

Health Benefits Estimates for Oregonians from Their Outdoor Recreation Participation in Oregon

2025-2029 Oregon Statewide Comprehensive Outdoor Recreation Plan Supporting Documentation

FINAL REPORT

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Randall S. Rosenberger



Oregon State University
College of Forestry

Corvallis, OR 97331

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Executive Summary

Introduction

Outdoor recreation significantly contributes to the health of Oregonians by enabling them to engage in daily physical activity outside of their home, work, or other environments. This project estimates the health benefits obtained by Oregonians from their participation in 76 outdoor recreation activities in 2022. Daily physical activity, along with healthy eating and other behavioral choices, may decrease the risk of many chronic conditions such as heart disease, stroke, depression, dementia, diabetes, and several cancers (U.S. Department of Health and Human Services 2018). In 2021, 52% of Oregon adults were living with at least one chronic condition. One-fifth (20%) of all adult Oregonians were not physically active outside of work in 2021 (Oregon Health Authority 2023a). While physical activity recommendations focus on higher health impacts from moderate- to vigorous-intensity activities (less than 25% of adult Oregonians met this level in 2019 (Oregon Health Authority 2023a)), any amount of sustained physical activity results in health benefits. The greatest marginal health benefits from physical activity are derived by inactive people becoming active. Increasing Oregonians' physical activity may help reduce the estimated \$31.1 billion spent on health care in 2021 (Oregon Health Authority 2023b).

Methods

Health benefits from Oregonians participating in 76 outdoor recreation activities of low- to moderate- to vigorous-intensity are estimated by applying the Outdoor Recreation Health Impacts Estimator (OR Estimator) tool. This tool is built on the base of the Integrated Transport and Health Impact Model (ITHIM), which was calibrated to Oregon's county-specific health information and population distributions in the Transportation Options Health Impact Estimator (TO Estimator). We adapted the TO Estimator by integrating outdoor recreation participation data by urban / rural status from the 2023 Oregon Statewide Outdoor Recreation Survey and MET-values from the Ainsworth Compendium (Ainsworth et al. 2011).

ITHIM is a comprehensive health impact assessment model that uses comparative risk assessment to quantify the estimated change in life expectancy and quality of life for a population due to changes in active transportation participation. ITHIM's physical activity pathway estimates health effects based on quantified relationships (dose-response functions) between physical activity (i.e., walking and cycling active transportation) and chronic illnesses, such as cardiovascular disease, diabetes, and some cancers. These estimated health effects are then converted into monetary units via Cost of Illness (COI) savings function. These COI estimates include disease-specific direct treatment costs and lost productivity costs.

Results

Adult Oregonians engaged in 76 outdoor recreation activities on 1.27 billion user occasions over the past year. They also realized \$2.965 billion in COI savings associated with eight chronic illnesses affected by their physical activity levels in outdoor recreation (county-level estimates are reported in Appendix A). These cost savings accrue to health insurers, providers, and participants. COI savings is approximately 10% of total health care expenditures in the state in 2021. These estimates are conservative and underestimate the total health benefits derived from physical activity because they do not include impacts on other illnesses and diseases, avoided deaths, or other activities, along with the use of conservative modeling assumptions. Close-to-home non-motorized linear / trail-based activities (i.e., activities that occur on trails, paths, roads, streets, and sidewalks) account for the largest proportion of health benefits. Outdoor recreation activities including walking / jogging / bicycling and other non-motorized and E-motorized activities on streets / sidewalks / trails / paths account for 55% of total annual user occasions and 58% of total COI savings associated with Oregonians participating in 76 outdoor recreation activities of low- to vigorous-intensity.

The three outdoor recreation activities with the greatest number of annual user occasions include

- Walking on streets or sidewalks (358 million) in your community
- Walking on paved paths or natural trails (183 million), within your community (149 million) and outside your community (34 million)

- Nature immersion (e.g., relaxing, hanging out, escaping heat or noise) (79 million), within your community (59 million) and outside your community (20 million)

The three outdoor recreation activities with the largest COI savings per year include

- Walking on streets or sidewalks (\$615 million)
- Walking on paved paths or natural trails (\$554 million), within your community (\$408 million) and outside your community (\$146 million)
- Jogging or running on streets or sidewalks (\$149 million)

Trends

A comparison of health benefits estimates for a subset of similar activity types (i.e., only includes activities that were included in both the prior and this current SCORP analyses) adjusted for population growth and inflation was completed. The result is a 10% increase in health benefits beyond the effects of population growth and inflation for this subset of similar activities overall between the 2019-2023 SCORP and 2025-2029 SCORP analyses.

Introduction¹

Physical activity affects overall health of people and may reduce risk factors for numerous causes of mortality (U.S. Department of Health and Human Services 2018). In response to the growing health crisis, the U.S. Department of Health and Human Services published its Physical Activity Guidelines for Americans. The guidelines were based on a comprehensive report from the Physical Activity Guidelines Advisory Committee, made up of exercise science and public health experts. The guidelines included recommendations for aerobic and muscle strengthening activities. The Physical Activity Guidelines Advisory Committee found that 500 to 1,000 MET-minutes² per week (roughly equivalent to 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity activities) were required to receive substantial health benefits³ (U.S. Department of Health and Human Services 2018). Physical activities (aerobic, anaerobic, and flexibility movements) include recreating outdoors or indoors, doing work on the job or at home, commuting by walking or bicycling, and exercising at the gym or at home. However, any level of physical activity beyond sedentarism generates some health benefits, including low-intensity activities such as relaxing or picnicking in natural settings.

Physical activity may decrease the risk of many chronic illnesses such as heart disease, stroke, depression, dementia, diabetes, and several cancers (e.g., breast, colon, endometrial, esophageal, kidney, stomach, lung) (U.S. Department of Health and Human Services 2018). In 2014, these

¹ This report uses the methods and tools developed for estimating the 2019-2023 SCORP health benefits of Oregonians participation in outdoor recreation (Rosenberger and Dunn 2018). This report provides the same description of these methods and tools with updates for population demographics to 2020 U.S. Census, inflation, and Oregon residents' participation data derived from the 2023 Oregon Resident Outdoor Recreation Survey (Gorrell, Rosenberger, and Morse 2023).

² MET stands for metabolic equivalent task, where one MET is the typical energy expenditure of an individual at rest (1 kcal/kg/h). Activities are assigned MET values based upon how much energy they require to perform. METs are constants for activities and therefore are usually expressed as either MET-minutes or MET-hours. A MET-minute is a unit that describes the energy expenditure of a specific activity per minute. For example, walking at 3.0 mph requires 3.3 METs of energy expenditure and running at 6.0 mph is a 10 MET activity. Walking at 3.0 mph for 10 minutes would be expressed as 33 MET-minutes, whereas running at 6.0 mph for 10 minutes is 100 MET-minutes.

³ There are a variety of ways someone could meet the minimum guideline of 500 MET-minutes. For example, if someone walked their dog (MET value of 3) every day for 25 minutes they would accumulate 525 MET-minutes every week (Ainsworth, et al. 2011). It is important to note that while the 500 MET-minutes per week result in "substantial" health benefits, any amount of physical activity is beneficial and the largest health improvements are received by those who are moving away from being sedentary to any level of physical activity.

chronic conditions made up five of the top ten leading causes of death (Maizlish 2016). Daily physical activity provides multiple benefits to people beyond reducing risks of chronic illnesses, such as increased memory function and improved quality of sleep.

However, one-fifth (20%) of all adult Oregonians were not physically active outside of work in 2021 and less than 25% of adult Oregonians met the CDC's recommended physical activity levels in 2019 (Oregon Health Authority 2023a). This state of physical inactivity and its associated chronic illnesses is a public health concern, as well as an economic burden. In the U.S., 11.1% of aggregate health care expenditures can be attributed to insufficient physical activity and sedentarism (Carlson et al. 2015). Substantial cost of illness savings (or conversely, health benefits) could be realized through increased physical activity. Oregonians spent over \$31 billion on health care in 2021 (Oregon Health Authority 2023b).

This report provides estimates of the health benefits (i.e., Cost of Illness savings) associated with Oregonian's participation in outdoor recreation activities in 2022. Outdoor recreation participation data are provided by a statewide survey of Oregon residents as part of the 2025-2029 Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP). Cost of Illness savings are derived from the Outdoor Recreation Health Impacts Estimator tool. This report provides evidence that parks and recreation providers have an important role in supporting the health and wellbeing of Oregonians (Rosenberger, Bergerson, and Kline 2009).

Methods

Oregon SCORP Data

In preparation for the 2025-2029 Oregon SCORP, a statewide survey of Oregon residents regarding their 2022 outdoor recreation participation in Oregon was conducted, as well as their opinions about park and recreation management (Gorrell, Rosenberger, and Morse 2023). The sample design was developed to derive information at various scales including statewide, urban, suburban, and rural for the general population and for specific demographic groups.

Surveying Oregonians consisted of two samples: (1) a statewide random sample of 22,000 Oregon adult residents with addresses on file at the Oregon Department of Motor Vehicles

(DMV), including valid drivers licenses and state-ID cards, and (2) a panel sample of Oregon residents. The random mailed sample was 99.9% deliverable and received a total number of 2,480 responses (11.3% response rate). The panel sample was conducted through Qualtrics, using an existing database of individuals residing in Oregon who were previously recruited to participate in online research in exchange for financial compensation. Qualtrics was contracted to obtain a sample of 1,554 individuals, oversampling for individuals of minority racial and ethnic backgrounds to improve statistical reliability of their responses as subgroup--the final sample size was 1,577. The total number of responses after combining the samples was 4,057.

Based on previous SCORP outdoor recreation activity lists and recommendations by the SCORP advisory committee comprised of parks and recreation managers across Oregon, 76 recreation activities were identified as important recreation activity types. These activities were grouped into 11 categories, including 3 defined as ‘in your community’: Non-motorized and electric trail or related activities; Outdoor leisure and sporting activities; Nature study activities; and 8 ‘outside your community’: Non-motorized and electric trail or related activities; Outdoor leisure and sporting activities; Nature study activities; Motorized activities; Vehicle-based camping activities; Hunting and fishing activities; Non-motorized, water-based and beach activities; and Non-motorized, snow activities. The health benefits estimation analysis was applied to all 76 outdoor recreation activities ranging from low-intensity to vigorous-intensity, as compared with the 2017-2023 analysis that focused only on moderate-intensity to vigorous-intensity activities.

The Outdoor Recreation Health Impacts Estimator

The Outdoor Recreation Health Impacts Estimator (OR Estimator) tool was developed by modifying the Transportation Options Health Impact Estimator (TO Estimator) tool to include a suite of outdoor recreation activities in Oregon (Dunn 2018). Just as the TO Estimator is a modification of the underlying Integrated Transport and Health Impact Model (ITHIM), including input and output user pages and prompts that increase accessibility of ITHIM to practitioners, the OR Estimator provides guided and simple input needs to increase accessibility for recreation and community planners. The OR Estimator links an environmental intervention to behavioral changes that result in changes in physical activity exposures, which in turn lead to improved health outcomes. In other words, a new trail (environment) leads to increased walking

(behavior) thus increasing physical activity (exposure), which results in a decrease in the risk of chronic diseases (health outcome). When the decrease in chronic diseases is monetized as a Cost of Illness savings, then the health outcome of the intervention may be quantified as an economic measure of health benefits due to the intervention. Although this is the conceptual flow of the tool's application, the tool itself only models the relationship between behavior change, exposure level, and health outcomes.

To better understand the health impacts of active transportation, Dr. James Woodcock and a team of leading researchers on transportation and health modeling developed ITHIM (Maizlish and Linesch 2016). ITHIM was first applied to scenarios in London, England and Delhi, India, and since then it has become one of the leading approaches to quantifying health impacts from transportation. In the U.S., it has also been used in multiple applications in Tennessee, California, and Oregon (Haggerty and Hamberg 2015) as well as including other types of physical activities, such as jogging (White and Blakesley 2016).

ITHIM is a comprehensive health impact assessment model used to quantify the estimated change in life expectancy and quality of life for a population due to changes in active transportation participation. ITHIM predicts how changes in active transportation might impact a population's health by evaluating three pathways: physical activity, injury, and air pollution (Centre for Diet and Activity Research 2018). The physical activity pathway, which focuses on changes in transportation-related walking and cycling, has been found to have the largest impact on health outcomes. In some applications of ITHIM, it has been recommended that only the physical activity pathway be used rather than all three pathways (Haggerty and Hamberg 2015). The physical activity pathway estimates the health effects for active transportation scenarios based on quantified relationships between physical activity and chronic illnesses, like cardiovascular disease, diabetes, and some cancers (Green et al. 2013).

The conceptual basis of ITHIM uses a methodology known as comparative risk assessment. The comparative risk assessment framework was first applied in 2000 as part of the World Health Organization's (WHO) Global Burden of Disease Project (Haggerty and Hamberg 2015). It compares scenarios to determine how a change in a risk factor will impact health outcomes. The comparison is between a baseline or 'business as usual' scenario and an alternative or

counterfactual scenario. Changes in health outcomes are quantified by finding the proportional reduction in population disease or mortality that would occur if exposure to a risk factor were reduced to an alternative ideal exposure scenario (e.g., recommended levels of physical activity).

The proportional reduction is called the Population Attributable Fraction (PAF) and is calculated

$$\text{as } PAF = \frac{\int_{Xmin}^{Xmax} RR(x)P(x)dx - \int_{Xmin}^{Xmax} RR(x)Q(x)dx}{\int_{Xmin}^{Xmax} RR(x)P(x)dx} \text{ (Woodcock et al. 2009).}$$

PAF determines the health effect of a change in physical activity participation for a population by comparing population distributions of physical activity in a baseline scenario [P(x)] and an alternative scenario [Q(x)], conditional on the relative risk [RR(x)] for a disease. For example, comparative risk assessment determines how the PAF for stroke in a community would be affected by a change in cycling for transport from an average of 30 minutes/week to 60 minutes/week. The change in physical activity level represents a change in exposure level (x).

To calculate the PAF for a disease, the relative risk [RR(x)] of a disease for each exposure level is needed. Relative risk is the probability that a person develops a chronic condition or disease. Certain factors can influence relative risk; for example, physical activity level can influence the relative risk of developing type II diabetes. As the level of physical activity increases, the relative risk of this individual developing diabetes decreases. This relationship between risk and exposure is represented mathematically with dose-response functions. Dose-response functions were developed for eight diseases/conditions (ischemic heart disease, hypertensive heart disease, stroke, diabetes, dementia (Alzheimer's disease), depression, colon cancer, and breast cancer) based on systematic reviews of scientific publications that measured these relationships.

PAF is not the final output for ITHIM. Baseline Global Burden of Disease data from WHO are combined with PAF to determine the change in disease burden: $\Delta DB = PAF \times DB_{Baseline}$. The global burden of disease is measured in two different ways, with deaths or with disability adjusted life years (DALYs). These two measures have been used by the WHO to record the disease burden for countries all over the world (including the U.S.) since 1996. They are publicly available from the Global Burden of Disease Database (Maizlish and Linesch 2016). The number of deaths from each disease is a simple measure of that disease's impact on a population, but it is not a comprehensive measure of the total impact of a disease because it does not account for the

impact of disability. DALYs can be a more informative measure because it is a standardized unit of morbidity (Haggerty and Hamberg 2015). DALYs are developed by WHO and are the sum of years of life lost (YLL) and Years of Living with Disability (YLD).

ITHIM did not originally have an economic measure of the health outcomes, but a monetized metric was found to be beneficial in communicating the results in an application in the U.S. Two different monetization strategies were used in the Tennessee application, cost of illness (COI) for morbidity effects and value of a statistical life (VSL) for mortality effects, but now only COI is used because it was found to be a more conservative and useful measurement (Whitfield, Meehan, Maizlish, and Wendel 2016). COI estimates are based on national-level disease-specific direct treatment costs and lost productivity costs that are linked through a dose-response function of physical activity to specific disease outcomes from studies published in the health sciences literature. The ITHIM-estimated change in disease burden is applied to COI estimates to determine the COI savings that would be associated with a change in physical activity behavior.

One of the most significant assumptions of the model is that all the health benefits attributed to the change in physical activity occur in a single “accounting year.” This is an oversimplification because the benefits would be realized gradually over a much longer period (Woodcock et al. 2009). The model also assumes that there are no exterior changes to the health of a community, outside of changes to physical activity from transportation (i.e. non-travel physical activity and disease prevalence are constant) (Woodcock et al. 2009). Another assumption of the ITHIM model is that as physical activity increases for a population the log normal distribution of travel-related physical activity becomes less skewed (i.e., diminishing marginal returns to increased physical activity levels) (Maizlish and Linesch 2016). Due to the availability of health data the model also assumes that disease rates are the same throughout the geographic area in question, and no activity substitution occurs.

The Oregon Health Impact Assessment Program adapted the ITHIM model for application in Oregon—the Transportation Options Estimator (TO Estimator). The TO Estimator reduces the overall data needs of ITHIM, thus lowering barriers of access for some communities. The TO Estimator has most of the calibration data needed for ITHIM built into the tool. The distribution of population by age and gender and per capita weekly non-travel related physical activity is

localized to Oregon counties. Similarly, the burden of disease data is built into the tool, but only has urban/rural resolution, rather than county resolution. The TO Estimator also includes county baseline data about the per capita mean travel and non-travel-related physical activity behaviors based on estimates from the Oregon Household Activity Survey. In addition, the Oregon Health Authority created three synthetic counties (large urban, small urban, and rural) for planning purposes.

The TO Estimator was designed to assess the health impacts related to changes in cycling and walking behavior, which are the two main types of active transportation. If the TO Estimator is to account for outdoor recreation in general, then more types of activities need to be accommodated beyond cycling and walking. The TO Estimator was modified to work for 76 different outdoor recreation activities by adjusting the MET values in the model. MET values for all activities were drawn from the 2011 Ainsworth Compendium of Physical Activities (Ainsworth et al. 2011) as most similar activities to those included in the statewide survey. The original MET values in the TO Estimator were 3.0 and 6.0 for walking and cycling, respectively. For the modified recreation version, these underlying MET values are replaced with those assigned to each outdoor recreation activity.

As noted earlier, the OR Estimator expanded the number of activities included in the TO Estimator by replacing the current rates of participation in cycling and walking with the current rates of participation for all of the outdoor recreation activities as derived from the Oregon's statewide SCORP outdoor recreation participation survey. The information needed from the SCORP survey came from questions in the activity participation tables. Respondents were asked to recall how many times they participated in an activity during the past year. Additionally, respondents were asked to report the average number of minutes they participated in a typical occasion for each activity. From these data, average weekly minutes of participation in each activity for the population-adjusted sample were calculated.

Another modification of SCORP participation data to fit the TO Estimator was by county characteristics. The TO Estimator categorizes counties as urban or rural for modelling purposes. Respondents of the SCORP survey were asked about how they would describe their community (rural, urban, or suburban). The urban and suburban subsamples' participation rates were

combined, resulting in two different median minutes/week being calculated from the SCORP data—rural participation and urban participation. The number of participants for each county was estimated by multiplying the 2020 county population by its corresponding urban or rural participation rate.

Cost of Illness Savings Estimation

Statewide-Level Estimation

Health benefits, or Cost of Illness savings, estimates for Oregonians participating in outdoor recreation were estimated using the Outdoor Recreation Health Impact Estimator tool. There are three primary inputs necessary to estimate COI savings in the OR Estimator tool.

- 1) Selection of County – while demographic information is provided at the county-level, health behaviors and impacts are modeled on the urban-rural level. Therefore, by selecting the county of interest sets the rural / urban indicator and adult population of the county.
- 2) Selection of Outdoor Recreation Activity – by choosing an outdoor recreation activity of interest, the SCORP participation rate for rural or urban areas is loaded, from which the total participation for the county is calculated. In addition, the MET value and baseline total weekly minutes of participation in that activity for the median SCORP participant are loaded. Relative to the 2017-2023 Oregon SCORP process, only the one-trip baseline was used in this analysis. The one-trip baseline assumes all other outdoor recreation activity minutes are set to zero except for baseline activity rates embedded in the tool. This approach places people lower on the dose-response function of physical activity to reduced risks, which is consistent with the majority of adult Oregonians not meeting recommended physical activity levels.

Statewide estimates were generated in this analysis by creating a state-level entry point that used statewide participation rates by activity type, selected MET-value by activity type, average daily minutes by activity type, and population demographics. Two additional adjustments are made to COI estimates to account for changes in population and inflation over time. First, the model was

updated with 2020 U.S. Census data. Second, COI estimates are adjusted for inflation to 2023 USD using a CPI deflator tool.

County-Level Estimates

The statewide survey of Oregon residents conducted in 2022/23 was not designed to obtain representative data at the county-level. However, a previous statewide survey conducted in 2011 was designed to obtain county-level outdoor recreation participation data (Rosenberger and Lindberg 2013). These 2011 survey results are used to apportion the total Cost of Illness (COI) savings estimate by activity type. Given some of the activity types changed between the 2011 and 2022 surveys, county proportions were assumed to be the same for similar activity types (e.g., the use of E-motorized bikes on trails has the same proportion as non-motorized bicycling on trails).

Results

Table 1 lists the 76 outdoor recreation activities that are included in the analysis. The top three activities based on total adult participants and proportion of the adult population participating in them include Walking on streets / sidewalks (2.8 million, 79%); Walking on paved paths or natural trails (2.5 million, 72%); and Traveling to walk / hike on non-local paved paths or natural trails (1.9 million, 53%). The bottom three activities on total adult participation and proportion of the adult population participating in them include Class III – Off-road motorcycling (0.1 million, 3%); Snowmobiling (0.09 million, 3%); and Windsurfing / kiteboarding / sailing (0.09 million, 3%).

Total annual user occasions are the primary Oregon SCORP survey outcomes that correlate with activity engagement. The top three activities with the largest annual user occasions include Walking on streets or sidewalks (358 million); Walking on paved paths or natural trails (183 million), within your community (149 million) and outside your community (34 million); and Nature immersion (e.g., relaxing, hanging out, escaping heat or noise) (79 million), within your community (59 million) and outside your community (20 million). The bottom three activities

with the smallest annual user occasions include Snowshoeing (1.1 million); Windsurfing / kiteboarding / sailing (0.9 million); and Snowmobiling (0.8 million).

Health Benefits – Cost of Illness Savings Estimates

The OR Estimator tool estimates Cost of Illness (COI) savings for eight primary illnesses (breast cancer; colon cancer; stroke; ischemic heart disease; depression; dementia; diabetes; and hypertensive heart disease), and given sustained physical activity has many other health benefits these COI savings are underestimated. The COI savings also only include morbidity costs of these illnesses, and do not include avoided deaths (mortality) due to physical activity.

The total annual Cost of Illness savings estimate to Oregon from Oregonians’ participation in 76 outdoor recreation activities is \$2.965 billion (Table 1). As noted in the introduction, it is estimated that Oregonians spend \$31.1 billion on health care each year. County-level estimates of COI savings are reported in Appendix A.

Physical activity rates that inform COI savings are primarily a function of frequency (user occasions per year), duration (time per user occasion), and intensity (MET-value). The three outdoor recreation activities with the largest COI savings per year include Walking on streets or sidewalks (\$615 million); Walking on paved paths or natural trails (\$554 million) [within your community (\$408 million) and outside your community (\$146 million)]; and Jogging or running on streets or sidewalks (\$149 million). The bottom three activities with lowest annual COI savings include Flying drones in local parks or open spaces (\$0.3 million); Windsurfing / kiteboarding / sailing (\$0.7 million); and Whale watching (\$0.9 million).

Table 1. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Total all activities

Annual User Occasions (million)	Annual COI Savings (\$million)	COI Savings per User Occasion (\$)
1,270.013	\$2,964.640	\$2.33

Table 1-1. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Non-motorized and electric trail or related activities In Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Walking on streets or sidewalks	2.779	79.1%	357.559	3.5	17.6	\$614.955	\$221.26	\$1.72
Walking on paved paths or natural trails	2.523	71.8%	149.120	5.3	8.4	\$408.038	\$161.74	\$2.74
Jogging or running on streets or sidewalks	0.826	23.5%	28.792	7.0	7.0	\$149.488	\$181.04	\$5.19
Jogging or running on paved paths or natural trails	0.696	19.8%	19.868	7.0	5.1	\$89.726	\$128.97	\$4.52
Riding non-powered scooters/skateboards on streets or sidewalks	0.285	8.1%	8.839	5.0	4.3	\$20.503	\$72.04	\$2.32
Pedaling bicycles on streets or sidewalks	1.086	30.9%	42.666	3.5	6.8	\$84.706	\$78.02	\$1.99
Pedaling bicycles on paved paths or natural trails (including mountain biking)	0.734	20.9%	22.888	5.8	3.9	\$55.500	\$75.58	\$2.42
Riding E-bikes on streets or sidewalks	0.267	7.6%	5.853	2.8	3.8	\$4.076	\$15.26	\$0.70
Riding E-bikes on paved paths or natural trails	0.176	5.0%	3.339	2.8	2.8	\$1.272	\$7.24	\$0.38
Riding e-scooters/e-skateboards/monowheel/other on streets or sidewalks	0.221	6.3%	3.000	2.8	3.1	\$2.579	\$11.65	\$0.86
Riding e-scooters/e-skateboards/monowheel/other on paved paths or natural trails	0.144	4.1%	1.881	2.8	2.1	\$0.600	\$4.16	\$0.32
Flying drones in local parks or open spaces	0.235	6.7%	2.862	1.8	1.7	\$0.348	\$1.48	\$0.12

Table 1-2. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Outdoor leisure and sporting activities In Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Picnicking	1.420	40.4%	15.633	1.8	1.4	\$1.728	\$1.22	\$0.11
Taking children or grandchildren to a playground	1.202	34.2%	48.004	3.0	4.5	\$44.585	\$37.10	\$0.93
Nature immersion (e.g., relaxing, hanging out, escaping heat or noise)	1.848	52.6%	59.057	1.5	5.8	\$21.603	\$11.69	\$0.37
Going to dog parks or off-leash areas	0.931	26.5%	45.415	3.0	10.8	\$108.163	\$116.16	\$2.38
Attending outdoor concerts, fairs, or festivals	1.426	40.6%	10.443	3.0	1.6	\$3.288	\$2.31	\$0.31
Golfing	0.415	11.8%	6.449	4.8	8.0	\$58.306	\$140.63	\$9.04
Tennis (played outdoors)	0.253	7.2%	3.231	7.3	2.7	\$16.329	\$64.55	\$5.05
Pickleball (played outdoors)	0.221	6.3%	4.513	4.5	2.8	\$6.454	\$29.15	\$1.43
Outdoor court games other than tennis/pickleball (e.g., basketball, badminton, futsal, beach volleyball)	0.394	11.2%	5.322	6.0	1.7	\$5.147	\$13.08	\$0.97
Field sports (e.g., soccer, softball, baseball, football, ultimate frisbee, disc-golf, lacrosse)	0.580	16.5%	17.131	6.0	5.3	\$66.398	\$114.53	\$3.88
Visiting historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers)	1.423	40.5%	11.307	3.0	1.4	\$2.874	\$2.02	\$0.25

Table 1-3. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Nature study activities In Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Nature observation (e.g., birds, other wildlife, forests, wildflowers)	1.314	37.4%	54.982	2.5	6.7	\$60.830	\$46.29	\$1.11
Visiting nature centers (e.g., zoo, botanical garden, arboretum)	1.202	34.2%	9.186	3.0	1.4	\$2.427	\$2.02	\$0.26
Taking children or grandchildren to nature settings to explore and/or learn about nature	0.689	19.6%	14.906	3.0	3.3	\$8.824	\$12.81	\$0.59
Outdoor photography, painting, or drawing	0.731	20.8%	21.705	2.5	4.9	\$20.928	\$28.64	\$0.96

Table 1-4. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Non-motorized and electric trail or related activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Traveling to walk/hike on non-local paved paths or natural trails	1.869	53.2%	34.477	5.3	4.5	\$145.930	\$78.07	\$4.23
Long-distance hiking (backpacking)	0.625	17.8%	6.171	7.0	4.5	\$69.482	\$111.10	\$11.26
Traveling to jog or run on non-local paved paths or natural trails	0.365	10.4%	5.959	7.0	4.9	\$46.022	\$125.94	\$7.72
Traveling to pedal bicycles on non-local paved paths or natural trails	0.478	13.6%	5.091	5.8	4.3	\$39.170	\$81.97	\$7.69
Traveling to ride e-bikes on non-local paved paths or natural trails	0.165	4.7%	1.503	2.8	2.8	\$1.195	\$7.24	\$0.80
Traveling to ride e-scooters/e-skateboards/monowheel/other on non-local paved paths or natural trails	0.116	3.3%	1.197	2.8	2.1	\$0.483	\$4.16	\$0.40
Horseback riding	0.218	6.2%	2.973	5.5	3.6	\$14.103	\$64.74	\$4.74

Table 1-5. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Outdoor leisure and sporting activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Traveling to picnic	0.928	26.4%	8.102	1.8	3.2	\$3.802	\$4.10	\$0.47
Traveling to off-leash areas/hike with your dog	0.632	18.0%	12.066	3.0	7.7	\$48.466	\$76.63	\$4.02
Traveling to golf	0.285	8.1%	2.657	4.8	4.9	\$22.034	\$77.42	\$8.29
Sightseeing/driving or motorcycling for pleasure	1.156	32.9%	17.769	2.0	5.8	\$18.775	\$16.24	\$1.06
Traveling to attend outdoor concerts, fairs, or festivals	1.001	28.5%	5.622	3.0	3.3	\$12.831	\$12.81	\$2.28
Traveling to historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers)	1.044	29.7%	7.126	3.0	3.0	\$12.479	\$11.96	\$1.75
Traveling for nature immersion (e.g., relaxing, hanging out, escaping heat or noise)	1.297	36.9%	19.514	1.5	6.9	\$19.440	\$14.99	\$1.00
Traveling for tennis or pickleball	0.112	3.2%	0.977	6.0	2.9	\$6.717	\$59.74	\$6.87
Traveling for other outdoor sports (e.g., basketball, soccer, baseball, disc-golf, badminton, beach volleyball)	0.404	11.5%	8.675	6.0	3.5	\$28.687	\$71.00	\$3.31

**Table 1-6. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Nature study activities
Outside Your Community**

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Traveling to go bird watching	0.408	11.6%	6.096	2.5	3.1	\$2.925	\$7.18	\$0.48
Whale watching	0.562	16.0%	2.232	1.5	2.3	\$0.937	\$1.67	\$0.42
Exploring tidepools	0.882	25.1%	5.141	2.5	2.5	\$3.873	\$4.39	\$0.75
Traveling for nature observation (e.g., other wildlife, forests, wildflowers)	1.019	29.0%	13.692	1.5	3.5	\$3.860	\$3.79	\$0.28
Traveling with children or grandchildren to nature settings to explore and/or learn about nature	0.587	16.7%	9.195	3.0	4.1	\$16.844	\$28.71	\$1.83
Traveling to nature centers (e.g., zoo, botanical garden, arboretum)	0.801	22.8%	5.428	1.8	2.5	\$1.737	\$2.17	\$0.32
Traveling to do outdoor photography, painting, or drawing	0.425	12.1%	5.971	1.8	4.1	\$2.939	\$6.91	\$0.49
Traveling for collecting/foraging (e.g., rocks, plants, mushrooms, or berries)	0.580	16.5%	8.139	3.8	3.2	\$15.791	\$27.24	\$1.94

Table 1-7. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Motorized activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Class I – All-terrain vehicle riding (3- & 4-wheel ATVs, straddle seat and handlebars)	0.225	6.4%	2.702	4.0	4.2	\$12.386	\$55.08	\$4.58
Class II – Off-road 4-wheel driving (jeeps, pick-ups, dune buggies, SUVs)	0.228	6.5%	3.179	4.0	4.9	\$14.695	\$64.34	\$4.62
Class III – Off-road motorcycling	0.109	3.1%	1.176	4.0	6.7	\$9.332	\$85.68	\$7.94
Class IV – Riding UTVs or side-by-side ATVs (non-straddle seat, driver and passenger sit side-by-side in the vehicle, steering wheel for steering control)	0.144	4.1%	1.852	4.0	4.7	\$9.033	\$62.70	\$4.88
Snowmobiling	0.091	2.6%	0.751	3.5	5.2	\$5.614	\$61.46	\$7.47
Using personal watercraft, such as jet ski	0.134	3.8%	1.342	7.0	4.2	\$13.743	\$102.93	\$10.24
Powerboating (cruising or water skiing)	0.253	7.2%	2.969	2.5	4.7	\$6.738	\$26.63	\$2.27

Table 1-8. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Vehicle-based camping activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
RV/motorhome/trailer camping	0.552	15.7%	9.951	2.5	25.4	\$126.144	\$228.67	\$12.68
Car camping with a tent	0.857	24.4%	10.365	2.5	15.1	\$120.945	\$141.07	\$11.67
Yurts or camper cabins	0.309	8.8%	1.770	2.5	6.4	\$13.902	\$44.96	\$7.85

Table 1-9. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Hunting and fishing activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Hunting – Big game	0.242	6.9%	2.337	6.0	6.0	\$31.438	\$129.67	\$13.45
Hunting – Small game	0.176	5.0%	1.379	5.0	6.0	\$18.973	\$108.00	\$13.76
Fishing – Ocean/saltwater	0.306	8.7%	3.172	3.5	4.5	\$13.071	\$42.76	\$4.12
Fishing – Freshwater	0.573	16.3%	7.596	3.5	4.5	\$24.490	\$42.76	\$3.22
Crabbing	0.295	8.4%	1.639	4.5	3.0	\$10.948	\$37.09	\$6.68
Shellfishing/clamming	0.200	5.7%	1.523	4.5	2.7	\$5.452	\$27.22	\$3.58

Table 1-10. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Non-motorized, snow activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
White-water canoeing, kayaking, or rafting	0.344	9.8%	2.432	5.0	2.9	\$13.373	\$38.84	\$5.50
Flat water canoeing, sea kayaking, rowing, stand-up paddling, tubing, floating	0.534	15.2%	4.496	3.5	3.1	\$8.261	\$15.47	\$1.84
Windsurfing/kiteboarding/sailing	0.091	2.6%	0.892	5.0	1.7	\$0.704	\$7.70	\$0.79
Beach activities – Ocean	1.588	45.2%	15.946	3.0	3.3	\$20.350	\$12.81	\$1.28
Beach activities – Lakes, reservoirs, rivers	1.075	30.6%	14.420	3.0	3.8	\$17.229	\$16.02	\$1.19

Table 1-11. Cost of Illness Savings (2023 USD) from 2022 Outdoor Recreation Activity Participation in Oregon—Non-motorized, water-based and beach activities Outside Your Community

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	MET Value	Average Daily Minutes	COI Savings, Total Annual (\$million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Downhill (alpine) skiing or snowboarding	0.376	10.7%	3.047	4.3	4.4	\$23.666	\$62.95	\$7.77
Cross-country/Nordic skiing/skijoring	0.193	5.5%	1.884	6.8	3.1	\$13.751	\$71.15	\$7.30
Sledding, tubing, or general snow play	0.383	10.9%	2.353	7.0	2.5	\$22.961	\$59.95	\$9.76
Snowshoeing	0.246	7.0%	1.117	5.3	2.6	\$9.244	\$37.58	\$8.27

Total annual COI savings may then be divided by the estimated number of participants to derive a COI savings per participant (not per person) for each outdoor recreation activity (Table 1). The top three activities with the largest COI savings per participant include RV / motorhome / trailer camping (\$229); Walking on streets or sidewalks (\$221); and Jogging or running on streets or sidewalks (\$181). The three activities with the lowest COI savings per participant include Picnicking (\$1); Flying drones in local parks or open spaces (\$1); and Whale watching (\$2). COI savings per participant are affected by the MET-value, duration, and frequency of activity.

COI savings per user occasion are also derived by dividing total annual COI savings by the total number of user occasions (Table 1). The top three activities with the largest COI savings per user occasion include Hunting small game (\$14); Hunting big game (\$13); and RV / motorhome / trailer camping (\$13). The bottom three activities with the lowest COI savings per user occasion include Picnicking (\$0.11); Flying drones in local parks or open spaces (\$0.12); and Visiting historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers) (\$0.25). COI savings per user occasion are affected by the MET-value, frequency, and duration of activity.

Trends in Health Benefits

Direct comparisons between the 2019-2023 SCORP data and these estimates for the 2025-2029 SCORP are difficult given changes in data collection methodology, types of outdoor recreation activities included, and survey design and implementation. However, a general assessment of trends in health benefits derived by Oregonians from their outdoor recreation participation is possible with some assumptions and adjustments. First, only including similar activities in Table 1 with those in the prior SCORP estimation of health benefits are included. Second, the 2019-2023 SCORP estimates are adjusted for population growth that occurred in Oregon between the 2017 and 2020 demographics. Third, the 2019-2023 SCORP estimates are adjusted for inflation to 2023 USD. These adjustments result in an estimate of \$1.9 billion⁴ in health benefits from the 2019-2023 SCORP analysis with \$2.1 billion in the 2025-2029 SCORP analysis. Essentially, this is a 10% increase in health benefits beyond the effects of population growth and inflation. This increase is the result of increased participation rates

⁴ The estimated benefits from 2019-2023 SCORP were \$1.42 billion (2018 USD), but only \$1.38 billion (2018 USD) were included in the adjusted calculation for comparison purposes. The difference is due to differences in measured activities between the two surveys.

(i.e., more people engaging in activities), increased frequency of participation (i.e., same people engaging more often), and / or increased duration of participation (i.e., people engage for a longer period of time on each occasion).

Conclusions

The largest predictor of a community's health is not the accessibility or quality of clinical care, but rather the social, economic, and physical conditions in which people live. These are considered “upstream” factors, and they shape our environments (White and Blakesley 2016). The lived environment influences people's physical activity participation, and parks and recreation providers can play a key role (Pitas et al. 2017). The 2018 Physical Activity Guidelines Advisory Committee reviewed various interventions for promoting physical activity to determine what approaches were effective at increasing rates of physical activity. They categorized the interventions into four different levels: individual, community, environment and policy, and communication / information technologies. The evidence supporting the efficacy of environment and policy interventions were found to be strong to moderate. Specifically, there was strong evidence suggesting point-of-decision prompts, like signs encouraging people to take the stairs instead of the elevator, to be effective, and moderate evidence suggesting that the built environment, including community designs and active transportation infrastructures that support physical activity, and access to indoor and outdoor facilities / environments were effective interventions (2018 Physical Activity Guidelines Advisory Committee 2018). Public transportation and trails-related bills focused on policy and environmental changes to promote physical activity have a high likelihood of being enacted (Eyler et al. 2016).

It is important to note that most epidemiological studies that link environmental factors with participation in physical activities have been generally conducted in urban environments. These studies look at land use mix, road design/street connectivity, urban planning policies (provision of parks, trails, or open spaces), neighborhood characteristics, and / or transportation infrastructure (sidewalks, bike lanes, trails). Environments that are more supportive of physical activity are generally found to have a positive influence on outdoor recreation participation.

A review of 11 cross-sectional studies shows that adults in neighborhoods that are more activity-supportive reported a median of 50.4 more minutes per week of moderate-to-vigorous physical activity

and averaged about 13.7 minutes more of recreational walking compared to less supportive neighborhoods (2018 Physical Activity Guidelines Advisory Committee 2018). Characteristics positively correlated with supportive environments include perceptions of safety; proximity of destinations; street connectivity; walkability indices; neighborhood aesthetics; low traffic volumes; and access to indoor and outdoor recreation facilities or outlets, including parks, trails, and green spaces.

Brown, Rhodes, and Dade (2018) used a participatory mapping method to relate park types and locations with physical activities and perceived social, psychological, and environmental benefits. Their results confirm that physical activity benefits most often occur in parks close-to-home, while social and environmental benefits are derived from more distant parks. Correlation analysis of their data suggests that larger parks provide greater opportunities to be physically active. When controlling for park size, their analysis shows natural parks, linear parks (i.e., trails), and large urban parks have the largest mean physical activity scores.

The Oregon SCORP outdoor recreation participation survey and the estimates Cost of Illness savings are consistent with these findings. Adult Oregonians engaged in the 76 outdoor recreation activities on 1.27 billion user occasions over the past year. They also realized \$2.965 billion in COI savings associated with eight chronic illnesses affected by their physical activity levels in outdoor recreation. Close-to-home non-motorized linear / trail-based activities (i.e., activities that occur on trails, paths, roads, streets, and sidewalks) account for the largest proportion of health benefits. Outdoor recreation activities including walking / jogging / bicycling and other non-motorized and E-motorized activities on streets / sidewalks / trails / paths account for 55% of total annual user occasions and 58% of total COI savings associated with Oregonians participating in 76 outdoor recreation activities of low- to vigorous-intensity. These cost savings accrue to health insurers, providers, and participants.

Community development / design and transportation planning significantly affect the health of people attempting to engage in daily physical activity to meet recommended levels for a healthy lifestyle (Cohen et al. 2016; Larson, Jennings, and Cloutier 2016). The management of parks and recreation are often not recognized for the health impacts they [at least indirectly] promote through providing environments and facilities that enable people to engage in physical activity through outdoor recreation. Estimating the health benefits obtained through outdoor recreation-related physical activity demonstrates that parks and recreation providers have a role in increasing the public health and

wellbeing of Oregonians (Rosenberger, Bergerson and Kline 2009). Collaboration between health, transportation, and parks and recreation providers, among others, has the potential to significantly influence community health and may be a cost-effective health prevention strategy for the state of Oregon.

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Appendix A – County-Level Cost of Illness Savings Estimates

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD)

Oregon County	Walking on streets or sidewalks	Walking on paved paths or natural trails	Jogging or running on streets or sidewalks	Jogging or running on paved paths or natural trails	Riding non-powered scooters/skateboards on streets or sidewalks	Pedaling bicycles on streets or sidewalks
Baker	\$2,527,562	\$2,246,672	\$495,734	\$273,239	\$119,842	\$495,109
Benton	\$17,519,006	\$13,296,723	\$4,710,260	\$3,174,577	\$984,095	\$4,065,632
Clackamas	\$47,488,176	\$33,040,306	\$11,992,206	\$4,435,867	\$898,596	\$3,712,404
Clatsop	\$7,248,059	\$6,196,974	\$1,162,250	\$1,191,999	\$172,387	\$712,188
Columbia	\$6,648,648	\$4,247,100	\$985,783	\$866,395	\$200,375	\$827,818
Coos	\$8,778,748	\$5,888,474	\$1,424,755	\$742,586	\$249,852	\$1,032,224
Crook	\$2,396,659	\$1,726,708	\$577,981	\$204,710	\$68,969	\$284,935
Curry	\$3,372,751	\$2,829,452	\$506,699	\$234,115	\$116,800	\$482,539
Deschutes	\$28,537,171	\$33,021,294	\$10,104,472	\$11,274,313	\$972,662	\$4,018,395
Douglas	\$12,982,973	\$8,846,970	\$1,782,868	\$1,472,874	\$416,373	\$1,720,179
Gilliam	\$505,044	\$192,940	\$132,922	\$48,169	\$15,009	\$62,007
Grant	\$1,424,519	\$713,165	\$290,275	\$164,341	\$23,696	\$97,897
Harney	\$934,289	\$618,044	\$114,407	\$68,518	\$21,319	\$88,076
Hood River	\$3,267,281	\$2,545,244	\$646,539	\$612,473	\$105,733	\$436,819
Jackson	\$30,385,385	\$19,398,628	\$6,504,746	\$3,650,947	\$971,800	\$4,014,836
Jefferson	\$2,040,602	\$1,731,453	\$590,417	\$459,234	\$47,557	\$196,473
Josephine	\$13,220,368	\$6,678,417	\$3,107,415	\$1,752,044	\$335,951	\$1,387,927
Klamath	\$8,546,450	\$9,566,035	\$1,737,369	\$2,500,277	\$214,869	\$887,696
Lake	\$1,059,411	\$1,132,460	\$215,986	\$287,923	\$26,742	\$110,479
Lane	\$50,117,285	\$36,464,209	\$8,233,958	\$5,883,379	\$2,062,135	\$8,519,380
Lincoln	\$6,510,585	\$4,625,106	\$1,355,818	\$623,864	\$113,005	\$466,864
Linn	\$18,721,549	\$11,236,441	\$1,447,394	\$1,186,450	\$705,209	\$2,913,456
Malheur	\$2,880,870	\$1,213,536	\$890,873	\$390,547	\$93,408	\$385,899
Marion	\$34,847,523	\$21,860,431	\$5,802,964	\$1,693,145	\$929,403	\$3,839,680
Morrow	\$1,067,439	\$411,208	\$212,452	\$91,883	\$34,927	\$144,296
Multnomah	\$157,868,135	\$93,213,414	\$45,996,355	\$28,007,169	\$5,977,723	\$24,695,997
Polk	\$9,620,382	\$5,811,910	\$1,742,975	\$779,264	\$246,613	\$1,018,841
Sherman	\$277,915	\$149,481	\$30,097	\$4,960	\$6,984	\$28,853
Tillamook	\$3,265,763	\$3,257,719	\$171,031	\$140,340	\$35,480	\$146,581
Umatilla	\$10,163,139	\$4,546,982	\$2,719,759	\$447,906	\$366,162	\$1,512,739
Union	\$5,463,693	\$2,431,370	\$1,067,628	\$276,858	\$265,699	\$1,097,691
Wallowa	\$1,499,973	\$724,360	\$270,797	\$97,098	\$26,335	\$108,797
Wasco	\$3,959,095	\$1,975,708	\$462,623	\$264,931	\$83,662	\$345,636
Washington	\$96,435,211	\$58,178,031	\$29,733,185	\$15,641,796	\$3,087,371	\$12,754,974
Wheeler	\$287,663	\$155,097	\$77,593	\$18,122	\$3,578	\$14,783
Yamhill	\$13,085,900	\$7,866,165	\$2,189,034	\$763,952	\$503,059	\$2,078,307

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Pedaling bicycles on paved paths or natural trails (including mountain biking)	Riding E-bikes on streets or sidewalks	Riding E-bikes on paved paths or natural trails	Riding e-scooters/e-skateboards/monowheel/other on streets or sidewalks	Riding e-scooters/e-skateboards/monowheel/other on paved paths or natural trails	Flying drones in local parks or open spaces
Baker	\$242,479	\$23,823	\$5,556	\$15,072	\$2,621	\$632
Benton	\$2,560,025	\$195,624	\$58,658	\$123,767	\$27,676	\$15,482
Clackamas	\$3,207,577	\$178,628	\$73,495	\$113,014	\$34,677	\$30,104
Clatsop	\$606,150	\$34,268	\$13,889	\$21,681	\$6,553	\$1,727
Columbia	\$415,442	\$39,832	\$9,519	\$25,201	\$4,491	\$22,673
Coos	\$703,063	\$49,667	\$16,109	\$31,423	\$7,601	\$7,898
Crook	\$122,425	\$13,710	\$2,805	\$8,674	\$1,324	\$5,860
Curry	\$126,137	\$23,218	\$2,890	\$14,690	\$1,364	\$679
Deschutes	\$2,220,948	\$193,351	\$50,889	\$122,329	\$24,011	\$35,318
Douglas	\$797,444	\$82,769	\$18,272	\$52,366	\$8,621	\$2,843
Gilliam	\$11,207	\$2,984	\$257	\$1,888	\$121	\$493
Grant	\$28,792	\$4,710	\$660	\$2,980	\$311	\$938
Harney	\$30,936	\$4,238	\$709	\$2,681	\$334	\$484
Hood River	\$315,108	\$21,018	\$7,220	\$13,298	\$3,407	\$817
Jackson	\$3,719,632	\$193,180	\$85,228	\$122,220	\$40,213	\$8,746
Jefferson	\$129,741	\$9,454	\$2,973	\$5,981	\$1,403	\$735
Josephine	\$920,336	\$66,782	\$21,088	\$42,252	\$9,950	\$7,803
Klamath	\$662,714	\$42,713	\$15,185	\$27,023	\$7,165	\$17,963
Lake	\$77,534	\$5,316	\$1,777	\$3,363	\$838	\$2,242
Lane	\$7,526,657	\$409,923	\$172,458	\$259,349	\$81,371	\$26,872
Lincoln	\$111,547	\$22,464	\$2,556	\$14,212	\$1,206	\$3,131
Linn	\$1,252,146	\$140,186	\$28,690	\$88,692	\$13,537	\$25,334
Malheur	\$39,865	\$18,568	\$913	\$11,748	\$431	\$514
Marion	\$1,624,612	\$184,752	\$37,225	\$116,888	\$17,564	\$2,552
Morrow	\$44,635	\$6,943	\$1,023	\$4,393	\$483	\$186
Multnomah	\$13,739,873	\$1,188,287	\$314,822	\$751,800	\$148,542	\$62,644
Polk	\$389,561	\$49,023	\$8,926	\$31,016	\$4,212	\$17,093
Sherman	\$14,148	\$1,388	\$324	\$878	\$153	\$0
Tillamook	\$53,511	\$7,053	\$1,226	\$4,462	\$579	\$1,179
Umatilla	\$367,655	\$72,788	\$8,424	\$46,051	\$3,975	\$9,152
Union	\$615,844	\$52,817	\$14,111	\$33,416	\$6,658	\$808
Wallowa	\$16,064	\$5,235	\$368	\$3,312	\$174	\$1,010
Wasco	\$319,763	\$16,631	\$7,327	\$10,522	\$3,457	\$1,625
Washington	\$11,329,919	\$613,726	\$259,602	\$388,289	\$122,488	\$26,455
Wheeler	\$814	\$711	\$19	\$450	\$9	\$66
Yamhill	\$1,155,351	\$100,001	\$26,473	\$63,268	\$12,491	\$5,712

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Picnicking	Taking children or grandchildren to a playground	Nature immersion (e.g., relaxing, hanging out, escaping heat or noise)	Going to dog parks or off-leash areas	Attending outdoor concerts, fairs, or festivals	Golfing
Baker	\$16,257	\$122,500	\$128,079	\$611,863	\$9,395	\$149,910
Benton	\$31,794	\$922,114	\$607,274	\$3,584,483	\$71,688	\$1,291,716
Clackamas	\$215,340	\$4,522,968	\$1,828,823	\$8,861,564	\$343,896	\$5,678,995
Clatsop	\$17,554	\$346,986	\$333,082	\$1,424,826	\$43,543	\$534,363
Columbia	\$13,843	\$765,186	\$281,041	\$1,193,224	\$48,482	\$652,515
Coos	\$35,350	\$643,049	\$413,821	\$1,505,718	\$37,678	\$812,538
Crook	\$5,488	\$92,897	\$118,483	\$306,679	\$20,201	\$290,879
Curry	\$16,844	\$201,116	\$291,519	\$846,272	\$18,919	\$329,680
Deschutes	\$52,735	\$970,449	\$1,029,358	\$3,752,277	\$239,496	\$5,453,517
Douglas	\$47,439	\$532,067	\$627,095	\$2,297,625	\$101,191	\$1,145,195
Gilliam	\$683	\$28,721	\$22,571	\$5,201	\$1,460	\$139,939
Grant	\$4,884	\$201,118	\$78,914	\$263,841	\$3,611	\$137,825
Harney	\$7,201	\$77,094	\$84,115	\$169,843	\$5,912	\$161,998
Hood River	\$4,747	\$147,370	\$103,634	\$591,433	\$16,235	\$244,997
Jackson	\$90,043	\$1,894,719	\$996,510	\$3,032,298	\$164,214	\$4,609,319
Jefferson	\$10,454	\$98,145	\$132,689	\$254,263	\$11,188	\$614,176
Josephine	\$59,220	\$1,037,012	\$924,086	\$1,142,069	\$113,404	\$1,781,300
Klamath	\$43,379	\$616,189	\$546,275	\$1,662,337	\$39,729	\$786,549
Lake	\$5,608	\$71,718	\$68,259	\$200,934	\$4,838	\$93,919
Lane	\$238,813	\$4,605,499	\$2,500,014	\$10,204,850	\$341,089	\$5,106,048
Lincoln	\$14,639	\$272,279	\$341,812	\$948,415	\$26,656	\$781,836
Linn	\$38,991	\$1,195,235	\$1,004,681	\$3,335,634	\$93,798	\$1,831,278
Malheur	\$10,802	\$226,027	\$138,704	\$358,748	\$13,686	\$549,785
Marion	\$123,935	\$2,622,237	\$1,324,538	\$7,174,290	\$152,678	\$1,767,980
Morrow	\$4,389	\$77,307	\$48,945	\$155,797	\$4,602	\$336,532
Multnomah	\$205,954	\$10,300,185	\$2,839,524	\$34,303,415	\$774,509	\$7,275,058
Polk	\$26,962	\$780,951	\$489,525	\$1,640,972	\$56,495	\$681,390
Sherman	\$1,038	\$32,687	\$19,909	\$63,482	\$1,930	\$24,570
Tillamook	\$11,077	\$179,047	\$183,161	\$706,377	\$12,810	\$282,993
Umatilla	\$43,758	\$773,812	\$454,568	\$1,206,574	\$49,564	\$811,844
Union	\$27,500	\$475,287	\$356,513	\$902,513	\$22,951	\$522,286
Wallowa	\$5,193	\$36,817	\$64,348	\$247,902	\$6,724	\$99,464
Wasco	\$11,682	\$374,396	\$224,490	\$587,707	\$16,075	\$425,966
Washington	\$251,489	\$8,274,208	\$2,403,693	\$12,959,740	\$361,517	\$11,650,804
Wheeler	\$355	\$1,072	\$13,763	\$110,543	\$2,144	\$20,049
Yamhill	\$33,019	\$1,066,229	\$579,442	\$1,549,385	\$55,895	\$1,228,868

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Tennis (played outdoors)	Pickleball (played outdoors)	Outdoor court games other than tennis/pickleball (e.g., basketball, badminton, futsal, beach volleyball)	Field sports (e.g., soccer, softball, baseball, football, ultimate frisbee, disc-golf, lacrosse)	Visiting historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers)	Nature observation (e.g., birds, other wildlife, forests, wildflowers)
Baker	\$30,132	\$25,027	\$19,958	\$224,692	\$13,445	\$811,574
Benton	\$259,290	\$111,788	\$89,145	\$3,313,467	\$66,224	\$2,062,363
Clackamas	\$508,498	\$394,190	\$314,348	\$6,512,809	\$241,707	\$4,552,042
Clatsop	\$92,760	\$29,915	\$23,855	\$252,692	\$75,766	\$963,620
Columbia	\$39,595	\$7,935	\$6,328	\$364,763	\$75,331	\$1,662,636
Coos	\$117,375	\$36,038	\$28,739	\$413,023	\$30,331	\$1,138,187
Crook	\$31,077	\$8,559	\$6,825	\$115,659	\$12,733	\$393,577
Curry	\$156,769	\$28,504	\$22,731	\$409,929	\$29,486	\$989,869
Deschutes	\$701,807	\$156,612	\$124,891	\$1,991,018	\$102,831	\$2,567,467
Douglas	\$373,825	\$40,792	\$32,529	\$1,943,556	\$70,376	\$1,421,811
Gilliam	\$7,614	\$7,058	\$5,628	\$34,486	\$1,442	\$17,346
Grant	\$11,079	\$36,178	\$28,850	\$170,340	\$5,909	\$305,986
Harney	\$51,653	\$26,661	\$21,261	\$197,436	\$5,335	\$257,706
Hood River	\$191,808	\$8,187	\$6,528	\$333,149	\$11,208	\$367,318
Jackson	\$945,693	\$209,089	\$166,738	\$2,124,229	\$138,113	\$3,464,546
Jefferson	\$71,652	\$14,358	\$11,450	\$377,061	\$11,432	\$310,255
Josephine	\$920,177	\$247,778	\$197,591	\$2,138,722	\$96,956	\$2,111,879
Klamath	\$542,078	\$198,454	\$158,258	\$331,381	\$62,381	\$3,163,409
Lake	\$62,362	\$23,067	\$18,395	\$72,780	\$7,673	\$370,663
Lane	\$1,879,677	\$1,136,070	\$905,962	\$2,573,792	\$243,263	\$6,958,166
Lincoln	\$71,013	\$41,395	\$33,010	\$726,338	\$39,344	\$1,282,852
Linn	\$268,253	\$139,445	\$111,200	\$920,092	\$89,681	\$1,930,269
Malheur	\$67,746	\$47,666	\$38,011	\$401,858	\$57,957	\$365,997
Marion	\$1,103,307	\$938,346	\$748,286	\$7,769,873	\$203,830	\$4,118,868
Morrow	\$15,170	\$23,214	\$18,512	\$278,841	\$7,719	\$203,809
Multnomah	\$4,594,035	\$1,261,746	\$1,006,183	\$8,673,222	\$473,888	\$7,175,349
Polk	\$228,212	\$132,293	\$105,498	\$651,609	\$56,498	\$1,278,569
Sherman	\$8,981	\$600	\$478	\$15,601	\$5,630	\$36,568
Tillamook	\$40,585	\$13,018	\$10,381	\$77,655	\$19,483	\$722,518
Umatilla	\$501,814	\$123,655	\$98,609	\$1,459,227	\$50,725	\$752,683
Union	\$74,655	\$93,701	\$74,722	\$1,021,331	\$26,894	\$595,172
Wallowa	\$6,442	\$8,407	\$6,704	\$64,265	\$5,507	\$391,621
Wasco	\$49,638	\$17,505	\$13,959	\$552,855	\$22,171	\$399,134
Washington	\$2,136,944	\$818,152	\$652,437	\$17,880,271	\$442,327	\$6,541,488
Wheeler	\$2,203	\$175	\$140	\$1,988	\$390	\$23,507
Yamhill	\$165,303	\$48,120	\$38,373	\$2,007,604	\$69,662	\$1,121,630

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Visiting nature centers (e.g., zoo, botanical garden, arboretum)	Taking children or grandchildren to nature settings to explore and/or learn about nature	Outdoor photography, painting, or drawing	Traveling to walk/hike on non-local paved paths or natural trails	Long-distance hiking (backpacking)	Traveling to jog or run on non-local paved paths or natural trails
Baker	\$1,879	\$24,246	\$228,697	\$803,495	\$552,098	\$140,150
Benton	\$49,332	\$182,508	\$451,379	\$4,755,414	\$2,799,284	\$1,628,307
Clackamas	\$202,316	\$895,199	\$1,409,994	\$11,816,470	\$2,897,717	\$2,275,249
Clatsop	\$39,818	\$68,677	\$415,558	\$2,216,274	\$2,575,334	\$611,401
Columbia	\$33,039	\$151,448	\$563,864	\$1,518,924	\$302,668	\$444,392
Coos	\$31,451	\$127,274	\$319,100	\$2,105,942	\$1,450,601	\$380,888
Crook	\$3,155	\$18,386	\$75,993	\$617,537	\$206,292	\$105,000
Curry	\$25,717	\$39,805	\$290,452	\$1,011,920	\$226,604	\$120,082
Deschutes	\$84,963	\$192,074	\$621,966	\$11,809,671	\$4,137,885	\$5,782,831
Douglas	\$27,696	\$105,308	\$998,980	\$3,164,013	\$1,474,045	\$755,468
Gilliam	\$243	\$5,685	\$9,299	\$69,003	\$7,473	\$24,707
Grant	\$1,707	\$39,806	\$68,374	\$255,055	\$111,529	\$84,294
Harney	\$945	\$15,259	\$40,805	\$221,036	\$209,981	\$35,144
Hood River	\$5,744	\$29,168	\$124,345	\$910,276	\$339,057	\$314,150
Jackson	\$133,132	\$375,008	\$1,199,772	\$6,937,687	\$6,400,765	\$1,872,647
Jefferson	\$17,212	\$19,425	\$144,960	\$619,234	\$139,025	\$235,551
Josephine	\$54,438	\$205,248	\$642,784	\$2,388,456	\$900,833	\$898,660
Klamath	\$28,854	\$121,958	\$1,461,920	\$3,421,178	\$12,178,020	\$1,282,444
Lake	\$3,256	\$14,195	\$167,758	\$405,011	\$1,362,139	\$147,682
Lane	\$227,021	\$911,533	\$1,290,685	\$13,040,988	\$5,490,591	\$3,017,709
Lincoln	\$25,183	\$53,890	\$344,522	\$1,654,114	\$365,521	\$319,993
Linn	\$85,438	\$236,564	\$948,674	\$4,018,579	\$3,070,794	\$608,555
Malheur	\$9,777	\$44,736	\$223,159	\$434,007	\$119,566	\$200,320
Marion	\$178,058	\$519,001	\$1,899,305	\$7,818,122	\$2,171,907	\$868,449
Morrow	\$1,475	\$15,301	\$62,296	\$147,064	\$69,657	\$47,129
Multnomah	\$540,212	\$2,038,642	\$2,754,685	\$33,336,663	\$6,532,302	\$14,365,465
Polk	\$37,260	\$154,568	\$425,838	\$2,078,560	\$632,713	\$399,701
Sherman	\$913	\$6,469	\$3,366	\$53,460	\$5,297	\$2,544
Tillamook	\$14,931	\$35,438	\$408,872	\$1,165,084	\$149,132	\$71,983
Umatilla	\$15,402	\$153,155	\$345,783	\$1,626,174	\$420,941	\$229,740
Union	\$11,544	\$94,070	\$243,449	\$869,550	\$613,633	\$142,006
Wallowa	\$1,884	\$7,287	\$118,884	\$259,059	\$291,597	\$49,804
Wasco	\$5,037	\$74,101	\$243,938	\$706,588	\$358,027	\$135,889
Washington	\$469,729	\$1,637,655	\$1,654,896	\$20,806,677	\$10,074,315	\$8,023,005
Wheeler	\$227	\$212	\$9,982	\$55,469	\$24,043	\$9,295
Yamhill	\$57,642	\$211,031	\$714,093	\$2,813,240	\$820,804	\$391,847

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Traveling to pedal bicycles on non-local paved paths or natural trails	Traveling to ride e-bikes on non-local paved paths or natural trails	Traveling to ride e-scooters/e-skateboards/monowheel/other on non-local paved paths or natural trails	Horseback riding	Traveling to picnic	Traveling to off-leash areas/hike with your dog
Baker	\$147,648	\$4,506	\$1,820	\$319,510	\$35,763	\$274,163
Benton	\$1,503,480	\$45,882	\$18,537	\$167,268	\$69,944	\$1,606,130
Clackamas	\$727,375	\$22,198	\$8,968	\$1,676,885	\$473,727	\$3,970,677
Clatsop	\$153,612	\$4,688	\$1,894	\$147,797	\$38,616	\$638,434
Columbia	\$249,838	\$7,624	\$3,080	\$166,330	\$30,453	\$534,658
Coos	\$673,418	\$20,551	\$8,303	\$313,570	\$77,766	\$674,680
Crook	\$198,326	\$6,052	\$2,445	\$162,832	\$12,072	\$137,416
Curry	\$164,222	\$5,012	\$2,025	\$144,565	\$37,056	\$379,196
Deschutes	\$3,057,940	\$93,321	\$37,702	\$286,462	\$116,011	\$1,681,315
Douglas	\$215,705	\$6,583	\$2,659	\$467,559	\$104,362	\$1,029,516
Gilliam	\$6,427	\$196	\$79	\$9,280	\$1,503	\$2,331
Grant	\$16,080	\$491	\$198	\$42,615	\$10,745	\$118,221
Harney	\$124,806	\$3,809	\$1,539	\$154,516	\$15,841	\$76,103
Hood River	\$695,274	\$21,218	\$8,572	\$49,527	\$10,443	\$265,009
Jackson	\$1,902,401	\$58,057	\$23,455	\$549,275	\$198,085	\$1,358,708
Jefferson	\$187,323	\$5,717	\$2,310	\$121,940	\$22,997	\$113,930
Josephine	\$829,339	\$25,309	\$10,225	\$38,034	\$130,278	\$511,737
Klamath	\$1,169,724	\$35,697	\$14,422	\$226,875	\$95,429	\$744,858
Lake	\$140,828	\$4,298	\$1,736	\$32,988	\$12,338	\$90,034
Lane	\$3,379,656	\$103,139	\$41,668	\$292,195	\$525,363	\$4,572,575
Lincoln	\$261,064	\$7,967	\$3,219	\$80,345	\$32,204	\$424,964
Linn	\$607,891	\$18,551	\$7,495	\$122,689	\$85,776	\$1,494,626
Malheur	\$114,037	\$3,480	\$1,406	\$910,928	\$23,763	\$160,747
Marion	\$822,129	\$25,089	\$10,136	\$523,985	\$272,643	\$3,214,646
Morrow	\$15,353	\$469	\$189	\$52,531	\$9,656	\$69,809
Multnomah	\$6,405,498	\$195,480	\$78,975	\$112,379	\$453,078	\$15,370,627
Polk	\$221,611	\$6,763	\$2,732	\$41,085	\$59,314	\$735,285
Sherman	\$20,667	\$631	\$255	\$49,367	\$2,284	\$28,445
Tillamook	\$98,909	\$3,018	\$1,219	\$102,208	\$24,369	\$316,513
Umatilla	\$415,478	\$12,679	\$5,122	\$333,975	\$96,263	\$540,640
Union	\$451,877	\$13,790	\$5,571	\$338,902	\$60,497	\$404,397
Wallowa	\$31,882	\$973	\$393	\$94,962	\$11,424	\$111,080
Wasco	\$311,546	\$9,508	\$3,841	\$119,549	\$25,700	\$263,339
Washington	\$13,097,100	\$399,691	\$161,477	\$5,343,247	\$553,250	\$5,806,983
Wheeler	\$2,629	\$80	\$32	\$3,579	\$782	\$49,532
Yamhill	\$748,656	\$22,847	\$9,230	\$503,076	\$72,638	\$694,246

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Traveling to golf	Sightseeing/driving or motorcycling for pleasure	Traveling to attend outdoor concerts, fairs, or festivals	Traveling to historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers)	Traveling for nature immersion (e.g., relaxing, hanging out, escaping heat or noise)	Traveling for tennis or pickleball
Baker	\$56,650	\$137,586	\$36,660	\$58,383	\$115,256	\$39,823
Benton	\$488,133	\$376,053	\$279,743	\$287,577	\$546,471	\$188,817
Clackamas	\$2,146,062	\$1,604,772	\$1,341,960	\$1,049,606	\$1,645,714	\$568,628
Clatsop	\$201,933	\$308,374	\$169,914	\$329,014	\$299,732	\$103,564
Columbia	\$246,582	\$248,424	\$189,189	\$327,124	\$252,902	\$87,383
Coos	\$307,054	\$445,777	\$147,027	\$131,712	\$372,388	\$128,668
Crook	\$109,922	\$106,078	\$78,829	\$55,295	\$106,620	\$36,839
Curry	\$124,584	\$175,766	\$73,828	\$128,042	\$262,331	\$90,641
Deschutes	\$2,060,855	\$784,578	\$934,567	\$446,541	\$926,295	\$320,054
Douglas	\$432,763	\$606,853	\$394,870	\$305,604	\$564,308	\$194,980
Gilliam	\$52,882	\$7,687	\$5,699	\$6,260	\$20,311	\$7,018
Grant	\$52,083	\$64,977	\$14,093	\$25,659	\$71,013	\$24,536
Harney	\$61,218	\$98,742	\$23,070	\$23,166	\$75,693	\$26,153
Hood River	\$92,583	\$53,575	\$63,351	\$48,671	\$93,258	\$32,223
Jackson	\$1,741,837	\$859,450	\$640,800	\$599,750	\$896,735	\$309,840
Jefferson	\$232,094	\$98,213	\$43,657	\$49,644	\$119,403	\$41,256
Josephine	\$673,144	\$610,927	\$442,529	\$421,027	\$831,563	\$287,322
Klamath	\$297,233	\$304,020	\$155,033	\$270,886	\$491,580	\$169,851
Lake	\$35,492	\$45,583	\$18,878	\$33,319	\$61,424	\$21,223
Lane	\$1,929,549	\$2,501,533	\$1,331,004	\$1,056,364	\$2,249,703	\$777,318
Lincoln	\$295,452	\$289,192	\$104,017	\$170,852	\$307,589	\$106,278
Linn	\$692,030	\$657,698	\$366,020	\$389,439	\$904,089	\$312,381
Malheur	\$207,761	\$123,154	\$53,406	\$251,677	\$124,817	\$43,127
Marion	\$668,110	\$1,312,583	\$595,785	\$885,125	\$1,191,920	\$411,833
Morrow	\$127,174	\$51,813	\$17,956	\$33,519	\$44,044	\$15,218
Multnomah	\$2,749,206	\$2,346,719	\$3,022,306	\$2,057,845	\$2,555,220	\$882,881
Polk	\$257,494	\$300,769	\$220,455	\$245,339	\$440,512	\$152,206
Sherman	\$9,285	\$22,815	\$7,532	\$24,450	\$17,916	\$6,190
Tillamook	\$106,941	\$136,563	\$49,986	\$84,604	\$164,822	\$56,949
Umatilla	\$306,792	\$456,877	\$193,409	\$220,271	\$409,055	\$141,337
Union	\$197,369	\$364,342	\$89,562	\$116,788	\$320,818	\$110,849
Wallowa	\$37,587	\$90,135	\$26,239	\$23,913	\$57,905	\$20,007
Wasco	\$160,970	\$191,918	\$62,728	\$96,276	\$202,013	\$69,800
Washington	\$4,402,777	\$2,516,851	\$1,410,718	\$1,920,792	\$2,163,026	\$747,370
Wheeler	\$7,577	\$1,167	\$8,365	\$1,696	\$12,385	\$4,279
Yamhill	\$464,383	\$473,661	\$218,115	\$302,506	\$521,426	\$180,163

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Traveling for other outdoor sports (e.g., basketball, soccer, baseball, disc-golf, badminton, beach volleyball)	Traveling to go bird watching	Whale watching	Exploring tidepools	Traveling for nature observation (e.g., other wildlife, forests, wildflowers)	Traveling with children or grandchildren to nature settings to explore and/or learn about nature
Baker	\$111,246	\$22,154	\$356	\$4,400	\$51,494	\$46,281
Benton	\$496,903	\$66,463	\$28,427	\$95,264	\$130,855	\$348,382
Clackamas	\$1,752,200	\$144,768	\$110,702	\$239,483	\$288,823	\$1,708,814
Clatsop	\$132,972	\$62,688	\$28,316	\$72,495	\$61,141	\$131,094
Columbia	\$35,272	\$61,569	\$6,722	\$59,076	\$105,493	\$289,094
Coos	\$160,192	\$65,734	\$63,745	\$134,503	\$72,217	\$242,949
Crook	\$38,044	\$38,928	\$2,474	\$11,694	\$24,972	\$35,097
Curry	\$126,702	\$52,027	\$73,375	\$99,686	\$62,806	\$75,983
Deschutes	\$696,151	\$148,995	\$14,634	\$71,744	\$162,903	\$366,644
Douglas	\$181,321	\$146,748	\$19,936	\$71,451	\$90,213	\$201,019
Gilliam	\$31,372	\$281	\$232	\$1,216	\$1,101	\$10,851
Grant	\$160,814	\$12,623	\$297	\$1,223	\$19,415	\$75,984
Harney	\$118,510	\$7,217	\$329	\$1,421	\$16,351	\$29,127
Hood River	\$36,390	\$11,314	\$1,913	\$12,655	\$23,306	\$55,678
Jackson	\$929,413	\$236,479	\$27,962	\$195,648	\$219,822	\$715,840
Jefferson	\$63,824	\$31,483	\$1,665	\$4,556	\$19,685	\$37,080
Josephine	\$1,101,387	\$167,153	\$30,488	\$106,160	\$133,997	\$391,792
Klamath	\$882,141	\$173,830	\$12,468	\$35,969	\$200,715	\$232,801
Lake	\$102,535	\$19,718	\$1,409	\$4,148	\$23,518	\$27,096
Lane	\$5,049,902	\$338,361	\$81,748	\$345,955	\$441,489	\$1,739,995
Lincoln	\$184,002	\$112,323	\$93,901	\$197,769	\$81,396	\$102,869
Linn	\$619,840	\$142,914	\$22,262	\$172,593	\$122,474	\$451,570
Malheur	\$211,878	\$17,276	\$2,985	\$9,240	\$23,222	\$85,395
Marion	\$4,171,008	\$137,331	\$56,435	\$187,099	\$261,338	\$990,703
Morrow	\$103,188	\$7,169	\$1,166	\$4,050	\$12,931	\$29,207
Multnomah	\$5,608,542	\$192,009	\$90,800	\$609,499	\$455,269	\$3,891,494
Polk	\$588,052	\$61,119	\$22,551	\$80,328	\$81,124	\$295,050
Sherman	\$2,666	\$2,154	\$272	\$543	\$2,320	\$12,349
Tillamook	\$57,867	\$44,445	\$22,634	\$74,381	\$45,843	\$67,646
Umatilla	\$549,653	\$45,594	\$7,457	\$32,779	\$47,757	\$292,353
Union	\$416,506	\$27,384	\$3,134	\$16,820	\$37,763	\$179,567
Wallowa	\$37,368	\$12,592	\$764	\$1,719	\$24,848	\$13,910
Wasco	\$77,810	\$28,176	\$3,366	\$14,530	\$25,325	\$141,450
Washington	\$3,636,736	\$194,900	\$70,837	\$736,047	\$415,051	\$3,126,063
Wheeler	\$779	\$2,864	\$0	\$300	\$1,491	\$405
Yamhill	\$213,896	\$87,820	\$30,930	\$166,370	\$71,166	\$402,830

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Traveling to nature centers (e.g., zoo, botanical garden, arboretum)	Traveling to do outdoor photography, painting, or drawing	Traveling for collecting/foraging (e.g., rocks, plants, mushrooms, or berries)	Class I – All-terrain vehicle riding (3- & 4-wheel ATVs, straddle seat and handlebars)	Class II – Off-road 4-wheel driving (jeeps, pick-ups, dune buggies, SUVs)	Class III – Off-road motorcycling
Baker	\$1,345	\$32,114	\$357,523	\$334,682	\$750,373	\$73,610
Benton	\$35,304	\$63,383	\$721,778	\$130,299	\$150,064	\$199,857
Clackamas	\$144,783	\$197,993	\$1,084,960	\$968,004	\$1,126,970	\$626,687
Clatsop	\$28,495	\$58,353	\$319,301	\$164,004	\$151,320	\$15,414
Columbia	\$23,644	\$79,179	\$324,885	\$246,113	\$206,143	\$48,826
Coos	\$22,507	\$44,808	\$585,618	\$1,048,871	\$1,144,491	\$601,726
Crook	\$2,258	\$10,671	\$43,543	\$88,105	\$108,552	\$15,319
Curry	\$18,404	\$40,786	\$294,752	\$273,593	\$229,319	\$73,157
Deschutes	\$60,802	\$87,337	\$532,907	\$580,195	\$365,474	\$382,813
Douglas	\$19,820	\$140,278	\$849,956	\$458,437	\$1,002,392	\$242,974
Gilliam	\$174	\$1,306	\$2,242	\$11,067	\$16,619	\$0
Grant	\$1,222	\$9,601	\$59,159	\$157,626	\$223,452	\$62,710
Harney	\$676	\$5,730	\$28,303	\$162,437	\$139,609	\$89,078
Hood River	\$4,111	\$17,461	\$43,894	\$63,647	\$50,139	\$13,881
Jackson	\$95,273	\$168,474	\$691,922	\$802,839	\$592,745	\$1,095,397
Jefferson	\$12,318	\$20,356	\$80,735	\$89,687	\$84,435	\$45,438
Josephine	\$38,957	\$90,261	\$445,509	\$644,402	\$693,177	\$510,195
Klamath	\$20,649	\$205,285	\$1,269,336	\$471,460	\$857,485	\$102,427
Lake	\$2,330	\$23,557	\$144,204	\$65,003	\$117,270	\$15,089
Lane	\$162,463	\$181,240	\$1,426,182	\$441,398	\$1,123,289	\$3,135,613
Lincoln	\$18,022	\$48,378	\$466,675	\$160,733	\$106,506	\$101,887
Linn	\$61,142	\$133,214	\$830,454	\$524,760	\$521,099	\$132,543
Malheur	\$6,997	\$31,336	\$121,937	\$548,860	\$399,792	\$354,755
Marion	\$127,423	\$266,703	\$580,971	\$1,145,270	\$670,301	\$92,760
Morrow	\$1,056	\$8,748	\$45,453	\$86,416	\$80,559	\$25,563
Multnomah	\$386,591	\$386,817	\$1,709,701	\$144,516	\$361,821	\$81,470
Polk	\$26,664	\$59,797	\$351,225	\$150,816	\$127,929	\$19,786
Sherman	\$653	\$473	\$1,196	\$20,141	\$19,070	\$7,496
Tillamook	\$10,685	\$57,414	\$210,191	\$127,170	\$192,116	\$167,705
Umatilla	\$11,022	\$48,555	\$488,510	\$627,641	\$301,153	\$165,885
Union	\$8,261	\$34,185	\$434,675	\$403,973	\$1,098,621	\$96,847
Wallowa	\$1,348	\$16,694	\$54,682	\$314,840	\$371,783	\$170,459
Wasco	\$3,605	\$34,254	\$175,165	\$115,235	\$135,803	\$71,804
Washington	\$336,151	\$232,383	\$732,781	\$655,445	\$954,168	\$430,151
Wheeler	\$163	\$1,402	\$3,319	\$26,651	\$4,178	\$13,650
Yamhill	\$41,250	\$100,274	\$277,727	\$131,972	\$217,210	\$49,443

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Class IV – Riding UTVs or side-by-side ATVs (non-straddle seat, driver and passenger sit side-by-side in the vehicle, steering wheel for steering control)	Snowmobiling	Using personal watercraft, such as jet ski	Powerboating (cruising or water skiing)	RV/motorhome/trailer camping	Car camping with a tent
Baker	\$170,157	\$385,459	\$100,439	\$50,048	\$1,238,614	\$1,086,639
Benton	\$69,489	\$89,223	\$282,957	\$151,259	\$2,137,383	\$3,586,139
Clackamas	\$372,970	\$101,372	\$316,875	\$816,223	\$14,057,235	\$13,108,622
Clatsop	\$142,871	\$87,194	\$203,588	\$163,435	\$2,277,989	\$887,194
Columbia	\$90,225	\$40,756	\$1,622,558	\$345,721	\$3,804,891	\$2,129,074
Coos	\$1,854,098	\$79,298	\$780,206	\$201,560	\$3,605,697	\$1,879,061
Crook	\$85,695	\$44,395	\$25,207	\$86,818	\$1,649,627	\$355,317
Curry	\$73,146	\$22,944	\$61,889	\$36,169	\$1,708,321	\$498,781
Deschutes	\$545,070	\$978,268	\$596,505	\$202,283	\$7,034,106	\$8,943,924
Douglas	\$1,337,156	\$162,597	\$244,116	\$274,784	\$4,888,453	\$2,621,886
Gilliam	\$6,561	\$2,423	\$0	\$539	\$58,141	\$87,823
Grant	\$43,499	\$31,833	\$35,984	\$8,403	\$1,007,253	\$120,409
Harney	\$124,436	\$81,958	\$7,563	\$4,594	\$530,819	\$224,650
Hood River	\$20,436	\$17,769	\$94,820	\$45,708	\$661,695	\$508,850
Jackson	\$23,887	\$110,871	\$292,833	\$308,492	\$3,626,072	\$5,424,880
Jefferson	\$22,810	\$26,346	\$24,860	\$46,188	\$1,596,802	\$210,715
Josephine	\$187,196	\$30,038	\$3,345,030	\$245,031	\$6,184,247	\$3,062,012
Klamath	\$405,903	\$586,048	\$534,981	\$207,116	\$5,549,709	\$2,532,877
Lake	\$47,773	\$69,552	\$59,735	\$23,332	\$652,781	\$330,594
Lane	\$525,288	\$96,046	\$437,487	\$1,079,079	\$15,884,319	\$11,014,929
Lincoln	\$146,446	\$12,222	\$440,663	\$81,020	\$1,299,124	\$730,467
Linn	\$332,403	\$143,753	\$1,031,071	\$350,822	\$6,740,576	\$3,230,756
Malheur	\$380,489	\$111,005	\$64,544	\$62,979	\$819,988	\$725,083
Marion	\$168,196	\$381,048	\$710,736	\$352,840	\$7,742,567	\$5,090,617
Morrow	\$256,859	\$53,505	\$12,064	\$29,251	\$879,326	\$264,787
Multnomah	\$0	\$186,623	\$323,014	\$300,524	\$7,440,186	\$19,359,373
Polk	\$19,615	\$38,237	\$304,763	\$173,962	\$2,008,662	\$2,475,086
Sherman	\$20,334	\$0	\$1,864	\$6,894	\$275,349	\$22,852
Tillamook	\$36,833	\$3,228	\$6,838	\$53,422	\$878,159	\$547,802
Umatilla	\$530,106	\$599,055	\$226,524	\$80,711	\$4,553,966	\$1,654,205
Union	\$75,772	\$286,525	\$208,553	\$96,743	\$1,998,646	\$1,172,294
Wallowa	\$162,685	\$510,493	\$15,656	\$92,277	\$890,423	\$149,826
Wasco	\$170,515	\$19,178	\$66,425	\$66,167	\$1,092,187	\$647,154
Washington	\$95,889	\$191,849	\$1,113,009	\$595,960	\$6,698,193	\$23,813,840
Wheeler	\$0	\$0	\$0	\$839	\$100,726	\$15,660
Yamhill	\$488,123	\$33,150	\$149,507	\$96,846	\$4,571,903	\$2,430,495

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Yurts or camper cabins	Hunting – Big game	Hunting – Small game	Fishing – Ocean/saltwater	Fishing – Freshwater	Crabbing
Baker	\$84,725	\$572,311	\$345,391	\$154,327	\$289,142	\$7,763
Benton	\$358,984	\$399,077	\$240,844	\$169,561	\$317,683	\$128,366
Clackamas	\$1,651,480	\$1,340,006	\$808,696	\$890,905	\$1,669,167	\$813,351
Clatsop	\$102,348	\$601,658	\$363,102	\$200,086	\$374,875	\$416,389
Columbia	\$194,751	\$631,129	\$380,888	\$402,273	\$753,684	\$173,519
Coos	\$172,979	\$1,182,694	\$713,758	\$461,820	\$865,249	\$914,179
Crook	\$18,905	\$209,209	\$126,258	\$64,829	\$121,460	\$14,835
Curry	\$97,790	\$319,681	\$192,928	\$134,969	\$252,873	\$205,421
Deschutes	\$495,935	\$736,802	\$444,662	\$535,686	\$1,003,642	\$207,380
Douglas	\$322,906	\$1,615,378	\$974,885	\$392,645	\$735,645	\$991,753
Gilliam	\$5,772	\$22,525	\$13,594	\$8,620	\$16,150	\$5,617
Grant	\$12,372	\$218,176	\$131,669	\$65,864	\$123,400	\$4,417
Harney	\$7,749	\$166,147	\$100,270	\$32,773	\$61,402	\$2,927
Hood River	\$61,630	\$180,216	\$108,761	\$59,217	\$110,947	\$14,113
Jackson	\$848,780	\$2,030,015	\$1,225,119	\$746,407	\$1,398,441	\$343,521
Jefferson	\$64,408	\$147,633	\$89,097	\$106,196	\$198,965	\$14,083
Josephine	\$690,394	\$1,135,228	\$685,113	\$495,173	\$927,738	\$190,416
Klamath	\$264,335	\$3,131,501	\$1,889,868	\$1,157,839	\$2,169,285	\$445,138
Lake	\$30,624	\$367,897	\$222,027	\$134,844	\$252,639	\$50,079
Lane	\$873,562	\$3,855,650	\$2,326,894	\$1,446,788	\$2,710,650	\$1,344,761
Lincoln	\$61,832	\$370,046	\$223,324	\$174,680	\$327,274	\$362,516
Linn	\$460,323	\$2,131,483	\$1,286,355	\$649,184	\$1,216,288	\$424,447
Malheur	\$133,197	\$964,742	\$582,224	\$194,037	\$363,540	\$12,661
Marion	\$2,349,344	\$829,076	\$500,349	\$443,140	\$830,251	\$476,794
Morrow	\$206,068	\$251,008	\$151,484	\$89,552	\$167,782	\$18,780
Multnomah	\$1,811,748	\$1,966,039	\$1,186,509	\$1,036,577	\$1,942,094	\$1,225,808
Polk	\$208,511	\$587,422	\$354,511	\$201,010	\$376,605	\$238,331
Sherman	\$6,870	\$9,103	\$5,494	\$8,569	\$16,054	\$11,008
Tillamook	\$51,361	\$247,712	\$149,495	\$131,009	\$245,454	\$378,712
Umatilla	\$342,085	\$619,362	\$373,786	\$339,739	\$636,522	\$109,414
Union	\$60,128	\$1,317,870	\$795,338	\$299,598	\$561,316	\$50,598
Wallowa	\$18,172	\$181,725	\$109,672	\$33,728	\$63,191	\$1,708
Wasco	\$81,847	\$233,486	\$140,909	\$142,626	\$267,219	\$31,624
Washington	\$1,276,671	\$1,877,312	\$1,132,962	\$1,509,493	\$2,828,131	\$1,142,757
Wheeler	\$1,510	\$28,561	\$17,237	\$6,639	\$12,439	\$122
Yamhill	\$472,258	\$960,173	\$579,466	\$150,908	\$282,735	\$174,231

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Shellfishing/clamming	White-water canoeing, kayaking, or rafting	Flat water canoeing, sea kayaking, rowing, stand-up paddling, tubing, floating	Wind-surfing/ kiteboarding/sailing	Beach activities – Ocean	Beach activities – Lakes, reservoirs, rivers
Baker	\$4,036	\$17,247	\$17,282	\$1,280	\$12,734	\$44,752
Benton	\$36,386	\$101,467	\$98,428	\$31,327	\$593,002	\$262,310
Clackamas	\$553,780	\$414,734	\$1,101,079	\$60,915	\$1,566,395	\$1,704,209
Clatsop	\$357,034	\$56,068	\$78,487	\$3,495	\$1,164,775	\$338,290
Columbia	\$116,050	\$81,008	\$76,097	\$45,879	\$242,354	\$273,270
Coos	\$305,002	\$375,430	\$341,296	\$15,982	\$1,067,039	\$506,234
Crook	\$3,492	\$54,508	\$43,958	\$11,857	\$25,331	\$74,863
Curry	\$57,911	\$80,435	\$88,750	\$1,375	\$591,287	\$233,511
Deschutes	\$28,735	\$1,794,221	\$694,294	\$71,465	\$367,836	\$1,062,713
Douglas	\$201,962	\$212,082	\$214,838	\$5,753	\$421,687	\$516,605
Gilliam	\$3,182	\$2,388	\$1,292	\$998	\$2,547	\$1,495
Grant	\$289	\$8,329	\$6,220	\$1,897	\$6,649	\$27,347
Harney	\$2,974	\$6,154	\$1,402	\$979	\$9,167	\$10,159
Hood River	\$10,266	\$68,223	\$70,689	\$1,654	\$46,113	\$129,756
Jackson	\$78,859	\$876,011	\$387,313	\$17,696	\$562,082	\$1,329,673
Jefferson	\$1,954	\$16,422	\$29,619	\$1,487	\$27,711	\$77,886
Josephine	\$44,208	\$567,451	\$152,543	\$15,790	\$453,273	\$714,924
Klamath	\$161,382	\$147,903	\$171,594	\$36,348	\$133,945	\$335,243
Lake	\$18,045	\$16,646	\$23,318	\$4,538	\$15,486	\$40,885
Lane	\$238,870	\$749,892	\$587,665	\$54,375	\$1,437,243	\$2,622,253
Lincoln	\$75,638	\$177,841	\$103,867	\$6,336	\$1,083,040	\$283,344
Linn	\$45,016	\$96,694	\$127,493	\$51,263	\$908,435	\$621,676
Malheur	\$3,990	\$23,159	\$4,555	\$1,040	\$21,917	\$61,205
Marion	\$26,049	\$181,566	\$150,868	\$5,164	\$1,019,981	\$622,051
Morrow	\$3,600	\$2,022	\$6,769	\$377	\$14,175	\$66,875
Multnomah	\$307,074	\$1,460,249	\$2,014,027	\$126,760	\$2,730,684	\$2,066,696
Polk	\$33,464	\$75,376	\$43,169	\$34,588	\$417,929	\$171,228
Sherman	\$5,175	\$442	\$80	\$0	\$1,709	\$5,770
Tillamook	\$119,688	\$25,596	\$20,277	\$2,386	\$620,653	\$240,204
Umatilla	\$28,828	\$43,678	\$123,421	\$18,520	\$105,075	\$247,200
Union	\$16,094	\$74,293	\$46,077	\$1,635	\$40,001	\$94,088
Wallowa	\$826	\$14,262	\$17,258	\$2,044	\$8,557	\$116,223
Wasco	\$13,867	\$131,305	\$27,109	\$3,287	\$58,165	\$75,971
Washington	\$2,478,075	\$5,242,070	\$1,313,301	\$53,531	\$4,033,508	\$2,020,122
Wheeler	\$0	\$1,373	\$1,039	\$134	\$913	\$5,542
Yamhill	\$69,769	\$176,277	\$76,010	\$11,559	\$538,596	\$224,645

Table A1. Total Cost of Illness Savings by Activity by Oregon County (2023 USD), continued

Oregon County	Downhill (alpine) skiing or snowboarding	Cross-country/Nordic skiing/skijoring	Sledding, tubing, or general snow play	Snowshoeing	Total County
Baker	\$110,359	\$117,064	\$439,691	\$195,418	\$18,819,961
Benton	\$357,591	\$419,477	\$601,961	\$195,979	\$87,683,003
Clackamas	\$1,839,092	\$432,803	\$2,023,818	\$641,529	\$228,593,190
Clatsop	\$67,137	\$59,635	\$216,905	\$23,687	\$39,243,559
Columbia	\$64,651	\$12,478	\$294,388	\$32,675	\$38,056,414
Coos	\$168,339	\$164,519	\$288,231	\$66,131	\$52,056,579
Crook	\$61,679	\$160,415	\$76,207	\$38,960	\$12,630,390
Curry	\$15,185	\$46,001	\$98,435	\$18,606	\$20,611,819
Deschutes	\$4,946,715	\$1,936,770	\$1,720,636	\$994,951	\$179,905,833
Douglas	\$185,835	\$33,187	\$640,418	\$33,572	\$68,122,013
Gilliam	\$949	\$0	\$16,014	\$6,663	\$1,821,025
Grant	\$10,174	\$28,957	\$161,689	\$5,312	\$7,846,562
Harney	\$6,967	\$60,440	\$133,514	\$17,317	\$6,351,225
Hood River	\$764,477	\$305,641	\$194,433	\$191,994	\$17,159,806
Jackson	\$1,038,009	\$1,388,372	\$652,430	\$436,551	\$141,906,607
Jefferson	\$55,162	\$80,841	\$153,410	\$13,262	\$12,844,151
Josephine	\$110,999	\$103,075	\$683,735	\$23,275	\$72,622,744
Klamath	\$197,444	\$350,143	\$744,331	\$518,410	\$80,981,770
Lake	\$29,381	\$42,056	\$95,130	\$60,200	\$9,655,906
Lane	\$1,254,448	\$2,307,859	\$1,894,482	\$1,627,350	\$268,026,334
Lincoln	\$37,887	\$41,857	\$127,854	\$21,918	\$31,139,969
Linn	\$435,844	\$62,213	\$861,951	\$170,912	\$88,458,753
Malheur	\$111,077	\$2,921	\$532,117	\$3,581	\$18,247,747
Marion	\$496,921	\$165,666	\$1,437,148	\$595,062	\$155,656,509
Morrow	\$20,497	\$33,575	\$101,695	\$9,319	\$7,020,229
Multnomah	\$4,773,832	\$2,815,248	\$3,175,134	\$1,657,656	\$618,470,394
Polk	\$174,769	\$36,088	\$433,549	\$98,284	\$42,630,594
Sherman	\$2,019	\$0	\$12,965	\$125	\$1,470,553
Tillamook	\$26,931	\$5,526	\$88,259	\$9,516	\$17,302,730
Umatilla	\$125,288	\$65,617	\$809,409	\$125,612	\$46,891,135
Union	\$319,465	\$268,831	\$760,560	\$253,435	\$31,524,729
Wallowa	\$63,968	\$129,992	\$589,972	\$47,721	\$9,173,316
Wasco	\$79,175	\$21,749	\$362,332	\$51,349	\$17,797,489
Washington	\$5,455,637	\$1,981,363	\$2,106,678	\$944,975	\$453,559,715
Wheeler	\$2,084	\$6,133	\$6,543	\$6,335	\$1,195,598
Yamhill	\$256,069	\$64,163	\$424,533	\$106,102	\$59,161,254

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County

Oregon County	Walking on streets or sidewalks	Walking on paved paths or natural trails	Jogging or running on streets or sidewalks	Jogging or running on paved paths or natural trails	Riding non-powered scooters/skateboards on streets or sidewalks	Pedaling bicycles on streets or sidewalks
Baker	0.41%	0.55%	0.33%	0.30%	0.58%	0.58%
Benton	2.85%	3.26%	3.15%	3.54%	4.80%	4.80%
Clackamas	7.72%	8.10%	8.02%	4.94%	4.38%	4.38%
Clatsop	1.18%	1.52%	0.78%	1.33%	0.84%	0.84%
Columbia	1.08%	1.04%	0.66%	0.97%	0.98%	0.98%
Coos	1.43%	1.44%	0.95%	0.83%	1.22%	1.22%
Crook	0.39%	0.42%	0.39%	0.23%	0.34%	0.34%
Curry	0.55%	0.69%	0.34%	0.26%	0.57%	0.57%
Deschutes	4.64%	8.09%	6.76%	12.57%	4.74%	4.74%
Douglas	2.11%	2.17%	1.19%	1.64%	2.03%	2.03%
Gilliam	0.08%	0.05%	0.09%	0.05%	0.07%	0.07%
Grant	0.23%	0.17%	0.19%	0.18%	0.12%	0.12%
Harney	0.15%	0.15%	0.08%	0.08%	0.10%	0.10%
Hood River	0.53%	0.62%	0.43%	0.68%	0.52%	0.52%
Jackson	4.94%	4.75%	4.35%	4.07%	4.74%	4.74%
Jefferson	0.33%	0.42%	0.39%	0.51%	0.23%	0.23%
Josephine	2.15%	1.64%	2.08%	1.95%	1.64%	1.64%
Klamath	1.39%	2.34%	1.16%	2.79%	1.05%	1.05%
Lake	0.17%	0.28%	0.14%	0.32%	0.13%	0.13%
Lane	8.15%	8.94%	5.51%	6.56%	10.06%	10.06%
Lincoln	1.06%	1.13%	0.91%	0.70%	0.55%	0.55%
Linn	3.04%	2.75%	0.97%	1.32%	3.44%	3.44%
Malheur	0.47%	0.30%	0.60%	0.44%	0.46%	0.46%
Marion	5.67%	5.36%	3.88%	1.89%	4.53%	4.53%
Morrow	0.17%	0.10%	0.14%	0.10%	0.17%	0.17%
Multnomah	25.67%	22.84%	30.77%	31.21%	29.15%	29.15%
Polk	1.56%	1.42%	1.17%	0.87%	1.20%	1.20%
Sherman	0.05%	0.04%	0.02%	0.01%	0.03%	0.03%
Tillamook	0.53%	0.80%	0.11%	0.16%	0.17%	0.17%
Umatilla	1.65%	1.11%	1.82%	0.50%	1.79%	1.79%
Union	0.89%	0.60%	0.71%	0.31%	1.30%	1.30%
Wallowa	0.24%	0.18%	0.18%	0.11%	0.13%	0.13%
Wasco	0.64%	0.48%	0.31%	0.30%	0.41%	0.41%
Washington	15.68%	14.26%	19.89%	17.43%	15.06%	15.06%
Wheeler	0.05%	0.04%	0.05%	0.02%	0.02%	0.02%
Yamhill	2.13%	1.93%	1.46%	0.85%	2.45%	2.45%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Pedaling bicycles on paved paths or natural trails (including mountain biking)	Riding E-bikes on streets or sidewalks	Riding E-bikes on paved paths or natural trails	Riding e-scooters/e-skateboards/monowheel/other on streets or sidewalks	Riding e-scooters/e-skateboards/monowheel/other on paved paths or natural trails	Flying drones in local parks or open spaces
Baker	0.44%	0.58%	0.44%	0.58%	0.44%	0.18%
Benton	4.61%	4.80%	4.61%	4.80%	4.61%	4.45%
Clackamas	5.78%	4.38%	5.78%	4.38%	5.78%	8.66%
Clatsop	1.09%	0.84%	1.09%	0.84%	1.09%	0.50%
Columbia	0.75%	0.98%	0.75%	0.98%	0.75%	6.52%
Coos	1.27%	1.22%	1.27%	1.22%	1.27%	2.27%
Crook	0.22%	0.34%	0.22%	0.34%	0.22%	1.68%
Curry	0.23%	0.57%	0.23%	0.57%	0.23%	0.20%
Deschutes	4.00%	4.74%	4.00%	4.74%	4.00%	10.16%
Douglas	1.44%	2.03%	1.44%	2.03%	1.44%	0.82%
Gilliam	0.02%	0.07%	0.02%	0.07%	0.02%	0.14%
Grant	0.05%	0.12%	0.05%	0.12%	0.05%	0.27%
Harney	0.06%	0.10%	0.06%	0.10%	0.06%	0.14%
Hood River	0.57%	0.52%	0.57%	0.52%	0.57%	0.24%
Jackson	6.70%	4.74%	6.70%	4.74%	6.70%	2.51%
Jefferson	0.23%	0.23%	0.23%	0.23%	0.23%	0.21%
Josephine	1.66%	1.64%	1.66%	1.64%	1.66%	2.24%
Klamath	1.19%	1.05%	1.19%	1.05%	1.19%	5.17%
Lake	0.14%	0.13%	0.14%	0.13%	0.14%	0.64%
Lane	13.56%	10.06%	13.56%	10.06%	13.56%	7.73%
Lincoln	0.20%	0.55%	0.20%	0.55%	0.20%	0.90%
Linn	2.26%	3.44%	2.26%	3.44%	2.26%	7.28%
Malheur	0.07%	0.46%	0.07%	0.46%	0.07%	0.15%
Marion	2.93%	4.53%	2.93%	4.53%	2.93%	0.73%
Morrow	0.08%	0.17%	0.08%	0.17%	0.08%	0.05%
Multnomah	24.76%	29.15%	24.76%	29.15%	24.76%	18.01%
Polk	0.70%	1.20%	0.70%	1.20%	0.70%	4.92%
Sherman	0.03%	0.03%	0.03%	0.03%	0.03%	0.00%
Tillamook	0.10%	0.17%	0.10%	0.17%	0.10%	0.34%
Umatilla	0.66%	1.79%	0.66%	1.79%	0.66%	2.63%
Union	1.11%	1.30%	1.11%	1.30%	1.11%	0.23%
Wallowa	0.03%	0.13%	0.03%	0.13%	0.03%	0.29%
Wasco	0.58%	0.41%	0.58%	0.41%	0.58%	0.47%
Washington	20.41%	15.06%	20.41%	15.06%	20.41%	7.61%
Wheeler	0.00%	0.02%	0.00%	0.02%	0.00%	0.02%
Yamhill	2.08%	2.45%	2.08%	2.45%	2.08%	1.64%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Picnicking	Taking children or grandchildren to a playground	Nature immersion (e.g., relaxing, hanging out, escaping heat or noise)	Going to dog parks or off-leash areas	Attending outdoor concerts, fairs, or festivals	Golfing
Baker	0.94%	0.27%	0.59%	0.57%	0.29%	0.26%
Benton	1.84%	2.07%	2.81%	3.31%	2.18%	2.22%
Clackamas	12.46%	10.14%	8.47%	8.19%	10.46%	9.74%
Clatsop	1.02%	0.78%	1.54%	1.32%	1.32%	0.92%
Columbia	0.80%	1.72%	1.30%	1.10%	1.47%	1.12%
Coos	2.05%	1.44%	1.92%	1.39%	1.15%	1.39%
Crook	0.32%	0.21%	0.55%	0.28%	0.61%	0.50%
Curry	0.97%	0.45%	1.35%	0.78%	0.58%	0.57%
Deschutes	3.05%	2.18%	4.76%	3.47%	7.28%	9.35%
Douglas	2.74%	1.19%	2.90%	2.12%	3.08%	1.96%
Gilliam	0.04%	0.06%	0.10%	0.00%	0.04%	0.24%
Grant	0.28%	0.45%	0.37%	0.24%	0.11%	0.24%
Harney	0.42%	0.17%	0.39%	0.16%	0.18%	0.28%
Hood River	0.27%	0.33%	0.48%	0.55%	0.49%	0.42%
Jackson	5.21%	4.25%	4.61%	2.80%	4.99%	7.91%
Jefferson	0.60%	0.22%	0.61%	0.24%	0.34%	1.05%
Josephine	3.43%	2.33%	4.28%	1.06%	3.45%	3.06%
Klamath	2.51%	1.38%	2.53%	1.54%	1.21%	1.35%
Lake	0.32%	0.16%	0.32%	0.19%	0.15%	0.16%
Lane	13.82%	10.33%	11.57%	9.43%	10.37%	8.76%
Lincoln	0.85%	0.61%	1.58%	0.88%	0.81%	1.34%
Linn	2.26%	2.68%	4.65%	3.08%	2.85%	3.14%
Malheur	0.62%	0.51%	0.64%	0.33%	0.42%	0.94%
Marion	7.17%	5.88%	6.13%	6.63%	4.64%	3.03%
Morrow	0.25%	0.17%	0.23%	0.14%	0.14%	0.58%
Multnomah	11.92%	23.10%	13.14%	31.71%	23.55%	12.48%
Polk	1.56%	1.75%	2.27%	1.52%	1.72%	1.17%
Sherman	0.06%	0.07%	0.09%	0.06%	0.06%	0.04%
Tillamook	0.64%	0.40%	0.85%	0.65%	0.39%	0.49%
Umatilla	2.53%	1.74%	2.10%	1.12%	1.51%	1.39%
Union	1.59%	1.07%	1.65%	0.83%	0.70%	0.90%
Wallowa	0.30%	0.08%	0.30%	0.23%	0.20%	0.17%
Wasco	0.68%	0.84%	1.04%	0.54%	0.49%	0.73%
Washington	14.55%	18.56%	11.13%	11.98%	10.99%	19.98%
Wheeler	0.02%	0.00%	0.06%	0.10%	0.07%	0.03%
Yamhill	1.91%	2.39%	2.68%	1.43%	1.70%	2.11%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Tennis (played outdoors)	Pickleball (played outdoors)	Outdoor court games other than tennis/pickleball (e.g., basketball, badminton, futsal, beach volleyball)	Field sports (e.g., soccer, softball, baseball, football, ultimate frisbee, disc-golf, lacrosse)	Visiting historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers)	Nature observation (e.g., birds, other wildlife, forests, wildflowers)
Baker	0.18%	0.39%	0.39%	0.34%	0.47%	1.33%
Benton	1.59%	1.73%	1.73%	4.99%	2.30%	3.39%
Clackamas	3.11%	6.11%	6.11%	9.81%	8.41%	7.48%
Clatsop	0.57%	0.46%	0.46%	0.38%	2.64%	1.58%
Columbia	0.24%	0.12%	0.12%	0.55%	2.62%	2.73%
Coos	0.72%	0.56%	0.56%	0.62%	1.06%	1.87%
Crook	0.19%	0.13%	0.13%	0.17%	0.44%	0.65%
Curry	0.96%	0.44%	0.44%	0.62%	1.03%	1.63%
Deschutes	4.30%	2.43%	2.43%	3.00%	3.58%	4.22%
Douglas	2.29%	0.63%	0.63%	2.93%	2.45%	2.34%
Gilliam	0.05%	0.11%	0.11%	0.05%	0.05%	0.03%
Grant	0.07%	0.56%	0.56%	0.26%	0.21%	0.50%
Harney	0.32%	0.41%	0.41%	0.30%	0.19%	0.42%
Hood River	1.17%	0.13%	0.13%	0.50%	0.39%	0.60%
Jackson	5.79%	3.24%	3.24%	3.20%	4.81%	5.70%
Jefferson	0.44%	0.22%	0.22%	0.57%	0.40%	0.51%
Josephine	5.64%	3.84%	3.84%	3.22%	3.37%	3.47%
Klamath	3.32%	3.08%	3.08%	0.50%	2.17%	5.20%
Lake	0.38%	0.36%	0.36%	0.11%	0.27%	0.61%
Lane	11.51%	17.60%	17.60%	3.88%	8.47%	11.44%
Lincoln	0.43%	0.64%	0.64%	1.09%	1.37%	2.11%
Linn	1.64%	2.16%	2.16%	1.39%	3.12%	3.17%
Malheur	0.41%	0.74%	0.74%	0.61%	2.02%	0.60%
Marion	6.76%	14.54%	14.54%	11.70%	7.09%	6.77%
Morrow	0.09%	0.36%	0.36%	0.42%	0.27%	0.34%
Multnomah	28.13%	19.55%	19.55%	13.06%	16.49%	11.80%
Polk	1.40%	2.05%	2.05%	0.98%	1.97%	2.10%
Sherman	0.06%	0.01%	0.01%	0.02%	0.20%	0.06%
Tillamook	0.25%	0.20%	0.20%	0.12%	0.68%	1.19%
Umatilla	3.07%	1.92%	1.92%	2.20%	1.77%	1.24%
Union	0.46%	1.45%	1.45%	1.54%	0.94%	0.98%
Wallowa	0.04%	0.13%	0.13%	0.10%	0.19%	0.64%
Wasco	0.30%	0.27%	0.27%	0.83%	0.77%	0.66%
Washington	13.09%	12.68%	12.68%	26.93%	15.39%	10.75%
Wheeler	0.01%	0.00%	0.00%	0.00%	0.01%	0.04%
Yamhill	1.01%	0.75%	0.75%	3.02%	2.42%	1.84%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Visiting nature centers (e.g., zoo, botanical garden, arboretum)	Taking children or grandchildren to nature settings to explore and/or learn about nature	Outdoor photography, painting, or drawing	Traveling to walk/hike on non-local paved paths or natural trails	Long-distance hiking (backpacking)	Traveling to jog or run on non-local paved paths or natural trails
Baker	0.08%	0.27%	1.09%	0.55%	0.79%	0.30%
Benton	2.03%	2.07%	2.16%	3.26%	4.03%	3.54%
Clackamas	8.34%	10.14%	6.74%	8.10%	4.17%	4.94%
Clatsop	1.64%	0.78%	1.99%	1.52%	3.71%	1.33%
Columbia	1.36%	1.72%	2.69%	1.04%	0.44%	0.97%
Coos	1.30%	1.44%	1.52%	1.44%	2.09%	0.83%
Crook	0.13%	0.21%	0.36%	0.42%	0.30%	0.23%
Curry	1.06%	0.45%	1.39%	0.69%	0.33%	0.26%
Deschutes	3.50%	2.18%	2.97%	8.09%	5.96%	12.57%
Douglas	1.14%	1.19%	4.77%	2.17%	2.12%	1.64%
Gilliam	0.01%	0.06%	0.04%	0.05%	0.01%	0.05%
Grant	0.07%	0.45%	0.33%	0.17%	0.16%	0.18%
Harney	0.04%	0.17%	0.19%	0.15%	0.30%	0.08%
Hood River	0.24%	0.33%	0.59%	0.62%	0.49%	0.68%
Jackson	5.49%	4.25%	5.73%	4.75%	9.21%	4.07%
Jefferson	0.71%	0.22%	0.69%	0.42%	0.20%	0.51%
Josephine	2.24%	2.33%	3.07%	1.64%	1.30%	1.95%
Klamath	1.19%	1.38%	6.99%	2.34%	17.53%	2.79%
Lake	0.13%	0.16%	0.80%	0.28%	1.96%	0.32%
Lane	9.36%	10.33%	6.17%	8.94%	7.90%	6.56%
Lincoln	1.04%	0.61%	1.65%	1.13%	0.53%	0.70%
Linn	3.52%	2.68%	4.53%	2.75%	4.42%	1.32%
Malheur	0.40%	0.51%	1.07%	0.30%	0.17%	0.44%
Marion	7.34%	5.88%	9.08%	5.36%	3.13%	1.89%
Morrow	0.06%	0.17%	0.30%	0.10%	0.10%	0.10%
Multnomah	22.26%	23.10%	13.16%	22.84%	9.40%	31.21%
Polk	1.54%	1.75%	2.03%	1.42%	0.91%	0.87%
Sherman	0.04%	0.07%	0.02%	0.04%	0.01%	0.01%
Tillamook	0.62%	0.40%	1.95%	0.80%	0.21%	0.16%
Umatilla	0.63%	1.74%	1.65%	1.11%	0.61%	0.50%
Union	0.48%	1.07%	1.16%	0.60%	0.88%	0.31%
Wallowa	0.08%	0.08%	0.57%	0.18%	0.42%	0.11%
Wasco	0.21%	0.84%	1.17%	0.48%	0.52%	0.30%
Washington	19.36%	18.56%	7.91%	14.26%	14.50%	17.43%
Wheeler	0.01%	0.00%	0.05%	0.04%	0.03%	0.02%
Yamhill	2.38%	2.39%	3.41%	1.93%	1.18%	0.85%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Traveling to pedal bicycles on non-local paved paths or natural trails	Traveling to ride e-bikes on non-local paved paths or natural trails	Traveling to ride e-scooters/e-skateboards/monowheel/other on non-local paved paths or natural trails	Horseback riding	Traveling to picnic	Traveling to off-leash areas/hike with your dog
Baker	0.38%	0.38%	0.38%	2.27%	0.94%	0.57%
Benton	3.84%	3.84%	3.84%	1.19%	1.84%	3.31%
Clackamas	1.86%	1.86%	1.86%	11.89%	12.46%	8.19%
Clatsop	0.39%	0.39%	0.39%	1.05%	1.02%	1.32%
Columbia	0.64%	0.64%	0.64%	1.18%	0.80%	1.10%
Coos	1.72%	1.72%	1.72%	2.22%	2.05%	1.39%
Crook	0.51%	0.51%	0.51%	1.15%	0.32%	0.28%
Curry	0.42%	0.42%	0.42%	1.03%	0.97%	0.78%
Deschutes	7.81%	7.81%	7.81%	2.03%	3.05%	3.47%
Douglas	0.55%	0.55%	0.55%	3.32%	2.74%	2.12%
Gilliam	0.02%	0.02%	0.02%	0.07%	0.04%	0.00%
Grant	0.04%	0.04%	0.04%	0.30%	0.28%	0.24%
Harney	0.32%	0.32%	0.32%	1.10%	0.42%	0.16%
Hood River	1.78%	1.78%	1.78%	0.35%	0.27%	0.55%
Jackson	4.86%	4.86%	4.86%	3.89%	5.21%	2.80%
Jefferson	0.48%	0.48%	0.48%	0.86%	0.60%	0.24%
Josephine	2.12%	2.12%	2.12%	0.27%	3.43%	1.06%
Klamath	2.99%	2.99%	2.99%	1.61%	2.51%	1.54%
Lake	0.36%	0.36%	0.36%	0.23%	0.32%	0.19%
Lane	8.63%	8.63%	8.63%	2.07%	13.82%	9.43%
Lincoln	0.67%	0.67%	0.67%	0.57%	0.85%	0.88%
Linn	1.55%	1.55%	1.55%	0.87%	2.26%	3.08%
Malheur	0.29%	0.29%	0.29%	6.46%	0.62%	0.33%
Marion	2.10%	2.10%	2.10%	3.72%	7.17%	6.63%
Morrow	0.04%	0.04%	0.04%	0.37%	0.25%	0.14%
Multnomah	16.35%	16.35%	16.35%	0.80%	11.92%	31.71%
Polk	0.57%	0.57%	0.57%	0.29%	1.56%	1.52%
Sherman	0.05%	0.05%	0.05%	0.35%	0.06%	0.06%
Tillamook	0.25%	0.25%	0.25%	0.72%	0.64%	0.65%
Umatilla	1.06%	1.06%	1.06%	2.37%	2.53%	1.12%
Union	1.15%	1.15%	1.15%	2.40%	1.59%	0.83%
Wallowa	0.08%	0.08%	0.08%	0.67%	0.30%	0.23%
Wasco	0.80%	0.80%	0.80%	0.85%	0.68%	0.54%
Washington	33.44%	33.44%	33.44%	37.89%	14.55%	11.98%
Wheeler	0.01%	0.01%	0.01%	0.03%	0.02%	0.10%
Yamhill	1.91%	1.91%	1.91%	3.57%	1.91%	1.43%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Traveling to golf	Sightseeing/driving or motorcycling for pleasure	Traveling to attend outdoor concerts, fairs, or festivals	Traveling to historic sites or history-themed parks (e.g., history-oriented museums, outdoor displays, visitor centers)	Traveling for nature immersion (e.g., relaxing, hanging out, escaping heat or noise)	Traveling for tennis or pickleball
Baker	0.26%	0.73%	0.29%	0.47%	0.59%	0.59%
Benton	2.22%	2.00%	2.18%	2.30%	2.81%	2.81%
Clackamas	9.74%	8.55%	10.46%	8.41%	8.47%	8.47%
Clatsop	0.92%	1.64%	1.32%	2.64%	1.54%	1.54%
Columbia	1.12%	1.32%	1.47%	2.62%	1.30%	1.30%
Coos	1.39%	2.37%	1.15%	1.06%	1.92%	1.92%
Crook	0.50%	0.56%	0.61%	0.44%	0.55%	0.55%
Curry	0.57%	0.94%	0.58%	1.03%	1.35%	1.35%
Deschutes	9.35%	4.18%	7.28%	3.58%	4.76%	4.76%
Douglas	1.96%	3.23%	3.08%	2.45%	2.90%	2.90%
Gilliam	0.24%	0.04%	0.04%	0.05%	0.10%	0.10%
Grant	0.24%	0.35%	0.11%	0.21%	0.37%	0.37%
Harney	0.28%	0.53%	0.18%	0.19%	0.39%	0.39%
Hood River	0.42%	0.29%	0.49%	0.39%	0.48%	0.48%
Jackson	7.91%	4.58%	4.99%	4.81%	4.61%	4.61%
Jefferson	1.05%	0.52%	0.34%	0.40%	0.61%	0.61%
Josephine	3.06%	3.25%	3.45%	3.37%	4.28%	4.28%
Klamath	1.35%	1.62%	1.21%	2.17%	2.53%	2.53%
Lake	0.16%	0.24%	0.15%	0.27%	0.32%	0.32%
Lane	8.76%	13.32%	10.37%	8.47%	11.57%	11.57%
Lincoln	1.34%	1.54%	0.81%	1.37%	1.58%	1.58%
Linn	3.14%	3.50%	2.85%	3.12%	4.65%	4.65%
Malheur	0.94%	0.66%	0.42%	2.02%	0.64%	0.64%
Marion	3.03%	6.99%	4.64%	7.09%	6.13%	6.13%
Morrow	0.58%	0.28%	0.14%	0.27%	0.23%	0.23%
Multnomah	12.48%	12.50%	23.55%	16.49%	13.14%	13.14%
Polk	1.17%	1.60%	1.72%	1.97%	2.27%	2.27%
Sherman	0.04%	0.12%	0.06%	0.20%	0.09%	0.09%
Tillamook	0.49%	0.73%	0.39%	0.68%	0.85%	0.85%
Umatilla	1.39%	2.43%	1.51%	1.77%	2.10%	2.10%
Union	0.90%	1.94%	0.70%	0.94%	1.65%	1.65%
Wallowa	0.17%	0.48%	0.20%	0.19%	0.30%	0.30%
Wasco	0.73%	1.02%	0.49%	0.77%	1.04%	1.04%
Washington	19.98%	13.41%	10.99%	15.39%	11.13%	11.13%
Wheeler	0.03%	0.01%	0.07%	0.01%	0.06%	0.06%
Yamhill	2.11%	2.52%	1.70%	2.42%	2.68%	2.68%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Traveling for other outdoor sports (e.g., basketball, soccer, baseball, disc-golf, badminton, beach volleyball)	Traveling to go bird watching	Whale watching	Exploring tidepools	Traveling for nature observation (e.g., other wildlife, forests, wildflowers)	Traveling with children or grandchildren to nature settings to explore and/or learn about nature
Baker	0.39%	0.76%	0.04%	0.11%	1.33%	0.27%
Benton	1.73%	2.27%	3.03%	2.46%	3.39%	2.07%
Clackamas	6.11%	4.95%	11.82%	6.18%	7.48%	10.14%
Clatsop	0.46%	2.14%	3.02%	1.87%	1.58%	0.78%
Columbia	0.12%	2.11%	0.72%	1.53%	2.73%	1.72%
Coos	0.56%	2.25%	6.81%	3.47%	1.87%	1.44%
Crook	0.13%	1.33%	0.26%	0.30%	0.65%	0.21%
Curry	0.44%	1.78%	7.83%	2.57%	1.63%	0.45%
Deschutes	2.43%	5.09%	1.56%	1.85%	4.22%	2.18%
Douglas	0.63%	5.02%	2.13%	1.84%	2.34%	1.19%
Gilliam	0.11%	0.01%	0.02%	0.03%	0.03%	0.06%
Grant	0.56%	0.43%	0.03%	0.03%	0.50%	0.45%
Harney	0.41%	0.25%	0.04%	0.04%	0.42%	0.17%
Hood River	0.13%	0.39%	0.20%	0.33%	0.60%	0.33%
Jackson	3.24%	8.09%	2.99%	5.05%	5.70%	4.25%
Jefferson	0.22%	1.08%	0.18%	0.12%	0.51%	0.22%
Josephine	3.84%	5.72%	3.25%	2.74%	3.47%	2.33%
Klamath	3.08%	5.94%	1.33%	0.93%	5.20%	1.38%
Lake	0.36%	0.67%	0.15%	0.11%	0.61%	0.16%
Lane	17.60%	11.57%	8.73%	8.93%	11.44%	10.33%
Lincoln	0.64%	3.84%	10.02%	5.11%	2.11%	0.61%
Linn	2.16%	4.89%	2.38%	4.46%	3.17%	2.68%
Malheur	0.74%	0.59%	0.32%	0.24%	0.60%	0.51%
Marion	14.54%	4.70%	6.02%	4.83%	6.77%	5.88%
Morrow	0.36%	0.25%	0.12%	0.10%	0.34%	0.17%
Multnomah	19.55%	6.57%	9.69%	15.74%	11.80%	23.10%
Polk	2.05%	2.09%	2.41%	2.07%	2.10%	1.75%
Sherman	0.01%	0.07%	0.03%	0.01%	0.06%	0.07%
Tillamook	0.20%	1.52%	2.42%	1.92%	1.19%	0.40%
Umatilla	1.92%	1.56%	0.80%	0.85%	1.24%	1.74%
Union	1.45%	0.94%	0.33%	0.43%	0.98%	1.07%
Wallowa	0.13%	0.43%	0.08%	0.04%	0.64%	0.08%
Wasco	0.27%	0.96%	0.36%	0.38%	0.66%	0.84%
Washington	12.68%	6.66%	7.56%	19.01%	10.75%	18.56%
Wheeler	0.00%	0.10%	0.00%	0.01%	0.04%	0.00%
Yamhill	0.75%	3.00%	3.30%	4.30%	1.84%	2.39%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Traveling to nature centers (e.g., zoo, botanical garden, arboretum)	Traveling to do outdoor photography, painting, or drawing	Traveling for collecting/foraging (e.g., rocks, plants, mushrooms, or berries)	Class I – All-terrain vehicle riding (3- & 4-wheel ATVs, straddle seat and handlebars)	Class II – Off-road 4-wheel driving (jeeps, pick-ups, dune buggies, SUVs)	Class III – Off-road motorcycling
Baker	0.08%	1.09%	2.26%	2.70%	5.11%	0.79%
Benton	2.03%	2.16%	4.57%	1.05%	1.02%	2.14%
Clackamas	8.34%	6.74%	6.87%	7.82%	7.67%	6.72%
Clatsop	1.64%	1.99%	2.02%	1.32%	1.03%	0.17%
Columbia	1.36%	2.69%	2.06%	1.99%	1.40%	0.52%
Coos	1.30%	1.52%	3.71%	8.47%	7.79%	6.45%
Crook	0.13%	0.36%	0.28%	0.71%	0.74%	0.16%
Curry	1.06%	1.39%	1.87%	2.21%	1.56%	0.78%
Deschutes	3.50%	2.97%	3.37%	4.68%	2.49%	4.10%
Douglas	1.14%	4.77%	5.38%	3.70%	6.82%	2.60%
Gilliam	0.01%	0.04%	0.01%	0.09%	0.11%	0.00%
Grant	0.07%	0.33%	0.37%	1.27%	1.52%	0.67%
Harney	0.04%	0.19%	0.18%	1.31%	0.95%	0.95%
Hood River	0.24%	0.59%	0.28%	0.51%	0.34%	0.15%
Jackson	5.49%	5.73%	4.38%	6.48%	4.03%	11.74%
Jefferson	0.71%	0.69%	0.51%	0.72%	0.57%	0.49%
Josephine	2.24%	3.07%	2.82%	5.20%	4.72%	5.47%
Klamath	1.19%	6.99%	8.04%	3.81%	5.84%	1.10%
Lake	0.13%	0.80%	0.91%	0.52%	0.80%	0.16%
Lane	9.36%	6.17%	9.03%	3.56%	7.64%	33.60%
Lincoln	1.04%	1.65%	2.96%	1.30%	0.72%	1.09%
Linn	3.52%	4.53%	5.26%	4.24%	3.55%	1.42%
Malheur	0.40%	1.07%	0.77%	4.43%	2.72%	3.80%
Marion	7.34%	9.08%	3.68%	9.25%	4.56%	0.99%
Morrow	0.06%	0.30%	0.29%	0.70%	0.55%	0.27%
Multnomah	22.26%	13.16%	10.83%	1.17%	2.46%	0.87%
Polk	1.54%	2.03%	2.22%	1.22%	0.87%	0.21%
Sherman	0.04%	0.02%	0.01%	0.16%	0.13%	0.08%
Tillamook	0.62%	1.95%	1.33%	1.03%	1.31%	1.80%
Umatilla	0.63%	1.65%	3.09%	5.07%	2.05%	1.78%
Union	0.48%	1.16%	2.75%	3.26%	7.48%	1.04%
Wallowa	0.08%	0.57%	0.35%	2.54%	2.53%	1.83%
Wasco	0.21%	1.17%	1.11%	0.93%	0.92%	0.77%
Washington	19.36%	7.91%	4.64%	5.29%	6.49%	4.61%
Wheeler	0.01%	0.05%	0.02%	0.22%	0.03%	0.15%
Yamhill	2.38%	3.41%	1.76%	1.07%	1.48%	0.53%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Class IV – Riding UTVs or side-by-side ATVs (non-straddle seat, driver and passenger sit side-by-side in the vehicle, steering wheel for steering control)	Snowmobiling	Using personal watercraft, such as jet ski	Powerboating (cruising or water skiing)	RV/motorhome/trailer camping	Car camping with a tent
Baker	1.88%	6.87%	0.73%	0.74%	0.98%	0.90%
Benton	0.77%	1.59%	2.06%	2.24%	1.69%	2.97%
Clackamas	4.13%	1.81%	2.31%	12.11%	11.14%	10.84%
Clatsop	1.58%	1.55%	1.48%	2.43%	1.81%	0.73%
Columbia	1.00%	0.73%	11.81%	5.13%	3.02%	1.76%
Coos	20.53%	1.41%	5.68%	2.99%	2.86%	1.55%
Crook	0.95%	0.79%	0.18%	1.29%	1.31%	0.29%
Curry	0.81%	0.41%	0.45%	0.54%	1.35%	0.41%
Deschutes	6.03%	17.42%	4.34%	3.00%	5.58%	7.40%
Douglas	14.80%	2.90%	1.78%	4.08%	3.88%	2.17%
Gilliam	0.07%	0.04%	0.00%	0.01%	0.05%	0.07%
Grant	0.48%	0.57%	0.26%	0.12%	0.80%	0.10%
Harney	1.38%	1.46%	0.06%	0.07%	0.42%	0.19%
Hood River	0.23%	0.32%	0.69%	0.68%	0.52%	0.42%
Jackson	0.26%	1.97%	2.13%	4.58%	2.87%	4.49%
Jefferson	0.25%	0.47%	0.18%	0.69%	1.27%	0.17%
Josephine	2.07%	0.54%	24.34%	3.64%	4.90%	2.53%
Klamath	4.49%	10.44%	3.89%	3.07%	4.40%	2.09%
Lake	0.53%	1.24%	0.43%	0.35%	0.52%	0.27%
Lane	5.82%	1.71%	3.18%	16.01%	12.59%	9.11%
Lincoln	1.62%	0.22%	3.21%	1.20%	1.03%	0.60%
Linn	3.68%	2.56%	7.50%	5.21%	5.34%	2.67%
Malheur	4.21%	1.98%	0.47%	0.93%	0.65%	0.60%
Marion	1.86%	6.79%	5.17%	5.24%	6.14%	4.21%
Morrow	2.84%	0.95%	0.09%	0.43%	0.70%	0.22%
Multnomah	0.00%	3.32%	2.35%	4.46%	5.90%	16.01%
Polk	0.22%	0.68%	2.22%	2.58%	1.59%	2.05%
Sherman	0.23%	0.00%	0.01%	0.10%	0.22%	0.02%
Tillamook	0.41%	0.06%	0.05%	0.79%	0.70%	0.45%
Umatilla	5.87%	10.67%	1.65%	1.20%	3.61%	1.37%
Union	0.84%	5.10%	1.52%	1.44%	1.58%	0.97%
Wallowa	1.80%	9.09%	0.11%	1.37%	0.71%	0.12%
Wasco	1.89%	0.34%	0.48%	0.98%	0.87%	0.54%
Washington	1.06%	3.42%	8.10%	8.84%	5.31%	19.69%
Wheeler	0.00%	0.00%	0.00%	0.01%	0.08%	0.01%
Yamhill	5.40%	0.59%	1.09%	1.44%	3.62%	2.01%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Yurts or camper cabins	Hunting – Big game	Hunting – Small game	Fishing – Ocean/saltwater	Fishing – Freshwater	Crabbing
Baker	0.61%	1.82%	1.82%	1.18%	1.18%	0.07%
Benton	2.58%	1.27%	1.27%	1.30%	1.30%	1.17%
Clackamas	11.88%	4.26%	4.26%	6.82%	6.82%	7.43%
Clatsop	0.74%	1.91%	1.91%	1.53%	1.53%	3.80%
Columbia	1.40%	2.01%	2.01%	3.08%	3.08%	1.59%
Coos	1.24%	3.76%	3.76%	3.53%	3.53%	8.35%
Crook	0.14%	0.67%	0.67%	0.50%	0.50%	0.14%
Curry	0.70%	1.02%	1.02%	1.03%	1.03%	1.88%
Deschutes	3.57%	2.34%	2.34%	4.10%	4.10%	1.89%
Douglas	2.32%	5.14%	5.14%	3.00%	3.00%	9.06%
Gilliam	0.04%	0.07%	0.07%	0.07%	0.07%	0.05%
Grant	0.09%	0.69%	0.69%	0.50%	0.50%	0.04%
Harney	0.06%	0.53%	0.53%	0.25%	0.25%	0.03%
Hood River	0.44%	0.57%	0.57%	0.45%	0.45%	0.13%
Jackson	6.11%	6.46%	6.46%	5.71%	5.71%	3.14%
Jefferson	0.46%	0.47%	0.47%	0.81%	0.81%	0.13%
Josephine	4.97%	3.61%	3.61%	3.79%	3.79%	1.74%
Klamath	1.90%	9.96%	9.96%	8.86%	8.86%	4.07%
Lake	0.22%	1.17%	1.17%	1.03%	1.03%	0.46%
Lane	6.28%	12.26%	12.26%	11.07%	11.07%	12.28%
Lincoln	0.44%	1.18%	1.18%	1.34%	1.34%	3.31%
Linn	3.31%	6.78%	6.78%	4.97%	4.97%	3.88%
Malheur	0.96%	3.07%	3.07%	1.48%	1.48%	0.12%
Marion	16.90%	2.64%	2.64%	3.39%	3.39%	4.36%
Morrow	1.48%	0.80%	0.80%	0.69%	0.69%	0.17%
Multnomah	13.03%	6.25%	6.25%	7.93%	7.93%	11.20%
Polk	1.50%	1.87%	1.87%	1.54%	1.54%	2.18%
Sherman	0.05%	0.03%	0.03%	0.07%	0.07%	0.10%
Tillamook	0.37%	0.79%	0.79%	1.00%	1.00%	3.46%
Umatilla	2.46%	1.97%	1.97%	2.60%	2.60%	1.00%
Union	0.43%	4.19%	4.19%	2.29%	2.29%	0.46%
Wallowa	0.13%	0.58%	0.58%	0.26%	0.26%	0.02%
Wasco	0.59%	0.74%	0.74%	1.09%	1.09%	0.29%
Washington	9.18%	5.97%	5.97%	11.55%	11.55%	10.44%
Wheeler	0.01%	0.09%	0.09%	0.05%	0.05%	0.00%
Yamhill	3.40%	3.05%	3.05%	1.15%	1.15%	1.59%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Shellfishing/ clamming	White-water canoeing, kayaking, or rafting	Flat water canoeing, sea kayaking, rowing, stand-up paddling, tubing, floating	Windsurfing/ kiteboarding/sailing	Beach activities – Ocean	Beach activities – Lakes, reservoirs, rivers
Baker	0.07%	0.13%	0.21%	0.18%	0.06%	0.26%
Benton	0.67%	0.76%	1.19%	4.45%	2.91%	1.52%
Clackamas	10.16%	3.10%	13.33%	8.66%	7.70%	9.89%
Clatsop	6.55%	0.42%	0.95%	0.50%	5.72%	1.96%
Columbia	2.13%	0.61%	0.92%	6.52%	1.19%	1.59%
Coos	5.59%	2.81%	4.13%	2.27%	5.24%	2.94%
Crook	0.06%	0.41%	0.53%	1.68%	0.12%	0.43%
Curry	1.06%	0.60%	1.07%	0.20%	2.91%	1.36%
Deschutes	0.53%	13.42%	8.40%	10.16%	1.81%	6.17%
Douglas	3.70%	1.59%	2.60%	0.82%	2.07%	3.00%
Gilliam	0.06%	0.02%	0.02%	0.14%	0.01%	0.01%
Grant	0.01%	0.06%	0.08%	0.27%	0.03%	0.16%
Harney	0.05%	0.05%	0.02%	0.14%	0.05%	0.06%
Hood River	0.19%	0.51%	0.86%	0.24%	0.23%	0.75%
Jackson	1.45%	6.55%	4.69%	2.51%	2.76%	7.72%
Jefferson	0.04%	0.12%	0.36%	0.21%	0.14%	0.45%
Josephine	0.81%	4.24%	1.85%	2.24%	2.23%	4.15%
Klamath	2.96%	1.11%	2.08%	5.17%	0.66%	1.95%
Lake	0.33%	0.12%	0.28%	0.64%	0.08%	0.24%
Lane	4.38%	5.61%	7.11%	7.73%	7.06%	15.22%
Lincoln	1.39%	1.33%	1.26%	0.90%	5.32%	1.64%
Linn	0.83%	0.72%	1.54%	7.28%	4.46%	3.61%
Malheur	0.07%	0.17%	0.06%	0.15%	0.11%	0.36%
Marion	0.48%	1.36%	1.83%	0.73%	5.01%	3.61%
Morrow	0.07%	0.02%	0.08%	0.05%	0.07%	0.39%
Multnomah	5.63%	10.92%	24.38%	18.01%	13.42%	12.00%
Polk	0.61%	0.56%	0.52%	4.92%	2.05%	0.99%
Sherman	0.09%	0.00%	0.00%	0.00%	0.01%	0.03%
Tillamook	2.20%	0.19%	0.25%	0.34%	3.05%	1.39%
Umatilla	0.53%	0.33%	1.49%	2.63%	0.52%	1.43%
Union	0.30%	0.56%	0.56%	0.23%	0.20%	0.55%
Wallowa	0.02%	0.11%	0.21%	0.29%	0.04%	0.67%
Wasco	0.25%	0.98%	0.33%	0.47%	0.29%	0.44%
Washington	45.46%	39.20%	15.90%	7.61%	19.82%	11.72%
Wheeler	0.00%	0.01%	0.01%	0.02%	0.00%	0.03%
Yamhill	1.28%	1.32%	0.92%	1.64%	2.65%	1.30%

Table A2. Proportion of Cost of Illness Savings by Activity by Oregon County, continued

Oregon County	Downhill (alpine) skiing or snowboarding	Cross-country/Nordic skiing/skijoring	Sledding, tubing, or general snow play	Snowshoeing
Baker	0.47%	0.85%	1.91%	2.11%
Benton	1.51%	3.05%	2.62%	2.12%
Clackamas	7.77%	3.15%	8.81%	6.94%
Clatsop	0.28%	0.43%	0.94%	0.26%
Columbia	0.27%	0.09%	1.28%	0.35%
Coos	0.71%	1.20%	1.26%	0.72%
Crook	0.26%	1.17%	0.33%	0.42%
Curry	0.06%	0.33%	0.43%	0.20%
Deschutes	20.90%	14.08%	7.49%	10.76%
Douglas	0.79%	0.24%	2.79%	0.36%
Gilliam	0.00%	0.00%	0.07%	0.07%
Grant	0.04%	0.21%	0.70%	0.06%
Harney	0.03%	0.44%	0.58%	0.19%
Hood River	3.23%	2.22%	0.85%	2.08%
Jackson	4.39%	10.10%	2.84%	4.72%
Jefferson	0.23%	0.59%	0.67%	0.14%
Josephine	0.47%	0.75%	2.98%	0.25%
Klamath	0.83%	2.55%	3.24%	5.61%
Lake	0.12%	0.31%	0.41%	0.65%
Lane	5.30%	16.78%	8.25%	17.60%
Lincoln	0.16%	0.30%	0.56%	0.24%
Linn	1.84%	0.45%	3.75%	1.85%
Malheur	0.47%	0.02%	2.32%	0.04%
Marion	2.10%	1.20%	6.26%	6.44%
Morrow	0.09%	0.24%	0.44%	0.10%
Multnomah	20.17%	20.47%	13.83%	17.93%
Polk	0.74%	0.26%	1.89%	1.06%
Sherman	0.01%	0.00%	0.06%	0.00%
Tillamook	0.11%	0.04%	0.38%	0.10%
Umatilla	0.53%	0.48%	3.53%	1.36%
Union	1.35%	1.96%	3.31%	2.74%
Wallowa	0.27%	0.95%	2.57%	0.52%
Wasco	0.33%	0.16%	1.58%	0.56%
Washington	23.05%	14.41%	9.18%	10.22%
Wheeler	0.01%	0.04%	0.03%	0.07%
Yamhill	1.08%	0.47%	1.85%	1.15%

