Oregon Outdoor Recreation Metrics: Health, Physical Activity, and Value

2019-2023 Oregon Statewide Comprehensive Outdoor Recreation Plan
Supporting Documentation

Part A:

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

FINAL REPORT (Revised)
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Introduction

Parks and recreation, community development / design, and transportation planning significantly contribute to the health of Oregonians by enabling them to engage in daily physical activity. 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. This project estimates the health benefits obtained by Oregonians from their participation in 30 outdoor recreation activities in 2017. Daily physical activity may decrease the risk of many chronic illnesses such as heart disease, stroke, depression, dementia, diabetes and several cancers. Recommended levels of physical activity are 150 minutes of moderate-intensity (3.0-5.9 METs) or 75 minutes of vigorous-intensity (≥ 6.0 METs) activities, where MET (metabolic equivalent task) measures the energy expenditure for physical activity relative to a resting metabolic rate (MET = 1). About 60% of adult Oregonians meet this recommended level, with an additional 17% being physically inactive (i.e., they are sedentary). Any amount of sustained physical activity results in health benefits, and greater amounts of activity are correlated with additional health benefits. The greatest marginal health benefits are derived by inactive people becoming active. Increasing Oregonians' physical activity may help reduce the estimated $39.1 billion they spend on health care each year.

Methods

Health benefits from Oregonians participating in 30 outdoor recreation activities of 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 2017 Oregon Resident Outdoor Recreation Survey and MET-values from the Ainsworth Compendium.

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 meta-analysis function. These COI estimates include disease-specific direct treatment costs and lost productivity costs.

Results

Adult Oregonians engaged in the 30 outdoor recreation activities on 794 million user occasions that expended 503 billion kcals of energy, which is equivalent to 144 million pounds of body fat that would fill 29.5 Olympic-sized swimming pools. They also realized $735 million to $1.416 billion in COI savings associated with eight chronic illnesses affected by physical activity (county-level estimates are reported in an Appendix). These cost savings accrue to health insurers, providers, and participants. COI savings is approximately 2-3.6% of total health care expenditures in the state including 9-17% of expenditures in treating cardiovascular diseases, cancers, diabetes, and depression. 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 and jogging / running on local streets / sidewalks / trails / paths, bicycling on roads / streets / sidewalks, and dog walking account for 77% of total annual user occasions, 62% of total energy expenditures, and 80% of total COI savings associated with Oregonians participating in 30 outdoor recreation activities of moderate- to vigorous-intensity.

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

- Walking on local streets / sidewalks (313 million)

- Walking on local trails / paths (113 million)
- Dog walking/ going to dog parks / off-leash areas (78 million)

The three outdoor recreation activities with the highest total annual energy expenditure include

- Walking on local streets / sidewalks (118 billion kcal)
- Walking on local trails / paths (57 billion kcal)
- Jogging / running on streets / sidewalks (42 billion kcal)

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

- Walking on local streets / sidewalks ($385-$630 million)
- Walking on local trails / paths ($72-$126 million)
- Jogging / running on streets / sidewalks ($33-$146 million)

ITHIM estimates COI savings based on age-sex cohort-specific DALYs (Disability-Adjusted Life Years), or relative risks for various diseases. To better understand variations in physical activity by cohorts, average weekly minutes for various cohorts are examined. These estimates are not necessarily reflective of Oregon's adult population given they are raw, unweighted data from the 2017 Oregon Resident Outdoor Recreation Survey. These results are also restricted to the 30 outdoor recreation activities of moderate- to vigorous-intensity. General findings include

- Average weekly minutes decline with age
- Average weekly minutes increase with workplace physical activity
- Average weekly minutes decrease with BMI increases (normal weight / overweight / obese)
- No significant differences observed in average weekly minutes across income, education, sex or community type (urban / suburban / rural)

Specific outdoor recreation activities are correlated with their variations in average weekly minutes across the different cohort categories. These details are provided in the report.

Introduction

"Sitting is the new smoking" is a phrase used frequently in conversations about healthy lifestyles and workplaces. This is because greater understanding and therefore importance is being placed on physical activity as a key component to living a healthy lifestyle. In 2010, physical inactivity and poor diet were the two most influential risk factors for mortality in the U.S., surpassing tobacco, motor vehicles, and firearms (Maizlish 2016). In response to the growing health crisis, the U.S. Department of Health and Human Services published its Physical Activity Guidelines for Americans in 2008. 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-minutes[1] per week (roughly equivalent to 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity activities) were required to receive substantial health benefits[2] (2018 Physical Activity Guidelines Advisory Committee 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 even exercising at the gym or at home.

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) (2018 Physical Activity Guidelines Advisory Committee 2018). In 2014, these chronic conditions made up five of the top ten leading causes of death (Maizlish 2016).

[1] 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.

[2] 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 physical activity.

Daily physical activity provides multiple benefits to people such as increased memory function and improved quality of sleep.

Yet, 23.1% of all U.S. adults report no physical activity or exercise outside of work (2016 CDC Behavioral Risk Factor Surveillance System (BRFSS) data). Conversely, Blackwell and Clarke (2018) report that "22.9% of U.S. adults aged 18-64 met the guidelines for both aerobic and muscle-strengthening activities during LTPA [leisure-time physical activity] in 2010-2015." They also report that 32.4% of all adults aged 18-64 met one of the two guidelines, and 44.7% met neither guideline.

Oregonians are above average in their non-work physical activity among all states in the U.S.; however, there is a reported 17.2% of adults who are physically inactive (i.e., they are sedentary) outside of work in 2016, down from 18.8% in 2015 (Oregon Public Health Division 2015, 2016). According to the 2015 Behavioral Risk Factor Surveillance System (BRFSS) data, about 60% of adults met the aerobic activity recommendation, 30% met the muscle strengthening recommendation, with 23% meeting both the aerobic and muscle strengthening recommendation (Oregon Public Health Division 2015). Blackwell and Clarke (2018) report that 25.8% of Oregon adults aged 18-64 met the guidelines for both aerobic and anaerobic activities during LTPA in 2010-2015.

This state of physical inactivity and 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 in Oregon. Oregonians spent over $39.1 billion on health care in 2014 (The Henry J. Kaiser Family Foundation 2018).

This report provides estimates of the energy expenditures and health benefits (Cost of Illness savings) associated with Oregonian's participation in outdoor recreation activities in 2017. Outdoor recreation participation data is provided by a statewide survey conducted by Oregon Parks and Recreation Department (OPRD) for their Statewide Comprehensive Outdoor Recreation Plan (SCORP). Cost of Illness savings are derived from the Outdoor Recreation

Health Impacts Estimator tool. In addition, participation intensity in outdoor recreation activities are reported based on BMI categories (i.e., normal weight, overweight, and obese) and demographic categories. This report provides evidence that parks and recreation providers have an important role in the health and wellbeing of Oregonians (Rosenberger, Bergerson, and Kline 2009).

Methods

Oregon SCORP Data

In preparation for the 2019-2023 Oregon SCORP, the OPRD conducted a statewide survey of Oregon residents regarding their 2017 outdoor recreation participation in Oregon, as well as their opinions about park and recreation management (Bergerson 2018). The sample design was developed to derive information at various scales including statewide, urban, suburban, and rural using ERS Rural-Urban Commuting Area Codes for the general population and for specific demographic groups.

The survey was conducted using a random sample of Oregon households. In order to generate sufficient responses for each demographic group, the sample was stratified to differentiate between those residing in urban, suburban, and rural areas of the state for the general population and for the demographic groups. There were two versions of the survey: 1) participants – those who engaged in outdoor recreation in Oregon in 2017; and 2) non-participants – everyone else.

Surveying Oregonians consisted of 17,016 mail outs, with 15,351 surveys deliverable (90%). Of those delivered, 3,069 completed surveys were obtained, for an overall response rate of 20%. With respect to format, 74% of the surveys were completed online and 26% in paper format. Due to variable sampling intensity and response rates across target demographic groups, the probability sample was complemented by an online research sample administered by Qualtrics. A total of 481 respondents completed a survey (50% response rate) through the Qualtrics online sample. In total, most (94%) of the surveys were by participants, with the remainder (6%) by non-participants.

Based on previous SCORP outdoor recreation activity lists and recommended by the SCORP advisory committee comprised of parks and recreation managers across Oregon, fifty six (56) recreation activities were identified as important recreation activity types. These activities were grouped into eight (8) categories including Non-motorized Trail or Related Activities, Motorized Activities, Non-motorized Snow Activities, Outdoor Leisure and Sporting Activities, Nature Study Activities, Vehicle-based Camping Activities, Hunting and Fishing Activities, and Non-motorized Water-based and Beach Activities. The health benefits estimation analysis focused only on those 30 activities that could accurately be ascribed to moderate-intensity to vigorous-intensity aerobic activity based on MET vales assigned to them, including categories of Non-motorized Trail Activities, Motorized Activities, Non-motorized Snow Activities, and the remaining collated as Other Outdoor 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 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 as $PAF = \frac{\int_{Xmin}^{Xmax} RR(x)P(x)dx - \int_{Xmin}^{Xmax} RR(x)Q(x)dx}{\int_{Xmin}^{Xmax} RR(x)P(x)dx}$ (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 in age-sex-and cause-groups (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). There are national-level disease-specific direct treatment costs and lost productivity costs that make up COI estimates. COI estimates are based on a dose-response function that relates levels of physical activity to specific disease outcomes. The dose-response functions are based on a meta-analysis of COI 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 30[3] different outdoor recreation activities by adjusting the MET values in the model. For all 30 activities the MET values were drawn from the 2011 Ainsworth Compendium of Physical Activities (Ainsworth et al. 2011). The original MET values in the TO Estimator were 3 and 6 for walking and cycling, respectively. For the modified recreation version, if an activity was determined to be moderately-intense (MET>=3.0–5.9), then the MET value for walking in the TO Estimator was adjusted to the MET value for that activity. If an activity was determined to be vigorously-intense (MET>6.0), then the MET value for cycling was adjusted to the MET value for that activity. For example, for horseback riding the MET value is 3.8 so the MET value for walking was adjusted from 3.0 to 3.8 in the tools baseline and scenario calibration pages. Alternatively, if the model is estimating the impact of a vigorous activity like backpacking (MET=7.0) then the MET value for cycling is adjusted from 6.0 to 7.0. Activities with MET values < 3.0 are not considered to be aerobic, do not produce the same level of health outcomes, and therefore are not modelled by ITHIM.

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 hours they participated in a typical occasion for each activity. From these data, the median weekly hours of participation in each activity for the population-adjusted sample were calculated. The median participation value was

[3] The OR Estimator tool includes 31 outdoor recreation activities. The Orienteering / geocaching activity is not included in this analysis.

used rather than the mean value because of concerns of over reporting due to recall and avidity bias. The median participation value is for a population of concern and not reflective necessarily of any individual. Therefore, if overall mean participation is increased due to an intervention, there will be sedentary individuals in the population who have not increased their physical activity and physically active individuals that have become more active.

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 2010 county population[4] by its corresponding participation rate.

Energy Expenditure Calculations

A direct outcome from physical activity of any kind is energy expenditure or kilocalories (kcal) expended or burned. An individual's energy balance is the difference between energy in (diet and nutrition) and energy out (physical activity), and is related to the individual's weight status and health (Wells et al. 2007). Total annual kcal expended by outdoor recreation activity type were calculated as MET-value * annual median hours * mean body weight (in kilograms) * annual user occasions. As noted previously, one MET is equivalent to a standard resting metabolic rate (3.5 ml O_2 per kg per minute). MET-values are the ratio of physical activity metabolic rate relative to the standard resting metabolic rate. MET-values for this analysis were ascribed from the compendium for physical activities (Ainsworth et al. 2011). For outdoor recreation activities that matched multiple MET-values reported in the compendium (e.g., slow to rapid pace), the lower MET-value was used in order to derive conservative estimates of energy expenditure. In other applications, the average of related MET-values per outdoor recreation activity was used (Kline, Rosenberger and White 2011; Elliott et al. 2015).

[4] Cost of Illness estimates derived from the OR Estimator tool were adjusted to reflect 2017 population numbers for Oregon using Portland State University, Population Research Center's certified population estimates for 2017.

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, which is built on the foundation of the Integrated Transport and Health Impact Model as described above. ITHIM was modified to fit transportation and physical activity behaviors, and demographics of Oregon in the Transportation Options 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. Two variants of baseline physical activity are used in calculating COI savings:
    a. One-trip baseline – the TO Estimator and ITHIM include background travel and non-travel physical activity for the median participant. In order to estimate the contribution of a specific outdoor recreation activity, this variant assumes all other outdoor recreation activity minutes= 0 with the exception of activity rates embedded in the tool. The one-trip baseline will provide relatively higher COI estimates given participants are located lower on the dose-response function.
    b. $\sum$J-j baseline – Total weekly minutes of outdoor recreation are calculated for each SCORP participant excluding the target activity (j), or $\sum$J-j minutes. The baseline activity $\sum$J-j is input into the model, which is automatically added to the embedded physical activity in the model. This variant assumes that the sum of all

other outdoor recreation physical activity minutes are held constant at their median participant's rate. The ∑J-j baseline will provide relatively lower COI estimates given participants are located higher on the dose-response function.

3) Desired weekly target activity minutes – The median SCORP participants weekly minutes for this activity are entered into the model. COI savings are estimated for this targeted level of activity relative to the baseline participation rates.

Aggregate COI savings estimates are derived from the OR Estimator tool by inputting county, activity type, and median outdoor recreation activity weekly minutes. Estimates for each county's COI savings are not reported given they are based on regional population participation rates and median participant weekly minutes, and therefore are not specific to the county individually, but they are appropriate in the aggregate. Therefore, each county's COI savings by activity are summed to provide an estimate for COI savings at the state level.

Two additional adjustments are made to COI estimates to account for changes in population and inflation over time. First, growth in Oregon's adult population between 2010 and 2017 is accounted for by increasing each county's COI estimate by its adult population growth rate. Given the model applies the participation rate from the 2017 statewide survey, this is an appropriate adjustment. Second, COI estimates are adjusted for inflation from 2010 USD to 2018 USD using a CPI deflator tool.

County-Level Estimates

The statewide survey of Oregon residents conducted in 2017 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. The following methods are used to apportion total COI savings for an activity to the counties in which the participant resides.

1) Align recreation activities – most of the outdoor recreation activities align between the 2017 and 2011 statewide surveys with the following exceptions and alignment used, respectively.

a. 2017 Pickleball (played outdoors) – 2011 Outdoor court games other than tennis (basketball, beach volleyball, badminton, etc.)
b. 2017 Soccer and 2017 Futsal – 2011 Football, soccer, lacrosse, rugby, ultimate frisbee

2) Use 2011 county participation proportions data for each activity as an input into the OR Estimator tool to derive COI savings by activity by county.
3) Calculate proportion of COI savings from 2) by adjusting estimates by county growth rates from 2010 to 2017, summing across counties by each activity, and dividing each county estimate for an activity by its corresponding activity total.
4) Apportion total COI by activity reported in Table 1 by the proportion of COI savings estimated in 3).

Results

The results of these analyses are restricted to Oregon SCORP survey outdoor physical activities with minimum MET-values ≥ 3.0, which correspond with moderate intensity (3.0 – 5.9 METs) to vigorous intensity (6.0 or higher METs) in physical activity recommendations (2018 Physical Activity Guidelines Advisory Committee 2018). MET-values < 1.5 are considered to be sedentary behavior. Oregon SCORP outdoor recreation activities not included in this analysis include: Class II off-road driving; powerboating; sightseeing; picnicking; taking children to playground or natural settings; relaxing; attending outdoor concerts; pickleball; orienteering / geocaching; visiting historic sites or nature centers; whale-watching; exploring tidepools; other nature observation; outdoor photography; vehicle-based camping; hunting; fishing/shellfishing; canoeing; and beach activities. While these activities may generate health benefits depending on the intensity and duration of engagement, they are not included in the analysis.

Table 1 lists the 30 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 local streets / sidewalks (2.716 million, 83.2%); Walking on local trails / paths (2.416 million, 74%); and Walking / day hiking on non-local trails / paths (1.786 million, 54.7%). The bottom three activities on total adult participation and proportion of the adult

population participating in them include Futsal (0.02 million, 0.6%); Snowmobiling (0.072 million, 2.2%); and Class III – Off-road motorcycling (0.104 million, 3.2%).

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 local streets / sidewalks (313 million); Walking on local trails / paths (113 million); and Dog walking / going to dog parks / off-leash areas (78 million). The bottom three activities with the smallest annual user occasions include Futsal (0.4 million); Cross-country / Nordic skiing on ungroomed trails (0.6 million); and Snowmobiling (1 million).

Energy Expenditures

Table 1 provides total annual kcal in energy expended per activity by Oregonians, as well as annual kcal per participant and kcal per user occasion. MET-values assigned to each activity are reported in Table 2.

Total energy expended by Oregonians for the 30 outdoor recreation activities included in this analysis is a conservative 503 billion kcal per year. The estimate is conservative because it only focuses on a subset of outdoor recreation activities, and uses the lowest intensity MET-value for each activity. Regardless, it is nearly twice the amount estimated for annual visitation to all national forests in the U.S. (289 billion kcal; Kline, Rosenberger, and White 2011). Total energy expended can be expressed in alternative ways. The 503 billion kcal of energy expended per year by Oregonians through a set of outdoor recreation activities is equivalent to 144 million pounds of body fat[5], which would fill 29.5 regulation-size Olympia swimming pools[6].

The top three outdoor recreation activities in terms of total annual energy expenditures are Walking on local streets / sidewalks (118 billion kcal); Walking on local trails / paths (57 billion kcal); and Jogging / running on streets / sidewalks (42 billion kcal). The activities with the lowest energy expended per year include Futsal (0.4 billion kcal); Cross-country / Nordic skiing on ungroomed trails (1.2 billion kcal); and Snowmobiling (1.4 billion kcal).

[5] One pound of body fat when oxidized through physical activity is 3,500 kcal.
[6] A regulation-size Olympic swimming pool (50m x 25m x 2m) holds 660,430 gallons of liquid. One gallon of human body fat weighs 7.4 pounds. One regulation-size Olympic swimming pool would hold 4,887,182 pounds of human body fat.

Table 1. Energy Expenditures and Cost of Illness Savings (2018 USD) from 2017 Outdoor Recreation Activity Participation in Oregon

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	Energy Expended, Total Annual kCal (billion)	Energy Expended, Annual / Participant, kCal	Energy Expended, Per User Occasion, kCal	COI Savings, Total Annual ($million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Non-motorized Trail Activities									
Walking on local streets / sidewalks	2.716	83.2	312.726	117.893	43,406	377	$385.405 - $629.991	$164.60 - $231.95	$1.43 - $2.01
Walking on local trails / paths	2.416	74.0	113.083	57.497	23,801	508	$71.602 - $125.860	$34.38 - $52.10	$0.73 - $1.11
Walking / day hiking on non-local trails / paths	1.786	54.7	44.035	31.913	17,872	725	$33.240 - $45.556	$21.59 - $25.51	$0.88 - $1.03
Long-distance hiking (back packing)	0.431	13.2	4.915	15.992	37,111	3,254	$5.670 - $36.096	$15.26 - $83.77	$1.34 - $7.34
Jogging / running on streets / sidewalks	0.875	26.8	37.224	41.938	47,936	1,127	$32.574 - $145.605	$43.19 - $166.43	$1.02 - $3.91
Jogging / running on trails / paths	0.692	21.2	17.284	22.598	32,653	1,307	$10.430 - $64.721	$17.48 - $93.52	$0.70 - $3.74
Horseback riding	0.127	3.9	2.626	5.444	42,757	2,073	$3.002 - $4.200	$27.35 - $32.99	$1.33 - $1.60

Table 1. Energy Expenditures and Cost of Illness Savings (2018 USD) from 2017 (continued)

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	Energy Expended, Total Annual kCal (billion)	Energy Expended, Annual / Participant, kCal	Energy Expended, Per User Occasion, kCal	COI Savings, Total Annual ($million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Bicycling on unpaved trails	0.486	14.9	11.403	16.412	33,740	1,439	$8.079 - $26.983	$19.27 - $55.47	$0.82 - $2.37
Bicycling on paved trails	0.983	30.1	26.105	17.762	18,076	680	$15.422 - $15.840	$15.69 - $18.70	$0.59 - $0.70
Bicycling on roads, streets / sidewalks	1.254	38.4	51.251	32.086	25,596	626	$47.311 - $78.109	$43.78 - $62.31	$1.07 - $1.52
Motorized Activities									
Class I – All-terrain vehicle riding	0.281	8.6	5.746	6.742	24,016	1,173	$6.365 - $6.514	$22.67 - $26.92	$1.11 - $1.32
Class III – Off-road motorcycling	0.104	3.2	2.038	2.700	25,850	1,325	$3.904 - $7.970	$43.35 - $76.29	$2.22 - $3.91
Class IV – Riding UTVs / side-by-side ATVs	0.134	4.1	2.734	4.404	32,907	1,611	$3.897 - $5.756	$33.78 - $43.01	$1.65 - $2.11
Snowmobiling	0.072	2.2	1.000	1.405	19,560	1,404	$1.557 - $2.882	$25.15 - $40.13	$1.81 - $2.88
Personal water craft – jet ski	0.140	4.3	3.139	4.367	31,113	1,391	$1.642 - $9.862	$13.57 - $70.26	$0.61 - $3.14

Table 1. Energy Expenditures and Cost of Illness Savings (2018 USD) from 2017 (continued)

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	Energy Expended, Total Annual kCal (billion)	Energy Expended, Annual / Participant, kCal	Energy Expended, Per User Occasion, kCal	COI Savings, Total Annual ($million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Non-motorized Snow Activities									
Downhill skiing / snowboarding	0.415	12.7	4.228	5.362	12,932	1,268	$8.117 - $14.102	$22.71 - $34.02	$2.23 - $3.34
Cross-country / Nordic skiing on groomed trails	0.189	5.8	1.235	1.656	8,744	1,340	$0.521 - $4.411	$3.19 - $23.30	$0.49 - $3.57
Cross-country / Nordic skiing on ungroomed trails	0.118	3.6	0.582	1.158	9,851	1,988	$0.417 - $4.613	$4.12 - $39.25	$0.83 - $7.92
Snowshoeing	0.343	10.5	1.279	2.062	6,015	1,613	$1.189 - $2.138	$3.47 - $7.24	$0.93 - $1.94
Sledding, tubing, or general snow play	0.878	26.9	6.435	6.864	7,817	1,067	$0.787 - $12.125	$1.04 - $13.81	$0.14 - $1.88
Other Outdoor Activities									
Dog walking / going to dog parks / off-leash areas	1.185	36.3	77.872	41.529	35,045	533	$39.829 - $75.372	$38.99 - $63.60	$0.59 - $0.97

Table 1. Energy Expenditures and Cost of Illness Savings (2018 USD) from 2017 (continued)

Activity	Total Participants (million)	% Population Participating	User Occasions, Total Annual (million)	Energy Expended, Total Annual kCal (billion)	Energy Expended, Annual / Participant, kCal	Energy Expended, Per User Occasion, kCal	COI Savings, Total Annual ($million)	COI Savings, Annual / Participant	COI Savings, Per User Occasion
Tennis (played outdoors)	0.219	6.7	2.526	1.670	7,633	661	$1.176 - $2.068	$5.37 - $10.97	$0.47 - $0.95
Outdoor court games other than tennis	0.330	10.1	11.148	9.245	28,039	829	$4.587 - $9.928	$16.14 - $30.11	$0.48 - $0.89
Soccer	0.258	7.9	10.928	11.329	43,927	1,037	$5.829 - $28.856	$26.22 - $111.89	$0.62 - $2.64
Futsal	0.020	0.6	0.444	0.429	21,888	966	$0.177 - $1.447	$10.48 - $73.89	$0.46 - $3.26
Golf	0.464	14.2	6.592	10.838	23,380	1,644	$11.502 - $14.256	$28.78 - $30.75	$2.02 - $2.16
Collecting (rocks, plants, mushrooms, berries)	0.875	26.8	16.872	11.245	12,853	666	$2.375 - $8.527	$2.71 - $11.31	$0.14 - $0.59
Crabbing	0.343	10.5	1.858	2.857	8,335	1,538	$2.206 - $5.222	$6.44 - $17.67	$1.19 - $3.26
White-water canoeing, kayaking, rafting	0.366	11.2	2.614	3.215	8,792	1,230	$2.025 - $3.080	$5.54 - $9.77	$0.77 - $1.37
Swimming / playing in outdoor pools / spray parks	0.826	25.3	13.993	14.012	16,965	1,001	$11.801 - $36.413	$16.57 - $44.09	$0.98 - $2.60
		TOTAL OREGON kCAL (billion)		**502.622**	**TOTAL OREGON COI SAVINGS ($millions)**		**$735.271 - $1,415.872**		

The average annual energy expended per participant per year is reported in Table 1. The top three activities in terms of average annual energy expended per participant per year include: Jogging / running on streets / sidewalks (47,936 kcal); Soccer (43,927 kcal); and Walking on local streets / sidewalks (43,406 kcal). The first two activities are vigorous-intensity (MET = 7.0) and the other is moderate-intensity (MET = 3.5). The bottom three activities with the lowest energy expended per person per year include Snowshoeing (6,015 kcal); Tennis (played outdoors) (7,633 kcal); and Sledding, tubing, or general snow play (7,817 kcal).

And lastly, energy expended is expressed in terms of per user occasion. The top three activities with the largest energy expenditure include Long-distance hiking (backpacking) (3,254 kcal); Horseback riding (2,073 kcal); and Cross-country / Nordic skiing on ungroomed trails (1,988 kcal). These activities rate high in energy expenditure per user occasion due to their duration and / or intensity of physical activity. The bottom three activities with the lowest energy expended per user occasion include Walking on local streets / sidewalks (377 kcal); Walking on local trails / paths (508 kcal); and Dog walking / going to dog parks / off-leash areas (533 kcal). These low energy expended per user occasion activities also have high participation and frequency, which leads them to be sources of large amounts of aggregate energy expended per year. Regardless of each outdoor recreation activity's ranking, they all are contributing to the overall health of participants.

Health Benefits – Cost of Illness Savings Estimates

The ITHIM 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. Cost estimates are based on a meta-analysis of national cost of illness studies scaled to the Oregon population and adjusted to 2010 USD, which are subsequently inflation-adjusted to 2018 USD. These cost estimates include direct public and private costs (treatments) and indirect costs (absenteeism) (Haggerty and Hamberg 2015).

Table 2. MET Values and Average Weekly Minutes by Target and Baseline Activity Levels, Oregon

Activity (j)	MET Value	Target Activity Level (j)		Baseline Activity Level (∑J-j)	
		Rural Weekly Minutes	Urban[a] Weekly Minutes	Rural Weekly Minutes	Urban[a] Weekly Minutes
Non-motorized Trail Activities					
Walking on local streets / sidewalks	3.5	101	162	171	201
Walking on local trails / paths	3.5	35	36	235	279
Walking / day hiking on non-local trails / paths	3.5	28	24	288	327
Long-distance hiking (back packing)	7.0	28	24	587	475
Jogging / running on streets / sidewalks	7.0	46	58	469	496
Jogging / running on trails / paths	7.0	23	29	582	536
Horseback riding	3.8	46	9	343	419
Bicycling on unpaved trails	5.8	23	23	581	634
Bicycling on paved trails	3.5	23	23	492	453
Bicycling on roads, streets / sidewalks	3.5	35	43	388	401
Motorized Activities					
Class I – All-terrain vehicle riding	4.0	25	21	243	372
Class III – Off-road motorcycling	4.0	46	44	426	292
Class IV – Riding UTVs / side-by-side ATVs	4.0	48	16	292	272
Snowmobiling	3.5	42	29	597	478
Personal water craft – jet ski	7.0	14	23	319	430
Non-motorized Snow Activities					
Downhill skiing / snowboarding	4.3	25	23	409	402
Cross-country / Nordic skiing on groomed trails	6.8	12	9	578	483
Cross-country / Nordic skiing on ungroomed trails	6.8	12	12	528	582
Snowshoeing	5.3	7	7	433	475
Sledding, tubing, or general snow play	7.0	7	7	357	384
Other Outdoor Activities					
Dog walking / going to dog parks / off-leash areas	3.0	35	58	331	390
Tennis (played outdoors)	4.5	6	11	296	322
Outdoor court games other than tennis	5.5	17	17	523	454
Soccer	7.0	23	35	293	413
Futsal	7.0	12	20	600	599
Golf	3.5	28	28	220	265
Collecting (rocks, plants, mushrooms, berries)	3.0	17	12	243	374
Crabbing	4.5	14	11	288	342
White-water canoeing, kayaking, rafting	5.0	14	9	456	386
Swimming / playing in outdoor pools / spray parks	6.0	14	16	247	316

[a]Urban includes urban and suburban community types as self-identified by respondents.

Two estimates are provided for each activity as noted previously. The lower estimate is generally based on the ∑J-j baseline activity level (Table 2) that places the median participant further out on the dose-response function where lower marginal COI savings are realized. For example, if a rural county and Walking on local streets / sidewalks are selected, then the ∑J-j baseline activity-level is set at 171 weekly minutes, and the target level (j) is an additional 101 weekly minutes for a total ∑J median weekly minutes of 272. For the one-trip baseline, the total median weekly minutes is 101. The difference in the estimated annual COI savings is based on where the MET-minutes of activity fall on the COI savings dose-response function. This diminishing marginal COI savings is illustrated in Appendix B, Tables B1—B3 where total and per participant annual COI savings are estimated from a baseline of 1-trip (i.e., sedentary) in 30-minute intervals up to 600 minutes, and the median minutes per week, for the synthetic Small Rural County, Medium Mixed County, and Large Urban County, respectively.

For planning purposes, Appendix B tables or the OR Estimator tool may be used to estimate COI savings based on the number of participants and expected median weekly minutes for each activity. For example, assume that the median weekly minutes of Walking on local streets / sidewalks is 90 minutes, and the baseline ∑J-j median weekly minutes is 180 for a rural county (these correspond closely with Table 2 estimates of 101 and 171 median weekly minutes, respectively). Therefore, under the one-trip baseline scenario (i.e., sedentary), it is expected that the median rural participant would generate $117 in COI savings from 90 minutes per week in Walking on local streets / sidewalks (Appendix B, Table B1). However, if the ∑J-j baseline of 180 weekly minutes is used, then the median rural participant would generate $80 in COI savings from an additional 90 minutes per week in Walking on local streets / sidewalks (i.e., the difference in COI estimates for 90 weekly minutes moving from 180 to 270 weekly minutes).[7]

[7] An illustration using the large urban COI estimates in Appendix B Table B3 shows a similar diminishing marginal benefit outcome. For example, assume that the median weekly minutes of Walking on local streets / sidewalks is 150 minutes, and the baseline ∑J-j median weekly minutes is 210 for a rural county (these correspond closely with Table 2 estimates of 162 and 201 median weekly minutes, respectively). Therefore, under the one-trip baseline scenario (i.e., sedentary), it is expected that the median rural participant would generate $177 in COI savings from 150 minutes per week in Walking on local streets / sidewalks (Table B3). However, if the ∑J-j baseline of 210 weekly minutes is used, then the median rural participant would generate $116 in COI savings from an additional 150 minutes per week in Walking on local streets / sidewalks (i.e., the difference in COI estimates for 150 weekly minutes moving from 210 to 360 weekly minutes).

The total annual Cost of Illness savings estimate to Oregon from Oregonians' participation in 30 outdoor recreation activities is $735 million to $1.416 billion (Table 1). As noted in the introduction, it is estimated that Oregonians spend $39.1 billion on health care each year. The conservative estimate of COI savings is about 2-3.6% of total health care expenditures, respectively. Haggerty and Hamberg (2015) state that Oregonians spend $3.6 billion on cardiovascular diseases, $1.9 billion on cancer, $1.7 billion on diabetes, and $892 million on depression, for a total of $8.1 billion per year. Estimated COI savings from Oregonians participating in 30 outdoor recreation activities is 9-17% of expenditures, respectively, on cardiovascular disease, cancer, diabetes, and depression. County-level estimates of COI savings are reported in Appendix A, Tables A1 for $\sum$J-j baseline and A2 for one-trip baseline. Tables A3 and A4 report county proportions by activity for 2011 user occasions and COI savings estimates based on 2011 user occasions, respectively.

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 local streets / sidewalks ($385-$630 million); Walking on local trails / paths ($72-$126 million); and Jogging / running on streets / sidewalks ($33-$146 million). The bottom three activities with lowest annual COI savings include Futsal ($0.2-$1.4 million); Tennis (played outdoors) ($1.2-$2.1 million); and Snowshoeing ($1.2-$2.1 million). These low annual COI savings activities provide positive benefits, but there are few participants.

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 Walking on local streets / sidewalks ($165-$232); Jogging / running on streets / sidewalks ($43-$166); and Soccer ($26-$112). The three activities with the lowest COI savings per participant include Snowshoeing ($3-$7); White-water canoeing, kayaking, rafting ($6-$10); and Tennis (played outdoors) ($5-$11). COI savings per participant are affected by the MET-value 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 Cross-country / Nordic skiing on ungroomed trails ($1-$8); Long-distance hiking (backpacking) ($1-$7); and Jogging / running on streets / sidewalks ($1-$4). The bottom three activities with the lowest COI savings per user occasion include Collecting (rocks, plants, mushrooms, berries) ($0.14-$0.59); Bicycling on paved trails ($0.59-$0.70); and Outdoor court games ($0.48-$0.89). COI savings per user occasion are affected by the MET-value and duration of activity.

Variations in Outdoor Recreation Physical Activity by Respondent Characteristics

ITHIM estimates COI savings based on age-sex cohort-specific DALYs, or relative risks for various diseases. The TO Estimator, and subsequently the OR Estimator, was adapted to age and sex distributions within each Oregon county. However, it may be of interest how average weekly minutes of outdoor recreation participation vary by respondent characteristics. While the energy expenditure and COI savings estimates are aggregated to Oregon's adult population, the following data is based on the respondents to the Oregon SCORP Survey and may not be representative of the adult population in Oregon.

Table 3 provides the average total weekly minutes spent in outdoor recreation across the 30 outdoor recreation activities included in this analysis, and broken out by respondent characteristics. As expected, average weekly minutes decline with age, showing the younger cohort (18-34 years) averaging 509 weekly minutes participating in the outdoor recreation activities, and young-old (60-74 years) averaging 334 weekly minutes, middle-old (75-84 years) averaging 185 weekly minutes, and old-old (85+ years) averaging 92 weekly minutes. Average weekly minutes participating in the outdoor recreation activities are relatively even for income categories, education levels, sex, and community type. Average weekly minutes generally increase as workplace activity increases, ranging from 429 to 539 average weekly minutes for 'Mostly sitting or standing' to 'Mostly heavy labor or physically demanding work', respectively. And average weekly minutes participating in the outdoor recreation activities decreases with BMI status, with normal weight at 460 minutes, overweight at 415 minutes, and obese at 335 minutes.

Table 3. Average Weekly Minutes of Outdoor Recreation Physical Activity by SCORP Survey Respondent Characteristics

	Average Weekly Minutes	No. Respondents		Average Weekly Minutes	No. Respondents
Age Category			**Sex**		
18-34	509	714	Female	407	1,894
35-59	478	1,559	Male	420	1,617
60-74	334	716	**Community Type**		
75-84	185	460	Rural	413	1,115
85 or older	92	32	Suburban	392	1,339
Income Category			Urban	428	776
<$25k	456	420			
$25K-$75K	387	1,255	**Workplace Activity**		
$75K or more	438	1,267	Mostly sitting or standing	429	1,330
Education Level			Mostly walking	502	428
Did Not Complete High School	247	105	Mostly heavy labor or physically demanding work	539	245
High School Diploma (or equivalent)	405	438	**BMI**		
Some College, But No Degree	441	760	Normal Weight (18.5-24.9)	460	1,212
Associate Degree	410	349	Overweight (25-29.9)	415	1,036
Bachelor Degree	428	818	Obese (30-45)	335	680
Graduate or Professional Degree	393	707			

Appendix C Tables C1 – C7 provide breakdowns of average weekly minutes participating in each of the 30 outdoor recreation activities based on BMI, income, age, education level, community type, sex, and workplace activity, respectively. BMI categories (Table C1) have the greatest differences in average weekly minutes between normal weight / overweight and obese for Walking and Dog Walking activities. Jogging / running activities show the greatest difference between normal weight and overweight / obese categories. Income categories (Table C2) have the greatest differences in average weekly minutes increasing by income category (<$25k to >$75k) for Jogging / running on streets / sidewalks and Golf, while Collecting (rocks, plants, mushrooms, berries) declines with increases in income level. Age categories (Table C3) have the greatest differences in average weekly minutes that systematically decline as age categories increase for most outdoor recreation activities. Horseback Riding and Dog walking

show an increase in 35-59 year olds before declining with additional age, and Golf showing an overall increase in average weekly minutes with increases in age (except for 75-84 year olds).

Table 3 shows respondents who do not have a high school degree (or equivalent) have substantially lower total average weekly minutes in outdoor recreation activities than all other education levels. Table C4 shows that the greatest increases in average weekly minutes from no high school education to a high school degree or higher are Walking and Collecting activities, although most outdoor recreation activities see an increase in average weekly minutes compared to this group. Community types (Table C5) illustrate some expected patterns in average weekly minutes participating in certain outdoor recreation activities. Moving from the rural to urban community, increases in average weekly minutes increased for Walking and Bicycling on streets / sidewalks, and declined for Horseback riding, Dog walking, and Collecting. Table C6 shows that male respondents generally spend more time per week Bicycling, Long-distance hiking, and Golf activities than female respondents, while female respondents spend more time per week Walking and Dog walking than male respondents based on average weekly minutes.

Respondents who were primarily sedentary at work (i.e., Mostly sitting or standing) have the highest average weekly minutes for Dog walking relative to respondents in more active work environments (Table C7). Respondents with the most physically demanding work, including heavy labor, have the highest average weekly minutes spent in Walking / day hiking on non-local trails / paths, Horseback riding, Class III – Off-road motorcycling, Downhill skiing / snowboarding, and Collecting activities. Note that these activities are generally not close-to-home unless respondents are living in rural communities. Respondents with moderate-intensity workplaces (i.e., Mostly walking) generally have the highest average weekly minutes in Bicycling on roads, streets / sidewalks than the other workplace activity categories.

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 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 of energy expenditures and Cost of Illness savings are consistent with the above findings. Walking on local streets / sidewalks; Walking on local trails / paths; Jogging / running on streets / sidewalks; Jogging / running on trails / paths; Bicycling on roads, streets / sidewalks; and Dog walking account for 77% of total annual user occasions, 62% of total annual energy expenditures, and 80% of total Cost of Illness savings associated with Oregonians participating in 30 outdoor recreation activities of moderate- to vigorous-intensity. Oregonians' engaged in the 30 outdoor recreation activities on 794 million user occasions that expended 503 billion kcals of energy and realized $735 million to $1.416 billion in Cost of Illness savings associated with eight chronic illnesses affected by physical activity. 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, One-Trip Baseline, 2018 USD

Oregon County	Walking on local streets / sidewalks	Walking on local trails / paths	Walking / day hiking on non-local trails / paths	Long-distance hiking (backpacking)	Jogging / running on streets / sidewalks	Jogging / running on trails / paths
Baker	$2,124,152	$598,624	$244,370	$439,230	$661,375	$324,280
Benton	$15,029,865	$2,626,183	$717,095	$1,169,945	$3,824,753	$1,913,933
Clackamas	$58,277,372	$11,771,948	$3,956,840	$2,336,758	$12,437,535	$4,127,097
Clatsop	$3,901,027	$1,172,792	$467,749	$281,775	$668,178	$348,422
Columbia	$7,869,166	$1,277,153	$375,372	$289,798	$1,221,824	$566,279
Coos	$6,509,006	$1,765,327	$686,312	$438,413	$978,813	$513,045
Crook	$2,078,777	$549,361	$244,859	$151,599	$489,887	$209,192
Curry	$2,227,276	$691,314	$234,247	$89,619	$178,313	$61,982
Deschutes	$33,161,610	$6,414,106	$2,025,573	$2,819,179	$7,709,336	$3,886,432
Douglas	$10,870,730	$2,855,678	$1,220,151	$767,856	$1,023,142	$400,520
Gilliam	$203,013	$51,330	$19,594	$9,488	$28,720	$10,940
Grant	$897,129	$228,669	$97,164	$136,361	$216,891	$84,954
Harney	$669,260	$127,438	$54,911	$34,013	$159,074	$43,432
Hood River	$2,671,694	$721,660	$393,860	$381,427	$1,021,006	$539,272
Jackson	$35,399,356	$7,145,686	$2,080,068	$1,766,855	$5,753,769	$2,875,764
Jefferson	$2,349,331	$639,122	$341,291	$183,575	$555,401	$225,021
Josephine	$8,635,317	$2,623,194	$1,063,058	$599,331	$1,975,885	$821,393
Klamath	$6,053,807	$1,734,762	$705,244	$721,715	$1,382,613	$823,021
Lake	$763,504	$211,044	$87,609	$78,357	$161,144	$84,606
Lane	$58,052,868	$10,740,346	$3,595,953	$2,228,630	$9,967,334	$4,521,949
Lincoln	$4,981,622	$1,390,783	$561,248	$279,494	$802,895	$441,353
Linn	$11,663,801	$3,244,518	$1,372,258	$725,548	$2,215,686	$874,830
Malheur	$2,678,277	$432,429	$208,694	$125,670	$729,829	$183,302
Marion	$59,724,369	$12,053,607	$3,700,249	$2,877,424	$12,309,661	$5,109,573
Morrow	$1,129,604	$260,851	$124,783	$70,147	$208,227	$80,256
Multnomah	$148,109,421	$26,811,405	$10,576,324	$7,334,942	$39,101,710	$18,835,449
Polk	$14,384,481	$2,605,444	$841,901	$721,292	$2,738,839	$1,174,020
Sherman	$173,460	$43,677	$17,136	$8,454	$25,643	$9,705
Tillamook	$2,256,367	$767,580	$250,508	$86,483	$290,205	$115,292
Umatilla	$7,831,046	$1,881,256	$847,259	$377,056	$1,258,201	$468,443
Union	$3,167,270	$728,018	$353,921	$409,775	$734,067	$205,821
Wallowa	$897,553	$224,824	$94,558	$135,379	$214,192	$84,392
Wasco	$2,610,498	$700,723	$285,121	$213,569	$530,241	$232,556
Washington	$97,807,079	$18,155,867	$6,671,451	$7,115,131	$30,947,652	$13,449,160
Wheeler	$137,283	$20,669	$12,353	$7,735	$31,092	$10,713
Yamhill	$14,694,811	$2,592,197	$1,027,220	$684,287	$3,052,364	$1,064,497

Table A1. Total Cost of Illness Savings by Activity by Oregon County, One-Trip Baseline, 2018 USD (continued)

Oregon County	Horseback riding	Bicycling on unpaved trails	Bicycling on paved trails	Bicycling on roads / streets / sidewalks	Class I – All-terrain vehicle riding (3 & 4 wheel ATVs, straddle seat and handle bars)	Class III – Off-road motorcycling
Baker	$153,847	$138,602	$54,363	$380,834	$109,267	$64,475
Benton	$5,994	$837,037	$453,260	$2,322,413	$91,780	$163,514
Clackamas	$42,218	$1,447,566	$1,166,405	$5,694,944	$555,337	$1,013,746
Clatsop	$101,286	$207,944	$218,051	$547,808	$91,714	$54,318
Columbia	$6,907	$164,034	$104,458	$832,719	$137,024	$141,532
Coos	$197,286	$347,200	$175,968	$663,307	$382,568	$361,354
Crook	$82,518	$135,947	$62,985	$283,278	$84,104	$50,038
Curry	$62,452	$94,275	$49,178	$216,249	$74,556	$52,176
Deschutes	$13,673	$2,416,791	$936,013	$4,138,202	$352,478	$674,039
Douglas	$459,675	$512,347	$356,077	$1,182,358	$434,432	$386,483
Gilliam	$13,059	$12,339	$6,200	$25,903	$10,915	$5,858
Grant	$78,918	$61,786	$23,782	$136,707	$64,160	$48,552
Harney	$65,998	$30,266	$7,132	$80,113	$54,013	$30,093
Hood River	$56,867	$373,550	$105,527	$471,838	$25,791	$56,608
Jackson	$27,065	$1,640,340	$983,026	$3,778,711	$312,193	$700,009
Jefferson	$136,852	$162,353	$54,385	$242,355	$97,337	$46,452
Josephine	$326,152	$442,077	$216,927	$912,863	$177,372	$314,882
Klamath	$268,853	$615,604	$257,929	$767,627	$297,923	$157,180
Lake	$35,693	$73,304	$36,854	$93,960	$36,481	$27,073
Lane	$13,489	$2,131,866	$1,362,902	$7,605,809	$206,773	$615,244
Lincoln	$156,251	$185,111	$77,048	$444,426	$88,168	$83,898
Linn	$247,019	$908,109	$313,736	$1,870,888	$441,503	$311,057
Malheur	$268,788	$111,842	$20,197	$289,094	$239,010	$139,076
Marion	$21,550	$2,140,046	$1,218,201	$6,276,705	$354,316	$244,649
Morrow	$71,345	$65,823	$24,642	$131,667	$64,839	$30,492
Multnomah	$38,073	$4,924,476	$3,438,279	$19,624,718	$126,049	$642,785
Polk	$5,318	$431,485	$203,233	$1,406,874	$100,353	$80,609
Sherman	$10,655	$10,029	$5,375	$22,040	$8,902	$5,009
Tillamook	$98,005	$150,030	$59,511	$301,220	$89,663	$80,204
Umatilla	$585,296	$538,200	$164,089	$1,033,943	$493,494	$199,834
Union	$254,677	$248,859	$63,234	$451,539	$230,634	$198,847
Wallowa	$85,252	$60,805	$23,569	$134,408	$62,364	$47,850
Wasco	$100,246	$128,738	$126,938	$294,133	$89,696	$71,202
Washington	$89,699	$4,705,053	$2,686,942	$13,373,089	$262,096	$690,033
Wheeler	$4,464	$2,334	$440	$11,945	$6,003	$2,864
Yamhill	$14,299	$526,938	$365,067	$2,064,121	$111,261	$177,652

Table A1. Total Cost of Illness Savings by Activity by Oregon County, One-Trip Baseline, 2018 USD (continued)

Oregon County	Class IV – Riding UTVs / side-by-side ATVs (non-straddle seat / steering wheel)	Snowmobiling	Personal water craft – jet ski	Downhill (alpine) skiing / snowboarding	Cross-country / Nordic skiing / skijoring on groomed trails	Cross-country / Nordic skiing / skijoring on ungroomed trails / off designated trails
Baker	$145,468	$89,247	$24,364	$60,115	$26,197	$30,661
Benton	$18,294	$47,133	$184,711	$410,081	$94,867	$186,609
Clackamas	$84,550	$105,629	$837,765	$1,253,042	$363,028	$302,329
Clatsop	$59,044	$20,719	$28,422	$84,795	$27,070	$41,318
Columbia	$48,123	$34,160	$198,359	$110,267	$25,211	$7,117
Coos	$638,036	$35,058	$100,031	$131,142	$36,532	$31,149
Crook	$162,772	$15,170	$10,282	$38,156	$19,353	$34,384
Curry	$38,718	$13,499	$20,514	$19,323	$9,044	$6,930
Deschutes	$101,939	$309,608	$1,273,825	$756,988	$536,486	$498,088
Douglas	$1,105,255	$150,517	$107,420	$176,590	$37,699	$27,319
Gilliam	$13,356	$5,798	$2,984	$4,943	$1,205	$624
Grant	$86,506	$42,440	$12,203	$31,639	$17,141	$15,745
Harney	$92,973	$16,376	$8,240	$13,241	$4,071	$4,152
Hood River	$38,920	$22,843	$49,022	$197,108	$203,606	$124,800
Jackson	$49,330	$77,525	$331,622	$511,842	$330,200	$306,355
Jefferson	$76,834	$19,576	$36,947	$56,229	$28,521	$28,973
Josephine	$138,164	$84,721	$247,200	$142,024	$28,911	$44,541
Klamath	$513,473	$122,733	$154,584	$160,854	$49,323	$107,271
Lake	$63,200	$17,038	$15,775	$20,549	$6,046	$12,647
Lane	$111,425	$92,956	$927,391	$1,110,213	$297,126	$575,681
Lincoln	$191,620	$12,132	$52,438	$75,367	$63,576	$36,369
Linn	$407,480	$141,455	$310,772	$355,898	$33,193	$34,370
Malheur	$409,695	$65,655	$37,998	$56,237	$14,427	$7,029
Marion	$43,677	$92,827	$1,424,067	$976,217	$68,756	$166,617
Morrow	$66,616	$33,129	$22,217	$22,877	$9,062	$4,744
Multnomah	$15,816	$431,939	$1,103,022	$3,416,169	$1,282,154	$1,187,926
Polk	$5,634	$32,105	$350,280	$218,625	$53,940	$35,455
Sherman	$10,963	$4,967	$2,652	$3,377	$1,069	$553
Tillamook	$28,538	$11,455	$9,396	$38,986	$18,002	$7,328
Umatilla	$378,775	$291,238	$175,565	$139,097	$43,855	$11,337
Union	$382,853	$178,349	$54,030	$89,184	$105,173	$61,183
Wallowa	$89,878	$41,748	$12,136	$31,419	$17,050	$15,661
Wasco	$77,231	$16,727	$35,102	$61,038	$29,189	$20,269
Washington	$22,727	$180,510	$1,429,645	$3,059,304	$445,934	$596,211
Wheeler	$46	$1	$315	$8,745	$848	$2,108
Yamhill	$38,221	$24,925	$271,025	$260,814	$82,901	$39,390

Table A1. Total Cost of Illness Savings by Activity by Oregon County, One-Trip Baseline, 2018 USD (continued)

Oregon County	Snowshoeing	Sledding / tubing / general snow play	Dog walking / going to dog parks / off-leash areas	Tennis (played outdoors)	Outdoor court games other than tennis (basketball / beach volleyball / badminton)	Soccer
Baker	$7,173	$75,892	$192,206	$1,131	$49,855	$147,123
Benton	$19,271	$280,709	$1,947,751	$22,657	$183,873	$1,067,264
Clackamas	$80,164	$1,192,193	$7,636,215	$66,044	$893,693	$2,331,005
Clatsop	$4,164	$95,105	$388,063	$1,305	$64,907	$99,449
Columbia	$8,285	$144,090	$915,599	$3,506	$73,088	$754,668
Coos	$7,966	$118,790	$539,238	$2,263	$84,255	$128,539
Crook	$5,649	$45,276	$163,065	$1,132	$16,572	$79,746
Curry	$746	$34,029	$234,898	$1,541	$23,805	$59,684
Deschutes	$120,324	$750,011	$5,036,334	$54,898	$467,278	$1,137,199
Douglas	$6,767	$369,906	$965,550	$5,441	$195,934	$656,156
Gilliam	$323	$7,175	$18,377	$284	$5,692	$7,778
Grant	$3,581	$32,840	$78,400	$519	$21,932	$53,830
Harney	$525	$24,460	$39,154	$395	$15,813	$36,512
Hood River	$14,672	$101,099	$237,557	$2,911	$30,245	$171,685
Jackson	$65,358	$495,375	$2,854,788	$68,192	$410,946	$1,041,951
Jefferson	$3,726	$72,065	$162,783	$1,148	$32,653	$63,561
Josephine	$4,006	$225,802	$773,243	$9,779	$308,279	$271,121
Klamath	$23,390	$290,964	$544,021	$2,619	$100,430	$255,077
Lake	$2,845	$30,599	$71,041	$323	$15,266	$39,561
Lane	$83,207	$780,328	$6,563,494	$85,654	$562,556	$2,022,015
Lincoln	$4,440	$71,097	$533,453	$3,398	$85,975	$139,989
Linn	$15,221	$474,228	$1,138,560	$5,029	$242,785	$408,168
Malheur	$1,599	$103,587	$160,588	$1,701	$66,388	$169,920
Marion	$116,772	$1,410,979	$7,882,758	$113,307	$937,129	$3,345,897
Morrow	$1,807	$54,023	$108,844	$1,598	$33,088	$57,034
Multnomah	$378,942	$2,255,784	$19,507,382	$423,884	$2,227,425	$6,472,169
Polk	$9,305	$185,626	$1,903,134	$31,340	$233,580	$364,529
Sherman	$267	$6,302	$14,954	$236	$4,977	$6,900
Tillamook	$1,157	$36,122	$182,615	$1,285	$38,295	$43,454
Umatilla	$12,107	$384,731	$762,855	$14,442	$243,092	$265,518
Union	$14,330	$140,347	$274,088	$1,601	$66,488	$232,697
Wallowa	$3,471	$32,870	$76,199	$506	$21,343	$53,474
Wasco	$5,732	$86,571	$212,843	$1,355	$46,141	$173,098
Washington	$136,693	$1,389,859	$11,298,794	$219,801	$1,980,196	$5,762,008
Wheeler	$258	$3,634	$14,641	$216	$1,803	$3,707
Yamhill	$24,606	$322,330	$1,938,239	$24,093	$142,464	$933,945

Table A1. Total Cost of Illness Savings by Activity by Oregon County, One-Trip Baseline, 2018 USD (continued)

Oregon County	Futsal	Golf	Collecting (rocks / plants / mushrooms / berries)	Crabbing	White-water canoeing / kayaking / rafting	Swimming / playing in outdoor pools / spray parks	County Total Cost of Illness Savings
Baker	$6,514	$48,136	$33,621	$5,884	$12,024	$90,094	$6,339,123
Benton	$53,262	$323,005	$42,945	$32,860	$35,107	$801,891	$34,908,064
Clackamas	$117,401	$1,880,352	$114,810	$180,993	$133,238	$3,316,747	$123,716,963
Clatsop	$4,518	$121,499	$55,406	$53,645	$15,936	$173,412	$9,399,842
Columbia	$37,985	$142,570	$32,529	$30,392	$10,406	$478,329	$16,040,950
Coos	$5,698	$196,801	$100,007	$99,404	$104,423	$268,217	$15,646,147
Crook	$3,526	$59,204	$19,024	$6,027	$15,458	$86,266	$5,203,606
Curry	$2,530	$76,318	$36,453	$19,535	$25,123	$81,257	$4,735,581
Deschutes	$57,225	$888,925	$87,136	$76,379	$70,494	$2,136,476	$78,907,044
Douglas	$29,121	$318,366	$142,290	$129,422	$90,590	$731,018	$25,714,813
Gilliam	$344	$7,121	$2,354	$979	$1,313	$19,132	$497,140
Grant	$2,292	$20,876	$14,884	$3,524	$6,384	$48,398	$2,568,208
Harney	$1,620	$24,492	$6,560	$2,037	$2,930	$45,605	$1,694,898
Hood River	$7,938	$93,357	$21,711	$11,416	$25,336	$122,089	$8,295,414
Jackson	$55,195	$708,881	$114,815	$104,184	$177,649	$1,926,596	$72,093,645
Jefferson	$2,840	$116,548	$21,188	$11,579	$16,262	$140,869	$5,925,777
Josephine	$12,001	$357,973	$109,505	$73,255	$180,752	$402,663	$21,522,391
Klamath	$11,372	$276,836	$69,390	$38,314	$72,557	$325,489	$16,904,975
Lake	$1,808	$31,634	$9,048	$4,376	$9,610	$38,872	$2,079,866
Lane	$101,316	$968,673	$203,854	$303,894	$146,741	$2,508,557	$118,488,241
Lincoln	$6,170	$167,985	$77,029	$65,060	$35,847	$144,933	$11,259,176
Linn	$18,317	$320,224	$132,088	$128,725	$79,429	$1,158,911	$29,593,808
Malheur	$7,876	$115,339	$24,527	$10,190	$12,893	$209,619	$6,901,476
Marion	$168,323	$649,137	$97,249	$196,617	$107,018	$3,292,224	$127,119,923
Morrow	$2,561	$45,408	$13,378	$6,653	$7,306	$141,879	$2,894,896
Multnomah	$332,644	$1,796,027	$349,757	$203,578	$215,661	$7,493,467	$328,657,374
Polk	$19,218	$172,488	$40,223	$48,331	$31,324	$538,603	$28,967,591
Sherman	$306	$6,227	$1,988	$872	$1,150	$17,012	$424,856
Tillamook	$1,920	$75,794	$35,988	$43,692	$9,433	$58,512	$5,187,040
Umatilla	$12,279	$311,554	$99,835	$46,733	$46,350	$1,023,733	$19,941,213
Union	$10,397	$80,165	$54,376	$19,326	$23,090	$220,781	$9,055,119
Wallowa	$2,280	$20,315	$14,439	$3,463	$6,258	$48,133	$2,555,788
Wasco	$7,741	$63,185	$27,621	$14,433	$26,141	$213,711	$6,501,788
Washington	$295,666	$3,463,655	$119,232	$161,050	$245,624	$7,160,131	$233,920,291
Wheeler	$157	$2,103	$1,768	$136	$1,223	$2,089	$291,697
Yamhill	$46,888	$304,458	$47,932	$68,939	$23,954	$947,427	$31,917,263

Table A2. Total Cost of Illness Savings by Activity by Oregon County, ∑J-j Baseline, 2018 USD

Oregon County	Walking on local streets / sidewalks	Walking on local trails / paths	Walking / day hiking on non-local trails / paths	Long-distance hiking (backpacking)	Jogging / running on streets / sidewalks	Jogging / running on trails / paths
Baker	$1,299,478	$340,558	$178,302	$68,995	$147,960	$52,257
Benton	$9,194,716	$1,494,040	$523,221	$183,776	$855,658	$308,423
Clackamas	$35,651,942	$6,697,080	$2,887,068	$367,060	$2,782,473	$665,066
Clatsop	$2,386,504	$667,203	$341,288	$44,261	$149,482	$56,147
Columbia	$4,814,065	$726,574	$273,886	$45,522	$273,341	$91,254
Coos	$3,981,969	$1,004,297	$500,760	$68,866	$218,976	$82,675
Crook	$1,271,719	$312,532	$178,659	$23,813	$109,595	$33,710
Curry	$1,362,565	$393,290	$170,916	$14,077	$39,891	$9,988
Deschutes	$20,287,047	$3,648,995	$1,477,939	$442,839	$1,724,700	$626,283
Douglas	$6,650,311	$1,624,600	$890,271	$120,615	$228,893	$64,542
Gilliam	$124,196	$29,202	$14,296	$1,490	$6,425	$1,763
Grant	$548,830	$130,090	$70,895	$21,420	$48,522	$13,690
Harney	$409,429	$72,500	$40,065	$5,343	$35,587	$6,999
Hood River	$1,634,444	$410,554	$287,376	$59,915	$228,415	$86,902
Jackson	$21,656,017	$4,065,192	$1,517,701	$277,539	$1,287,209	$463,418
Jefferson	$1,437,234	$363,598	$249,019	$28,836	$124,252	$36,261
Josephine	$5,282,768	$1,492,339	$775,649	$94,143	$442,037	$132,364
Klamath	$3,703,495	$986,909	$514,574	$113,367	$309,312	$132,627
Lake	$467,084	$120,063	$63,923	$12,308	$36,051	$13,634
Lane	$35,514,598	$6,110,200	$2,623,751	$350,075	$2,229,850	$728,695
Lincoln	$3,047,572	$791,219	$409,509	$43,903	$179,620	$71,122
Linn	$7,135,482	$1,845,812	$1,001,254	$113,970	$495,684	$140,975
Malheur	$1,638,471	$246,010	$152,272	$19,740	$163,274	$29,538
Marion	$36,537,161	$6,857,316	$2,699,849	$451,988	$2,753,866	$823,388
Morrow	$691,050	$148,398	$91,047	$11,019	$46,584	$12,933
Multnomah	$90,607,869	$15,253,051	$7,716,907	$1,152,178	$8,747,671	$3,035,260
Polk	$8,799,893	$1,482,241	$614,285	$113,301	$612,721	$189,189
Sherman	$106,116	$24,848	$12,503	$1,328	$5,737	$1,564
Tillamook	$1,380,362	$436,677	$182,781	$13,585	$64,924	$18,579
Umatilla	$4,790,745	$1,070,249	$618,194	$59,228	$281,479	$75,488
Union	$1,937,619	$414,170	$258,235	$64,368	$164,222	$33,167
Wallowa	$549,090	$127,903	$68,993	$21,265	$47,918	$13,599
Wasco	$1,597,006	$398,642	$208,036	$33,548	$118,623	$37,476
Washington	$59,834,755	$10,328,902	$4,867,757	$1,117,650	$6,923,479	$2,167,280
Wheeler	$83,985	$11,759	$9,013	$1,215	$6,956	$1,726
Yamhill	$8,989,742	$1,474,705	$749,501	$107,488	$682,862	$171,540

Table A2. Total Cost of Illness Savings by Activity by Oregon County, ∑J-j Baseline, 2018 USD (continued)

Oregon County	Horseback riding	Bicycling on unpaved trails	Bicycling on paved trails	Bicycling on roads / streets / sidewalks	Class I – All-terrain vehicle riding (3 & 4 wheel ATVs, straddle seat and handle bars)	Class III – Off-road motorcycling
Baker	$109,956	$41,501	$55,836	$230,675	$111,839	$31,584
Benton	$4,284	$250,629	$465,545	$1,406,712	$93,940	$80,100
Clackamas	$30,173	$433,436	$1,198,017	$3,449,494	$568,409	$496,600
Clatsop	$72,390	$62,264	$223,961	$331,814	$93,872	$26,608
Columbia	$4,936	$49,116	$107,289	$504,387	$140,250	$69,332
Coos	$141,002	$103,960	$180,737	$401,773	$391,573	$177,015
Crook	$58,976	$40,706	$64,692	$171,584	$86,084	$24,512
Curry	$44,635	$28,228	$50,510	$130,985	$76,311	$25,559
Deschutes	$9,772	$723,646	$961,381	$2,506,557	$360,775	$330,189
Douglas	$328,534	$153,409	$365,728	$716,168	$444,657	$189,325
Gilliam	$9,333	$3,695	$6,368	$15,690	$11,172	$2,869
Grant	$56,404	$18,500	$24,426	$82,805	$65,670	$23,784
Harney	$47,169	$9,062	$7,325	$48,525	$55,284	$14,741
Hood River	$40,643	$111,850	$108,387	$285,798	$26,398	$27,731
Jackson	$19,343	$491,157	$1,009,668	$2,288,809	$319,542	$342,911
Jefferson	$97,809	$48,612	$55,859	$146,797	$99,628	$22,755
Josephine	$233,104	$132,369	$222,806	$552,932	$181,546	$154,250
Klamath	$192,151	$184,327	$264,919	$464,961	$304,935	$76,997
Lake	$25,510	$21,949	$37,853	$56,913	$37,339	$13,262
Lane	$9,641	$638,332	$1,399,839	$4,606,927	$211,640	$301,387
Lincoln	$111,674	$55,427	$79,136	$269,194	$90,243	$41,099
Linn	$176,546	$271,910	$322,239	$1,133,218	$451,895	$152,376
Malheur	$192,105	$33,488	$20,745	$175,108	$244,636	$68,128
Marion	$15,402	$640,782	$1,251,217	$3,801,873	$362,656	$119,845
Morrow	$50,991	$19,709	$25,309	$79,752	$66,365	$14,937
Multnomah	$27,211	$1,474,507	$3,531,463	$11,886,919	$129,016	$314,879
Polk	$3,801	$129,197	$208,741	$852,160	$102,715	$39,488
Sherman	$7,615	$3,003	$5,521	$13,350	$9,112	$2,454
Tillamook	$70,045	$44,923	$61,123	$182,453	$91,774	$39,289
Umatilla	$418,316	$161,150	$168,536	$626,271	$505,110	$97,892
Union	$182,020	$74,514	$64,947	$273,502	$236,062	$97,409
Wallowa	$60,930	$18,207	$24,207	$81,412	$63,831	$23,440
Wasco	$71,647	$38,547	$130,378	$178,160	$91,807	$34,879
Washington	$64,109	$1,408,807	$2,759,764	$8,100,235	$268,265	$338,024
Wheeler	$3,191	$699	$452	$7,235	$6,144	$1,403
Yamhill	$10,220	$157,778	$374,962	$1,250,262	$113,880	$87,026

Table A2. Total Cost of Illness Savings by Activity by Oregon County, ∑J-j Baseline, 2018 USD (continued)

Oregon County	Class IV – Riding UTVs / side-by-side ATVs (non-straddle seat / steering wheel)	Snowmobiling	Personal water craft – jet ski	Downhill (alpine) skiing / snowboarding	Cross-country / Nordic skiing / skijoring on groomed trails	Cross-country / Nordic skiing / skijoring on ungroomed trails / off designated trails
Baker	$98,494	$48,217	$4,057	$34,602	$3,097	$2,772
Benton	$12,387	$25,464	$30,760	$236,043	$11,213	$16,870
Clackamas	$57,247	$57,068	$139,512	$721,251	$42,910	$27,331
Clatsop	$39,978	$11,194	$4,733	$48,808	$3,200	$3,735
Columbia	$32,583	$18,455	$33,033	$63,470	$2,980	$643
Coos	$432,002	$18,941	$16,658	$75,485	$4,318	$2,816
Crook	$110,210	$8,196	$1,712	$21,962	$2,288	$3,108
Curry	$26,215	$7,293	$3,416	$11,122	$1,069	$626
Deschutes	$69,021	$167,271	$212,128	$435,722	$63,413	$45,027
Douglas	$748,348	$81,319	$17,888	$101,645	$4,456	$2,470
Gilliam	$9,043	$3,133	$497	$2,845	$142	$56
Grant	$58,572	$22,929	$2,032	$18,212	$2,026	$1,423
Harney	$62,950	$8,847	$1,372	$7,621	$481	$375
Hood River	$26,352	$12,341	$8,164	$113,455	$24,066	$11,282
Jackson	$33,401	$41,884	$55,225	$294,616	$39,030	$27,695
Jefferson	$52,023	$10,576	$6,153	$32,365	$3,371	$2,619
Josephine	$93,548	$45,772	$41,166	$81,749	$3,417	$4,027
Klamath	$347,663	$66,308	$25,743	$92,588	$5,830	$9,697
Lake	$42,791	$9,205	$2,627	$11,828	$715	$1,143
Lane	$75,443	$50,221	$154,437	$639,038	$35,121	$52,042
Lincoln	$129,742	$6,554	$8,732	$43,382	$7,515	$3,288
Linn	$275,897	$76,423	$51,752	$204,855	$3,923	$3,107
Malheur	$277,397	$35,471	$6,328	$32,370	$1,705	$635
Marion	$29,573	$50,151	$237,148	$561,910	$8,127	$15,062
Morrow	$45,104	$17,898	$3,700	$13,168	$1,071	$429
Multnomah	$10,708	$233,362	$183,685	$1,966,346	$151,552	$107,389
Polk	$3,814	$17,345	$58,332	$125,841	$6,376	$3,205
Sherman	$7,423	$2,683	$442	$1,944	$126	$50
Tillamook	$19,323	$6,189	$1,565	$22,441	$2,128	$662
Umatilla	$256,462	$157,346	$29,237	$80,064	$5,184	$1,025
Union	$259,223	$96,356	$8,997	$51,334	$12,432	$5,531
Wallowa	$60,855	$22,555	$2,021	$18,085	$2,015	$1,416
Wasco	$52,292	$9,037	$5,845	$35,133	$3,450	$1,832
Washington	$15,388	$97,524	$238,077	$1,760,935	$52,710	$53,898
Wheeler	$31	$1	$53	$5,033	$100	$191
Yamhill	$25,878	$13,466	$45,133	$150,124	$9,799	$3,561

Table A2. Total Cost of Illness Savings by Activity by Oregon County, ∑J-j Baseline, 2018 USD (continued)

Oregon County	Snowshoeing	Sledding / tubing / general snow play	Dog walking / going to dog parks / off-leash areas	Tennis (played outdoors)	Outdoor court games other than tennis (basketball / beach volleyball / badminton)	Soccer
Baker	$12,900	$4,925	$101,568	$1,990	$23,034	$29,717
Benton	$34,658	$18,219	$1,029,253	$39,856	$84,952	$215,576
Clackamas	$144,172	$77,376	$4,035,216	$116,177	$412,901	$470,838
Clatsop	$7,488	$6,173	$205,065	$2,296	$29,988	$20,088
Columbia	$14,901	$9,352	$483,831	$6,168	$33,768	$152,435
Coos	$14,326	$7,710	$284,950	$3,982	$38,927	$25,964
Crook	$10,159	$2,939	$86,169	$1,992	$7,656	$16,108
Curry	$1,341	$2,209	$124,128	$2,710	$10,998	$12,055
Deschutes	$216,400	$48,677	$2,661,357	$96,570	$215,890	$229,702
Douglas	$12,170	$24,008	$510,227	$9,571	$90,525	$132,537
Gilliam	$581	$466	$9,711	$499	$2,630	$1,571
Grant	$6,441	$2,131	$41,429	$913	$10,133	$10,873
Harney	$944	$1,587	$20,690	$694	$7,306	$7,375
Hood River	$26,387	$6,562	$125,533	$5,121	$13,974	$34,679
Jackson	$117,544	$32,151	$1,508,560	$119,955	$189,864	$210,463
Jefferson	$6,702	$4,677	$86,020	$2,019	$15,086	$12,839
Josephine	$7,205	$14,655	$408,606	$17,202	$142,430	$54,764
Klamath	$42,066	$18,884	$287,478	$4,607	$46,400	$51,523
Lake	$5,117	$1,986	$37,540	$568	$7,053	$7,991
Lane	$149,645	$50,645	$3,468,356	$150,673	$259,911	$408,426
Lincoln	$7,985	$4,614	$281,894	$5,977	$39,722	$28,276
Linn	$27,375	$30,778	$601,651	$8,846	$112,171	$82,446
Malheur	$2,877	$6,723	$84,860	$2,992	$30,672	$34,322
Marion	$210,011	$91,575	$4,165,497	$199,317	$432,970	$675,836
Morrow	$3,250	$3,506	$57,516	$2,812	$15,287	$11,520
Multnomah	$681,515	$146,405	$10,308,313	$745,650	$1,029,109	$1,307,310
Polk	$16,735	$12,047	$1,005,676	$55,131	$107,918	$73,631
Sherman	$480	$409	$7,902	$414	$2,299	$1,394
Tillamook	$2,081	$2,344	$96,500	$2,261	$17,693	$8,777
Umatilla	$21,774	$24,970	$403,117	$25,404	$112,312	$53,632
Union	$25,773	$9,109	$144,837	$2,816	$30,718	$47,002
Wallowa	$6,243	$2,133	$40,266	$890	$9,861	$10,801
Wasco	$10,309	$5,619	$112,473	$2,384	$21,318	$34,964
Washington	$245,838	$90,204	$5,970,638	$386,649	$914,885	$1,163,865
Wheeler	$464	$236	$7,737	$381	$833	$749
Yamhill	$44,253	$20,920	$1,024,226	$42,381	$65,821	$188,647

Table A2. Total Cost of Illness Savings by Activity by Oregon County, ∑J-j Baseline, 2018 USD (continued)

Oregon County	Futsal	Golf	Collecting (rocks / plants / mushrooms / berries)	Crabbing	White-water canoeing / kayaking / rafting	Swimming / playing in outdoor pools / spray parks	County Total Cost of Illness Savings
Baker	$796	$38,838	$120,711	$13,929	$18,287	$29,199	$3,256,074
Benton	$6,513	$260,613	$154,189	$77,792	$53,396	$259,890	$17,428,687
Clackamas	$14,356	$1,517,142	$412,210	$428,483	$202,645	$1,074,944	$65,178,597
Clatsop	$552	$98,030	$198,927	$127,000	$24,238	$56,202	$5,343,488
Columbia	$4,645	$115,031	$116,790	$71,950	$15,827	$155,025	$8,430,838
Coos	$697	$158,787	$359,061	$235,329	$158,819	$86,928	$9,179,304
Crook	$431	$47,768	$68,303	$14,269	$23,511	$27,958	$2,831,322
Curry	$309	$61,576	$130,879	$46,247	$38,210	$26,335	$2,853,697
Deschutes	$6,998	$717,219	$312,851	$180,820	$107,216	$692,423	$39,578,830
Douglas	$3,561	$256,870	$510,874	$306,393	$137,781	$236,920	$14,964,617
Gilliam	$42	$5,746	$8,450	$2,319	$1,998	$6,201	$282,428
Grant	$280	$16,843	$53,440	$8,343	$9,709	$15,686	$1,386,452
Harney	$198	$19,761	$23,554	$4,822	$4,456	$14,780	$939,846
Hood River	$971	$75,324	$77,952	$27,027	$38,534	$39,569	$3,975,701
Jackson	$6,749	$571,953	$412,229	$246,644	$270,190	$624,402	$38,541,063
Jefferson	$347	$94,036	$76,073	$27,412	$24,734	$45,655	$3,213,368
Josephine	$1,468	$288,827	$393,163	$173,425	$274,910	$130,501	$11,873,142
Klamath	$1,391	$223,362	$249,134	$90,706	$110,354	$105,490	$9,027,799
Lake	$221	$25,523	$32,485	$10,361	$14,616	$12,598	$1,130,258
Lane	$12,389	$781,563	$731,909	$719,438	$223,182	$813,013	$63,500,388
Lincoln	$755	$135,537	$276,564	$154,024	$54,521	$46,972	$6,425,771
Linn	$2,240	$258,370	$474,243	$304,744	$120,806	$375,599	$16,256,588
Malheur	$963	$93,060	$88,062	$24,124	$19,609	$67,937	$3,793,622
Marion	$20,583	$523,750	$349,158	$465,473	$162,767	$1,066,997	$65,581,247
Morrow	$313	$36,637	$48,032	$15,749	$11,112	$45,982	$1,591,182
Multnomah	$40,676	$1,449,105	$1,255,754	$481,950	$328,004	$2,428,602	$166,732,368
Polk	$2,350	$139,170	$144,417	$114,420	$47,641	$174,559	$15,256,341
Sherman	$37	$5,024	$7,136	$2,065	$1,749	$5,513	$240,242
Tillamook	$235	$61,154	$129,210	$103,437	$14,346	$18,963	$3,095,821
Umatilla	$1,502	$251,374	$358,443	$110,637	$70,495	$331,788	$11,167,423
Union	$1,271	$64,680	$195,230	$45,754	$35,118	$71,554	$4,907,972
Wallowa	$279	$16,391	$51,840	$8,199	$9,518	$15,600	$1,379,763
Wasco	$947	$50,980	$99,169	$34,169	$39,759	$69,263	$3,527,691
Washington	$36,155	$2,794,613	$428,085	$381,270	$373,575	$2,320,569	$115,503,903
Wheeler	$19	$1,697	$6,347	$322	$1,860	$677	$160,508
Yamhill	$5,733	$245,649	$172,092	$163,206	$36,432	$307,057	$16,734,345

Table A3. County Population Participating in Outdoor Recreation Activities, 2011 SCORP Statewide Survey

Oregon County	Walking on local streets / sidewalks	Walking on local trails / paths	Walking / day hiking on non-local trails / paths	Long-distance hiking (backpacking)	Jogging / running on streets / sidewalks	Jogging / running on trails / paths
Baker	79.71%	74.11%	53.93%	38.54%	26.85%	25.07%
Benton	72.79%	69.71%	53.80%	18.34%	22.35%	20.04%
Clackamas	58.02%	56.26%	45.04%	7.87%	15.85%	9.26%
Clatsop	64.17%	61.68%	42.50%	9.45%	10.63%	10.61%
Columbia	62.93%	49.04%	34.59%	7.87%	12.47%	10.27%
Coos	64.57%	57.81%	39.55%	9.80%	10.18%	10.13%
Crook	58.50%	50.67%	40.00%	9.43%	14.19%	11.44%
Curry	59.13%	61.15%	38.45%	5.87%	5.56%	3.57%
Deschutes	74.51%	69.57%	53.16%	21.75%	22.27%	20.00%
Douglas	61.63%	53.22%	40.66%	9.84%	6.13%	4.47%
Gilliam	61.76%	52.25%	36.35%	7.09%	10.01%	7.16%
Grant	76.08%	63.69%	49.41%	26.32%	20.18%	14.53%
Harney	56.71%	35.15%	27.07%	6.37%	13.98%	7.20%
Hood River	67.49%	63.63%	54.97%	18.30%	24.15%	23.50%
Jackson	67.72%	65.82%	47.10%	12.29%	14.81%	12.66%
Jefferson	64.83%	57.02%	50.83%	10.21%	14.47%	11.15%
Josephine	63.28%	63.03%	45.91%	9.46%	15.31%	12.00%
Klamath	57.86%	53.49%	37.48%	14.13%	12.69%	14.18%
Lake	58.55%	53.39%	39.28%	14.23%	13.56%	14.03%
Lane	65.24%	57.61%	47.36%	8.81%	14.70%	11.90%
Lincoln	63.77%	58.34%	41.11%	7.97%	10.75%	11.12%
Linn	60.64%	54.82%	39.18%	7.40%	10.44%	7.90%
Malheur	54.15%	31.14%	23.39%	5.41%	15.27%	7.31%
Marion	72.70%	70.28%	50.43%	11.82%	18.91%	13.89%
Morrow	61.76%	52.25%	36.35%	7.09%	10.01%	7.16%
Multnomah	74.82%	65.13%	55.38%	12.41%	24.11%	20.40%
Polk	74.50%	64.57%	51.34%	12.77%	17.96%	13.22%
Sherman	61.76%	52.25%	36.35%	7.09%	10.01%	7.16%
Tillamook	53.51%	59.85%	34.43%	4.56%	7.18%	5.41%
Umatilla	62.30%	52.96%	36.65%	5.83%	9.16%	6.56%
Union	77.05%	61.93%	49.17%	20.51%	17.27%	9.12%
Wallowa	76.08%	63.69%	49.41%	26.32%	20.18%	14.53%
Wasco	62.30%	53.68%	38.85%	10.61%	12.38%	10.21%
Washington	66.90%	59.91%	47.71%	15.70%	25.35%	19.30%
Wheeler	56.40%	28.31%	31.86%	8.23%	15.60%	10.01%
Yamhill	57.25%	48.54%	45.79%	9.32%	15.53%	9.65%

Table A3. County Population Participating in Outdoor Recreation Activities, 2011 SCORP Statewide Survey (continued)

Oregon County	Horseback riding	Bicycling on unpaved trails	Bicycling on paved trails	Bicycling on roads / streets / sidewalks	Class I – All-terrain vehicle riding (3 & 4 wheel ATVs, straddle seat and handle bars)	Class III – Off-road motorcycling
Baker	16.23%	15.97%	17.87%	45.79%	32.07%	5.93%
Benton	3.98%	17.00%	32.89%	42.71%	9.55%	2.47%
Clackamas	5.75%	6.58%	20.93%	22.30%	8.77%	4.14%
Clatsop	4.45%	10.25%	28.04%	28.02%	11.10%	2.34%
Columbia	7.28%	5.95%	15.16%	26.23%	17.61%	4.65%
Coos	5.49%	10.65%	15.03%	21.12%	29.41%	8.68%
Crook	6.55%	11.68%	15.20%	25.37%	18.28%	3.42%
Curry	4.44%	7.52%	10.07%	18.58%	14.99%	3.46%
Deschutes	4.11%	24.96%	30.99%	36.73%	12.89%	6.18%
Douglas	7.33%	8.90%	17.36%	21.37%	19.33%	5.34%
Gilliam	10.81%	11.20%	16.62%	25.64%	25.19%	4.39%
Grant	18.93%	15.42%	18.44%	36.97%	40.09%	10.07%
Harney	15.51%	7.75%	5.07%	21.47%	35.54%	6.09%
Hood River	3.86%	28.70%	33.10%	40.38%	4.77%	3.65%
Jackson	7.02%	14.43%	22.53%	28.23%	10.28%	5.52%
Jefferson	10.23%	13.47%	18.50%	21.03%	19.30%	3.27%
Josephine	6.69%	9.90%	14.01%	21.31%	10.23%	5.64%
Klamath	6.99%	17.66%	24.95%	23.03%	21.11%	3.85%
Lake	7.62%	17.26%	23.52%	23.05%	21.84%	4.98%
Lane	2.13%	10.89%	26.99%	33.47%	5.94%	2.76%
Lincoln	5.57%	6.89%	8.52%	18.10%	8.64%	2.60%
Linn	3.52%	14.32%	20.86%	30.67%	16.83%	4.24%
Malheur	14.58%	6.85%	4.69%	20.22%	35.69%	7.16%
Marion	3.72%	11.93%	25.31%	29.77%	10.56%	1.16%
Morrow	10.81%	11.20%	16.62%	25.64%	25.19%	4.39%
Multnomah	2.74%	11.42%	28.40%	38.29%	1.48%	1.32%
Polk	3.92%	10.25%	18.65%	28.72%	13.34%	1.66%
Sherman	10.81%	11.20%	16.62%	25.64%	25.19%	4.39%
Tillamook	6.50%	10.86%	12.08%	22.79%	16.42%	4.55%
Umatilla	12.55%	13.07%	15.38%	28.27%	28.40%	4.14%
Union	16.76%	18.08%	20.47%	37.31%	42.73%	12.46%
Wallowa	18.93%	15.42%	18.44%	36.97%	40.09%	10.07%
Wasco	6.55%	9.15%	24.12%	21.94%	16.27%	4.43%
Washington	8.71%	14.79%	30.59%	35.58%	4.30%	1.92%
Wheeler	4.92%	2.86%	1.48%	15.85%	19.14%	2.96%
Yamhill	7.92%	9.38%	24.64%	31.49%	10.76%	2.84%

Table A3. County Population Participating in Outdoor Recreation Activities, 2011 SCORP Statewide Survey (continued)

Oregon County	Class IV – Riding UTVs / side-by-side ATVs (non-straddle seat / steering wheel)	Snowmobiling	Personal water craft – jet ski	Downhill (alpine) skiing / snowboarding	Cross-country / Nordic skiing / skijoring on groomed trails	Cross-country / Nordic skiing / skijoring on ungroomed trails / off designated trails
Baker	6.52%	17.35%	4.67%	16.56%	4.83%	6.18%
Benton	1.32%	3.22%	3.38%	23.00%	6.20%	6.13%
Clackamas	1.15%	1.47%	3.31%	14.74%	4.32%	2.08%
Clatsop	1.05%	1.74%	2.10%	9.66%	1.89%	3.16%
Columbia	5.59%	3.95%	6.26%	10.36%	2.37%	0.43%
Coos	7.49%	1.80%	4.94%	9.54%	1.71%	1.65%
Crook	5.40%	2.22%	1.41%	7.83%	2.52%	4.88%
Curry	1.25%	1.86%	3.07%	2.84%	1.27%	1.08%
Deschutes	3.30%	10.05%	11.27%	20.17%	14.38%	7.86%
Douglas	7.37%	4.38%	3.00%	7.39%	1.02%	0.79%
Gilliam	4.67%	9.28%	4.89%	9.05%	1.88%	1.10%
Grant	8.80%	18.69%	5.38%	16.33%	7.16%	7.29%
Harney	9.19%	7.07%	3.41%	8.24%	1.56%	1.75%
Hood River	1.05%	2.86%	5.08%	37.14%	20.09%	13.63%
Jackson	1.37%	2.17%	2.57%	12.04%	6.53%	4.42%
Jefferson	2.43%	2.66%	4.45%	10.60%	3.32%	3.73%
Josephine	1.21%	3.15%	8.96%	7.69%	0.96%	1.69%
Klamath	5.61%	5.86%	6.55%	10.81%	1.98%	4.83%
Lake	5.72%	6.74%	6.27%	11.51%	2.33%	5.28%
Lane	1.67%	1.52%	4.19%	14.80%	4.05%	4.71%
Lincoln	2.92%	0.79%	3.33%	6.88%	3.85%	2.38%
Linn	2.38%	3.67%	6.94%	13.74%	0.75%	0.85%
Malheur	9.36%	6.59%	3.60%	8.54%	1.26%	0.72%
Marion	0.67%	1.56%	6.67%	13.93%	1.00%	1.39%
Morrow	4.67%	9.28%	4.89%	9.05%	1.88%	1.10%
Multnomah	0.00%	2.97%	2.11%	19.56%	8.49%	4.38%
Polk	0.41%	2.39%	6.98%	13.47%	2.75%	1.33%
Sherman	4.67%	9.28%	4.89%	9.05%	1.88%	1.10%
Tillamook	0.79%	1.41%	1.13%	6.68%	1.96%	0.94%
Umatilla	3.84%	11.57%	5.88%	8.06%	1.37%	0.38%
Union	10.63%	21.73%	5.86%	16.67%	10.85%	7.01%
Wallowa	8.80%	18.69%	5.38%	16.33%	7.16%	7.29%
Wasco	2.12%	2.05%	3.76%	10.54%	3.01%	2.34%
Washington	0.19%	1.74%	3.59%	23.83%	3.90%	2.92%
Wheeler	0.00%	0.00%	0.00%	19.63%	1.96%	5.40%
Yamhill	2.02%	1.41%	4.29%	12.15%	3.99%	1.09%

Table A3. County Population Participating in Outdoor Recreation Activities, 2011 SCORP Statewide Survey (continued)

Oregon County	Snowshoeing	Sledding / tubing / general snow play	Dog walking / going to dog parks / off-leash areas	Tennis (played outdoors)	Outdoor court games other than tennis (basketball / beach volleyball / badminton)	Soccer
Baker	14.59%	45.56%	36.18%	5.48%	13.77%	20.66%
Benton	9.45%	29.50%	31.71%	8.04%	10.93%	16.49%
Clackamas	5.46%	24.56%	27.39%	4.61%	10.02%	7.79%
Clatsop	3.58%	21.42%	32.29%	2.66%	7.38%	5.52%
Columbia	4.64%	23.95%	26.36%	2.00%	6.56%	20.43%
Coos	4.26%	17.81%	28.53%	2.91%	6.07%	4.59%
Crook	8.61%	18.86%	24.42%	4.06%	3.43%	7.86%
Curry	1.08%	16.12%	32.49%	5.21%	4.94%	6.32%
Deschutes	18.99%	35.42%	41.09%	8.88%	10.99%	8.75%
Douglas	2.07%	31.45%	29.49%	3.99%	8.15%	13.41%
Gilliam	5.76%	35.38%	29.06%	11.67%	13.29%	9.28%
Grant	16.45%	44.82%	33.55%	5.70%	14.03%	16.70%
Harney	2.49%	30.67%	17.70%	4.38%	9.82%	10.97%
Hood River	21.67%	30.47%	30.44%	9.94%	5.74%	13.62%
Jackson	8.68%	21.63%	19.92%	9.19%	8.54%	7.22%
Jefferson	5.44%	26.77%	22.21%	4.02%	6.14%	5.73%
Josephine	1.64%	25.23%	28.64%	9.19%	16.70%	7.24%
Klamath	11.92%	37.54%	26.53%	3.18%	6.71%	8.02%
Lake	11.88%	38.15%	27.09%	3.32%	8.61%	11.91%
Lane	6.11%	19.60%	26.49%	6.09%	7.23%	7.95%
Lincoln	2.96%	13.91%	33.20%	5.43%	7.92%	6.45%
Linn	4.32%	31.20%	29.85%	3.42%	8.73%	6.71%
Malheur	1.86%	30.81%	16.54%	4.59%	10.32%	12.32%
Marion	9.49%	35.84%	34.30%	8.95%	12.66%	13.54%
Morrow	5.76%	35.38%	29.06%	11.67%	13.29%	9.28%
Multnomah	13.30%	22.13%	34.95%	14.44%	11.88%	10.82%
Polk	3.16%	20.77%	36.33%	10.18%	13.92%	6.44%
Sherman	5.76%	35.38%	29.06%	11.67%	13.29%	9.28%
Tillamook	1.46%	13.10%	21.39%	3.90%	6.63%	3.73%
Umatilla	5.63%	38.90%	30.20%	15.27%	14.29%	6.81%
Union	19.78%	45.99%	34.86%	5.14%	12.88%	18.70%
Wallowa	16.45%	44.82%	33.55%	5.70%	14.03%	16.70%
Wasco	7.35%	28.90%	26.57%	4.21%	7.87%	13.81%
Washington	6.51%	17.92%	27.58%	10.17%	14.44%	12.40%
Wheeler	6.28%	27.66%	31.95%	11.99%	5.87%	6.28%
Yamhill	4.82%	27.42%	27.13%	6.23%	6.29%	12.45%

Table A3. County Population Participating in Outdoor Recreation Activities, 2011 SCORP Statewide Survey (continued)

Oregon County	Futsal	Golf	Collecting (rocks / plants / mushrooms / berries)	Crabbing	White-water canoeing / kayaking / rafting	Swimming / playing in outdoor pools / spray parks
Baker	20.66%	10.09%	47.27%	6.35%	9.72%	15.99%
Benton	16.49%	13.34%	24.02%	10.41%	11.11%	21.51%
Clackamas	7.79%	14.61%	13.00%	11.34%	11.10%	18.92%
Clatsop	5.52%	10.47%	32.82%	23.55%	6.07%	11.82%
Columbia	20.43%	8.89%	28.77%	15.46%	6.95%	22.01%
Coos	4.59%	10.83%	37.19%	28.84%	22.41%	12.09%
Crook	7.86%	9.17%	20.02%	5.04%	9.51%	10.78%
Curry	6.32%	11.86%	36.29%	16.83%	16.02%	11.28%
Deschutes	8.75%	15.71%	21.94%	11.12%	13.55%	27.80%
Douglas	13.41%	10.13%	30.40%	21.61%	11.17%	18.84%
Gilliam	9.28%	12.61%	27.59%	9.30%	8.88%	28.84%
Grant	16.70%	10.07%	47.07%	9.35%	12.36%	19.66%
Harney	10.97%	11.51%	20.66%	5.01%	5.33%	17.28%
Hood River	13.62%	12.38%	20.96%	7.39%	14.35%	11.71%
Jackson	7.22%	11.02%	24.91%	12.55%	28.73%	22.74%
Jefferson	5.73%	16.50%	21.02%	8.07%	9.95%	15.80%
Josephine	7.24%	14.72%	30.11%	16.04%	29.36%	13.50%
Klamath	8.02%	13.98%	24.23%	9.93%	16.31%	12.76%
Lake	11.91%	13.52%	26.13%	9.23%	14.79%	14.25%
Lane	7.95%	9.28%	26.65%	19.42%	13.14%	16.80%
Lincoln	6.45%	11.70%	35.96%	24.27%	9.96%	8.41%
Linn	6.71%	8.74%	25.45%	17.50%	9.45%	23.75%
Malheur	12.32%	12.26%	18.63%	4.79%	5.34%	18.33%
Marion	13.54%	6.64%	13.99%	14.00%	10.59%	22.74%
Morrow	9.28%	12.61%	27.59%	9.30%	8.88%	28.84%
Multnomah	10.82%	7.22%	20.77%	6.22%	9.22%	20.51%
Polk	6.44%	7.69%	24.66%	14.11%	13.14%	16.19%
Sherman	9.28%	12.61%	27.59%	9.30%	8.88%	28.84%
Tillamook	3.73%	9.91%	31.69%	30.03%	4.84%	6.31%
Umatilla	6.81%	12.80%	29.76%	8.95%	7.69%	31.69%
Union	18.70%	10.58%	48.58%	12.84%	13.27%	22.15%
Wallowa	16.70%	10.07%	47.07%	9.35%	12.36%	19.66%
Wasco	13.81%	8.24%	24.38%	9.40%	14.75%	21.32%
Washington	12.40%	18.95%	9.69%	6.71%	14.17%	25.92%
Wheeler	6.28%	5.19%	27.56%	1.96%	12.32%	4.66%
Yamhill	12.45%	10.10%	22.22%	15.90%	7.66%	21.69%

Table A4. Proportion of Cost of Illness Savings by Activity by Oregon County, 2011 Participation Rates

Oregon County	Walking on local streets / sidewalks	Walking on local trails / paths	Walking / day hiking on non-local trails / paths	Long-distance hiking (backpacking)	Jogging / running on streets / sidewalks	Jogging / running on trails / paths
Baker	0.34%	0.48%	0.54%	1.22%	0.45%	0.50%
Benton	2.39%	2.09%	1.57%	3.24%	2.63%	2.96%
Clackamas	9.25%	9.35%	8.69%	6.47%	8.54%	6.38%
Clatsop	0.62%	0.93%	1.03%	0.78%	0.46%	0.54%
Columbia	1.25%	1.01%	0.82%	0.80%	0.84%	0.87%
Coos	1.03%	1.40%	1.51%	1.21%	0.67%	0.79%
Crook	0.33%	0.44%	0.54%	0.42%	0.34%	0.32%
Curry	0.35%	0.55%	0.51%	0.25%	0.12%	0.10%
Deschutes	5.26%	5.10%	4.45%	7.81%	5.29%	6.00%
Douglas	1.73%	2.27%	2.68%	2.13%	0.70%	0.62%
Gilliam	0.03%	0.04%	0.04%	0.03%	0.02%	0.02%
Grant	0.14%	0.18%	0.21%	0.38%	0.15%	0.13%
Harney	0.11%	0.10%	0.12%	0.09%	0.11%	0.07%
Hood River	0.42%	0.57%	0.86%	1.06%	0.70%	0.83%
Jackson	5.62%	5.68%	4.57%	4.89%	3.95%	4.44%
Jefferson	0.37%	0.51%	0.75%	0.51%	0.38%	0.35%
Josephine	1.37%	2.08%	2.33%	1.66%	1.36%	1.27%
Klamath	0.96%	1.38%	1.55%	2.00%	0.95%	1.27%
Lake	0.12%	0.17%	0.19%	0.22%	0.11%	0.13%
Lane	9.21%	8.53%	7.89%	6.17%	6.85%	6.99%
Lincoln	0.79%	1.11%	1.23%	0.77%	0.55%	0.68%
Linn	1.85%	2.58%	3.01%	2.01%	1.52%	1.35%
Malheur	0.43%	0.34%	0.46%	0.35%	0.50%	0.28%
Marion	9.48%	9.58%	8.12%	7.97%	8.45%	7.89%
Morrow	0.18%	0.21%	0.27%	0.19%	0.14%	0.12%
Multnomah	23.51%	21.30%	23.22%	20.32%	26.85%	29.10%
Polk	2.28%	2.07%	1.85%	2.00%	1.88%	1.81%
Sherman	0.03%	0.03%	0.04%	0.02%	0.02%	0.01%
Tillamook	0.36%	0.61%	0.55%	0.24%	0.20%	0.18%
Umatilla	1.24%	1.49%	1.86%	1.04%	0.86%	0.72%
Union	0.50%	0.58%	0.78%	1.14%	0.50%	0.32%
Wallowa	0.14%	0.18%	0.21%	0.38%	0.15%	0.13%
Wasco	0.41%	0.56%	0.63%	0.59%	0.36%	0.36%
Washington	15.53%	14.43%	14.64%	19.71%	21.25%	20.78%
Wheeler	0.02%	0.02%	0.03%	0.02%	0.02%	0.02%
Yamhill	2.33%	2.06%	2.25%	1.90%	2.10%	1.64%

Table A4. Proportion of Cost of Illness Savings by Activity by Oregon County, 2011 Participation Rates (continued)

Oregon County	Horseback riding	Bicycling on unpaved trails	Bicycling on paved trails	Bicycling on roads / streets / sidewalks	Class I – All-terrain vehicle riding (3 & 4 wheel ATVs, straddle seat and handle bars)	Class III – Off-road motorcycling
Baker	3.66%	0.51%	0.35%	0.49%	1.72%	0.81%
Benton	0.14%	3.10%	2.94%	2.97%	1.44%	2.05%
Clackamas	1.01%	5.36%	7.56%	7.29%	8.73%	12.72%
Clatsop	2.41%	0.77%	1.41%	0.70%	1.44%	0.68%
Columbia	0.16%	0.61%	0.68%	1.07%	2.15%	1.78%
Coos	4.70%	1.29%	1.14%	0.85%	6.01%	4.53%
Crook	1.96%	0.50%	0.41%	0.36%	1.32%	0.63%
Curry	1.49%	0.35%	0.32%	0.28%	1.17%	0.65%
Deschutes	0.33%	8.96%	6.07%	5.30%	5.54%	8.46%
Douglas	10.95%	1.90%	2.31%	1.51%	6.83%	4.85%
Gilliam	0.31%	0.05%	0.04%	0.03%	0.17%	0.07%
Grant	1.88%	0.23%	0.15%	0.18%	1.01%	0.61%
Harney	1.57%	0.11%	0.05%	0.10%	0.85%	0.38%
Hood River	1.35%	1.38%	0.68%	0.60%	0.41%	0.71%
Jackson	0.64%	6.08%	6.37%	4.84%	4.91%	8.78%
Jefferson	3.26%	0.60%	0.35%	0.31%	1.53%	0.58%
Josephine	7.77%	1.64%	1.41%	1.17%	2.79%	3.95%
Klamath	6.40%	2.28%	1.67%	0.98%	4.68%	1.97%
Lake	0.85%	0.27%	0.24%	0.12%	0.57%	0.34%
Lane	0.32%	7.90%	8.84%	9.74%	3.25%	7.72%
Lincoln	3.72%	0.69%	0.50%	0.57%	1.39%	1.05%
Linn	5.88%	3.37%	2.03%	2.40%	6.94%	3.90%
Malheur	6.40%	0.41%	0.13%	0.37%	3.76%	1.75%
Marion	0.51%	7.93%	7.90%	8.04%	5.57%	3.07%
Morrow	1.70%	0.24%	0.16%	0.17%	1.02%	0.38%
Multnomah	0.91%	18.25%	22.29%	25.12%	1.98%	8.07%
Polk	0.13%	1.60%	1.32%	1.80%	1.58%	1.01%
Sherman	0.25%	0.04%	0.03%	0.03%	0.14%	0.06%
Tillamook	2.33%	0.56%	0.39%	0.39%	1.41%	1.01%
Umatilla	13.94%	1.99%	1.06%	1.32%	7.75%	2.51%
Union	6.06%	0.92%	0.41%	0.58%	3.62%	2.50%
Wallowa	2.03%	0.23%	0.15%	0.17%	0.98%	0.60%
Wasco	2.39%	0.48%	0.82%	0.38%	1.41%	0.89%
Washington	2.14%	17.44%	17.42%	17.12%	4.12%	8.66%
Wheeler	0.11%	0.01%	0.00%	0.02%	0.09%	0.04%
Yamhill	0.34%	1.95%	2.37%	2.64%	1.75%	2.23%

Table A4. Proportion of Cost of Illness Savings by Activity by Oregon County, 2011 Participation Rates (continued)

Oregon County	Class IV – Riding UTVs / side-by-side ATVs (non-straddle seat / steering wheel)	Snowmobiling	Personal water craft – jet ski	Downhill (alpine) skiing / snowboarding	Cross-country / Nordic skiing / skijoring on groomed trails	Cross-country / Nordic skiing / skijoring on ungroomed trails / off designated trails
Baker	2.53%	3.10%	0.25%	0.43%	0.59%	0.66%
Benton	0.32%	1.64%	1.87%	2.91%	2.15%	4.05%
Clackamas	1.47%	3.67%	8.49%	8.89%	8.23%	6.55%
Clatsop	1.03%	0.72%	0.29%	0.60%	0.61%	0.90%
Columbia	0.84%	1.19%	2.01%	0.78%	0.57%	0.15%
Coos	11.08%	1.22%	1.01%	0.93%	0.83%	0.68%
Crook	2.83%	0.53%	0.10%	0.27%	0.44%	0.75%
Curry	0.67%	0.47%	0.21%	0.14%	0.21%	0.15%
Deschutes	1.77%	10.74%	12.92%	5.37%	12.16%	10.80%
Douglas	19.20%	5.22%	1.09%	1.25%	0.85%	0.59%
Gilliam	0.23%	0.20%	0.03%	0.04%	0.03%	0.01%
Grant	1.50%	1.47%	0.12%	0.22%	0.39%	0.34%
Harney	1.62%	0.57%	0.08%	0.09%	0.09%	0.09%
Hood River	0.68%	0.79%	0.50%	1.40%	4.62%	2.71%
Jackson	0.86%	2.69%	3.36%	3.63%	7.49%	6.64%
Jefferson	1.33%	0.68%	0.37%	0.40%	0.65%	0.63%
Josephine	2.40%	2.94%	2.51%	1.01%	0.66%	0.97%
Klamath	8.92%	4.26%	1.57%	1.14%	1.12%	2.33%
Lake	1.10%	0.59%	0.16%	0.15%	0.14%	0.27%
Lane	1.94%	3.23%	9.40%	7.87%	6.74%	12.48%
Lincoln	3.33%	0.42%	0.53%	0.53%	1.44%	0.79%
Linn	7.08%	4.91%	3.15%	2.52%	0.75%	0.75%
Malheur	7.12%	2.28%	0.39%	0.40%	0.33%	0.15%
Marion	0.76%	3.22%	14.44%	6.92%	1.56%	3.61%
Morrow	1.16%	1.15%	0.23%	0.16%	0.21%	0.10%
Multnomah	0.27%	14.99%	11.18%	24.22%	29.07%	25.75%
Polk	0.10%	1.11%	3.55%	1.55%	1.22%	0.77%
Sherman	0.19%	0.17%	0.03%	0.02%	0.02%	0.01%
Tillamook	0.50%	0.40%	0.10%	0.28%	0.41%	0.16%
Umatilla	6.58%	10.11%	1.78%	0.99%	0.99%	0.25%
Union	6.65%	6.19%	0.55%	0.63%	2.38%	1.33%
Wallowa	1.56%	1.45%	0.12%	0.22%	0.39%	0.34%
Wasco	1.34%	0.58%	0.36%	0.43%	0.66%	0.44%
Washington	0.39%	6.26%	14.50%	21.69%	10.11%	12.92%
Wheeler	0.00%	0.00%	0.00%	0.06%	0.02%	0.05%
Yamhill	0.66%	0.86%	2.75%	1.85%	1.88%	0.85%

Table A4. Proportion of Cost of Illness Savings by Activity by Oregon County, 2011 Participation Rates (continued)

Oregon County	Snowshoeing	Sledding / tubing / general snow play	Dog walking / going to dog parks / off-leash areas	Tennis (played outdoors)	Outdoor court games other than tennis (basketball / beach volleyball / badminton)	Soccer
Baker	0.60%	0.63%	0.26%	0.10%	0.50%	0.51%
Benton	1.62%	2.32%	2.58%	1.93%	1.85%	3.70%
Clackamas	6.74%	9.83%	10.13%	5.62%	9.00%	8.08%
Clatsop	0.35%	0.78%	0.51%	0.11%	0.65%	0.34%
Columbia	0.70%	1.19%	1.21%	0.30%	0.74%	2.62%
Coos	0.67%	0.98%	0.72%	0.19%	0.85%	0.45%
Crook	0.48%	0.37%	0.22%	0.10%	0.17%	0.28%
Curry	0.06%	0.28%	0.31%	0.13%	0.24%	0.21%
Deschutes	10.12%	6.19%	6.68%	4.67%	4.71%	3.94%
Douglas	0.57%	3.05%	1.28%	0.46%	1.97%	2.27%
Gilliam	0.03%	0.06%	0.02%	0.02%	0.06%	0.03%
Grant	0.30%	0.27%	0.10%	0.04%	0.22%	0.19%
Harney	0.04%	0.20%	0.05%	0.03%	0.16%	0.13%
Hood River	1.23%	0.83%	0.32%	0.25%	0.30%	0.59%
Jackson	5.50%	4.09%	3.79%	5.80%	4.14%	3.61%
Jefferson	0.31%	0.59%	0.22%	0.10%	0.33%	0.22%
Josephine	0.34%	1.86%	1.03%	0.83%	3.11%	0.94%
Klamath	1.97%	2.40%	0.72%	0.22%	1.01%	0.88%
Lake	0.24%	0.25%	0.09%	0.03%	0.15%	0.14%
Lane	7.00%	6.44%	8.71%	7.29%	5.67%	7.01%
Lincoln	0.37%	0.59%	0.71%	0.29%	0.87%	0.49%
Linn	1.28%	3.91%	1.51%	0.43%	2.45%	1.41%
Malheur	0.13%	0.85%	0.21%	0.14%	0.67%	0.59%
Marion	9.82%	11.64%	10.46%	9.64%	9.44%	11.59%
Morrow	0.15%	0.45%	0.14%	0.14%	0.33%	0.20%
Multnomah	31.87%	18.60%	25.88%	36.06%	22.44%	22.43%
Polk	0.78%	1.53%	2.52%	2.67%	2.35%	1.26%
Sherman	0.02%	0.05%	0.02%	0.02%	0.05%	0.02%
Tillamook	0.10%	0.30%	0.24%	0.11%	0.39%	0.15%
Umatilla	1.02%	3.17%	1.01%	1.23%	2.45%	0.92%
Union	1.21%	1.16%	0.36%	0.14%	0.67%	0.81%
Wallowa	0.29%	0.27%	0.10%	0.04%	0.21%	0.19%
Wasco	0.48%	0.71%	0.28%	0.12%	0.46%	0.60%
Washington	11.50%	11.46%	14.99%	18.70%	19.95%	19.97%
Wheeler	0.02%	0.03%	0.02%	0.02%	0.02%	0.01%
Yamhill	2.07%	2.66%	2.57%	2.05%	1.43%	3.24%

Table A4. Proportion of Cost of Illness Savings by Activity by Oregon County, 2011 Participation Rates (continued)

Oregon County	Futsal	Golf	Collecting (rocks / plants / mushrooms / berries)	Crabbing	White-water canoeing / kayaking / rafting	Swimming / playing in outdoor pools / spray parks
Baker	0.45%	0.34%	1.42%	0.27%	0.59%	0.25%
Benton	3.68%	2.27%	1.81%	1.49%	1.73%	2.20%
Clackamas	8.11%	13.19%	4.83%	8.20%	6.58%	9.11%
Clatsop	0.31%	0.85%	2.33%	2.43%	0.79%	0.48%
Columbia	2.62%	1.00%	1.37%	1.38%	0.51%	1.31%
Coos	0.39%	1.38%	4.21%	4.51%	5.16%	0.74%
Crook	0.24%	0.42%	0.80%	0.27%	0.76%	0.24%
Curry	0.17%	0.54%	1.53%	0.89%	1.24%	0.22%
Deschutes	3.95%	6.24%	3.67%	3.46%	3.48%	5.87%
Douglas	2.01%	2.23%	5.99%	5.87%	4.47%	2.01%
Gilliam	0.02%	0.05%	0.10%	0.04%	0.06%	0.05%
Grant	0.16%	0.15%	0.63%	0.16%	0.32%	0.13%
Harney	0.11%	0.17%	0.28%	0.09%	0.14%	0.13%
Hood River	0.55%	0.65%	0.91%	0.52%	1.25%	0.34%
Jackson	3.81%	4.97%	4.83%	4.72%	8.77%	5.29%
Jefferson	0.20%	0.82%	0.89%	0.52%	0.80%	0.39%
Josephine	0.83%	2.51%	4.61%	3.32%	8.93%	1.11%
Klamath	0.79%	1.94%	2.92%	1.74%	3.58%	0.89%
Lake	0.12%	0.22%	0.38%	0.20%	0.47%	0.11%
Lane	7.00%	6.80%	8.58%	13.78%	7.25%	6.89%
Lincoln	0.43%	1.18%	3.24%	2.95%	1.77%	0.40%
Linn	1.27%	2.25%	5.56%	5.84%	3.92%	3.18%
Malheur	0.54%	0.81%	1.03%	0.46%	0.64%	0.58%
Marion	11.63%	4.55%	4.09%	8.91%	5.28%	9.04%
Morrow	0.18%	0.32%	0.56%	0.30%	0.36%	0.39%
Multnomah	22.98%	12.60%	14.73%	9.23%	10.65%	20.58%
Polk	1.33%	1.21%	1.69%	2.19%	1.55%	1.48%
Sherman	0.02%	0.04%	0.08%	0.04%	0.06%	0.05%
Tillamook	0.13%	0.53%	1.52%	1.98%	0.47%	0.16%
Umatilla	0.85%	2.19%	4.20%	2.12%	2.29%	2.81%
Union	0.72%	0.56%	2.29%	0.88%	1.14%	0.61%
Wallowa	0.16%	0.14%	0.61%	0.16%	0.31%	0.13%
Wasco	0.53%	0.44%	1.16%	0.65%	1.29%	0.59%
Washington	20.43%	24.30%	5.02%	7.30%	12.13%	19.66%
Wheeler	0.01%	0.01%	0.07%	0.01%	0.06%	0.01%
Yamhill	3.24%	2.14%	2.02%	3.13%	1.18%	2.60%

Appendix B – Cost of Illness Savings Estimates for Small Rural, Medium Mixed, and Large Urban County Classifications

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon

Small Rural County				Annual Cost of Illness Savings, Minutes / Week								
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Walking on local streets or sidewalks	101	30,920	Total ($million)	$3.991	$0.826	$2.277	$3.631	$4.645	$5.848	$6.833	$7.693	$8.452
			/Participant	$129	$27	$74	$117	$150	$189	$221	$249	$273
Walking on local trails or paths	35	27,200	Total ($million)	$1.088	$0.727	$2.003	$3.194	$4.086	$5.145	$6.011	$6.768	$7.436
			/Participant	$40	$27	$74	$117	$150	$189	$221	$249	$273
Walking / day hiking on non-local trails or path	28	20,760	Total ($million)	$0.488	$0.555	$1.529	$2.438	$3.119	$3.927	$4.588	$5.165	$5.675
			/Participant	$24	$27	$74	$117	$150	$189	$221	$249	$273
Long-distance hiking (back packing)	28	4,200	Total ($million)	$0.264	$0.290	$0.506	$0.704	$0.838	$0.976	$1.101	$1.199	$1.315
			/Participant	$63	$69	$121	$168	$200	$232	$262	$285	$313
Jogging or running on streets or sidewalks	46	6,400	Total ($million)	$0.665	$0.442	$0.772	$1.073	$1.277	$1.487	$1.677	$1.826	$2.003
			/Participant	$104	$69	$121	$168	$200	$232	$262	$285	$313
Jogging or running on trails or paths	23	4,640	Total ($million)	$0.253	$0.320	$0.559	$0.778	$0.926	$1.078	$1.216	$1.324	$1.453
			/Participant	$55	$69	$121	$168	$200	$232	$262	$285	$313
Horseback riding	46	3,320	Total ($million)	$0.181	$0.128	$0.274	$0.410	$0.538	$0.681	$0.775	$0.872	$0.954
			/Participant	$54	$39	$83	$123	$162	$205	$233	$263	$287
Bicycling on unpaved trails	23	5,040	Total ($million)	$0.215	$0.273	$0.626	$0.912	$1.166	$1.380	$1.541	$1.749	$1.909
			/Participant	$43	$54	$124	$181	$231	$274	$306	$347	$379

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County				Annual Cost of Illness Savings, Minutes / Week								
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Bicycling on paved trails	23	7,720	Total ($million)	$0.116	$0.206	$0.569	$0.907	$1.160	$1.460	$1.706	$1.921	$2.110
			/Participant	$15	$27	$74	$117	$150	$189	$221	$249	$273
Bicycling on roads, streets or sidewalks	35	10,480	Total ($million)	$0.419	$0.280	$0.772	$1.231	$1.574	$1.982	$2.316	$2.608	$2.865
			/Participant	$40	$27	$74	$117	$150	$189	$221	$249	$273
Class I – All-terrain vehicle riding	25	6,640	Total ($million)	$0.161	$0.264	$0.591	$0.867	$1.117	$1.420	$1.595	$1.804	$1.963
			/Participant	$24	$40	$89	$131	$168	$214	$240	$272	$296
Class III – Off-road motorcycling	46	1,840	Total ($million)	$0.114	$0.073	$0.164	$0.240	$0.310	$0.393	$0.442	$0.500	$0.544
			/Participant	$62	$40	$89	$131	$168	$214	$240	$272	$296
Class IV – Riding UTVs or side-by-side ATVs	48	3,520	Total ($million)	$0.226	$0.140	$0.313	$0.460	$0.592	$0.753	$0.845	$0.957	$1.041
			/Participant	$64	$40	$89	$131	$168	$214	$240	$272	$296
Snowmobiling	42	1,120	Total ($million)	$0.053	$0.030	$0.082	$0.132	$0.168	$0.212	$0.248	$0.279	$0.306
			/Participant	$48	$27	$74	$117	$150	$189	$221	$249	$273
Using personal water craft, such as jet ski	14	1,600	Total ($million)	$0.050	$0.110	$0.193	$0.268	$0.319	$0.372	$0.419	$0.457	$0.501
			/Participant	$31	$69	$121	$168	$200	$232	$262	$285	$313
Downhill skiing or snowboarding	25	3,760	Total ($million)	$0.103	$0.157	$0.360	$0.523	$0.679	$0.838	$0.957	$1.063	$1.179
			/Participant	$27	$42	$96	$139	$181	$223	$255	$283	$314
Cross-country / nordic skiing on groomed trails	12	1,360	Total ($million)	$0.038	$0.092	$0.162	$0.222	$0.268	$0.309	$0.352	$0.383	$0.418
			/Participant	$28	$68	$119	$163	$197	$227	$259	$282	$307

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County				Annual Cost of Illness Savings, Minutes / Week								
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Cross-country / nordic skiing on ungroomed trails	12	1,280	Total ($million)	$0.036	$0.087	$0.152	$0.209	$0.252	$0.291	$0.331	$0.360	$0.393
			/Participant	$28	$68	$119	$163	$197	$227	$259	$282	$307
Snowshoeing	7	3,320	Total ($million)	$0.008	$0.170	$0.381	$0.550	$0.730	$0.853	$0.962	$1.078	$1.188
			/Participant	$2	$51	$115	$166	$220	$257	$290	$325	$358
Sledding, tubing, or general snow play	7	10,360	Total ($million)	$0.103	$0.715	$1.249	$1.737	$2.068	$2.407	$2.715	$2.956	$3.243
			/Participant	$10	$69	$121	$168	$200	$232	$262	$285	$313
Dog walking or going to dog parks / off-leash areas	35	14,160	Total ($million)	$0.374	$0.317	$0.869	$1.423	$1.893	$2.287	$2.735	$3.147	$3.503
			/Participant	$26	$22	$61	$100	$134	$162	$193	$222	$247
Tennis (played outdoors)	6	1,840	Total ($million)	$0.003	$0.083	$0.184	$0.263	$0.352	$0.421	$0.481	$0.536	$0.592
			/Participant	$2	$45	$100	$143	$191	$229	$261	$291	$321
Outdoor court games other than tennis	17	2,840	Total ($million)	$0.066	$0.149	$0.342	$0.484	$0.637	$0.745	$0.844	$0.950	$1.036
			/Participant	$23	$52	$120	$171	$224	$262	$297	$335	$365
Soccer	23	1,960	Total ($million)	$0.107	$0.135	$0.236	$0.329	$0.391	$0.455	$0.514	$0.559	$0.614
			/Participant	$55	$69	$121	$168	$200	$232	$262	$285	$313
Futsal	12	80	Total ($million)	$0.002	$0.006	$0.010	$0.013	$0.016	$0.019	$0.021	$0.023	$0.025
			/Participant	$28	$69	$121	$168	$200	$232	$262	$285	$313
Golf	28	5,160	Total ($million)	$0.121	$0.138	$0.380	$0.606	$0.775	$0.976	$1.140	$1.284	$1.411
			/Participant	$24	$27	$74	$117	$150	$189	$221	$249	$273

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County				Annual Cost of Illness Savings, Minutes / Week								
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Orienteering or geocaching	17	2,400	Total ($million)	$0.128	$0.211	$0.362	$0.457	$0.557	$0.634	$0.707	$0.773	$0.840
			/Participant	$53	$88	$151	$190	$232	$264	$294	$322	$350
Collecting (rocks, plants, mushrooms, or berries)	17	13,760	Total ($million)	$0.046	$0.308	$0.844	$1.383	$1.839	$2.222	$2.658	$3.058	$3.404
			/Participant	$3	$22	$61	$100	$134	$162	$193	$222	$247
Crabbing	14	5,320	Total ($million)	$0.033	$0.239	$0.533	$0.759	$1.018	$1.216	$1.390	$1.550	$1.710
			/Participant	$6	$45	$100	$143	$191	$229	$261	$291	$321
White-water canoeing, kayaking, or rafting	14	4,920	Total ($million)	$0.039	$0.237	$0.532	$0.780	$1.034	$1.216	$1.381	$1.547	$1.705
			/Participant	$8	$48	$108	$158	$210	$247	$281	$315	$347
Swimming or playing in outdoor pools / spray parks	14	8,400	Total ($million)	$0.242	$0.508	$0.934	$1.288	$1.554	$1.787	$2.047	$2.232	$2.439
			/Participant	$101	$61	$111	$153	$185	$213	$244	$266	$290

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Walking on local streets or sidewalks	Total ($million)	$9.299	$10.106	$10.775	$11.684	$12.295	$12.893	$13.480	$14.057	$14.673	$15.236	$15.791	$16.339
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Walking on local trails or paths	Total ($million)	$8.180	$8.890	$9.479	$10.278	$10.816	$11.342	$11.858	$12.366	$12.907	$13.403	$13.891	$14.373
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Walking / day hiking on non-local trails or path	Total ($million)	$6.244	$6.785	$7.234	$7.845	$8.255	$8.657	$9.051	$9.438	$9.851	$10.229	$10.602	$10.970
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Long-distance hiking (back packing)	Total ($million)	$1.416	$1.502	$1.585	$1.665	$1.761	$1.838	$1.946	$2.021	$2.094	$2.166	$2.236	$2.305
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549
Jogging or running on streets or sidewalks	Total ($million)	$2.157	$2.289	$2.415	$2.536	$2.683	$2.800	$2.966	$3.079	$3.191	$3.300	$3.407	$3.512
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549
Jogging or running on trails or paths	Total ($million)	$1.564	$1.659	$1.751	$1.839	$1.945	$2.030	$2.150	$2.233	$2.313	$2.392	$2.470	$2.546
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549
Horseback riding	Total ($million)	$1.045	$1.135	$1.242	$1.311	$1.380	$1.446	$1.512	$1.581	$1.645	$1.707	$1.769	$1.830
	/Participant	$315	$342	$374	$395	$416	$436	$455	$476	$495	$514	$533	$551
Bicycling on unpaved trails	Total ($million)	$2.091	$2.228	$2.360	$2.488	$2.621	$2.744	$2.864	$2.982	$3.098	$3.212	$3.324	$3.435
	/Participant	$415	$442	$468	$494	$520	$544	$568	$592	$615	$637	$660	$682

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Bicycling on paved trails	Total ($million)	$2.322	$2.523	$2.690	$2.917	$3.070	$3.219	$3.366	$3.510	$3.663	$3.804	$3.943	$4.079
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Bicycling on roads, streets or sidewalks	Total ($million)	$3.152	$3.425	$3.652	$3.960	$4.167	$4.370	$4.569	$4.764	$4.973	$5.164	$5.352	$5.538
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Class I – All-terrain vehicle riding	Total ($million)	$2.171	$2.346	$2.553	$2.696	$2.836	$2.972	$3.106	$3.248	$3.378	$3.506	$3.633	$3.758
	/Participant	$327	$353	$384	$406	$427	$448	$468	$489	$509	$528	$547	$566
Class III – Off-road motorcycling	Total ($million)	$0.602	$0.650	$0.707	$0.747	$0.786	$0.824	$0.861	$0.900	$0.936	$0.972	$1.007	$1.041
	/Participant	$327	$353	$384	$406	$427	$448	$468	$489	$509	$528	$547	$566
Class IV – Riding UTVs or side-by-side ATVs	Total ($million)	$1.151	$1.243	$1.353	$1.429	$1.503	$1.576	$1.647	$1.722	$1.791	$1.859	$1.926	$1.992
	/Participant	$327	$353	$384	$406	$427	$448	$468	$489	$509	$528	$547	$566
Snowmobiling	Total ($million)	$0.337	$0.366	$0.390	$0.423	$0.445	$0.467	$0.488	$0.509	$0.531	$0.552	$0.572	$0.592
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Using personal water craft, such as jet ski	Total ($million)	$0.539	$0.572	$0.604	$0.634	$0.671	$0.700	$0.741	$0.770	$0.798	$0.825	$0.852	$0.878
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549
Downhill skiing or snowboarding	Total ($million)	$1.289	$1.411	$1.503	$1.587	$1.668	$1.748	$1.832	$1.910	$1.986	$2.061	$2.135	$2.208
	/Participant	$343	$375	$400	$422	$444	$465	$487	$508	$528	$548	$568	$587

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Cross-country / nordic skiing on groomed trails	Total ($million)	$0.453	$0.480	$0.507	$0.532	$0.563	$0.588	$0.623	$0.647	$0.670	$0.693	$0.716	$0.738
	/Participant	$333	$353	$373	$391	$414	$432	$458	$476	$493	$510	$526	$543
Cross-country / nordic skiing on ungroomed trails	Total ($million)	$0.426	$0.452	$0.477	$0.501	$0.530	$0.553	$0.586	$0.609	$0.631	$0.653	$0.674	$0.695
	/Participant	$333	$353	$373	$391	$414	$432	$458	$476	$493	$510	$526	$543
Snowshoeing	Total ($million)	$1.313	$1.399	$1.483	$1.564	$1.643	$1.726	$1.802	$1.877	$1.950	$2.023	$2.094	$2.164
	/Participant	$395	$421	$447	$471	$495	$520	$543	$565	$587	$609	$631	$652
Sledding, tubing, or general snow play	Total ($million)	$3.492	$3.705	$3.909	$4.106	$4.343	$4.533	$4.801	$4.985	$5.165	$5.342	$5.515	$5.685
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549
Dog walking or going to dog parks / off-leash areas	Total ($million)	$3.816	$4.173	$4.512	$4.791	$5.180	$5.435	$5.685	$5.931	$6.174	$6.434	$6.671	$6.905
	/Participant	$269	$295	$319	$338	$366	$384	$402	$419	$436	$454	$471	$488
Tennis (played outdoors)	Total ($million)	$0.647	$0.711	$0.754	$0.795	$0.836	$0.876	$0.918	$0.957	$0.995	$1.032	$1.069	$1.105
	/Participant	$351	$386	$410	$432	$454	$476	$499	$520	$541	$561	$581	$601
Outdoor court games other than tennis	Total ($million)	$1.145	$1.221	$1.293	$1.364	$1.437	$1.505	$1.571	$1.636	$1.700	$1.763	$1.825	$1.886
	/Participant	$403	$430	$455	$480	$506	$530	$553	$576	$599	$621	$642	$664
Soccer	Total ($million)	$0.661	$0.701	$0.739	$0.777	$0.822	$0.858	$0.908	$0.943	$0.977	$1.011	$1.043	$1.076
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549

Table B1. Cost of Illness Savings (2018 USD) by Minutes per Week, Small Rural County (pop. <=40,000), Oregon (continued)

Small Rural County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Futsal	Total ($million)	$0.027	$0.029	$0.030	$0.032	$0.034	$0.035	$0.037	$0.038	$0.040	$0.041	$0.043	$0.044
	/Participant	$337	$358	$377	$396	$419	$438	$463	$481	$499	$516	$532	$549
Golf	Total ($million)	$1.552	$1.686	$1.798	$1.950	$2.052	$2.152	$2.250	$2.346	$2.449	$2.543	$2.635	$2.727
	/Participant	$301	$327	$348	$378	$398	$417	$436	$455	$475	$493	$511	$528
Orienteering or geocaching	Total ($million)	$0.903	$0.956	$1.012	$1.062	$1.116	$1.164	$1.229	$1.275	$1.320	$1.364	$1.407	$1.449
	/Participant	$376	$398	$422	$442	$465	$485	$512	$531	$550	$568	$586	$604
Collecting (rocks, plants, mushrooms, or berries)	Total ($million)	$3.708	$4.055	$4.385	$4.656	$5.034	$5.282	$5.525	$5.764	$5.999	$6.252	$6.483	$6.710
	/Participant	$269	$295	$319	$338	$366	$384	$402	$419	$436	$454	$471	$488
Crabbing	Total ($million)	$1.869	$2.054	$2.179	$2.300	$2.418	$2.533	$2.654	$2.766	$2.876	$2.984	$3.091	$3.196
	/Participant	$351	$386	$410	$432	$454	$476	$499	$520	$541	$561	$581	$601
White-water canoeing, kayaking, or rafting	Total ($million)	$1.877	$2.010	$2.131	$2.248	$2.363	$2.482	$2.592	$2.700	$2.806	$2.911	$3.014	$3.116
	/Participant	$382	$409	$433	$457	$480	$504	$527	$549	$570	$592	$613	$633
Swimming or playing in outdoor pools / spray parks	Total ($million)	$2.645	$2.809	$2.965	$3.117	$3.287	$3.447	$3.657	$3.799	$3.939	$4.075	$4.210	$4.342
	/Participant	$315	$334	$353	$371	$391	$410	$435	$452	$469	$485	$501	$517

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon

Medium Mixed County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Walking on local streets or sidewalks	162	84,950	Total ($million)	$16.508	$2.254	$5.999	$9.417	$12.310	$14.806	$18.070	$20.201	$22.395
			/Participant	$194	$27	$71	$111	$145	$174	$213	$238	$264
Walking on local trails or paths	36	75,450	Total ($million)	$3.122	$2.002	$5.328	$8.364	$10.933	$13.150	$16.049	$17.942	$19.890
			/Participant	$41	$27	$71	$111	$145	$174	$213	$238	$264
Walking / day hiking on non-local trails or path	24	55,900	Total ($million)	$1.007	$1.483	$3.947	$6.197	$8.100	$9.743	$11.891	$13.293	$14.736
			/Participant	$18	$27	$71	$111	$145	$174	$213	$238	$264
Long-distance hiking (back packing)	24	14,350	Total ($million)	$0.883	$1.034	$1.879	$2.565	$3.051	$3.531	$3.982	$4.330	$4.656
			/Participant	$62	$72	$131	$179	$213	$246	$277	$302	$324
Jogging or running on streets or sidewalks	58	30,000	Total ($million)	$3.799	$2.161	$3.928	$5.363	$6.379	$7.381	$8.325	$9.052	$9.734
			/Participant	$127	$72	$131	$179	$213	$246	$277	$302	$324
Jogging or running on trails or paths	29	24,200	Total ($million)	$1.703	$1.743	$3.169	$4.326	$5.145	$5.954	$6.715	$7.302	$7.852
			/Participant	$70	$72	$131	$179	$213	$246	$277	$302	$324
Horseback riding	9	2,750	Total ($million)	$0.005	$0.080	$0.216	$0.338	$0.428	$0.536	$0.618	$0.694	$0.762
			/Participant	$2	$29	$79	$123	$156	$195	$225	$253	$277
Bicycling on unpaved trails	23	15,650	Total ($million)	$0.675	$0.870	$1.877	$2.676	$3.511	$4.094	$4.604	$5.158	$5.645
			/Participant	$43	$56	$120	$171	$224	$262	$294	$330	$361

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Bicycling on paved trails	23	33,650	Total ($million)	$0.371	$0.893	$2.376	$3.730	$4.876	$5.865	$7.158	$8.002	$8.871
			/Participant	$11	$27	$71	$111	$145	$174	$213	$238	$264
Bicycling on roads, streets or sidewalks	43	42,400	Total ($million)	$2.074	$1.125	$2.994	$4.700	$6.144	$7.390	$9.019	$10.083	$11.178
			/Participant	$49	$27	$71	$111	$145	$174	$213	$238	$264
Class I – All-terrain vehicle riding	21	6,150	Total ($million)	$0.069	$0.194	$0.526	$0.787	$1.000	$1.233	$1.430	$1.597	$1.758
			/Participant	$11	$32	$85	$128	$163	$200	$233	$260	$286
Class III – Off-road motorcycling	44	3,000	Total ($million)	$0.167	$0.095	$0.256	$0.384	$0.488	$0.601	$0.698	$0.779	$0.858
			/Participant	$56	$32	$85	$128	$163	$200	$233	$260	$286
Class IV – Riding UTVs or side-by-side ATVs	16	2,650	Total ($million)	$0.022	$0.084	$0.226	$0.339	$0.431	$0.531	$0.616	$0.688	$0.758
			/Participant	$8	$32	$85	$128	$163	$200	$233	$260	$286
Snowmobiling	29	1,950	Total ($million)	$0.050	$0.052	$0.138	$0.216	$0.283	$0.340	$0.415	$0.464	$0.514
			/Participant	$26	$27	$71	$111	$145	$174	$213	$238	$264
Using personal water craft, such as jet ski	23	4,350	Total ($million)	$0.251	$0.313	$0.570	$0.778	$0.925	$1.070	$1.207	$1.313	$1.411
			/Participant	$58	$72	$131	$179	$213	$246	$277	$302	$324
Downhill skiing or snowboarding	23	13,750	Total ($million)	$0.351	$0.581	$1.227	$1.867	$2.362	$2.947	$3.345	$3.764	$4.088
			/Participant	$26	$42	$89	$136	$172	$214	$243	$274	$297

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Cross-country / nordic skiing on groomed trails	9	6,700	Total ($million)	$0.107	$0.475	$0.855	$1.180	$1.404	$1.611	$1.834	$1.995	$2.145
			/Participant	$16	$71	$128	$176	$210	$240	$274	$298	$320
Cross-country / nordic skiing on ungroomed trails	12	3,800	Total ($million)	$0.115	$0.269	$0.485	$0.669	$0.797	$0.914	$1.040	$1.131	$1.217
			/Participant	$30	$71	$128	$176	$210	$240	$274	$298	$320
Snowshoeing	7	11,250	Total ($million)	$0.033	$0.579	$1.250	$1.787	$2.354	$2.761	$3.153	$3.461	$3.870
			/Participant	$3	$51	$111	$159	$209	$245	$280	$308	$344
Sledding, tubing, or general snow play	7	26,750	Total ($million)	$0.278	$1.927	$3.503	$4.782	$5.688	$6.582	$7.423	$8.071	$8.680
			/Participant	$10	$72	$131	$179	$213	$246	$277	$302	$324
Dog walking or going to dog parks / off-leash areas	58	36,700	Total ($million)	$2.033	$0.727	$2.086	$3.543	$4.712	$5.688	$6.730	$7.922	$8.678
			/Participant	$55	$20	$57	$97	$128	$155	$183	$216	$236
Tennis (played outdoors)	11	7,350	Total ($million)	$0.036	$0.319	$0.700	$1.039	$1.328	$1.630	$1.860	$2.062	$2.287
			/Participant	$5	$43	$95	$141	$181	$222	$253	$281	$311
Outdoor court games other than tennis	17	10,900	Total ($million)	$0.247	$0.574	$1.238	$1.796	$2.354	$2.758	$3.117	$3.492	$3.823
			/Participant	$23	$53	$114	$165	$216	$253	$286	$320	$351
Soccer	35	9,000	Total ($million)	$0.777	$0.648	$1.178	$1.609	$1.914	$2.214	$2.497	$2.716	$2.920
			/Participant	$86	$72	$131	$179	$213	$246	$277	$302	$324

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Futsal	20	800	Total ($million)	$0.041	$0.058	$0.105	$0.143	$0.170	$0.197	$0.222	$0.241	$0.260
			/Participant	$51	$72	$131	$179	$213	$246	$277	$302	$324
Golf	28	14,300	Total ($million)	$0.332	$0.379	$1.010	$1.585	$2.072	$2.492	$3.042	$3.401	$3.770
			/Participant	$23	$27	$71	$111	$145	$174	$213	$238	$264
Orienteering or geocaching	7	4,950	Total ($million)	$0.101	$0.465	$0.796	$1.011	$1.209	$1.393	$1.544	$1.682	$1.806
			/Participant	$21	$94	$161	$204	$244	$281	$312	$340	$365
Collecting (rocks, plants, mushrooms, or berries)	12	25,000	Total ($million)	$0.040	$0.496	$1.421	$2.413	$3.210	$3.875	$4.584	$5.396	$5.912
			/Participant	$2	$20	$57	$97	$128	$155	$183	$216	$236
Crabbing	11	9,400	Total ($million)	$0.046	$0.408	$0.896	$1.329	$1.698	$2.085	$2.379	$2.637	$2.925
			/Participant	$5	$43	$95	$141	$181	$222	$253	$281	$311
White-water canoeing, kayaking, or rafting	9	11,200	Total ($million)	$0.037	$0.545	$1.190	$1.707	$2.233	$2.648	$3.028	$3.340	$3.714
			/Participant	$3	$49	$106	$152	$199	$236	$270	$298	$332
Swimming or playing in outdoor pools / spray parks	16	26,600	Total ($million)	$0.892	$1.760	$3.181	$4.336	$5.243	$5.958	$6.768	$7.470	$8.041
			/Participant	$180	$66	$120	$163	$197	$224	$254	$281	$302

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Walking on local streets or sidewalks	Total ($million)	$24.235	$26.395	$28.359	$30.672	$32.356	$33.908	$35.430	$36.924	$38.395	$39.951	$41.386	$42.801
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Walking on local trails or paths	Total ($million)	$21.525	$23.444	$25.188	$27.242	$28.738	$30.116	$31.467	$32.795	$34.101	$35.484	$36.758	$38.014
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Walking / day hiking on non-local trails or path	Total ($million)	$15.947	$17.369	$18.661	$20.183	$21.291	$22.313	$23.314	$24.298	$25.265	$26.289	$27.234	$28.164
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Long-distance hiking (back packing)	Total ($million)	$5.052	$5.353	$5.642	$5.922	$6.192	$6.504	$6.764	$7.035	$7.377	$7.624	$7.866	$8.104
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565
Jogging or running on streets or sidewalks	Total ($million)	$10.562	$11.191	$11.796	$12.379	$12.945	$13.596	$14.140	$14.707	$15.423	$15.939	$16.445	$16.941
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565
Jogging or running on trails or paths	Total ($million)	$8.520	$9.028	$9.515	$9.986	$10.442	$10.968	$11.406	$11.863	$12.441	$12.857	$13.266	$13.666
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565
Horseback riding	Total ($million)	$0.838	$0.905	$0.963	$1.040	$1.094	$1.146	$1.197	$1.247	$1.300	$1.349	$1.397	$1.444
	/Participant	$305	$329	$350	$378	$398	$417	$435	$453	$473	$490	$508	$525

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Bicycling on unpaved trails	Total ($million)	$6.210	$6.610	$6.996	$7.370	$7.735	$8.110	$8.460	$8.803	$9.140	$9.471	$9.797	$10.118
	/Participant	$397	$422	$447	$471	$494	$518	$541	$562	$584	$605	$626	$647
Bicycling on paved trails	Total ($million)	$9.600	$10.456	$11.233	$12.150	$12.817	$13.431	$14.034	$14.626	$15.209	$15.825	$16.394	$16.954
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Bicycling on roads, streets or sidewalks	Total ($million)	$12.096	$13.174	$14.155	$15.309	$16.149	$16.924	$17.684	$18.430	$19.164	$19.940	$20.657	$21.363
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Class I – All-terrain vehicle riding	Total ($million)	$1.927	$2.080	$2.258	$2.391	$2.512	$2.632	$2.749	$2.863	$2.984	$3.096	$3.206	$3.314
	/Participant	$313	$338	$367	$389	$409	$428	$447	$466	$485	$503	$521	$539
Class III – Off-road motorcycling	Total ($million)	$0.940	$1.015	$1.102	$1.166	$1.226	$1.284	$1.341	$1.397	$1.456	$1.510	$1.564	$1.617
	/Participant	$313	$338	$367	$389	$409	$428	$447	$466	$485	$503	$521	$539
Class IV – Riding UTVs or side-by-side ATVs	Total ($million)	$0.830	$0.896	$0.973	$1.030	$1.083	$1.134	$1.184	$1.234	$1.286	$1.334	$1.381	$1.428
	/Participant	$313	$338	$367	$389	$409	$428	$447	$466	$485	$503	$521	$539
Snowmobiling	Total ($million)	$0.556	$0.606	$0.651	$0.704	$0.743	$0.778	$0.813	$0.848	$0.881	$0.917	$0.950	$0.982
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Using personal water craft, such as jet ski	Total ($million)	$1.531	$1.623	$1.710	$1.795	$1.877	$1.971	$2.050	$2.132	$2.236	$2.311	$2.385	$2.456
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Downhill skiing or snowboarding	Total ($million)	$4.511	$4.833	$5.262	$5.551	$5.832	$6.108	$6.377	$6.659	$6.920	$7.178	$7.431	$7.681
	/Participant	$328	$352	$383	$404	$424	$444	$464	$484	$503	$522	$540	$559
Cross-country / nordic skiing on groomed trails	Total ($million)	$2.329	$2.468	$2.601	$2.731	$2.856	$3.000	$3.120	$3.246	$3.405	$3.519	$3.631	$3.741
	/Participant	$348	$368	$388	$408	$426	$448	$466	$484	$508	$525	$542	$558
Cross-country / nordic skiing on ungroomed trails	Total ($million)	$1.321	$1.400	$1.475	$1.549	$1.620	$1.701	$1.770	$1.841	$1.931	$1.996	$2.059	$2.122
	/Participant	$348	$368	$388	$408	$426	$448	$466	$484	$508	$525	$542	$558
Snowshoeing	Total ($million)	$4.175	$4.534	$4.801	$5.060	$5.312	$5.572	$5.814	$6.052	$6.285	$6.515	$6.741	$6.964
	/Participant	$371	$403	$427	$450	$472	$495	$517	$538	$559	$579	$599	$619
Sledding, tubing, or general snow play	Total ($million)	$9.417	$9.979	$10.518	$11.038	$11.543	$12.123	$12.608	$13.114	$13.752	$14.212	$14.663	$15.106
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565
Dog walking or going to dog parks / off-leash areas	Total ($million)	$9.543	$10.261	$11.123	$11.904	$12.563	$13.504	$14.117	$14.720	$15.313	$15.898	$16.520	$17.091
	/Participant	$260	$280	$303	$324	$342	$368	$385	$401	$417	$433	$450	$466
Tennis (played outdoors)	Total ($million)	$2.485	$2.665	$2.881	$3.038	$3.192	$3.342	$3.489	$3.642	$3.785	$3.925	$4.063	$4.199
	/Participant	$338	$363	$392	$413	$434	$455	$475	$496	$515	$534	$553	$571
Outdoor court games other than tennis	Total ($million)	$4.194	$4.479	$4.742	$4.996	$5.245	$5.500	$5.739	$5.972	$6.202	$6.428	$6.650	$6.869
	/Participant	$385	$411	$435	$458	$481	$505	$526	$548	$569	$590	$610	$630

Table B2. Cost of Illness Savings (2018 USD) by Minutes per Week, Medium Mixed County (pop. <=100,000), Oregon (continued)

Medium Mixed County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Soccer	Total ($million)	$3.168	$3.357	$3.539	$3.714	$3.883	$4.079	$4.242	$4.412	$4.627	$4.782	$4.933	$5.082
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565
Futsal	Total ($million)	$0.282	$0.298	$0.315	$0.330	$0.345	$0.363	$0.377	$0.392	$0.411	$0.425	$0.439	$0.452
	/Participant	$352	$373	$393	$413	$431	$453	$471	$490	$514	$531	$548	$565
Golf	Total ($million)	$4.080	$4.443	$4.774	$5.163	$5.447	$5.708	$5.964	$6.216	$6.463	$6.725	$6.967	$7.205
	/Participant	$285	$311	$334	$361	$381	$399	$417	$435	$452	$470	$487	$504
Orienteering or geocaching	Total ($million)	$1.946	$2.059	$2.168	$2.279	$2.380	$2.489	$2.585	$2.686	$2.810	$2.901	$2.991	$3.078
	/Participant	$393	$416	$438	$460	$481	$503	$522	$543	$568	$586	$604	$622
Collecting (rocks, plants, mushrooms, or berries)	Total ($million)	$6.501	$6.990	$7.577	$8.109	$8.558	$9.199	$9.617	$10.027	$10.431	$10.830	$11.253	$11.642
	/Participant	$260	$280	$303	$324	$342	$368	$385	$401	$417	$433	$450	$466
Crabbing	Total ($million)	$3.178	$3.408	$3.684	$3.886	$4.082	$4.274	$4.462	$4.658	$4.841	$5.020	$5.197	$5.371
	/Participant	$338	$363	$392	$413	$434	$455	$475	$496	$515	$534	$553	$571
White-water canoeing, kayaking, or rafting	Total ($million)	$4.004	$4.379	$4.638	$4.889	$5.134	$5.373	$5.622	$5.852	$6.079	$6.303	$6.522	$6.739
	/Participant	$357	$391	$414	$437	$458	$480	$502	$523	$543	$563	$582	$602
Swimming or playing in outdoor pools / spray parks	Total ($million)	$8.708	$9.270	$9.779	$10.270	$10.747	$11.265	$11.757	$12.237	$12.850	$13.288	$13.717	$14.138
	/Participant	$327	$349	$368	$386	$404	$423	$442	$460	$483	$500	$516	$531

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon

Large Urban County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Walking on local streets or sidewalks	162	339,800	Total ($million)	$67.046	$9.429	$24.941	$38.251	$50.047	$60.135	$73.131	$81.511	$90.398
			/Participant	$197	$28	$73	$113	$147	$177	$215	$240	$266
Walking on local trails or paths	36	301,800	Total ($million)	$12.687	$8.375	$22.152	$33.973	$44.450	$53.410	$64.952	$72.396	$80.289
			/Participant	$42	$28	$73	$113	$147	$177	$215	$240	$266
Walking / day hiking on non-local trails or path	24	223,600	Total ($million)	$3.372	$6.205	$16.412	$25.170	$32.933	$39.571	$48.122	$53.637	$59.485
			/Participant	$15	$28	$73	$113	$147	$177	$215	$240	$266
Long-distance hiking (back packing)	24	57,400	Total ($million)	$3.678	$4.483	$7.980	$11.006	$13.025	$14.899	$16.915	$18.390	$19.774
			/Participant	$64	$78	$139	$192	$227	$260	$295	$320	$344
Jogging or running on streets or sidewalks	58	120,000	Total ($million)	$16.305	$9.372	$16.683	$23.008	$27.231	$31.148	$35.362	$38.447	$41.339
			/Participant	$136	$78	$139	$192	$227	$260	$295	$320	$344
Jogging or running on trails or paths	29	96,800	Total ($million)	$7.384	$7.560	$13.458	$18.560	$21.966	$25.126	$28.525	$31.014	$33.346
			/Participant	$76	$78	$139	$192	$227	$260	$295	$320	$344
Horseback riding	9	11,000	Total ($million)	$0.018	$0.333	$0.889	$1.299	$1.744	$2.123	$2.496	$2.795	$3.070
			/Participant	$2	$30	$81	$118	$159	$193	$227	$254	$279
Bicycling on unpaved trails	23	62,600	Total ($million)	$2.743	$3.502	$7.443	$10.866	$14.180	$16.479	$18.561	$20.852	$22.774
			/Participant	$44	$56	$119	$174	$227	$263	$297	$333	$364

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Bicycling on paved trails	23	134,600	Total ($million)	$1.598	$3.735	$9.880	$15.152	$19.824	$23.820	$28.968	$32.288	$35.808
			/Participant	$12	$28	$73	$113	$147	$177	$215	$240	$266
Bicycling on roads, streets or sidewalks	43	169,600	Total ($million)	$8.550	$4.706	$12.449	$19.092	$24.979	$30.014	$36.501	$40.684	$45.119
			/Participant	$50	$28	$73	$113	$147	$177	$215	$240	$266
Class I – All-terrain vehicle riding	21	24,600	Total ($million)	$0.298	$0.805	$2.049	$3.217	$4.015	$5.006	$5.776	$6.429	$7.090
			/Participant	$12	$33	$83	$131	$163	$203	$235	$261	$288
Class III – Off-road motorcycling	44	12,000	Total ($million)	$0.689	$0.392	$0.999	$1.570	$1.958	$2.442	$2.818	$3.136	$3.458
			/Participant	$57	$33	$83	$131	$163	$203	$235	$261	$288
Class IV – Riding UTVs or side-by-side ATVs	16	10,600	Total ($million)	$0.096	$0.347	$0.883	$1.386	$1.730	$2.157	$2.489	$2.770	$3.055
			/Participant	$9	$33	$83	$131	$163	$203	$235	$261	$288
Snowmobiling	29	7,800	Total ($million)	$0.211	$0.216	$0.573	$0.878	$1.149	$1.380	$1.679	$1.871	$2.075
			/Participant	$27	$28	$73	$113	$147	$177	$215	$240	$266
Using personal water craft, such as jet ski	23	17,400	Total ($million)	$1.085	$1.359	$2.419	$3.336	$3.948	$4.516	$5.128	$5.575	$5.994
			/Participant	$62	$78	$139	$192	$227	$260	$295	$320	$344
Downhill skiing or snowboarding	23	55,000	Total ($million)	$1.469	$2.359	$4.995	$7.615	$9.528	$11.927	$13.495	$15.174	$16.480
			/Participant	$27	$43	$91	$138	$173	$217	$245	$276	$300

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Cross-country / nordic skiing on groomed trails	9	26,800	Total ($million)	$0.402	$2.060	$3.670	$5.063	$5.995	$6.859	$7.789	$8.471	$9.110
			/Participant	$15	$77	$137	$189	$224	$256	$291	$316	$340
Cross-country / nordic skiing on ungroomed trails	12	15,200	Total ($million)	$0.454	$1.168	$2.082	$2.872	$3.400	$3.890	$4.418	$4.804	$5.167
			/Participant	$30	$77	$137	$189	$224	$256	$291	$316	$340
Snowshoeing	7	45,000	Total ($million)	$0.128	$2.340	$5.078	$7.286	$9.410	$11.140	$12.711	$13.952	$15.610
			/Participant	$3	$52	$113	$162	$209	$248	$282	$310	$347
Sledding, tubing, or general snow play	7	107,000	Total ($million)	$1.237	$8.357	$14.876	$20.516	$24.281	$27.773	$31.531	$34.282	$36.860
			/Participant	$12	$78	$139	$192	$227	$260	$295	$320	$344
Dog walking or going to dog parks / off-leash areas	58	146,800	Total ($million)	$8.183	$3.176	$8.578	$14.342	$19.272	$23.194	$27.210	$31.996	$35.018
			/Participant	$56	$22	$58	$98	$131	$158	$185	$218	$239
Tennis (played outdoors)	11	29,400	Total ($million)	$0.141	$1.297	$2.865	$4.224	$5.262	$6.584	$7.465	$8.314	$9.027
			/Participant	$5	$44	$97	$144	$179	$224	$254	$283	$307
Outdoor court games other than tennis	17	43,600	Total ($million)	$1.056	$2.362	$5.027	$7.209	$9.524	$11.116	$12.564	$14.118	$15.424
			/Participant	$24	$54	$115	$165	$218	$255	$288	$324	$354
Soccer	35	36,000	Total ($million)	$3.324	$2.812	$5.005	$6.902	$8.169	$9.344	$10.609	$11.534	$12.402
			/Participant	$92	$78	$139	$192	$227	$260	$295	$320	$344

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County					Annual Cost of Illness Savings, Minutes / Week							
Activity	**Average Minutes / Week**	**No. Participants**		**Average**	**30**	**60**	**90**	**120**	**150**	**180**	**210**	**240**
Futsal	20	3,200	Total ($million)	$0.177	$0.250	$0.445	$0.614	$0.726	$0.831	$0.943	$1.025	$1.102
			/Participant	$55	$78	$139	$192	$227	$260	$295	$320	$344
Golf	28	57,200	Total ($million)	$1.417	$1.587	$4.198	$6.439	$8.425	$10.123	$12.310	$13.721	$15.217
			/Participant	$25	$28	$73	$113	$147	$177	$215	$240	$266
Orienteering or geocaching	7	19,800	Total ($million)	$0.352	$1.969	$3.384	$4.333	$5.154	$5.934	$6.568	$7.127	$7.672
			/Participant	$18	$99	$171	$219	$260	$300	$332	$360	$387
Collecting (rocks, plants, mushrooms, or berries)	12	100,000	Total ($million)	$0.161	$2.164	$5.843	$9.770	$13.128	$15.800	$18.536	$21.796	$23.854
			/Participant	$2	$22	$58	$98	$131	$158	$185	$218	$239
Crabbing	11	37,600	Total ($million)	$0.181	$1.659	$3.664	$5.402	$6.730	$8.421	$9.547	$10.632	$11.545
			/Participant	$5	$44	$97	$144	$179	$224	$254	$283	$307
White-water canoeing, kayaking, or rafting	9	44,800	Total ($million)	$0.144	$2.248	$4.833	$6.836	$9.068	$10.697	$12.221	$13.464	$15.000
			/Participant	$3	$50	$108	$153	$202	$239	$273	$301	$335
Swimming or playing in outdoor pools / spray parks	16	106,400	Total ($million)	$3.883	$7.313	$13.645	$18.535	$22.365	$25.407	$28.703	$31.701	$34.122
			/Participant	$196	$69	$128	$174	$210	$239	$270	$298	$321

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Walking on local streets or sidewalks	Total ($million)	$97.717	$106.752	$114.430	$121.084	$130.268	$136.518	$142.647	$148.669	$154.593	$160.749	$166.522	$172.214
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507
Walking on local trails or paths	Total ($million)	$86.790	$94.814	$101.633	$107.543	$115.700	$121.251	$126.695	$132.043	$137.305	$142.773	$147.900	$152.955
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507
Walking / day hiking on non-local trails or path	Total ($million)	$64.301	$70.247	$75.299	$79.677	$85.721	$89.834	$93.867	$97.829	$101.728	$105.779	$109.577	$113.323
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507
Long-distance hiking (back packing)	Total ($million)	$21.345	$22.614	$23.834	$25.010	$26.151	$27.410	$28.503	$29.571	$30.663	$32.074	$33.090	$34.085
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Jogging or running on streets or sidewalks	Total ($million)	$44.623	$47.278	$49.826	$52.286	$54.670	$57.304	$59.588	$61.821	$64.104	$67.054	$69.177	$71.258
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Jogging or running on trails or paths	Total ($million)	$35.996	$38.137	$40.193	$42.178	$44.101	$46.225	$48.068	$49.869	$51.711	$54.090	$55.803	$57.482
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Horseback riding	Total ($million)	$3.307	$3.652	$3.881	$4.189	$4.403	$4.613	$4.819	$5.021	$5.230	$5.427	$5.620	$5.811
	/Participant	$301	$332	$353	$381	$400	$419	$438	$456	$475	$493	$511	$528
Bicycling on unpaved trails	Total ($million)	$24.997	$26.608	$28.162	$29.670	$31.137	$32.629	$34.036	$35.416	$36.771	$38.104	$39.416	$40.707
	/Participant	$399	$425	$450	$474	$497	$521	$544	$566	$587	$609	$630	$650

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Bicycling on paved trails	Total ($million)	$38.707	$42.286	$45.327	$47.963	$51.601	$54.077	$56.505	$58.890	$61.237	$63.675	$65.962	$68.217
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507
Bicycling on roads, streets or sidewalks	Total ($million)	$48.772	$53.282	$57.114	$60.435	$65.019	$68.139	$71.198	$74.203	$77.160	$80.233	$83.114	$85.955
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507
Class I – All-terrain vehicle riding	Total ($million)	$7.792	$8.394	$8.941	$9.624	$10.115	$10.595	$11.066	$11.528	$12.006	$12.455	$12.898	$13.334
	/Participant	$317	$341	$363	$391	$411	$431	$450	$469	$488	$506	$524	$542
Class III – Off-road motorcycling	Total ($million)	$3.801	$4.094	$4.361	$4.695	$4.934	$5.168	$5.398	$5.623	$5.857	$6.076	$6.292	$6.504
	/Participant	$317	$341	$363	$391	$411	$431	$450	$469	$488	$506	$524	$542
Class IV – Riding UTVs or side-by-side ATVs	Total ($million)	$3.357	$3.617	$3.853	$4.147	$4.359	$4.565	$4.768	$4.967	$5.173	$5.367	$5.558	$5.746
	/Participant	$317	$341	$363	$391	$411	$431	$450	$469	$488	$506	$524	$542
Snowmobiling	Total ($million)	$2.243	$2.450	$2.627	$2.779	$2.990	$3.134	$3.274	$3.413	$3.549	$3.690	$3.822	$3.953
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507
Using personal water craft, such as jet ski	Total ($million)	$6.470	$6.855	$7.225	$7.582	$7.927	$8.309	$8.640	$8.964	$9.295	$9.723	$10.031	$10.332
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Downhill skiing or snowboarding	Total ($million)	$18.222	$19.500	$21.184	$22.347	$23.481	$24.589	$25.675	$26.792	$27.844	$28.880	$29.900	$30.905
	/Participant	$331	$355	$385	$406	$427	$447	$467	$487	$506	$525	$544	$562
Cross-country / nordic skiing on groomed trails	Total ($million)	$9.836	$10.423	$10.987	$11.531	$12.058	$12.641	$13.146	$13.640	$14.146	$14.801	$15.271	$15.732
	/Participant	$367	$389	$410	$430	$450	$472	$491	$509	$528	$552	$570	$587

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Cross-country / nordic skiing on ungroomed trails	Total ($million)	$5.579	$5.912	$6.231	$6.540	$6.839	$7.169	$7.456	$7.736	$8.023	$8.394	$8.661	$8.923
	/Participant	$367	$389	$410	$430	$450	$472	$491	$509	$528	$552	$570	$587
Snowshoeing	Total ($million)	$16.817	$18.253	$19.328	$20.371	$21.386	$22.418	$23.393	$24.348	$25.288	$26.212	$27.121	$28.017
	/Participant	$374	$406	$430	$453	$475	$498	$520	$541	$562	$582	$603	$623
Sledding, tubing, or general snow play	Total ($million)	$39.789	$42.156	$44.429	$46.622	$48.747	$51.096	$53.133	$55.124	$57.160	$59.789	$61.683	$63.539
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Dog walking or going to dog parks / off-leash areas	Total ($million)	$38.524	$41.375	$44.992	$48.038	$50.659	$54.371	$56.841	$59.269	$61.659	$64.014	$66.472	$68.770
	/Participant	$262	$282	$306	$327	$345	$370	$387	$404	$420	$436	$453	$468
Tennis (played outdoors)	Total ($million)	$10.025	$10.708	$11.598	$12.232	$12.850	$13.454	$14.046	$14.655	$15.228	$15.793	$16.349	$16.896
	/Participant	$341	$364	$394	$416	$437	$458	$478	$498	$518	$537	$556	$575
Outdoor court games other than tennis	Total ($million)	$16.613	$18.029	$19.088	$20.114	$21.113	$22.129	$23.088	$24.028	$24.952	$25.861	$26.756	$27.636
	/Participant	$381	$414	$438	$461	$484	$508	$530	$551	$572	$593	$614	$634
Soccer	Total ($million)	$13.387	$14.183	$14.948	$15.686	$16.401	$17.191	$17.876	$18.546	$19.231	$20.116	$20.753	$21.377
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Futsal	Total ($million)	$1.190	$1.261	$1.329	$1.394	$1.458	$1.528	$1.589	$1.649	$1.709	$1.788	$1.845	$1.900
	/Participant	$372	$394	$415	$436	$456	$478	$497	$515	$534	$559	$576	$594
Golf	Total ($million)	$16.449	$17.970	$19.262	$20.383	$21.929	$22.981	$24.012	$25.026	$26.023	$27.060	$28.031	$28.989
	/Participant	$288	$314	$337	$356	$383	$402	$420	$438	$455	$473	$490	$507

Table B3. Cost of Illness Savings (2018 USD) by Minutes per Week, Large Urban County (pop. >=400,000), Oregon (continued)

Large Urban County		Annual Cost of Illness Savings, Minutes / Week											
Activity		**270**	**300**	**330**	**360**	**390**	**420**	**450**	**480**	**510**	**540**	**570**	**600**
Orienteering or geocaching	Total ($million)	$8.236	$8.713	$9.171	$9.632	$10.060	$10.506	$10.913	$11.310	$11.715	$12.228	$12.603	$12.971
	/Participant	$416	$440	$463	$486	$508	$531	$551	$571	$592	$618	$637	$655
Collecting (rocks, plants, mushrooms, or berries)	Total ($million)	$26.242	$28.185	$30.648	$32.723	$34.509	$37.037	$38.720	$40.374	$42.002	$43.606	$45.280	$46.846
	/Participant	$262	$282	$306	$327	$345	$370	$387	$404	$420	$436	$453	$468
Crabbing	Total ($million)	$12.822	$13.694	$14.832	$15.644	$16.434	$17.207	$17.964	$18.743	$19.476	$20.198	$20.908	$21.609
	/Participant	$341	$364	$394	$416	$437	$458	$478	$498	$518	$537	$556	$575
White-water canoeing, kayaking, or rafting	Total ($million)	$16.153	$17.627	$18.671	$19.683	$20.669	$21.632	$22.617	$23.546	$24.459	$25.358	$26.242	$27.113
	/Participant	$361	$393	$417	$439	$461	$483	$505	$526	$546	$566	$586	$605
Swimming or playing in outdoor pools / spray parks	Total ($million)	$36.788	$39.119	$41.261	$43.330	$45.337	$47.458	$49.488	$51.373	$53.307	$55.834	$57.632	$59.396
	/Participant	$346	$368	$388	$407	$426	$446	$465	$483	$501	$525	$542	$558

Appendix C – Average Weekly Minutes by Respondent Categories

Table C1. BMI Categories: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	Normal Weight (18.5-24.9)	Overweight (25-29.9)	Obese (30-45)
Walking on local streets / sidewalks	105	101	81
Walking on local trails / paths	65	59	52
Walking / day hiking on non-local trails / paths	42	36	28
Long-distance hiking (back packing)	11	9	4
Jogging / running on streets / sidewalks	21	13	9
Jogging / running on trails / paths	14	7	4
Horseback riding	4	7	9
Bicycling on unpaved trails	11	8	8
Bicycling on paved trails	16	17	13
Bicycling on roads, streets / sidewalks	26	28	25
Class I – All-terrain vehicle riding	5	6	6
Class III – Off-road motorcycling	2	2	2
Class IV – Riding UTVs / side-by-side ATVs	4	3	8
Snowmobiling	2	2	2
Personal water craft – jet ski	3	1	2
Downhill skiing / snowboarding	8	4	2
Cross-country / Nordic skiing on groomed trails	2	1	0
Cross-country / Nordic skiing on ungroomed trails	1	0	0
Snowshoeing	2	2	0
Sledding, tubing, or general snow play	3	4	3
Dog walking / going to dog parks / off-leash areas	51	44	27
Tennis (played outdoors)	2	2	1
Outdoor court games other than tennis	10	3	4
Soccer	6	6	7
Futsal	1	0	0
Golf	13	14	5
Collecting (rocks, plants, mushrooms, berries)	15	16	13
Crabbing	2	3	4
White-water canoeing, kayaking, rafting	4	2	2
Swimming / playing in outdoor pools / spray parks	8	9	10
TOTAL WEEKLY MINUTES	**460**	**415**	**335**
No. Respondents	1212	1036	680

Table C2. Income Categories: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	<$25k	$25K-$75K	$75K or more
Walking on local streets / sidewalks	101	93	103
Walking on local trails / paths	63	57	62
Walking / day hiking on non-local trails / paths	40	35	35
Long-distance hiking (back packing)	10	7	8
Jogging / running on streets / sidewalks	10	13	21
Jogging / running on trails / paths	6	8	12
Horseback riding	11	6	5
Bicycling on unpaved trails	10	9	9
Bicycling on paved trails	17	15	18
Bicycling on roads, streets / sidewalks	34	24	27
Class I – All-terrain vehicle riding	4	6	8
Class III – Off-road motorcycling	1	3	3
Class IV – Riding UTVs / side-by-side ATVs	4	3	6
Snowmobiling	1	2	2
Personal water craft – jet ski	3	2	2
Downhill skiing / snowboarding	7	3	7
Cross-country / Nordic skiing on groomed trails	0	1	1
Cross-country / Nordic skiing on ungroomed trails	0	0	1
Snowshoeing	1	1	2
Sledding, tubing, or general snow play	3	4	4
Dog walking / going to dog parks / off-leash areas	44	40	47
Tennis (played outdoors)	1	1	2
Outdoor court games other than tennis	11	5	5
Soccer	13	5	6
Futsal	0	0	0
Golf	7	9	17
Collecting (rocks, plants, mushrooms, berries)	31	17	7
Crabbing	3	3	2
White-water canoeing, kayaking, rafting	2	3	3
Swimming / playing in outdoor pools / spray parks	12	9	9
TOTAL WEEKLY MINUTES	**456**	**387**	**438**
No. Respondents	420	1255	1267

Table C3. Age Categories: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	18-34	35-59	60-74	75-84	85 or older
Walking on local streets / sidewalks	118	104	82	76	33
Walking on local trails / paths	66	66	54	30	9
Walking / day hiking on non-local trails / paths	42	44	30	9	0
Long-distance hiking (back packing)	11	13	4	1	0
Jogging / running on streets / sidewalks	28	19	5	1	0
Jogging / running on trails / paths	18	11	4	0	0
Horseback riding	3	7	9	1	0
Bicycling on unpaved trails	12	13	3	0	0
Bicycling on paved trails	25	18	8	3	0
Bicycling on roads, streets / sidewalks	37	32	14	6	0
Class I – All-terrain vehicle riding	7	10	5	1	6
Class III – Off-road motorcycling	2	4	1	0	0
Class IV – Riding UTVs / side-by-side ATVs	3	6	3	1	0
Snowmobiling	3	2	1	0	0
Personal water craft – jet ski	3	2	3	0	0
Downhill skiing / snowboarding	9	5	3	0	0
Cross-country / Nordic skiing on groomed trails	2	1	0	0	0
Cross-country / Nordic skiing on ungroomed trails	1	1	1	0	0
Snowshoeing	2	2	1	0	0
Sledding, tubing, or general snow play	6	5	1	0	0
Dog walking / going to dog parks / off-leash areas	34	49	55	26	0
Tennis (played outdoors)	2	2	0	0	0
Outdoor court games other than tennis	14	6	0	0	0
Soccer	10	9	1	1	0
Futsal	1	0	0	0	0
Golf	7	10	19	14	43
Collecting (rocks, plants, mushrooms, berries)	18	15	13	8	0
Crabbing	3	2	3	2	1
White-water canoeing, kayaking, rafting	2	3	2	0	0
Swimming / playing in outdoor pools / spray parks	14	11	4	1	0
TOTAL WEEKLY MINUTES	**509**	**478**	**334**	**185**	**92**
No. Respondents	714	1559	716	460	32

Table C4. Education Level: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	Did Not Complete High School	High School Diploma (or equivalent)	Some College, But No Degree	Associate Degree	Bachelor Degree	Graduate or Professional Degree
Walking on local streets / sidewalks	78	96	101	104	99	96
Walking on local trails / paths	33	59	57	56	65	60
Walking / day hiking on non-local trails / paths	11	33	38	36	35	38
Long-distance hiking (back packing)	2	9	9	4	9	8
Jogging / running on streets / sidewalks	8	10	14	12	19	16
Jogging / running on trails / paths	4	6	6	6	13	12
Horseback riding	1	12	7	11	3	1
Bicycling on unpaved trails	2	4	11	12	12	5
Bicycling on paved trails	4	11	17	19	21	11
Bicycling on roads, streets / sidewalks	15	19	28	22	33	23
Class I – All-terrain vehicle riding	3	6	12	5	4	7
Class III – Off-road motorcycling	7	4	2	1	3	1
Class IV – Riding UTVs / side-by-side ATVs	1	2	7	2	4	4
Snowmobiling	0	3	2	0	2	1
Personal water craft – jet ski	1	2	3	1	3	1
Downhill skiing / snowboarding	1	2	7	2	6	6
Cross-country / Nordic skiing / skijoring on groomed trails	0	0	0	0	2	1
Cross-country / Nordic skiing / skijoring on ungroomed trails	0	0	1	0	1	1
Snowshoeing	0	0	2	1	2	3
Sledding, tubing, or general snow play	8	4	4	4	3	3
Dog walking / going to dog parks / off-leash areas	23	40	49	44	40	45
Tennis (played outdoors)	5	1	1	1	1	2
Outdoor court games other than tennis	1	10	7	6	6	3
Soccer	7	11	7	2	5	6
Futsal	0	0	1	0	0	0
Golf	2	6	8	14	14	19
Collecting (rocks, plants, mushrooms, berries)	10	28	21	23	8	6
Crabbing	3	3	4	2	2	2
White-water canoeing, kayaking, rafting	2	3	1	1	4	3
Swimming / playing in outdoor pools / spray parks	10	16	9	12	7	5
TOTAL WEEKLY MINUTES	**247**	**405**	**441**	**410**	**428**	**393**
No. Respondents	105	438	760	349	818	707

Table C5. Community Type: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	Rural	Suburban	Urban
Walking on local streets / sidewalks	84	94	123
Walking on local trails / paths	60	59	55
Walking / day hiking on non-local trails / paths	43	31	31
Long-distance hiking (back packing)	7	9	8
Jogging / running on streets / sidewalks	10	18	16
Jogging / running on trails / paths	6	10	10
Horseback riding	11	5	0
Bicycling on unpaved trails	7	9	10
Bicycling on paved trails	11	16	20
Bicycling on roads, streets / sidewalks	23	22	35
Class I – All-terrain vehicle riding	10	7	1
Class III – Off-road motorcycling	4	1	2
Class IV – Riding UTVs / side-by-side ATVs	9	2	1
Snowmobiling	2	1	2
Personal water craft – jet ski	1	1	5
Downhill skiing / snowboarding	4	4	7
Cross-country / Nordic skiing on groomed trails	0	1	2
Cross-country / Nordic skiing on ungroomed trails	1	1	1
Snowshoeing	2	1	1
Sledding, tubing, or general snow play	3	4	4
Dog walking / going to dog parks / off-leash areas	48	40	38
Tennis (played outdoors)	1	2	2
Outdoor court games other than tennis	5	6	5
Soccer	2	8	9
Futsal	0	1	0
Golf	12	12	12
Collecting (rocks, plants, mushrooms, berries)	24	10	10
Crabbing	3	2	2
White-water canoeing, kayaking, rafting	3	1	4
Swimming / playing in outdoor pools / spray parks	8	9	8
TOTAL WEEKLY MINUTES	**413**	**392**	**428**
No. Respondents	1115	1339	776

Table C6. Sex: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	Female	Male
Walking on local streets / sidewalks	105	89
Walking on local trails / paths	59	57
Walking / day hiking on non-local trails / paths	37	35
Long-distance hiking (back packing)	6	14
Jogging / running on streets / sidewalks	16	14
Jogging / running on trails / paths	10	9
Horseback riding	5	6
Bicycling on unpaved trails	6	12
Bicycling on paved trails	11	20
Bicycling on roads, streets / sidewalks	22	30
Class I – All-terrain vehicle riding	7	7
Class III – Off-road motorcycling	1	4
Class IV – Riding UTVs / side-by-side ATVs	4	4
Snowmobiling	1	2
Personal water craft – jet ski	3	2
Downhill skiing / snowboarding	3	7
Cross-country / Nordic skiing on groomed trails	1	1
Cross-country / Nordic skiing on ungroomed trails	1	1
Snowshoeing	1	2
Sledding, tubing, or general snow play	4	4
Dog walking / going to dog parks / off-leash areas	49	36
Tennis (played outdoors)	2	2
Outdoor court games other than tennis	5	7
Soccer	6	6
Futsal	0	0
Golf	6	19
Collecting (rocks, plants, mushrooms, berries)	15	14
Crabbing	2	3
White-water canoeing, kayaking, rafting	2	3
Swimming / playing in outdoor pools / spray parks	10	7
TOTAL WEEKLY MINUTES	**407**	**420**
No. Respondents	1894	1617

Table C7. Workplace Activity: Average Weekly Minutes by Outdoor Activity, Oregon SCORP Survey Respondents

Activity	Mostly sitting or standing	Mostly walking	Mostly heavy labor or physically demanding work
Walking on local streets / sidewalks	97	118	102
Walking on local trails / paths	60	68	63
Walking / day hiking on non-local trails / paths	34	48	58
Long-distance hiking (back packing)	9	15	16
Jogging / running on streets / sidewalks	20	15	18
Jogging / running on trails / paths	12	11	8
Horseback riding	3	5	22
Bicycling on unpaved trails	10	13	19
Bicycling on paved trails	19	21	19
Bicycling on roads, streets / sidewalks	30	37	32
Class I – All-terrain vehicle riding	7	9	14
Class III – Off-road motorcycling	2	3	12
Class IV – Riding UTVs / side-by-side ATVs	4	8	10
Snowmobiling	1	3	6
Personal water craft – jet ski	2	3	5
Downhill skiing / snowboarding	5	6	16
Cross-country / Nordic skiing on groomed trails	1	1	3
Cross-country / Nordic skiing on ungroomed trails	1	1	1
Snowshoeing	2	2	1
Sledding, tubing, or general snow play	3	6	6
Dog walking / going to dog parks / off-leash areas	49	40	27
Tennis (played outdoors)	2	3	1
Outdoor court games other than tennis	5	6	12
Soccer	8	10	10
Futsal	0	0	0
Golf	10	13	14
Collecting (rocks, plants, mushrooms, berries)	9	17	21
Crabbing	2	2	4
White-water canoeing, kayaking, rafting	3	2	2
Swimming / playing in outdoor pools / spray parks	11	11	12
TOTAL WEEKLY MINUTES	**429**	**502**	**539**
No. Respondents	1330	428	245