

Tillamook County: 2020 Strategic Vision

Indicator Report & Assessment, 2009 - 2014

A Product of the Vital Tillamook Indicator Project

A collaboration of:

The Tillamook County Futures Council and

Oregon State University Extension Service & Rural Studies Program



Report Prepared by:
Lena Etuk
Oregon State University

April 29, 2015

Vital Tillamook Indicator Project

Report Overview

What is vitality?

Vital communities are places where residents work together and achieve a balance of positive social, economic, and environmental outcomes. As rural communities today face many economic, ecological, and population changes it is important that their leaders and residents pay close attention to community vitality. By focusing on vitality, leaders can figure out exactly where coordinated community action and strategic planning is needed during tough times. So within this broad idea of community vitality, are there specific goals for which rural communities should aim? And once the goals are set, how will the community know if they are being met?

Who was involved with this project & what is its purpose?

In 2008 and 2009 and again in 2014 and 2015, with funding from the Ford Family Foundation, Oregon State University Extension Service and Oregon State University's Rural Studies Program partnered with Tillamook County in an effort to answer the questions posed above. The purpose of the project was to work together to define the specific elements of community vitality for the county that reflect the goals and values held by residents, measure vitality by constructing indicators and gathering data for the indicators, and assess the vitality of Tillamook County using the indicator data and community input. With a set of goals and a clear way of measuring the attainment of those goals in hand, leaders in the county can initiate or continue to support policies or programs designed to bolster vitality. Changes in the indicators can provide residents and decision-makers some insight into how community decisions have affected the county's vitality. This assessment in 2014-15 is the first time changes in all of the indicators have been documented.

How were the indicators developed?

The partnership between Oregon State University and Tillamook County was formally established between the Tillamook County Futures Council (hereafter referred to as the Futures Council) and three OSU faculty members. In order to collaboratively develop indicators that reflect the community's understanding of vitality, the project team relied exclusively on the Tillamook County: 2020 Strategic Vision. The Tillamook County: 2020 Strategic Vision was established in 1997 with community input and updated in 2007 with the input of over 1,000 Tillamook County residents and homeowners. With input from community members and members of the Futures Council, OSU faculty members developed a list of 50 indicators of Tillamook County Vitality (see Table 1) that directly reflect the goals outlined in the Strategic Vision. The Tillamook County Futures Council approved this indicator list on February 2, 2009.

Table 1

| Indicators of Tillamook County Vitality | |
|---|--|
| GROWTH & DEVELOPMENT | |
| 1. Land Conversion | 2. Home Construction within Urban Growth Boundaries |
| 3. Road Condition | 4. Road Capacity |
| 5. Utility System Growth Capacity | 6. Public Transportation Coverage |
| 7. Pedestrian & Bike Access | 8. Natural Hazard & Disaster Plans |
| ECONOMY | |
| 9. Employment in Forestry, Agriculture, and Fishing | 10. Forest, Agriculture, and Fishing Productivity |
| 11. Skill Training Opportunities | 12. Industry Employment Diversity |
| 13. Small & Large Business Health | 14. Living Wage Jobs |
| 15. Tourism | 16. Workforce Housing |
| NATURAL ENVIRONMENT | |
| 17. Salmon Runs | 18. Forest Health |
| 19. Land Conservation | 20. Public Natural Resource Education |
| 21. 303d Listed Waterways | 22. Watershed Restoration Projects |
| 23. Riparian Area Quality | 24. Participation in Recycling |
| SOCIETY & CULTURE | |
| 25. Open Space | 26. Civic Participation |
| 27. Community Capacity | 28. Museums, Cultural Centers & Historic Buildings |
| 29. Community Events | 30. Discrimination Experiences |
| 31. Arts & Cultural Establishments | 32. Culture of Lifelong Learning |
| 33. Educational Diversity for Adults | |
| YOUTH & EDUCATION | |
| 34. Culture of Youth Engagement | 35. Educational Diversity for Teens |
| 36. Youth Unemployment Rate Post-High School | 37. Educational Achievement |
| 38. Teen Pregnancy | 39. Teen Substance Abuse |
| HEALTH & HUMAN SERVICES | |
| 40. Distance Traveled for Care | 41. Delay of Health Care due to Cost, Quality, or Availability |
| 42. Availability of Long-Term Care | 43. Health Outcomes |
| 44. Substance Abuse Crimes | 45. Language Service in Public Arenas |
| 46. Poverty | 47. Low-Cost Food Access |
| 48. Index Crime Rate | 49. Emergency Services Coverage |
| 50. Workforce Housing | |

Community Vitality indicator data were collected in 2009 and in 2014 from three types of sources:

1. External secondary sources (e.g., Census, Dept. of Human Services, OR Dept. of Ag, OR Dept. of Fish & Wildlife)
2. Local secondary sources (e.g., County Commissioners, Historical Societies, School Districts, Watershed Councils, Chambers of Commerce)

3. Primary sources (e.g., adult survey) – for collection methods and margin of error estimates, see Appendix 1 – Vital Tillamook Indicator Project Survey Methods

How were indicator targets developed, and why have targets?

After compiling all of the data, indicator targets were set in 2009 based on the input of the Tillamook County Futures Council, Oregon State University faculty members, experts in particular fields, and any standards set by independent agencies or organizations. These targets represent the desired goals for the levels of the indicators. Some targets were simply percentages, rates, or amounts equal to, higher, or lower than those observed in 2009. In other instances the target was expressed as a specific percentage, rate, or amount, which reflected some known desired level. And in other cases, the target was stated as being equal to the rate or amount observed in the state. Based on these targets, “on target” or “below target” assessments for each indicator could be made. Though the target values may change with further community conversation, the 2009 targets are a starting point for assessment and interpretation of the indicators and overall vitality within the county.

There are many reasons to use target goals in an indicator project like this one:

- Tillamook County’s 2020 Strategic Vision outlines goals for the county, so using targets for the indicators of the vision matches this goal orientation.
- Target values represent the moment at which the community or an expert would say “Oh no! This is out of hand. We need to do something about this!” As such, targets help the indicators inspire people to act and improve their community.
- Without targets the indicators would just represent a passive monitoring project. The indicator data would occasionally get viewed, and sometimes someone might think the trend they see is bad, but it’s possible that no one else would notice or care.
- Targets help decision makers quickly and easily determine where to concentrate resources; this saves them time and money, and makes them more efficient. Without targets, there would be no shared understanding that action may or may not be necessary on an issue.
- Target levels are controversial, and as result of being controversial they make the indicators the topic of frequent discussion. When indicators are frequently discussed, it raises the odds that: the data will be viewed, action will be inspired, indicator measures will be debated and new, better data added, and stakeholders will continually think about their role in affecting indicators.
- Targets help keep the community focused on the indicators that are really important. If you can’t set a target or a goal for an indicator, then it’s probably not measuring anything you really care about.

How should this report be used?

This report should be used to inspire conversation and action among Tillamook County agencies, organizations, and residents. Conversations about how to improve outcomes with promising strategies should result from this assessment, and actions to implement those strategies should result. Also, stakeholders should talk about ways the current targets and indicator measures might be refined and made more useful so that residents and leaders have even better information to use in the future. Stakeholders may also choose to track additional indicators that directly affect the outcome indicators of the Tillamook Indicator Project; these types of indicator would help everyone anticipate positive or negative outcomes in the future. This project represents Tillamook County's commitment to continuous improvement and evolution.

The remainder of this report describes how each indicator was measured, the target or goal associated with each indicator, whether or not the indicator is on target, and the change between 2009 and 2014. In order for a community to be fully vital, all observed indicator levels should meet the targets.

Vision of our Growth & Development

Goal 1.1 Tillamook County will manage growth in a way that creates vibrant towns and maintains the rural character of the countryside; planning for growth and encouraging development to take place within existing communities.

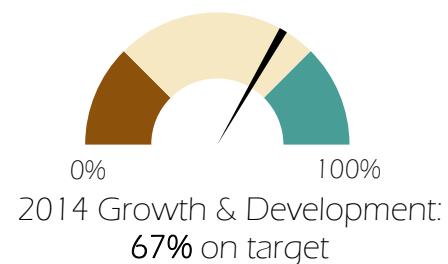
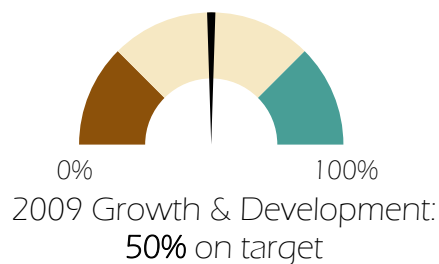
Goal 1.2 Tillamook County will need adequate infrastructure for current conditions and future growth...related to water, power, sewer, roads, streets, and storm water systems.

Goal 1.3 Communities throughout the county will support the use of public transportation, biking, and walking.

Goal 1.4 Tillamook County will effectively prepare for and respond to natural hazards.

Summary of findings

In 2009 and 2014, twelve measures were used as indicators of the achievement of Tillamook County's Growth and Development goals. In 2014, eight (67% of the measures) were on target, three were below target, and one measure had no target. By contrast, in 2009 six (50%) were on target and six were below target. This shows overall improvement in the number of indicator measures on target in the area of Growth and Development. In other words, Tillamook County is getting closer to achieving all of its goals in this area.



Indicators related to maintaining the rural character of the countryside, having adequate county road infrastructure, and biking activity all saw such significant improvement between 2009 and 2014 that they went from below target in 2009 to on target in 2014. Great news! Two other indicators saw improvement in this time frame as well, but not enough to change their relationships to the targets. Fortunately, there was only one indicator measure that went from being on target in 2009 to being below target; it was the one related to the adequacy of state road infrastructure. An indicator of the county's ability to prepare for and respond to natural hazards went from being on target in 2009 to having no target in 2014; this was due to measurement challenges and limitations of the data. The remaining five indicators of the twelve saw no change between 2009 and 2014. In order to continue realizing improvement in this area of the vision, issues related to keeping growth inside the urban growth boundaries, and improving biking infrastructure as well as state road infrastructure will need to be addressed.

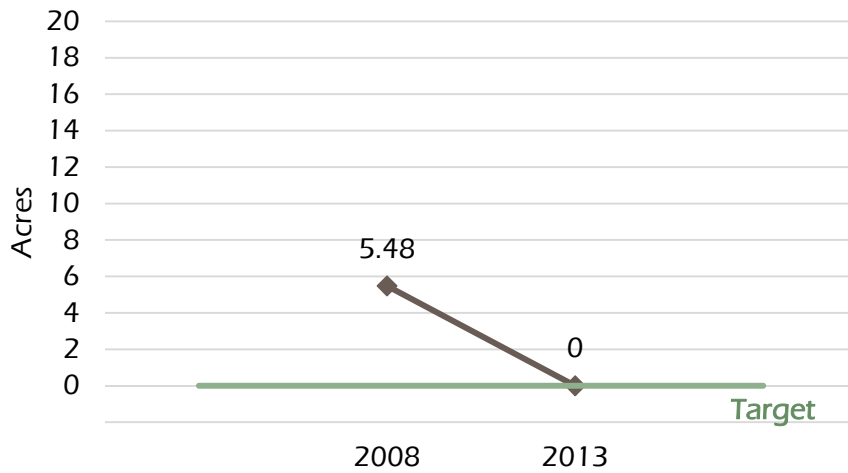
Among the six areas of the County Vision, in 2014 the Growth and Development area had the highest percentage of indicators that were on target – making it stand out as an area of strength for the county. It is also an area of the vision with relatively few indicators, meaning that improvement in just one or two indicators can yield greater returns than other vision areas with more indicators.

Land Conversion

Measure: Number of acres approved for zoning change from farm, forest, or small farm/woodlot to residential or commercial

Assessment: **On Target** & **Improving**

Since 2008, the number of acres re-zoned from natural resource use to residential or commercial use declined from 5.48 acres to 0, meaning that in 2013, Tillamook met its target of 0 acres converted.



Source: Tillamook County Department of Community Development

Land Conversion

Measurement Methods

In order to measure this indicator we relied on data from the Tillamook County Department of Community Development. This department provided data about the total number of acres that were approved for re-zoning from resource to residential or commercial in 2008 and 2013.

Why This Indicator Matters

In Tillamook County, the extent to which farm- or forest-land is converted to residential or commercial land is one component of vitality. Re-zoning land that was available for its natural resources into land available only for residential and commercial growth is viewed as diminishing the overall “rurality” of the community. The hope within the county is to preserve the rural nature of the community as much as possible.

Indicator Targets

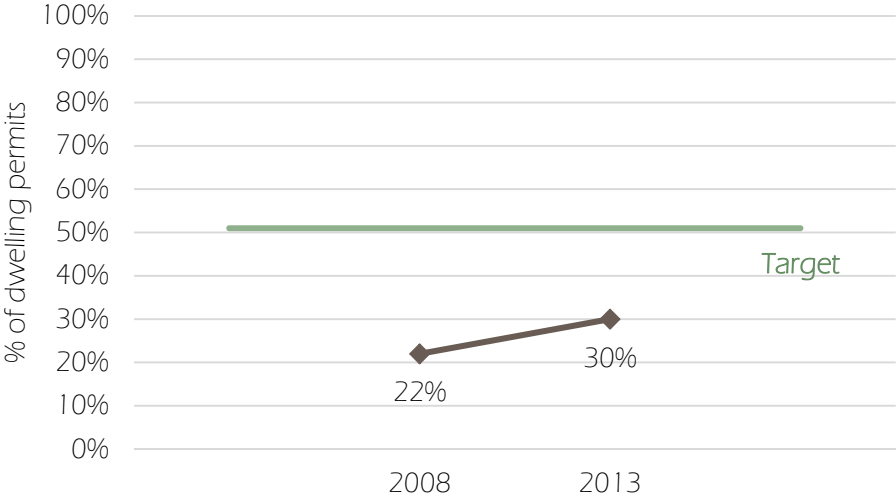
The goal for this indicator is for the number of farm, forest, or small farm/woodlot acreage converted to residential or commercial land to remain close to zero.

Home Construction within UGBs

Measure: Percentage of dwelling permits issued for construction within city limits & Urban Growth Boundaries (UGBs)

Assessment: **Below Target** & **Improving**

Since 2008, the percentage of dwelling permits issued for construction within UGBs increased about eight percentage points, bringing the county closer to its target of 51% or more. There is still work to be done to reach the goal, however.



Source: Tillamook County Department of Community Development & City of Manzanita

Home Construction within UGBs

Measurement Methods

These data come from the Tillamook County Department of Community Development and the city of Manzanita. The data provided were the total number of permits issued for dwellings across the county and the number of dwelling permits issued within the Urban Growth Boundaries of the cities in Tillamook County.

Why This Indicator Matters

A key indicator of the extent to which Tillamook County is preserving its rural nature is the prevalence of home construction within the Urban Growth Boundaries established by the Tillamook County Comprehensive Plan. By constructing homes inside the Urban Growth Boundaries, areas outside those boundaries remain rural in character.

Indicator Targets

The goal for this indicator is for the majority (51% or more) of dwelling permits to be issued inside the Urban Growth Boundaries during a given period.

Tillamook County Road Condition

Measure 1: Percentage of state road miles in good or better condition in ODOT Region 2, District 1

Measure 2: Percentage of county road miles in fair to good condition

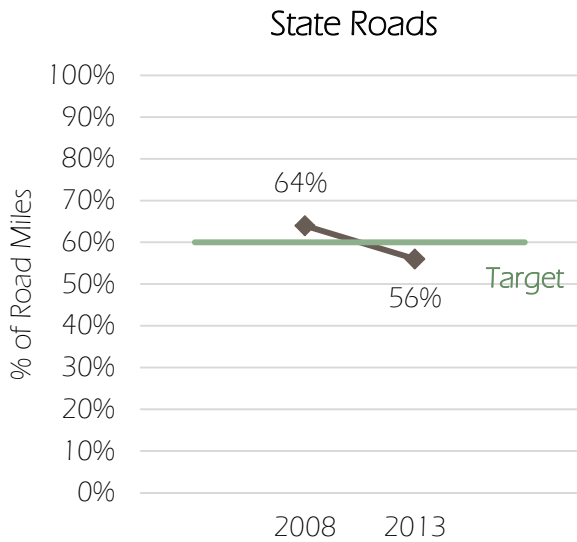
Assessment:

Below Target & Declining

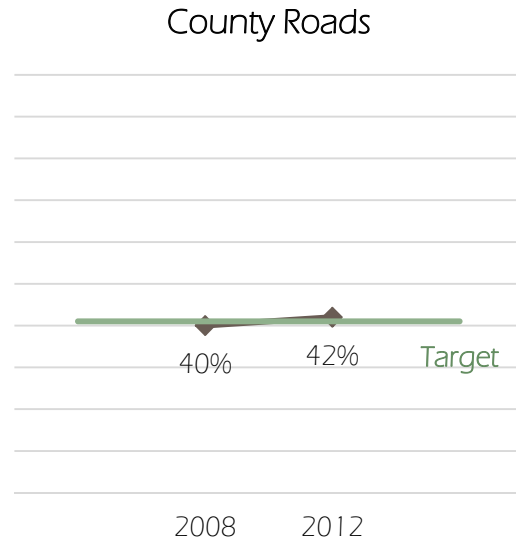
Assessment:

On Target & Improving

Since 2008, the condition of state roads has declined while county roads have improved slightly. State road condition is now below the goal of 60% and county roads are now above the goal of 41%.



Source: Oregon Department of Transportation



Source: Tillamook County Public Works, Road Department

Tillamook County Road Condition

Measurement Methods

In order to measure this indicator, road data from the Oregon Department of Transportation (ODOT) and the Tillamook County Public Works Department were obtained by OSU faculty. The data reported by ODOT correspond to the district in which Tillamook County is located (Region 2, District 1), and therefore includes portions of Clatsop County and Lincoln County. In order to assess the condition of state roads in this area, ODOT conducts windshield surveys by staff teams. Based on the visual survey of state roads, the team assigns scores on a 1 to 100 scale for particular road segments. The scores of the scale are then categorized as very poor, poor, fair, good, and very good. For the purposes of this indicator assessment, we used the number of state road miles within the district that received a good or very good rating, divided by the total number of surveyed road miles in the district.

The Tillamook County Public Works Department uses a similar visual survey method, and the same categorization scheme as ODOT: very poor, poor, fair, good, and very good. For this report, we used road miles that received a rating of fair or better, as there were no county roads in 2008 or 2012 that received a rating of very good. The number of miles that were fair or better was divided by the total number of surveyed county road miles to calculate the percentage.

Why This Indicator Matters

The condition of roads throughout Tillamook County is important to residents, as automotive transportation is the prime form of transportation across the often long distances between communities. Roads are also used by visitors to the county, and their quality may encourage or discourage visitors from exploring areas of the county for goods, services, or amenities. This indicator measures how adequate the road infrastructure is in the county.

Indicator Targets

Ideally, the goal within Tillamook County would be for county roads to be in the same or better condition than the average condition of county roads across the state. Unfortunately, however, an average condition of county roads across the state has not been determined by a central agency (county roads are managed by separate counties, which also conduct their own separate condition assessments). For this reason, the target is simply for the percentage of county roads in Tillamook County that are in fair or better condition to increase from the 2009 level of 40%.

The goal for state roads is that 60% or more of those miles within the Tillamook County district will be in good or better condition.

Road Capacity

Measure: Percent of sampled road miles in Tillamook County with volume to service flow (VSF) capacity ratio greater than or equal to the Oregon Department of Transportation (ODOT) standard of 1.5.

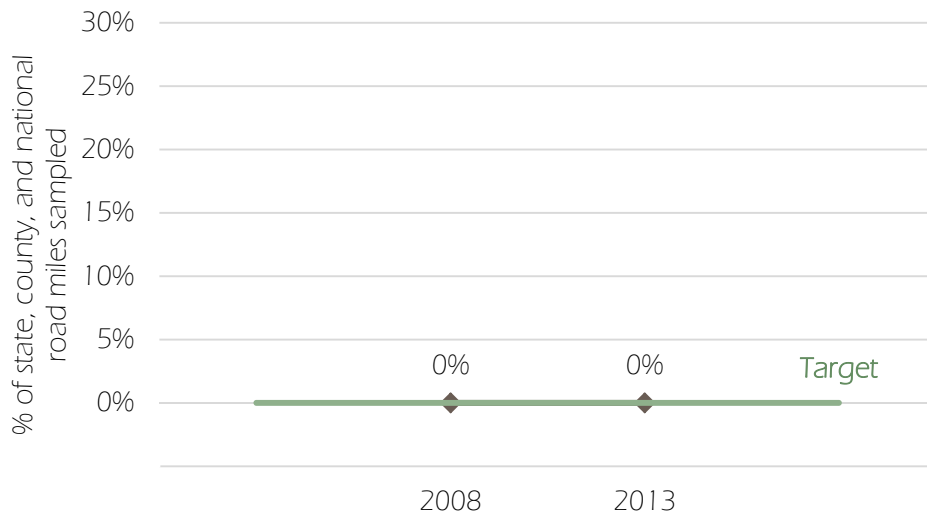
Assessment:

On Target



No Change

Since 2008 there has been no change in the measured congestion on Tillamook County roads. In 2013 there continued to be no roads with VSF capacity ratio of 1.5 or more, on target with the goal of zero percent of sampled road miles.



Source: Oregon Department of Transportation

Road Capacity

Measurement Methods

In order to measure road capacity in Tillamook County, data were obtained from the OR Department of Transportation (ODOT). ODOT samples the state, county, and national roads across Oregon and calculates a volume to service flow (VSF) capacity ratio for all sampled segments. ODOT uses this ratio to measure congestion. OSU faculty obtained volume to capacity data for road segments sampled in Tillamook County from an ODOT Senior Transportation Analyst. In 2008 and 2013, ODOT staff sampled 49 total miles of road in the county, and calculated a volume to capacity ratio for all of these miles. ODOT rates roads that have a volume to capacity ratio of 1.5 or more as “at capacity,” or congested.

Why This Indicator Matters

The extent to which roads in Tillamook County can handle the level of traffic they receive serves as an indicator of the growth the county could support and the development needed. Transportation infrastructure is just one way of gauging the growth potential of the county, but one that was specifically identified as important to residents.

Indicator Targets

The goal for this indicator is for no roads to be operating “at capacity” (with VSF 1.5 or higher) in Tillamook County.

Utility System Growth Capacity

In order to gauge the extent to which Tillamook County can sustain future population growth, the capacity of utility systems throughout the county was chosen as the indicator. Specifically, information about the relationship between usage capacity and the current use of water and sewer systems was desired.

In 2009, according to information provided by the Tillamook County Assessor's Office, there were 32 water districts or water companies operating in Tillamook County. With respect to the total number of sanitation districts or authorities operating in the county, OSU faculty members were unable to obtain this information.

In order to get accurate information about the relationship between system capacity and current usage it is necessary to communicate with each utility company or district to get the most recent statistics. This information is best collected by systematically contacting each company or district with a short mail survey or a short phone survey. In 2009 and 2014, OSU faculty members did not have the resources to implement such a data collection effort.

Public Transportation Coverage

Measure: Percent of Tillamook County unincorporated and incorporated places that are served by the WAVE bus service.

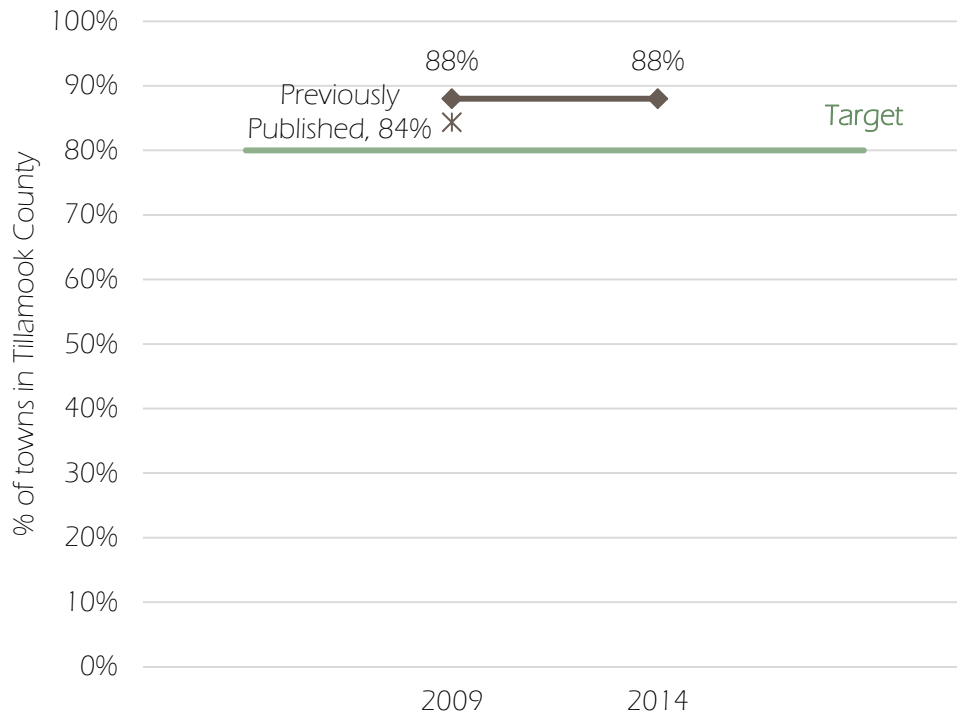
Assessment:

On Target



No Change

Between 2009 and 2014 the percentage of incorporated and unincorporated places served by the WAVE did not change, though the 2009 estimate had to be revised upward from the prior assessment. At 88% of all the incorporated and unincorporated places in the county, the coverage of the WAVE service continues to be well above the target of 80% of all the places in the county.



Source: WAVE route map & Oregon Populated Place Names File, 1990
USGS Geographic Names Information System

Public Transportation Coverage

Measurement Methods

In 2009 and 2014, the WAVE was the only agency that provided public transportation for residents of and visitors to Tillamook County. The WAVE provides services with small buses along fixed routes and with a dial-a-ride program that picks up individuals who have reserved a ride at their specified location and drops them off at the door of their destination. For the purposes of this indicator, only the WAVE's bus system coverage was used as the measure. The dial-a-ride service is an important resource for those in need of more tailored public transportation, however.

Overlaying the WAVE routes on a map of the populated places in Tillamook County, we were able to assess the extent of community coverage by this transit system. In 2014, according to the US Census Bureau and the file of Oregon Populated Places derived from US Geological Society's Geographic Names Information System, from the Oregon State Service Center for GIS, there were 48 populated places (incorporated and unincorporated areas) in Tillamook County. Of those 48 places, 26 were determined to be current communities based on consultation with the Futures Council. Out of those 26 communities, the WAVE had official stops at 17, yielding a coverage rate of 65%. The WAVE also serves communities without an official stop, however. Riders can request stops between official stops by specifically asking the driver to do so, or by waving

the driver down at a safe spot along the route road. Taking into consideration the flexibility of this service, there were 23 communities that were served by official and unofficial stops of the WAVE (88% of all Tillamook County communities).

In the 2009 assessment a different methodology was used to count the number of communities in Tillamook County, specifically Google Maps™ was used as the source of community names and locations. According to Google Maps™ in 2009, there were 32 communities in the county. Based on this number of towns, the coverage rate of the WAVE was estimated at 84%. The 2009 coverage rate of the WAVE was revised upward to 88% in 2014 to reflect the change in methodology to a more reputable source of community names and location. There was no change in the WAVE routes between 2009 and 2014.

Why This Indicator Matters

Within the vision for Tillamook County's growth and development is a desire to have a viable rural public transportation system. Specifically, the goal is for public transit to be available countywide for residents and visitors. In future years, an additional indicator of WAVE ridership may be a useful supplement.

Indicator Targets

The target for this indicator is for 80% or more of the communities in Tillamook County to be served by the WAVE or other fixed route public transport.

Pedestrian & Bike Access

Measure 1: Percentage of adult seasonal and permanent residents who bike

Measure 2: Percentage of adult seasonal and permanent residents who walk

Assessment:

On Target



No Change

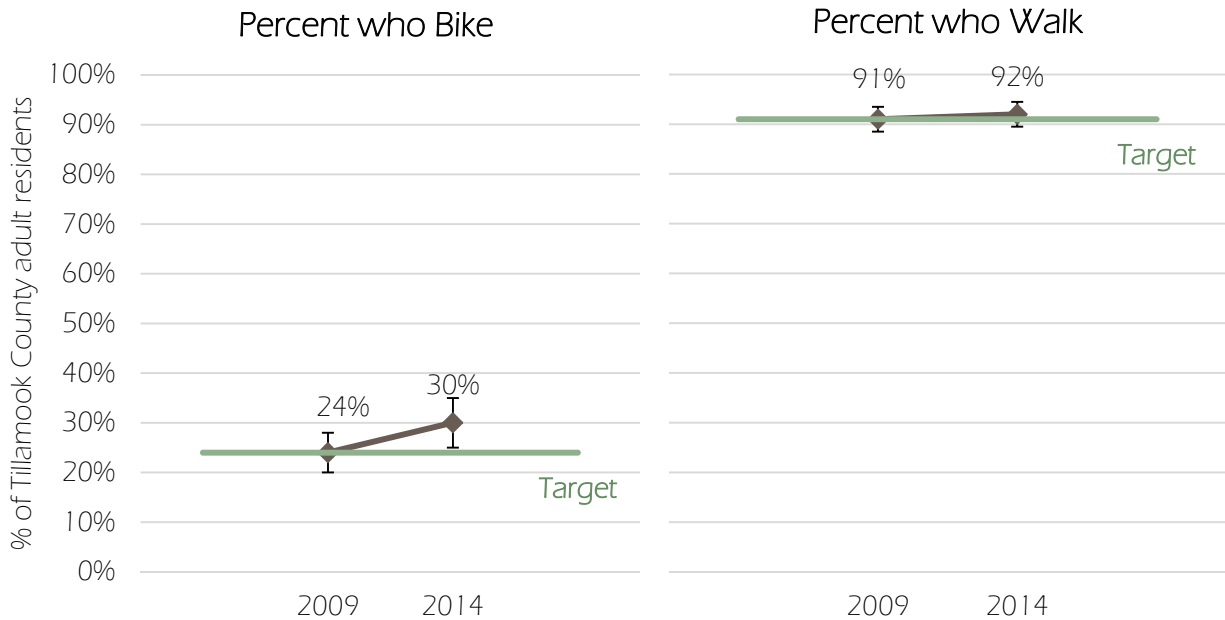
Assessment:

On Target



No Change

The percentage of adult seasonal and permanent Tillamook County residents who bike or walk increased slightly from 24% to 30% and 91% to 92%, respectively, but the margins of error indicate these changes were not statistically significant. In 2014, the percentages of adults who biked or walked were on target with the goals of 25% or more biking and 91% or more walking.



Source: 2009 & 2014 VTIP Surveys

Pedestrian & Bike Access

Measure 3: Percentage of adult seasonal and permanent residents who are satisfied with access to safe streets for biking

Measure 4: Percentage of adult seasonal and permanent residents who are satisfied with access to safe streets for walking

Assessment:

Below Target



No Change

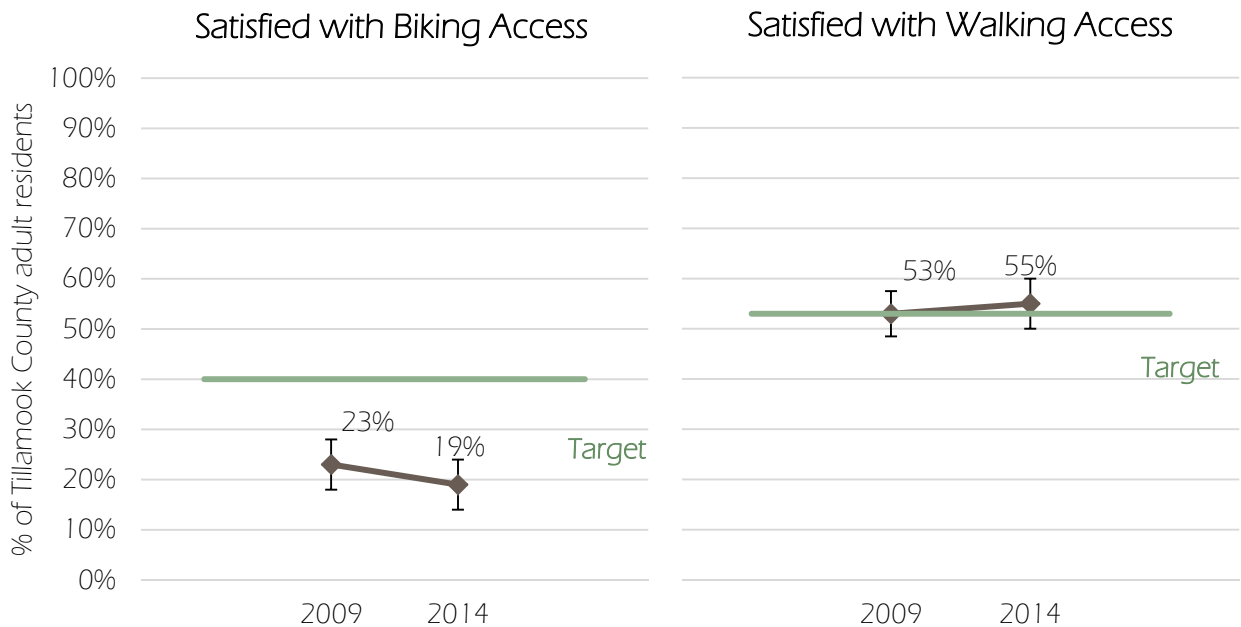
Assessment:

On Target



No Change

The percentage of adult seasonal and permanent Tillamook County residents satisfied with biking access on streets declined slightly from 23% to 19% between 2009 and 2014. By contrast, satisfaction with walking access on streets increased slightly, but as the margins of error bars show, neither change was statistically significant. Bike access satisfaction remains below the target of 40%, while walking access satisfaction remains on target at 53% or more.



Source: 2009 & 2014 VTIP Surveys

Pedestrian & Bike Access

Measurement Methods

In order to assess walking and biking behaviors among adult seasonal and permanent residents of Tillamook County data from the Vital Tillamook Indicator Project survey were used (See Appendix 1 for details of the survey methodology). On the survey, respondents were asked sets of questions related first to biking and then to walking. One set of questions asked about the frequency of biking or walking activities in the last 12 months, another asked about why respondents may have walked or biked in the last year, and the third set asked about satisfaction with access to safe streets and paths to bike or walk on in the county. Survey respondents were specifically instructed not to consider walking from a parking lot to a building entrance as a form of walk that counted on the survey.

Why This Indicator Matters

Encouraging the use of alternative forms of transportation is another goal expressed in the Tillamook County: 2020 Strategic Vision. In order to understand the extent to which residents are indeed using alternative modes of transportation, the indicator focuses on biking and walking behaviors and access.

Indicator Targets

The primary goal for this indicator is for the proportion of residents who are satisfied with their access to safe streets for biking and walking to be at a reasonable level. With respect to the proportion of residents satisfied with their access to safe biking streets, the goal is for at least 40% of residents to be mostly to completely satisfied. In the future, the goal is for there to be no net decline in the proportion of residents who are satisfied with their access to safe streets for walking. So the goal is for about 53% of adult residents to be satisfied with their access to streets to walk on.

The secondary goal for this indicator relates to the prevalence of walking and biking behavior among residents. The hope is that increases in the proportions of residents who are satisfied with access to safe routes to bike on and safe streets to walk along will drive subsequent increases in the percentages of residents who bike or walk. To keep track of this, the targets for biking and walking behavior are for more than 24% of residents to bike and at least 90% of residents to walk.

Natural Hazard & Disaster Plans

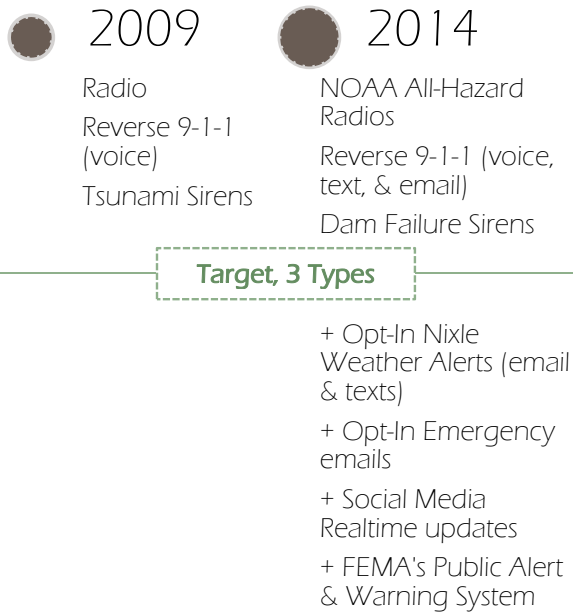
Measure 1: Number of types of warning systems in place

Assessment:



Since 2009, the number of warning systems increased significantly, from three types to seven types. By 2014, Tillamook County had met its goal of having at least three types of warning systems in place in the event of various natural disasters.

Types of Warning Systems



Source: Tillamook County Emergency Management

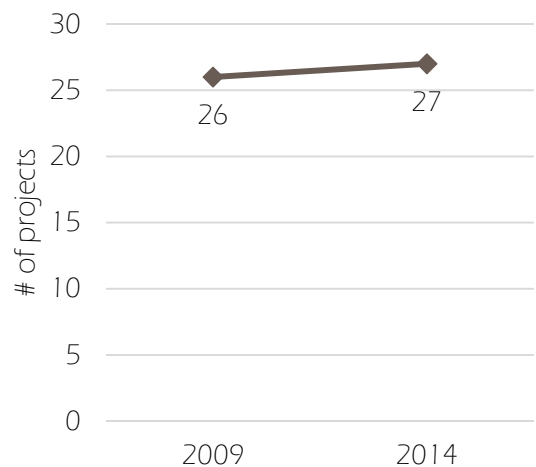
Measure 2: Number of flood mitigation projects or measures completed since 1996

Assessment:



Since 1996, 27 projects have been completed, but between 2009 and 2014, only one was. There is no target set for this indicator measure, because it is unclear how many projects are needed in the county.

Flood Mitigation Efforts since 1996



Source: Tillamook County Commissioner's Office

Natural Hazard & Disaster Plans

Measurement Methods

Data about the number and types of warning systems in place were provided by the Tillamook County Office of Emergency Management.

Data about the number of flood mitigation projects completed in the county were provided by the Office of the Tillamook County Commissioners and the Tillamook County Office of Emergency Management. In the 2009 assessment simply the count of projects completed in the assessment year were used to measure this indicator. For this report it was decided that a more complete story about the cumulative number of projects completed since 1996 would be appropriate. 1996 was chosen as the reference year, because it was a year of extensive flooding across the county. It is also important to note that this measure captures response to flooding, because flood mitigation projects only get completed when FEMA funding is provided after extensive flooding.

The number of flood mitigation projects suffers, as a measure, from one major problem that suggests it may need to be modified or replaced in the future. The problem is that it is unclear the number of flood mitigation projects that are needed in the county, so it is difficult to interpret the number completed as good or bad, in a given year.

Why This Indicator Matters

Tillamook County's geography makes the county susceptible to flooding, tsunamis, landslides, and other natural disasters. Given these challenges, it is important for the community to both prepare for and respond to natural hazards in an appropriate manner. The measures chosen to represent the extent to which the county prepares for and responds to natural hazards relate to public warning systems and flood mitigation projects. Warning systems speak to the county's preparation, while the completion of flood mitigation projects speaks to its ability to respond to the occurrence of floods.

Indicator Targets

In the future, the goal for Tillamook County is to have at least three types of warning systems in place in the county. Given the lack of information about the number of needed flood mitigation projects, there is no target for the number of completed projects. Without a target, the number of flood mitigation projects may need to be cut from the list of indicator measures in the future.

Vision of our Economy

Goal 2.1 Tillamook County residents look forward to the development of an economy that complements and builds upon industries that have been a part of the landscape for over 100 years.

Goal 2.2 Provide vocational and job training opportunities to Tillamook County residents

Goal 2.3 In addition to maintaining the traditional economic base, citizens will seek to diversify the Tillamook County economy by attracting new industries and encouraging development of locally owned businesses.

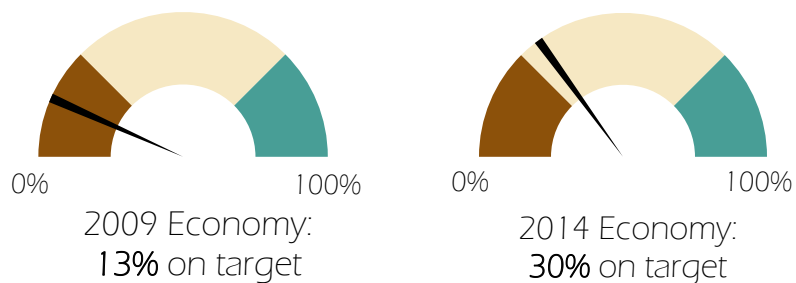
Goal 2.4 Provide living wage jobs

Goal 2.5 Plan for and expand the tourism and recreation industry

Goal 2.6 Promote the development of affordable workforce housing

Summary of findings

In 2009, 28 measures were used as indicators of the achievement of Tillamook County's Economic goals and in 2014 30 measures were used. In 2014, nine (30% of the measures) were on target, 17 were below target, and four measures had no target. By contrast, in 2009 four (13%) were on target, 20 were below target, and four had no target. This shows overall improvement in the number of indicator measures on target in the Economic area of the vision. In other words, Tillamook County is getting closer to achieving all of its goals in this area.



Indicators related to maintaining the traditional economy, providing vocational and job training opportunities, and having affordable workforce housing all saw such significant improvement between 2009 and 2014 that they went from below target in 2009 to on target in 2014. Great news! Nine other indicators saw improvement in this time frame as well, but not enough to change their relationships to the targets. Fortunately, there were no economic indicator measures that went from being on target in 2009 to being below in 2014. The same four indicators related to industry composition that had no targets in 2009 stayed neutral in 2014, and therefore represent useful background information, but not so relevant to decision making.

These findings show that since the Great Recession (2007-2009), Tillamook County's economy is making a slow recovery. The areas where it is still struggling are in the areas related to classic economic development outcomes; employment and quality of jobs. The county has improved in ways that map onto residents' unique economic hopes for the county. This highlights the very nuanced way that Tillamook County residents view the nature of their economy – it's not just about jobs or their quality, but how the economy is structured and the processes that support it – this gives decision makers much more information about how to build the economy that residents desire even in the face of economic downturn and lagging recovery.

Employment in Forestry, Agriculture, & Fishing

Measure 1: Percent of all full and part-time jobs in Forestry or Fishing Industry

Measure 2: Percent of all full and part-time jobs in Agriculture Industry

Assessment:

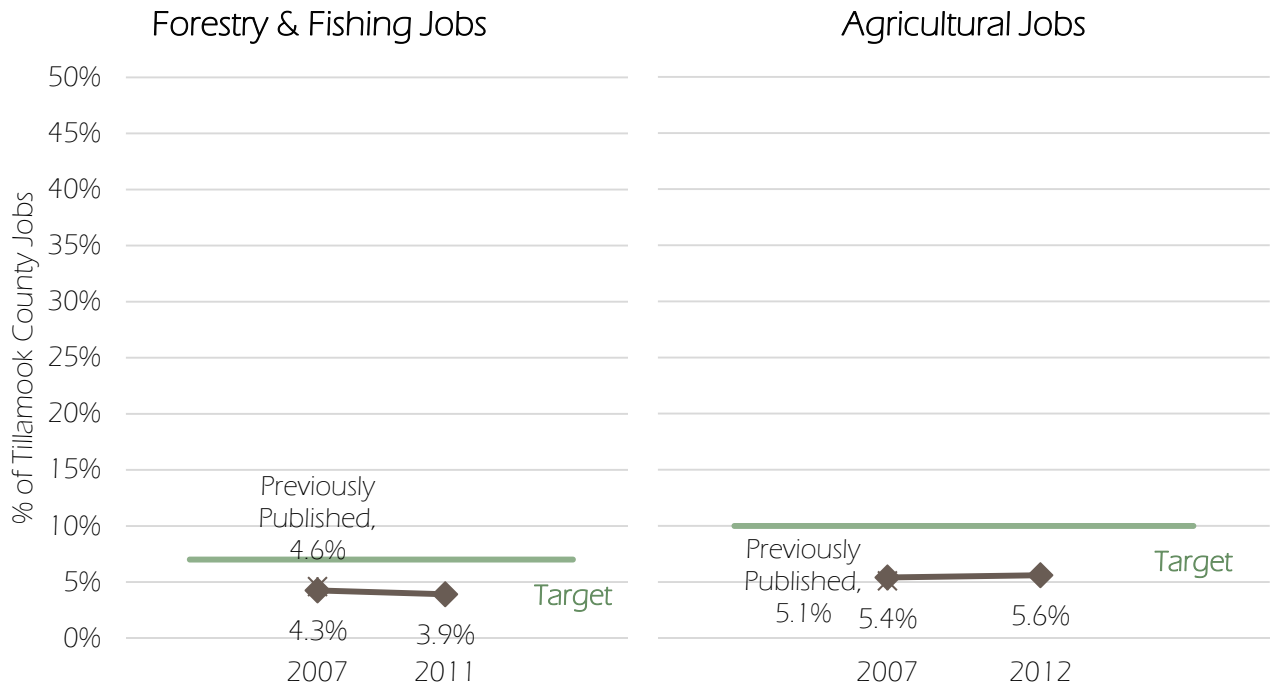
Below Target & **Declining**

Assessment:

Below Target & **Improving**

Between 2007 and 2011, the percentage of jobs in Tillamook County that were in the forestry and fishing industries declined .04 percentage points to 3.9%, still below the target of 7%. The 2007 estimate previously published in the 2009 report had to be revised downward slightly, based on revisions the Bureau of Economic Analysis made in 2014.

Between 2007 and 2012, the percentage of jobs in Tillamook County that were in the agriculture industry increased .02 percentage points, a slight improvement but still below the target of 10%. The 2007 estimate previously published in the 2009 report had to be revised upward slightly, due to revisions the Bureau of Economic Analysis made in 2014.



Source: US Bureau of Economic Analysis

Employment in Forestry, Agriculture, & Fishing

Measure 3: Percent of farms that are family owned (not including Family Corporation owned farms)

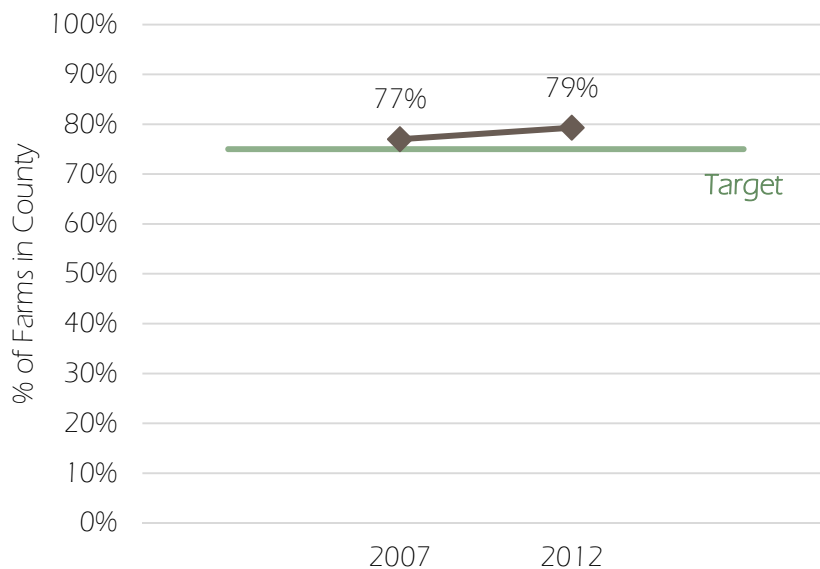
Assessment:

On Target



Improving

Between 2007 and 2012, the percentage of farms that were family-owned increased 2 percentage points, from 77% of farms in the county to 79%. This change over time is on target with the goal of 75% or more of farms in the county being owned by families instead of family corporations or publicly traded corporations.



Source: US Department of Agriculture, 2012 Census of Agriculture

Employment in Forestry, Agriculture, & Fishing

Measurement Methods

Data about the proportion of Tillamook County jobs that are in the forestry, fishing, and agriculture industries come from the US Bureau of Economic Analysis (BEA). Included in these figures are the owners of businesses in these sectors. 2011 data were used for percentage of jobs that were in the forestry and fishing industry because 2012 data for Tillamook County, in this industry, were suppressed. Every few years the BEA revises previously published data. In 2014 they revised all of their previous statistics by industry between 2000 and 2012, for all counties. The revised, as well as the previously published statistics are provided in this report.

Data about the percentage of farms that are family owned come from the US Department of Agriculture's 2007 and 2012 censuses. According to the USDA, family farms are farms owned and operated solely by individuals or family members, not by corporations, partnerships, or other types of institutions.

Why This Indicator Matters

Tillamook County places a high value on the extent to which traditional industries,

such as forestry, fishing, and farming, continue to be a part of its economic engine. Toward this end, employment in forestry, fishing, and agriculture along with the prevalence of family owned farms were chosen as indicators for this component of the vitality assessment.

Indicator Targets

The goal for this indicator is for a moderate percentage of Tillamook County residents to be employed in the farming, forestry, and fishing sectors. At the heart of this desire is for these industries to remain a part of the economy in the county. In addition, it is important to recognize that other industries make up significant portions of successful rural economies; therefore the goals for future levels of employment in these three sectors are modest. In the forestry and fishing sector, the goal is for approximately seven percent of workers to be employed in these fields, while within the farming sector the goal is for about ten percent of workers to be employed therein.

The goal for family farms is for at least 75% of farms to be family owned.

Forest, Agriculture, & Fish Productivity

Measure 1: Thousands of board feet cut from private land (industrial and non-industrial private land)

Measure 2: Thousands of board feet cut from all public land (State, Federal, County, & Municipal)

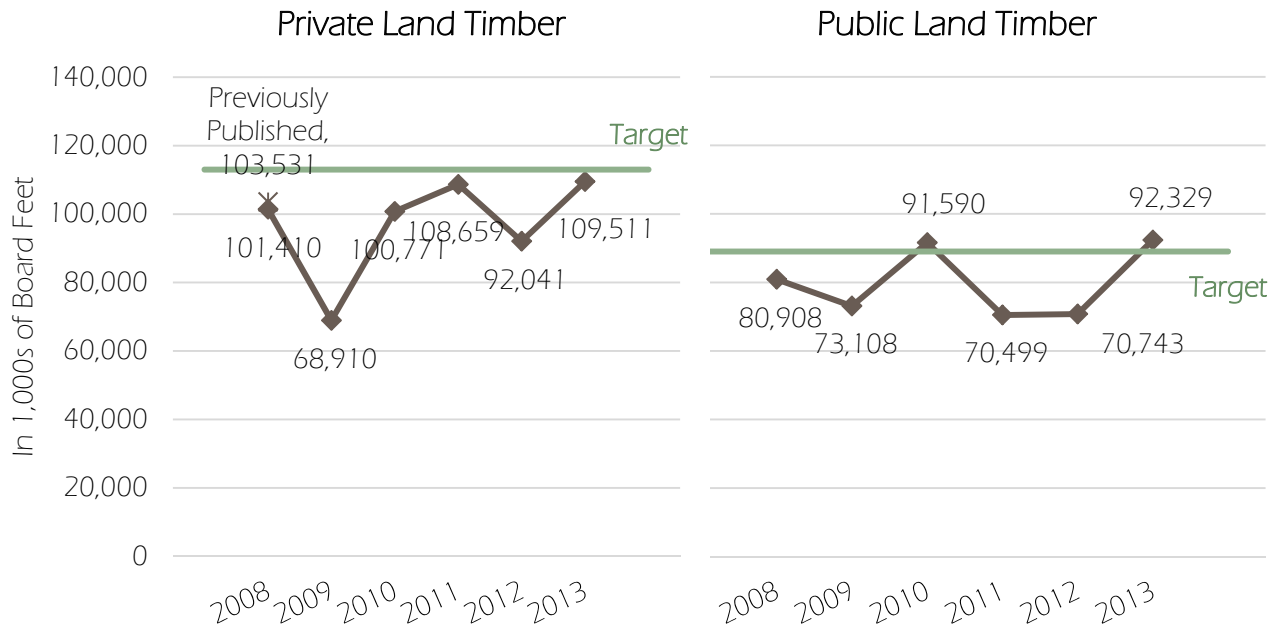
Assessment:

Below Target & **Improving**

Assessment:

On Target & **Improving**

Between 2008 and 2013, timber harvest increased by about 8 and 12 million board feet on private and public land, respectively. These increases meant that by 2013 the county was near the goal of 113 million board feet of timber harvested from private land and had met the goal of 89 million board feet harvested from public land. The charts below also show that there is quite a bit of fluctuation in timber harvest volume, year to year.



Source: Oregon Department of Forestry

Forest, Agriculture, & Fish Productivity

Measure 3: Total pounds of dairy products from Tillamook County, sold.

Measure 4: Total pounds of fish & shellfish harvested from Tillamook County ports

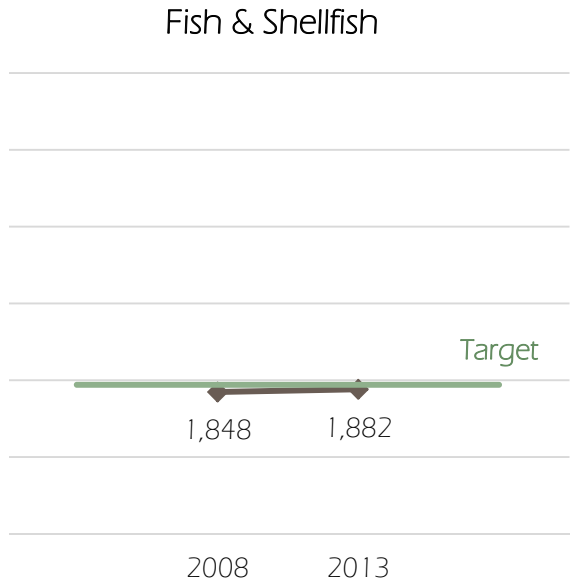
Assessment:

Below Target & **Improving**

Assessment:

Below Target & **Improving**

Both dairy product sales and fish/shellfish harvest were slightly higher in 2012 and 2013 than they were in 2008. These recent productivity estimates were still slightly lower than the goals of 5.62 million pounds of dairy products sold and 1.94 million pounds of fish/shellfish harvested.



Source: OR Department of Fish & Wildlife, Landing Statistics

Source: Oregon Agricultural Information Network (OAIN)

Forest, Agriculture, & Fish Productivity

Measure 5: Pounds of coho salmon commercially harvested and landed at Tillamook County ports

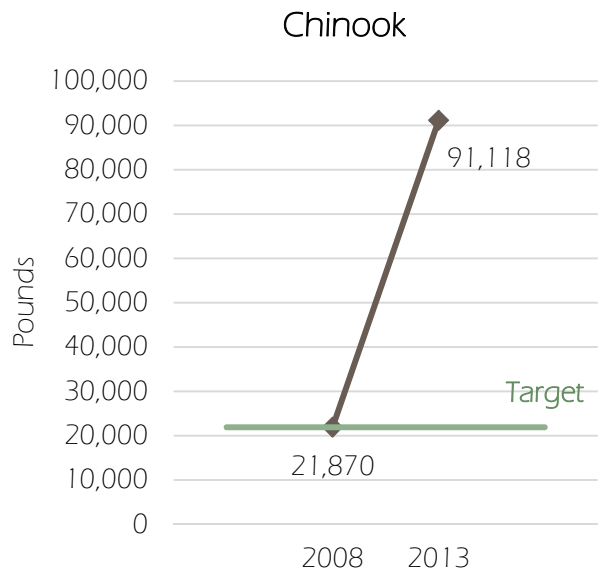
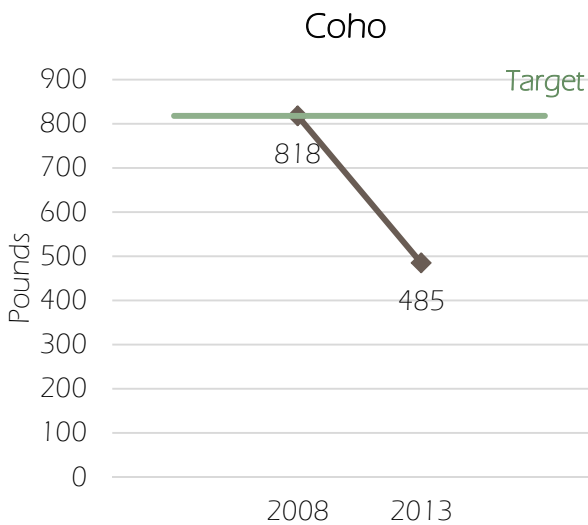
Measure 6: Pounds of Chinook salmon commercially harvested and landed at Tillamook County ports

Assessment:

Assessment:

Below Target &
 Declining
On Target &
 Improving

Commercial harvest of coho salmon in 2013 was lower than the harvest observed in 2008, while harvest of Chinook was more than four times as high in 2013 as it was in 2008. Commercial harvest of coho is below the target of 818 pounds, but commercial harvest of Chinook is well over its target of 21,870 pounds.



Source: OR Department of Fish & Wildlife, Commercial Landing Statistics

Forest, Agriculture, & Fish Productivity

Measurement Methods

In order to measure forest productivity, data from the Oregon Department of Forestry about the number of board feet of timber cut on private and public land in Tillamook County was used.

Private land belonged to industry or other private landowners. Public land included was owned by Bureau of Land Management, US Forest Service, the State of Oregon, and County or Municipal government. Forest industry, Other Private and Other Public harvests were compiled by the Department of Revenue and are subject to revision. Native American harvests were compiled from five Confederated Indian tribes by ODF. BLM harvests were compiled by the U.S. Bureau of land management. A West Side short/long conifer log conversion of .81 was used. USFS harvests were compiled by the United States Forest Service.

With respect to agricultural productivity, we relied on dairy production figures. These data were provided by the Oregon Agricultural Information Network (OAIN), and represent estimates of total sales. Important to note in these sales amount statistics is that the values of sales in a particular year reflect commodity prices and amount of milk produced. Year to year fluctuations in values reflect both changes in the amount of dairy products sold and changes in the price per unit offered in the commodity markets.

Data about the number of pounds of fish and shellfish overall, as well as the number of pounds of coho and chinook salmon, specifically, that were commercially harvested off the Tillamook County coast (landed at Garibaldi, Pacific City, Netarts Bay, and Nehalem Bay ports) were provided by the Oregon Department of Fish & Wildlife, in order to measure fishing productivity.

Why This Indicator Matters

As stated earlier, Tillamook County places a high value on the extent to which traditional industries, such as forestry, fishing, and farming, continue to be a part of its economic engine. Another indicator of the extent to which traditional industries remain strong is their productivity.

Indicator Targets

In the future, the goal for Tillamook County is to have no net loss in forestry, fishing, or agricultural productivity. Within forestry productivity, a gain of approximately ten percent (to 113,000,000 board feet cut on private land and 89,000,000 on public land) is desired. In farming and overall fishing, the goal is moderate growth, within the range of zero to five percent from 2008 figures. With respect to commercial coho and Chinook harvests, the goal is for 2008 observed levels to persist.

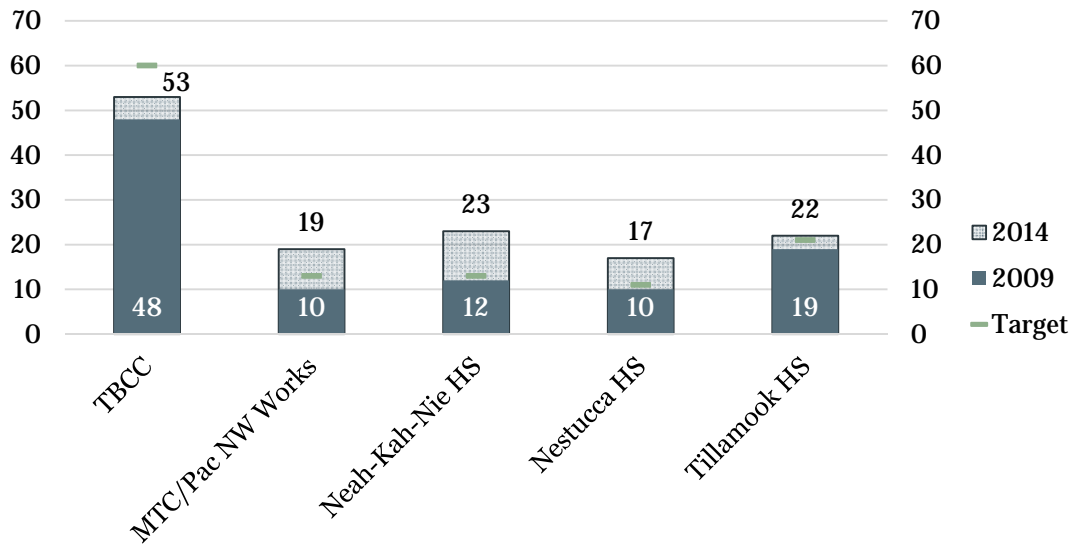
Skill Training Opportunities

Measure: The number of vocational and job training classes or degrees at Tillamook Bay Community College (TBCC), PacNW Works (formerly MTC), Neah-Kah-Nie High School, Nestucca Valley High School, and Tillamook High School

Assessment:



Between 2009 and 2014 all five of the educational institutions increased the number of vocational and job training classes or degrees. Neah-Kah-Nie High School added the most (11), and Tillamook High School added the least (3). By 2014 all institutions had met or exceeded the targets, except for TBCC; the target for this institution was 60 and in 2014 they offered 53 different vocational and job training classes or degrees.



Sources: 2013-2014 TBCC Course Catalog, 2014 PacNW works course list, 2013-2014 Neah-Kah-Nie Course Catalog, 2014-2015 Nestucca HS Course Catalog, 2014-2015 Tillamook HS Course Catalog

Skill Training Opportunities

Measurement Methods

In order to measure the prevalence of skill training opportunities, we relied on data from the major educational institutions in Tillamook County namely, the high schools, the community college, and the workforce-training agency.

Skill training opportunities offered at the high schools in Tillamook County were determined based on tallies of the courses and course tracks reported in each high school's course catalog that aim to prepare students for the workforce. These courses and educational tracks relate to a variety of industries including health services, construction, engineering, accounting, computer aided design (CAD), web design, forestry, horticulture, journalism, veterinary medicine, and media production. Course catalogs for the academic years 2008-09 and 2013-14 were used.

In order to determine the number of skill training opportunities offered at the Tillamook Bay Community College, we relied on personal communication from administrators as well as course catalogs. From the course catalogs, the number of degrees, certificates, and continuing education course categories were tallied. The certificates and degrees represented a variety of professions and industries including accounting, computer information systems, culinary arts, early education, electrician, construction, hospitality and tourism, marketing, nursing, corrections, mechanics, and

agriculture. Continuing education courses included phlebotomy, college preparatory, music, and computer classes.

Data about skill training offered at the workforce-training agency in the county came in 2009 from the Management & Training Corporation (MTC) and in 2014 from the Pacific NW Works websites. MTC became Pacific NW Works at some point between 2009 and 2014. Trainings focused on office management-related proficiencies were included in the count, but training for job seekers such as resume writing and job searching were not included in the tally of training classes.

Why This Indicator Matters

The relationship between the skills of the labor force and the potential of the economy is a close one. Employers present in the local economy signal to potential workers their needs with respect to skills and expertise, and the skills held by the labor force signal to potential employers (and industries) the feasibility of locating in that area. In a county such as Tillamook that wishes to both preserve traditional industries and expand into new areas, the skills of its labor force are key indicators of potential economic growth and stability. For this reason, an economic indicator adopted by Tillamook County was the prevalence of skill training opportunities. The indicator answers the question: To what extent does the Tillamook County workforce have access to the education they need to work in emerging industries and those already present in the local economy?

Indicator Targets

The goal for this indicator is for there to be growth in the number of skill-training opportunities offered by each of the institutions in Tillamook County from 2009. Specifically, the goal is for TBCC to offer 60 vocational and job training degrees and classes, for the workforce

training organization to offer approximately 13 vocational and job training classes, and for the high schools to increase their offerings by ten percent from 2009 numbers, so 13 classes at Neah-Kah-Nie, 11 at Nestucca, and 21 at Tillamook.

Industry Employment Diversity

Measure 1: The County Herfindahl Index Score value of industry employment diversity. Values of the Herfindahl Index range between zero and one; where a one means that the economy of the county is not diverse at all (one industry is the predominant employer in a county) and a zero means that the economy is completely diversified.

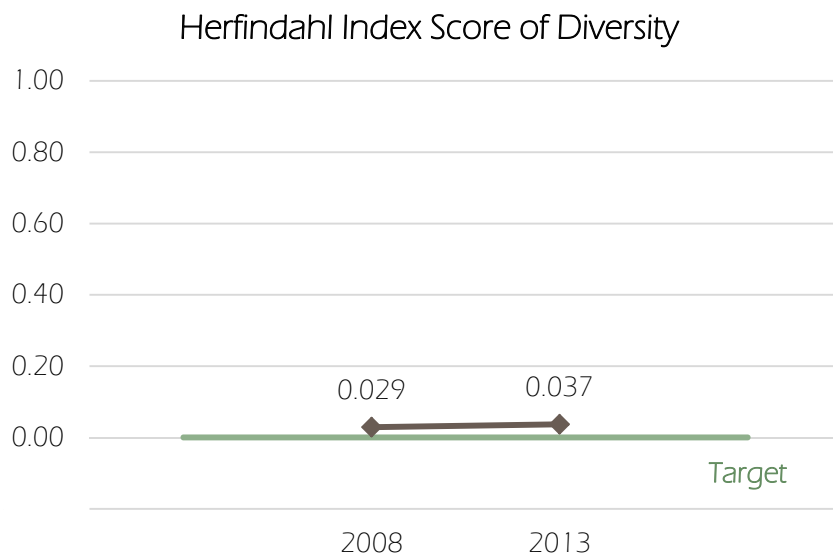
Assessment:

Below Target



Declining

Since 2008, Tillamook County has become slightly less diverse in its industry employment, from an index score of .029 in 2008 to a score of .037 in 2013. In 2013 the County was still below the target of completely diverse (index score of zero). In both 2008 and 2013 Tillamook County was ranked 24 out of the 36 Oregon counties, where a rank of 1 is most diverse and rank of 36 is least diverse. The most diverse county in Oregon in 2013 (Clackamas) had an index score of .016.



Source: Oregon Employment Department, independent analysis by Nick Beleiciks

Industry Employment Diversity

Measure 2: Industries of Tillamook County's top five employers

Assessment:

No Target

&

No Change

Between 2009 and 2014 there was no change in the top employers in the county, therefore the industries that these top five employers represented also did not change. The top five employers represented four different industries. At this time there is no target or goal for the industrial representation of the top employers in the county.

2009 & 2014

Government services

Food Manufacturing

Lumber & Wood Products Manufacturing

Health Services

Sources: Oregon Infrastructure Finance Authority, Oregon Job Match, & Personal communication with NW Regional Solutions Team Representative

Industry Employment Diversity

Measurement Methods

The Herfindahl Index is a statistical measurement that takes into account the shares of employment by industry in a place, and by squaring the proportional shares and summing across all industries for a county the index yields a standardized and singular measure of industry diversity. Values of the index range between zero and one; where a one means that the economy of the county is not diverse at all (one industry is the predominant employer in a county) and a zero means that the economy is completely diversified. In 2009 and 2014, the Oregon Employment Department calculated the Herfindahl index using employment data by industry for all counties in Oregon, and provided these data to OSU faculty members.

The second measure of industry employment diversity used in this assessment is the industries of the top five employers in Tillamook County. While the OR Employment Department collects information about the number of employees by firm, this agency cannot share the names of the firms with the greatest number of employees to the public. Therefore, in order to approximate this measure, estimates from Oregon Infrastructure Finance Authority (<http://www.orinfrastructure.org/>), collected between 2005 and 2007, and Oregon Job Match (<http://www.oregonjobmatch.com/employers-TILLAMOOK-County-Oregon.htm>) were used. According to these estimates, Tillamook County Creamery Association,

Tillamook County General Hospital, and public agencies had the greatest numbers of employees between 2005 and 2007. After these, Stimpson Lumber, Tillamook Country Smoker, and Tillamook Lumber Company had the next highest estimated numbers of employees. The employee size estimates of these three firms were equal, making it impossible to determine which two employed more workers. These six employers represent four unique industries, namely health services, government services, wood manufacturing, and food manufacturing. In 2014, data from Oregon Job Match and the Oregon Infrastructure Finance Authority were no longer available. Instead, personal communication with the Northwest Regional Solutions Team representative in 2014 confirmed that there has been no change in the top employers in the county since 2009.

Why This Indicator Matters

Another dimension of economic vitality for Tillamook County residents is the concentration of jobs in the various industrial sectors. Again, the hope is to maintain jobs in farming, fishing, and forestry, but also to expand into additional areas such as tourism.

Indicator Targets

The goal for this indicator is for the Herfindahl index score of industry diversity to approach zero. There is no target for the industries of the top employers in the county.

Small & Large Business Health

Measure 1: Percent change in the number of small businesses (with 0-4 employees) from 1st quarter of one year to 1st quarter of the next year

Measure 2: Percent change in the number of large businesses (with 50+ employees) from 1st quarter of one year to 1st quarter of the next year

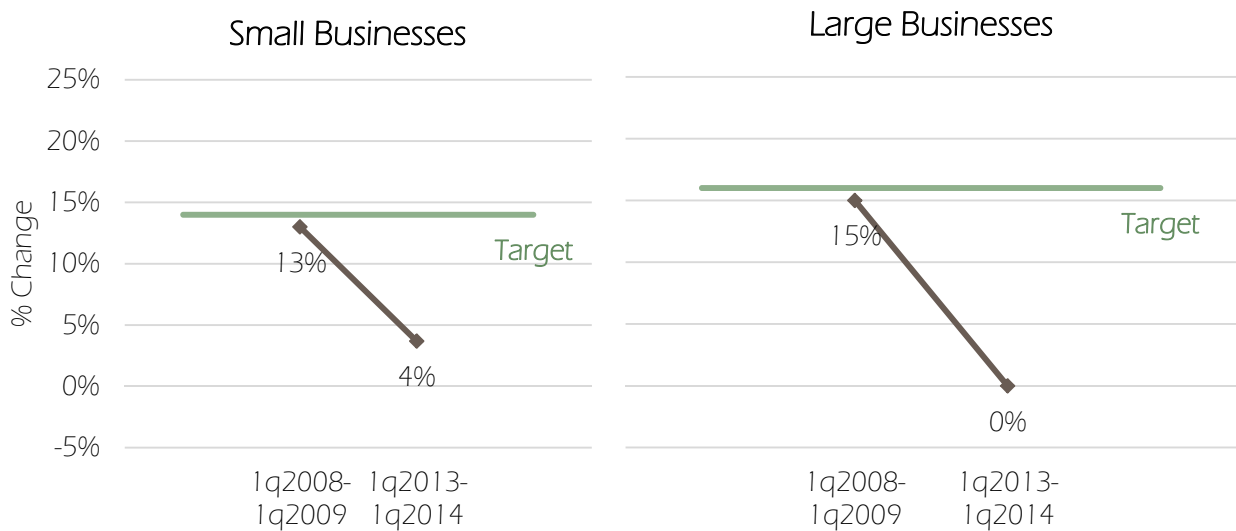
Assessment:

Below Target & **Declining**

Assessment:

Below Target & **Declining**

Since the last assessment period (2008-09), the percent change in the number of large and small businesses over a one year period declined significantly. From 1st quarter 2013 to 1st quarter 2014, percent change in these two types of businesses fell short of the targeted 14% and 16% for small and large businesses, respectively. There was no change in the number of large businesses in the 2013-14 period and only a four percent increase in the number of small businesses.



Source: Oregon Employment Department

Small & Large Business Health

Measurement Methods

Data about change in the number of small and large businesses were provided by the regional Oregon Employment Department agency staff member.

It is important to note that growth in the number of small firms that employed 0-4 people could be due to the emergence of new small businesses in Tillamook County or due to the reclassification of firms from a larger size class to this smaller one because they laid off workers between the reference quarters. In addition, growth in the number of firms that employed 50 or more employees could be due to existing firms in the county increasing the number of workers they employed in the year, or to new firms of this size entering the county.

Why This Indicator Matters

Tracking the lifecycle of small and large businesses is another important aspect of the vitality of the Tillamook County economy, according to residents.

Indicator Targets

The goal for this indicator is for the percent change of small and large firms to be greater than change rates observed between 2008 and 2009. Specifically, the goal is for the percent change to be 14% or more among small businesses and 16% or more among large businesses.

Living Wage Jobs

Measure 1: The ratio of county average earnings to basic family budget for local family of 1 parent with 1 child. Basic family budget estimated from two sources: Oregon Housing & Community Services and the Economic Policy Institute

Measure 2: The ratio of county average earnings to basic family budget for local family of 2 parents with 1 child. Basic family budget estimated from two sources: Oregon Housing & Community Services and the Economic Policy Institute

Assessment:

Below Target



Declining

Assessment:

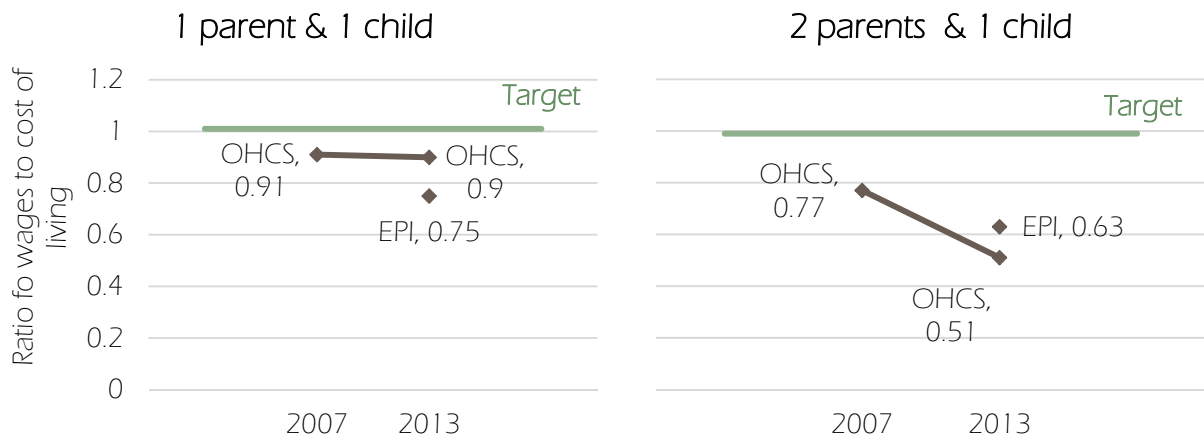
Below Target



Declining

Since 2007, according to the Oregon Housing & Community Services calculation of the cost of living, the ability of county average wages to cover the cost of living for these two family types has declined. In 2007, according to the OHCS cost of living in Tillamook County, the average wage in the county was .91 (or 91%) of the cost of living for families of one parent and one child, and it was only .77 (equal to 77%) of the cost of living for families of two parents and one child. That these ratios were below 1.0 show that average wages did not cover the costs of living in the county for either family type in 2007. In 2013, the ratios continued to be below 1.0, and the difference from 2007 was dramatic for families of two parents with one child and one wage earner. The ratio of wages to cost of living continued to be below the target ratio of 1.0 in 2013.

According to the Economic Policy Institute’s calculation of the cost of living, Tillamook County’s average wage covered 75% of the costs for families of one parent and one child and 63% of the costs for families of two parents and one child – still well below the target ratio of 1.0.



Sources: US Bureau of Economic Analysis, OR Housing & Community Services, Economic Policy Institute, Family Budget Calculator

Living Wage Jobs

Measurement Methods

In order to measure the extent to which jobs in Tillamook County provide a living wage, two factors must be considered. First, it is necessary to determine the cost of living for the county, then that cost of living amount must be compared to prevailing wages in the county.

Cost of living data were obtained from the Oregon Housing and Community Services department (OHCS) and the Economic Policy Institute (EPI). In 2007, OHCS calculated for each county in Oregon a basic family budget for different size families, which is equivalent to the cost of living. The agency calculated the basic family budget for each county by using information about costs of housing, food, childcare, transportation, health care, other necessities (31% of housing and food costs), and taxes in each area. The agency has not updated these budgets since 2007, so they were adjusted for inflation for this 2014 assessment. Due to the age of the OHCS family budget estimates and the availability of this new resource, family budget estimates from EPI were also used. EPI also includes housing, food, childcare, transportation, health care, other necessities, and taxes in its calculation, but it estimates these costs based on information about all of rural Oregon. In other words, the basic family budget estimate for Tillamook County from EPI is the same estimate for other non-metropolitan counties in the state. The OHCS estimate is therefore more representative of Tillamook County, but it does not bear in mind possible changes to

the relative size of living costs in the county.

The second piece of information needed to understand the extent to which jobs in the county pay a living wage is prevailing wage information. This information comes from the US Bureau of Economic Analysis (BEA), and is obtained primarily from quarterly unemployment insurance (UI) reports that are filed with the state by employers in industries that are covered by, and subject to, state UI laws (www.bea.gov). For industries not completely covered by state UI programs (such as agricultural services, private education, and religious membership organizations) and for industries not covered by UI programs, wages and salaries are estimated using a number of different procedures, detailed on the BEA website.¹

To compare the average earnings to the basic family budget amounts we calculated a ratio of earnings to the cost of living for families of one parent and one child (assuming that the one parent works for pay) and for families of two parents and one child (assuming that only one parent works for pay).

Why This Indicator Matters

Tillamook County residents included in their Strategic Vision a goal that jobs in the county provide a living wage.

¹ See http://www.bea.gov/regional/pdf/lapi2007/wag_sal.pdf for more information

Indicator Targets

The goal for this indicator is for the ratio of the average prevailing wage and the cost of living for families of one parent and one child to be equal to one and for the ratio for families of two parents and one child,

with one wage-earning adult, to approach one. These desired ratio values would mean that 100% of the costs of living in Tillamook County for these two types of families would be covered by the average prevailing wage.

Tourism

Measure 1: Dollars of visitor spending at destination in Tillamook County

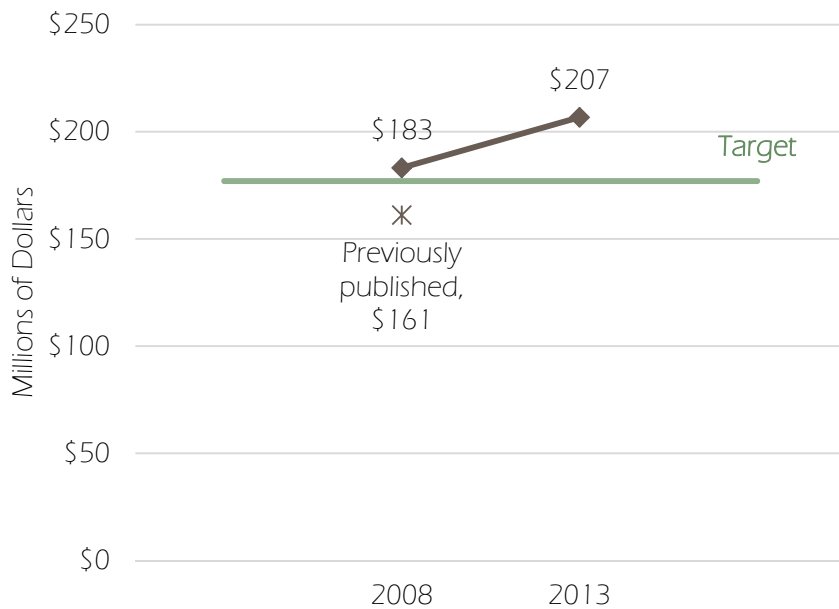
Assessment:

On Target



Improving

Between 2008 and 2013, visitor spending in Tillamook County increased from \$183 million to \$207 million, exceeding the target of \$177 million. The previously published 2008 value had to be revised upward with new data for that year from Dean Runyan Associates.



Source: Dean Runyan Associates

Tourism

Measure 2: Total number of occupants camping overnight at County Campgrounds January 1 to December 31 of the year

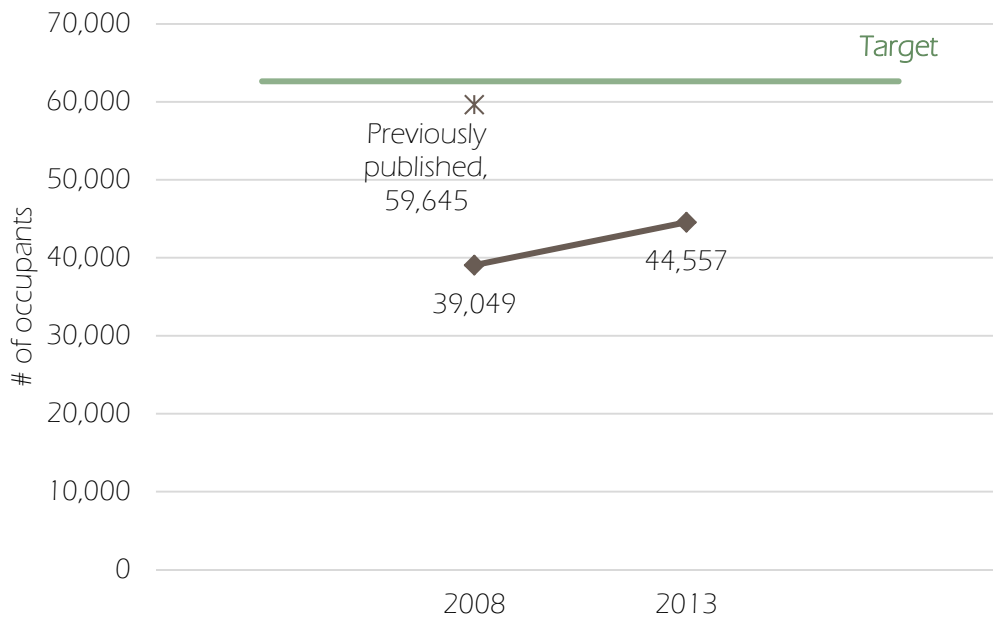
Assessment:

Below Target



Improving

Since 2008, the number of county campground overnight campers has increased, though the number of campers in 2013 is still below the targeted 62,627 campers. The 2008 value had to be revised downward to reflect a change in the methodology.



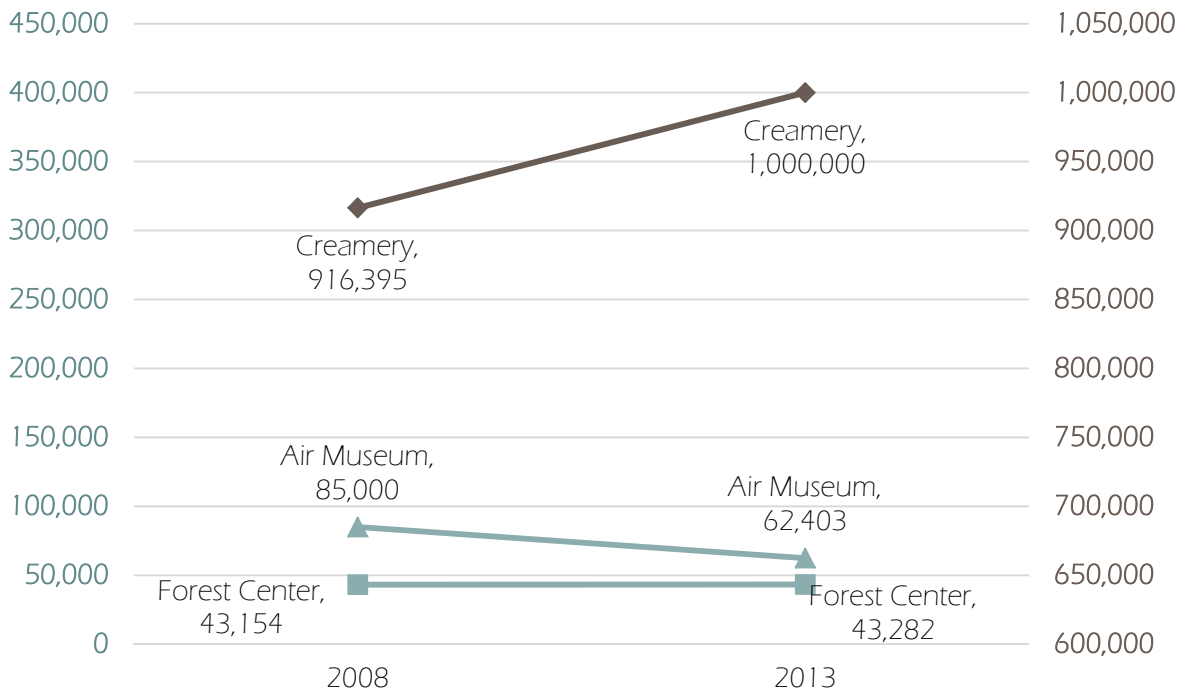
Source: Tillamook County Parks Department

Tourism

Measure 3: Total number of visitors to Tillamook Creamery Visitors Center, the Tillamook Air Museum, and the Tillamook Forest Center

| | Tillamook Creamery Visitors Center | Tillamook Air Museum | Tillamook Forest Center |
|--------------------|------------------------------------|------------------------|-------------------------|
| Assessment: | No Target Improving | No Target Declining | No Target Improving |

Since 2008, visitor numbers to the Creamery have increased dramatically, while the number of visitors to the Forest Center has risen only slightly. The Air Museum has seen declining visitation during this same period. There are no targets set for these visitor destinations.



Tourism

Measurement Methods

In order to measure tourism spending, we relied on data from the Oregon Tourism Bureau, calculated by Dean Runyan Associates. These data represent total spending in Tillamook County by non-residents and are not adjusted for inflation. Dean Runyan Associates periodically re-estimates prior years of tourism spending in location, and because of this, the previously published 2008 value had to be revised upward.

In order to measure visitor numbers at the four major tourist attractions, we relied on data directly reported from the organizations running the attractions.

According to the Tillamook County Parks department, the 2008 county campground usage statistic previously reported was incorrect, so this year's report shows the revised number of occupants in 2008. In addition, according to the Parks department, the number of overnight campers is an estimate because it is based on what the Fee Collectors were told by patrons at check in. This number is not always accurate because some patrons are not sure about how many family members or friends will actually show up to camp, and they are not required to finalize the number.

Why This Indicator Matters

One specific area of the economy in which Tillamook County wishes to grow is the area of tourism. The tourism attractions used to measure this indicator

represent the character of the county, its amenities, and the most popular destinations. In order to measure the depth of tourism in the county we relied on tourism spending data and data about the number of visitors at each of the major tourist attractions in the county.

Indicator Targets

The goal for this indicator is for future levels of tourism to increase by approximately five to ten percent from 2008 levels. For spending, the current goal is \$192 - \$201 million. It should be noted, however, that the Economic Development Council's and the County's "Visit Tillamook Coast" Board may adopt a different goal. When it does, that goal should be the VTIP target for this indicator.

At each tourism location, the goal is for the number of visitors to also increase five to ten percent. It may not be feasible, however, for all of these locations to accommodate such increases without physically expanding. Thus for the purposes of this report, the indicator target is limited to campground use. According to the Parks Department, the county campgrounds could hold about 416,256 overnight occupants throughout a year. This is based on the average number of occupants per site (3) and the number of sites available each night throughout the year. In the future, it may be possible to assign a target value to the number of campers per year, based on some realistic assessment of capacity and usage.

Workforce Housing

Measure 1: The percentage of low-income renters, earning less than the county median income, who were housing cost burdened (spending 30% or more of their income on housing)

Measure 2: The percentage of low-income homeowners, earning less than the county median income, who were housing cost burdened (spending 30% or more of their income on housing)

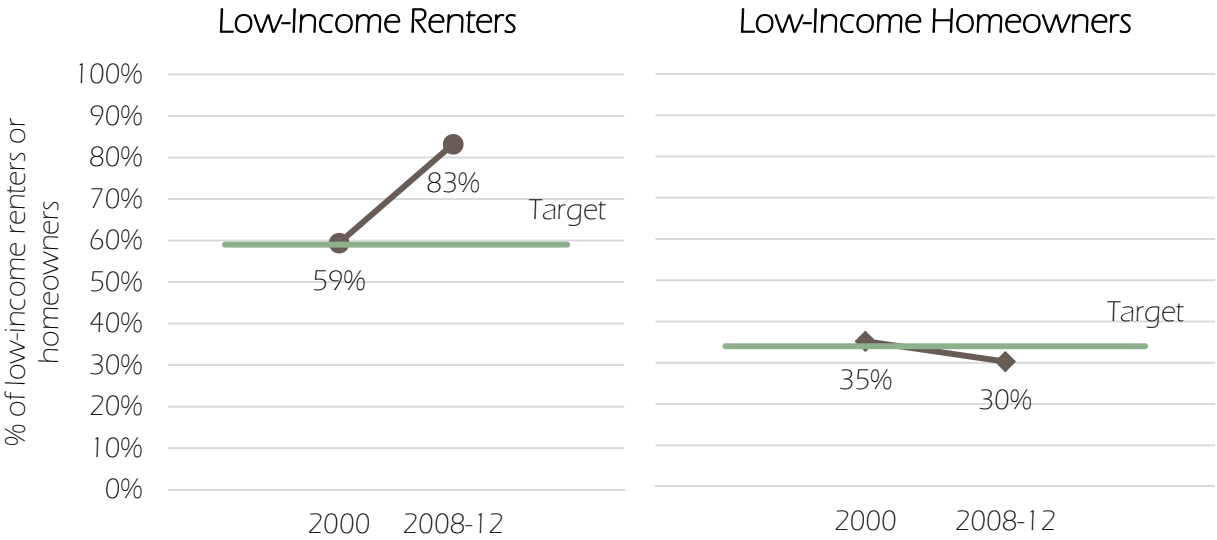
Assessment:

Below Target & **Declining**

Assessment:

On Target & **Improving**

Since 2000, housing cost burden among low-income renters in Tillamook County has gotten much worse, but it has improved among low-income homeowners. By the 2008-2012 period, housing cost burden among renters had reached 83%, meaning that 83% of low-income renters were spending 30% or more of their income on housing; which was worse than (or below) the target of 59%. Among low-income homeowners, by the 2008-2012 period approximately 30% were housing cost burdened, which was better than the target of 34%.



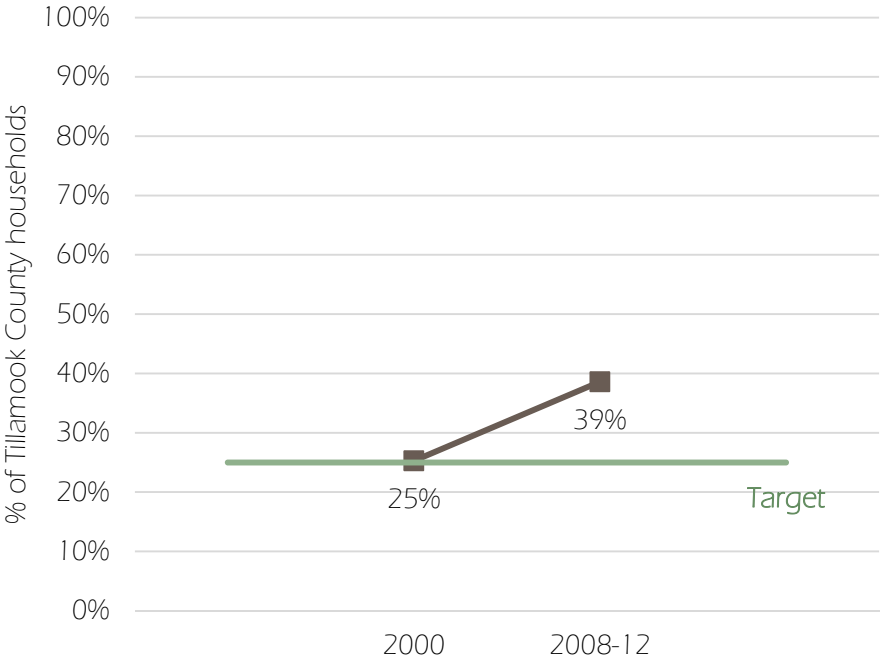
Source: US Census Bureau

Workforce Housing

Measure 3: The percentage of all households who were housing cost burdened (spending 30% or more of their income on housing)

Assessment: **Below Target** & **Declining**

Since 2000, housing cost burden among all households in Tillamook County has increased from 25% of households paying 30% or more of their income on housing to approximately 39% of households, during the 2008-12 period. The prevalence of housing cost burden among all county households now exceeds the target of fewer than 25%.



Source: US Census Bureau

Workforce Housing

Measurement Methods

Data about the percentage of low-income renters and owners who were housing cost burdened (spending 30% or more of their income on housing) and the percentage of all households that were housing cost burdened came from the long form of the decennial census in 2000 and from the 2008-2012 American Community Survey. Both the decennial census and the American Community Survey are administered by the US Census Bureau, and come from a sample of the population. Therefore, both estimates suffer from sampling and non-sampling error. The data are weighted, however, to represent the entire population of the county.

In order to calculate the percentage of low-income households that were housing cost burdened in 2008-2012 we had to determine which households qualified as low-income. To do so, we used median income as the cut-off threshold, which is standard practice among housing scholars and consistent with the methodology used in 2000. The median income in Tillamook County during the 2008-12 period was \$36,765, but unfortunately the data from the Census Bureau would not allow that break in the household data to be made. For this reason, instead of the exact

median income threshold, we used \$35,000. So the 2008-12 estimate of low-income housing cost burden represents the percentage of households earning less than \$35,000 and paying 30% or more on rent or a mortgage.

In 2000, the percentages of low-income renters and owners who were housing cost burdened were calculated by the Oregon Progress Board, using exact median income values as thresholds. Therefore, the 2000 and 2008-12 estimates differ slightly in the households being represented as low-income.

Why This Indicator Matters

An explicit goal of the county is to promote and develop affordable workforce housing. In order to measure the prevalence of affordable housing we relied on the rate of housing cost-burden, a rate commonly used to assess area housing affordability.

Indicator Targets

The goal for this indicator is for the prevalence of housing cost burden to decline from the rates observed in 2000. In the future, fewer than 59% of low-income renters, fewer than 35% of low-income owners, and fewer than 25% of all households should be housing cost burdened.

Vision of our Natural Environment

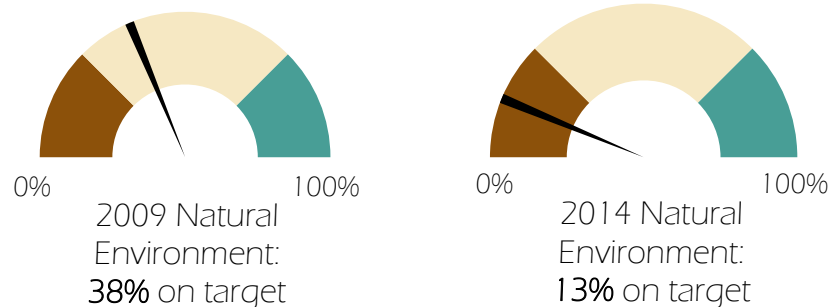
Goal 3.1 County rivers and estuaries will support magnificent runs of wild salmon... Foothills and mountains will be noted for healthy, productive forests that provide high quality habitat... Active participation in natural resource management will become institutionalized in the educational systems.

Goal 3.2 Promote high quality waterways

Goal 3.3 Encourage the recycling of waste products

Summary of findings

In 2009, six measures were used as indicators of the achievement of Tillamook County's goals for the Natural Environment and in 2014 eight measures were used. In 2014, only one (representing 13% of the measures) was on target, six were below target, and one measure had no target. By contrast, in 2009 three (38%) were on target, two were below target, and only the one had no target. This shows overall decline in the number of indicator measures on target in the Natural Environment area of the vision. In other words, Tillamook County is getting farther from achieving its goals in this arena.



Among the Natural Environment indicators, none went from below target in 2009 to on target in 2014. Only the indicator related to recycling persisted in being on target in 2009 and 2014. Three other indicators saw improvement in this time frame, but not enough to achieve their targets. And unfortunately, two indicator measures went from being on target in 2009 to being below target in 2014; these indicators related to the prevalence of wild salmon (which fluctuates significantly from year to year) and the institutionalization of natural resource management into the educational system. There were also two new measures introduced in 2014, but their changes over time were either not assessable or not significant enough to achieve targets. And two other indicators of salmon prevalence were moved from the Natural Environment section to the Economy section as they dealt with commercial harvests and as such seemed much more aligned with the measurement of the fishing industry.

These findings show that some ground has been lost in the Natural Environment since the last assessment. It will be important for decision makers and stakeholders across the

county to reflect on the causes of this decline and determine if and how local action can reverse it.

Salmon Runs

Measure 1: Ratio of the estimated number of wild adult coho salmon spawners in the Nehalem River, Tillamook Bay, and Nestucca River watersheds to the population needed to fully seed existing coho habitat

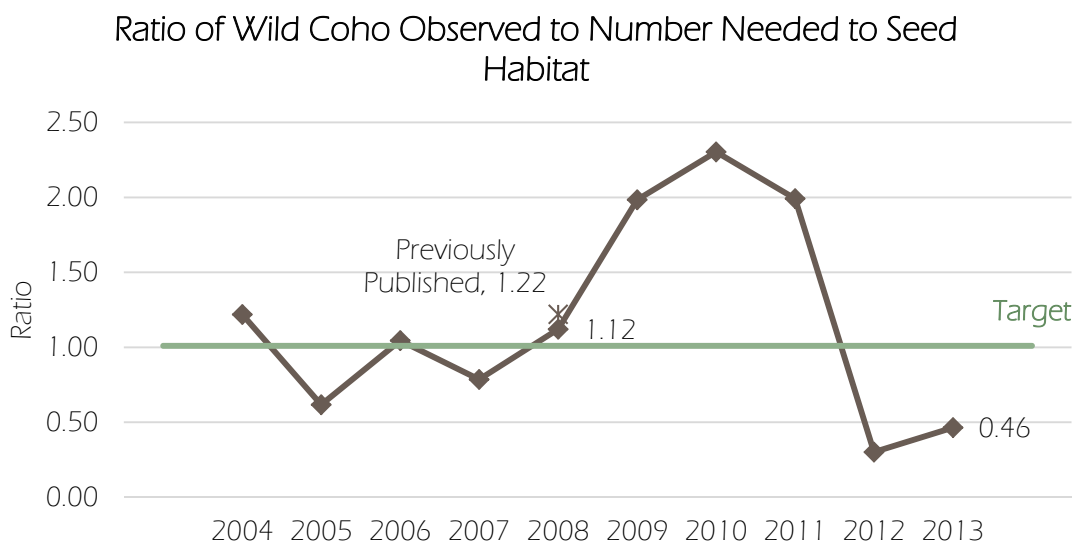
Assessment:

Below Target



Declining

The estimated number of wild adult coho spawners fluctuates significantly year-to-year, and as a result, the ratio of spawners to the population needed to fully seed the habitat also fluctuates significantly. In 2008 the observed population was 112% of the population needed, meaning there were 12% more salmon than necessary, but in 2013 the observed population was only 46% of the population needed. Though in 2013 only half the target number of spawners were observed, down from 2008, 2013 was an improvement on 2012.



Sources: OR Department of Fish & Wildlife, OR Adult Salmonid Inventory & Sampling Project and ODFW - North Coast Watershed District

Salmon Runs

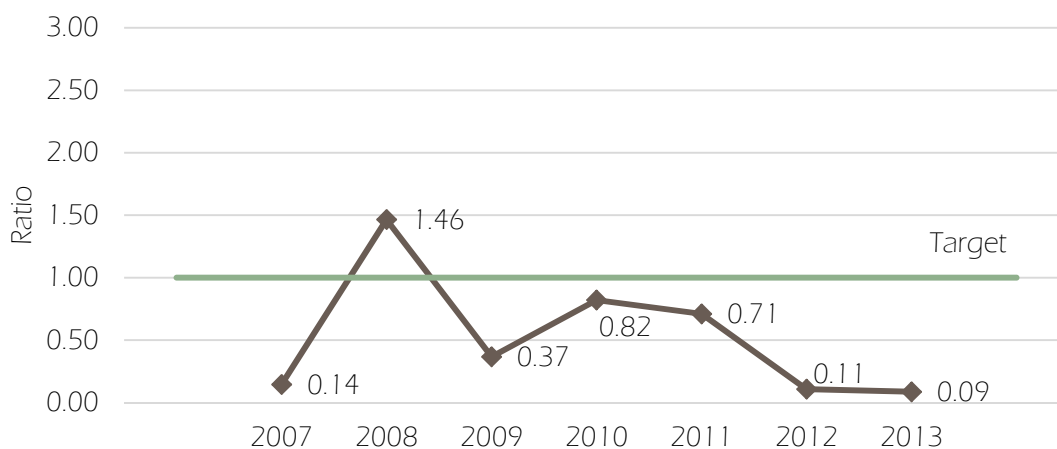
Measure 2: Ratio of the estimated number of wild adult coho salmon spawners in the Nehalem River, Tillamook Bay, and Nestucca River watersheds to the population needed to meet the abundance goals set by Oregon Department of Fish & Wildlife for those areas, given marine survival rates for the year.

Assessment:

Below Target

Here again, we see sizable fluctuations in this measure from year to year, due to the significant annual fluctuations in the number of adult coho. In contrast to the other measure, however, in this measure the population of salmon needed also fluctuates – based on marine conditions. Using this measure, the chart shows that only a few times have these watersheds come close to or exceeded the abundance goals for a given year since 2007, when the ratio would equal 1.0 or greater. 2013 was the worst year, when the observed coho population represented only 9% of the population goal for these watersheds. 2008 was the best year during this time span, when the coho population represented 146% of the goal for that year. This is a new measure for the indicator project, so there is no assessment of change since the last indicator report.

Ratio of Wild Coho Observed to Number Needed to Meet Abundance Goals Set by ODFW



Sources: OR Department of Fish & Wildlife, OR Adult Salmonid Inventory & Sampling Project, ODFW Salmon & Steelhead Recovery Tracker, and ODFW - North Coast Watershed District

Salmon Runs

Measurement Methods

In order to measure the abundance of the wild salmon population, we relied on data from the Oregon Department of Fish & Wildlife's (ODFW) Coastal Salmonid Inventory Project (<http://oregonstate.edu/dept/ODFW/spawn/index.htm>). These data were used in combination with salmon population threshold values from the 1998 Nickelson report and from the ODFW Oregon Coast Coho Conservation Plan for the State of Oregon.

Sample data collected by ODFW in the Nehalem River, Tillamook Bay, and Nestucca River basins of the wild adult coho spawner populations in Tillamook County basins serve as the estimates of salmon abundance. These estimates of wild adult coho spawner population are based on randomly selected spawning surveys, following the US Environmental Protection Agency's EMAP protocol. The spawning surveys are conducted from October through at least January each year following standard ODFW spawning survey protocols.

It is important to understand observed salmon abundance is adequate or desirable. Only by knowing a minimum optimum population value is it possible to make such an assessment. Chris Knutsen, Fish Biologist at the OR Department of Fish & Wildlife - North Coast Watershed District, recommends using two spawner abundance thresholds. The first threshold he recommends is the population that is

believed to fully seed the existing high quality juvenile coho winter rearing habitat (personal communication, 2009). In the North Coast (Nehalem, Tillamook, and Nestucca watersheds), according to Nickelson (1998), the number of spawners needed to fully seed the habitat is 21,300 adults. While Knutsen reports that the OR Department of Fish & Wildlife is still in the process of updating the spawner abundance threshold values, the levels in the Nickelson report can appropriately be used for now as a target for determining the adequacy of the coho population in Tillamook County.

Using information about the threshold values and the spawner estimates it is possible to calculate a ratio of the estimated number of wild coho spawners to the threshold of 21,300.

In addition, Knutsen recommended in 2015 the use of the Oregon Coast Coho Conservation Plan abundance goals, set by ODFW as an additional threshold. ODFW annually sets goals for coho population, by watershed, depending on the marine survival conditions in that year. In years when marine survival is extremely low, for instance, the population goal for the Nehalem watershed is 10,300 coho, but when marine survival is high, the population goal for this watershed is 83,300 coho. The ODFW Salmon & Steelhead Recovery Tracker (<http://odfwrecoverytracker.org/>) provides the data for this measure, both observed counts and population goals.

The ratios for each year were calculated by combining the data across the Nehalem River, Tillamook Bay, and Nestucca River watersheds. The ratio of observed coho population to population abundance goal, given marine conditions, was calculated for each year for which data were available from the Recovery Tracker website.

Why This Indicator Matters

Salmon populations are an important indicator of ecosystem health throughout Oregon, and Tillamook County is no exception. The Tillamook County: 2020 Strategic Vision explicitly states that a goal for the county's rivers and estuaries is to support "magnificent runs of wild salmon" (p. 6). According to Knutsen, the ratio of observed coho to the number needed to fully seed the habitat represents a short-run indicator of salmon run adequacy, and the ratio

of observed coho to the Conservation Plan abundance goals represents a long-run indicator of salmon run adequacy.

Indicator Targets

The goal for this indicator is for the ratio of the estimated number of wild coho spawners in Tillamook County to the two threshold values for the number of adult coho salmon needed to be equal to or greater than one. In future years of the indicator project, when the data become available, Knutsen recommends "shifting from a coho abundance goal to a coho habitat goal to bring the indicator in line with the Coastal coho Conservation Plan and the stated desired future condition for Oregon Coast coho" (personal communication, 2009 and 2014).

Forest Health

At this point, no adequate measure of forest health has been developed by forest ecologists for lay use.

Land Conservation

Measure 1: The percentage of land in Tillamook County that was designated wilderness, preserved, or set aside by land trusts, nonprofits, and agencies

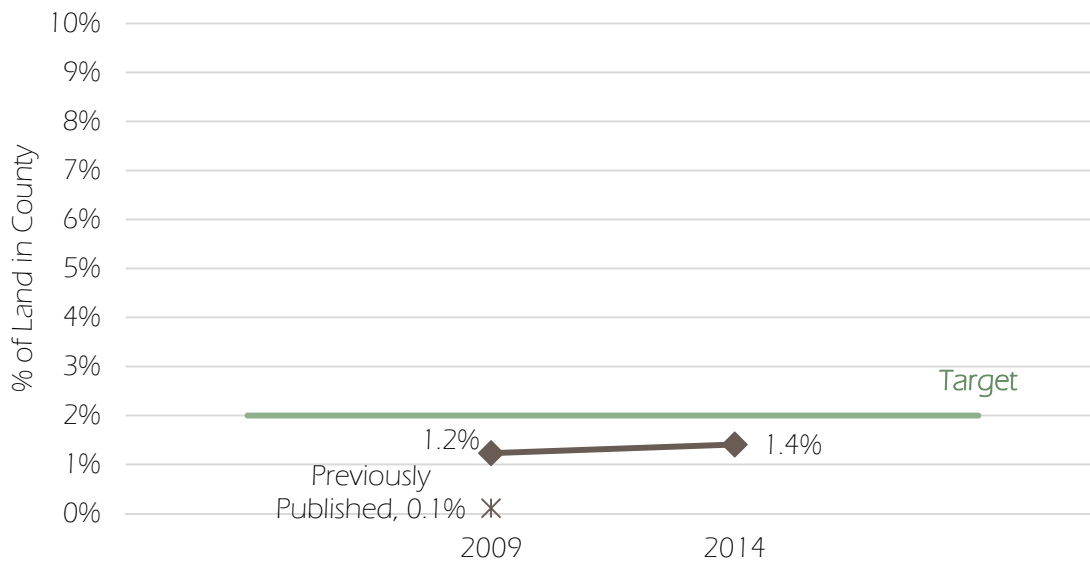
Assessment:

Below Target



Improving

In 2009, 1.2% of all land (8,691 acres) in Tillamook County was held in conservation by land trusts, nonprofits, or public agencies. By 2014, that percentage had increased slightly to 1.4% of all land (9,928 acres), still below the targeted 2%, however. Due to discovery of missing data from 2009 during this recent assessment, the percentage of land in conservation in 2009 had to be revised upward from 0.1% to 1.2% in this report.



Sources: North Coast Land Conservancy, The Nature Conservancy, Lower Nehalem Community Trust, Central Coast Land Conservancy, Tillamook County Pioneer Museum, US Fish & Wildlife Service's National Wildlife Refuge, Oregon State Parks, US Census Bureau

Land Conservation

Measurement Methods

In order to measure land conservation, we relied on information about the amount of land in Tillamook County that was held by land trusts or designated as wilderness. This land cannot be farmed, forested, grazed, fished, or hunted and thus represents a strict definition of conservation.

In 2009, the Nature Conservancy, the US Fish and Wildlife Service's Oregon Coast National Wildlife Refuge, the North Coast Land Conservancy, and the Lower Nehalem Community Trust were the only known land trusts in Tillamook County. In 2014, North Coast Land Conservancy, The Nature Conservancy, Lower Nehalem Community Trust, Central Coast Land Conservancy, Tillamook County Pioneer Museum, US Fish & Wildlife Service's National Wildlife Refuge, and Oregon State Parks were the known owners of land in trust. With the knowledge of additional land trusts in 2014 it became necessary to revise the 2009 estimate upward. The number of acres held by each of these known land holders was obtained directly from these agencies, via email, websites, and phone calls. In 2009, these land holders held 8,691 acres in wilderness,

preservation, or set aside and in 2014 they held 9,928 acres.

The total number of acres of land in Tillamook County came from the US Census Bureau. According to that agency, in 2009 there were 705,376 acres in Tillamook County and in 2014 there were 705,280 acres.

Why This Indicator Matters

Tillamook County residents desire "a sustainable balance between responsible use and protection of natural resources" within the community (Tillamook County: 2020 Strategic Vision, p. 6). While at this point, a definition of "sustainability" has not been created by social and natural scientists, we can begin to gauge the extent of protection and use of natural resources. Toward this end, land conservation was chosen to indicate the extent of land protection.

Indicator Targets

The goal for this indicator is for two percent of land in Tillamook County to be held in preserved, set aside, or wilderness status by land trusts or public agencies.

Public Natural Resource Education

Measure: The number of natural resource education programs available in or through the public education system

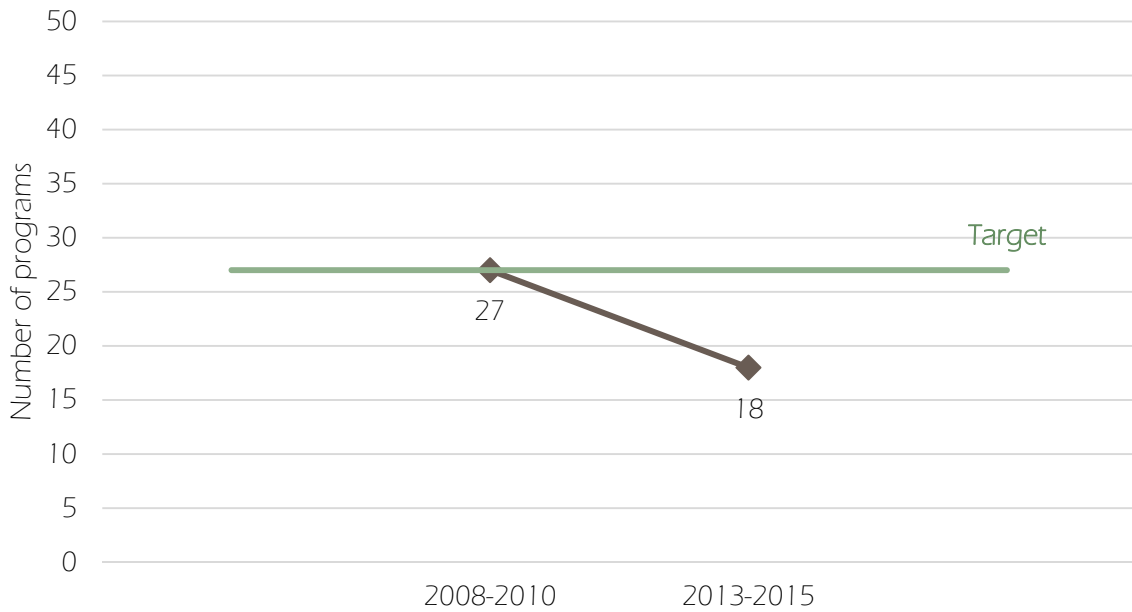
Assessment:

Below Target



Declining

During the 2013-2015 period there were only 18 natural resource education programs available through the public education system in Tillamook County. This represents a marked decline from the number offered in the 2008-2010 period. And this current number of natural resource education opportunities is below the target of 27.



Sources: Nestucca, Neah-Kah-Nie, and Tillamook School Districts; TBCC Course Catalog; OSU Extension Service, Tillamook County

Public Natural Resource Education

Measurement Methods

In order to assess the institutionalization of natural resource management education within the county, we relied on data from Tillamook County school districts, Oregon State University Extension Service in Tillamook County, and Tillamook Bay Community College (TBCC). Specifically, we counted the number of courses, programs, or educational offerings related to natural resources, broadly defined, available to youth at schools or through the public education system. Course catalogs and personal communication from the high schools and TBCC were used as the data sources. Direct communication with the Extension Service faculty in Tillamook County served as the source of data for that organization's offerings.

The courses and programs at the high schools included natural resource science, plant science, agricultural science, Natural History, Wildlife Biology, Environmental Science, Oceanography, and Forestry. In 2014, there were nine of these courses and programs offered through the high schools.

The programs through Oregon State University Extension Service's Tillamook County office included home school science club, gardening day camp,

horticulture projects, and 4-H camp. In 2014 there were six programs of this type.

Courses offered through Tillamook Bay Community College included Agricultural Science and a non-credit Recipe to Market course. In the 2014-15 academic year there were three courses that qualified as natural resource education.

Why This Indicator Matters

Preparing the rural youth and adults for lives or careers in the natural resource field is another goal expressed in the Strategic Vision. This has the dual effect of encouraging people to pursue careers in natural resource management, and of integrating new methods and science related to natural resource management into the preparation of new resource managers in a systematic way. In addition, in a rural setting it is important that residents understand their natural environment and learn how to interact with it appropriately.

Indicator Targets

The goal for this indicator is for there to be at least 27 natural resource educational opportunities available to county youth and adult residents.

303d Listed Waterways

Measure 1: The number of stream miles in the Wilson-Trask-Nestucca Watershed that have been 303d listed (water quality limited) by Oregon Dept. of Environmental Quality

Measure 2: The number of stream miles in Tillamook County that have been 303d listed (water quality limited) by Oregon Dept. of Environmental Quality

Assessment:

Below Target



Declining

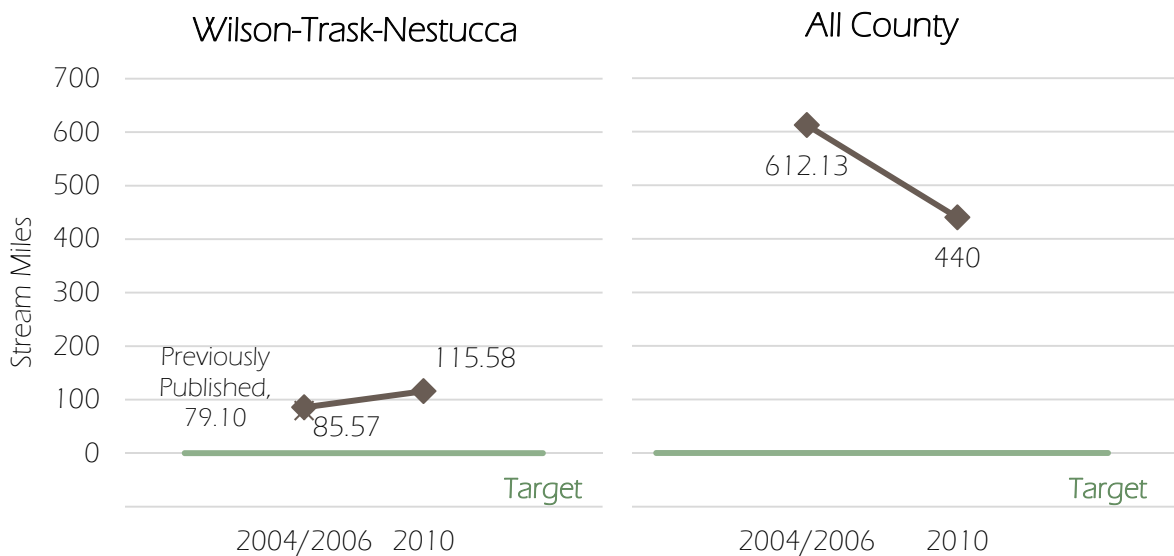
Assessment:

Below Target



Improving

Though since 2004/2006 the number of stream miles within the Wilson-Trask-Nestucca Watershed that were 303d listed increased slightly in 2010 from 85 miles to 115, the total number of listed miles in the county declined significantly. Both measures were below the target of zero miles in 2010, however.



Source: Oregon Department of Environmental Quality

303d Listed Waterways

Measurement Methods

The number of stream miles that were 303d listed in the Wilson-Trask-Nestucca watershed and throughout the county were estimated using ArcGIS software and data from the Oregon Department of Environmental Quality (DEQ). In each measurement year, geographic data from DEQ delineated the number of stream miles that were considered water quality limited (303d listed). “Water quality limited” is a general set of parameters set by the US Environmental Protection Agency (EPA) as part of the Clean Water Act. Specific parameters set by Oregon DEQ for this assessment included water temperature, pH, dissolved oxygen levels, turbidity, conductivity, and bacteria levels. Stream reaches may fail to meet standards for one or more criteria. ArcGIS software was used to estimate the total miles of stream 303d listed within the Wilson-Trask-Nestucca watershed and the county overall.

The 2004/2006 estimates previously published had to be revised to reflect refinement of the measurement methodology.

Why This Indicator Matters

The 2020 Strategic Vision for Tillamook County states that the promotion of high quality waterways is a priority. Understanding the number of miles of streams that are water quality limited is a method of approximating the extent to which high quality waterways have been and are promoted in the county.

Indicator Targets

The goal for this indicator is for no miles of stream in Tillamook County watersheds to be water quality limited (303d listed) in the future. In addition, the hope is for a water quality plan to be established for all impaired stream reaches.

Watershed Restoration Projects

Measure: The number of watershed restoration project activities completed in a given year

Assessment:

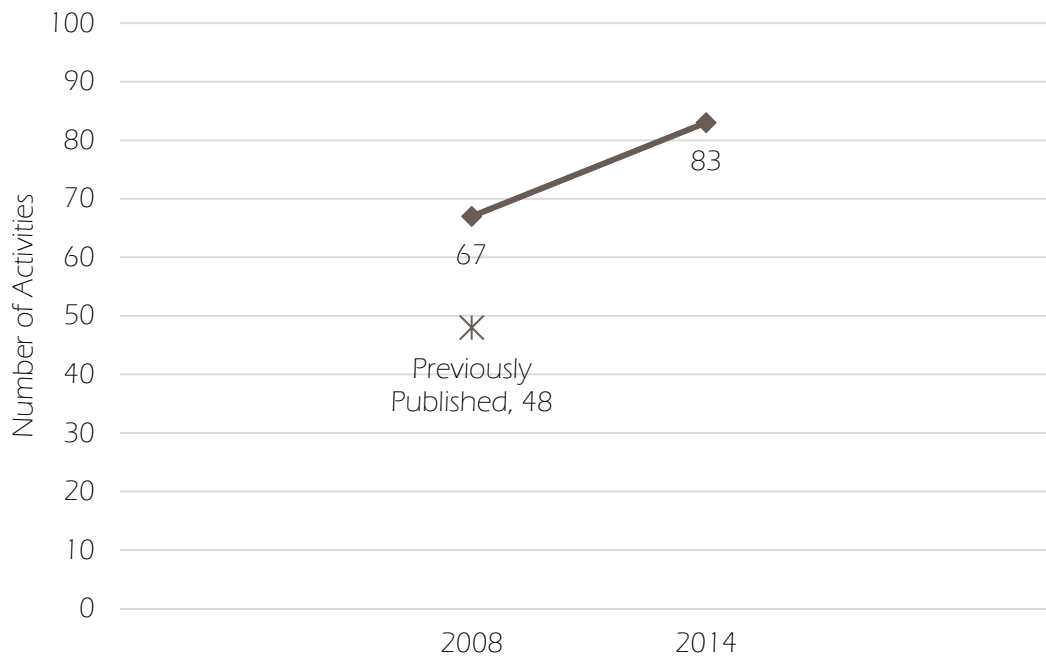
No Target



Improving

Between 2008 and 2014 the number of restoration project activities completed in each of those years increased from 67 to 83. Due to an error in the collection of 2008 data, the 2008 value had to be revised upward from the last report.

In 2008 the 67 project activities addressed about 19.1 linear miles and 211.3 acres of land, and in 2014 the 83 project activities addressed just over 26 linear miles of riparian and in-stream areas and about 626 acres of land. There is no target for the number of watershed restoration activities



Source: Tillamook Estuaries Partnership

Watershed Restoration Projects

Measurement Methods

In order to obtain information about the number of watershed restoration projects, OSU faculty contacted the Tillamook Estuaries Partnership (TEP). Staff from the TEP provided OSU faculty a list of all restoration project activities that occurred in Tillamook County in 2008 and 2014.

The data provided by the Tillamook Estuaries Partnership for Federal Fiscal Years 2008 (Oct. 1, 2007–Sept. 30, 2008) and 2014 (Oct. 1, 2013–Sept. 30, 2014) represent the number of watershed restoration project activities that were completed in that fiscal year, but that could have been initiated at any point prior. Multiple activities may have been funded off of the same restoration grant, contract, or work order, so the number of activities in a given year represents the overall watershed restoration activity, not necessarily the number of funded watershed restoration projects or the number of funding sources. The types of habitat targeted by these restoration activities included riparian areas, streams, field meadows, forest/woodland, and tidal wetland.

TEP gathers these data annually from watershed councils, public agencies, private industry, and private landowners who engage in watershed restoration efforts in Tillamook County. TEP collects these data in order to satisfy the US Environmental Protection Agency's requirements for National Estuary Projects. It is a voluntary reporting effort

on the parts of the partners, however, so there may be some activities missing in these counts. Also, the data do not include private individuals who complete some kind of watershed restoration action on their own land without engaging TEP or a watershed council.

The 2008 data reported in the 2009 indicator assessment had to be revised upward, based on additional information received in 2014 from TEP.

Why This Indicator Matters

In addition to tracking environmental outcome indicators, an implicit element of the Tillamook County Strategic Vision is that process indicators be tracked as well. Understanding the processes or conditions that must be present in order to realize particular environmental outcomes is key to attaining a vital future in the county. In particular, watershed restoration efforts are one way in which the county has expressed an environmental goal that focuses on process as opposed to outcomes like water quality.

Indicator Targets

At this point, no information about the total number of restoration projects needed across the Tillamook County watershed areas is available making it impossible to assess the extent to which current restoration efforts are meeting the needs in the county.

Participation in Recycling

Measure: The ratio of the Tillamook County material recovery rate (recycling rate) to Oregon Department of Environmental Quality’s goal for the county.

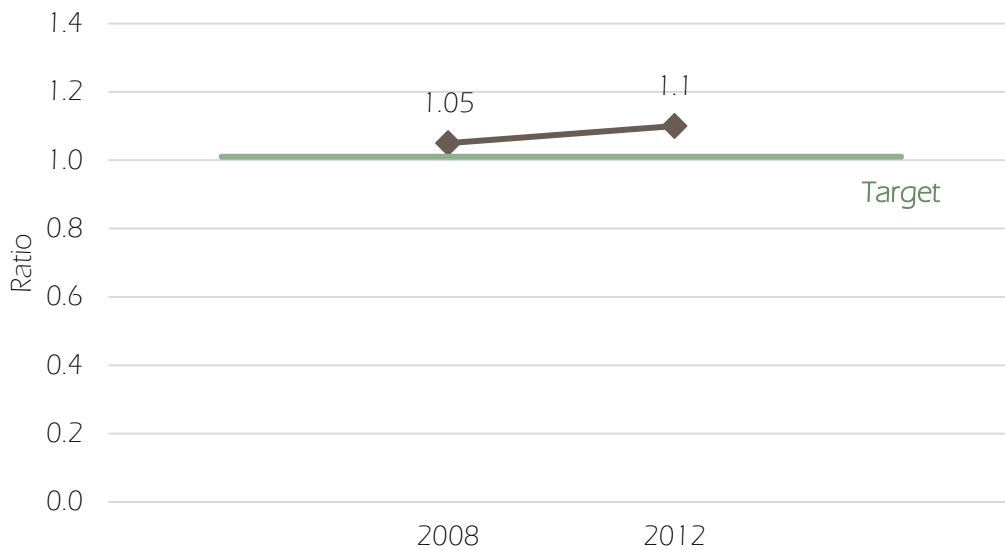
Assessment:

On Target



Improving

Since 2008, Tillamook County’s rate of recycling has continued to exceed DEQ’s goal for the county. Having a ratio value of 1.0 or higher means that the County has met the target for recycling each assessment year.



Participation in Recycling

Measurement Methods

In order to measure this indicator, we relied on data provided by the Oregon Department of Environmental Quality. Every year, the OR Department of Environmental Quality (DEQ) administers a mandatory survey of all public and private recycling and waste management operations to determine the material recovery rate (the number of pounds of waste recycled).

According to the data collected by this agency in 2008, 32% of the total waste (38,000 tons) generated by Tillamook County was recovered via recycling, composting, or energy recovery, and in 2012, 35% of the 32,166 tons of total waste generated were. Included in the material recovery rate are the credits issued to the county for certified programs in waste prevention, home composting, and reuse. Compared to the goal set by DEQ for Tillamook County of 30% by 2010, Tillamook County has succeeded at meeting and surpassing this goal.

Why This Indicator Matters

Another important dimension of the natural environment that Tillamook County residents wish to track over time is the participation of the community in recycling programs. Here again, is a desire on the part of residents to create the context for positive environmental outcomes to occur, where waste management practices represent an important component of that environmental context.

Indicator Targets

The goal for this indicator is for the ratio of Tillamook County's material recovery rate to the goal rate set by the OR Department of Environmental Quality to be equal to one.

Vision of our Society and Culture

Goal 4.1 Tillamook County citizens will maintain the rural character of their community by conserving a high percentage of the land as farm and forestland.

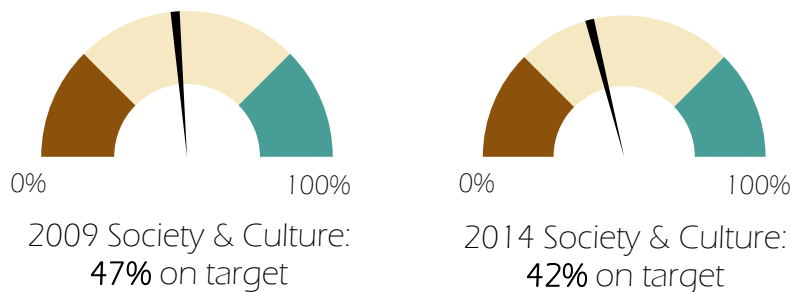
Goal 4.2 Tillamook County citizens will be involved with civic activities and have the capacity to work together.

Goal 4.3 Enhance arts and culture opportunities throughout the county that preserve and reflect local history and bring people together. People will be valued and respected, regardless of race, culture, or beliefs.

Goal 4.4 Promote lifelong learning

Summary of findings

In 2009 and 2014, 19 measures were used as indicators for Tillamook County's achievement of its Society & Cultural goals. In 2014, eight (representing 42% of the measures) were on target and 11 were below target. By contrast, in 2009 nine (47%) were on target and ten were below target. This shows a slight decline in the number of indicator measures on target for the Society & Culture area of the vision. In other words, Tillamook County is getting slightly farther from achieving its goals in this arena.



Among the Society & Culture indicators, none went from below target in 2009 to on target in 2014, but one did go from on target in 2009 to below target in 2014. This indicator related to the number of arts and cultural opportunities available throughout the county. Aside from this one indicator that declined below the targeted value, by and large, there was not much change among the indicators of Society & Culture between the first and last assessment periods. Mostly, this was due to our reliance on survey data for many of the indicators in this area, and the survey data come from a sample of the population – in order to see change in these indicators, fairly dramatic changes would have to be experienced by the whole adult population in the county. Therefore changes over a short time should not be expected.

These findings show that in order to realize improvement in the area of Society & Culture, fairly significant effort will have to be made across the county to address and

improve population-level outcomes related to civic participation, discrimination, and lifelong learning.

Open Space

Measure: The percentage of land in Tillamook County that has been designated farm or forest land.

Assessment:

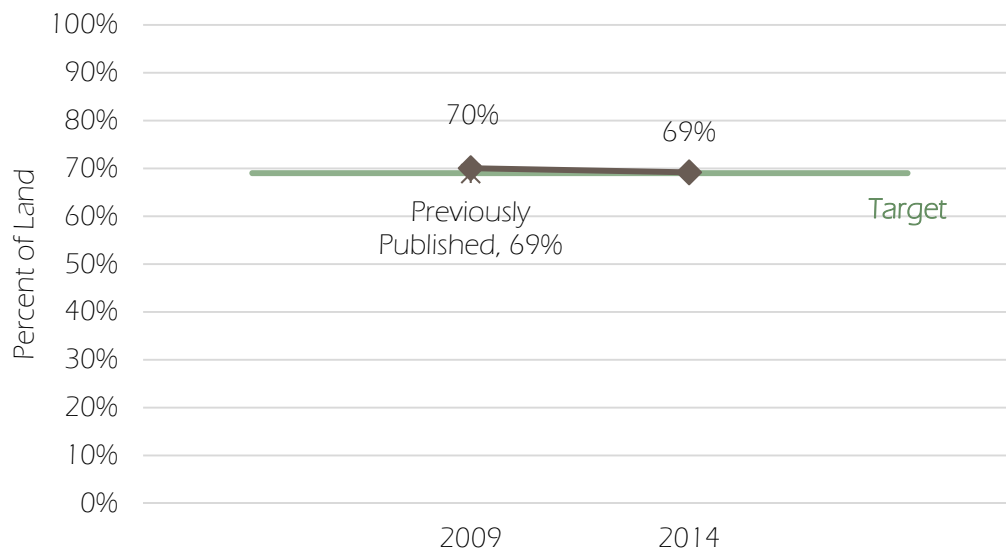
On Target



Declining

Though between 2009 and 2014 the percent of land publicly or privately owned as farm or forest land declined one percentage point, the county was still on target with its 69% goal.

The 2009 value had to be revised upward due to knowledge in 2014 of additional land owners and access to their data about acreage designated as open space.



Sources: USDA Census of Agriculture, OR Department of Forestry, Siuslaw National Forest, Bureau of Land Management, The Nature Conservancy, Lower Nehalem Community Trust, Central Coast Land Conservancy, North Coast Land Conservancy, Tillamook County Pioneer Museum, OR State Parks, USFWS National Wildlife Refuge

Open Space

Measurement Methods

In order to measure this land indicator, data from a variety of sources were used. Data about total land area in Tillamook County were obtained from the US Census Bureau. Data about acreage privately owned as farm- or woodland came from the US Department of Agriculture (USDA) Census of Agriculture, while public forestland acreage data were provided by the various public agencies managing land in Tillamook County, including Oregon Department of Forestry, the Bureau of Land Management, Oregon State Parks, and the US Fish & Wildlife Service's National Wildlife Refuge. Information about the number of acres owned by land trusts came from The Nature Conservancy, Lower Nehalem Community Trust, Central Coast Land Conservancy, North Coast Land Conservancy, and the Tillamook County Pioneer Museum.

In 2009, the Nature Conservancy, the US Fish and Wildlife Service's Oregon Coast National Wildlife Refuge, the North

Coast Land Conservancy, and the Lower Nehalem Community Trust were the only known land trusts in Tillamook County. In 2014, North Coast Land Conservancy, The Nature Conservancy, Lower Nehalem Community Trust, Central Coast Land Conservancy, Tillamook County Pioneer Museum, US Fish & Wildlife Service's National Wildlife Refuge, and Oregon State Parks were the known owners of land in trust. With the knowledge of additional land trusts in 2014 it became necessary to revise the 2009 estimate upward.

Why This Indicator Matters

Tillamook County residents hope to preserve the community's rural character, and open space is a clear visual element of rurality that many observers, be they residents or visitors, can easily understand.

Indicator Targets

The goal for this indicator is for the percentage of land designated farm, forest, or preserved to remain close to 69%.

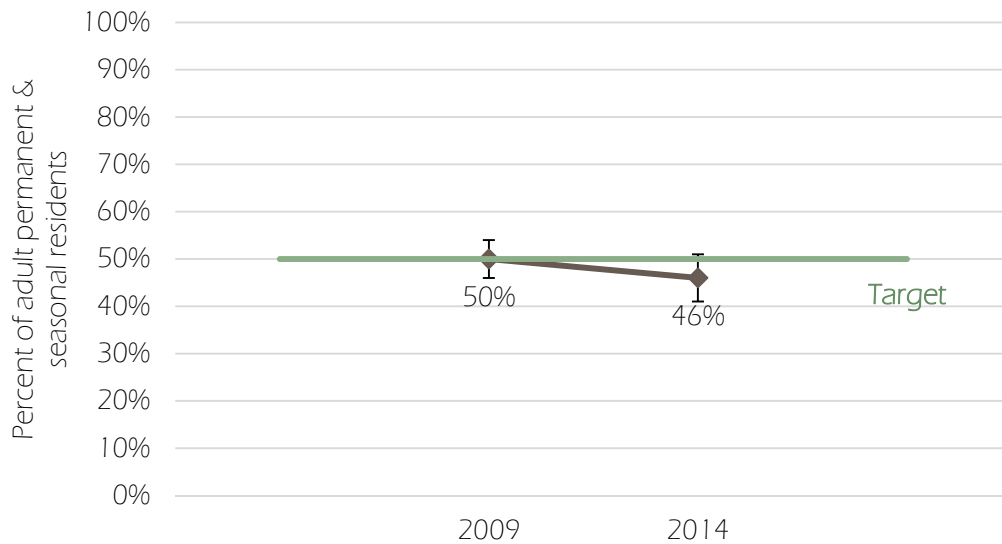
Civic Participation

Measure 1: The percentage of Tillamook County adult permanent and seasonal residents who participated in 2 or more civic activities in last 12 months

Assessment:

On Target & **No Change**

The chart shows that the estimated percentage of adults who participated in 2 or more civic activities declined slightly between 2009 and 2014 from 50% to 46%. The chart also shows the margins of error around each estimate, which means that we can be 90% sure that the true value (in the population) lies somewhere within a range around the estimated percentages. For 2014, the margin of error indicates that we can be 90% sure that the true percentage of adults who participated in two or more civic activities lies between 41% and 51%. In 2009, the true percentage lay somewhere between 46% and 54%. Given these overlapping margins of error, there is a chance that the true values in these two time periods were equal. This means that there was not a statistically significant difference between the estimates at the two times and the 2014 estimate is not statistically different from the 50% goal for this indicator. Therefore, in 2014 this indicator measure was on target.



Source: 2009 & 2014 VTIP Survey

Civic Participation

Measure 2-7: The percentage of Tillamook County adult permanent and seasonal residents who, over the last year:

- Attended any public meetings
- Volunteered time
- Participated on the board of any local service agency or organization
- Applied or ran for local public office
- Donated money, services, materials, or food
- Helped raise money for local cause

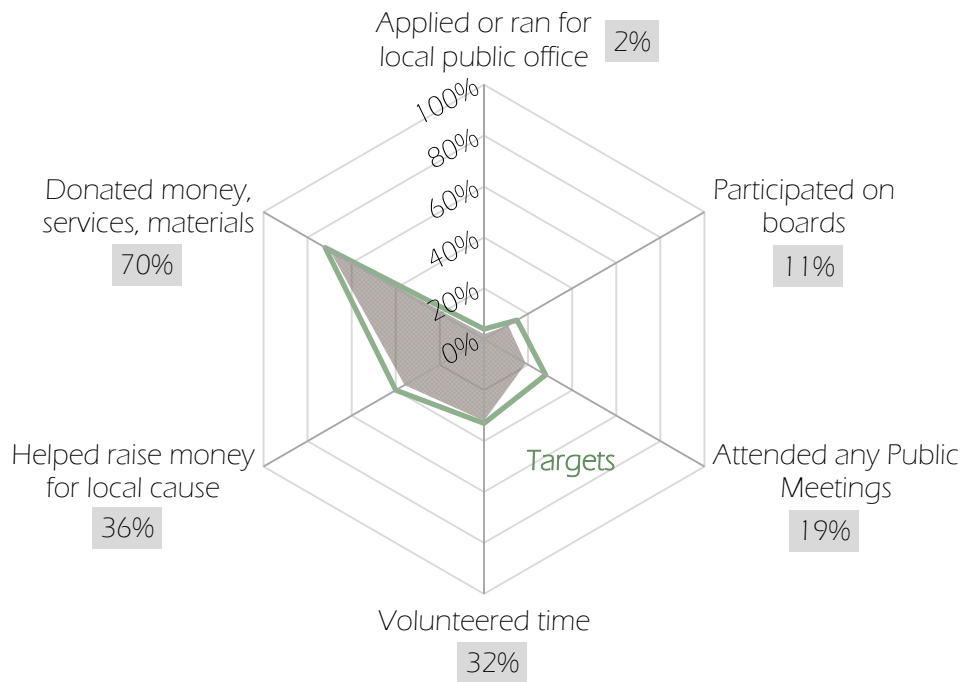
Assessment:

Below Target



No Change

Between 2009 and 2014 there was no statistically significant change in the way adult residents participated in civic life in the county. Again in 2014 donating to local causes was the most popular form of civic participation, as approximately 70% of adult permanent and seasonal residents reported doing this in the last year. This was followed by fundraising (36%), volunteering (32%), attending public meetings (19%), participating on local boards (11%), and applying or running for public office (2%). Because there was no change from 2009, again in 2014 civic participation was below target in all of these areas.



Source: 2014 VTIP Survey

Civic Participation

Measurement Methods

Using the Vital Tillamook Indicator Project survey, we were able to measure the extent to which Tillamook County adult permanent and seasonal residents participate in civic activities in various ways (See Appendix 1 for details of the survey methodology).

Specifically, survey respondents were asked if they had done any of six listed civic activities in the last 12 months within Tillamook County:

- Attended any public hearings, town hall meetings, community forums, or city council meetings
- Participated on the board of any local service agency or organization
- Volunteered time, in ways other than participating on the board, to any local service agency or organization
- Applied or ran for local public office
- Donated money, services, materials, or food to any local charities, groups, or associations
- Helped raise money for local cause

Approximately ninety-five percent of respondents answered all six questions

(with a yes or no), and for each of these individuals the total number of civic activities they reported participating in during the previous 12 months was tallied. This sum served as the basis of the indicator, as participation in two or more civic activities was determined by the VTIP working group as a suitable threshold level of civic participation for individuals.

Why This Indicator Matters

Within Tillamook County, residents cite civic involvement as an important aspect to the vitality of their community.

Indicator Targets

The goal for this indicator is for at least 50% of the adult permanent and seasonal resident population to participate in two or more civic activities in a given year.

With respect to participation in specific civic activities, however, the goal is for the percentages of adult seasonal and permanent residents to increase from 2009 levels. So, the goals are for 72% or more of adults to make donations, 40% or more of adults to help fundraise, 33% or more to volunteer, 28% or more to attend public meetings, 15% or more to participate on boards, and 4% or more to apply or run for public office.

Community Capacity

Measure 1: The percentage of Tillamook County adult permanent and seasonal residents who perceive that people in the community are willing to help their neighbors

Measure 2: The percentage of Tillamook County adult permanent and seasonal residents who perceive that people in the community are trustworthy and get along with each other

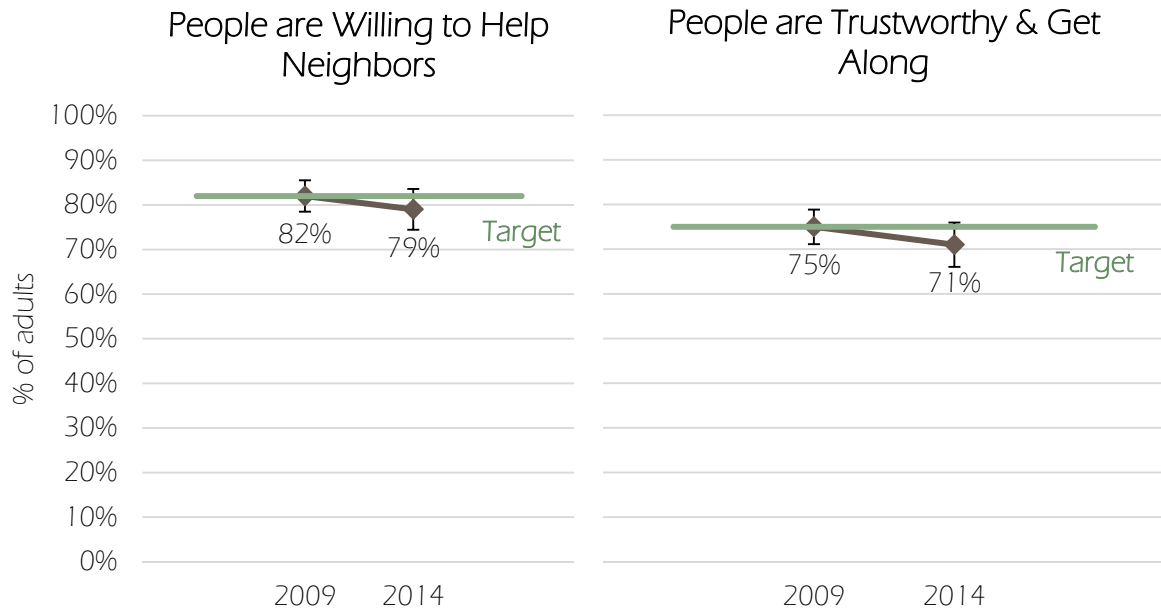
Assessment:

On Target & No Change

Assessment:

On Target & No Change

Between 2009 and 2014 though the estimated percentages of adults who perceived community members are willing to help their neighbors and that they are trustworthy and get along declined, the margins of error show that the differences were not statistically significant. The two measures continued to be on target in 2014 near 82% and 75%, respectively, given the margins of error.



Source: 2009 & 2014 VTIP Surveys

Community Capacity

Measure 3: The percentage of Tillamook County adult permanent and seasonal residents who perceive that people in the community can be counted on to work together to address community issues

Measure 4: The percentage of Tillamook County adult permanent and seasonal residents who perceive that local government has the ability to deal effectively with important problems

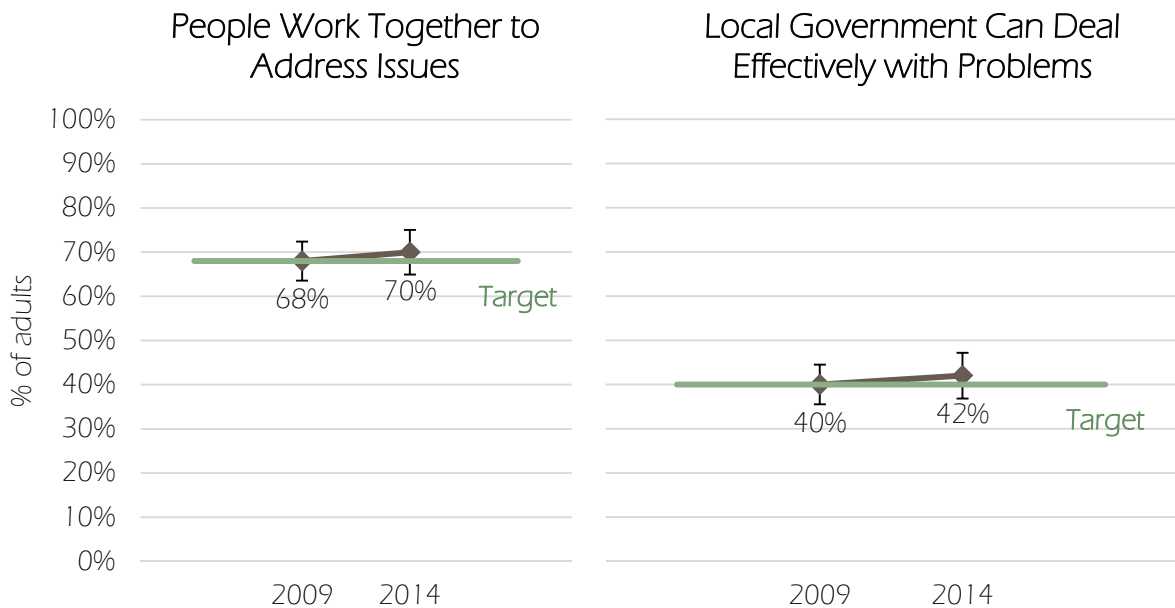
Assessment:

On Target & No Change

Assessment:

On Target & No Change

Between 2009 and 2014 though the estimated percentages of adults who perceived community members work together and that government can effectively deal with problems increased, the margins of error show that the difference was not statistically significant. The two measures continued to be on target in 2014 near 68% and 40%, respectively, given the margins of error.



Source: 2009 & 2014 VTIP Surveys

Community Capacity

Measurement Methods

In order to measure the extent of community capacity and cohesion, the 2009 and 2014 VTIP surveys asked seasonal and permanent adult residents to indicate how much they agreed with four statements about their community in Tillamook County that, together, measure community capacity (See Appendix 1 for details of the survey methodology):

1. "People around here are willing to help their neighbors"
2. "People in this community generally trust one another and get along"
3. "If this community were faced with a local issue, people here could be counted on to work together to address it"
4. "Local government has the ability to deal effectively with important problems"

Survey respondents were asked to indicate if they strongly disagreed, somewhat disagreed, neither agreed nor disagreed, somewhat agreed, or strongly agreed with each of the statements. Respondents who said they somewhat or strongly agreed with the statements were counted as agreeing, and are thus represented in the reported percentages.

Why This Indicator Matters

The extent to which Tillamook County residents can work together to get important tasks done in their community is a crucial part of having a functional community environment. Goal 4.2 of the Strategic Vision is for Tillamook County citizens to have the capacity to work together. These measures shed light on people's perceptions of that capacity being present or not in the county.

Indicator Targets

The goal for this indicator is for 2009 levels of community capacity perceptions to serve as the benchmark for future assessments of community capacity in Tillamook County. In other words, the goal for this indicator is for approximately 40% of residents to agree or strongly agree with the statement that local government has the ability to deal effectively with important problems; about 70% of residents to agree or strongly agree with the statement that people in the community can be counted on to work together to address a local issue, should it arise; approximately 75% of residents to agree with the statement that people in the community generally trust one another and get along; and that approximately 84% of residents agree or strongly agree with the statement that people are willing to help their neighbors.

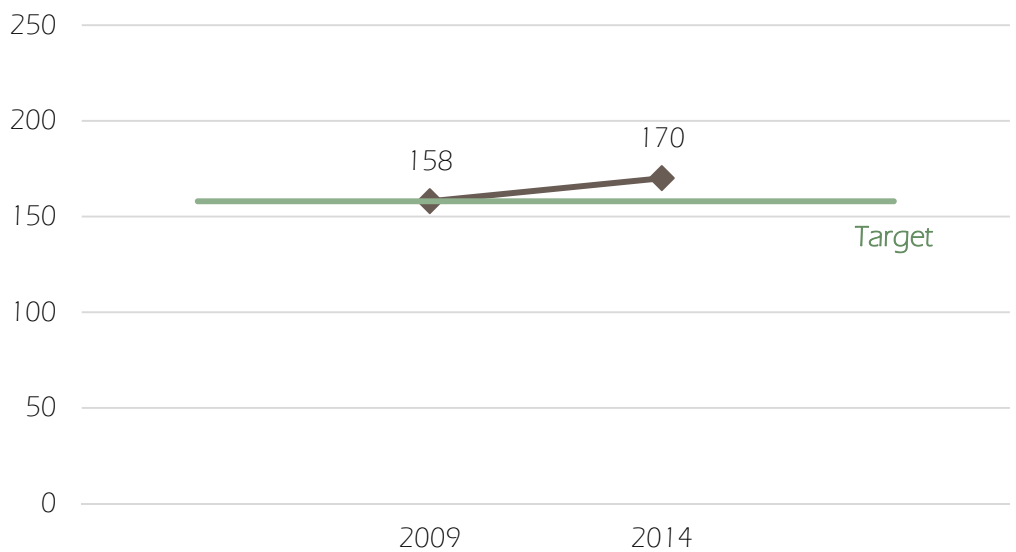
Museums, Cultural Centers, & Historic Buildings and Sites

Measure: The number of local museums, cultural centers, historic buildings, and historic sites

Assessment:

On Target & Improving

Between 2009 and 2014, the number of museums, cultural centers, and historic buildings and sites increased slightly from 158 to 170. In 2014, the target of 158 continued to be met.



Sources: TC Arts Network, OR Museum Association, Oregon Historic Sites Database

Museums, Cultural Centers, & Historic Buildings and Sites

Measurement Methods

The number of museums, cultural centers, and historic buildings and sites was obtained from a variety of sources. The data about the number of museums came from the Oregon Museum Association and the Tillamook County Arts Network (TCAN) websites, as well as personal communication with county residents. According to this research, there were 5 museums in the county in 2014 (Latimer Quilt & Textile Center, Tillamook Forest Center, Pioneer Museum, Air Museum, and Museum of People's Art).

TCAN also provided the information about the four cultural centers operating in the county. These cultural centers had to be buildings or major cultural organizations in a building open to the public. These included the Hoffman Center, Bay City Arts Center, OR Coast Council for the Arts, and the Tillamook County Cultural Coalition.

Data about the number of historic buildings came from the Oregon Historic Sites Database. This is an online database of registered historic buildings that can be filtered by county. Only buildings, structures, and sites that were

evaluated as eligible/significant (ES) and eligible/contributing (EC) counted toward this tally. In 2014 there were 114 historic buildings, 13 historic structures, and 34 historic sites officially registered in Tillamook County.

Why This Indicator Matters

A clear goal of Tillamook County residents, as expressed in the Strategic Vision, is to preserve the history of the area and share it with others. One way of preserving local history and culture is to preserve historic buildings and sites, another is to create museums that house local arts or history, and yet another way of actively preserving and sharing the local culture is to create centers of cultural education and expression. Indeed, the number of cultural centers, museums, and historic buildings and sites was the indicator chosen to reflect the extent to which Tillamook County is succeeding at preserving culture and history.

Indicator Targets

The goal for this indicator is for the total number of museums, cultural centers, historic buildings, and historic sites in Tillamook County not to decline from the 2009 value of 158.

Participation in Community Events

Measure: The percentage of Tillamook County adult permanent and seasonal residents who attended at least one community event in the last 12 months.

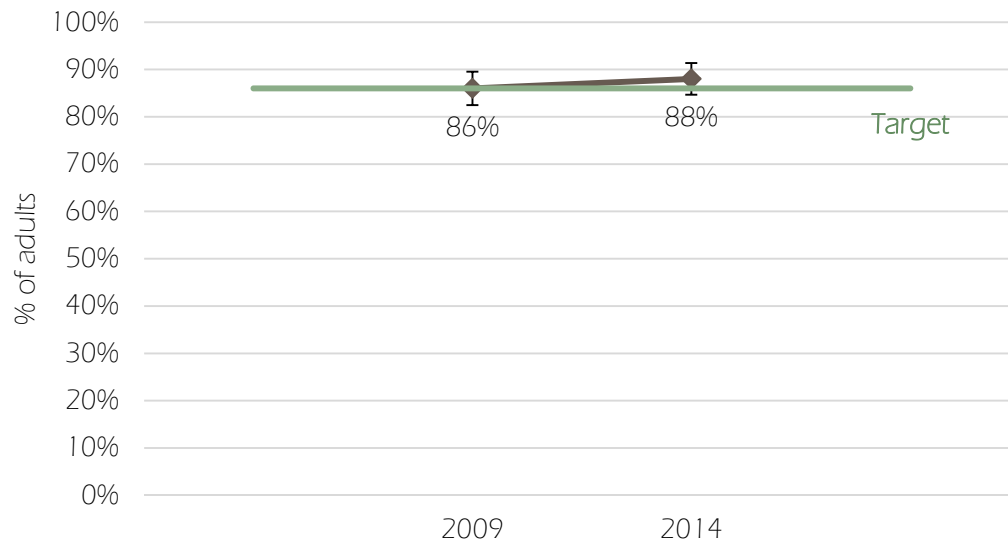
Assessment:

On Target



No Change

Between 2009 and 2014 though the estimated percentage of adults participated in at least one community event increased very slightly the margins of error show that the difference was not statistically significant. The indicator continued to be on target at 86% in 2014, given the margins of error.



Source: 2009 & 2014 VTIP Surveys

Participation in Community Events

Measurement Methods

In 2009 and 2014, the VTIP survey was used to ask respondents if, in the last 12 months, they had attended or participated in eight types of community events:

- Community parade
- Tillamook County Fair
- Community Festival
- Fundraising Event
- Community Fun-Run
- Beach, Bay, or River Clean-up
- Community or Club Sponsored Breakfast, BBQ, or Dinner
- Farmer's Market

Then, across all individuals the total number of people who had attended at least one community event in the last year was calculated. According to the survey findings, the vast majority of adult seasonal and permanent residents in the county attend at least one event over the course of a given year. (See

Appendix 1 for the complete survey methodology)

Why This Indicator Matters

The extent to which Tillamook County permanent and seasonal residents come together in public arenas, so new relationships can be openly forged, old relationships can be strengthened, and community issues can be publicly discussed is another indicator of vitality. The indicator directly measures the extent to which the strategic vision goal that people come together is reached.

Indicator Targets

The goal for this indicator is for the prevalence of community event attendance to not decrease below the 2009 value. In other words, the goal is for the percentage of seasonal and permanent residents who attend at least one community event during a given year to be close to 86%.

Discrimination Experiences

Measure 1: The percentage of Tillamook County adult permanent and seasonal residents who have personally felt unfairly treated on the basis of race, culture, beliefs, status, etc. by anyone in the county

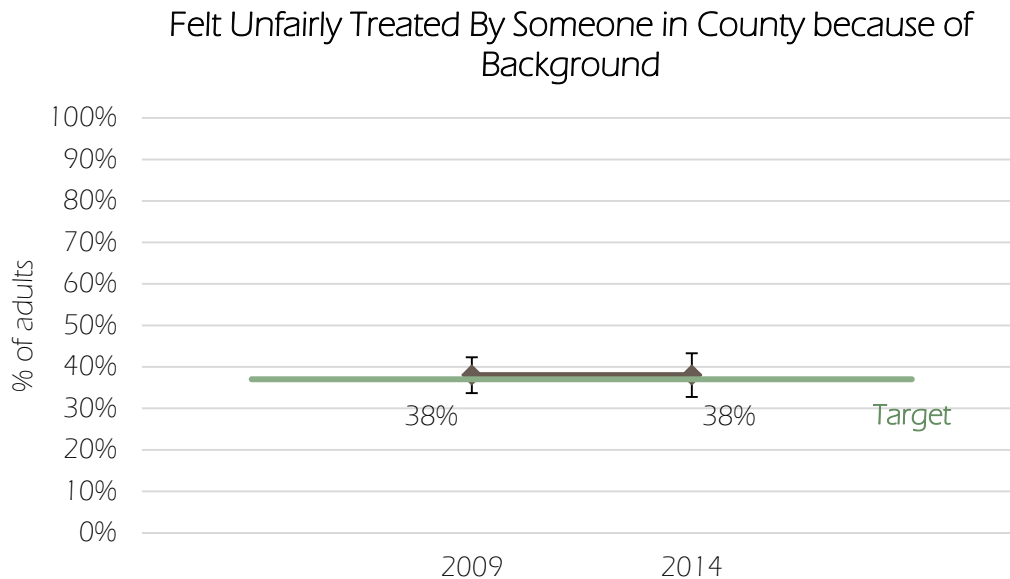
Assessment:

Below Target



No Change

Between 2009 and 2014 the estimated percentage of adults who felt unfairly treated by anyone in the county on the basis of their personal characteristics did not change from 38%. The indicator continued to be below the target of less than 38% in 2014.



Source: 2009 & 2014 VTIP Surveys

Discrimination Experiences

Measure 2: The percentage of Tillamook County adult permanent and seasonal residents who have personally experienced one form of discrimination or more, such as being accused of wrong-doing, being misunderstood, being insulted or called names, or being threatened with harm because of race, gender, age, etc.

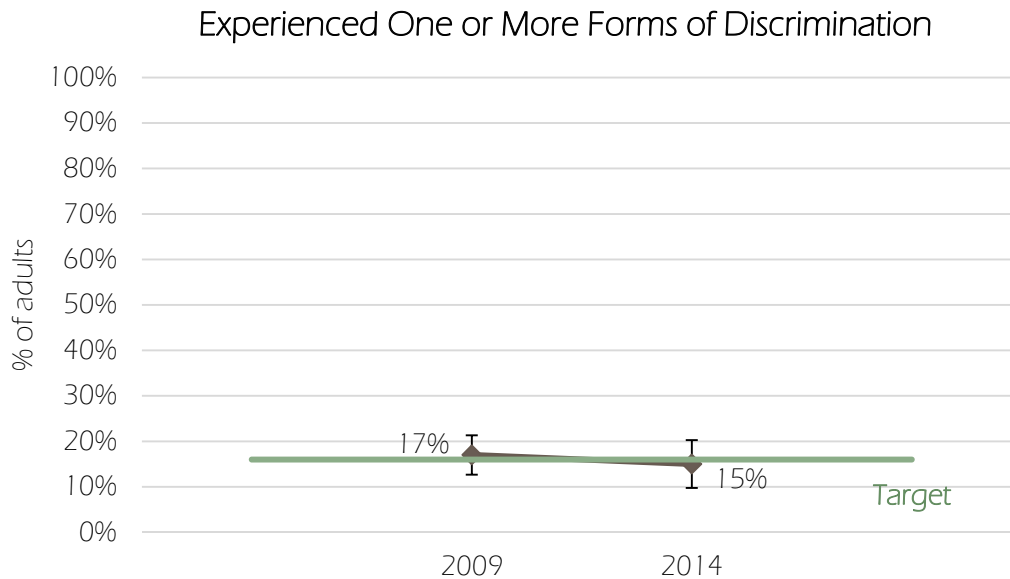
Assessment:

Below Target



No Change

Between 2009 and 2014 though the estimated percentage of adults who experienced at least one form of discrimination declined slightly, the margins of error show that the difference was not statistically significant. The indicator continued to be below the target of less than 17% in 2014, given the margins of error.



Source: 2009 & 2014 VTIP Surveys

Discrimination Experiences

Measurement Methods

In order to gauge the extent to which Tillamook County is a place where people feel valued and respected we used data from the 2009 and 2014 VTIP surveys (See Appendix 1 for the full survey methodology). Respondents were asked a variety of questions related to discrimination based on race, ethnicity, gender, age, religion, physical appearance, sexual orientation, or newcomer status. Specifically, respondents were asked if, in the last 12 months in Tillamook County, they had been treated unfairly because of the aforementioned characteristics by nine different types of people or groups:

- Strangers
- People in service jobs
- Neighbors
- People you thought were your friends
- People in helping jobs
- Institutions
- Co-workers, fellow students
- Employers, bosses, or supervisors

If a respondent indicated she or he had been unfairly treated by any of the types of people or groups in the county, then that person was identified as having been discriminated against.

Respondents were then asked how often (never, rarely, sometimes, or often), in the last 12 months in Tillamook County, they had experienced four different types of discrimination because

of their race, gender, age, sexual orientation, or other characteristics:

- Accused or suspected of doing something wrong (such as stealing, cheating, not doing their share of the work, or breaking the law)
- People had misunderstood their intentions and motives
- Been called names or been insulted
- Been made fun of, picked on, pushed, shoved, hit, or threatened with harm

If a respondent indicated he or she had been discriminated against in any of the four ways rarely, sometimes, or often, then that individual was counted as experiencing one or more forms of discrimination.

Why This Indicator Matters

The Tillamook County community identified, in its strategic plan, a desire for “people to be valued and respected, regardless of race, culture, or beliefs” (Tillamook County: 2020 Strategic Vision, p. 8). Indeed, an important part of having a cohesive community that reflects the many population and social changes occurring in the world is having a community that does not tolerate or perpetuate discrimination along these lines.

Indicator Targets

The goal for this indicator is for the proportion of adult residents and property owners who feel unfairly treated or who have experienced one or

more forms of discrimination to decline from the 2009 values of 38% and 17%, respectively. Ultimately the goal is for these percentages to approach zero.

Arts & Cultural Establishments

Measure: The number of arts & cultural organizations per 1,000 Tillamook County residents

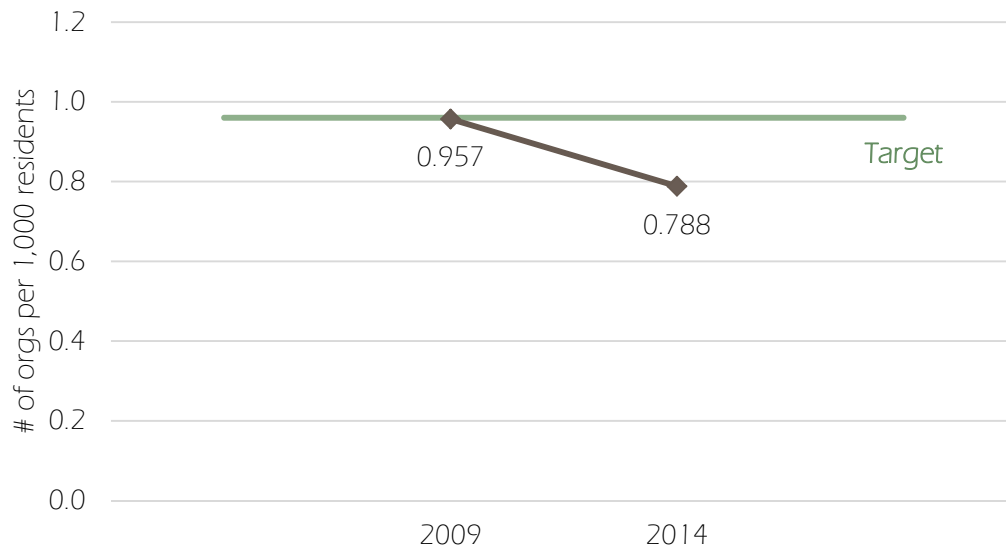
Assessment:

Below Target

&

Declining

The number of arts and cultural organizations per capita in 2014 was significantly lower than that observed in 2009. The County is now below the target of .96 organizations per 1,000 residents.



Sources: Tillamook County Arts Network Website; Portland State University, Population Research Center

Arts & Cultural Establishments

Measurement Methods

In order to measure the extent to which arts and culture are present in the community we relied on the number of arts and cultural organizations in the county per 1,000 residents. Information about the number of organizations came from the Tillamook County Arts Network website while information about the estimated total number of residents in 2009 and 2013 (2014 estimates had not yet been published at the time of this report) came from Portland State University, Population Research Center.

Why This Indicator Matters

Arts and culture are elements of the community that residents of Tillamook County value and wish to preserve into the future.

Indicator Targets

The goal for this indicator is for the number of arts and cultural organizations per capita in Tillamook County to not dip greatly below the number observed in 2009, .96 organizations per 1,000 residents.

Culture of Lifelong Learning

Measure: The percentage of Tillamook County adult permanent residents taking classes for personal (not professional) development in the county

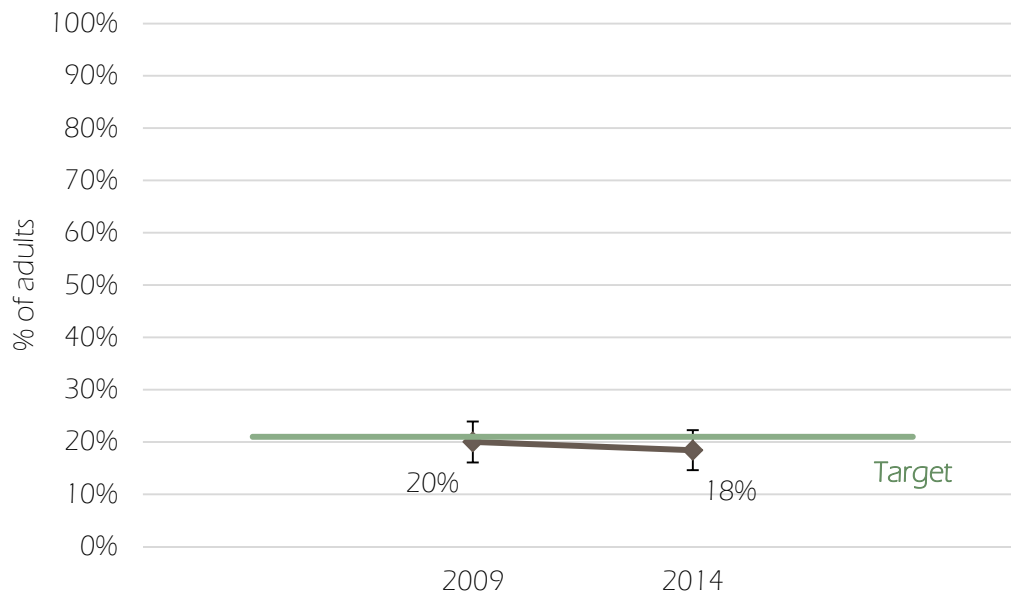
Assessment:

Below Target



No Change

Between 2009 and 2014 though the estimated percentage of adults who took classes for personal development declined slightly, the margins of error show that the difference was not statistically significant. The indicator continued to be below the target of more than 20% in 2014, given the margins of error.



Source: 2009 & 2014 VTIP Surveys

Culture of Lifelong Learning

Measurement Methods

In order to measure this indicator, we relied on data from the 2009 and 2014 Vital Tillamook Indicator Project surveys. Specifically, the survey asked respondents if, in the last 12 months, they had taken a class or workshop for personal growth through the Hoffman Center, Bay City Arts Center, Tillamook Bay Community College, Oregon State University Extension, or some other organization in Tillamook County.

Why This Indicator Matters

Having a population of Tillamook County adult residents who engage in learning throughout the life-course was another goal expressed for the county through the Tillamook County Strategic Vision. As an indicator of this goal, the Vital Tillamook Indicator Project chose to measure the extent to which a culture of lifelong learning exists among residents.

Indicator Targets

The goal for this indicator is for the percentage of Tillamook County adult residents who take classes for personal development to be greater than 20% in the future.

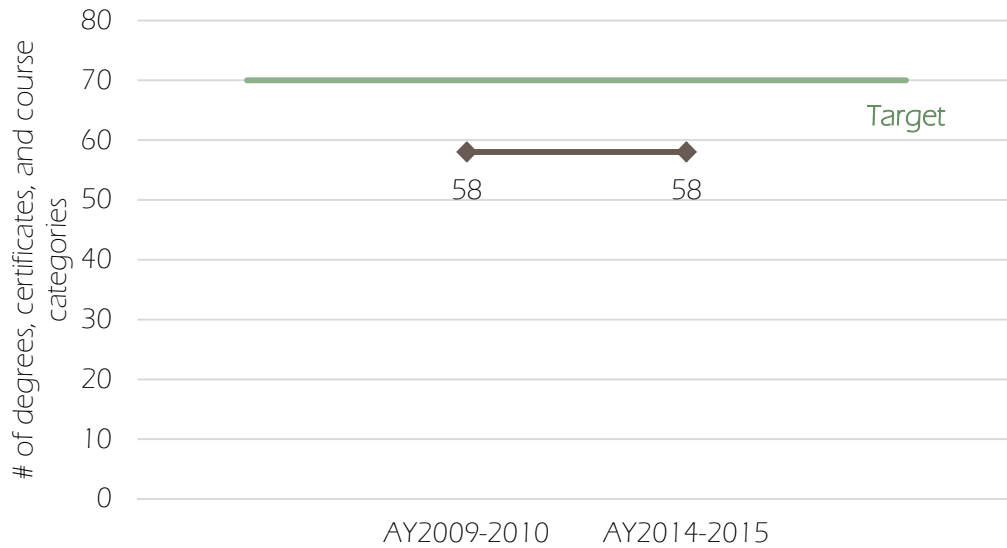
Educational Diversity for Adults

Measure: The number of degrees, certificates, and continuing education course categories at Tillamook Bay Community College (TBCC)

Assessment:

Below Target & **No Change**

Between the academic years 2009-10 and 2014-15, according to the TBCC course catalogs, the number of degrees, certificates, and continuing education course categories has remained stable. In 2014, the indicator was still below the target goal of 70.



Source: Tillamook Bay Community College Course Catalogs, Academic Years 2009-10 and 2014-15

Educational Diversity for Adults

Measurement Methods

In order to assess the diversity of educational opportunities for adults the focus turns to Tillamook Bay Community College, as it serves as the primary source of adult education in the county.

The degrees offered were all Associate degrees; three focused on giving students the skills needed to transfer to a 4-year college while the other two were career technical in nature. Students could receive career technical Associate degrees in a variety of areas including Accounting, Alcohol and Drug Counseling, Marketing, Culinary Arts, and Fire Protection Technology. With respect to certificates, a fair amount of diversity was apparent. In the 2009-2010 course catalog, certificates were available in areas such as Manual Trades, Electrician, Accounting, Computer Applications and Office Systems, Corrections, Early Education, and Hospitality, Tourism, and Recreation Management. According to the catalog listing, seven courses focused solely on continuing education and covered areas such as nursing, phlebotomy, job skills training, and wild-land firefighter training.

Why This Indicator Matters

The presence of diverse educational opportunities for adults is also a key element of the Tillamook County Strategic Vision related to the promotion of life-long learning. It represents a process indicator – an indicator that the outcome of increased lifelong learning has the opportunity to occur.

Indicator Targets

The goal for this indicator is for there to be approximately 70 types of degrees, certificates, and continuing education courses available through Tillamook Bay Community College.

Vision of our Youth and Education

Goals 5.1 & 5.2 Tillamook County will be a place that actively involves youth in their communities through educational programs, extracurricular activities, and community involvement.

Goal 5.3 Provide Tillamook County youth with employable skills

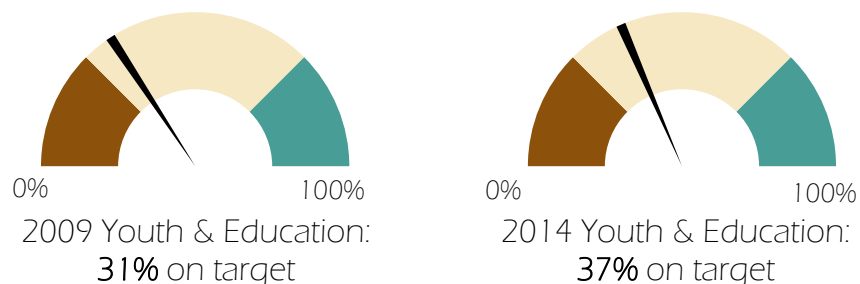
Goal 5.4 Tillamook County schools will be recognized for their academic achievements.

Additional Goals Tillamook County youth will avoid self-destructive behavior.

Summary of findings

In 2009, 37 measures were used as indicators of Tillamook County's Youth & Education goals. Due to changes in measurement and data sources, in 2014 54 measures were used to indicate achievement of these goals. None of the new measures had historical data, so it was impossible to assess how they had changed since 2009. Also due to changes in measurement, 28 of the indicator measures that had a target in 2009 had to be switched to having no target in 2014 – ideally, once these measurement changes have a longer history it will be possible to assign targets to the data in the future. Despite these many changes to the indicator measures there was little overall change in the extent to which the county is meeting its goals in this area.

In 2014, 20 measures (representing 37% of the measures in this area) were on target, six were below target (11%), and 28 had no target (52%). By contrast, in 2009 17 (31%) were on target, 20 were below target (37%), and there were no that had no target. This shows overall improvement in the number of indicator measures on target for the Youth & Education area of the vision, but that many of the measures have also been removed from judgement. In other words, Tillamook County is getting a bit closer to achieving its goals in this arena, but achieving future overall vitality in this area will be hampered by the lack of targeted goals for many indicator measures.



Among the Youth & Education indicators, 17 went from below target in 2009 to on target in 2014 and all of them were related to the goal for teens in the county to avoid self-destructive behavior. Only one indicator went from on target in 2009 to below target in 2014. This indicator related to the goal for youth in the county to have

employable skills. In future years, once targets have been set for the 28 new measures related to the academic achievements of Tillamook County youth, it will be easier to see how and where the county will need to make investments

Overall, the indicator assessment findings show that in order to realize improvement in the area of Youth & Education, first and foremost better information about how youth are doing academically is needed, and with that information it will be possible to figure out strengths and weaknesses in the county. The results also show that since 2009, county youth have made notable improvements in their ability to avoid the self-destructive behaviors of pregnancy and substance abuse; this is an area that should be explored more deeply so that the successful strategies can be identified and supported. Also, with respect to support for the process of providing youth with employable skills, the public school system is still strong in this area – the ability of the economy to provide employment opportunities for youth to use these skills is where we see room for improvement.

Culture of Youth Engagement

A goal expressed in the Tillamook County: 2020 Strategic Vision is for youth to have many opportunities to participate in different types of educational, civic, and cultural activities in the community. Instead of simply measuring the number of opportunities available to youth, the Indicator Project chose to assess the extent to which youth are actually engaged in these activities. In order to do so, we planned to rely on data collected from a survey of youth administered by the schools on an annual basis.

Unfortunately, the survey has never been conducted, therefore data for this indicator were not available in time for the 2009 or 2014 assessments.

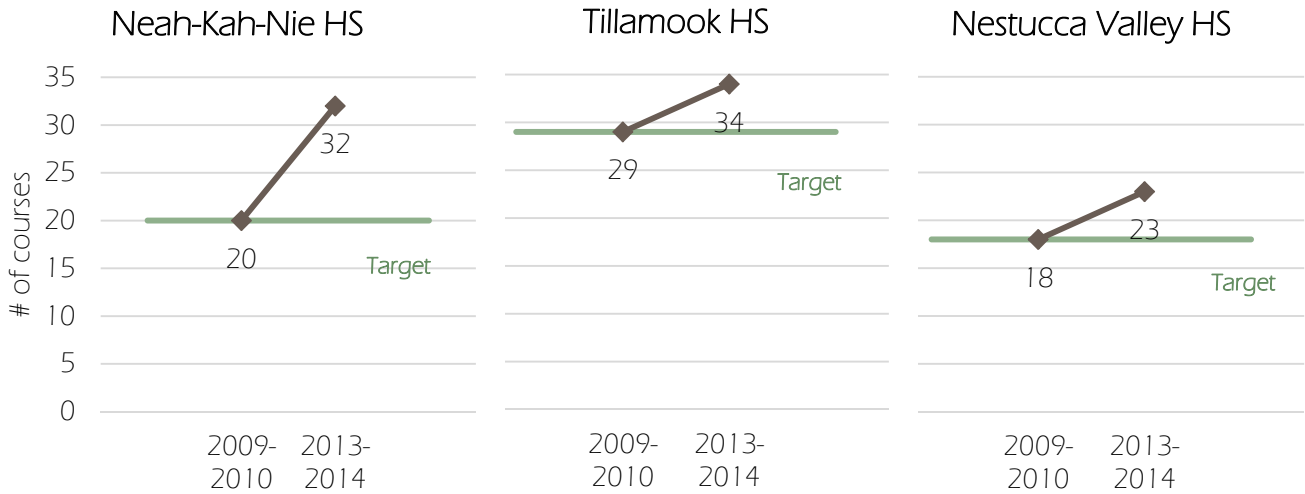
Educational Diversity for High School Youth

Measure: The number of language courses, laboratory science classes, and vocational/technical training courses at Neah-Kah-Nie High School, Tillamook High School, and Nestucca Valley High School

Assessment:

On Target
&
Improving

Since 2009, all three high schools increased the number of language, lab science, and vocational/technical training courses they offered. In the 2009-2010 academic year the schools had already met their targets, but by the 2013-2014 academic year, all three schools had exceeded their respective targets of 20 for Neah-Kah-Nie, 29 for Tillamook, and 18 for Nestucca.



Sources: Neah-Kah-Nie HS, Tillamook HS, & Nestucca HS course catalogs

Educational Diversity for High School Youth

Measurement Methods

The number of languages taught, laboratory science classes offered, and vocational/technical training courses offered was used as an indicator of educational diversity for high school age youth. This number was calculated by counting the number of these courses in each high school's course guide for the 2009-2010 and 2013-2014 school years.

Lab science included courses like biology, physics, astronomy, and oceanography. The types of career-oriented courses included in the tally were health services, graphic design, photography, Computer Aided Design (CAD), child development, and accounting courses. Electives like psychology, comparative religion, art, and music were not included in the count of the number of language, vocational, or laboratory science classes by school for this indicator.

Why This Indicator Matters

While the Tillamook County community recognizes the importance of the core curriculum in high schools, it also recognizes the value that non-core elements of a curriculum have for preparing the next generation of leaders in a knowledge-based economy. For this reason, the diversity of educational opportunities for high school students was chosen as an indicator of Tillamook County vitality.

Indicator Targets

The goal for this indicator is for the number of high school language, laboratory science, and vocational classes to remain the same as or increase from the number observed in 2009.

Youth Unemployment Post-High School

Measure: The percentage of young adults, age 20-24 in the labor force and unable to find work.

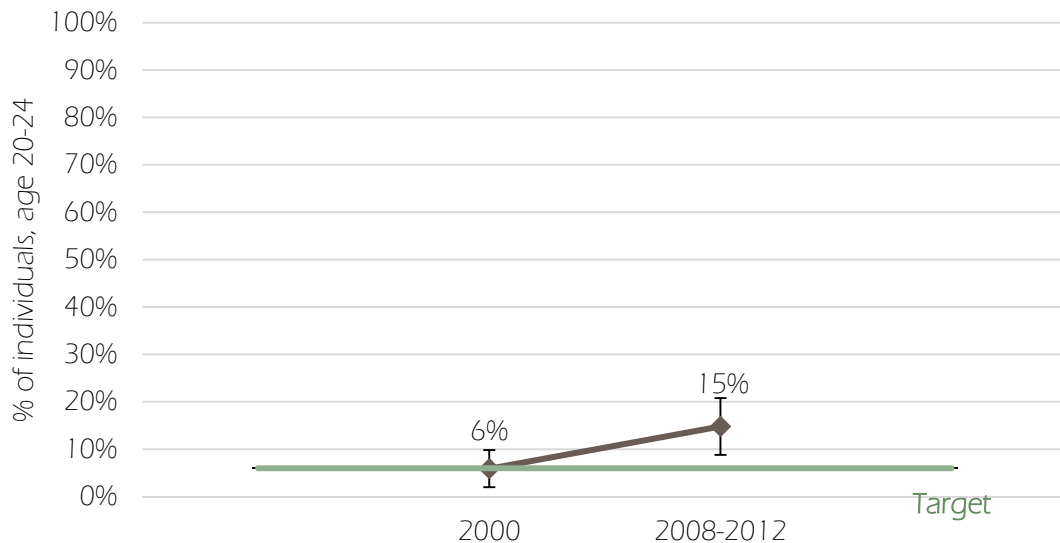
Assessment:

Below Target



No Change

Between 2000 and the 2008-2012 period, unemployment among young adults increased from 6% to 15%. The chart below also shows the margins of error around each estimate that mean we can be 90% sure the true value in the population lies somewhere within a range around the estimated percentages. So the margins of error around each of these estimates mean that we can be 90% sure that the true percentage of young adults age 20-24 who were unemployed in the 2008-2012 period lies between 9% and 21%. And in 2000, the true percentage lay somewhere between 2% and 10%. Given these overlapping margins of error, there is a chance that the true values in these two time periods were equal. This means that there was not a statistically significant difference between the estimates at the two times, but because the margin of error around the 2008-12 estimate does not intersect with the target of 6% or less, then we can say that in the 2008-2012 period young adult unemployment was higher than the target.



Source: US Census Bureau, 2000 census, 2008-12 American Community Survey

Youth Unemployment Post-High School

Measurement Methods

Unemployment among young adults, age 20-24 come from the US Census Bureau. In 2000, the data were collected via the long form of the decennial census, from a sample of the population. Since 2005, these data have been collected via the American Community Survey, also from a sample of the population.

The unemployed are people who are not working for pay, but are willing to or looking for work for pay.

Why This Indicator Matters

Related to the goal to provide Tillamook County youth with employable skills, tracking unemployment among young adults is the ultimate outcome measure of this goal. It reflects both the provision of skills and the adequacy of employment prospects for young people in the county. Both the process and the desired outcomes were expressed in the Strategic Vision.

Indicator Targets

The goal for this indicator is for the percentage of young adults age 20 to 24 who are looking for work but unable to find it to be less than or equal to six percent.

Educational Achievement

Measure 1: The average score across all kindergartners in the county for approaches to learning (self-regulation and interpersonal skills), score range is 1-5.

Measure 2: The average number of early math (numbers and operations) questions answered correctly, across all kindergartners in the county. Range is 0-16.

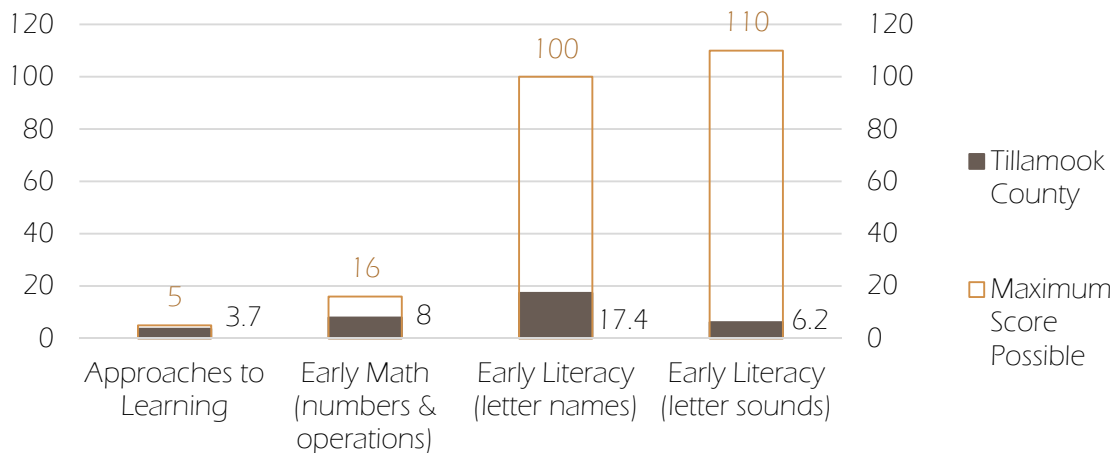
Measure 3: The average number of early literacy (letter names) questions answered correctly by kindergartners in the county. Range is 0-100.

Measure 4: The average number of early literacy (letter sounds) questions answered correctly by kindergartners in the county. Range is 0-110.

Assessment:

No Target

Data from the 2013-14 school year show that assessment scores among kindergartners in Tillamook County varied, depending on the topic. On average, kindergartners in the county scored 3.7 out of 5 for their approaches to learning (their ability to self-regulate and their interpersonal skills). On average, Tillamook County kindergartners scored 8 out of 16 on early math and 17.4 out of 100 on letter name early literacy. And finally, kindergartners in the county scored 6.2 out of 110 on letter sound early literacy, on average. Though some of these average scores seem low, because the 2013-14 academic year is the first time this kindergarten assessment has been done, it is not clear what the targets should be. Future indicator assessments should use this measure, but will need to determine what a realistic target should be.



Source: Oregon Department of Education

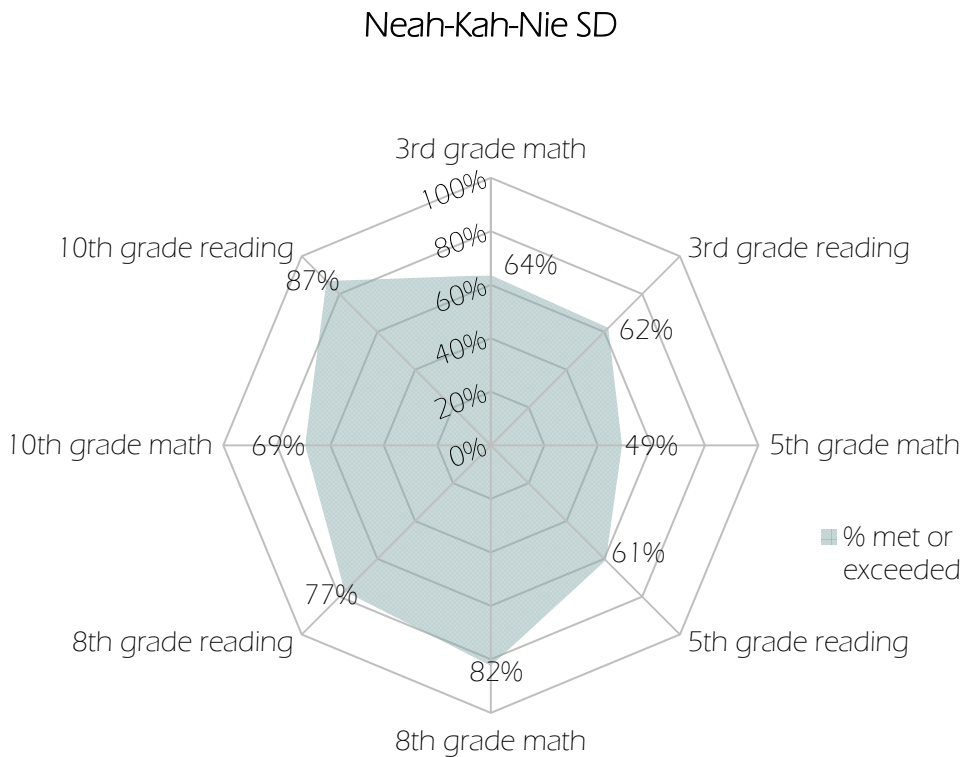
Educational Achievement

Measures 5-12: The percentage of 3rd, 5th, 8th, and 10th graders who met or exceeded the reading and math achievement standards in place at the time, on their Oregon Statewide Assessment tests, in Neah-Kah-Nie School District.

Assessment:

No Target

In the 2013-2014 Academic Year, between 49% and 87% of students met or exceeded the reading and math achievement standards set for that year, within this district. There is no target set for this set of measures, due to the upcoming changes to student assessment.



Source: Oregon Department of Education

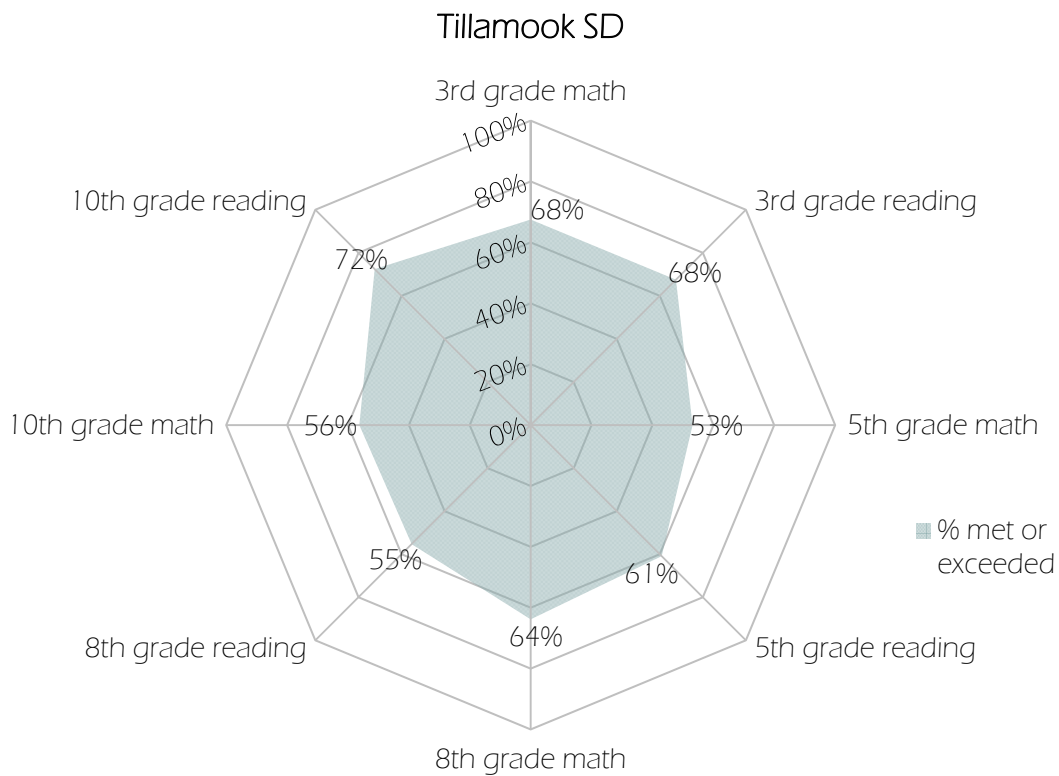
Educational Achievement

Measures 13-20: The percentage of 3rd, 5th, 8th, and 10th graders who met or exceeded the reading and math achievement standards in place at the time, on their Oregon Statewide Assessment tests, in Tillamook School District.

Assessment:

No Target

In the 2013-2014 Academic Year, between 53% and 72% of students met or exceeded the reading and math achievement standards set for that year, within this district. There is no target set for this set of measures, due to the upcoming changes to student assessment.



Source: Oregon Department of Education

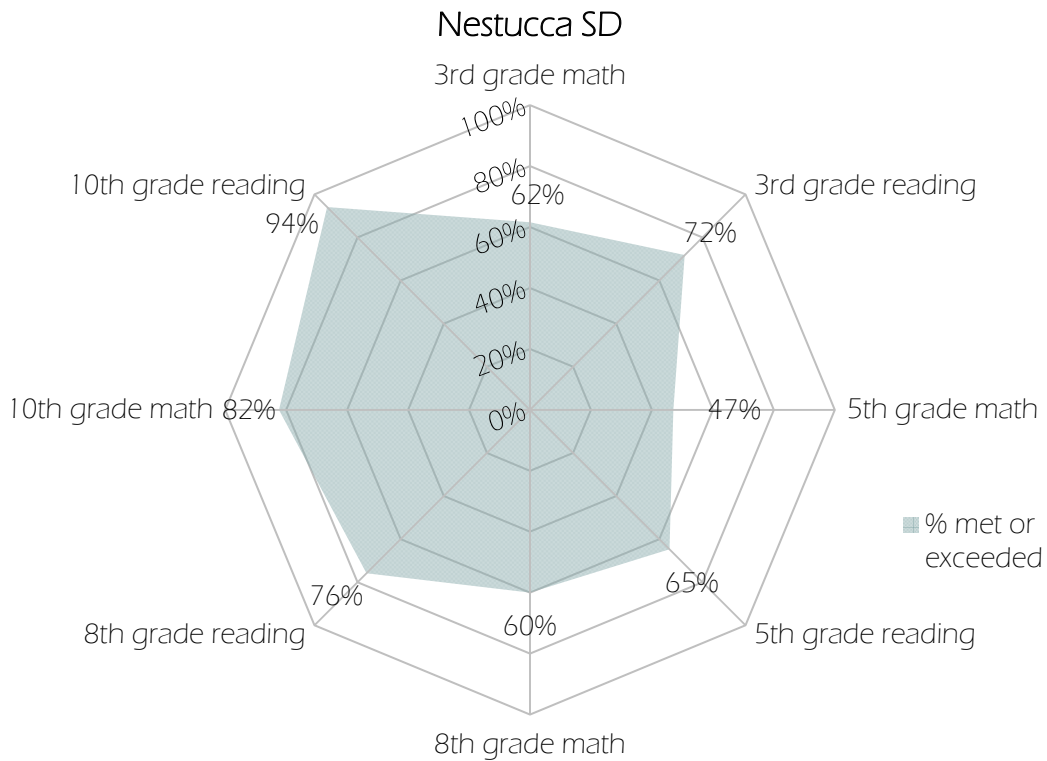
Educational Achievement

Measures 21-28: The percentage of 3rd, 5th, 8th, and 10th graders who met or exceeded the reading and math achievement standards in place at the time, on their Oregon Statewide Assessment tests, in Tillamook School District.

Assessment:

No Target

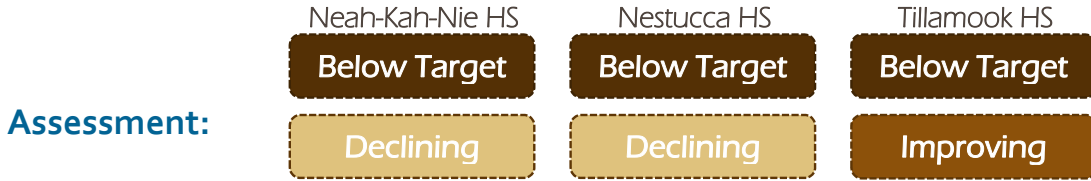
In the 2013-2014 Academic Year, between 47% and 94% of students met or exceeded the reading and math achievement standards set for that year, within this district. There is no target set for this set of measures, due to the upcoming changes to student assessment.



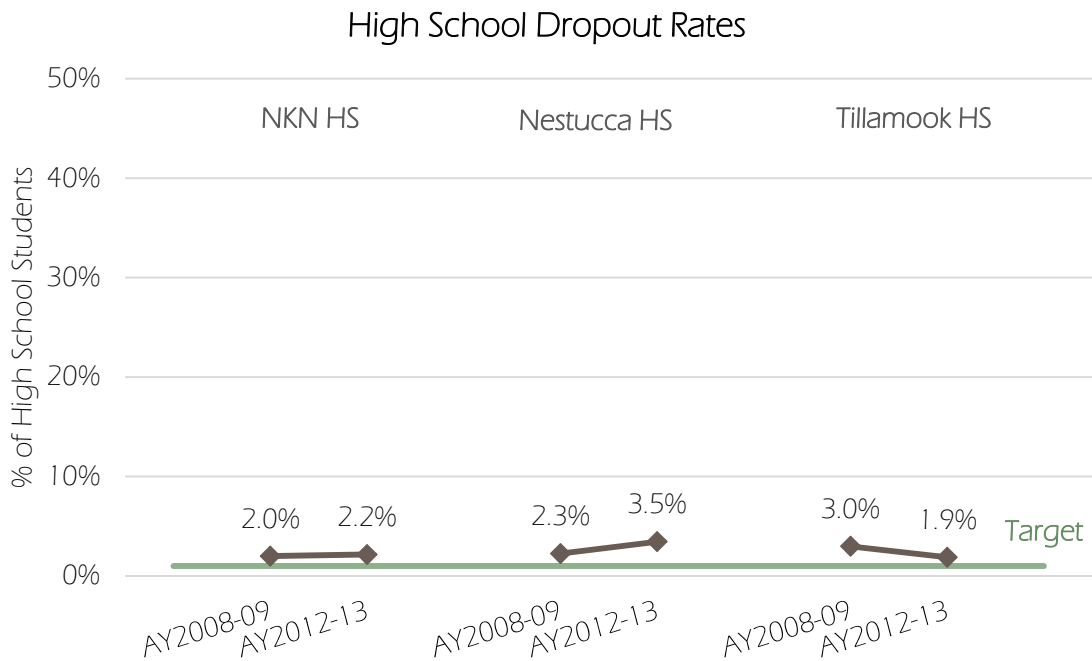
Source: Oregon Department of Education

Educational Achievement

Measures 29-32: The percentage of students who dropped out of grades 9-12 between July 1 and June 30 of the academic year.



Between the 2008-09 and the 2012-13 Academic Years Neah-Kah-Nie and Nestucca Valley High Schools experienced slight upticks in their dropout rates, while Tillamook High saw a slight decline. None of the high schools were at the targeted 1% dropout rate in AY2012-13, however. The statewide dropout rate is 3.4%, showing that overall Tillamook is doing better than the state.



Source: Oregon Department of Education

Educational Achievement

Measurement Methods

Kindergarten assessment data came from the Oregon Kindergarten Assessment (OKA) process that began in the 2013-14 Academic Year. The assessment was administered through the Oregon Department of Education. The math and literacy assessments are based on children's responses to prompts, or questions, related to letter names and sounds or basic math, include counting, simple addition, simple subtraction, and recognizing number patterns. The assessment of student approaches to learning is done by teacher observation of a student. Teachers observe the student in the classroom during regular classroom activities and routines and complete the 15 item Child Behavior Rating Scale (CBRS). The scale focuses on self-regulation and interpersonal skills.

3rd, 5th, 8th, and 10th grade reading and math assessment data represent the percentage of students who met or exceeded the achievement standards set by Oregon Department of Education on Oregon's Assessments of Knowledge and Skills (OAKS) tests. Those standards, also referred to as "cut scores," were increased in the 2010-11 school year, making comparisons between the 2008-09 school year of the prior VTIP assessment and this year's assessment impossible.

High School dropout data also came from the Oregon Department of

Education. Dropout rates correspond to the number of students who dropped out of grades 9-12 between July 1 and June 30 divided by the number of students enrolled in the fall of that school year. According to the OR Department of Education, a dropout is a student who withdrew from school and did not graduate or transfer to another school that leads to graduation. Dropouts do not include students who are deceased, are being home schooled, are enrolled in an alternative school or hospital education program, are enrolled in a juvenile detention facility, are enrolled in a foreign exchange program, are temporarily absent because of suspension, a family emergency, or severe health problems that prevent attendance at school, received a GED certificate, or received an adult high school diploma from a community college. Given changes in the state and national dialogue surround high school completion and dropout, in the future it may be more appropriate to report 4-year cohort graduation rates, instead of dropout, in the next indicator assessments for Tillamook County.

Why This Indicator Matters

The outcomes of Tillamook County youth are a major concern of residents young and old. In particular, having a large proportion of youth who succeed academically is central to Tillamook County residents' notion of a vital community. In order to capture this notion of academic success, as well as

recognize that educational achievement is a concept best measured across the spectrum of youth ages, we relied on data about kindergarten achievement, as well as 3rd, 5th, 8th, and 10th grade standardized test scores, and high school dropout rates.

Indicator Targets

As the Oregon Kindergarten Assessment has only been implemented for one year, it seemed premature to identify a target for the county in this measure. After more data have been collected, it may be possible to identify appropriate and realistic targets for the county.

Targets for 3rd, 5th, 8th, and 10th grade achievement are not useful for the county at this time. Beginning in the 2014-2015 academic year, the state switched to the Smarter Balanced Assessments associated with the Common Core. This is a marked shift from one assessment method to another; therefore the data are likely to change just as dramatically. Setting targets based on OAKS methods and achievements would not be useful for local decision makers.

With respect to high school dropout the goal is for dropout rates to approach zero in the future.

Teen Pregnancy

Measure: The number of females age 15-17 who were pregnant and either gave birth or induced termination, per 1,000 females age 15-17 in Tillamook County.

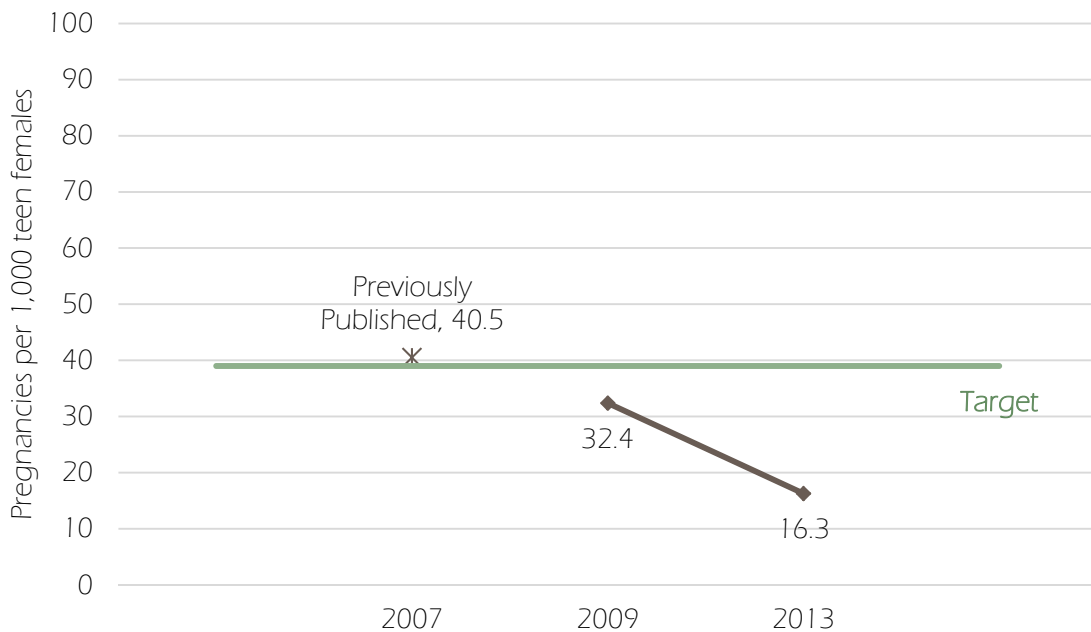
Assessment:

On Target



Improving

The teen pregnancy rate published in the 2009 VTIP report had to be revised downward, based on updated data from the Oregon Health Authority, to 32.4 pregnancies per 1,000 teen women in 2009. Between 2009 and 2013 there was a significant decline in the rate of teen pregnancies from about 32 per 1,000 to 16 per 1,000. In 2013 the rate of teen pregnancy in Tillamook County had met the target of fewer than 40 per 1,000.



Source: Oregon Health Authority, Center for Health Statistics

Teen Pregnancy

Measurement Methods

Teen pregnancy rate data came from the Oregon Department of Human Services', Center for Health Statistics. Pregnancy estimates are based on the estimated number of births and induced terminations that occur among Tillamook County girls who are between the ages of 15 and 17; they do not include the number of fetal deaths or miscarriages (spontaneous abortions) that occur. These teen girls may be married or unmarried at the time of their pregnancy.

Why This Indicator Matters

Another goal of the Tillamook County Strategic Vision is that youth will avoid self-destructive behavior. One measure of that is the prevalence of teen pregnancy.

Indicator Targets

The goal for this indicator is for the rate of pregnancy among teens between the ages of 15 and 17 to be less than 40.5 per 1,000 teen women.

Teen Substance Abuse

Measure 1: Percentage of 8th graders who reported having alcohol on at least one occasion in past 30 days

Measure 2: Percentage of 11th graders who reported having alcohol on at least one occasion in past 30 days

Assessment:

On Target



Improving

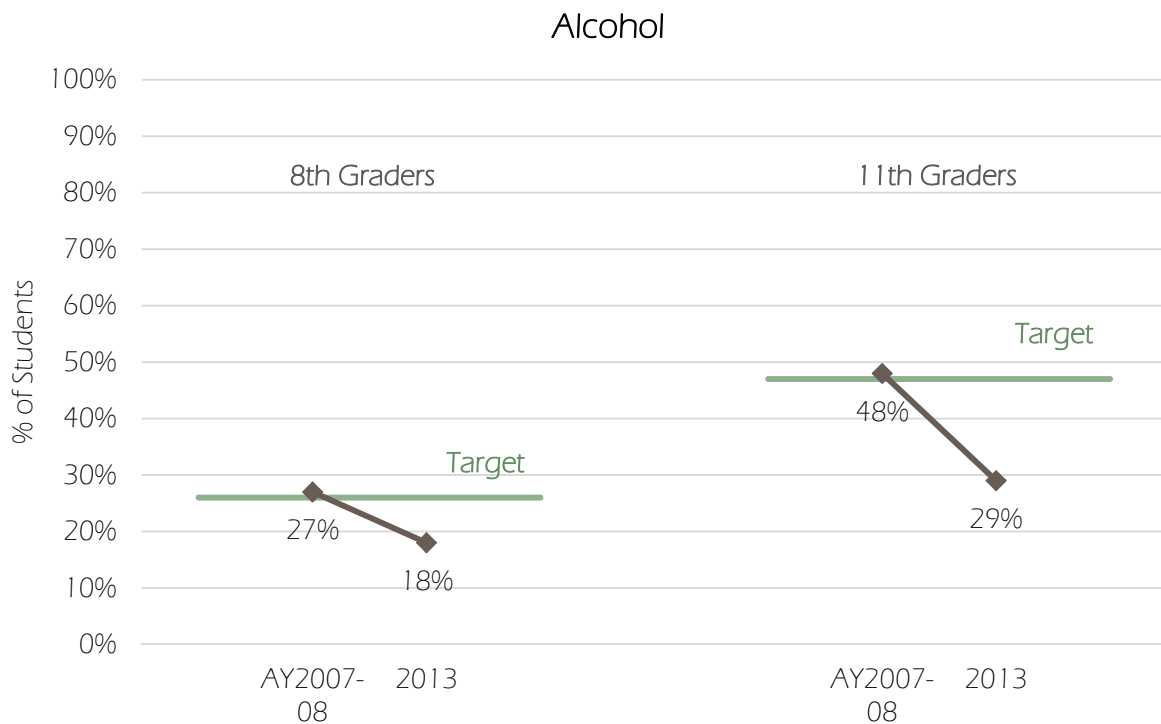
Assessment:

On Target



Improving

The percentage of 8th and 11th graders who drank alcohol has declined since the 2007-2008 survey period, by nine and 19 percentage points, respectively. Both teen groups are now on target for their alcohol consumption; in 2013 fewer than 26% of 8th graders and fewer than 47% of 11th graders reported drinking alcohol.



Source: Oregon Health Authority, Public Health Division, Oregon Healthy Teens Survey

Teen Substance Abuse

Measures 3-10: The percentage of 8th graders reporting using any of the following illicit drugs in past 30 days: marijuana, prescription drugs, inhalants, methamphetamine, cocaine, heroin, Ecstasy, or LSD

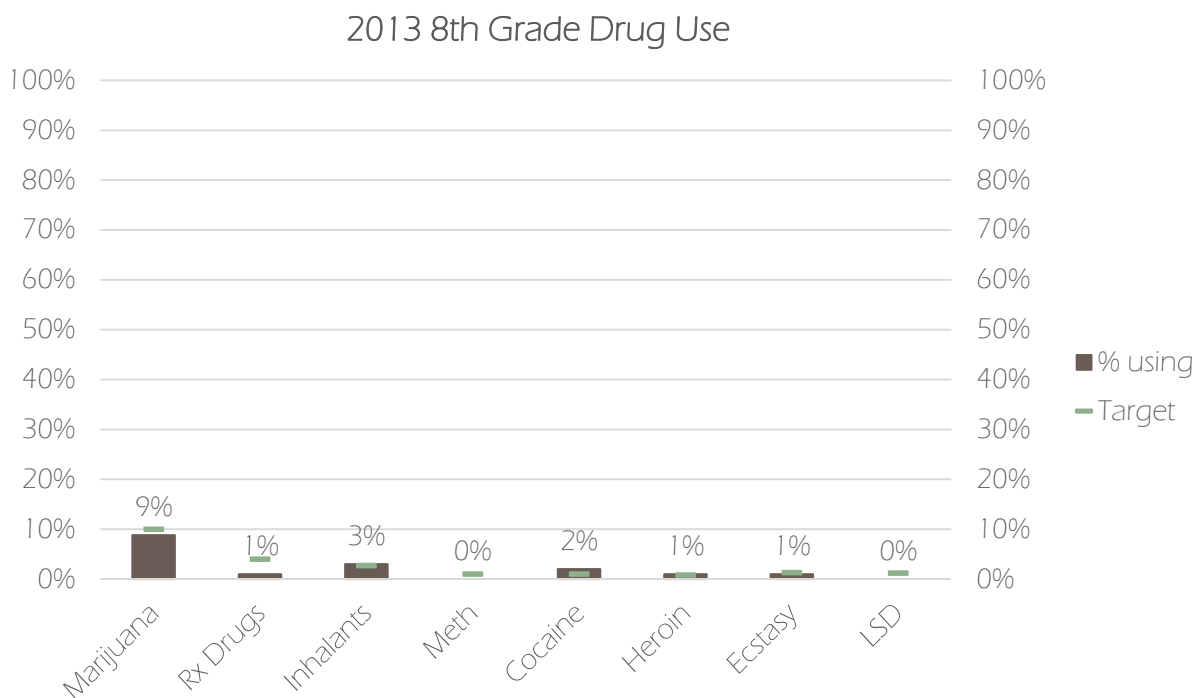
Assessment:

On Target

except cocaine

Below Target

In 2013 the Oregon Health Authority released data from the Oregon Healthy Teens survey about teen substance abuse. In 2013, the data were reported for specific drugs, while in the past overall drug use was reported. Because it is possible for multiple drugs to be used by the same person, it was not possible to combine the 2013 data into an overall percentage of drug use. As a result, it was not possible to compare 2013 data to the data in the 2009 indicator report. In 2013, according to these data, for all drugs except cocaine, fewer 8th graders in Tillamook County reported use than 8th graders across the state (the target for Tillamook County).



Source: Oregon Health Authority, Public Health Division, Oregon Healthy Teens Survey

Teen Substance Abuse

Measures 11-18: The percentage of 11th graders reporting using any of the following illicit drugs in the past 30 days: marijuana, prescription drugs, inhalants, methamphetamine, cocaine, heroin, Ecstasy, or LSD

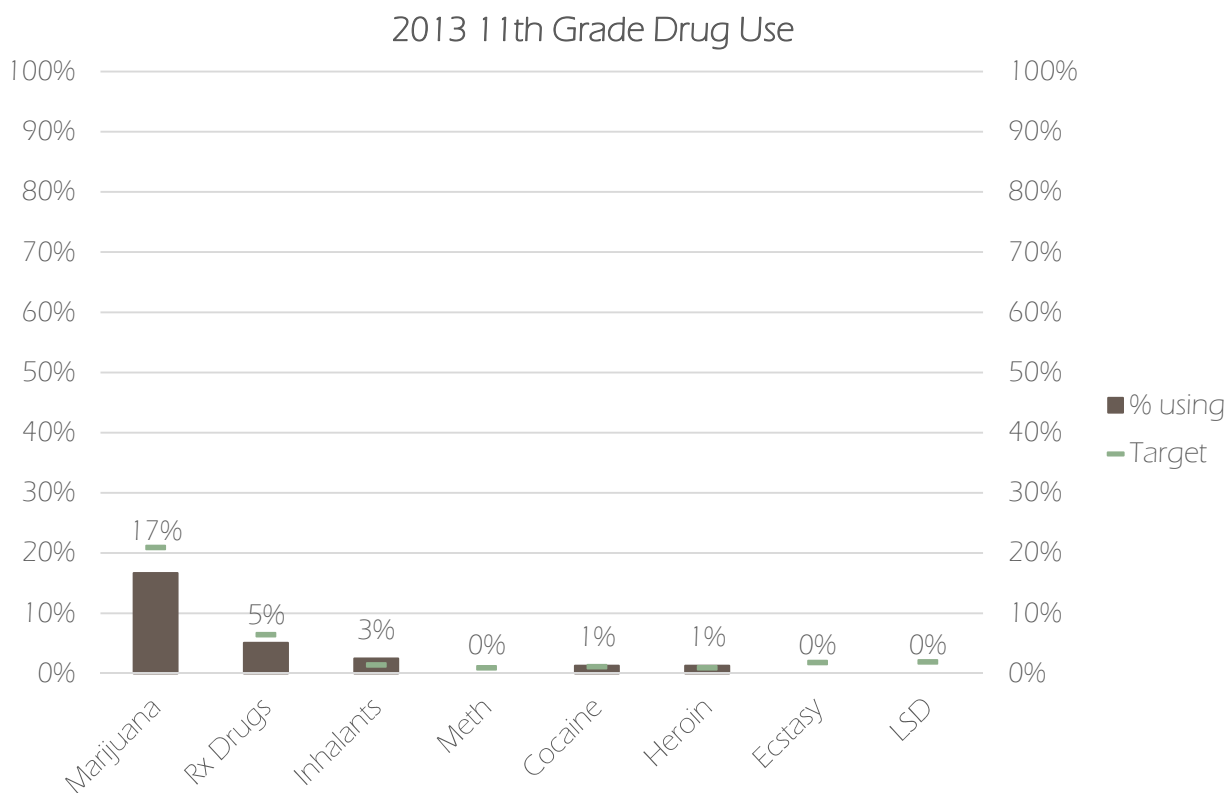
Assessment:

On Target

except inhalants

Below Target

In 2013 the Oregon Health Authority released data from the Oregon Healthy Teens survey about teen substance abuse. In 2013, the data were reported for specific drugs, while in the past overall drug use was reported. Because it is possible for multiple drugs to be used by the same person, it was not possible to combine the 2013 data into an overall percentage of drug use. As a result, it was not possible to compare 2013 data to the data in the 2009 indicator report. In 2013, according to these data, for all drugs except inhalants, fewer 11th graders in Tillamook County reported use than 11th graders across the state (the target for Tillamook County)



Source: Oregon Health Authority, Public Health Division, Oregon Healthy Teens Survey

Teen Substance Abuse

Measurement Methods

Teen substance abuse data come from the Oregon Health Authority's Oregon Healthy Teens (OHT) Survey. The OHT Survey is administered to nearly one-half of Oregon's 8th and 11th graders. A random sampling process is used to select districts within counties and then select schools within districts for participation. Data are weighted to more accurately represent Oregon 8th and 11th graders.

Data for these measures come from responses to questions worded like this: "During the past 30 days, how many times have you used...?" At the close of the survey, respondents are asked how honest they were when answering the questions. Data are edited to omit students who did not take the survey seriously, based on validity criteria relating to inconsistent response patterns among related items, dubious responses (the number of extreme high risk behavior responses chosen by subject area), missing gender or grade, and if the student indicated that she or he was "not honest at all" on the survey.

Why This Indicator Matters

Another goal of the Tillamook County Strategic Vision is that youth will avoid self-destructive behavior. One measure of that is the prevalence of substance abuse among teens.

Indicator Targets

The goal for this indicator is to see a reduction in the prevalence of substance abuse among eighth and eleventh graders over time. This year, the targets were set at the state average percentages of teens consuming these substances:

| 2013 State Percentages | 8th Grade | 11th Grade |
|------------------------|-----------|------------|
| Alcohol | 26% | 47% |
| Marijuana | 10% | 21% |
| Rx Drugs | 4% | 6% |
| Inhalants | 3% | 1% |
| Meth | 1% | 1% |
| Cocaine | 1% | 1% |
| Heroin | 1% | 1% |
| Ecstasy | 1% | 2% |
| LSD | 1% | 2% |

Vision of our Health and Human Services

Goal 6.1 All Tillamook County residents will have access to affordable healthcare.

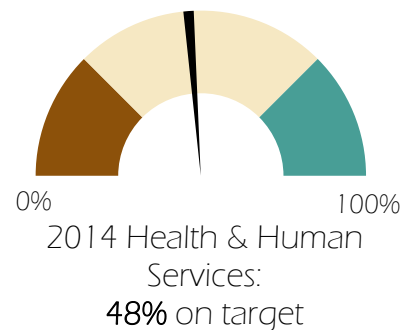
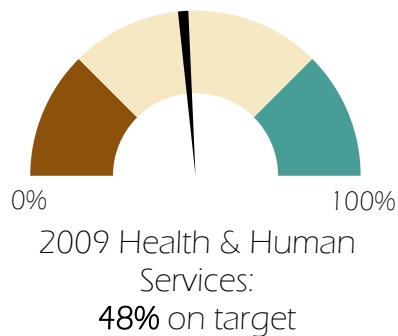
Goal 6.2 Tillamook County residents will lead lifestyles that include healthy activities and behavior.

Goal 6.3 Tillamook County will provide resources to meet the basic needs of all populations.

Additional Goals Tillamook County public will be safe.

Summary of findings

In 2009, 24 measures were used as indicators of Tillamook County's Health & Human Service goals. In 2014, due to limited availability of data related to healthy adult lifestyles and the provision of resources to help residents meet their basic needs, 21 measures were used to indicate achievement of these goals. In 2014, 10 measures (representing 48% of the measures in this area) were on target, 10 were below target (48%), and one had no target (5%). A similar pattern was true in 2009, when 10 measures were on target (48%), 13 were below target (62%), and one had no target. This shows no real change in the number of indicator measures on target for the Health & Human Services area of the vision, but that three of the measures that were faring poorly in 2009 have been removed from judgement. In other words, Tillamook County is not getting any closer or farther from achieving its goals in this arena, but that release of the missing data may change this assessment in the future.



Among the Health & Human Service indicators, four went from below target in 2009 to on target in 2014. These indicators related to three goal areas of the vision; that residents will lead healthy lifestyles, that the basic needs of all populations will be met, and that the public will be safe. Specifically, the county saw this improvement in substance abuse offenses among adults, poverty among Neah-Kah-Nie school children, and overall crime. These are encouraging to see. Nice work, Tillamook County!

Between 2009 and 2014 only one of the Health & Human Service indicators went from being on target to being below target, and it related to the goal for residents to have

access to affordable health care. In this time, there was a decline in the number of senior care facility beds per capita in the county; thus reducing access to a long-term health care option for this population.

Finally, between the 2009 and 2014 assessment periods there were some persistent problem areas within the Health & Human Services arena. Most of the indicators related to health care access and residents' basic needs being met either did not change or worsened, meaning that the indicators stayed below targets or got pulled farther from their targets. Partially, these findings are due to the time period of assessment – before the Affordable Care Act went into full implementation and just on the heels of the Great Recession. There may also be other, more localized explanations as well. It will be important to keep tracking change in these indicators to see how these larger factors affect their levels in the future, but also to see how local actions are also affecting them.

Overall, the indicator assessment findings show that in order to realize improvement in the area of Health & Human Services, issues related to improving access to affordable local health care will need to be addressed. In addition, it will be important to focus on improving the opportunities for low-income residents to exit poverty, as poverty continues to grow in many parts of the county. Other issues to pay attention to, as they've worsened in the period but not yet gotten out of hand, relate to health outcomes of residents.

Distance Traveled for Health Care

Measure: The percentage of Tillamook County adult permanent residents who saw a health care provider in the last year and saw only health care providers inside the county

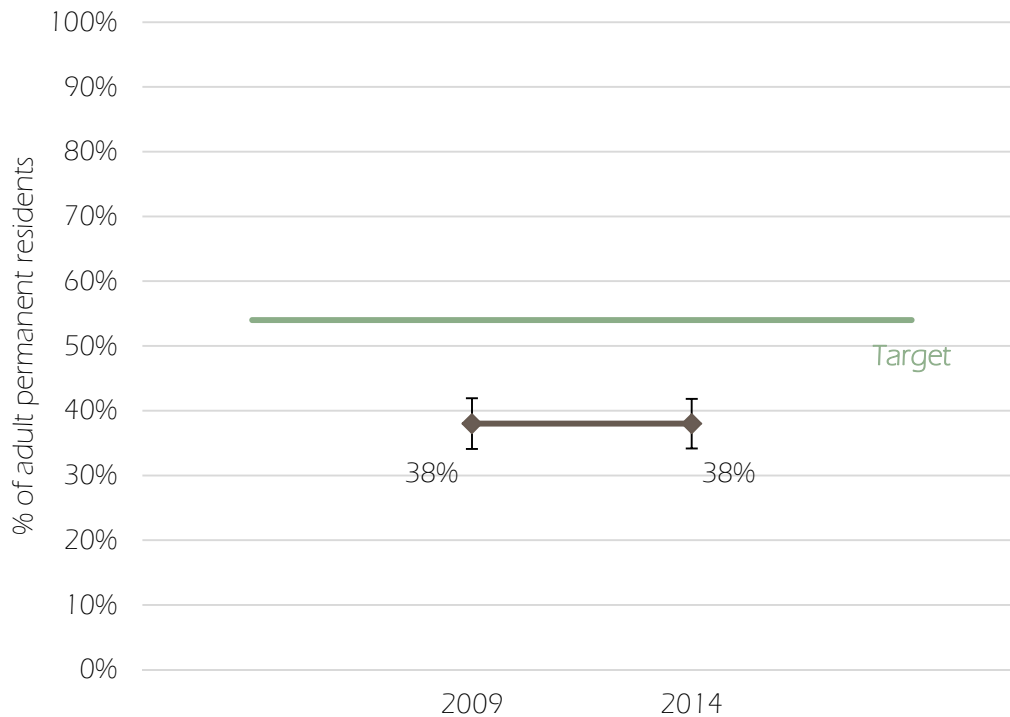
Assessment:

Below Target



No Change

The percentage of adult permanent residents who saw exclusively Tillamook County health care providers did not change from 38% between 2009 and 2014. In 2014 the percentage was still below the target of 54%. The margin of error bars around each estimate in the chart below show that we can be 90% confident that the true population value lies somewhere between 34% and 42% in 2014.



Source: 2009 & 2014 Vital Tillamook Indicator Project Survey

Distance Traveled for Health Care

Measurement Methods

In order to measure this indicator, we relied on data from the 2009 and 2014 VTIP surveys (See Appendix 1 for survey methodology). On the survey, respondents were asked about seeing twelve health care provider types in the last twelve months. If a respondent had visited one type of provider he or she was then asked if that provider was located inside or outside Tillamook County.

To create a measure of health care utilization within the county, for each respondent we added up the number of health care providers they saw inside Tillamook County and divided that sum by the total number of health care providers seen in the last year. This figure corresponds to the proportion of health care providers seen within Tillamook County for each individual. For example, for a respondent that saw only a general practitioner and a dentist over the last year, and no other provider types, if she saw both of these practitioners in Tillamook County then the calculation would show that 100% of the provider types she saw over the last year were in Tillamook County. If, however, this person saw the dentist in Tillamook County and the general practitioner in Clatsop County then the calculation would indicate that 50% of the visits made were in Tillamook County. Calculating this proportion across all respondents and then examining the number of people who saw providers 100% of the time in Tillamook County revealed that about

38% of adult permanent residents, who visited a health care provider in the prior 12 months, had done so 100% of the time within the county.

Why This Indicator Matters

Access to health care is a function of many things, including the physical availability of health care services close to those who need care. Through the “distance traveled for health care” indicator, we hope to gauge the extent to which Tillamook County residents indeed feel that the care they need is close to them. At the core of this indicator is the concept that residents should be able to access the health care they need within the county boundaries. This idea reflects the value placed on bolstering the Tillamook County economy (by reducing the number of local dollars being spent on health care in another county) and the value placed on making health care accessible to residents of the county.

Indicator Targets

The goal for this indicator is for at least 54% of adult permanent county residents to see health care providers within Tillamook County for all of their health care needs. Ideally, increases in this indicator will be driven by declines in the number of people needing to travel outside the county to find certain types of practitioners and declines in the number of residents who perceive the quality of care to be higher outside the county.

Delay of Health Care

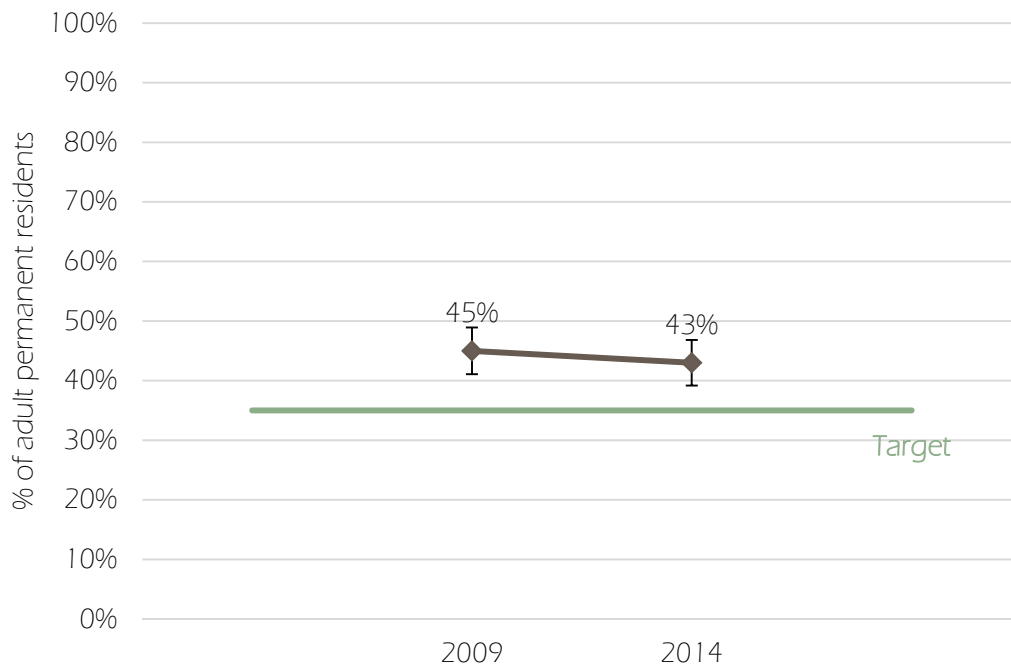
Measure: The percentage of Tillamook County adult permanent residents who delayed care in the last year due to cost, quality, or availability

Assessment:

Below Target & **No Change**

The percentage of adult permanent residents who delayed receiving health care due to cost, quality, or availability declined slightly from 45% to 43%, but the margins of error indicate this change was not statistically significant. In 2014, the percentage was still higher than the target of 35% or less.

The margin of error bars in the chart below mean that we can be 90% sure that the true value in the population lies somewhere within a range around the estimated percentages. For 2014, the margin of error indicates that we can be 90% sure that the true percentage of adults who delayed health care due to cost, quality, or availability lies between 38% and 48%. In 2009, the true percentage lay somewhere between 41% and 49%. Given these overlapping margins of error, there is a chance that the true values in these two time periods were equal. This means that there was not a statistically significant difference between the estimates at the two times and the 2014 estimate is still higher than the target goal for this indicator.



Source: 2009 & 2014 Vital Tillamook Indicator Project Survey

Delay of Health Care

Measurement Methods

Data about the delay of health care come from the 2009 and 2014 VTIP surveys. Survey respondents were asked if they had delayed getting health care in the last 12 months because:

- They couldn't afford the care [they] needed
- The type of health care provider [they] needed (e.g., specialist or insurance network provider) was located too far away
- They didn't have transportation
- They were dissatisfied with the health care provider choices available locally
- They didn't have health insurance

While the survey solicited information about the health care delay behaviors of both seasonal and permanent county residents this indicator focuses on the health care behaviors of permanent residents only. The reason for this focus is due to the fact that the Tillamook County community can do little to improve health care access for those who do not live there.

Why This Indicator Matters

The ability of individuals to access health care is not only a function of distance, but also a function of affordability, access to transportation, and availability of particular providers. By gauging the extent to which adults in Tillamook County have limited their use of health care services due to location, satisfaction, and cost we note the severity of access problems among residents. This indicator reflects the value placed on making health care accessible to residents of the county.

Indicator Targets

The goal for this indicator is for 35% or less of the adult permanent resident population of Tillamook County to delay getting needed care from a health care professional.

Availability of Long-Term Care

Measure: The number of residential senior care facility beds per 1,000 Tillamook County residents, age 65+

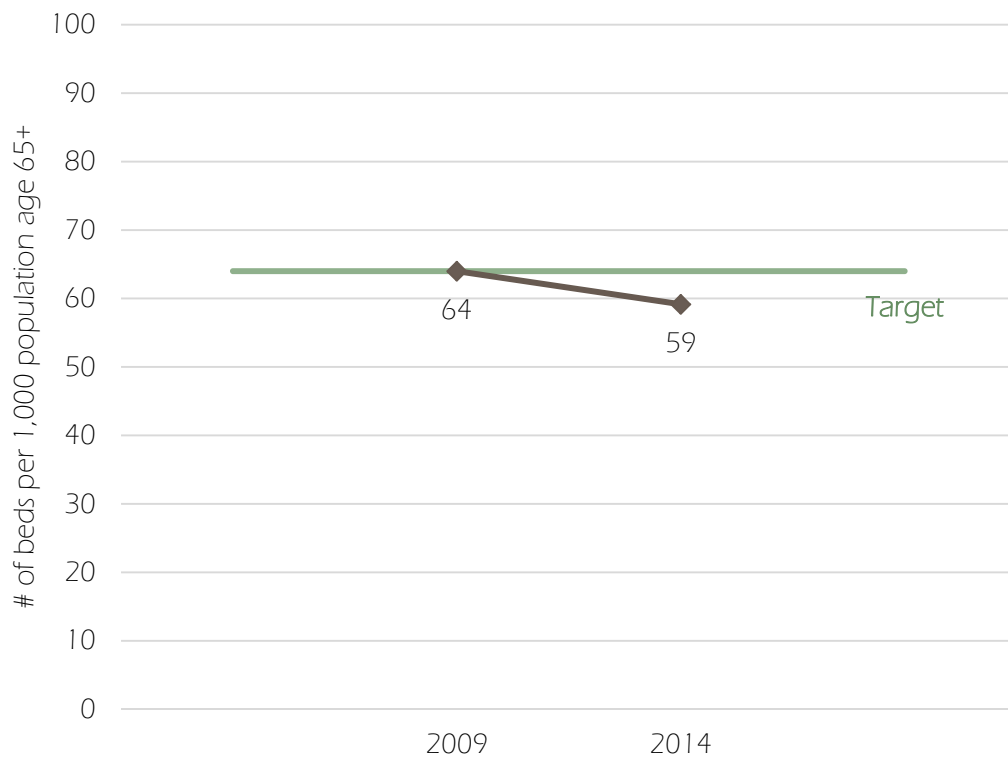
Assessment:

Below Target



Declining

The number of beds at long-term care facilities for seniors, per 1,000 older adults, declined by five beds between 2009 and 2014; from 64 beds per 1,000 to 59 beds per 1,000. This brought the county below its target goal of 64 beds per 1,000 adults age 65 and over.



Source: Local care facility contacts; Portland State University, Population Research Center

Availability of Long-Term Care

Measurement Methods

In order to gauge the capacity of Tillamook County to provide for the long-term health care needs of the older population, OSU faculty obtained live-in care capacity data for the 11 assisted living facilities in Tillamook County from facility.² Though the majority of these facilities do not have age requirements, and some house people age 55+, the capacity of these facilities was considered in light of the population age 65+ in 2000.

Data about the population age 65 and over came from the 2013 population estimates generated by the Portland State University, Population Research Center; the office that generates the official intercensal population numbers for the state.

Why This Indicator Matters

As a county with a large population of older adults, and a population trajectory that indicates growth in this age group, it is important for Tillamook County to have the capacity to meet the health care needs of the senior population. In order to gauge this capacity, the Vital Tillamook Indicator Project chose to track the availability of long-term care within the county.

Indicator Target

The goal for this indicator is for there to be no fewer than 64 senior assisted living beds per 1,000 people age 65 and over in Tillamook County.

² The assisted living facilities included in the 2009 assessment were: Nehalem Bay House, ABC Comfort Homes/Garibaldi Home by the Bay, Five Rivers Assisted Living & Retirement Community, Kilchis House, Nehalem Valley Care Center, Country Haven Estates, Pleasant Valley Adult Foster Home, Lees Manor, Miami River Inn Elder Care, Above the Valley, and a private individual who offers assisted living care.

The assisted living facilities included in the 2014 assessment were: Wayne Manor, Sunset Retreat, Nehalem Bay House, Five Rivers Assisted Living & Retirement Community, Kilchis House, Nehalem Valley Care Center, Country Haven Estates, Miami River Inn Elder Care, Above the Valley, and a private individual who offers assisted living care.

Health Outcomes

Measure 1: The percentage of 8th graders who are obese (at or above the 95th percentile of Body Mass Index (BMI) for their age group)

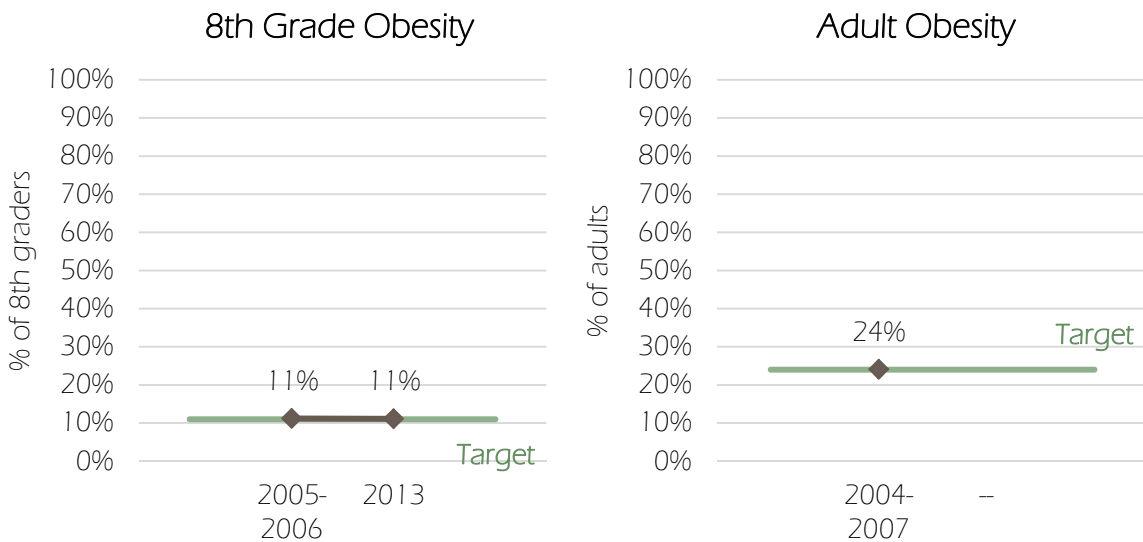
Measure 2: The percentage of adults who are obese (having a Body Mass Index (BMI) greater than 30 (age-adjusted))

Assessment:

Assessment: No 2014 Data

On Target & No Change

The percentage of 8th graders who were obese stayed stable at 11%, between the 2005-06 and 2013 time periods, which was on target with the goal of 11% or less. Adult obesity data were not available for this 2014 assessment, so it is not clear how obesity has changed among this population.



Sources: Oregon Health Authority, Public Health Division, Oregon Healthy Teens Survey;

Health Outcomes

Measure 3: The percentage of 8th graders who reported smoking tobacco on any day in the past 30 days

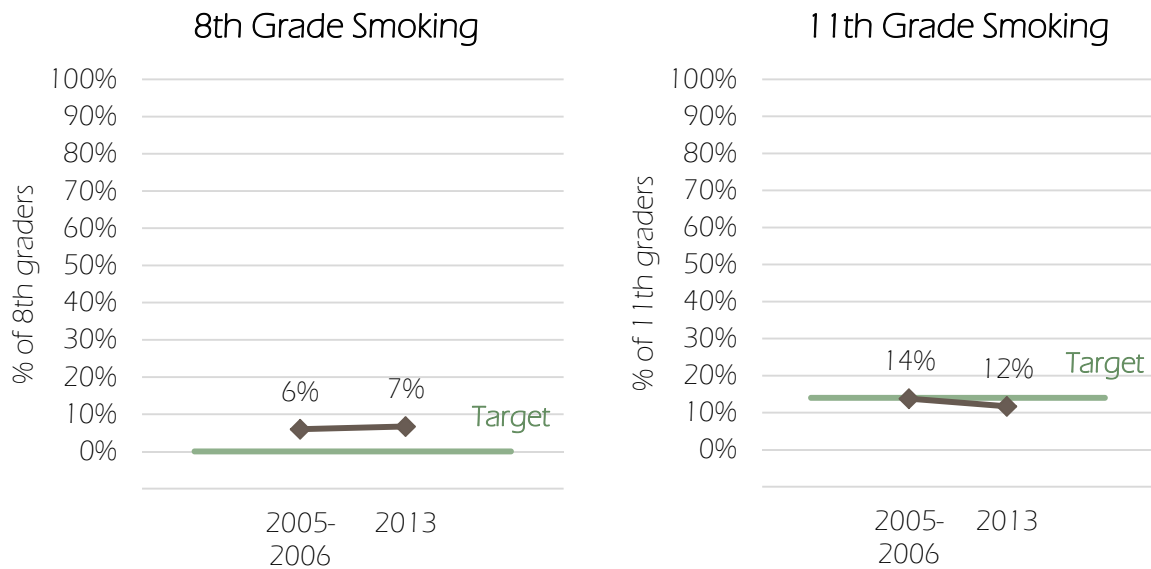
Measure 4: The percentage of 11th graders who reported smoking tobacco on any day in the past 30 days

Assessment:

Assessment:

Below Target
&
Declining
On Target
&
Improving

Between the 2005-06 period and 2013, the percentage of 8th graders who smoked increased slightly from 6% to 7%, while the percentage of 11th graders who smoked declined slightly from 14% to 12%. In 2013, 8th graders were not meeting the target of 0% smoking, but 11th graders were meeting the target of less than 14% smoking.



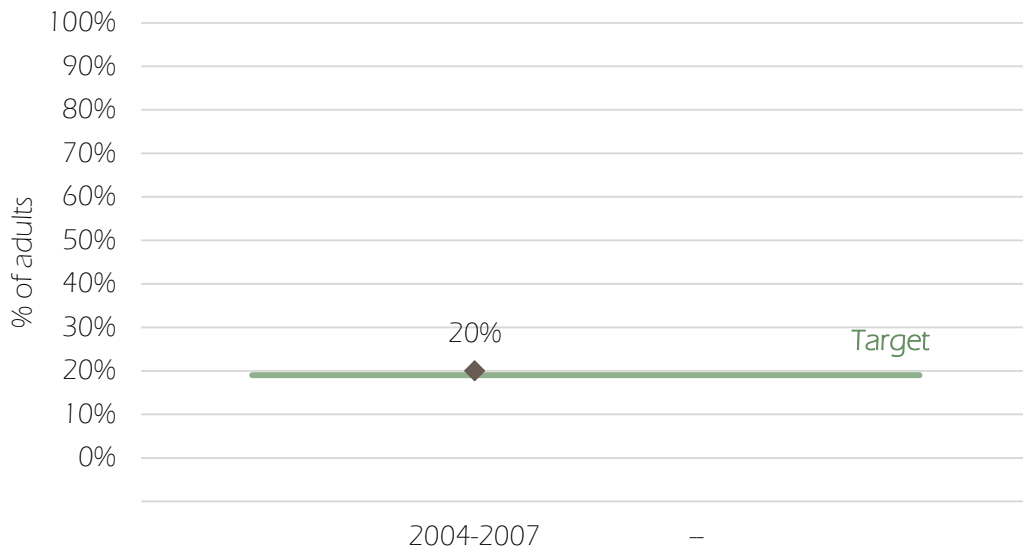
Source: Oregon Health Authority, Public Health Division, Oregon Healthy Teens Survey

Health Outcomes

Measure 5: The percentage of adults who smoked sometimes or every day (age-adjusted)

Assessment: No 2014 Data

Adult smoking data were not available for this 2014 assessment; therefore it is not clear how smoking behavior has changed among this population.



Source: Oregon Health Authority, Public Health Division, Behavioral Risk Factor Surveillance System

Health Outcomes

Measure 6: The ratio of Tillamook County's rate of Syphilis incidence (new cases) per 100,000 population to Oregon's rate

Measure 7: The ratio of Tillamook County's rate of Gonorrhea incidence (new cases) per 100,000 population to Oregon's rate

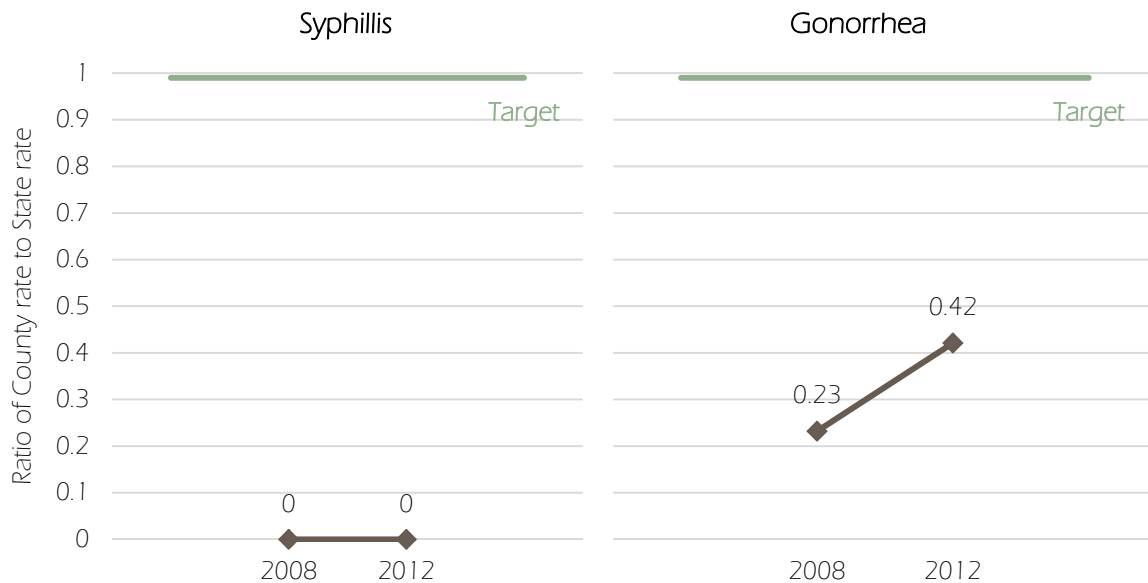
Assessment:

On Target & No Change

Assessment:

On Target & Declining

The ratio of Tillamook County Syphilis and Gonorrhea incidence rates to those in Oregon overall were less than 1 in 2008 and 2012, meaning that Tillamook County had lower Syphilis and Gonorrhea incidence rates than Oregon in both years. Between those two years, however, the incidence rate of Gonorrhea in the county relative to the state's rate increased over time. Gonorrhea incidence increased in Oregon from 33 to 38 cases per 100,000 population during the time, but incidence increased in Tillamook County from 7.7 to 16 per 100,000 population. Despite this increase in Gonorrhea, in 2012 Tillamook County was still on target with its goals to have lower rates than Oregon overall (a ratio of .99 and lower) for both diseases.



Source: Oregon Health Authority, Public Health Division

Health Outcomes

Measure 8: The ratio of Tillamook County's rate of Chlamydia incidence per 100,000 population to Oregon's rate

Measure 9: The ratio of Tillamook County's rate of HIV/AIDS prevalence per 100,000 population to Oregon's rate

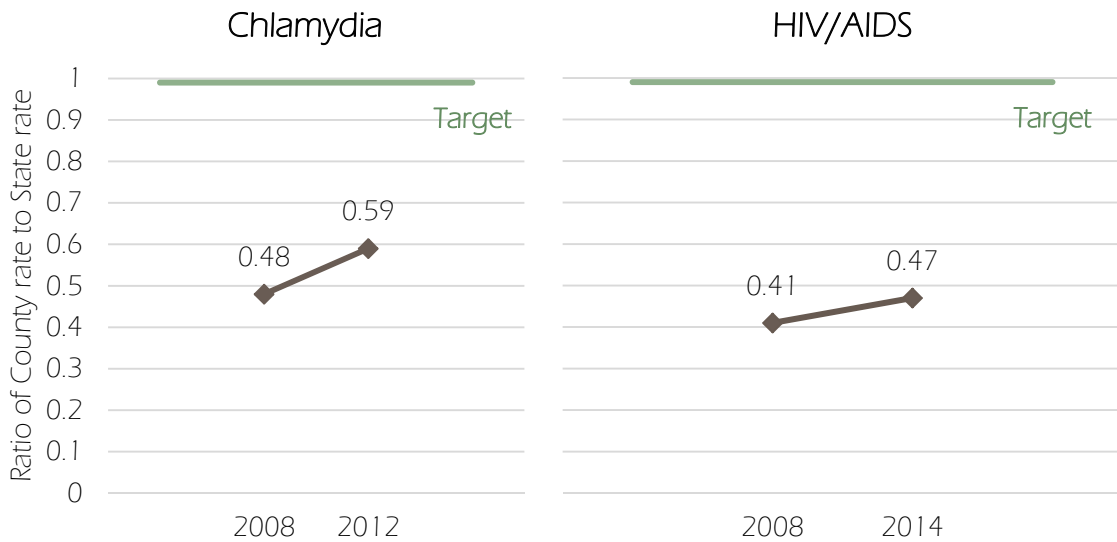
Assessment:

On Target & Declining

Assessment:

On Target & Declining

Though the ratio of Tillamook County's rate of Chlamydia and HIV/AIDS to the states' continued to be well within the target of less than 1, between 2008 and 2012 Chlamydia incidence in Tillamook County has gotten closer to the state's rate and between 2008 and 2014 the HIV/AIDS prevalence rate has gotten closer to the state's rate. Chlamydia incidence increased in Tillamook County from 138 to 206 per 100,000 and HIV/AIDS prevalence increased slightly from 52 to 55 per 100,000.



Source: Oregon Health Authority, Public Health Division

Health Outcomes

Measurement Methods

Obesity data came from two sources: the Oregon Healthy Teens Survey, for 8th grade statistics, and the Behavioral Risk Factor Surveillance System, for adult statistics. Both surveys gather data from a sample of the respective populations, therefore may suffer from sampling and non-sampling error.

Smoking data came from the same surveys, though in addition to eighth graders and adults we included data from eleventh graders.

Information about the incidence of sexually transmitted diseases and the prevalence of HIV/AIDS came from the Oregon Department of Human Services, the Public Health Division. The Public Health Division receives disease incidence data from county public health offices, who receive reports from local doctors. All doctors are required to report cases they diagnose, without identifying information about the patient (thus preserving the patient's rights to confidentiality). HIV/AIDS data correspond to the number of known individuals living with HIV/AIDS, as of June 30 of the year.

Why This Indicator Matters

An element of the Tillamook County Strategic Vision relates to a desire to promote healthy lifestyles among residents. While assessing the number of health promotion activities in the county would be one way of measuring this goal, the Indicator Project group felt that measuring health outcomes would be a more appropriate way to assess the extent to which residents live healthy lifestyles.

The health outcomes the group chose to track fell along three dimensions, namely obesity, smoking, and sexually transmitted disease.

Indicator Target

The goal for this indicator is for Tillamook County rates of obesity and smoking to be generally equal to or less than those observed in the county in 2008, but that among eighth graders the smoking rate should be very close to zero percent. With respect to disease prevalence and incidence, the goal is for the ratio of Tillamook County rates to the state rates to be equal to or less than one.

Substance Abuse Crime

Measure 1: The number of reported drug offenses per 100,000 population

Measure 2: The number of reported DUII offenses (driving under the influence of intoxicants) per 100,000 population

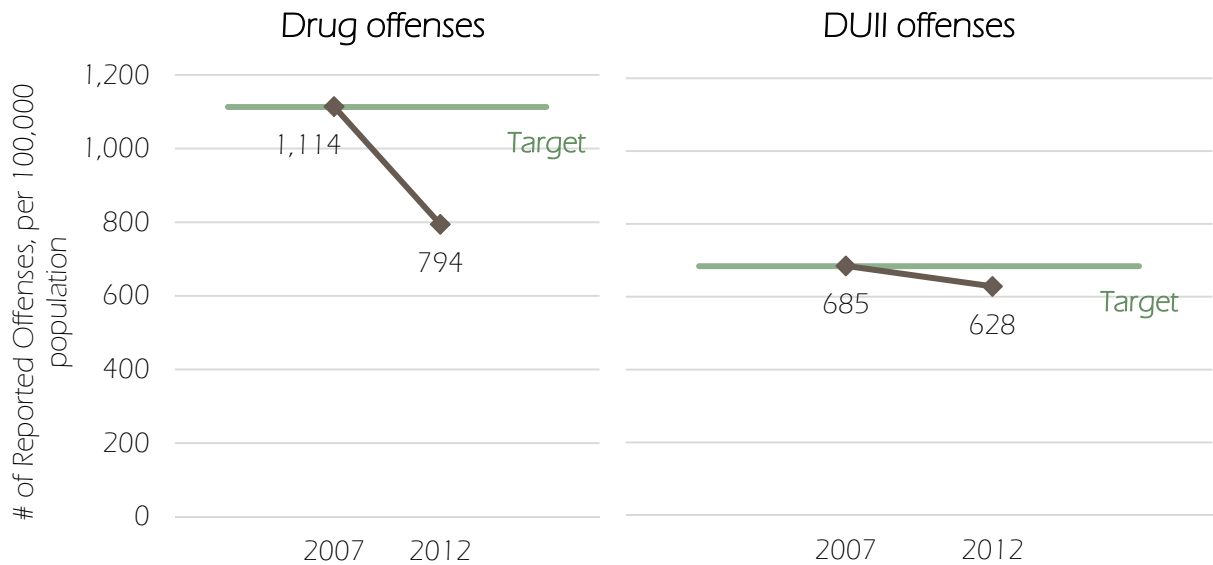
Assessment:

On Target & **Improving**

Assessment:

On Target & **Improving**

The rates of both drug and DUII offenses declined between 2007 and 2012, bringing them in line with the goals for the county of having rates lower than those observed in 2007.



Source: Oregon Criminal Justice Commission

Substance Abuse Crime

Measurement Methods

Substance abuse crime data come from the Oregon Criminal Justice Commission, and represent criminal offenses, not arrests or convictions. Some of these reported offenses may have led to arrests and subsequent convictions, but others may not have.

Why This Indicator Matters

Substance abuse is a critical concern for many communities, and Tillamook County is no exception. One goal of the Strategic Vision is to reduce the prevalence of substance abuse in Tillamook County. Given the difficulty of measuring the extent of substance abuse in the county, we must use a proxy indicator, namely the incidence of substance abuse related criminal offenses.

Indicator Targets

The goal for this indicator is for the rate of reported substance abuse crimes to be below 2007 levels. In other words, the goal is for the reported drug crime offense rate to be less than 1,114 per 100,000 people and for the reported DUII offense rate to be less than 684 per 100,000 people.

Language Services in Public Arenas

Another goal expressed in the Tillamook County Strategic Vision is for underrepresented populations to have access to the services they need. One way of gauging the attainment of this goal is to assess the extent to which people for whom English is not their first language can access services in their native tongue.

Neither in 2009 nor in 2014 did the project team have the capacity to interview staff at all of the public service agencies in Tillamook County. It is apparent that if this indicator is to remain, that some form of interview would need to be developed and administered to a clear and targeted group of public service agency personnel. The goal of the survey would be to ascertain the number of staff or volunteers in each agency who can serve as Spanish bilingual/bi-cultural interpreters.

Poverty

Measure 1: The percentage of children age 0-18 in poverty

Measure 2: The percentage of Tillamook County families in poverty

Assessment:

Below Target



Declining

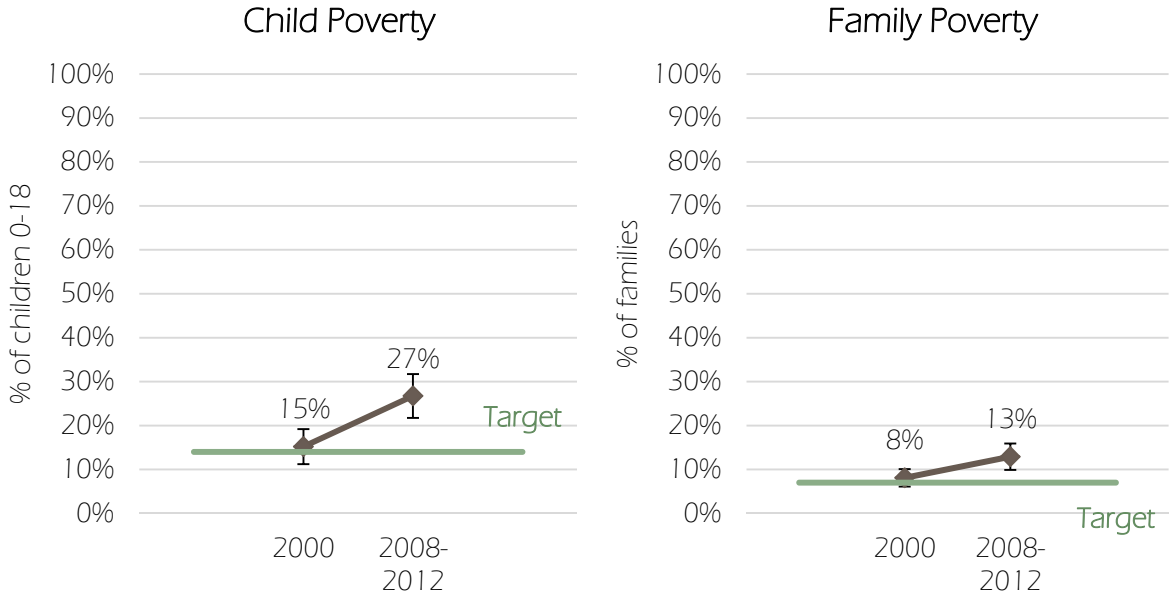
Assessment:

Below Target



Declining

The percentages of Tillamook County children and families in poverty increased significantly between 2000 and the 2008-2012 period. Child poverty and family poverty nearly doubled between the two times. Comparison of the margins of error around the estimates in the chart below, reveals that we can be 90% sure that the true population values of poverty between the two time periods, for both poverty estimates, were statistically different. This means that in the 2008-2012 period child poverty had exceeded the target of less than 15%, and family poverty had exceeded the target of less than 8%.



Source: US Census Bureau, 2000 census and 2008-12 American Community Survey

Poverty

Measure 3: The percentage of Tillamook County adults (18+) in poverty

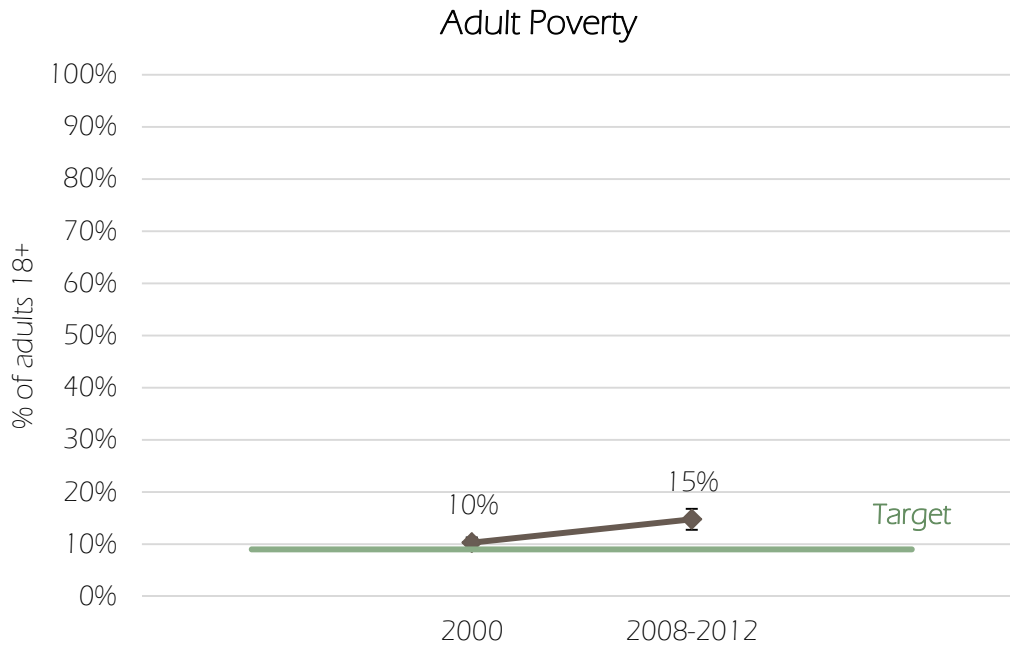
Assessment:

Below Target



Declining

Between 2000 and the 2008-2012 period, adults in poverty increased by five percentage points from 10% to 15%. By the 2008-12 period, the adult poverty rate had exceeded the target of less than 10%. Comparison of the margins of error around each year's estimate shows that the differences were statistically significant – there was no overlap in the margins of error.



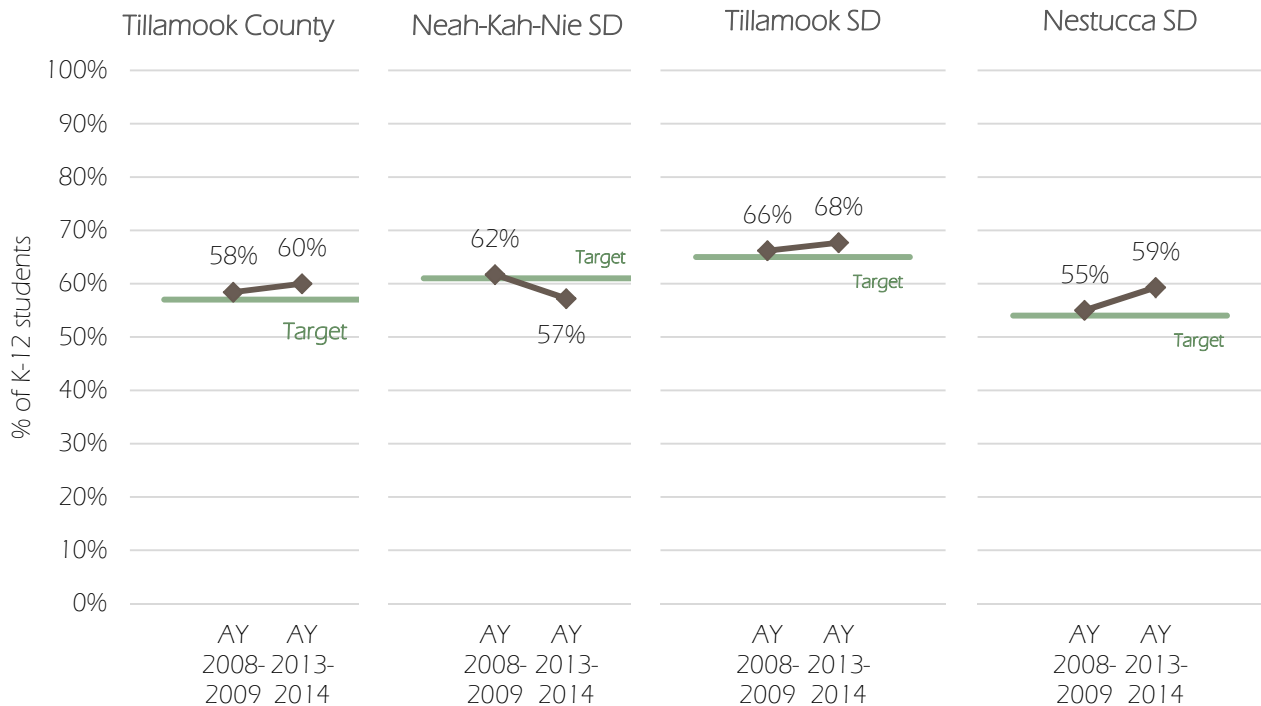
Source: US Census Bureau, 2000 census and 2008-12 American Community Survey

Poverty

Measures 4-7: The percentage of students in Tillamook County and each school district eligible for the Free & Reduced (priced) Lunch program



Throughout the County and in all school districts except for Neah-Kah-Nie, the percentage of students eligible for the Free & Reduced Lunch program increased between the 2008-09 and 2013-12 academic years. Except for Neah-Kah-Nie, all districts and the county overall were not meeting their targets in 2013-14.



Source: OR Department of Education

Poverty

Measurement Methods

Four of the poverty statistics used here came from the 2000 long form of the US Census and the 2008-2012 American Community Survey. Both surveys are administered by the US Census Bureau to a sample of the population. The long form was distributed to about one in six households, while the American Community Survey is distributed to about one in eight households. Because the data come from a sample, they suffer from sampling and non-sampling error. The margins of error estimate the extent of the sampling error. The margins of error indicate that we can be 90% confident that the true population values of the statistics fall somewhere within the ranges of the error.

In addition to using the poverty estimate data from the US Census Bureau, eligibility of youth for the Free & Reduced Lunch Program was used as a measure of poverty in Tillamook County. In order to qualify for this program, families must demonstrate income eligibility. Children whose families earn income that falls below 130% of the federal poverty threshold qualify for free lunch and children whose families earn between 130% and 185% of the poverty threshold qualify for reduced price lunch. The advantage to using the proportion of students who are eligible

for this meal program is that data are updated annually. The disadvantage of using this statistic to estimate child poverty is that it is a voluntary program; families that do not wish to enroll their children or determine their eligibility do not have to and thus some low-income children may not be included. Nevertheless, the eligibility rate can shed some light on the prevalence of low-income among children.

Why This Indicator Matters

A goal of the Tillamook County community is to “provide resources to meet the basic needs of all populations.” The extent of poverty is a clear indicator of the extent to which the basic needs of the population are being met.

Indicator Targets

The goal for this indicator is for all poverty figures to decline below the figures cited in the 2009 baseline indicator assessment. In addition, with respect to Free & Reduced Lunch Program eligibility rates, the goal is for these figures to decline from 2008-2009 levels, but to do so because of a decrease in need not because of an increase in stigma associated with participation.

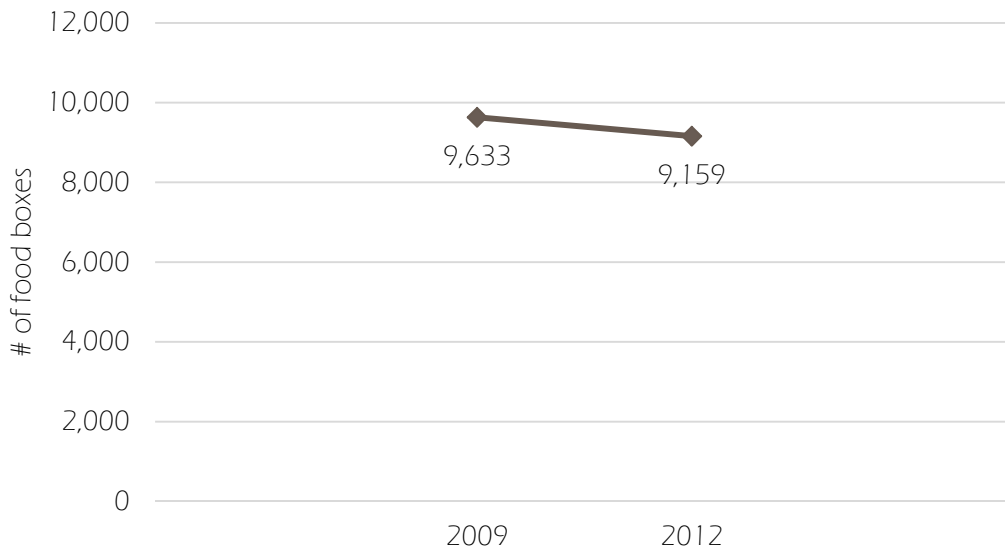
Low Cost Food Access

Measure: The number of food boxes distributed to Tillamook County residents by food pantries across the county

Assessment:

No Target & Improving

Between 2009 and 2012 the number of food boxes that were distributed through the food bank and pantry system declined slightly. There is no targeted number because the number is affected by too many factors, including the economy, social stigma, and the availability of food. Because it is not clear what may have caused the decline during this period, it is very difficult, without additional information, to determine if it is an improvement in the material condition of low-income residents or a decline in the availability of food. Assuming no overall decline in the availability of food, it appears that the decline in food box distribution signals a decline in demand – meaning that the need of low-income residents has lessened. Decreasing need would be an improvement from 2009; so the interpretation is of overall improvement in this indicator measure.



Sources: Oregon Food Bank; Partners for a Hunger-Free Oregon

Low Cost Food Access

Measurement Methods

Data about the number of food boxes distributed within the county come from the Oregon Food Bank and are reported by the Partners for a Hunger-Free Oregon.

Indicator Target

No target

Why This Indicator Matters

A goal of the Tillamook County community is to “provide resources to meet the basic needs of all populations.” Another indicator of the extent to which the basic needs of the population are being met is the access low-income families and individuals have to low cost food, and their demand for it. In order to measure this indicator, information about food pantry utilization was used. While utilization figures are not exact indicators of access or demand, they show that there are food resources in the community for low-income populations and they shed some light on the demand for low cost food within the community.

Workforce Housing

Measure 1: The percentage of low-income renters, earning less than the county median income, who were housing cost burdened (spending 30% or more of their income on housing)

Measure 2: The percentage of low-income homeowners, earning less than the county median income, who were housing cost burdened (spending 30% or more of their income on housing)

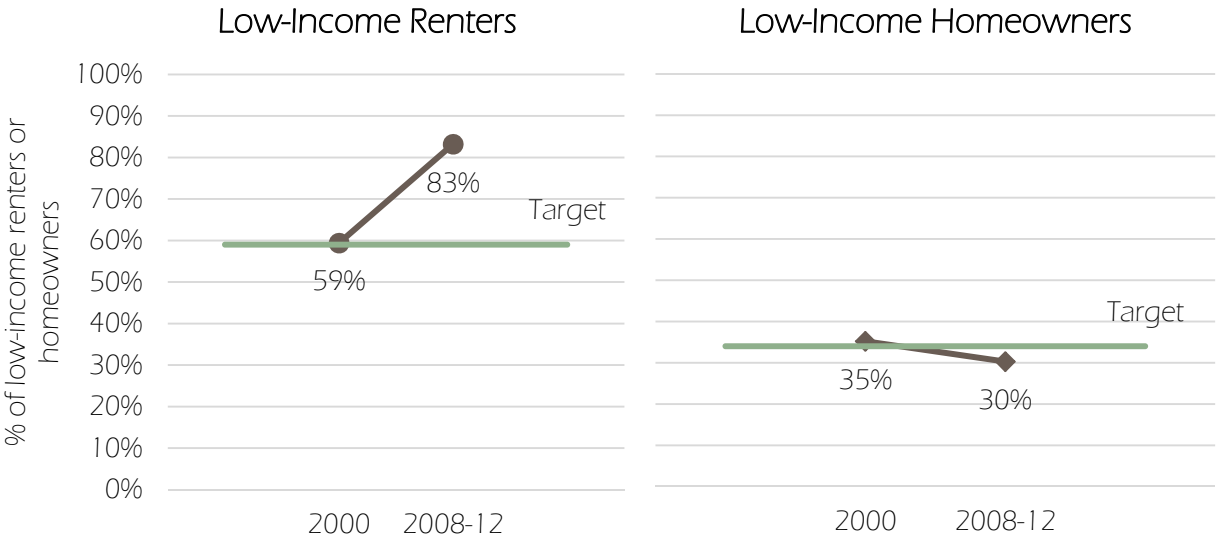
Assessment:

Below Target & **Declining**

Assessment:

On Target & **Improving**

Since 2000, housing cost burden among low-income renters in Tillamook County has gotten much worse, but it has improved among low-income homeowners. By the 2008-2012 period, housing cost burden among renters had reached 83%, meaning that 83% of low-income renters were spending 30% or more of their income on housing; which was worse than (or below) the target of 59%. Among low-income homeowners, by the 2008-2012 period approximately 30% were housing cost burdened, which was better than the target of 34%.



Source: US Census Bureau

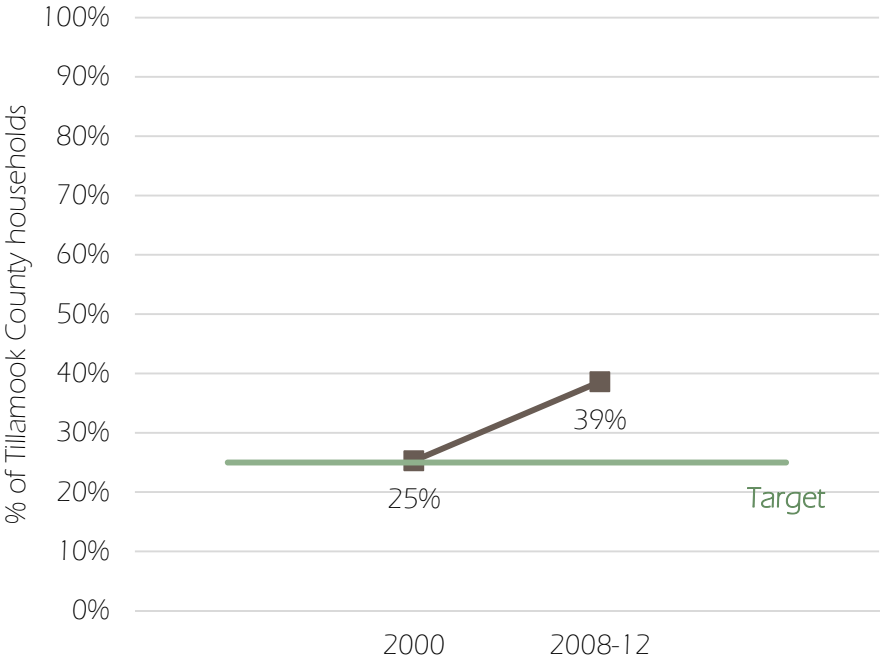
Workforce Housing

Measure 3: The percentage of all households who were housing cost burdened (spending 30% or more of their income on housing)

Assessment:

Below Target & **Declining**

Since 2000, housing cost burden among all households in Tillamook County has increased from 25% of households paying 30% or more of their income on housing to approximately 39% of households, during the 2008-12 period. The prevalence of housing cost burden among all county households now exceeds the target of fewer than 25%.



Source: US Census Bureau

Workforce Housing

Measurement Methods

Data about the percentage of low-income renters and owners who were housing cost burdened (spending 30% or more of their income on housing) and the percentage of all households that were housing cost burdened came from the long form of the decennial census in 2000 and from the 2008-2012 American Community Survey. Both the decennial census and the American Community Survey are administered by the US Census Bureau, and come from a sample of the population. Therefore, both estimates suffer from sampling and non-sampling error. The data are weighted, however, to represent the entire population of the county.

In order to calculate the percentage of low-income households that were housing cost burdened in 2008-2012 we had to determine which households qualified as low-income. To do so, we used median income as the cut-off threshold, which is standard practice among housing scholars and consistent with the methodology used in 2000. The median income in Tillamook County during the 2008-12 period was \$36,765, but unfortunately the data from the Census Bureau would not allow that break in the household data to be made. For this reason, instead of the exact

median income threshold, we used \$35,000. So the 2008-12 estimate of low-income housing cost burden represents the percentage of households earning less than \$35,000 and paying 30% or more on rent or a mortgage.

In 2000, the percentages of low-income renters and owners who were housing cost burdened were calculated by the Oregon Progress Board, using exact median income values as thresholds. Therefore, the 2000 and 2008-12 estimates differ slightly in the households being represented as low-income.

Why This Indicator Matters

An explicit goal of the county is to promote and develop affordable workforce housing. In order to measure the prevalence of affordable housing we relied on the rate of housing cost-burden, a rate commonly used to assess area housing affordability.

Indicator Targets

The goal for this indicator is for the prevalence of housing cost burden to decline from the rates observed in 2000. In the future, fewer than 59% of low-income renters, fewer than 35% of low-income owners, and fewer than 25% of all households should be housing cost burdened.

Index Crime Rate

Measure: The number of reported index crime offenses per 100,000 population

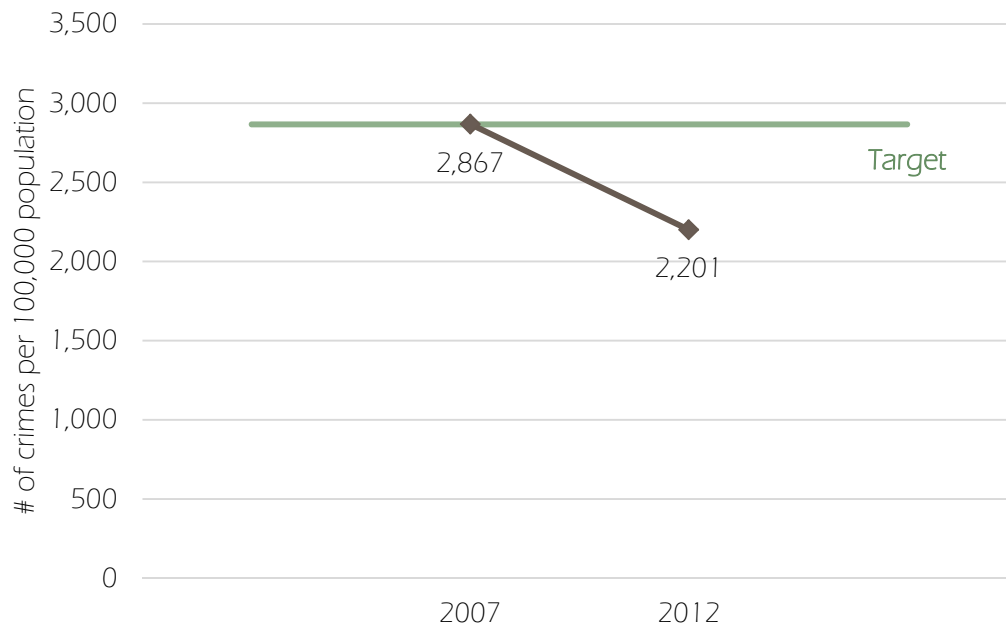
Assessment:

On Target



Improving

Between 2007 and 2012 the index crime rate declined slightly from 2,867 offenses per 100,000 Tillamook County residents to 2,201 offenses per 100,000 county residents. This decline brought the county in line with its goal of fewer than 2,867 index crime offenses per 100,000 residents.



Source: Oregon Criminal Justice Commission

Index Crime Rate

Measurement Methods

Index crime statistics come from the Oregon Criminal Justice Commission (OCJC). According to the OCJC, index crimes correspond to person index crimes (willful murder, aggravated assault, robbery and forcible rape) and property index crimes (larceny, burglary, motor vehicle theft and arson). Index offenses are general categories, and generally cover more than one crime – or degrees of the same crime – under Oregon law. These statistics represent criminal offenses, not arrests or convictions. Some of these reported offenses may have led to arrests and subsequent convictions, but others may not have.

Why This Indicator Matters

Another indicator of vitality within Tillamook County is the extent of general crime. The extent of crime relates to the larger concept of public safety, which was an area identified by residents as a key characteristic of vitality that was not explicitly addressed in the Strategic Vision.

Indicator Target

The goal for this indicator is for the Index Crime Rate to be lower than 2,867 crimes per 100,000 Tillamook County residents.

Emergency Services Coverage

Measure: Average Response time of fire, police, and ambulance

Assessment: No 2014 Data

In 2009, six out of 16 emergency service providers reported their response times to this project. In 2014, only three responded to our requests for data. As a result it is impossible to assess change over time or the achievement of goals this year. Below are the response times that were reported for the 2009 assessment.

| Measure | Data | Year | Source |
|---|------|------|---------------------------------|
| Average Response time of fire, police, ambulance | 5.9 | 2008 | Personal Communication w/ staff |
| Average Response time: Rockaway Beach Police (in minutes) | 5.0 | 2008 | Rockaway Beach Police |
| Average Response time: Nehalem Fire Dept (in minutes) | 6.7 | 2008 | Nehalem Fire Dept |
| Average Response time: Rockaway Fire Dept (in minutes) | 7.0 | 2008 | Rockaway Fire Dept |
| Average Response time: Bay City Fire Dept (in minutes) | 5.0 | 2008 | Bay City Fire Dept |
| Average Response time: Netarts-Oceanside Fire (in minutes) | 5.5 | 2008 | Netarts-Oceanside Fire |
| Average Response time: Tillamook Fire District (in minutes) | 6.0 | 2008 | Tillamook Fire District |

Emergency Services Coverage

Measurement Methods

In order to measure the response time of emergency services, in 2009 OSU faculty members called and in 2014 Tillamook County Futures Council staff called the offices of the 16 emergency service providers: the Tillamook General Hospital, all of the fire departments, and the police departments. Of the 16 emergency services providers in the county, six responded to our calls in 2009 and only three responded in 2014.

Why This Indicator Matters

Public safety, though not explicitly mentioned in the Tillamook County Strategic Plan, was an issue that arose in community discussions about the vitality of the county. One aspect of public

safety that emerged as being particularly important was access to emergency services. Specifically, the coverage of emergency services throughout the county, as measured by the average response time was an indicator chosen to represent public safety; areas that are under-served will have longer response times.

Indicator Targets

The goal for this indicator is for the average response time of fire, police, and ambulance in Tillamook County to be less than six minutes. In addition, the variation of response times across all districts in the county should remain small. The maximum average response time for an emergency service should not exceed 7.5 minutes.

Conclusion

Tillamook County is a proactive community. It has a well-articulated and broad vision for its future. That vision makes it possible for decision makers and residents to prioritize actions, strategies, and investments of resources. The vision sets the stage for coordinated community effort because it tells decision makers exactly which goals the community at large thinks they should be aiming to achieve. But without tracking achievement of the vision's goals it is difficult to understand if and how community efforts are working. Without tracking achievement of the goals it would also be hard to tell if there are some aspects of the vision that are lagging behind or being grandly achieved, or if the vision is being achieved at all. This is where the Vital Tillamook Indicator Project comes in. The indicator project tracks achievement of Tillamook County's vision.

In 2009, indicators of Tillamook County's vision were developed, collected, and shared with the community. In 2014, data for those indicators were collected again, to see if and how achievement of the county's vision has changed. Data across these two time points can give only limited insight into the overarching trends within and facing the county, but it can give the community an idea about how things have changed over the last five years. Most importantly, the updated assessment of the indicators can give decision makers and residents more up to date information about areas of the vision that are lagging behind and realizing success. That information can be immediately put to use in the allocation of resources and in the pursuit of further information to help decision makers.

The assessment of 2014 indicator data showed that of the 144 measures used to indicate the goals of the Tillamook County vision, 56 were on target, 53 were below target, and for various reasons 35 indicators had no target at all – making it impossible to tell if they were at a desirable level. About half of the indicators that were below target in 2014 related to goals for the economy, society, and culture of the county. Clearly, some effort should be made to address those aspects of life in Tillamook County. The assessment also revealed, however, that some additional investment into the natural environment would be wise, as almost all the county's natural environment indicators failed to meet desired levels in 2014.

Some of the 53 indicators that were below target in 2014 were also below target in 2009, while others were new to this status in 2014. There were 17 indicators that were below target in 2009, and their values got worse by the 2014 assessment. These indicators related to employment in targeted industries, income and poverty, high school dropout, and stream water quality. And there were eight indicators that went from on target in 2009 to below target in 2014. These indicators were diverse, and related to natural resources, particularly salmon, but also state road condition, arts and cultural establishments, unemployment among young adults, and the availability of long-term care for older adults in the county. Different types of approaches will be needed to improve each indicator, and those that have been persistently below target may require deeper, more innovative, and more systematic approaches than those that only recently

degraded. Effort should be made to understand the root causes for the under-performance of all indicators, so that the right strategies can be used to improve them.

The 2014 assessment also revealed clear areas of strength in the county. In particular, in 2014, the county did a great job meeting the goals for its growth and development. This area of the vision even saw improvement over the 2009 assessment; meaning the efforts or changes related to growth and development in the county that occurred between 2009 and 2014 were successful. The assessment also revealed that there is strength in the behaviors of young people in the county, particularly in their ability to avoid self-destructive behaviors. Finally, there were 15 indicators that were below target in 2009, but improved so much over the last five years that they managed to be on target for the 2014 assessment. These indicators related to the reduction of unhealthy and destructive behaviors of adults and teens, community infrastructure and growth, public timber harvest, and the number of opportunities for youth and adults to develop their employable skills. It will be important to learn from and continue supporting success in these aspects of the vision.

There are aspects of the Tillamook County vision over which local decision makers have easy control and there are other aspects of the vision over which larger political, economic, environmental, and social systems have more control. As decision makers and residents examine the indicator data and explore ways to continue realizing success in some areas and improve the outcomes of other areas it will be important to identify the local and external factors and systems that affect the aspects of life in Tillamook County that residents hold most dear. While this indicator report does not provide those insights, it should inspire community members to continue exploring these types of issues and working toward their goals.

Appendix 1 – Vital Tillamook Indicator Project Survey Methods

In the summer of 2009 and spring of 2014, the Oregon State University Vital Tillamook Indicator Project team administered a mail survey to a sample of adult Tillamook County residents and property owners. Combining data from the US census and data from the Tillamook County Assessor's office, we estimated that the target population of adult Tillamook County residents and property owners was 26,660 in 2009 and 32,900 in 2014. In order to be 95% confident that, with repeated sample draws from the population, the (true) population statistics fall within a range of plus or minus 4 percentage points of our sample estimates we needed a sample of about 590 Tillamook County adults to complete the survey. Given the mail format of the survey administration, a 40% response rate was expected. Therefore, in order to get 590 completed surveys the team elected to use a stratified, unequal probability, random sampling strategy to select 1500 absentee-owner households and permanent residents to receive the survey. The sample was stratified based on residency, age, and location.

At the conclusion of the survey distribution period, in 2009 OSU received 696 surveys from Tillamook County residents and absentee homeowners, yielding a response rate of 46%. Given the total number of surveys, overall, we can be 95% confident that, with repeated sample draws from the population, the (true) population statistics fall within a range of plus or minus 3.7 percentage points of our sample estimates. In 2014, the response rate was slightly lower. By the conclusion of the survey period in 2014 OSU received 567 surveys, yielding a response rate of 38%. Given the total number of surveys, in 2014 the margin of error around each sample estimate is plus or minus 5 percentage points.

The Vital Tillamook Indicator Project Survey data come from a sample of Tillamook County adult residents and property owners and therefore not the entire population. The sample data are used, however, to create statistical estimates for the entire adult Tillamook County resident and absentee owner population. Given the intent to use these sample data as estimates of the total population, it was necessary to use statistical weighting procedures that reflect the way the sample was drawn, ensure the data represent the target population, and correct for non-response of individuals.

As with all sample surveys, the VTIP survey data suffers, to some degree, from sampling error. Some members of the adult, Tillamook County, resident population were not included in the list of voters we used to draw our sample, and some members of the Tillamook County absentee owner population may not have been included in the list of properties we used, each of which would result in sample bias. Other members of the target population may have been given a chance to participate, but simply chose not to, and they may differ in important ways from those people who did participate. Due to this potential error in the VTIP survey, statistics that are calculated using these data may not give us an accurate estimate of the true population statistics. For these reasons, it is important and necessary for the analysis of these survey data to include the application of sampling weights. Sampling weights can account for the under-representation of certain elements of the population due to these errors in the sample. OSU constructed

weights to account for the sampling design and survey non-response. These weights were then applied to individual respondents in order to make each represent a targeted number of adult Tillamook County residents and property owners. This weighting procedure brings the VTIP survey sample closer in line with the true population.

The full description of the methods used to weight and analyze the VTIP survey data is included in the VTIP Survey Methods Report. To request a copy of this full methodology report, please contact Lena Etuk at Oregon State University (lana.etuk@oregonstate.edu) or Jane Dunkin at the Tillamook County Futures Council (jane@tillamookfutures.org).