county.

As the county's population continues to increase (particularly in the summer tourist season), bicycles, foot traffic, and public transportation can all play valuable roles in making Tillamook County accessible to its residents and visitors without the use of an automobile.

This benchmark evaluates commuter traffic, one of the major indicators of a growing population. Heavy commuter traffic is expensive (wear and tear on infrastructure), time consuming (traffic jams), and damaging to the environment (auto emissions, oil run off, and noise pollution). By determining the number of people who travel to work by means other than a single occupancy vehicle, this benchmark will indicate the county's success at encouraging alternative modes of transportation.

Comparing census data for 1990 and 2000 shows commuting trends for both Tillamook County and Oregon.

Data Source

Data were obtained for this benchmark through:

- 1990 and 2000 U.S. Census, SF3 Tables www.census.gov

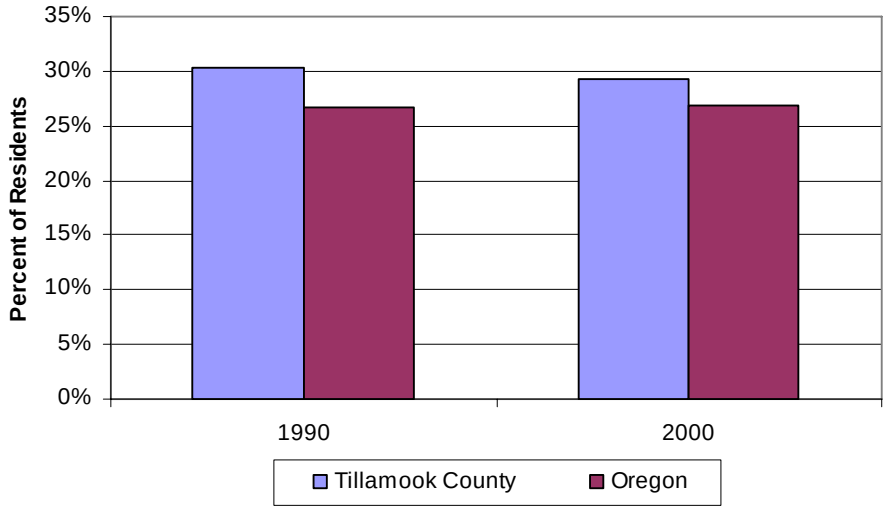
Related State Benchmark

- Oregon Progress Board Benchmark # 70

Findings

Figure 1-7 and Table 1-7 compare commuting data for 1990 and 2000 in Tillamook County and the state of Oregon. Figure 1-7 shows the percentage of residents commuting by carpool or alternative means. While the state rate has remained at approximately 27%, Tillamook County has dropped from 30.3% to 29.2% during this decade.

Figure 1-7
Percentage of Residents Commuting to Work by Carpool or Alternative Means



Source: US Census

Table 1-7 also shows that the percentage of Tillamook County residents commuting by single occupancy vehicles has increased approximately one percent from 69.7% to 70.8% over the 1990-2000 decade. In addition, the percent of residents commuting by carpool has dropped slightly from 15.4% to 14.9% in Tillamook County.

Table 1-7
Number and Percentage of Residents Commuting by Automobile (Alone or Carpooling) and by Alternative Means

	1990		2000	
	Tillamook County	Oregon	Tillamook County	Oregon
Commuting Alone	5,739 (69.7%)	949,326 (73.3%)	7,618 (70.8%)	117,1641 (73.2%)
Carpooling	1,268 (15.4%)	165,256 (12.8%)	1,599 (14.9%)	195,950 (12.2%)
Total Commuting by Automobile	7,007 (85.1%)	1,114,582 (86.1%)	9,217 (85.7%)	1,367,591 (85.4%)
Commuting by Other Means	1,230 (14.9%)	180,108 (13.9%)	1,537 (14.3%)	233,787 (14.6%)
Total Commuters	8,237 (100%)	1,294,690 (100%)	10,754 (100%)	1,601,378 (100%)

Source: US Census

Benchmark 1.8 Percentage of Households that are Owner-Occupied

No new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark is a measure of success for Goal 1.4:

> *Our county offers an array of affordable housing.*

With the increase in second home and vacation residences in the county, it is crucial that the county maintains an emphasis on providing a wide array of housing types that are affordable to a broad range of income levels. Rising property values can lead to the loss of buildings and residences that allow low-income families the chance to buy into their county.

This benchmark measures the percentage of Tillamook County residents that report owning their own home, either outright or with a mortgage. It also serves as a rough measure of the distribution of wealth among Tillamook County residents. To identify whether ample affordable housing exists in the county, this benchmark complements Benchmark 1.10: Percentage of Households Spending More than 30% of their Household Income on Housing (including utilities). Viewed together, these benchmarks indicate whether or not affordable housing is available in the county, and, likewise, whether the construction of larger homes is having an adverse impact on housing for low-income populations.

This update contains new 2000 data from the Oregon Progress Board that can be compared with 1980 and 1990 data to show recent housing trends.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board, *2001 County Data Book*, September 2002, Benchmark #73: Percentage of Oregon Households that are Owner Occupied, p.74. www.econ.state.or.us/opb
- Southern Oregon Regional Services Institute (SORSI), *Oregon: A Statistical Overview 2002*, Benchmark #20: 1990-2000 Average Owner-Occupied Housing Units % Occupied Units, p. 37.

Related State Benchmark

- Oregon Progress Board Benchmark # 73

Findings

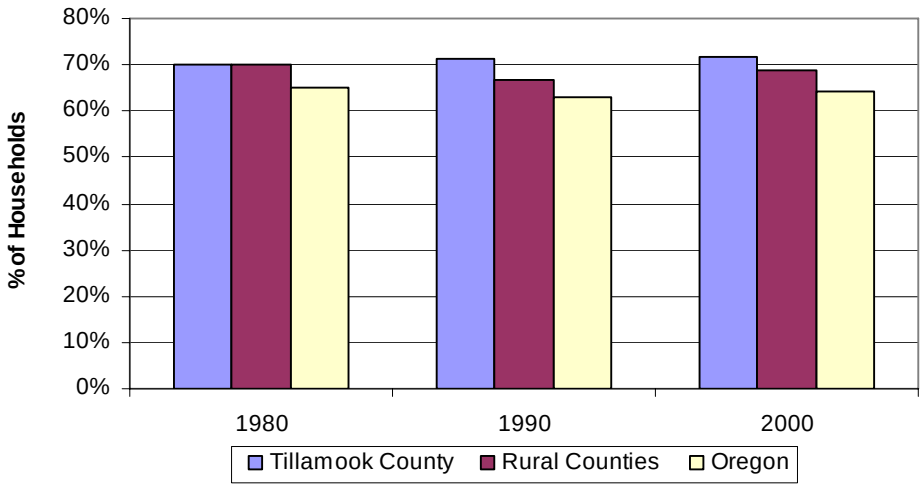
The Oregon Progress Board's data, shown in Table 1-8 and Figure 1-8, show that the percentage of owner-occupied households in Tillamook County has increased slowly since 1980. Tillamook County remains well above the state and rural county average for owner-occupied households. SORSI data illustrate the same trend and shows that Tillamook County has the fifth highest rate of owner-occupied households among Oregon's thirty-six counties.

Table 1-8
Percentage of Households Occupied by Owners and by Renters

	1980		1990		2000	
	Owners	Renters	Owners	Renters	Owners	Renters
Tillamook County	70.0%	30.0%	71.3%	28.7%	71.8%	28.2%
Rural Counties	69.9%	30.1%	66.9%	33.1%	68.7%	31.3%
Oregon	65.1%	34.9%	63.1%	36.9%	64.3%	35.7%

Source: Oregon Progress Board

Figure 1-8
Percentage of Households that are Owner-Occupied



Source: Oregon Progress Board

Benchmark 1.9 Percentage of Households Spending More than 30% of their Household Income on Housing Including Utilities

No new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark is a measure of success for Goal 1.4:

> *Our county offers an array of affordable housing.*

As defined in the state's Strategic Vision, Oregon Shines II, "a housing affordability rule of thumb states that the proportion of a household's income spent on rent or mortgage payments and other housing expenses should be less than 30 percent". Today, many households pay a large portion of their income on housing-related costs, leaving too little money for food, childcare, health services, and other necessities. Because of increasing numbers of large vacation rentals and second-family homes, many residents emphasized during the Visioning process the importance of maintaining an adequate supply of affordable housing.

This benchmark presents data from the 1990 and 2000 US Census showing the percentage of Tillamook County's residents for whom housing is a cost burden.

Data Source

Data were obtained for this benchmark through:

- 1990 and 2000 U.S. Census www.census.gov
- Oregon Progress Board, *2001 County Data Book*, September 2002, Benchmark #74a: Percent of Renters Below Median Income Spending More than 30% of Income for Housing (including Utilities) and #74b: Percent of Owner Occupied Households Below Median Income Spending More than 30% of Income for Housing (including Utilities), p.76, 78. www.econ.state.or.us/opb

Related State Benchmark

- Oregon Progress Board Benchmark # 74

Findings

Data from the U.S. Census, shown in Table 1-9 and Figure 1-9, show that in 1990, 26.4% of Tillamook County households spent more than 30% of their income on housing. This decreased to 25.3% in 2000. At the same time, the total percent of cost-burdened households in the state of Oregon increased 8.6% from 22.6% to 31.2%. Tillamook County now has a lower rate of cost-burdened households than the state. It is important to note, however, that while the overall proportion of cost-burdened households decreased in Tillamook County from 1990 to 2000, the proportion of owner-occupied households that are cost-burdened increased 5%, while it dropped 1.3% for renters.

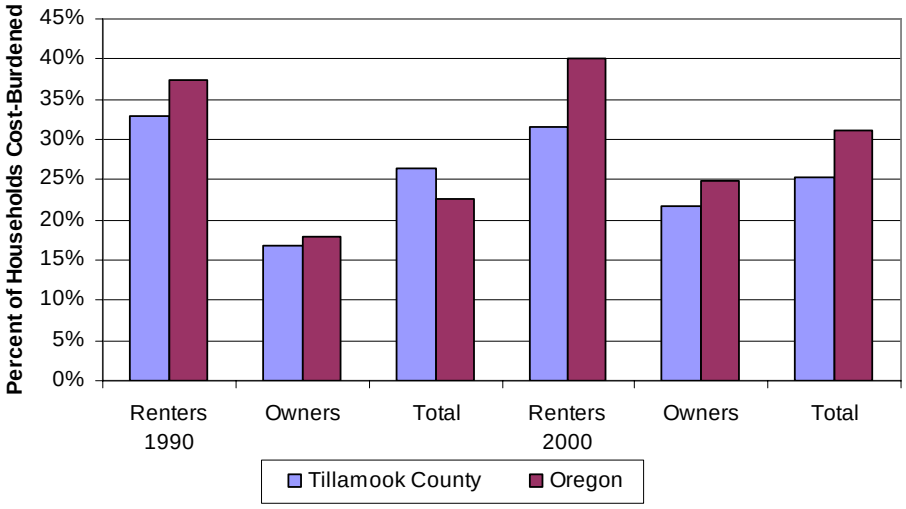
Table 1-9
Percentage of Households Spending More than 30% of their Household Income on Housing Including Utilities

	1990			2000		
	Renters	Owners	Total	Renters	Owners	Total
Tillamook County	32.9%	16.7%	26.4%	31.6%	21.7%	25.3%
Oregon	37.3%	18.0%	22.6%	40.0%	24.8%	31.2%

Source: 1990 and 2000 U.S. Census

The Oregon Progress Board also collects data on the percentage of households with incomes below the median income that spend more than 30% of their income on housing. While these data are not available for 2000, the data from 1990 show that for Tillamook County, 68.0% of renters and 32.1% of owner-occupants below the median income level are cost-burdened. Both these rates are below the state averages of 71.0% and 38.1%, respectively.

Figure 1-9
Percentage of Households Spending More than 30% of their Household Income on Housing Including Utilities



Source: 1990 and 2000 U.S. Census

CHAPTER 2: NATURAL ENVIRONMENT BENCHMARKS

NATURAL ENVIRONMENT BENCHMARKS

Introduction

The Natural Environment section of the Strategic Vision focuses primarily on maintaining the health of Tillamook County's bountiful natural resources as integral and essential components of our community as a whole. During the Visioning process, residents emphasized the importance of conserving fish, wildlife and other natural resources. In addition, they stated a clear desire to promote community partnerships that work with agricultural and forest managers to retain the natural features that much of our community is based upon. Community partnerships and development of local grassroots organizations help insure that resource-based industries use resources in a manner that promotes economic development while maintaining the ecological integrity of the landscape.

About the Natural Environment Benchmarks

To monitor achievement of the Vision's goals, the Futures Council focuses on benchmarks that provide clear evidence of ecosystem health countywide, while keeping the benchmarks as straightforward as possible. To a greater degree than the other three areas of the Vision, natural environment benchmarks are often inherently complex and easy to misinterpret. First, data collection is labor intensive and reporting is often inconsistent. Data collection and analysis often are confounded by such problematic tasks, such as counting species' populations, analyzing riparian health at a county level, and focusing on the outcomes of environmental restoration rather than the techniques used. In addition, because of the dynamic and interrelated character of natural environment systems, benchmarks that attempt to measure any one indicator risk being either overly complex for consistent measurement or too focused to be meaningful. The benchmarks contained in this section are an attempt to simply and accurately measure those elements of the natural environment that are most important to the community, while indicating overall ecosystem health and community stewardship.

The list below contains a summary of the goals found in the Natural Environment section of the Tillamook County Strategic Vision. Beneath each goal is listed the benchmark(s) with which the Futures Council has chosen to monitor the community's progress towards its goals.

Goal 2.1 Waterways are managed to protect riparian zones and provide high quality habitat for native fish and wildlife. In addition, they provide recreational, aesthetic, educational, and commercial values.

- Benchmark 2.1 Trends in Stream Water Quality Index
- Benchmark 2.2 Trends in Water Quality Limited Streams and TMDL Approvals
- Benchmark 2.3 Bacteria and Sediment Loads Entering Tillamook Bay
- Benchmark 2.4 Wild Salmon and Steelhead Population Levels

Goal 2.2 All county water bodies are of sufficiently high quality to avoid listing as "water quality degraded" (e.g. streams listed by the DEQ).

- Benchmark 2.1 Trends in Stream Water Quality Index
- Benchmark 2.2 Trends in Water Quality Limited Streams and TMDL Approvals

Goal 2.3 Shellfish harvesting in our estuaries is not limited by degraded water quality.

- Benchmark 2.3 Bacteria and Sediment Loads Entering Tillamook Bay

Goal 2.4 Wild salmon and steelhead populations are increased as integral, functioning components of our watersheds.

- Benchmark 2.4 Wild Salmon and Steelhead Populations Levels

Goal 2.5 Native wildlife populations are healthy and integral components of our community. Wildlife species contribute to the health and value of our managed agricultural and forestlands.

- No Benchmark.

Goal 2.6 Forest management practices sustain the full complement of associated plant and animal populations, as well as support a viable wood products industry.

- Benchmark 3.2 Employment in the Forest Industry (See Economy Section)

Goal 2.7 Waste products are recycled, thereby reducing demand on the natural and human-made environment.

- Benchmark 2.5 Solid Waste Generated, Disposed, and Recovered per Capita

Benchmark 2.1 Trends in the Stream Water Quality Index (OWQI)

Background

This benchmark addresses Goals 2.1 and 2.2:

> *Waterways are managed to protect riparian zones and provide high quality habitat for native fish and wildlife. In addition, they provide recreational, aesthetic, educational, and commercial values.*
>
> *All county water bodies are of sufficiently high quality to avoid listing as "water quality degraded" (e.g. streams listed by the DEQ).*

Tillamook County is a land of water. Throughout the landscape run rivers and streams that roar down the uplands before meandering through lowland areas and pouring into Tillamook County's mosaic of lakes, fresh and saltwater marshes, and estuaries. These waters are vital to the ecological well-being of the region, and Tillamook County residents are deeply concerned that the health of these waters be maintained. Currently, many water bodies are listed by the Oregon Department of Environmental Quality (DEQ) as "water quality limited", as defined under Section 303(d) of the Clean Water Act.

The Futures Council uses the Oregon Water Quality Index (OWQI) as a meaningful measure of our river systems' general health as well as to assess the goals of protection, recreation, aesthetics, education, and commercial values. The OWQI monitors various factors that indicate overall water quality. DEQ defines the OWQI as follows:

The OWQI is a single number between zero (worst) and 100 (best) that expresses water quality by integrating measurements of eight carefully selected water quality parameters (temperature, dissolved oxygen, biochemical oxygen demand, pH, ammonia and nitrate nitrogen, total phosphates, total solids, fecal coliform). The index was developed for the purpose of providing a simple, concise and valid method for expressing the significance of regularly generated laboratory data, and was designed to aid in the assessment of water quality for general recreational uses.[7]

The OWQI results have been updated to include 1995-2004 data as follows.

Data Source

Data were obtained for this benchmark through:

- Curtis Cude, Oregon Water Quality Index Coordinator, Water Quality Monitoring Section, Laboratory Division, Oregon Department of Environmental Quality, 503-229-5983.
- Department of Environmental Quality, Water Quality Monitoring Summary, www.deq.state.or.us

[7] For additional information on the OWQI, please see Appendix B.

Related State Benchmark

- None

Findings

The Oregon Water Quality Index (OWQI) is based on a ten-year index to reduce the variability that is inherent in water quality assessments. Table 2-1 summarizes the health of major rivers in Tillamook County according to OWQI data sets from 1986-1995, 1991-2000 and 1995-2004. The periods are broken into summer (column 2) as well as fall, winter, and spring (column 3).

OWQI results were calculated at these sites on all samples taken in Water Years 1995-2004. These data are analyzed to determine which parameters influence general water quality during various seasons. Each site, with sufficient data, is analyzed for the presence of significantly increasing or decreasing trends. The nonparametric Seasonal-Kendall test is used for trend analysis to ensure that the significant trends that exist are not due to normal seasonal variation. Significant trends are reported at the 80% or greater confidence level.

The OWQI data set from 1991-2001 listed three of Tillamook County's eight rivers as "fair", and one in poor in condition. Where data were available, trends show that the Nehalem and Miami rivers increased their OWQI ratings, while the other six rivers remained unchanged. Notable OWQI ratings include the Wilson at Highway 6, which maintained an excellent rating and the Tillamook which remains in poor condition.

Table 2-1
Seasonal Average OWQI Results for the North Coast Basin (1995-2004)

River (@ Location)	River Mile	Summer Mean	FWS Mean	Minimum Seasonal Average	Rating 1986-1995	Rating 1991-2000	Rating 1995-2004	Trend
Nehalem R @ Foley Rd	7.8	91	86	86	Fair	Fair	Good	Increase
Miami R @ Moss Creek Rd	1.7	85	86	85	Fair	Fair	Good	Increase
Kilchis R @ Hwy 101	1	87	89	87	Fair	Good	Good	No Trend
Wilson R @Hwy 6	8.5	91	91	91	Excellent	Excellent	Excellent	No Trend
Wilson R @ Hwy 101	1.8	85	84	84	Fair	Fair	Fair	No Trend
Trask R @ Hwy 101	4.2	87	87	87	Good	Good	Good	No Trend
Tillamook R @ Bewley Creek Rd	6.8	70	82	70	Poor	Poor	Poor	No Trend
Nestucca R @ Cloverdale	1.7	88	86	86	Fair	Good	Good	No Trend

Source: Oregon Water Quality Index Lab

Note: The OWQI analyzes a defined set of water quality variables, including temperature, dissolved oxygen (percent saturation and concentration), biochemical oxygen demand, pH, total solids, ammonia and nitrate nitrogens, total phosphorus, and fecal coliforms, to produce a score, or average, describing general water quality. The averages for each river above display their scores over the season.

Benchmark 2.2 Trends in Water Quality Limited Streams and TMDL Approvals

No new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark addresses Goals 2.1 and 2.2:

> *Waterways are managed to protect riparian zones and provide high quality habitat for native fish and wildlife. In addition, they provide recreational, aesthetic, educational, and commercial values.*

All county water bodies are of sufficiently high quality to avoid listing as "water quality degraded" (e.g. streams listed by the DEQ).

This is a new benchmark for the 2002 update that provides the Futures Council with data from the Department of Environmental Quality (DEQ) regarding rivers with water quality issues. The Federal Clean Water Act requires that Oregon undertake specific activities, such as monitoring and recording of rivers, estuaries and lakes, in order to develop standards and procedures that better protect sensitive areas. Section 303(d) of the Clean Water Act requires that Oregon develop a list of water bodies that do not meet standards and that the list be submitted every two years to the U.S. Environmental Protection Agency (EPA). Water bodies contained on the 303(d) list are described as water quality limited.

Once a water body has been added to the 303(d) list, the DEQ must develop a Total Maximum Daily Load (TMDL) plan within 10 years. The TMDL identifies "allowable pollutant loads to a water body from both point (end of pipe) and non-point sources (runoff) that will prevent a violation of water quality standards." Once a TMDL plan is approved by the EPA, the river can be removed from the 303(d) list.

Monitoring an increase or decrease of 303(d) listed water bodies and those with TMDLs in Tillamook County, provides the Futures Council with a general indicator of water quality trends. The 303(d) listings, however, are limited in that a TMDL plan does not necessarily correspond with improved water quality.

Data Source

Data were obtained for this benchmark through:

- Oregon Department of Environmental Quality, Water Quality Division, 303(d) List, "Water Quality Limited Streams Database," "Fact Sheet: The 303(d) List of Impaired and Threatened Waterbodies" www.deq.state.or.us/wq
- Oregon Department of Environmental Quality, Water Quality Division, TMDLs, "Oregon TMDLs Approved by USEPA as of June 2002," "Tillamook Bay Watershed Total Maximum Daily Load (TMDL)," "Nestucca Bay Watershed TMDLs and Water Quality Management Plan," http://www.deq.state.or.us/wq/TMDLs/TMDLs.htm

Related State Benchmark

- None

Findings

As a new addition to Chapter 2, summary information on the 303(d) list and Total Maximum Daily Loads data will provide ongoing information on water quality trends in Tillamook County. Currently, the Wilson-Trask-Nestucca sub-basin contains 11 listed water bodies (including portions of these rivers outside of Tillamook County), and the Nehalem sub-basin has 18. With the exception of Mill Creek, which is listed for elevated levels of iron, all of the current listings in the Wilson-Trask-Nestucca sub-basin are for Dissolved Oxygen. (It is important to note that TMDLs were just completed for both bacteria and temperature in this basin so, although these parameters are not shown on the current 303(d) list, they are major water quality issues.). Iron and pH content are also listed as concerns for specific locations. The predominant concern for locations in the Nehalem sub-basin is water temperature. A few locations, including the lower Nehalem River and the Nehalem Bay are also listed for elevated levels of fecal coliform.

Table 2-2 lists the water bodies that were previously listed as water quality limited in 1998. These have been removed from the 303(d) list as a result of TMDL development for each basin. The Nestucca Bay water body was not meeting standards for temperature, bacteria, and sediment. Many reaches were found to be too warm to protect salmon and trout; some reaches had excessive fine sediment in streambeds; and fecal bacteria concentrations were occasionally too high for human consumption of shellfish harvested from the area. The TMDL parameters determined for the bay included creation of more riparian vegetation along the stream, limitations on temperature of discharges from wastewater treatment plants, load allocations for land use types were developed, and increased channel width to reduce sedimentation. Once the TMDL parameters were addressed, the water bodies were removed from 303(d) listing.

Tillamook Bay Watershed also has a TMDL plan to address pollutant levels. The watershed contains 20 water bodies listed as water quality limited. Bacteria levels are a concern in 15 of these, and temperature is a concern in 12 of the listed waterbodies.

Table 2-2
TMDLs in Tillamook County Approved by the US EPA as of June 2002

Waterbody	Water Quality Concern Addressed	TMDL Parameters	U.S. EPA Approval Date
Tillamook Bay Watershed	Temperature, Bacteria	Temperature, Bacteria	07/31/2001
Nestucca Bay	Temperature, Bacteria, Sediment	Temperature, Bacteria, Sediment	05/13/2002

Source: Oregon Department of Environmental Quality

Benchmark 2.3 Bacteria and Sediment Loads Entering Tillamook Bay

No new data currently exists for this benchmark. The following is data from the 2002 Benchmark Update.

Background

This benchmark addresses Goals 2.1 and 2.3:

> *Waterways are managed to protect riparian zones and provide high quality habitat for native fish and wildlife. In addition, they provide recreational, aesthetic, educational, and commercial values.*
>
> *Shellfish harvesting in our estuaries is not limited by degraded water quality.*

Urban development and resource-based industries, such as timber harvesting and dairy farming, can contribute significant loads of bacteria and sediment into Tillamook County waterways. These processes have been most manifest in the Tillamook Bay, which is the county's largest and most biologically rich estuary. Sedimentation and bacterial contamination have caused periodic closures of Tillamook Bay to both commercial and recreational shellfish harvesting. The Federal government has implemented two major programs in the Tillamook Bay basin, the Rural Clean Water Project and the National Estuary Program to address water quality in the Tillamook Bay basin.

The underlying intent of Goal 2.3 is to keep Tillamook Bay open longer for commercial shellfish harvest and reduce the periodic "man-induced" closures to recreational shellfish harvest. Consequently, Benchmark 2.3 serves as an indicator of water quality and indirectly assesses the impacts of the programs mentioned above on shellfish harvest. This benchmark is specific to Tillamook Bay because the Performance Partnership (now called the Tillamook County Estuary Partnership, a multi-lateral nonprofit partnership designed to implement the Comprehensive Conservation and Management Plan) will provide a reliable source of the required data only for Tillamook Bay.

Data for this benchmark are costly to collect and will only be collected every 5-10 years. The Futures Council should update this benchmark as new data become available.

Data Source

Data were obtained for this benchmark through:

- Oregon Department of Agriculture, Commercial Shellfish Program
- TBNEP/Performance Partnership, Scientific and Technical Coordinator
- T.J. Sullivan, J.M. Bischoff and K.B. Vache, *Results from Storm Sampling in Tillamook Bay Watershed.*

Related State Benchmark

- None

Findings

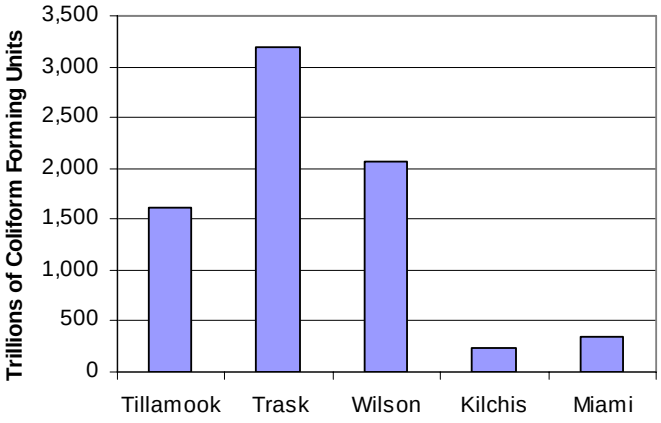
Table 2-3 shows two of the measurable factors, bacteria and sediment, related to water quality that can be used to indicate the overall health of Tillamook Bay. Figures 2-3a and 2-3b indicate that the Trask and Wilson Rivers contribute the bulk of sediment and bacteria entering the Tillamook Bay. It should be noted, however, that these rivers contribute more than half of the total volume of surface water entering via the bay's five rivers. Per unit of water volume, the Tillamook River produces a disproportionately high load of bacteria.

Table 2-3
Levels of Bacteria and Sediment in Rivers Entering Tillamook Bay (1997–1998)

River	Bacteria Levels (Trillions of Coliform Forming Units)	Sediment Loads (Millions of Total Suspended Solids)
Tillamook	1,623	10
Trask	3,189	185
Wilson	2,065	314
Kilchis	238	49
Miami	339	15

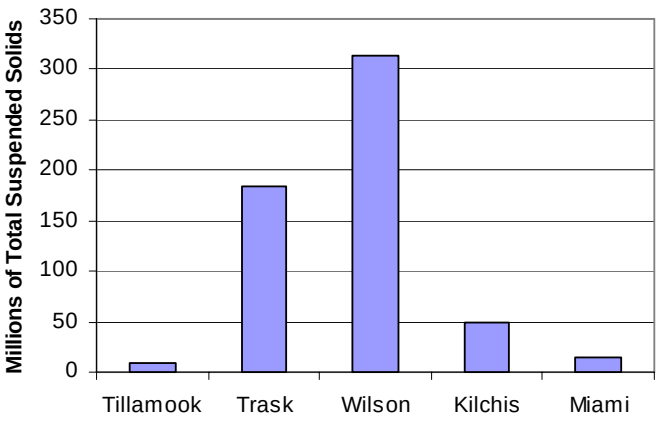
Source: Sullivan, Bischoff, and Vache.

Figure 2-3a
Levels of Bacteria in Rivers Entering Tillamook Bay (1997–1998)



Source: Sullivan, Bischoff, and Vache.

Figure 2-3b
Loads of Sediment in Rivers Entering Tillamook Bay (1997–1998)



Source: Sullivan, Bischoff, and Vache

Benchmark 2.4 Wild Salmon and Steelhead Population Levels

Background

This benchmark addresses Goals 2.1 and 2.4:

> *Waterways are managed to protect riparian zones and provide high quality habitat for native fish and wildlife. In addition, they provide recreational, aesthetic, educational, and commercial values.*
>
> *Wild salmon and steelhead populations are increased as integral, functioning components of our watersheds.*

Throughout much of the Pacific Northwest, wild salmonid populations are in steady decline. This is reflected in Tillamook County, where many runs of Coho, Chinook, and chum salmon, as well as sea-run cutthroat and steelhead trout have declined considerably. Causes for the decline of these species are many and have been widely debated. Many of these causes have been addressed during the last decade through changes in natural resource policy and on-the-ground management. The legacy of decades and even centuries of habitat alteration will not be easily or quickly reversed. Some improvement in the number of returning salmonids has encouraged habitat restoration efforts. Tillamook County residents recognize these salmonids as integral to the economic, cultural, and ecological character of the county. During the Visioning process, 75% of survey respondents agreed or strongly agreed that "efforts to recover and ensure sustainable runs of salmon should be a top priority now and through the year 2020."

The methodology for measuring wild Coho populations has changed since the last update. In order to quantify the success of salmonid populations, the Oregon Department of Fish and Wildlife has developed specific criteria to determine overall population viability. The intent of this benchmark is to serve as an indicator of the success of salmonid habitat enhancement efforts. However, due to the complex life cycles of salmonids and the resulting logistical and statistical variability of data collection and analysis, ODFW cannot assure its accuracy.

ODFW's "Viability Criteria and Status Assessment of Oregon Coastal Coho" from May 2005, indicates that "populations of Coho salmon that occur in coastal watersheds between Cape Blanco and the mouth of the Columbia River are being evaluated by NOAA Fisheries for listing under the federal Endangered Species Act (ESA)."

The assessment furthers that "developing a meaningful abundance criterion for coastal Coho was difficult because of the confounding effect of variations in marine survival. Survival conditions for Coho in the marine phase of their life history can cause wide fluctuations in subsequent adult returns and spawner abundance. For example, an observation of 600 spawners during a period of unfavorable ocean conditions could represent a more 'healthy' state than an observation of 1,200 spawners for the same population during a period of highly favorable ocean conditions."[8]

[8]Oregon Department of Fish and Wildlife, Oregon Coastal Coho Assessment, Part 2

In consideration of wild Coho survival, ODFW assigned five attributes that determine the successfulness of overall population viability (which have been included into this benchmark). The attributes are defined as:

1. Abundance – the number of naturally-produced spawners.
2. Productivity –the number of recruits (progeny) produced per spawner (parent).
3. Distribution – the distribution of spawners among habitats within a population's home range
4. Diversity – indices of genetic variability related to a population's ability to adequately respond to unpredictable natural variations in the environment and retain those adaptive genetic characteristics that promote optimum survival in basin specific habitats.
5. Persistence – the forecast likelihood that the population will become extirpated in the future must be very low.

Data Source

Data were obtained for this benchmark through:

- Oregon Department of Fish and Wildlife, Corvallis Research Lab, Dave Stewart (503) 842-2741
- Oregon Department of Fish and Wildlife, Oregon Coastal Coho Assessment, Part 2: Viability Criteria and Status Assessment of Oregon Coastal Coho, May 2005. http://nrimp.dfw.state.or.us/oregonplan/reports/FinalReports/ViabilityFinalReport.pdf

Related State Benchmark

- Oregon Progress Board Benchmark #85

Findings

In Tillamook County, wild Coho populations were substantially diminished during much of the 1990s but have increased dramatically in the last several years. Table 2-4a shows the wild Coho population counts by drainage basin. Though all drainage basins increased dramatically, Tillamook Bay and Nestucca have had the most impressive increases in Coho populations since 2000—with an increase from an estimated 2,178 and 1,219 Coho in 1998, respectively, to 13,008 and 10,194 Coho in 2003. The Nehalem basin continues to show Coho levels at more than double the populations of the other basins, with 56% of the total wild Coho population for the three basins.

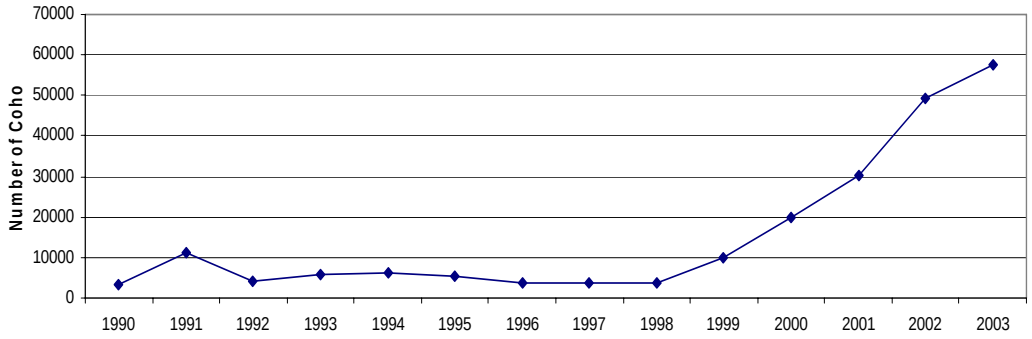
Salmonid populations typically fluctuate naturally. Causal factors are widely debated. The recent improvement in population levels may in part be due to habitat restoration and enhancement projects.

Table 2-4a
Wild Coho Populations in Tillamook County by Drainage Basin (1990–2003)

Drainage Basin	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Nehalem	1158	6837	1392	3049	2844	1700	527	1187	1206	3555	14462	21928	17164	32517
Tillamook Bay	80	1577	176	571	1105	341	733	437	358	1831	2178	1944	13334	13008
Nestucca	160	618	604	340	266	1537	440	230	202	2357	1219	4164	16698	10194
Total	3388	11023	4164	5953	6209	5573	3696	3851	3764	9742	19859	30037	49198	57722

Source: Oregon Department of Fish and Wildlife

Figure 2-4
Total Estimated Wild Coho Populations in Tillamook County Drainage Basins



Source: Oregon Department of Fish and Wildlife

While Figure 2-4 shows the overall population increases – indicating a drastic improvement from 1998 population levels – Table 2-4b shows where populations are below ODFW thresholds. Only the Nestucca drainage basin passed the combination of attributes, while both Tillamook and Nehalem failed. This discrepancy indicates that though wild Coho population numbers are improving, their overall viability is dependant on the health of the drainage basins. Highlighted entries indicate attribute failures.

Table 2-4b
Criteria for Population Viability for Wild Coho Populations in Tillamook County Drainage Basins (2005)

Population	Abundance	Productivity	Persistence	Distribution	Diversity	Combined
Nehalem	149	above threshold	**0.081**	80%	2926	**Fail**
Tillamook	**-61**	**1.03**	**0.156**	100%	721	**Fail**
Nestucca	259	1.59	0.001	100%	2850	Pass

Source: Oregon Department of Fish and Wildlife

Benchmark 2.5 Solid Waste Generated, Disposed, and Recovered Per Capita

Background

This benchmark addresses Goal 2.7:

> *Waste products are recycled, thereby reducing demand on the natural and human-made environment.*

Recycling rates provide an indicator of environmental consciousness and stewardship within a community. Increased recycling will reduce the amount of refuse that ends up in county landfills and reduce demand on raw materials. Tillamook County reflects the nationwide effort to increase recycling as the number of public and private recycling stations available to residents has increased dramatically in the last decade.

The Department of Environmental Quality provides data on approximately 35 materials collected for recycling, composting, or energy recovery. DEQ's annual Material Recovery Survey was mandated by 1991 legislation, setting a 50% material recovery goal for Oregon in the year 2000.

In 1997, the legislature also passed laws (Oregon Revised Statute 459A.010) requiring wastesheds to set new voluntary goals and to maintain the lesser of their required rate or their actual 1996 rate without backsliding. For Tillamook in 2000, the statutory target was established at a 30% recovery rate goal, with a minimum recovery rate of 15% required. The DEQ Material Recovery Survey provides an annual look at how Tillamook County is doing in its waste generation, recovery, and disposal, providing information regarding the success of these efforts and where more focus and attention are needed.

Data Source

Data were obtained for this benchmark through:

- Oregon Department of Environmental Quality: 2003 Material Recovery Survey Report.
  http://www.deq.state.or.us/wmc/solwaste/documents/recwastegenreport2003.pdf

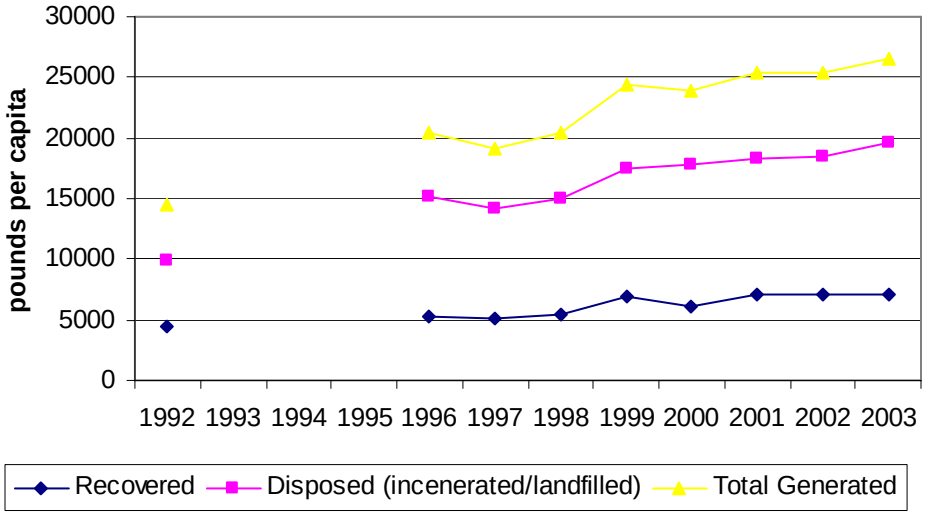
Related State Benchmark

- Oregon Progress Board Benchmark #83

Findings

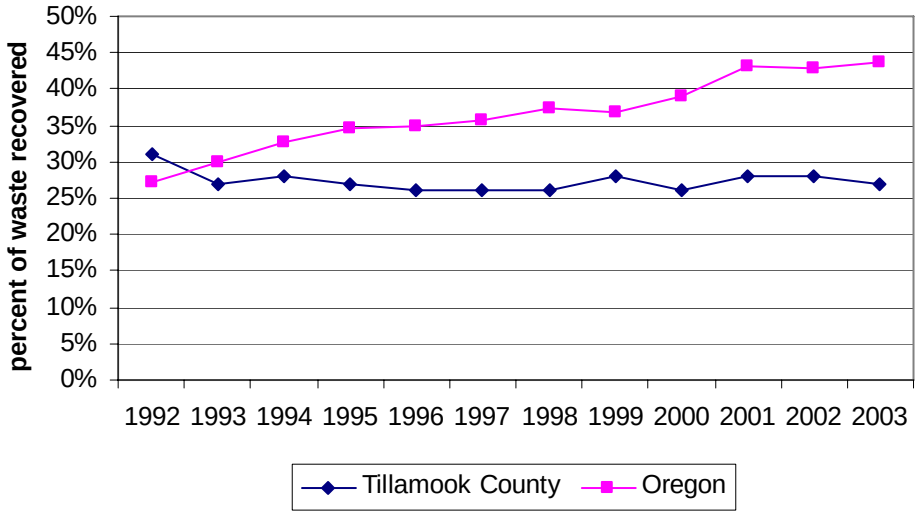
The Department of Environmental Quality's data, shown in Figure 2-5a, show that Tillamook County's pounds of solid waste generated and disposed of per capita have increased steadily since 1992, while the yearly average amount of waste recovered has remained unchanged. As a result, the county's waste recovery rate, shown in Figure 2-5b, has declined from 31% in 1992 to 27% in 2003, away from its goal of 30%. During this same time period, Oregon's recovery rate rose from 27% to 44%, closer to its goal of 50%. Anecdotal evidence suggests that the increase in solid waste generated is largely due to a corresponding increase of new construction in the area.

Figure 2-5a
Waste Generated, Disposed, and Recovered in Tillamook County



Source: Oregon Department of Environmental Quality

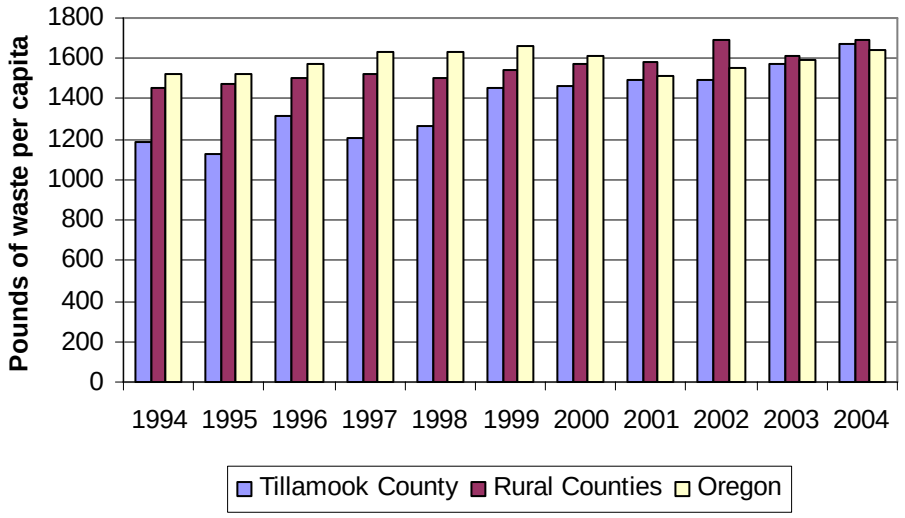
Figure 2-5b
Waste Recovery Rate



Source: Oregon Department of Environmental Quality

Data from the Oregon Department of Environmental Quality shown in Figure 2-5c show that while the state and rural counties' solid waste disposed per capita has increased 7% and 16%, respectively, Tillamook County's per capita solid waste disposal has increased 40%, from 1192 to 1668 pounds per capita from 1994 to 2004. Tillamook County's disposal quantity is now nearly equal to that of other rural counties and the state.

Figure 2-5c
Pounds of Municipal Solid Waste Disposed of per Capita (1994-2004)



Source: Oregon Department of Environmental Quality

CHAPTER 3: ECONOMY BENCHMARKS

Benchmark 3.1	Net Job Growth
Benchmark 3.2	Employment in the Forest Industry
Benchmark 3.3	Employment in the Farm Sector
Benchmark 3.4	Average Annual Payroll per Covered Worker
Benchmark 3.5	Per Capita Income as a Percentage of the U.S. Per Capita Income
Benchmark 3.6	Percentage of Population Below Poverty Level
Benchmark 3.7	Number of Students Receiving Free or Reduced-Cost Lunches
Benchmark 3.8	Total Unemployment Rate
Benchmark 3.9	Status of Tillamook County and its Cities as “Distressed Areas”
Benchmark 3.10	Employment Diversification
Benchmark 3.11	Tourism Spending and Employment Trends in Tillamook County
Benchmark 3.12	Number of Tourists Visiting the Tillamook County Creamery
Benchmark 3.13	Number of Students Enrolled in Vocational Supplementary or Preparatory Classes at Tillamook Bay Community College

ECONOMY BENCHMARKS

Introduction

Since Europeans settled Tillamook County in the mid-19th century, resource-based industries like logging, agriculture, and fishing have comprised virtually all of the county's economic input and output. Over the past 50 years, however, the county has seen a steadily diversifying economy, with significant growth in non-farm and forest industries. Much of this is due to the relatively recent increase in tourism and second-home development as well as accompanying growth in the service sector. Although resource-based industries still comprise a substantial proportion of the county economy, the tourist industry's share of employment continues to grow every year with the leisure and hospitality industry adding 50 new jobs in Tillamook County from 2001-2004. Moreover, the county experienced a 64% increase in tourism spending between 1994 and 2004 (Dean Runyan Associates, 2002).

The views provided by Tillamook County residents during the Visioning process indicate a community that appreciates and nurtures its heritage but also has an eye on its economic future. Goal 3.1 of the Vision focuses on expanding existing businesses and industries while maintaining traditional resource-based industries. Goal 3.2 and 3.3 address two issues common to rural regions: low per capita income and little economic diversification. Residents also emphasized the importance of tourism, which is reflected in Goal 3.4: "promote economic growth through year-round family wage jobs in the tourism industry." Finally, Goal 3.5 expresses the community's desire to include the county's youth in economic development through appropriate education and hands-on experience.

About the Economy Benchmarks

For the most part, the benchmarks contained in this section evaluate standard economic indicators. Goal 3.1—expanding businesses while maintaining existing industries, is measured using net job growth and employment in the forest industry and farm sector. Per capita income, addressed in Goal 3.2, is measured in Benchmarks 3.4 through 3.7. These include the average annual payroll per covered worker, the county per capita income as a percentage of U.S per capita income, the percentage of the population below poverty level, and the number of county students receiving free or reduced-cost lunches. The goal of increased economic diversification is measured using the total unemployment rate, the designation of "distressed" areas, an economic diversification index, and employment trends. Travel spending in the County and the number of tourists visiting the Tillamook County Creamery measure growth in the tourism industry. Finally, Goal 3.5, which promotes youth in economic diversification efforts, is measured through the change in numbers of students completing vocational, supplemental, and preparatory classes at the local community college.

Below is a list of the goals that make up the Economy section of the Tillamook County 2020 Strategic Vision. Beneath each goal are the benchmark(s) the Futures Council has chosen to assess the goal.

Goal 3.1 *Expand existing business and industries while maintaining traditional industrial base in forestry and agriculture.*

Benchmark 3.1	Net Job Growth
Benchmark 3.2	Employment in the Forest Industry
Benchmark 3.3	Employment in the Farm Sector

Goal 3.2 *Increase per capita income.*

Benchmark 3.4	Average Annual Payroll per Covered Worker
Benchmark 3.5	Per Capita Income as a Percentage of the U.S. Per Capita Income
Benchmark 3.6	Percentage of Population Below Poverty Level
Benchmark 3.7	Number of Students Receiving Free or Reduced-Cost Lunches

Goal 3.3 *Diversify the economy.*

Benchmark 3.8	Total Unemployment Rate
Benchmark 3.9	Status of Tillamook County and its Cities as "Distressed Areas"
Benchmark 3.10	Employment Diversification

Goal 3.4 *Promote economic growth through year-round family wage jobs in the tourism industry.*

Benchmark 3.11	Tourism Spending and Employment in Tillamook County
Benchmark 3.12	Number of Tourists Visiting the Tillamook County Creamery

Goal 3.5 *Include youth in local economic development by providing appropriate classroom and field based education and training.*

Benchmark 3.13	Number of Students Enrolled in Vocational Supplementary or Preparatory Classes at Tillamook Bay Community College

Benchmark 3.1 Net Job Growth

Background

This benchmark relates to Goal 3.1 of the 2020 Strategic Vision:

> *Expand existing business and industries while maintaining traditional industrial base in forestry and agriculture.*

Reflecting recent demographic changes in the county, where greater numbers of second home-owners and seniors have entered the area, an astonishing 61% of survey respondents disagreed with the statement, "providing jobs is more important than protecting the environment." In addition to bringing a greater degree of pro-environment fervor to the county, this demographic movement has also increased employment in the trade and service industries (see Benchmark 3.9: Non-Farm Employment Trends).

Contrary to these survey results, however, community focus group meetings held during the Visioning process revealed many residents' ambivalence. Many long-time residents want to utilize the county's abundant natural resources, and they draw a fine line between preservation and conservation. On the other hand, local resistance to recent "pro-environment" initiatives, like increased riparian protection and a Portland-based movement to set aside the Tillamook State Forest from logging, indicates the county's desire to insure private property rights as well as maintain resource extraction industries. In addition, the commonly-held desire among residents to preserve farmland (see Benchmark 3.3: Employment in the Farm Sector) reflects the importance of the dairy industry to the community.

Regardless of disparate attitudes concerning resource protection verses utilization, virtually all county residents indicated an over-riding priority to expand Tillamook County's job base. Residents recognize that job growth ultimately enhances the vitality of businesses operating in the county and, consequently, the county's economic well-being. This benchmark measures overall job growth in the Tillamook County. The benchmarks that follow, 3.2 and 3.3, focus on job growth in the resource-based farm and forest industries.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board, *2005 County Data Book*, November 2005, Benchmark #4: Net Job Growth (Loss) per 1,000 Population
  http://www.oregon.gov/DAS/OPB/docs/CoData/05CoData/FinalBook.pdf

Related State Benchmark

- Oregon Progress Board Benchmark #4.

Findings

Because job growth rates fluctuate rapidly from year to year, it is important to evaluate long-term trends. Data from the Oregon Progress Board shown in Table 3-1 and Figure 3-1 indicate consistent job growth in Tillamook County from 1990 to 2000. Since the 2000 Benchmarks Report, the average net job growth rate has decreased for Tillamook, rural counties, and the state. However, in 2004 the net job growth rate in Tillamook County increased, surpassing other rural counties and is almost at the same rate as the state.

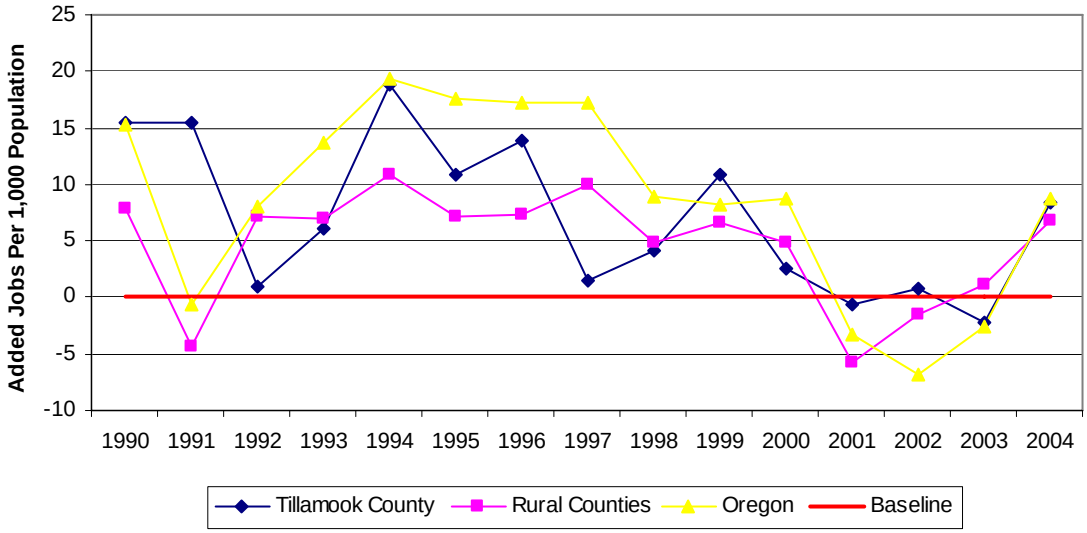
On average from 1990 to 2000, Tillamook County added 9.2 jobs per 1,000 eligible workers, while other rural counties added only 6.3 jobs, but statewide approximately 12.1 jobs were added per 1,000 eligible workers. Since 2000 however, Tillamook County has averaged 1.5 jobs per 1,000 eligible workers, while other rural counties added 1.7 jobs. The statewide average decreased to negative job growth at -.95 jobs per 1,000 eligible workers during this same time.

Table 3-1
Net Job Growth per 1,000 Eligible Workers in Tillamook County, Rural Oregon Counties, and the State of Oregon (1990–2004)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tillamook County	15.5	15.5	1	6.1	18.9	10.9	13.8	1.5	4.1	10.8	2.6	-0.6	0.7	-2.2	8.3
Rural Counties	7.8	-4.3	7.2	6.9	10.9	7.1	7.4	10	4.9	6.7	4.9	-5.8	-1.5	1.2	6.8
Oregon	15.2	-0.7	8	13.7	19.3	17.6	17.2	17.3	8.9	8.2	8.8	-3.2	-6.8	-2.6	8.8

Source: Oregon Progress Board

Figure 3-1
Net Job Growth per 1,000 Eligible Workers in Tillamook County, Rural Oregon Counties, and the State of Oregon (1990–2004)



Source: Oregon Progress Board

Benchmark 3.2 Employment in the Forest Industry

Background

This benchmark relates to Goal 3.1 of the 2020 Strategic Vision:

> *Expand existing business and industries while maintaining traditional industrial base in forestry and agriculture.*

Since the turn of the century, Tillamook County forests have fueled a significant portion of the county economy. In recent years, forest management throughout the Pacific Northwest has come under increasing scrutiny from the environmental community. This has led to concern among the forest products industry that an increasing acreage of land may be set aside from timber harvest to benefit salmonids, spotted owls, and other threatened and endangered wildlife. However, the Oregon Department of Forestry and the County Commissioners have committed to consistent timber production from the Tillamook State Forest. From these indications, it is clear that, although timber harvests may never again reach historical levels, logging will continue in the forests of Tillamook County.

This benchmark addresses a portion of Goal 3.2, maintaining the industrial base in forestry. Specifically, it examines levels of employment in the wood products industry and per capita income earned by wood products employees.[9]

Following are updated data for this benchmark.

Data Source

Data were obtained for this benchmark through:

- Oregon Employment Department, Oregon Labor Market Information System (OLMIS), "Covered Employment and Payroll: Lumber and Wood Products: Tillamook County." (http://www.olmis.org) Salary information was converted into 2004 dollars using the Bureau of Labor Statistics' Inflation Calculator http://www.bls.gov/ .

Related State Benchmark

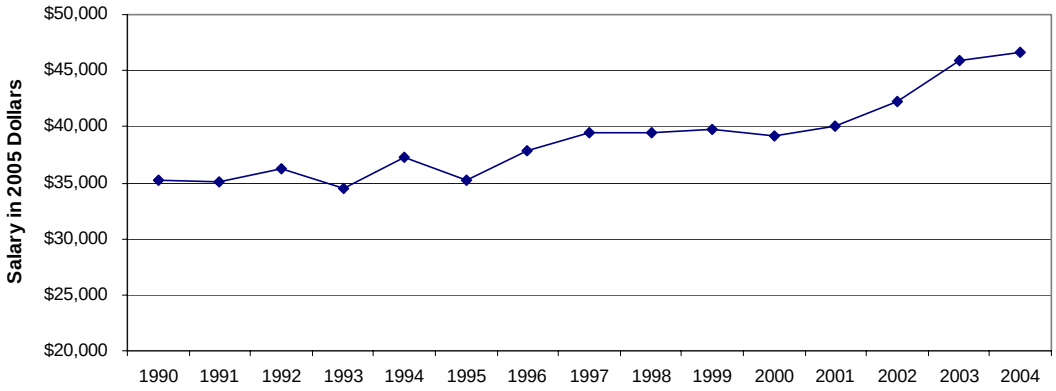
- None

[7] This benchmark omits some minor sectors of the forest industry. Please see Appendix B for details.

Findings

Since the 2000 Benchmarks Report, data from the Oregon Employment Department show that the average annual pay for employees in the lumber and wood manufacturing industries rose steadily in the early and mid-1990s. The late 1990s saw a stagnation of wage increases in lumber and wood manufacturing. Figure 3-2a shows that in 2004, the average annual pay was approximately $46,667—about $7,440 higher (adjusted) than in 2000.

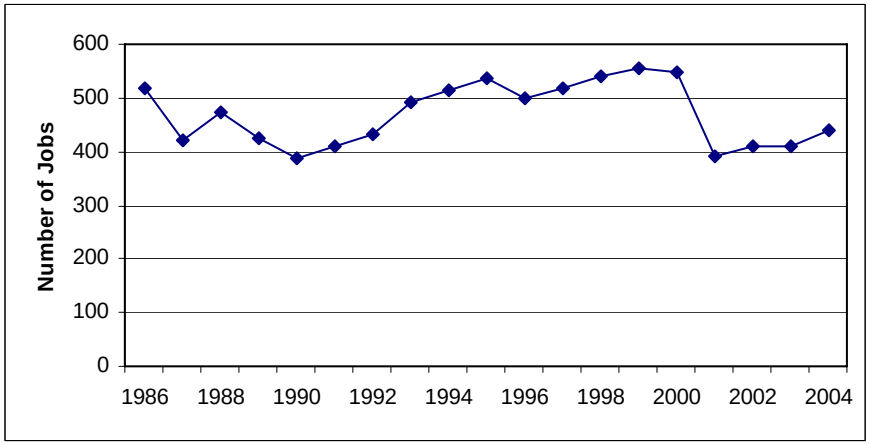
Figure 3-2a
Annual Pay (in 2004 Dollars) for Lumber and Wood Manufacturing Jobs in Tillamook County (1990-2004)



Source: Oregon Employment Department

Employment in timber manufacturing has improved gradually over the last three years after dropping to 390 in 2001, as shown in Figure 3-2b. In the last few years, employment has increased to 440 jobs. These data provide only a subset of the total number of timber-related jobs, but this benchmark continues to indicate that employment is improving, and salaries are increasing.

Figure 3-2b
Manufacturing Jobs in Lumber and Wood in Tillamook County (1986-2004)



Source: Oregon Employment Department

Benchmark 3.3 Employment in the Farm Sector

Background

This benchmark relates to Goal 3.1 of the 2020 Strategic Vision:

> *Expand existing business and industries while maintaining traditional industrial base in forestry and agriculture.*

In addition to tourist dollars generated from the Tillamook County Creamery's 800,000 to 1 million annual visitors, the dairy industry's production comprises a critical portion of the Tillamook County economy. It is not surprising then that during the Visioning process, 72% of respondents to the Futures Council household survey agreed that protecting farmland is essential to the county's economy. It is interesting to note that the negative image of logging as revealed in the survey—61% of respondents disagreed with the statement, "providing jobs is more important than protecting the environment" and 57% disagreed with the statement "clearcutting is a necessary forest practice" is not seen for the dairy industry. This reflects Tillamook County's primary identity as a dairy community.

Rather than measuring only agricultural employment, which does not include the dairy industry, this benchmark measures total employment in the farm sector. The more traditional economic indicator of employment in the agricultural industry is a subset of farm data and is also provided in the findings.

Following are updated data for this benchmark.

Data Source

Data were obtained for this benchmark through:

- Oregon Employment Department, Oregon Labor Market Information System (OLMIS), Total Agricultural Employment by Calendar Year: Tillamook County, 2001-2004 www.olmis.org
- Oregon Employment Department, Oregon Labor Market Information System (OLMIS) www.olmis.org Figures for total farm employment were calculated by subtracting non-farm employment from total employment.

Related State Benchmark

- None

Findings

Table 3-3 and Figure 3-3 show that total farm employment and agricultural employment have decreased somewhat since the 2000 Benchmarks Report. In 1991, farm employment comprised approximately 33 percent of total employment in Tillamook County. By 2001, this figure dropped to 25 percent. Agricultural employment also dropped from approximately 7 percent to 5

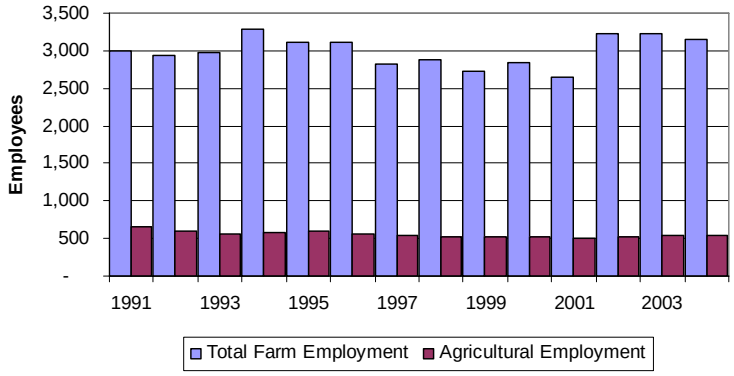
percent of total employment during this period. Table 3-3 also indicates that the percentage of total farm employment has increased from a low of 25% in 2001 to 28% in 2004. The percentage of total agricultural employment has stabilized at around 4.8% for the past 5 years. While both industries have added jobs since the last update, both industries have also decreased in percent of total employment for the county since 1991.

Table 3-3
Total Employment and Employment in the Farm Sector in Tillamook County (1991–2004)

		Total Farm Emp		Agricultural Emp	
Year	Total Employed	Number	Percent of Total Employed	Number	Percent of Total Employed
1991	9,210	3,000	33%	650	7.1%
1992	9,400	2,940	31%	600	6.4%
1993	9,580	2,970	31%	560	5.8%
1994	10,350	3,280	32%	580	5.6%
1995	10,360	3,110	30%	590	5.7%
1996	10,730	3,110	29%	570	5.3%
1997	10,390	2,820	27%	540	5.2%
1998	10,540	2,880	27%	530	5.0%
1999	10,661	2,731	26%	520	4.9%
2000	10,789	2,849	26%	520	4.8%
2001	10,552	2,652	25%	505	4.8%
2002	11,243	3,233	29%	520	4.6%
2003	11,220	3,230	29%	540	4.8%
2004	11,356	3,146	28%	550	4.8%
Change1991-2004					
Number	2,146	146		-100	
Percent	23%	5%		-15%	

Source: Oregon Employment Department

Figure 3-3
Tillamook County Employment in the Agricultural Sector (1991–2003)



Source: Oregon Employment Department

Benchmark 3.4 Average Annual Payroll per Covered Worker

Background

This benchmark relates to Goal 3.2 of the 2020 Strategic Vision:

Increase per capita income.

Sound wages are at the core of a healthy economy. With declining numbers of jobs in natural resource industries, Oregon's rural counties face challenges providing family wage jobs to many of their residents. During the Visioning process, residents emphasized the importance of economic diversification and family wage employment opportunities.

This benchmark complements Benchmark 3.5: Average Annual Per Capita Income. The average annual payroll per covered worker measures the total payroll for all industries divided by the annual average employment in these industries. According to the Oregon Progress Board, "this approach helps evaluate how each worker is fairing rather than just charting personal income, which may include two-worker families." In addition, per capita income will improve as more individuals become employed. This measurement evaluates the income in the county independent of total employment or household size.

This update provides recent information for this benchmark from the Oregon Progress Board.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board, *2005 County Data Book*, November 2005, Benchmark #12: Average Annual Payroll per Covered Worker (All Industries) in 2004 Dollars, p.9. www.oregon.gov/DAS/OPB

Related State Benchmark

- Oregon Progress Board Benchmark #12

Findings

Table 3-4 summarizes the (adjusted) average annual payroll per covered worker from 1992 to 2004. The earnings gap between Tillamook County and the state peaked in 2000; however, since then it has steadily decreased. The overall change in the Tillamook-Oregon difference between 1992 and 2004 amounts to only $637 – a clear indication that Tillamook County's average payroll is going up steadily. Another factor to note is that although the other rural counties in Oregon have a higher average annual payroll, Tillamook County's payroll is rising at a higher rate than either the other counties or the state. The percent change in payroll between 1994 and 2004 is 22% for Tillamook County, compared to 20% for Oregon and only 13% for rural counties. If this trend were to continue, Tillamook County would easily surpass the other rural counties in average annual payroll over the next few years.

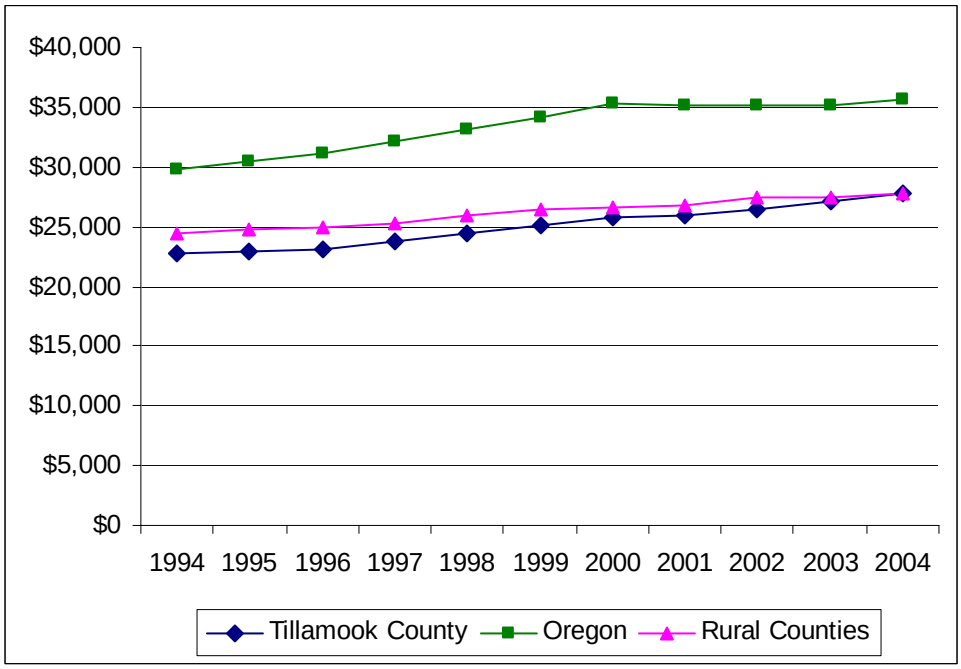
Table 3.4
Average Annual Payroll Per Covered Worker

	Tillamook County	Oregon	Rural Counties	Tillamook-Oregon Difference
1992	$22,291	$29,546	N/A	($7,255)
1993	$22,587	$29,584	N/A	($6,997)
1994	$22,748	$29,802	$24,503	($7,054)
1995	$22,942	$30,422	$24,688	($7,480)
1996	$23,074	$31,157	$24,861	($8,083)
1997	$23,821	$32,201	$25,275	($8,380)
1998	$24,462	$33,196	$26,012	($8,734)
1999	$25,139	$34,110	$26,476	($8,971)
2000	$25,801	$35,341	$26,577	($9,540)
2001	$25,883	$35,067	$26,801	($9,184)
2002	$26,452	$35,077	$27,400	($8,625)
2003	$27,092	$35,202	$27,519	($8,110)
2004	$27,726	$35,618	$27,791	($7,892)

Source: Oregon Progress Board

Figure 3-4 graphically shows that, although wages for workers in both Tillamook County and other rural counties have improved throughout this decade, the rate of growth in rural counties clearly continues to lag behind the state as a whole. However, the gap between Oregon and Tillamook County is slowly narrowing and the difference between Oregon and Tillamook County earnings is at its smallest in nearly a decade.

Figure 3-4
Average Annual Payroll per Covered Worker (2004 Dollars)



Source: Oregon Progress Board

Benchmark 3.5 Per Capita Income as a Percentage of U.S. Per Capita Income

Background

This benchmark relates to Goal 3.2 of the 2020 Strategic Vision:

> *Increase per capita income.*

During the Visioning process, it became clear that Tillamook County residents place a high priority on increasing the number of family wage jobs available in the county. The average income of the individual is a reflection of the health of a region's economy. In addition to Benchmark 3.4: Average Annual Payroll per Covered Worker, this benchmark helps assess the county's success in raising the earning power of county residents relative to other regions in Oregon and the U.S. as a whole. Per capita income is determined by dividing the total personal income by the total population.

Following are updated data for this benchmark from the Oregon Progress Board.

Data Source

- Oregon Progress Board, *2005 County Data Book*, November 2005, Benchmark #11: Per Capita Personal Income as a Percentage of the US Per Capita Income (US=100%), p.6. www.oregon.gov/DAS/OPB

Related State Benchmark

- Oregon Progress Board Benchmark #11

Findings

Table 3-5 and Figure 3-5 show the per capita incomes as percentages of the US per capita income for Tillamook County, rural Oregon counties, and Oregon. Like Benchmark 3.4 on the previous pages, this benchmark indicates that Tillamook County is prospering at a higher rate than the other rural counties and Oregon as a whole. The 2002 benchmark update saw Tillamook County with an average of only 76% from 1990-2000.[10] In 2003, Tillamook County's average per capita income had risen to 80% of the U.S. per capita income, surpassing other rural counties that have not seen the same growth.

Table 3-5
Per Capita Income as a Percentage of the U.S. Per Capita Income (1992–2003)

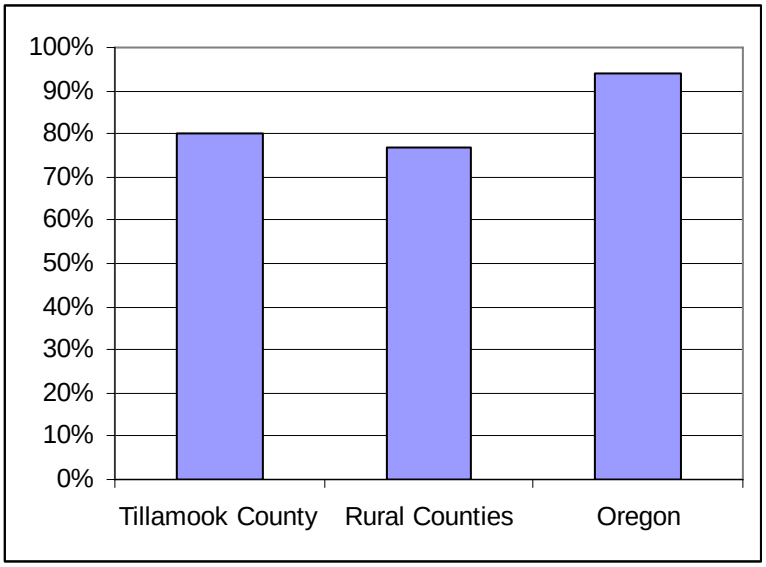
	Tillamook County	Rural Counties	Oregon
1992	76.2%	77.7%	92.2%
1993	76.8%	78.5%	93.9%
1994	78.4%	78.1%	95.0%
1995	78.5%	78.8%	96.6%
1996	81.1%	78.2%	96.8%
1997	80.1%	78.1%	96.6%
1998	80.2%	76.4%	95.0%
1999	81.3%	75.6%	94.8%
2000	79.5%	73.9%	94.1%
2001	80.8%	73.8%	93.2%
2002	81.5%	74.9%	92.4%
2003	80.1%	74.7%	91.3%
Average	**80%**	**77%**	**94%**

Source: Oregon Progress Board

Figure 3-5 shows the discrepancy in earnings between Oregon, Tillamook County, and other rural counties. Although Tillamook County's per capita income is on the rise, it still lags 20% behind the U.S., and 14% behind Oregon as a whole.

[10] For reference, see the 2002 update completed by Community Planning Workshop: "Measuring Progress…2002 Tillamook County Benchmarks Update", Tillamook County Futures Council, February 2003.

Figure 3-5
Average Per Capita Income as a Percentage of U.S. Per Capita Income (1992-2003)



Source: Oregon Progress Board

Benchmark 3.6 Percentage of Population Below Poverty Level

Background

This benchmark addresses Goal 3.2:

Increase per capita income.

Living below the poverty level often means a family will not have adequate funds to afford vital living expenses like food, shelter, and health services. The state of Oregon has undertaken a comprehensive effort involving a number of state agencies to reduce poverty in both urban and rural areas. This benchmark provides the third evaluation of per capita income in Tillamook County by examining the percentage of the total population living below the Federal poverty line. Over time, this benchmark will assess the effectiveness of state and county efforts to reduce poverty in Oregon and Tillamook County. Table 3-6a details the 2005 poverty guidelines for the United States by the size of the family.

Table 3-6a
U.S. Department of Health and Human Services Poverty Guidelines for 2005

Family Size	1	2	3	4	5	6	7	8
U.S. Poverty Level	$9,570	$12,830	$16,090	$19,350	$22,610	$25,870	$29,130	$32,390

Source: U.S. Department of Health and Human Services

Following are updated data from the Oregon Progress Board and the Department of Human Services.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board, *2005 County Data Book*, November 2005, Benchmark #53: Percent of Oregonians with Incomes Below 100% of the Federal Poverty Level, p.54. www.oregon.gov/DAS/OPB
- Oregon Department of Human Services, Children, Adults and Families Programs, Reports and Publications, Historical Program Information, Public Assistance Branch and Service Delivery Data, "Historical Program Information by Branch and County: State of Oregon Public Assistance Data by County." (http://www.afs.hr.state.or.us/papage.html) Data on the "estimated population of the county" and the "estimated persons below poverty" in Section A of this table were collected for each month and then averaged to get annual percentages of persons below poverty.
- US Department of Health and Human Services, poverty guidelines (definition of poverty). http://aspe.hhs.gov/poverty/05poverty.htm.

Related State Benchmark

- Oregon Progress Board Benchmark #53

Findings

Table 3-6 shows the Department of Human Services' data on the percentage of those living below the poverty line in Tillamook County and Oregon. From 1992 through 1998, Tillamook County had a poverty rate higher than that of the state. In more recent years, however, Tillamook County's rate has dropped steadily and is now consistent with that of Oregon at 11% below the poverty level.

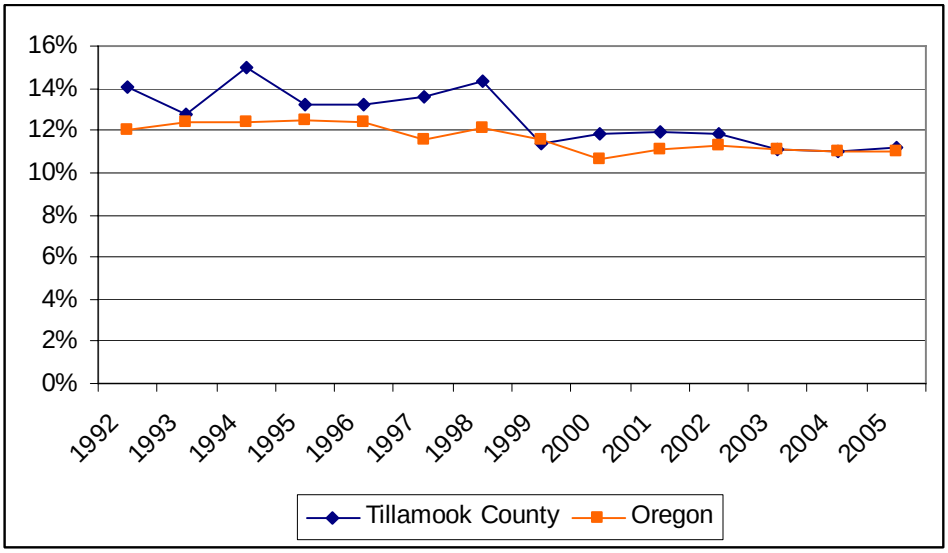
Table 3-6b
Percentage of Total Population Below Poverty in Tillamook County and Oregon (1992–2005)

	Tillamook County	Oregon
1992	14.1%	12.0%
1993	12.8%	12.4%
1994	15.0%	12.4%
1995	13.2%	12.5%
1996	13.2%	12.4%
1997	13.6%	11.6%
1998	14.3%	12.1%
1999	11.4%	11.6%
2000	11.8%	10.6%
2001	11.9%	11.1%
2002	11.8%	11.3%
2003	11.1%	11.1%
2004	11.0%	11.0%
2005	11.2%	11.0%

Source: Oregon Department of Human Services, Oregon Progress Board

Figure 3-6 graphically shows that although Tillamook County had a higher rate of poverty than Oregon through much of the nineties, the rate has fallen over time to intersect and stay constant with Oregon's rate over the past few years.

Figure 3-6
Percentage of Total Population Below Poverty (1992-2005)



Source: Oregon Department of Health and Human Services; Oregon Progress Board

Benchmark 3.7 Number of Students Receiving Free or Reduced-Cost Lunches

Background

This benchmark addresses Goal 3.2:

Increase per capita income.

Benchmark 3.7 provides the final benchmark that the Futures Council has chosen to use in assessing per capita income. By examining the numbers of students in need of assistance for school lunches, this benchmark aims to evaluate the effect of increasing (or decreasing) income levels on Tillamook County families. In doing so, this benchmark also helps gauge the number of family wage jobs available to Tillamook County residents.

In order to qualify for the free or reduced lunch program, a family must meet a set of standards for income level and family size established by the U.S. Department of Agriculture. Table 3-7a shows USDA family income and size standards that determine eligibility for school lunch programs.

Table 3-7a
USDA Family Earnings and Size Standards for School Lunch Programs in 2005-2006 School Year

Family Size	1	2	3	4	5	6	7	8
Annual Income to Qualify for Free Lunch	$12,441	$16,679	$20,917	$25,155	$29,393	$33,631	$37,869	$42,107
Annual Income to Qualify for Reduced Price Lunch	$17,705	$23,736	$29,767	$35,798	$41,829	$47,860	$53,891	$59,922

Source: Oregon Department of Education

Following are updated data obtained from the Oregon Department of Education Child Nutrition Programs.

Data Source

- Oregon Department of Education, Administrators Group, Child Nutrition Programs, School Nutrition Programs, National School Lunch Programs, "Income Elegibility Guildlines July 2005-June 2006," Form 581-3511-E (Rev. 6-04). http://www.ode.state.or.us/nutrition/

Related State Benchmark

- None

Findings

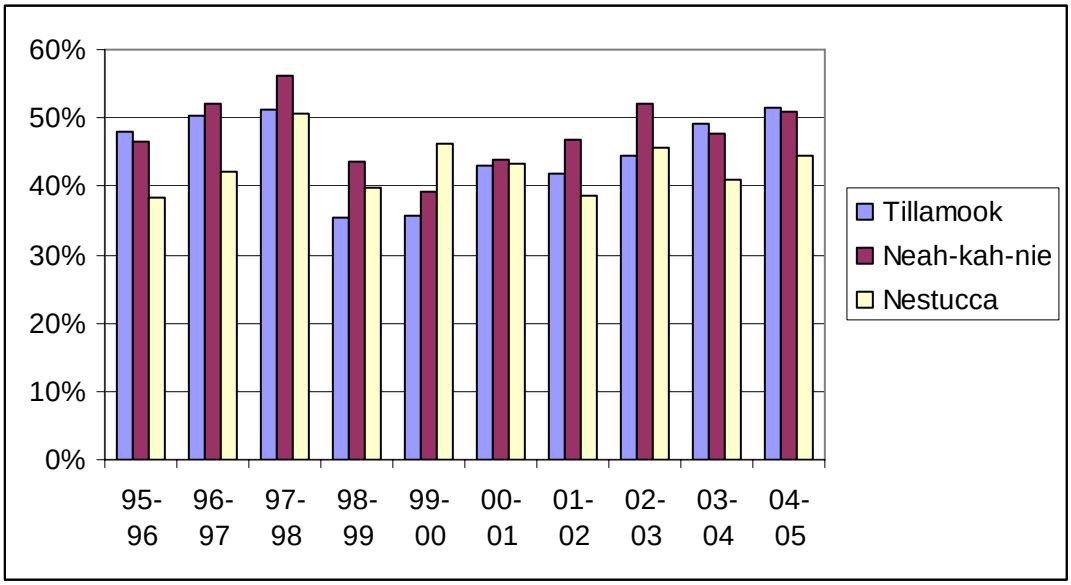
Table 3-7b and Figure 3-7 show that between the 1995-96 and 1997-98 school years, increasing numbers of students received free or reduced-cost lunches in each of Tillamook County's three school districts. This was followed by a dramatic drop in the number of students receiving free or reduced-cost lunches in the 1998-99 school year. The reduction may be due to a variety of external factors such as extra resources available for these programs or lower enrollment. However, from the 1990-2000 school year to the present, the average number of students receiving free or reduced-cost lunches has risen steadily. From 1998 to the present, the total percent of Tillamook County students receiving free or reduced-cost lunches has increased by 9.3%.

Table 3-7b
Percentage of Tillamook County School Children by School District Receiving Free or Reduced-Cost Lunches (1995–2005)

School District	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05
Tillamook	48.1%	50.3%	51.2%	35.4%	35.8%	43.1%	41.8%	44.6%	49.3%	51.6%
Neah-kah-nie	46.5%	52.1%	56.3%	43.7%	39.1%	43.9%	46.7%	52.1%	47.8%	50.8%
Nestucca	38.2%	42.1%	50.5%	39.7%	46.1%	43.2%	38.7%	45.7%	41.0%	44.4%
Average	44.3%	48.2%	52.7%	39.6%	40.3%	43.4%	42.4%	47.5%	46.0%	48.9%

Source: Oregon Department of Education

Figure 3-7
Percentage of Tillamook County School Children by School District Receiving Free or Reduced-Cost Lunches (1995–2005)



Source: Oregon Department of Education

Benchmark 3.8 Total Unemployment Rate

Background

This benchmark relates to Goal 3.3 of the 2020 Strategic Vision:

Diversify the economy.

As discussed throughout this chapter, local residents place a high value on the creation of family wage jobs and economic diversification. This benchmark assesses economic diversification throughout our communities by measuring unemployment across all sectors of the county economy. By doing so, it complements Benchmark 3.10: Employment Diversification, which focuses on trends within specific industries operating throughout the county. By combining these two benchmarks, policy makers can track the big picture (total unemployment) as well as how it plays out in specific facets of the local economy (labor trends).

Following is an update of the Oregon Progress Board data for this benchmark. Data from the Oregon Employment Department and Bureau of Labor Statistics have been added as additional indicators for this benchmark.

Data Source

Data were obtained for this benchmark through:

- Oregon Employment Department (OLMIS), Unemployment Division, Unemployment Rates by Labor Market Area. www.olmis.org
- Oregon Progress Board, *2005 County Data Book*, November 2005, Benchmark #15: Oregon Unemployment Rate as a Percent of US Unemployment Rate, p.10. www.oregon.gov/DAS/OPB
- Bureau of Labor Statistics, National Unemployment Rate, Annual Averages. www.bls.gov

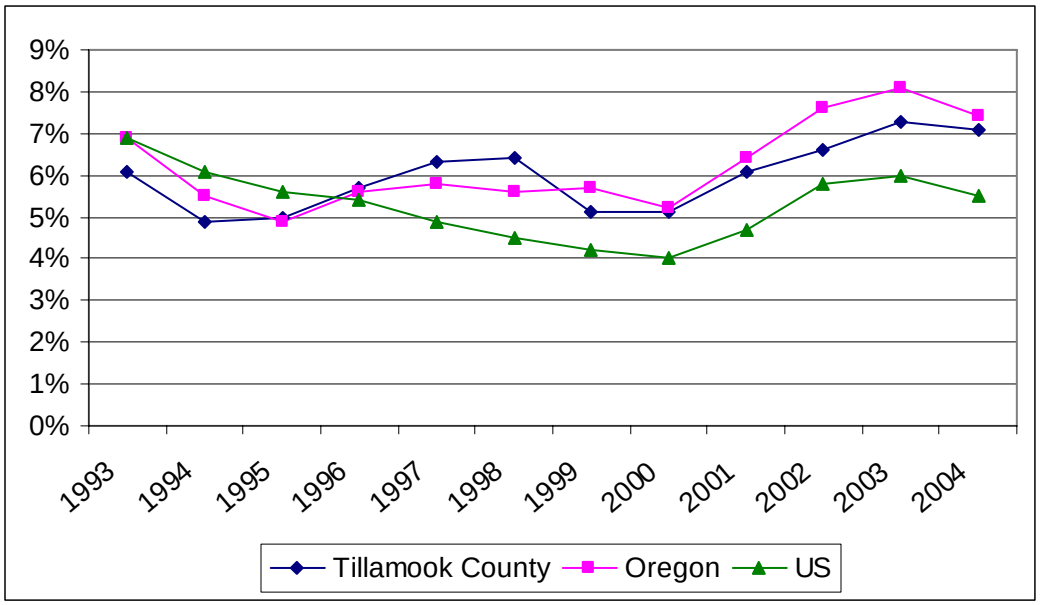
Related State Benchmark

- Oregon Progress Board Benchmark #15

Findings

As Figure 3-8 indicates, unemployment rates have fluctuated throughout the past decade. Tillamook County started out lower than Oregon and the U.S. in 1993, then rose above both of them by 1997. After a low point in 2000, rates have risen over the past four years at all levels, including Tillamook County, Oregon, and the United States. Although the gap is narrowing, Tillamook County continues to have a lower rate than Oregon overall.

Figure 3-8a
Unemployment Rate (1993–2004)



Source: Oregon Employment Department, Bureau of Labor Statistics

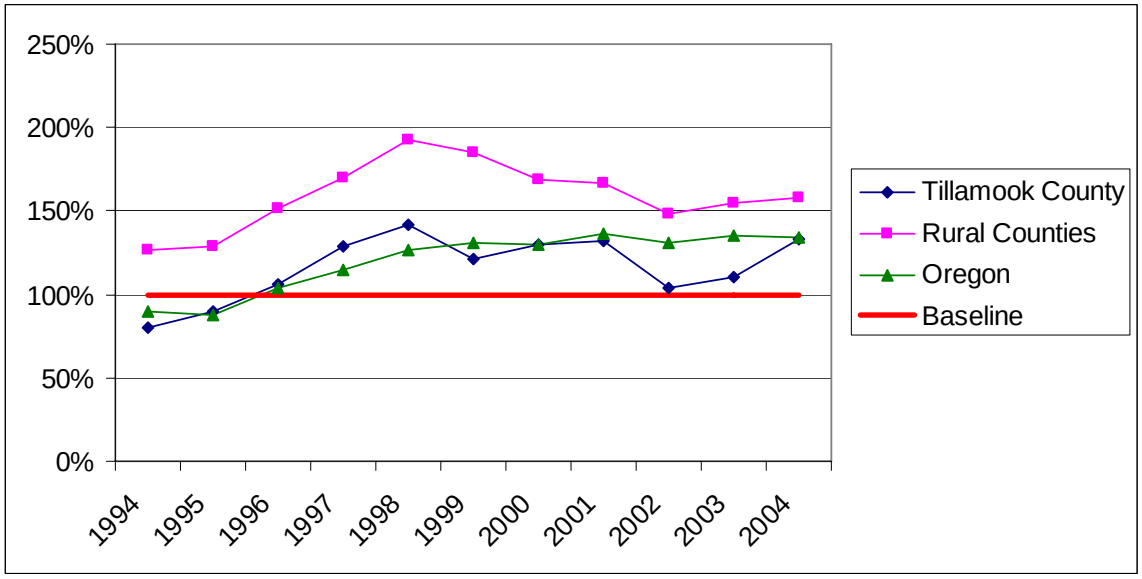
Table 3-8 and Figure 3-8b provide another indicator on unemployment trends by showing the unemployment rate as a percent of the national unemployment rate for Tillamook County, rural counties, and the state. For the last eight years, all three areas have been well above the national unemployment rate. Both Tillamook County and Oregon have consistently had lower unemployment rates than rural Oregon counties on average. It is important to note that these figures are not seasonably adjusted and do not necessarily represent the year-round employment situation fully.

Table 3-8
Unemployment Rate as a Percentage of US Unemployment Rate (1994–2004)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tillamook County	80.3%	89.3%	105.6%	128.6%	142.2%	121.4%	130.0%	131.9%	103.4%	110.0%	132.7%
Rural Counties	127.0%	129.2%	151.9%	170.1%	192.7%	184.8%	168.4%	167.1%	148.2%	154.5%	157.6%
Oregon	90.2%	87.5%	103.7%	114.3%	126.7%	131.0%	130.0%	136.2%	131.0%	135.0%	134.5%

Source: Oregon Progress Board

Figure 3-8b
Unemployment Rate as a Percentage of US Unemployment Rate (1994-2004)



Source: Oregon Progress Board

Benchmark 3.9 Status of Tillamook County and its Cities as "Distressed Areas"

Background

This benchmark relates to Goal 3.3 of the 2020 Strategic Vision:

Diversify the economy.

Each year, the Oregon Economic and Community Development Department (OECDD) assesses which counties and cities are "distressed" areas. These areas receive priority assistance from the department.

The 2005 update reflects changes made in the methodology of determining whether cities or counties are distressed. To determine whether a county is distressed, four factors are used to create an index, including: employment change; average wage change; annual unemployment rate relative to state; and per capita personal income relative to state. An index of less than 1.0 indicates that a county is distressed. To determine whether a place in a non-distressed county is distressed, four factors are used:

- Poverty rate;
- Per capita personal income;
- Percent of population aged 25+ with college education; and
- Unemployment rate.

OECDD determined a threshold value for each of these factors. If three or more of the factors are below the threshold value, the place is considered distressed.

This new benchmark added by the Futures Council in December 2002 provides a good overview of the general health of Tillamook County's economy. Following are data from OECDD's 2005 analysis.

Data Source

Data were obtained for this benchmark through:

- Oregon Economic and Community Development Department, Distressed Communities. www.econ.state.or.us/distlist.htm.

Related State Benchmark

- None

Findings

In 2005, Tillamook County had an index value of 1.04, making it a non-distressed county. However, the towns of Garibaldi, Tillamook, and Bay City all made the list of distressed areas. Garibaldi classifies as severely distressed because it falls below the threshold values in all four categories. These three areas may be locations where the Futures Council wants to specifically examine how it can promote a strong economy.

Table 3-9
Distressed Areas in Tillamook County as of 2005

Non-Distressed County	Distressed City/Area	% Population Aged 25+ w/Bachelor's Degree or Higher	Unemployment Rate	% Population Below Poverty	Per Capita Income	Number of Factors Worse than Threshold	Economic Status
	Threshold:	**21.00%**	**6.50%**	**11.00%**	**$19,000**		
Tillamook	Garibaldi	12.30%	7.90%	11.60%	18,075	4	Severely Distressed
	Tillamook	14.90%	3.80%	15.40%	15,160	3	Distressed
	Bay City	10.80%	6.40%	12.40%	18,731	3	Distressed

Source: Oregon Economic and Community Development Department

Benchmark 3.10 Employment Diversification

Background

This benchmark relates to Goal 3.3 of the 2020 Strategic Vision:

Diversify the economy.

As discussed in other benchmarks throughout this chapter, family wage jobs are a vital component of economic health. At present, Tillamook County desires to expand the number of family wage jobs that are available to its residents. One may hypothesize that limited family wage jobs resulted in 76% of local residents agreeing with the survey statement, "Tillamook County needs a more diversified employment base." Despite the agreement concerning the need for economic diversification and high-paying jobs, the Visioning process revealed a range of opinions regarding the types of businesses and industries that local policy makers should promote. Many residents wanted to focus on maintaining and expanding opportunities in traditional industries like logging, fishing, and agriculture. Others expressed concern about the environmental degradation that can occur as a result of these industries and wanted to pursue less resource-dependent development opportunities.

This benchmark is measured in two ways: by comparing industry employment from 2001-2004; and also by the Hachman economic diversification index. An economic diversification index is an indicator that measures how closely a county's employment distribution resembles that of the state. The more closely a region's economy reflects the reference region, the higher the value of the Hachman Index. This index has a maximum value of one—meaning that the county's employment mix is exactly the same as the state's. The index is defined as follows:

$$HI_t = \frac{1}{\sum_j \left[\left(\frac{EMP_{CTY_{jt}}}{EMP_{STATE_{jt}}} \right) x\, EMP_{CTY_{jt}} \right]}$$

(Where EMP_{CTYjt} is the share of the county's employment in industry j in year t, and $EMP_{STATEjt}$ is the share of the state's employment in industry j in year t.)

This new benchmark added in December 2002 provides a snapshot view of the diversity of Tillamook County's employment base.

Data Source

Data were obtained for this benchmark through:

- Erik Knoder, Regional Economist for Region 1, Oregon Employment Department. (541)-265-8891 ext. 340.
- Oregon Employment Department, Oregon Labor Market Information System (OLMIS), Tillamook County Labor Force and Industry Employment for years 2001-2004. Figures for

farm employment were calculated by subtracting non-farm employment from total employment. www.olmis.org

Related State Benchmark

- None

Findings

Table 3-10a shows that Tillamook County declined slightly in economic diversity as compared to Oregon's economic distribution from 2000-2005. This could correlate with the industry distribution shown in Table 3-10b, with Tillamook County losing jobs or market share in farm employment, information, professional and business services, government, and educational and health services.

Table 3-10a
Hachman Economic Diversification Index for Tillamook County as Compared to Oregon

	2000	2005
Hachman Index Value	0.87	0.80

Source: Oregon Employment Department

Table 3-10b shows the diversity of employment by sector. Due to methodology changes in classifying industry sectors, data prior to 2001 cannot be compared to current years. Non-farm employment continues to grow in Tillamook County, adding an additional 310 jobs in 2004. In addition, the manufacturing sector grew slightly and added 110 jobs to the county. Tillamook County saw a net loss of jobs in only three sectors: information, professional and business services, and government. All other sectors added jobs, although some, including farming employment, declined in their market share of jobs.

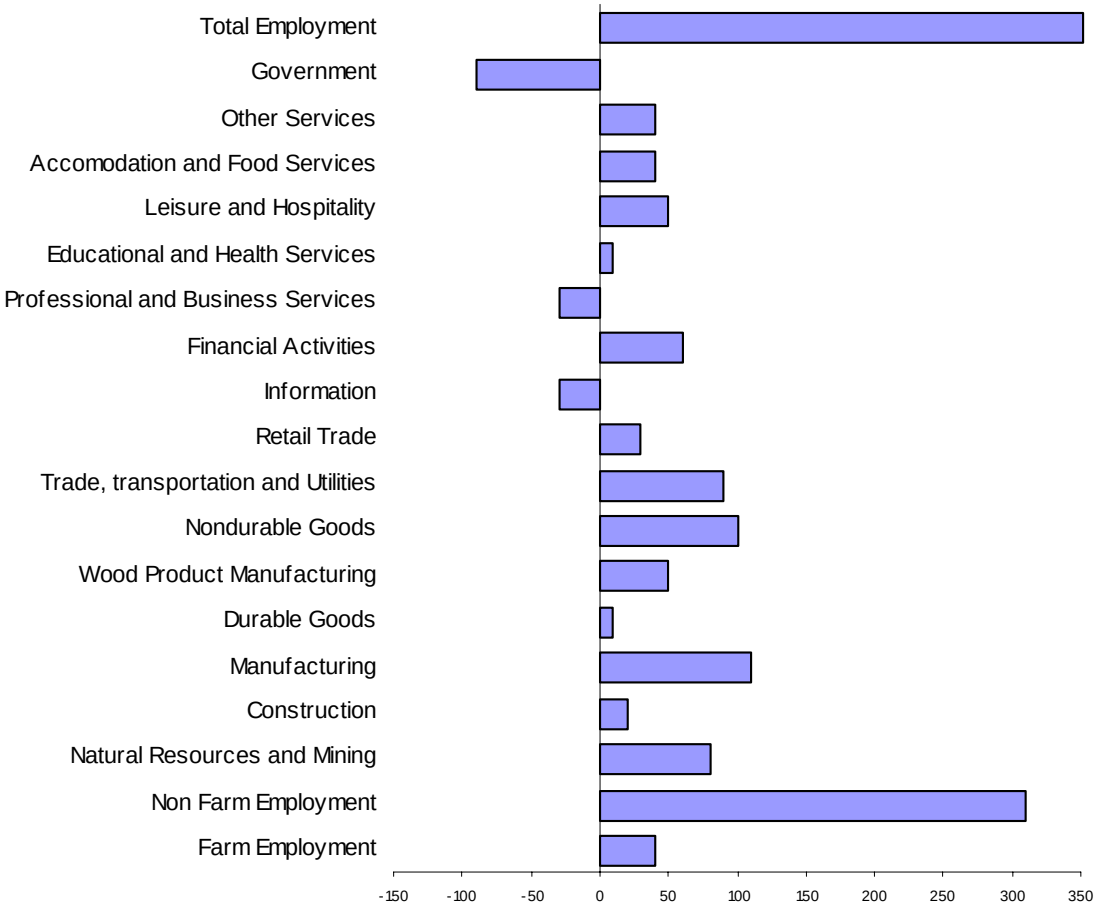
Table 3-10b
Tillamook County Employment by Sector 2001-2004

	2001		2004		Change 2001-2004	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Farm Employment	3,105	28.2%	3,146	27.7%	**41**	**-0.5%**
Non Farm Employment	7,900	71.8%	8,210	72.3%	**310**	**0.5%**
Natural Resources and Mining	170	1.5%	250	2.2%	**80**	**0.7%**
Construction	340	3.1%	360	3.2%	**20**	**0.1%**
Manufacturing	1,310	11.9%	1,420	12.5%	**110**	**0.6%**
Durable Goods	550	5.0%	560	4.9%	**10**	**-0.1%**
Wood Product Manufacturing	390	3.5%	440	3.9%	**50**	**0.3%**
Nondurable Goods	760	6.9%	860	7.6%	**100**	**0.7%**
Trade, transportation and Utilities	1,250	11.4%	1,340	11.8%	**90**	**0.4%**
Retail Trade	970	8.8%	1,000	8.8%	**30**	**0.0%**
Information	110	1.0%	80	0.7%	**(30)**	**-0.3%**
Financial Activities	300	2.7%	360	3.2%	**60**	**0.4%**
Professional and Business Services	350	3.2%	320	2.8%	**(30)**	**-0.4%**
Educational and Health Services	810	7.4%	820	7.2%	**10**	**-0.1%**
Leisure and Hospitality	1,090	9.9%	1,140	10.0%	**50**	**0.1%**
Accomodation and Food Services	1,040	9.5%	1,080	9.5%	**40**	**0.1%**
Other Services	300	2.7%	340	3.0%	**40**	**0.3%**
Government	1,860	16.9%	1,770	15.6%	**(90)**	**-1.3%**
Total Employment	11,005		11,356		**351**	**3.1%**

Source: Oregon Employment Department

Figure 3-10 illustrates the net change in employment by sector comparing the years 2001 to 2004. Total employment has risen by over 350 jobs, with most of the new jobs coming from the non-farm sector. Tillamook County lost employment in only three sectors and gained in all other sectors.

Figure 3-10
Net Change in Employment by Sector In Tillamook County (2001-2004)



Source: Oregon Employment Department

Benchmark 3.11 Tourism Spending and Employment in Tillamook County

Background

This benchmark relates to Goal 3.4 of the 2020 Strategic Vision:

> *Promote economic growth through year-round family wage jobs in the tourism industry.*

Tourism is a central part of Tillamook County's economy. It contributes to local business earnings, local and state tax revenues, and provides employment opportunities. Tillamook County's world-famous Creamery along with its scenic location on the Oregon Coast draws tourists year-round.

This is a new benchmark added by the Futures Council in December 2002. Council members feel it is important to track how much tourism is contributing to the local economy. Data for this benchmark are from reports generated for the Oregon Tourism Commission by a Portland consulting firm, Dean Runyan Associates.

Data Source

Data were obtained for this benchmark through:

- Dean Runyan Associates, Travel Data, Oregon Travel Data, County Level Impacts, "Travel Impacts by County, 2004," "Total Travel Spending by County, 1991-2004," "Travel Generated Employment and Earnings by County, 2004," "Employment Generated by Travel Spending," "Detailed County Impacts," "Oregon Travel Impacts 1991-2004," www.deanrunyan.com.

- Oregon Employment Department, Oregon Labor Market Information System (OLMIS), Regions, Region 1, Publications, Oregon Data Sheets, Tillamook County. www.olmis.org The data on total county employment were used to calculate the percent of employment resulting from travel spending as a percent of total employment.

Related State Benchmark

- None

Findings

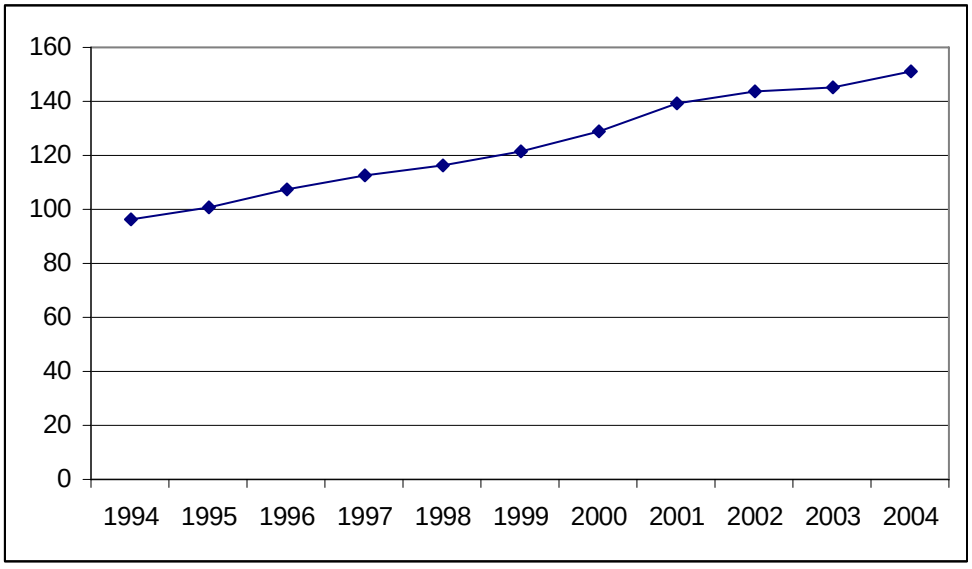
Table 3-11a and Figure 3-11 show that travel spending in Tillamook County and in the state of Oregon has steadily increased from 1994 to 2004—although it has grown at a greater rate for the state (5.5%) than for Tillamook County (4.6%). Travel spending in Tillamook County has remained steady at around 2 percent of total travel spending in Oregon.

Table 3-11a
Travel Spending in Millions of Dollars (1994-2004)

	Tillamook County	Oregon	TC as % of Oregon
1994	96.5	4,072.1	2.4%
1995	100.8	4,344.8	2.3%
1996	107.1	4,690.3	2.3%
1997	112.4	5,027.1	2.2%
1998	116.5	5,216.2	2.2%
1999	121.5	5,550.3	2.2%
2000	128.9	6,140.4	2.1%
2001	139.4	6,124.8	2.3%
2002	143.9	6,263.7	2.3%
2003	145.2	6,493.2	2.2%
2004	151.3	6,902.9	2.2%
Average Annual Change	**4.6%**	**5.5%**	

Source: Dean Runyan Associates

Figure 3-11
Tillamook County Travel Spending in Millions of Dollars (1994-2004)



Source: Dean Runyan Associates

Table 3-11b illustrates the fact that although travel spending in Tillamook County has been rising steadily since 1994, employment generated by travel spending is rising at a much slower rate and in fact has decreased slightly from a high point in 2002. This table also shows that travel generated employment is becoming a larger share of Tillamook County's total employment, increasing 1.3% in the decade from 1994-2004.

Table 3-11b
Employment Generated by Travel Spending 1994-2004

	Tillamook County	% of TC Total Employment	Oregon	TC as % of Oregon
1994	1,640	16.0%	67,960	2.4%
1995	1,660	15.9%	70,700	2.3%
1996	1,710	15.9%	73,280	2.3%
1997	1,700	16.1%	74,840	2.3%
1998	1,790	16.9%	78,120	2.3%
1999	1,800	16.5%	79,870	2.3%
2000	1,830	16.7%	83,330	2.2%
2001	1,960	17.8%	85,090	2.3%
2002	1,990	17.7%	86,290	2.3%
2003	1,970	17.6%	85,750	2.3%
2004	1,970	17.3%	87,210	2.3%

Source: Dean Runyan Associates, Oregon Employment Department

Benchmark 3.12 Number of Tourists Visiting the Tillamook County Creamery

Background

This benchmark relates to Goal 3.4 of the 2020 Strategic Vision:

> *Promote economic growth through year-round family wage jobs in the tourism industry.*

As discussed above, Tillamook County residents want to diversify the economy to provide more year-round family wage jobs. During the Visioning process, almost 70% of survey respondents encouraged the development of small, locally-owned businesses. As evidenced by Tillamook County's steadily increasing employment in the service sector, tourism holds great potential for diversifying and bolstering the county's economy through locally-owned business start-ups. This benchmark uses Tillamook County's most prominent tourist attraction, the Tillamook County Creamery, as an indicator of tourism county-wide.[11] The findings presented here are broken down into four three-month blocks to highlight the seasonal nature of the county's tourism.

This benchmark is certainly not an in-depth indicator of tourism and its effect on family wage jobs. However, assuming that greater numbers of visitors will spawn greater local investment in the community, tracking tourist visits to the Creamery will provide insight on the health of Tillamook County's tourist base and, subsequently, the likelihood that tourism can spawn family wage jobs. The Futures Council will work with Chambers of Commerce and the County Economic Development Council to develop a more direct link between tourism and its net effect on jobs.

The following data are an update to the data presented in the 2000 Benchmarks Report.

Data Source

Data were obtained for this benchmark through:

- Susan Palmer, Director of Retail Operations, Tillamook County Creamery Association, 503-815-6713.

Related State Benchmark

- None

[11] The Creamery utilizes a formula to calculate tourist estimates. Please see Appendix B for details.

Findings

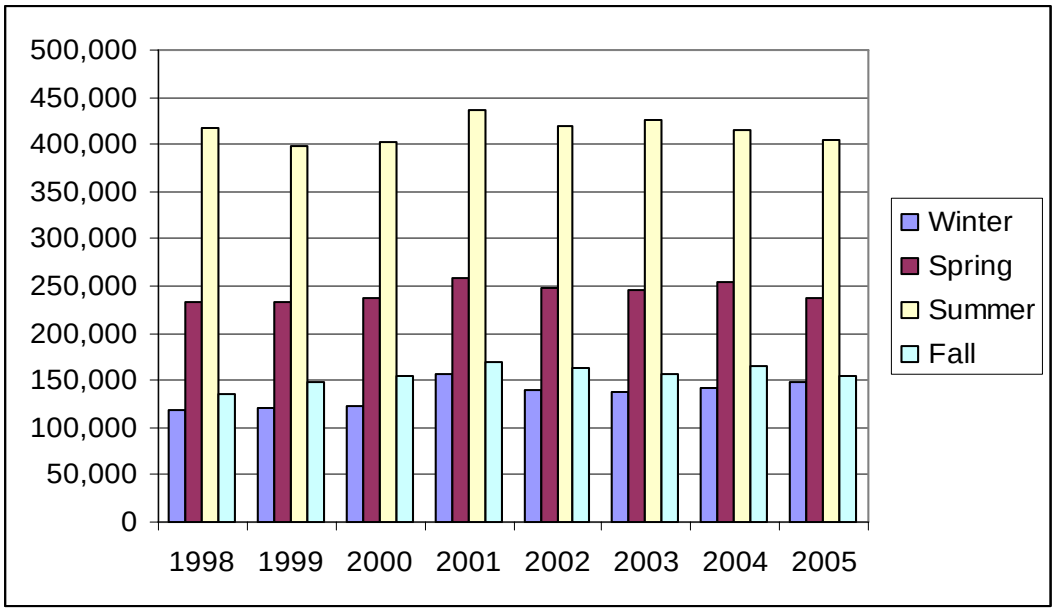
Table 3-12 and Figure 3-12 show that the number of tourists visiting the Tillamook Creamery has decreased slightly in 2005 from recent years. In 2001, the Creamery saw more than one million visitors, followed by a continued decline of visitors in the following years. Not surprisingly, 40-45% of tourists continue to visit in the summer months, followed by the spring, fall, and winter months, respectively.

Table 3-12
Number of Tourists Visiting the Tillamook Creamery by Season (1994–2005)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
	Winter	Spring	Summer	Fall	Totals
1994	115,905	229,424	406,081	142,534	893,944
1995	124,174	236,736	400,204	139,217	900,331
1996	85,997	213,223	385,029	130,288	814,537
1997	118,561	227,116	387,363	145,255	878,295
1998	118,920	233,360	418,212	135,716	906,208
1999	120,683	233,601	398,936	147,446	900,666
2000	123,471	237,417	402,068	154,229	917,185
2001	156,084	259,427	436,577	169,545	1,021,633
2002	139,467	247,106	419,772	163,242	969,587
2003	138,189	246,353	425,974	156,464	966,980
2004	141,157	253,471	415,974	166,146	976,748
2005	147,904	236,925	404,307	155,361	944,497

Source: Tillamook County Creamery Association

Figure 3-12
Number of Tourists Visiting the Tillamook Creamery by Season (1998–2005)



Source: Tillamook County Creamery Association

Benchmark 3.13 Number of Students Enrolled in Vocational Supplementary or Preparatory Classes at Tillamook Bay Community College

Background

This benchmark measures Goal 3.5 of the 2020 Strategic Vision:

> *Include youth in local economic development by providing appropriate classroom and field based education and training.*

Tillamook County residents understand that applied education is essential for today's demanding job market and that people with greater skills are more likely to earn family wages than those without. During the Visioning process, 62% of survey respondents agreed that more vocational employment skills are needed to improve incomes among low- and moderate-income residents. Training for workers increases their income generating potential, and Tillamook County residents want young people to have these opportunities before entering the workforce. Retraining and supplemental training are also critical for preparing people to work effectively with changing and emerging technologies. This benchmark measures the number of students who complete vocational supplementary or preparatory classes at the local community college.

Following are updated headcount and enrollment data from Tillamook Bay Community College's Institutional Researcher.

Data Source

Data were obtained for this benchmark through:

- Cindy Rowe, Institutional Researcher, Office of Registrar and Records, Tillamook Bay Community College. 503-842-8222 x.1162
- Lori Gates, Ph.D, Dean of Instruction and Student Services, Tillamook Bay Community College. 503-842-8222 x 1133

Related State Benchmarks

- Oregon Progress Board Benchmark #25
- Oregon Progress Board Benchmark #28

Findings

Table 3-13 and Figure 3-13 show that Tillamook County residents are using the vocational services provided at the Tillamook Bay Community College in smaller numbers. The number of students in vocational preparatory and supplementary courses was at its highest during the 1997-1998 school year; followed by a 41% decline in the number of students enrolled in subsequent years. Among other internal factors, the decline in enrollment is largely due to a significant decrease in state funding prior to the 2002-2003 school year that resulted in reduced staffing and course offerings at the college.

In Table 3-13, "Headcount" is the number of students when they are not double-counted if enrolled in more than one course. "Enrollment" does double count students. Both of these figures show similar trends.

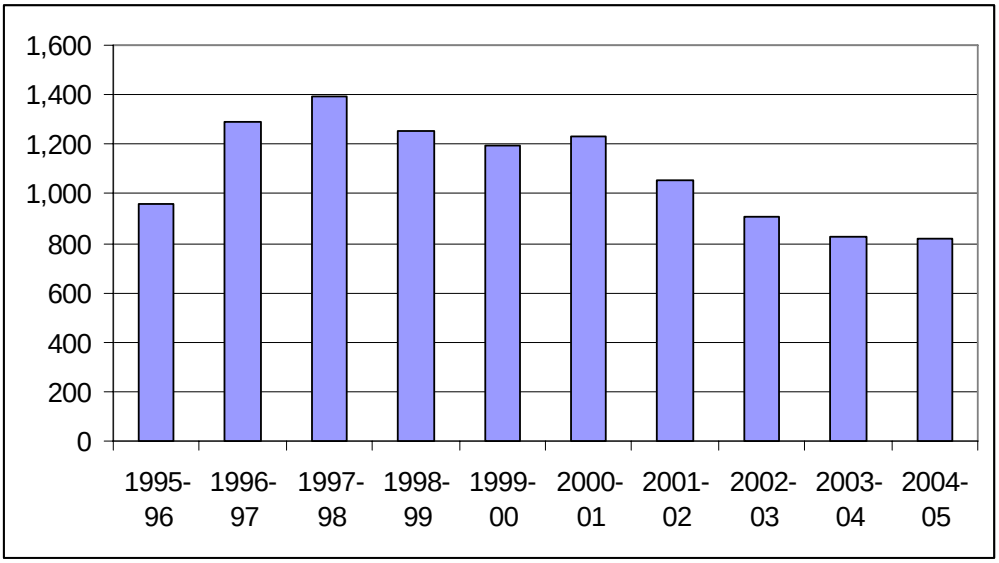
Table 3-13
Headcount and Enrollment in Vocational Preparatory and Supplementary Courses at Tillamook Bay Community College (1995–2005)

Academic Year	Headcount	Enrollment
1995-96	955	1,415
1996-97	1,294	1,695
1997-98	1,394	1,839
1998-99	1,251	1,700
1999-00	1,195	1,529
2000-01	1,229	1,555
2001-02	1,051	1,444
2002-03	910	1,044
2003-04	825	947
2004-05	819	998

Source: Tillamook Bay Community College

Figure 3-13 illustrates the trend in the number of students enrolled (headcount) in vocational preparatory and supplementary courses at the Tillamook Bay Community College from 1995 to 2004.

Figure 3-13
Number of Students (Headcount) in Vocational Preparatory and Supplementary Courses at Tillamook Bay Community College (1995–2005)



Source: Tillamook Bay Community College

CHAPTER 4: SOCIETY AND CULTURE BENCHMARKS

Benchmark 4.1	Tillamook County High School Dropout Rate
Benchmark 4.2	Percentage of 8th Graders Who Achieve Established Skill Levels in Reading and Math
Benchmark 4.3	Tillamook County School Report Cards
Benchmark 4.4	Pregnancy Rate per 1,000 Females Age 10-17
Benchmark 4.5	Percentage of 8th Grade Students Who Have Used Alcohol, Cigarettes, or Illicit Drugs in the Past 30 Days
Benchmark 4.6	Total Juvenile Arrests per 1,000 Juveniles per Year
Benchmark 4.7	Percentage of Registered Tillamook County Voters who Voted in General Elections

SOCIETY & CULTURE BENCHMARKS

Introduction

The Society and Culture section of the Strategic Vision contains an array of goals and strategies that indicate residents' and landowners' priorities with regard to the health and cultural richness of their communities. During the Visioning process, the welfare of area youth consistently arose as a topic of particular concern to Tillamook County residents. Two of the four goals and six of the eleven strategies contained in the Society and Culture section of the Vision relate to the welfare of county youth. These goals and strategies emphasize the importance of community involvement in the lives of children and focus on providing a range of educational and extracurricular opportunities for students. Those goals and strategies not involving youth address the importance of maintaining the rural character of Tillamook County and enhancing citizen participation in community affairs.

About the Society and Culture Benchmarks

Because of the Vision's emphasis on young people, the benchmarks contained in the Society and Culture section focus almost entirely on the well-being of youth in Tillamook County. Due to the rather general nature of these youth-oriented goals, however, they do not lend themselves to quick and easy measurement. As a result, most of the benchmarks contained here focus on measuring indicators of overall youth welfare. The Futures Council believes that, although they do not measure goals explicitly, many of these indicators will reflect how well a goal is being met, and therefore make effective benchmarks.

For example, Goal 4.2, which focuses on educational and extracurricular opportunities for students, is measured using the student dropout rate, achievement in math and reading, and overall school performance in the statewide school and district report cards (Benchmarks 4.1 – 4.3). The Futures Council is confident that if the county offers appropriate educational and extracurricular opportunities, this will be reflected through a student's participation and achievement in both his/her school and community.

Similarly, Goal 4.3 emphasizes the desire for the community to become involved in its schools. This goal is measured using social indicators, including the teen pregnancy rate, teen alcohol and drug abuse rates, and juvenile arrest rates (Benchmarks 4.4 – 4.6). The implicit idea behind these benchmarks is that if parents and the community as a whole become involved in their schools, the community will see improving trends in the health and welfare of area youth.

Goals 4.1 and 4.4 are extremely subjective and consequently, not easily measured. The Futures Council is still determining a benchmark for Goal 4.1: Protect Rural Atmosphere and Small Town Feeling. Goal 4.4 addresses citizen involvement in government and is measured using voter turnout.

The list below contains a summary of the goals found in the Society and Culture section of the Tillamook County Strategic Vision. Beneath each goal is listed the benchmark(s) with which the Futures Council has chosen to assess it.

Goal 4.1 Protect rural atmosphere and small-town feeling.

Benchmark under development

Goal 4.2 Students in Tillamook County schools participate in a wide variety of safe, skill-building, extracurricular activities and educational opportunities.

Benchmark 4.1	Tillamook County High School Dropout Rate
Benchmark 4.2	Percentage of 8th Graders Who Achieve Established Skill Levels in Reading and Math
Benchmark 4.3	Tillamook County School Report Cards

Goal 4.3 There is strong community involvement in local schools. Community involvement is a part of every student's education in Tillamook County.

Benchmark 4.4	Pregnancy Rate per 1,000 Females Age 10-17
Benchmark 4.5	Percentage of 8th Grade Students Who Have Used Alcohol, Cigarettes, or Illicit Drugs in the Past 30 Days
Benchmark 4.6	Total Juvenile Arrests per 1,000 Juveniles per Year

Goal 4.4 There is ample opportunity for citizens to become involved in local and county government.

Benchmark 4.7	Percentage of Registered Tillamook County Voters who Voted in General Elections

Benchmark 4.1 Tillamook County High School Dropout Rate

Background

This benchmark relates to Goal 4.2 of the 2020 Strategic Vision:

> *Students in Tillamook County schools participate in a wide variety of safe, skill-building, extracurricular activities and educational opportunities.*

Tillamook County takes pride in its youth. From the results of the Futures Council's gauging of public opinion, it is evident that residents recognize the importance of youth education. An educated young population will ultimately benefit the county as a whole. Goal 4.2 declares a strong desire for Tillamook County's youth to become educated, well-rounded members of society.

This benchmark measures the percentage of students, grades 7-12, who leave the school system and do not return to receive a high school diploma. Statistics show that the future for young people who do not complete a high school education is not as promising as those of their graduating peers. Besides lacking basic skills for employment, those who drop out are not exposed to continuing educational and professional opportunities provided to high school graduates. As a result, students who dropout are more likely to be unemployed, and if employed, will likely earn less than those with a diploma. Thus, a low dropout rate indicates that young people have a better chance of success in an increasingly sophisticated and demanding job market.

This update to the benchmarks provides new data for the 1997-98 through 2003-2004 school years.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board. *2005 County Data Book*, November 2005, Benchmark #22: High School Dropout Rate (Grades 9-12 for the listed school year), p.22. www.oregon.gov/DAS/OPB
- Oregon Department of Education. Reports, Data and Statistics, Dropout Reports. www.ode.state.or.us

Related State Benchmark

- Oregon Progress Board Benchmark #22

Findings

Table 4-1 and Figure 4-1 show high school dropout rates for Tillamook County, rural Oregon counties, and Oregon between the 1997-98 and 2003-04 school years. Definitional changes regarding what constitutes a "dropout" were instituted in the 1995-96 school year. Due to this, data prior to 1996 cannot be adequately compared with later years.

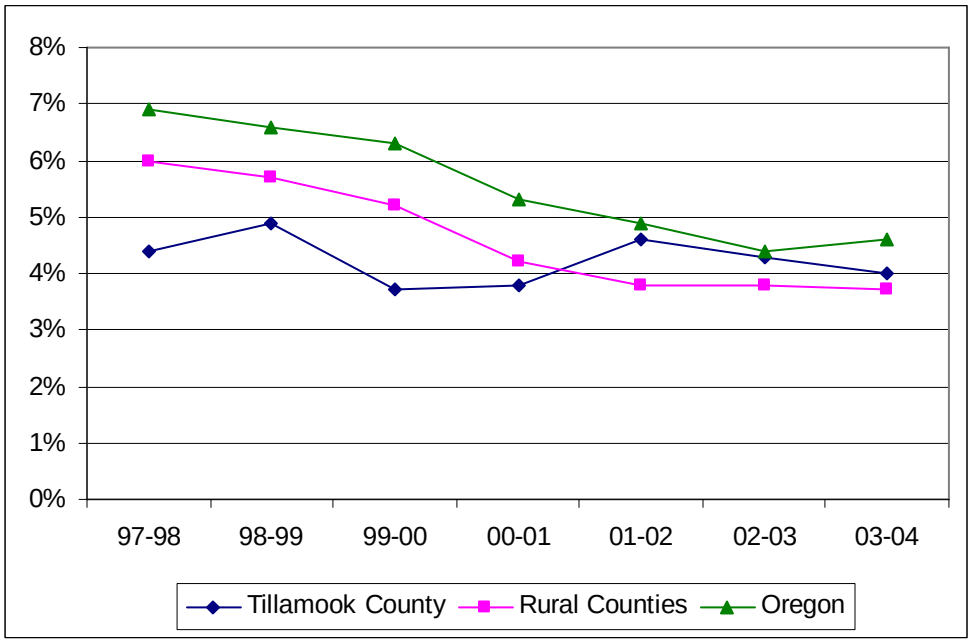
From the 1997-98 school year through the 2000-01 school year, Tillamook County's dropout rate was lower than that of either other rural counties or Oregon. Since then, Tillamook County's rate has fluctuated while the rates of other rural counties have declined and held constant. However, the rate of dropouts in Tillamook County has continued to decline over the past several years, and remains lower than that of the state, suggesting an improving trend of fewer high school dropouts.

Table 4-1
High School Dropout Rate
(School years 1997-98 through 2003-04)

	97-98	98-99	99-00	00-01	01-02	02-03	03-04
Tillamook County	4.4%	4.9%	3.7%	3.8%	4.6%	4.3%	4.0%
Rural Counties	6.0%	5.7%	5.2%	4.2%	3.8%	3.8%	3.7%
Oregon	6.9%	6.6%	6.3%	5.3%	4.9%	4.4%	4.6%

Source: Oregon Progress Board

Figure 4-1
High School Dropout Rate
(School years 1997-98 through 2003-04)



Source: Oregon Progress Board

Benchmark 4.2 Percentage of 8th Graders Who Achieve Established Skills in Reading and Math

Background

This benchmark relates to Goal 4.2 of the 2020 Strategic Vision:

> *Students in Tillamook County schools participate in a wide variety of safe, skill-building, extracurricular activities and educational opportunities.*

Benchmark 4.2 focuses on the building blocks of a student's education: reading and math. Adequate skills in reading and math are critical to the success of young people entering the job market. By measuring students' proficiency in reading and math, teachers and administrators can gauge the effectiveness of school curricula. Moreover, it helps Tillamook County as a whole assess how well extracurricular and other non-academic opportunities are meeting the needs of its youth. Coupled with Benchmark 4.1, this benchmark gives a picture of the academic health and educational progress of students throughout the county.

This benchmark update includes new data from the Oregon Progress Board for 1997 through 2005.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board. *2005 County Data Book*, November 2005, Benchmark #20a: Percent of 8th Grade Students who Achieve Established Skills in Reading and #20b: Percent of 8th Grade Students who Achieve Established Skills in Math, p.18-19. www.oregon.gov/DAS/OPB

Related State Benchmark

- Oregon Progress Board Benchmark #20

Findings

Table 4-2 and Figure 4-2a show that over the past five years, 8th grade achievement in reading has fluctuated, but seems to be on an upward trend. After a big drop in reading achievement in 1999, Tillamook County's scores hit a high point in 2000 that matched the state's overall reading achievement. Although reading achievement in Tillamook County has fluctuated in the past six years, it is now parallel with that of other rural counties and seems to be holding steady.

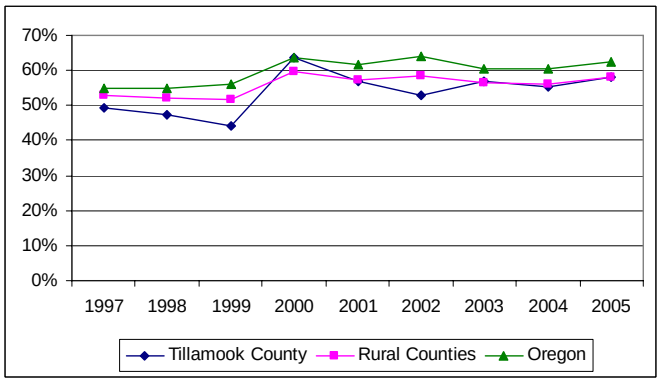
Table 4-2 and Figure 4-2b show that 8th grade achievement in math has also fluctuated over the years. Tillamook County's math achievement was on par with the state's rate until a precipitous drop in 2002 that left its scores below the state and other rural counties. Since then, math achievement in Tillamook County has rebounded impressively, even surpassing the state's scores in 2004. The rate continues to fluctuate and is currently on a slight decline, lower than the state's rate, but higher than that of other rural counties. Coupled with results from Benchmark 4.1, this benchmark update suggests improving trends in the academic health and educational progress of the county.

Table 4-2
Percentage of Eighth Graders
Who Achieve Established Skills in Math and Reading (1997–2005)

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Reading									
Tillamook County	49.5%	47.3%	44.3%	63.8%	56.9%	52.8%	56.7%	55.4%	57.9%
Rural Counties	52.7%	52.0%	51.7%	59.5%	57.3%	58.5%	56.5%	56.1%	58.0%
Oregon	54.9%	54.7%	56.0%	63.6%	61.5%	64.2%	60.6%	60.5%	62.5%
Math									
Tillamook County	46.1%	48.8%	52.6%	56.1%	51.6%	45.3%	56.1%	63.5%	60.1%
Rural Counties	43.3%	46.9%	47.1%	51.5%	50.6%	51.0%	54.3%	55.3%	58.7%
Oregon	49.5%	50.8%	52.1%	55.6%	55.4%	56.3%	58.9%	60.4%	63.5%

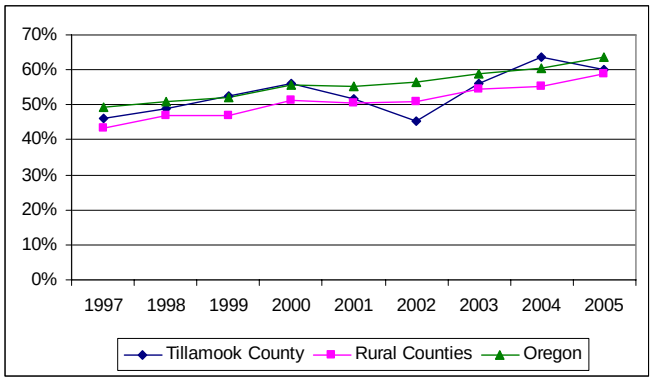
Source: Oregon Progress Board

Figure 4-2a
Percentage of Eighth Graders Achieving Established Reading Skills (1997–2005)



Source: Oregon Progress Board

Figure 4-2b
Percentage of Eighth Graders Achieving Established Math Skills (1997–2005)



Source: Oregon Progress Board

Benchmark 4.3 Tillamook County School Report Cards

Background

This benchmark relates to Goal 4.2 of the 2020 Strategic Vision:

> *Students in Tillamook County schools participate in a wide variety of safe, skill-building, extracurricular activities and educational opportunities.*

The Oregon Department of Education (ODE) develops yearly report cards for schools and districts across the state of Oregon. Evaluation is based on the following primary categories – student performance, student behavior, school character, and improved student performance – and includes an overall rating.

Report cards for the following districts and schools of Tillamook County are included in this report:

Nestucca Valley School District #101
- Nestucca High School
- Nestucca Valley Elementary School
- Nestucca Valley Middle School

Tillamook School District #9
- East Elementary School
- Liberty Elementary School
- South Prairie Elementary School
- Tillamook High School
- Tillamook Junior High School
- Wilson Elementary School)

Neah-Kah-Nie School District #56
- Garibaldi Elementary School
- Neah-Kah-Nie Junior/Senior High School
- Nehalem Elementary School)

This is a new benchmark for the 2002 report.

Data Source

- Oregon Department of Education, "School and District Report Cards." http://reportcard.ode.state.or.us/

Related State Benchmark

- None

Findings

Table 4-3 shows overall school ratings from the Oregon Department of Education's School Report Cards for each school in Tillamook County's three school districts, between the years of 2001 and 2005. Each school except one was given an overall rating of either satisfactory or strong for all four years. In the four year period, five schools went from strong to satisfactory, while four schools went from satisfactory to strong. In 2005, two schools showed improvement, five stayed satisfactory and one stayed strong. None of the schools showed diminishing performances in 2005. The School Report Cards are based on the aggregate of more specific categories, including student performance, student behavior, school character, and improved student performance.

Table 4-3
Overall School Ratings for Schools in Tillamook County
by School District (2001-2005)

	2001-2002	2002-2003	2003-2004	2004-2005
Neah-Kah-Nie School District 56				
Garibaldi Elementary	Strong	Strong	Satisfactory	Satisfactory
Nehalem Elementary	Strong	Satisfactory	Satisfactory	Satisfactory
Neah-Kah-Nie Jr/Sr High School	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Tillamook School District 9				
East Elementary	Strong	Not Rated	Not Rated	Satisfactory
Liberty Elementary	Satisfactory	Not Rated	Not Rated	Strong
South Prairie Elementary	Satisfactory	Not Rated	Not Rated	Strong
Wilson Elementary	Satisfactory			
Tillamook Junior High	Satisfactory	Satisfactory	Satisfactory	Strong
Tillamook High School	Satisfactory	Satisfactory	Low	Satisfactory
Nestucca School District 101				
Nestucca Valley Elementary	Strong	Satisfactory	Satisfactory	Satisfactory
Nestucca Valley Middle School	Satisfactory	Satisfactory	Strong	Strong
Nestucca High School	Satisfactory	Strong	Satisfactory	Satisfactory

Source: Oregon Department of Education

Benchmark 4.4 Pregnancy Rate per 1000 Females Age 10-17

Background

This benchmark relates to Goal 4.3 of the 2020 Strategic Vision:

> *There is strong community involvement in local schools. Community involvement is a part of every student's education in Tillamook County.*

This benchmark measures the rate of pregnancies for females age 10-17 (data include live births and abortions). Females age 10-17 who become pregnant are more likely than adults to have problems with their pregnancy, often resulting in poor maternal outcomes. While teenage pregnancy is a health concern, it is a social problem as well. Teenage mothers have a difficult time getting an adequate education and, accordingly, often face greater hardships as young parents.

In the late 1980s and early 1990s, the Tillamook County teen pregnancy rate was very high. As a result, the county launched an aggressive effort at reducing teen pregnancy. This effort earned the county national recognition for the positive results it produced. However, the latter half of this decade has shown a steady increase. This benchmark will measure how effectively Tillamook County can build upon the momentum generated by its past efforts.

The following update provides data for 1990-2003 from the Oregon Progress Board and Oregon Department of Human Services.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board. *2005 County Data Book*, November 2005, Benchmark #39: Pregnancy Rates per 1,000 Females Ages 10-17, p.30. www.oregon.gov/DAS/OPB
- Oregon Department of Human Services. Center for Health Statistics, Statistics, Teen Pregnancy. www.oregon.gov/DHS

Related State Benchmark

- Oregon Progress Board Benchmark #39

Findings

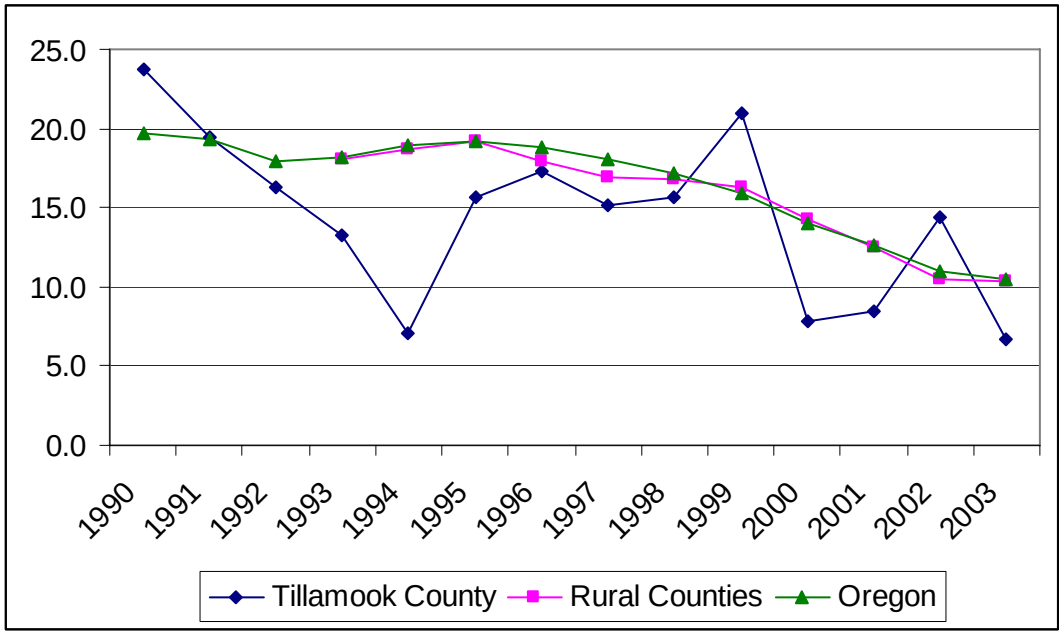
Table 4-4 and Figure 4-4 summarize the pregnancy rate for youth (age 10-17) in Tillamook County, other rural counties, and the state from 1990 through 2003. In 1990, the county's teen pregnancy rate was higher than the state rate; almost 25 of every 1,000 females age 10-17 became pregnant. In 1994, the pregnancy rate plummeted to its lowest point at only seven youths per 1,000. Since 1994, Tillamook County's rate has fluctuated dramatically; at one point again rising above the state rate with 21 out of 1000 teens becoming pregnant. As of 2003, the teen pregnancy rate was once again declining and below that of other rural counties and the state. This update of benchmark data suggests the trends associated with teenage pregnancy may be improving in Tillamook County.

Table 4-4
Pregnancy Rate per 1000 Females Age 10-17 (1990–2003)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Tillamook County	23.8	19.4	16.3	13.3	7.1	15.7	17.3	15.2	15.6	21.0	7.8	8.5	14.4	6.7
Rural Counties				18.1	18.7	19.2	17.9	16.9	16.8	16.3	14.3	12.5	10.5	10.4
Oregon	19.7	19.3	17.9	18.2	18.9	19.2	18.8	18.0	17.2	15.9	14.0	12.6	10.9	10.5

Sources: Oregon Progress Board, Oregon Department of Human Services

Figure 4-4
Pregnancy Rate per 1000 Females Age 10-17 (1990–2003)



Source: Oregon Progress Board

Benchmark 4.5 Percentage Of 8th Grade Students Who Have Used Alcohol, Cigarettes, or Illicit Drugs in the Past 30 Days

Background

This benchmark relates to Goal 4.3 of the 2020 Strategic Vision:

> *There is strong community involvement in local schools. Community involvement is a part of every student's education in Tillamook County.*

Tillamook County residents want more community involvement with youth. An important component of this goal is educating young people about the risks of certain behaviors. The Visioning process revealed that most Tillamook County residents think the availability and use of drugs is increasing among young people. Additionally, residents agreed that alcohol abuse is one of the county's most important social issues. Drug and alcohol use at a young age makes an individual more likely to live a life of dependence, which increases the likelihood that the abuser will become involved in crime and suffer greater health problems. Consequently, an abuser of drugs and alcohol is more likely to pose a hazard to society and become a burden on the healthcare system.

Although Benchmark 4.5 does not directly measure community involvement in schools, it is an important indicator of the health of young people and community welfare. When viewed alongside Benchmarks 4.4: Teen Pregnancy Rate and 4.6: Juvenile Arrest Rate, these benchmarks do measure an implicit connection between the health of Tillamook County's youth and the community's involvement in its schools.

Following is an update with new data from the Oregon Progress Board for 2002 and 2004.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board. *2005 County Data Book*, November 2005, Benchmark #49a: Percent of 8th Grade Students Who Report Using Alcohol in the Previous 30 Days, #49b: Percent of 8th Grade Students Who Report Using Illicit Drugs in the Previous 30 Days, and #49 c: Percent of 8th Grade Students Who Report Using Cigarettes in the Previous 30 Days, p. 42, 44, 46. www.oregon.gov/DAS/OPB

Related State Benchmark

- Oregon Progress Board Benchmark #49.

Findings

Table 4-5 and Figures 4-5a-c indicate that a significant number of Tillamook County middle school students use tobacco, drugs, and alcohol. More students responded that they use alcohol than cigarettes or illicit drugs. In 2004, alcohol and drug use in Tillamook County had gone up slightly since 1998, with falling numbers in the years between. One worrisome trend is that 8th graders in Tillamook County continue to use alcohol and drugs at a higher rate than for either the state or other rural counties. On a positive note, however, the rate of cigarette use among 8th graders in Tillamook County has continued to drop steadily and has gone down almost 19% in six years.

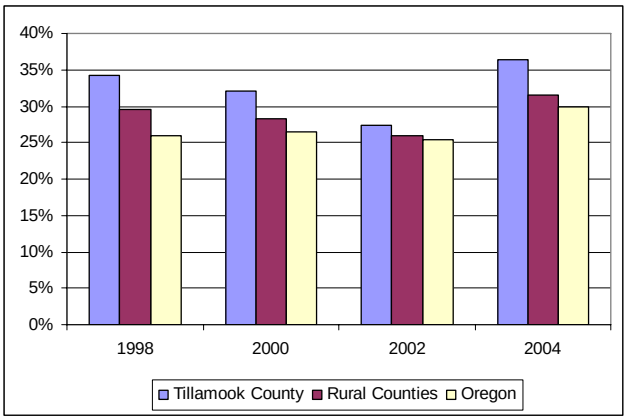
Table 4-5
Percentage of 8th Grade Students who Used Alcohol, Cigarettes or Illicit Drugs in the Previous 30 Days

	1998	2000	2002	2004
Alcohol				
Tillamook County	34.3%	32.1%	27.3%	36.4%
Rural Counties	29.5%	28.3%	26.0%	31.5%
Oregon	26.0%	26.4%	25.4%	30.0%
Illicit Drugs				
Tillamook County	23.1%	19.3%	9.4%	23.2%
Rural Counties	19.2%	15.0%	19.4%	18.2%
Oregon	18.6%	13.3%	18.3%	17.0%
Cigarettes				
Tillamook County	26.8%	14.0%	12.7%	7.9%
Rural Counties	16.0%	17.5%	13.4%	11.3%
Oregon	20.1%	13.1%	10.7%	8.1%

Source: Oregon Progress Board

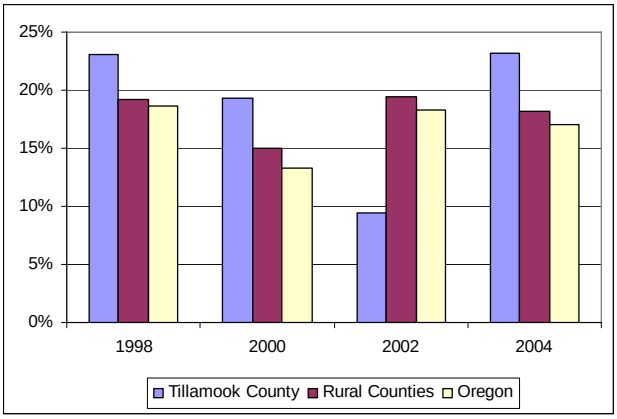
Figures 4-5a, 4-5b, and 4-5c, graphically illustrate the trends in alcohol, illicit drug, and cigarette use among 8th grade students from 1998-2004.

Figure 4-5a
Percentage of 8th Grade Students Who Used Alcohol in the Previous 30 Days



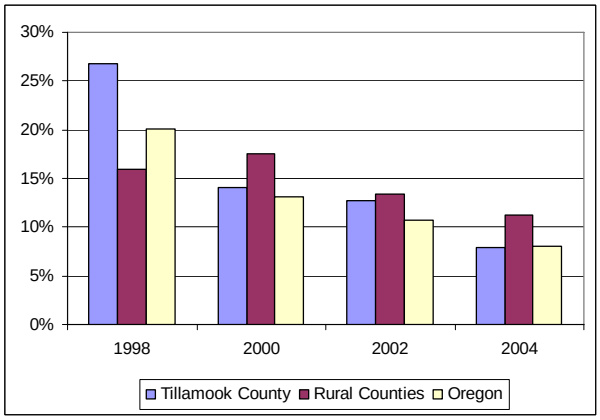
Source: Oregon Progress Board

Figure 4-5b
Percentage of 8th Grade Students Who Used Illicit Drugs in the Previous 30 Days



Source: Oregon Progress Board

Figure 4-5c
Percentage of 8th Grade Students Who Used Cigarettes in the Previous 30 Days



Source: Oregon Progress Board

Benchmark 4.6 Total Juvenile Arrests Per 1,000 Juveniles Per Year

Background

This benchmark relates to Goal 4.3 of the 2020 Strategic Vision:

> *There is strong community involvement in local schools. Community involvement is a part of every student's education in Tillamook County.*

This benchmark measures the number of arrests made by law enforcement for juvenile crimes. Juvenile crime is an indicator of youth stability and can be reduced by increased community involvement in schools. It should be noted that findings for this benchmark should be considered carefully. Tillamook County places a high priority on reporting juvenile crime, immediate intervention and follow-up. High crime rates relative to other rural counties may be a reflection of Tillamook County's vigilance in reporting and responding to juvenile crime.

Following is an update that includes data from 1992-2003 from the Oregon Progress Board.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board. *2005 County Data Book*, November 2005, Benchmark #62: Total Juvenile Arrests per 1,000 Juvenile Oregonians per year, #62a: Juvenile Arrests for Crimes Against Persons per 1,000 Juvenile Oregonians per year, #62b: Juvenile Arrests for. Crimes Against Property per 1,000 Juvenile Oregonians per year, and #62c: Juvenile Arrests for Behavioral Crimes per 1,000 Juvenile Oregonians per year, p. 66, 68, 70,72. www.oregon.gov/DAS/OPB

Related Benchmark

- Oregon Progress Board Benchmark #62

Findings

Table 4-6 summarizes the total juvenile arrest rate for crimes against persons and crimes against property in Tillamook County, all rural counties and Oregon as a whole. Figures 4-6a and 4-6b graphically illustrate trends in each of these three areas. After an increase in crime in the 1990s, juvenile crime rates in Tillamook County declined and remained lower than the rate in other rural counties and the state from 1999-2002. Data from 2003 shows an increase in juvenile crime in both categories from 2001. Tillamook County's rate is now similar to other rural counties and slightly higher than the overall rate for Oregon.

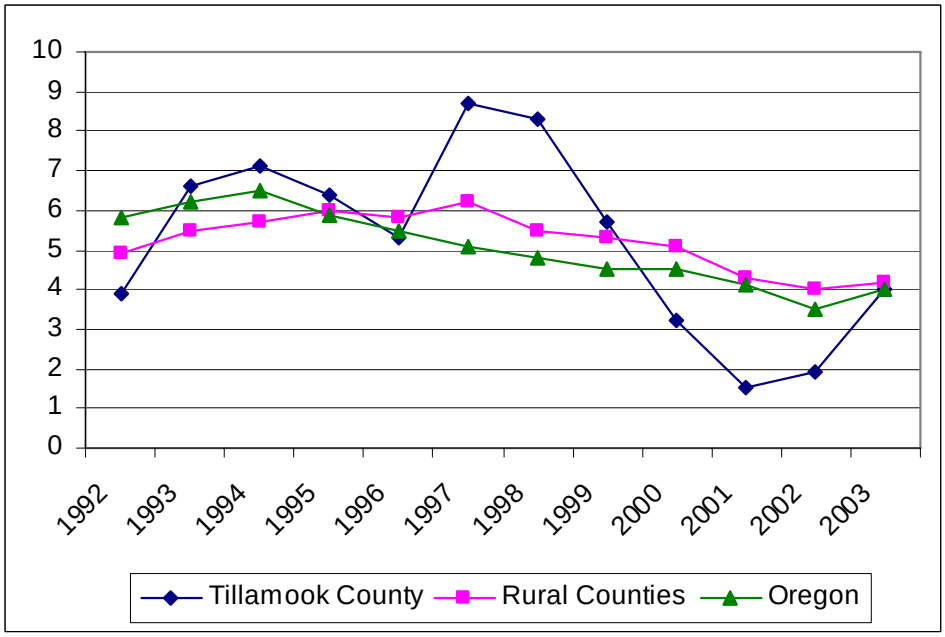
Table 4-6
Total Juvenile Arrests per 1,000 Juveniles
(1992-2003)

	Tillamook County	Rural Counties	Oregon
1992	26.6	27.9	28.8
1993	34.5	28.5	29.3
1994	52.7	30.6	30
1995	39.1	30	27.4
1996	32.2	29.1	26.6
1997	26.4	28.9	24.7
1998	32.2	25.7	21.8
1999	16.5	24.2	19.6
2000	12.5	21.7	18.6
2001	11	20	16.8
2002	12.1	17.1	14.9
2003	17.8	17.3	16.6

Source: Oregon Progress Board

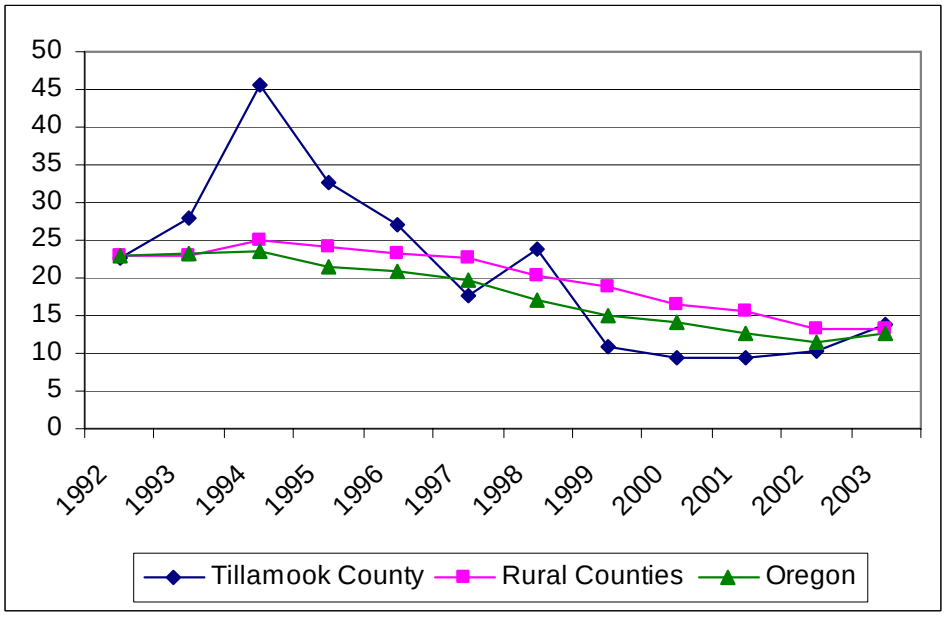
Figures 4-6a and 4-6b illustrate the dramatic fluctuation in crime rates that Tillamook County has seen over the past decade. After having substantially higher crime rates than other rural counties and Oregon—for crimes against persons in 1997 and crimes against properties in 1994—Tillamook County's juvenile crime rate dipped significantly in both categories and became lower than Oregon or rural counties. However, since 2001, juvenile crime rates in Tillamook County have again risen and surpassed the overall rate for Oregon.

Figure 4-6a
Juvenile Arrests per 1,000 Juveniles for Crimes Against Persons (1992–2003)



Source: Oregon Progress Board

Figure 4-6b
Juvenile Arrests per 1,000 Juveniles for Property Crimes (1992–2003)



Source: Oregon Progress Board

Benchmark 4.7 Percentage of Registered Tillamook County Voters who Voted in General Elections

Background

This benchmark measures Goal 4.4 of the Strategic Vision:

> *There is ample opportunity for citizens to become involved in local and county government.*

During the Visioning process, Tillamook County residents indicated that they think it is important for people to become more involved in their communities. Specifically, they indicated that citizens should participate more in local government decision-making, whereby decision-makers respond to the concerns and interests of the community. If citizens are involved in and trust their government, then government functions as intended.

Difficulties arise when measuring the degree of public involvement in local government. Voter turnout rates measure only indirectly Goal 4.4 of the Strategic Vision. Citizens who become involved in local government tend to vote. Citizens who find government inaccessible or unresponsive are less likely to vote. Thus, a rising voter turnout likely indicates increasing involvement in government.

Following is an update that contains data from all general elections from 1996-2004.

Data Source

Data were obtained for this benchmark through:

- Oregon Progress Board. *2005 County Data Book*, November 2005, Benchmark #31: Percent of Registered Voters who Participated in Biennial Primary Elections, p.28. www.oregon.gov/DAS/OPB
- Oregon Secretary of State, Elections Division, Elections History, "Voter Registration and Participation." www.sos.state.or.us

Related State Benchmark

- Oregon Progress Board Benchmark #31

Findings

Table 4-7 shows voter turnout in general elections from 1996 to 2004 for registered voters in Tillamook County. Figure 4-7 illustrates a comparison between Tillamook County, other rural counties, and the state of Oregon. Voter turnout refers to the percentage of registered voters who actually cast votes in the elections. Not surprisingly, voter turnout has been higher in years of presidential elections. In the most recent general election (2004), 85.9% of registered Tillamook County voters participated. This is on par with the state average and slightly higher than turnout in other rural counties. Overall, voter participation in Tillamook County has remained equal or higher than state averages from 1996 to 2004.

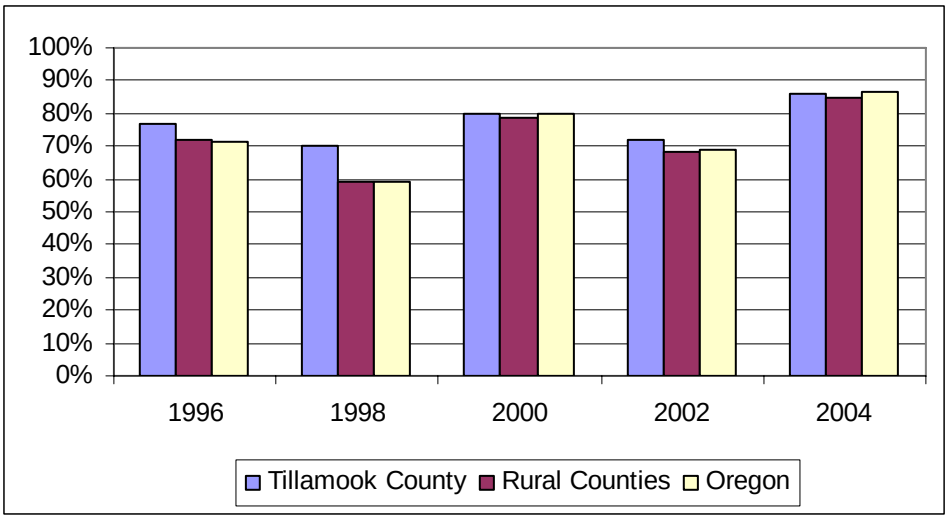
Table 4-7
Tillamook County Voter Turnout in General Elections (1996–2004)

	1996*	1998	2000*	2002	2004*
Registered Voters	14,492	15,036	15,695	14,917	16,401
Total Voting	11,513	10,507	12,553	10,695	14,094
Percentage Who Voted	77.1%	69.9%	80.0%	71.7%	85.9%

* Signifies a presidential election year

Source: Oregon Secretary of State

Figure 4-7
Voter Turnout in General Elections (1996-2004)



Source: Oregon Progress Board, Oregon Secretary of State

APPENDIX A: OBSTACLES TO EFFECTIVE BENCHMARKING

Benchmarks effectively assess many of the goals contained in the Strategic Vision. However, many of the benchmarks contained in the Strategic Vision (as summarized in Futures Council newsletter #4) are different than those contained in this publication. Over the course of this benchmarking exercise, which we have dubbed “road testing the Vision," the Futures Council recognized that many of the benchmarks contained in the Vision could not be quantified or did not, in fact, adequately measure the corresponding goal. Consequently, the Futures Council revised many of the benchmarks originally contained in the Vision.

Some benchmarks cannot be quantified

As mentioned above, access to reliable and consistently available data was one of the criteria used by the Futures Council in selecting the benchmarks contained in this publication. Many of the benchmarks originally proposed in the Strategic Vision provided effective measures of progress. However, because of the unavailability of some data, several appropriate benchmarks are not contained in this report. For example, data were available for several benchmarks at the regional or state level but not for Tillamook County. With time and through localized surveying and data gathering, information may become available that allows the Futures Council to expand its list of benchmarks. Several proposed benchmarks are listed below under Benchmarks to be Assessed in the Future.

Not all goals have benchmarks

In a few instances, goals simply cannot be measured by a benchmark. Those goals that currently do not have a benchmark established to measure them include:

- Goal 2.3 Shellfish harvesting in our estuaries is not limited by degraded water quality.
- Goal 2.5 Native wildlife populations are healthy and integral components of our community. Wildlife species contribute to the health and value of our managed agricultural and forestlands.
- Goal 4.1 Protect rural atmosphere and small-town feeling.

During future updates of this report, the Futures Council will continue to discuss appropriate measurements for these goals as well as data needs. See below (Benchmarks to be Assessed in the Future) for details.

Other obstacles

Within each of the four sections, other challenges to benchmarking arose, which were unique to that area. These are discussed at the beginning of each chapter and, when necessary, within the background statements of each benchmark.

APPENDIX B: NOTES ON DATA

Appendix B provides details on data gathered for certain benchmarks.

Growth and Development:

Benchmark 1.4 Percentage of Area within the Urban Growth Boundary that Can be Served by Existing Public Sewer Systems

Unlike other benchmarks contained in this report, many of the figures presented here are "thumbnail estimates" by city officials and should not be cited or used in policy-making. The primary difficulty faced by the city representatives was estimating the amount of land within their Urban Growth Boundary (UGB). (This information is currently not available through county or state sources either.) Thus, estimating the proportion of an area served by existing sewer systems was a best-guess exercise. The City of Rockaway Beach was unable to produce figures.

Benchmark 1.5 Percentage of Tillamook County Residents Served by Public Drinking Water that Meets Health Based Standards

There are three types of public drinking water systems: 1) community-based systems, 2) non-community transient systems and 3) non-community non-transient systems. Community-based systems are in established communities. Non-community systems (both transient and non-transient) occur almost entirely in rural areas that are not served by community-based systems. (Examples of establishments using non-community supplied water include rural schools, restaurants, R.V. parks, businesses etc.)

This benchmark measures the percentage of Tillamook County residents served only by community-based systems. The rates provided for the state of Oregon include non-community based systems.

Benchmark 1.6 Percentage of Tillamook County Residents with On-Site Sewage Disposal Systems that Do Not Meet Government Standards

The Oregon Progress Board Benchmark #72 is "the percentage of Oregon residents with sewage disposal that does not meet government standards." OPB derived their findings using data from the DEQ Sewage Needs Survey, which provides information on large public sanitary sewer systems.

The Futures Council uses only local (small) on-site sewage disposal systems as their benchmark. Many of these systems often are out of compliance, and data on repair permits are readily available. Note: compliance issues with large on-site sewage disposal systems (RV parks, state parks etc) cannot be quantified, so these are presented qualitatively in appendix form. Because the number of permits issued is used as the indicator of failures, the actual number of failures may be higher. Any error between actual failures and permits issued is assumed to be consistent over the years examined.

Environment

Benchmark 2.2 Trends in the Stream Water Quality Index (OWQI)

Because of the inherent variability in water quality data when comparing one year or season to another, the OWQI uses a Kendall Analysis in computing the index: This means that scores are indexed on a ten-year average, and ten-year blocks are then compared to show trends. Scores are measured as follows:

- Very Poor: 0-59,
- Poor: 60-79,
- Fair: 80-84,
- Good: 85-89,
- Excellent: 90-100

Economy

Benchmark 3.2 Employment in the Forest Industry

First, the data do not represent those individuals actually working in the forests but only those on the manufacturing end of the industry. Second, sometimes mills and logging contractors hire temporary workers, who would not be reflected in this category of state employment data. Finally, some degree of crossover exists between Tillamook and the surrounding counties, both in terms of employees coming in to find work in the timber industry and in terms of wood products being taken outside of the county for processing. In both cases, the employment data contained in this benchmark do not reflect this.

Benchmark 3.9 Number of Tourists Visiting the Tillamook County Creamery

The Creamery staff track these figures using the following formula:
a factor of 2.78 (estimated number of visitors per party) x the number of Register Sales.
The figures are verified by both random physical counts of visitors and by the number of ice cream cones sold per sales ticket. Ms. Judy Hill, Public Relations Manager, stated that survey information has shown that many of the visitors are day visitors. However, every visitor who comes to the community brings the potential for supporting Tillamook businesses.

Society and Culture

Benchmark 4.1 Tillamook County High School Dropout Rate

Definitional changes regarding what constitutes a “dropout” were instituted in the 1995-96 school year. Due to this, data prior to 1996 cannot be adequately compared with later years.

Benchmark 4.2 Percentage of 8th Graders Who Achieve Established Skills in Reading and Math

The Oregon State Board of Education adopted new performance standards in 1996. Data before and after 1997 should not be compared