

Outdoor Recreation in Oregon:

Responding to Demographic and Societal Change



2019-2023
**Oregon Statewide Comprehensive
Outdoor Recreation Plan**
Oregon Parks and Recreation Department

What is SCORP?

- Qualifies state for LWCF funding
- Updated every 5 years
- Provides guidance for other OPRD-administered grant programs
- Provides guidance & information for federal, state, & local units of government & the private sector
- Accepted by the NPS on April 23, 2019



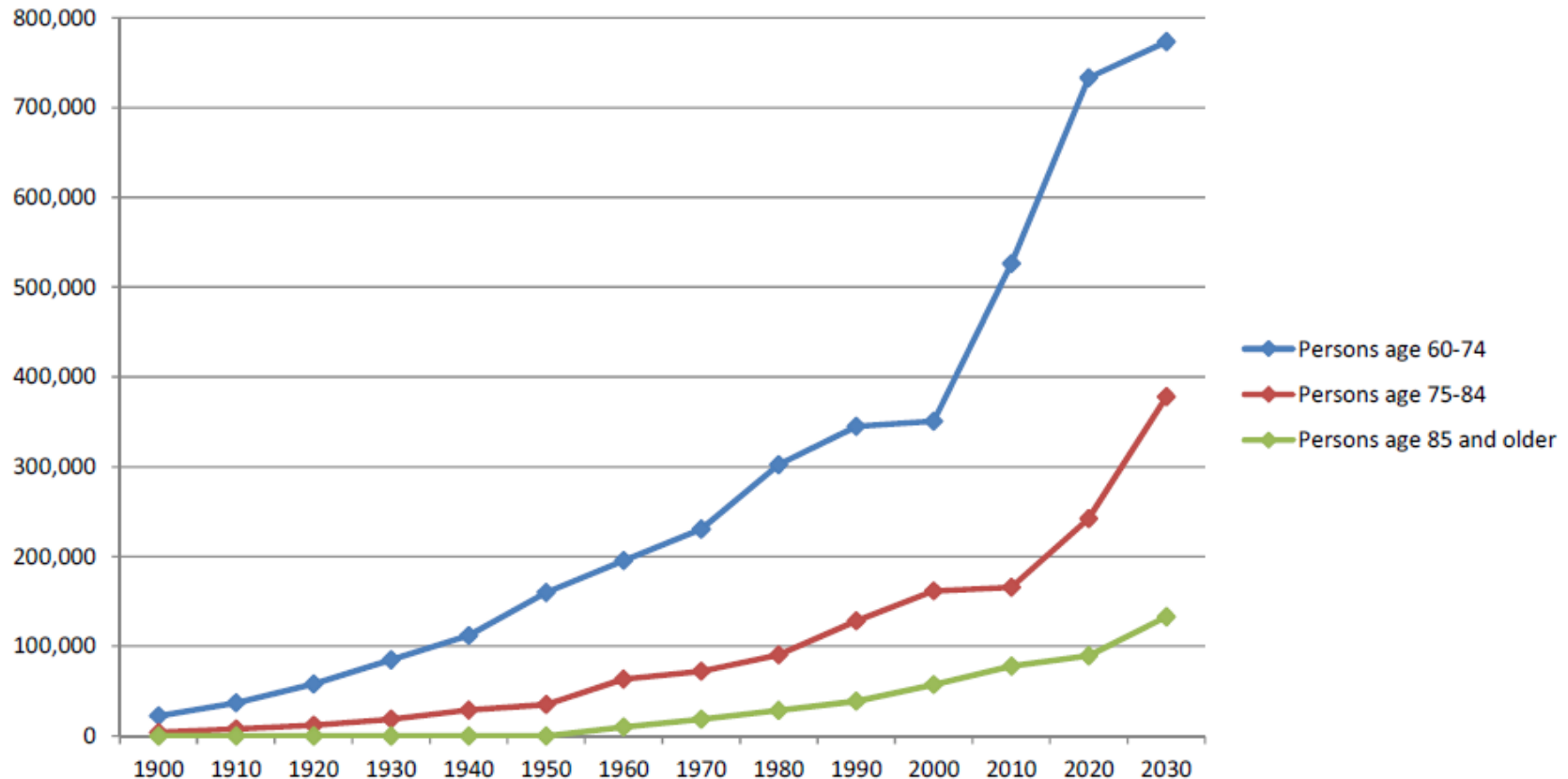
Important Demographic & Social Changes Addressed

- **An aging population**
- **An increasingly diverse population**
- **Lack of youth engagement in outdoor recreation**
- **An underserved low-income population**
- **The health benefits of physical activity**



An Aging Population

Figure 3.2. Number of people over 60 in Oregon, 1900-2030¹



By the year 2030, approximately 1.3 million Oregonians will be over the age of 60.

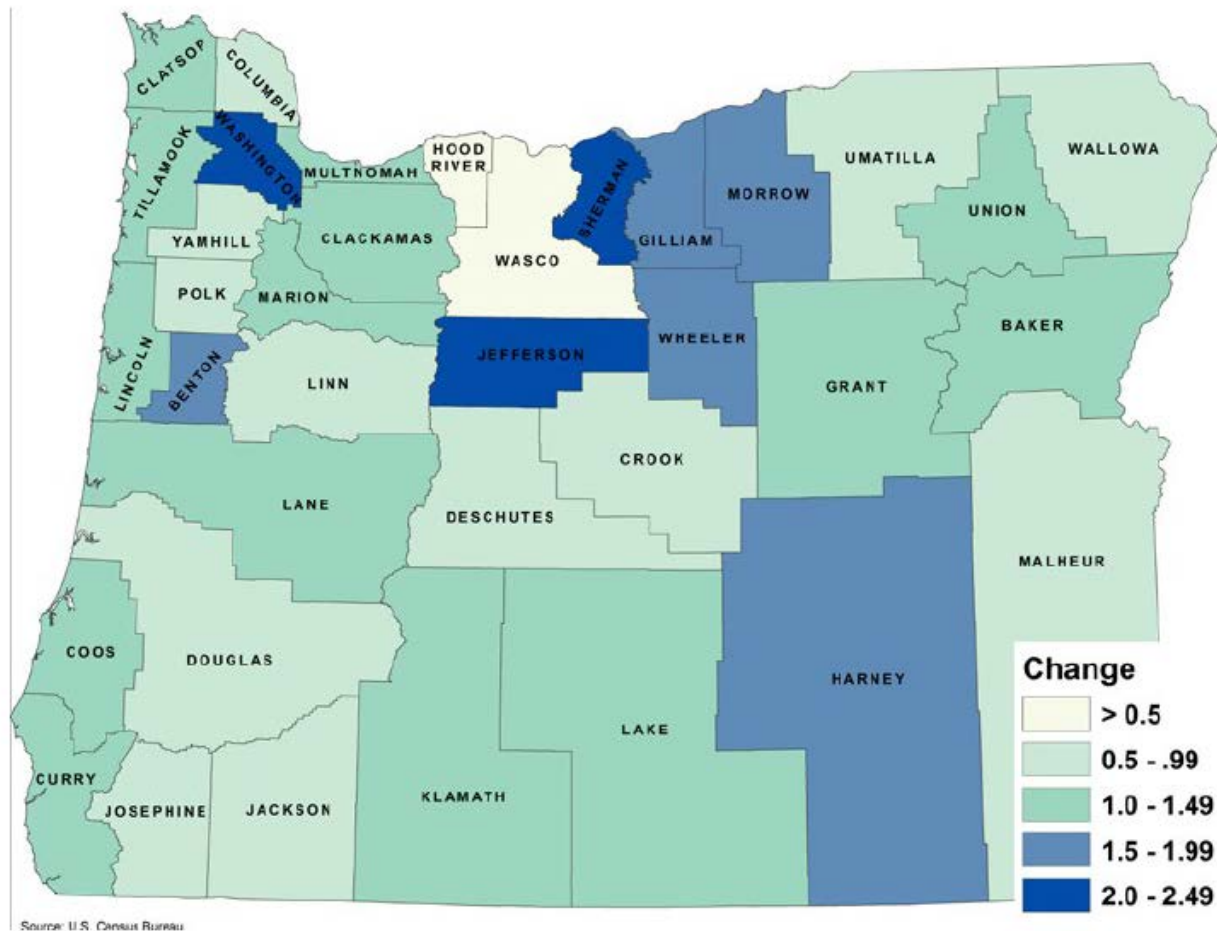
Recent analysis of National Survey on Recreation and the Environment data generates four conclusions:

- **With the exception of gardening / landscaping, participation in all recreation activities decreases with age.**
- **Participation in most activities continues to decrease as age increases, with physically demanding activities decreasing most rapidly.**
- **Some activities such as walking for pleasure remain popular across all age groups,**



An Increasingly Diverse Population

Figure 4.1. Percentage of non-white population growth by Oregon county, 2000-2017¹⁷



All of Oregon's 36 counties have become more diverse since 2010.

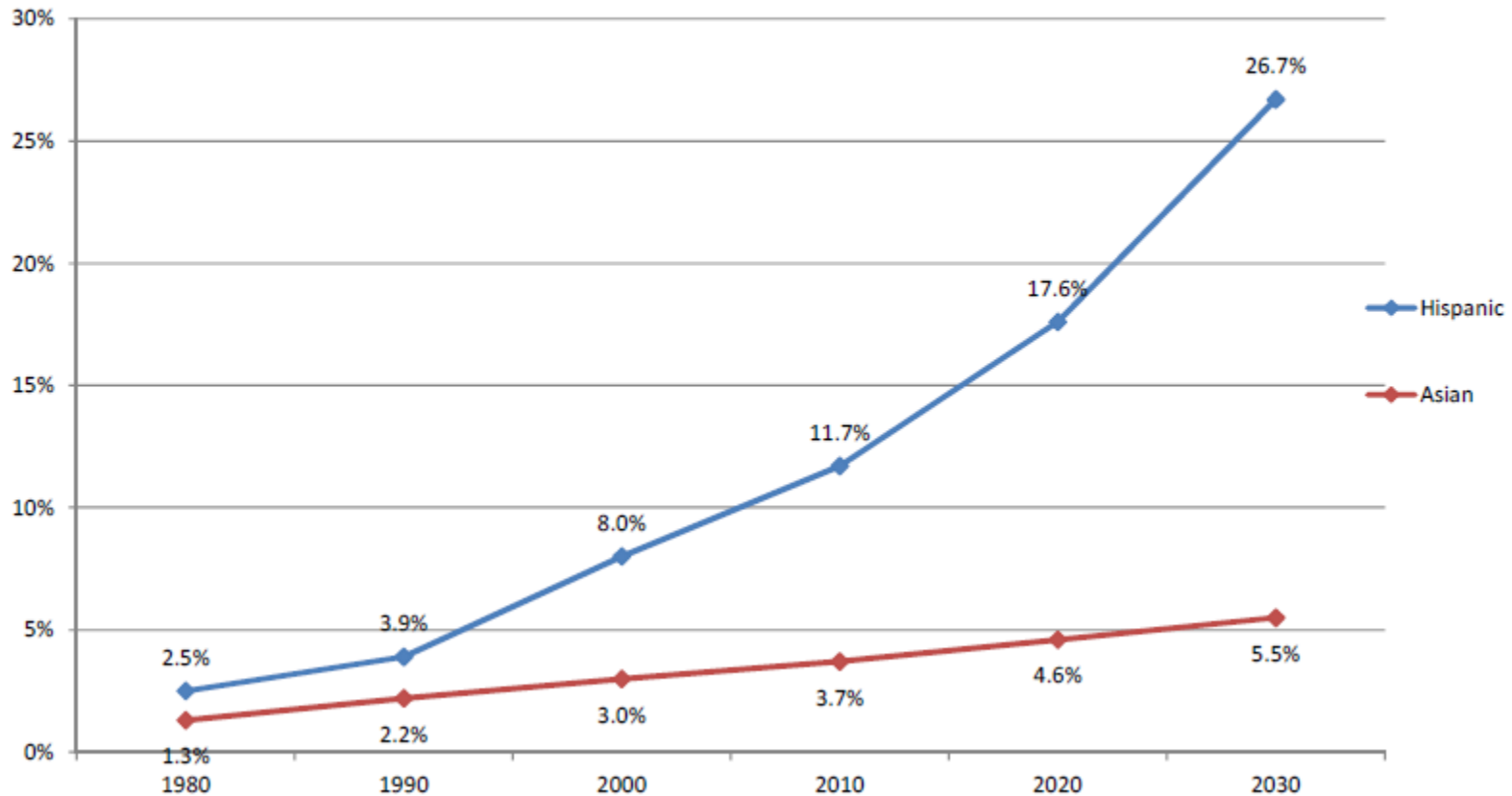
Oregon Statewide Minority Population Growth (2000-2016)

Minority Population Group	Total Pop. 2000	Total Pop. 2016	Percent Change	Share of 2016 Population
Hispanic	275,314	522,568	89.8%	12.8%
Asian	101,350	169,459	67.2%	4.1%
Black or African American	55,662	79,575	43.0%	1.9%
Native American or Alaska Native	45,211	45,426	<1%	1.1%
Native Hawaiian and Other Pacific Islander	7,976	14,823	85.8%	0.4%
Multiracial	104,745	207,593	98.2%	5.1%
Total Statewide Population	3,421,399	4,093,465	19.6%	

- During a period from 2000 to 2016, Oregon's Hispanic (90%) and Asian (67%) populations have grown much faster than the state population as a whole (20%).

An Increasingly Diverse Population

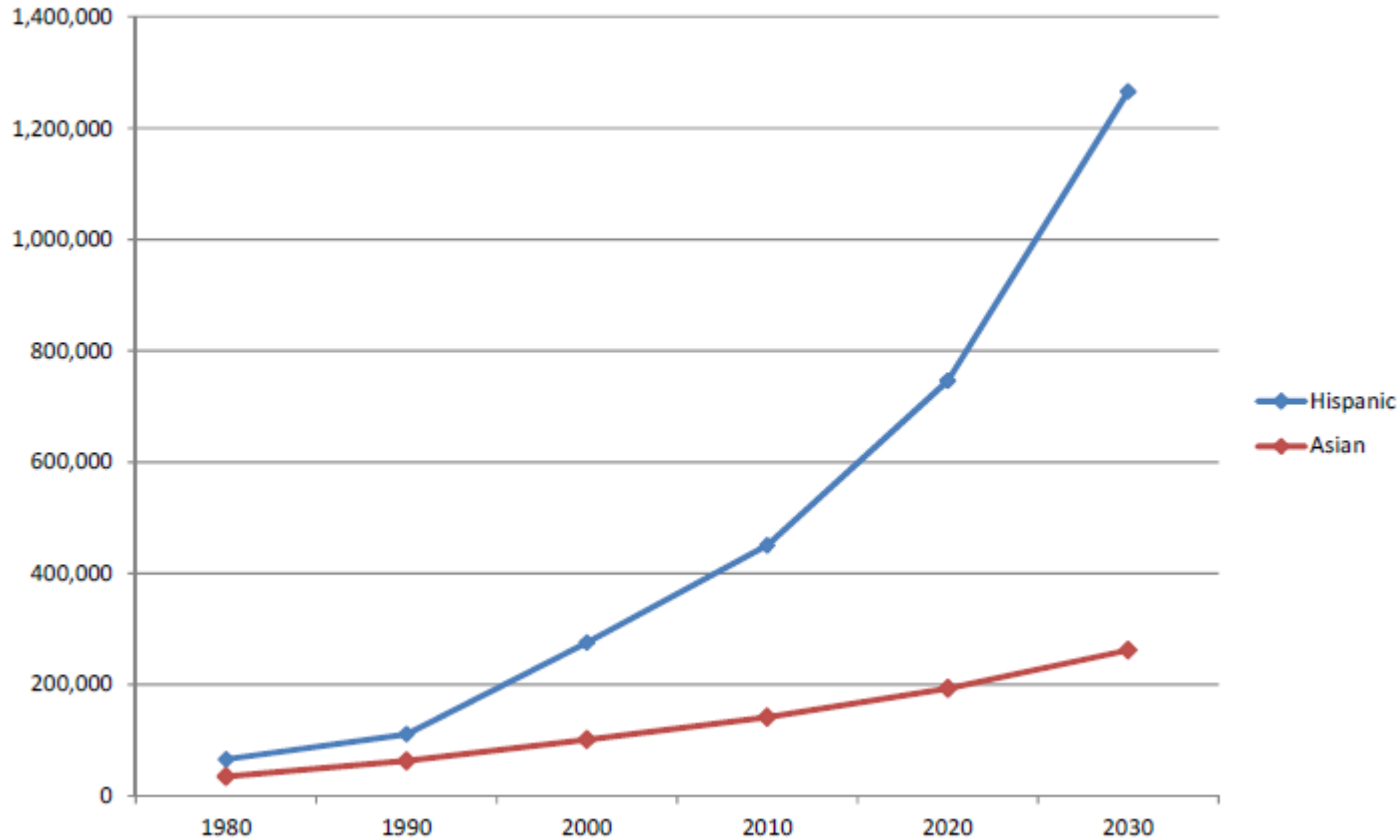
Figure 4.2. Percentage of total Oregon population, Hispanic, Asian, 1980-2030²⁰



Of Oregon's two fastest growing minority groups, Hispanics currently represent 12.8% and Asians 4.1% of the Oregon population. By the year 2030, over one in four (26.7%) will be Hispanic and 5.5% Asian.

An Increasingly Diverse Population

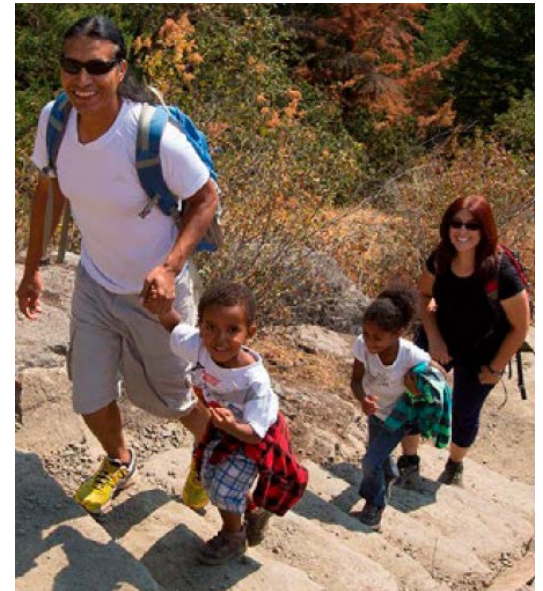
Figure 4.3. Number of people in Oregon, Hispanic, Asian, 1980-2030¹



By the year 2030, approximately 1.3 million Oregonians will be of Hispanic descent and 262,000 of Asian descent.

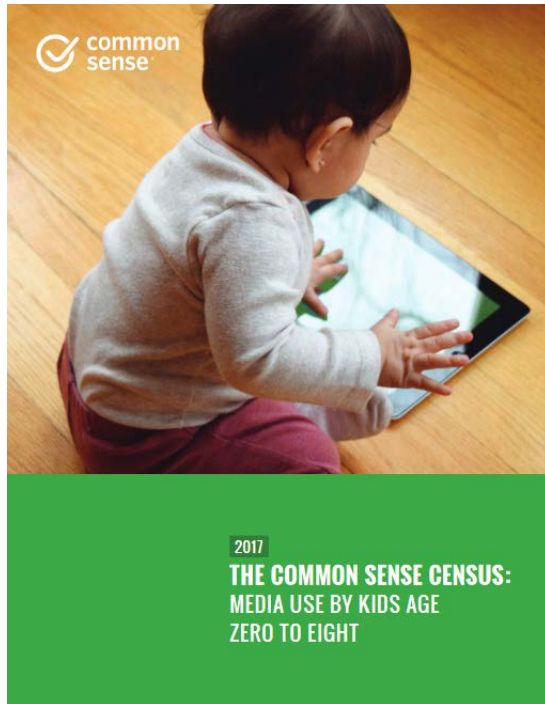
Findings from recent studies in Oregon of underserved populations

- A 2007 SCORP survey found that both the Hispanic and Asian populations in Oregon engage in outdoor recreation less than the general population.
- A 2017 study of residents of the Portland metro region found that communities of color were less likely to have visited local parks and natural areas that traditionally well served residents.



Lack of Youth Involvement

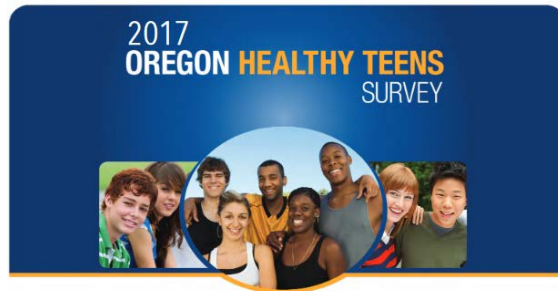
A 2017 study by Common Sense, reported:



- **98% of children age 8 and under live in a home with some type of mobile device.**
- **95% of families with children this age now have a smart phone, and 78% have a tablet.**
- **42% of children now have their own tablet device.**
- **Children 8 and under spend an average of about two and a quarter hours (2:19) a day with screen media, up from 1:55 in 2013.**
- **Children from lower-income homes spend an average of 1:39 more with screen media each day than those from higher-income homes (3:29 vs. 1:50).**

Lack of Youth Involvement

According to Oregon Healthy Teens Survey Findings:



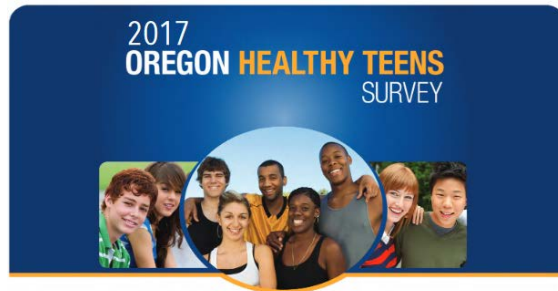
2017 OHT State Report
February, 2018



- A 102% increase from 2011-2017 in the fraction of 8th graders who played video or computer games or used a computer for something that is not school work more than two hours a day (24.4% to 49.3%).
- An 81% increase from 2011-2017 in the fraction of 11th graders who played video or computer games or used a computer for something that is not school work more than two hours a day (25.8% to 46.8%).

Lack of Youth Involvement

According to Oregon Healthy Teens Survey Findings:



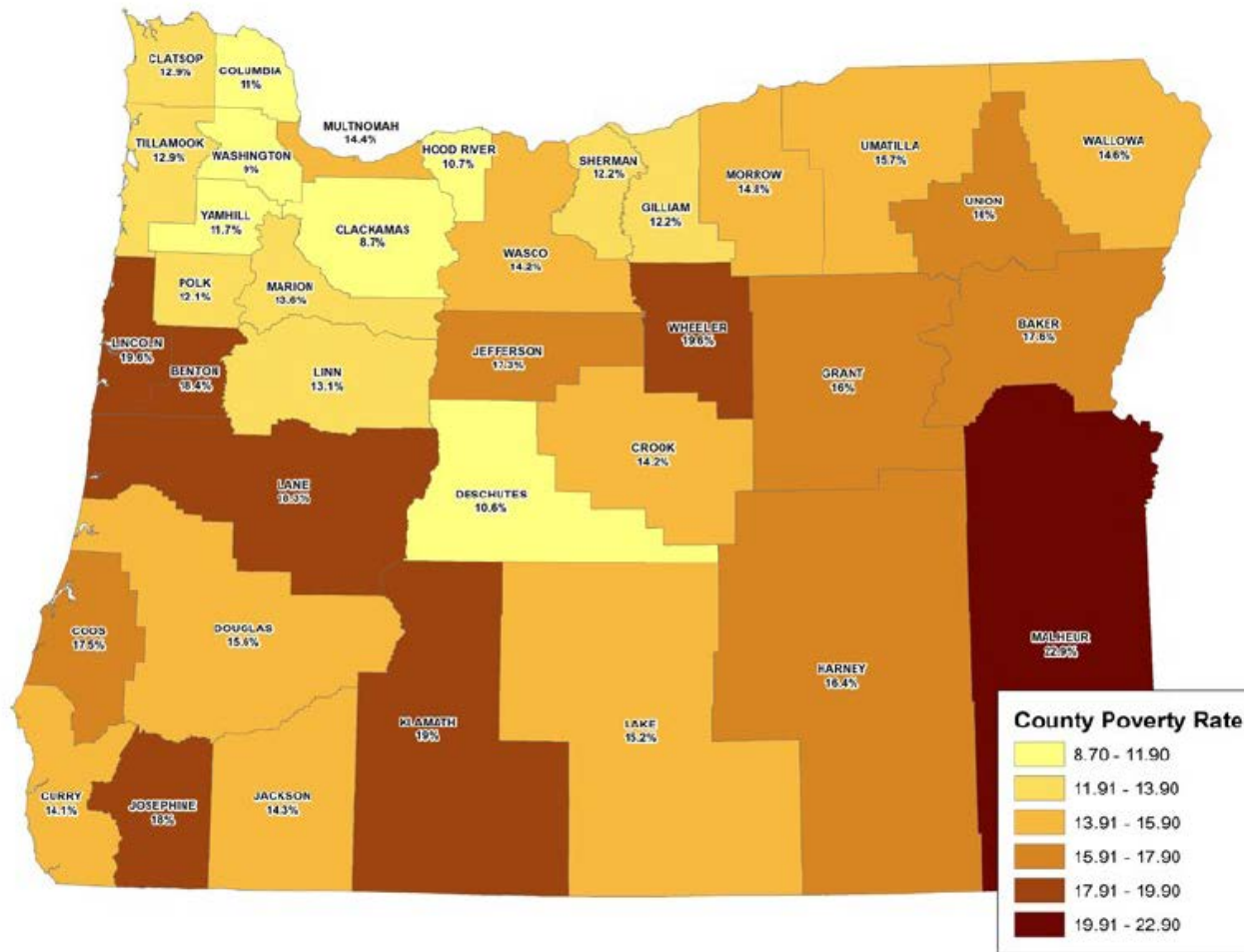
2017 OHT State Report
February, 2018



- The percent of 8th graders who were overweight or obese in 2017 was 25.7%.
- The percent of 11th graders who were overweight or obese in 2017 was 28.9%.
- The percentage of 8th graders who were overweight or obese increased 20% since 2011.
- The percentage of 11th graders who were overweight or obese increased 16% since 2011.

An Underserved Low-Income Population

Figure 6.2. Oregon poverty rate by county, 2016⁵⁷



In 2016, 15.7% of Oregonians were living with household incomes below the poverty threshold.

Percent of Oregon Population Below the Poverty Line (2000,2016)			
	2000		2016
Total Population	11.6%		15.7%
Race / Ethnicity			
Asian	12.5%		15.4%
White (non-Hispanic)	9.8%		13.3%
Native Hawaiian & Other Pacific Islander	18.2%		29.8%
Hispanic or Latino	24.9%		26.1%
African American	24.1%		32.5%
American Indian & Alaska Native	22.2%		28.3%
Age			
Under 18 years	14.7%		20.4%
18-64 years	11.2%		16.1%
65 years & older	7.6%		8.8%
Educational Attainment, population 25 years and over			
Less than high school degree			26.2%
High school graduate			15.4%
Some college, Associate’s degree			12.6%
Bachelor’s degree or higher			5.9%

Literature on low-income outdoor recreation participation:

- Individuals of lower socio-economic status are less likely to use publicly funding park & recreation resources.
- Fees and charges negatively impact lower income access to parks & programs.
- Children growing up in poverty are less likely to learn outdoor recreation skills.
- Low-income recreationists travel long distances to reach non-fee settings to avoid fees.



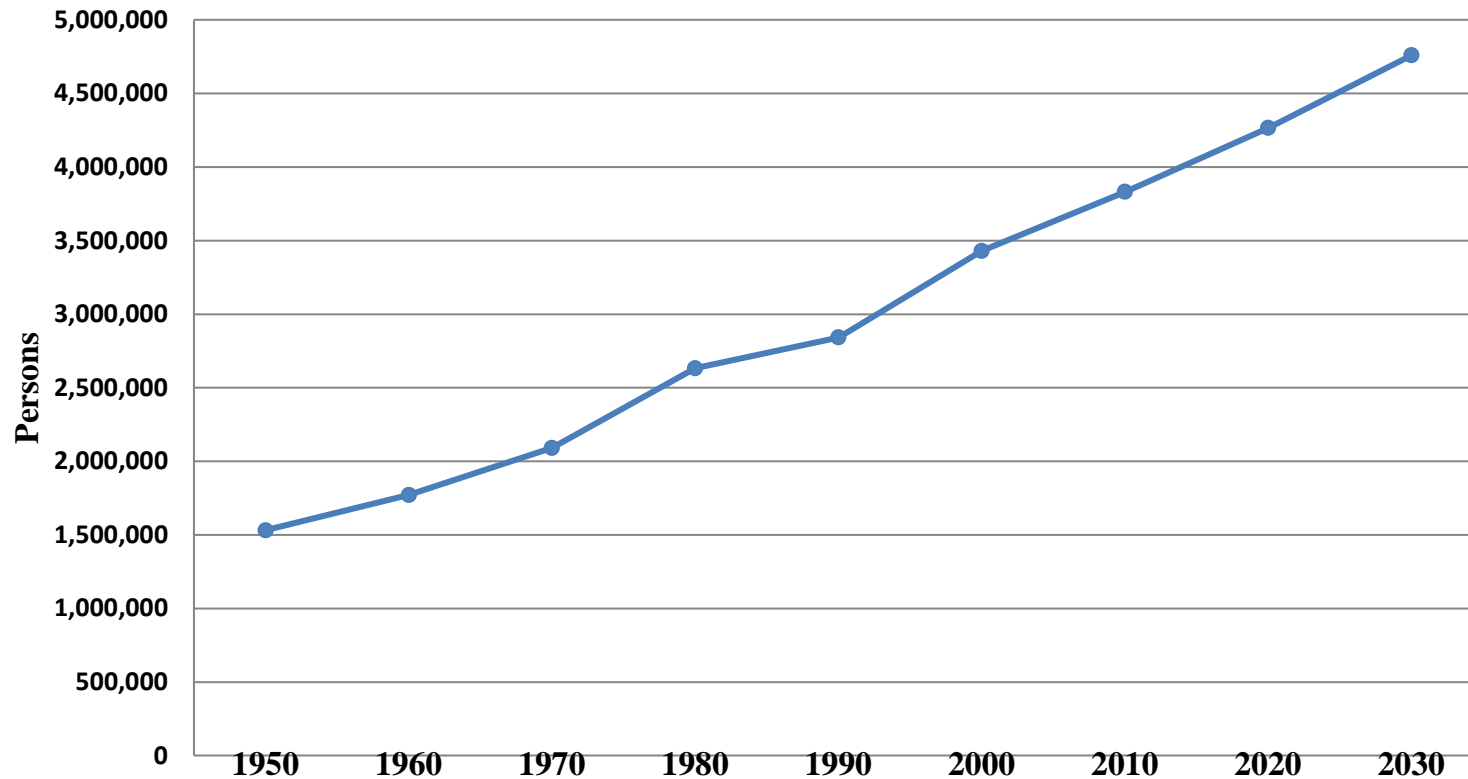
The Health Benefits of Physical Activity

- In 2015, 17.2 % of Oregon adults reported no physical activity or exercise outside of work.
- Each year, Oregon spends about \$1.6 billion (\$339 million paid by Medicaid) in medical expenses for obesity-related chronic conditions such as diabetes and heart disease.
- Substantial health benefits occur with a moderate amount of activity (e.g., at least 30 minutes of brisk walking) on 5 or more days a week.



Steady Population Growth

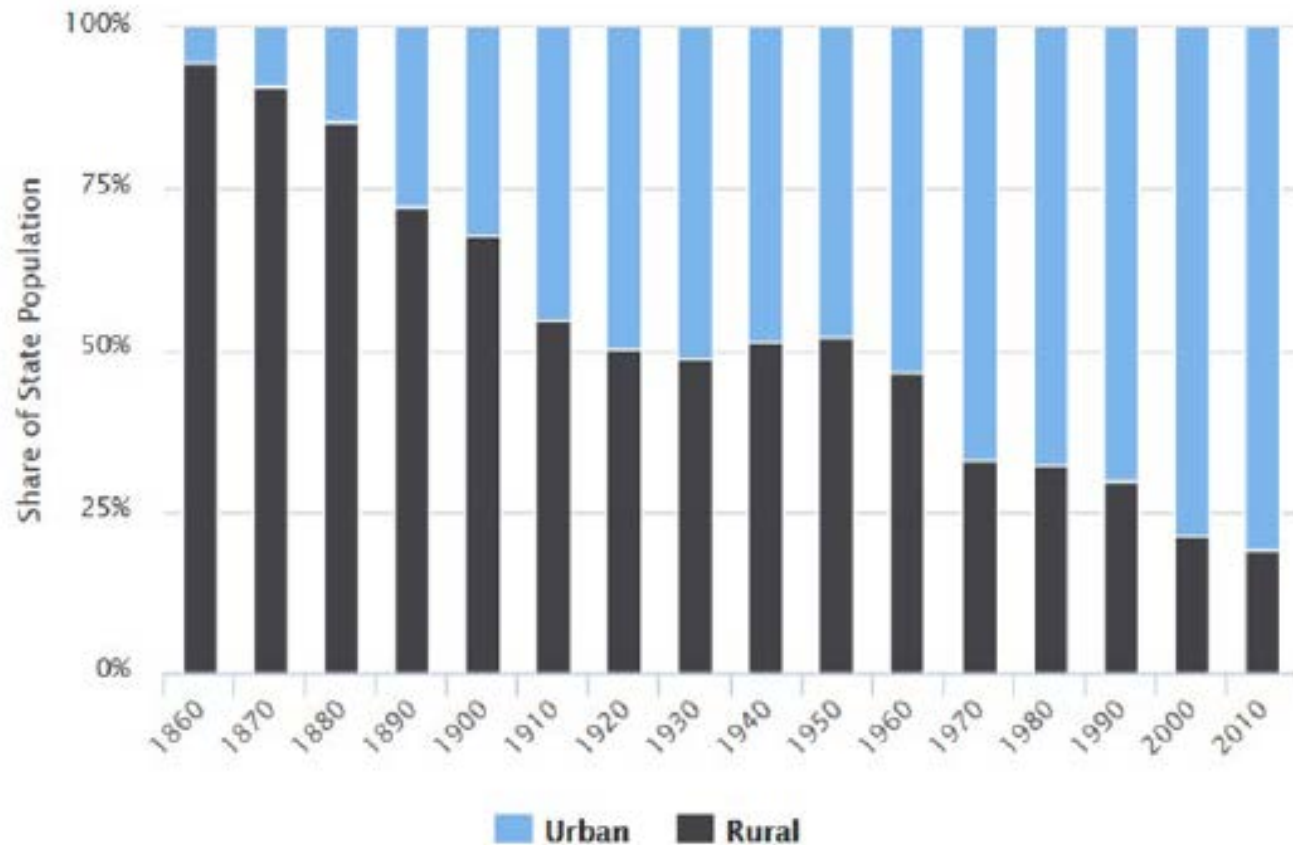
**Oregon Historic and Projected Population Change
(1950-2030)**



Outdoor recreation need is compounded by continuing population growth.

Continuing Urbanization of the Population

Figure 5.2. Oregon urban and rural population shares, 1860-2010³⁷



In general, outdoor recreation skills have decreased more amongst urban and suburban households than rural households.

SCORP Planning Components – Statewide Resident Outdoor Recreation Survey

An Oregon population survey: (Conducted by OPRD with technical assistance from Kreg Lindberg - OSU)

- Oregonians of Spanish/ Hispanic/ Latino descent
- Oregonians of Asian descent (including South Asian and East/ Southeast Asian)
- Oregon's families with children
- Aging – Young (ages 60-74)
- Aging – Middle (ages 75-84)
- Low-income Oregonians (annual household income <\$25k)
- Oregon's male and female populations.
- Oregon's urban, suburban, and rural populations.

Outdoor Recreation in Oregon



A Study Conducted by:



Oregon Parks and Recreation Department

2017 Oregon Outdoor Recreation Survey

Survey response rate – 20%

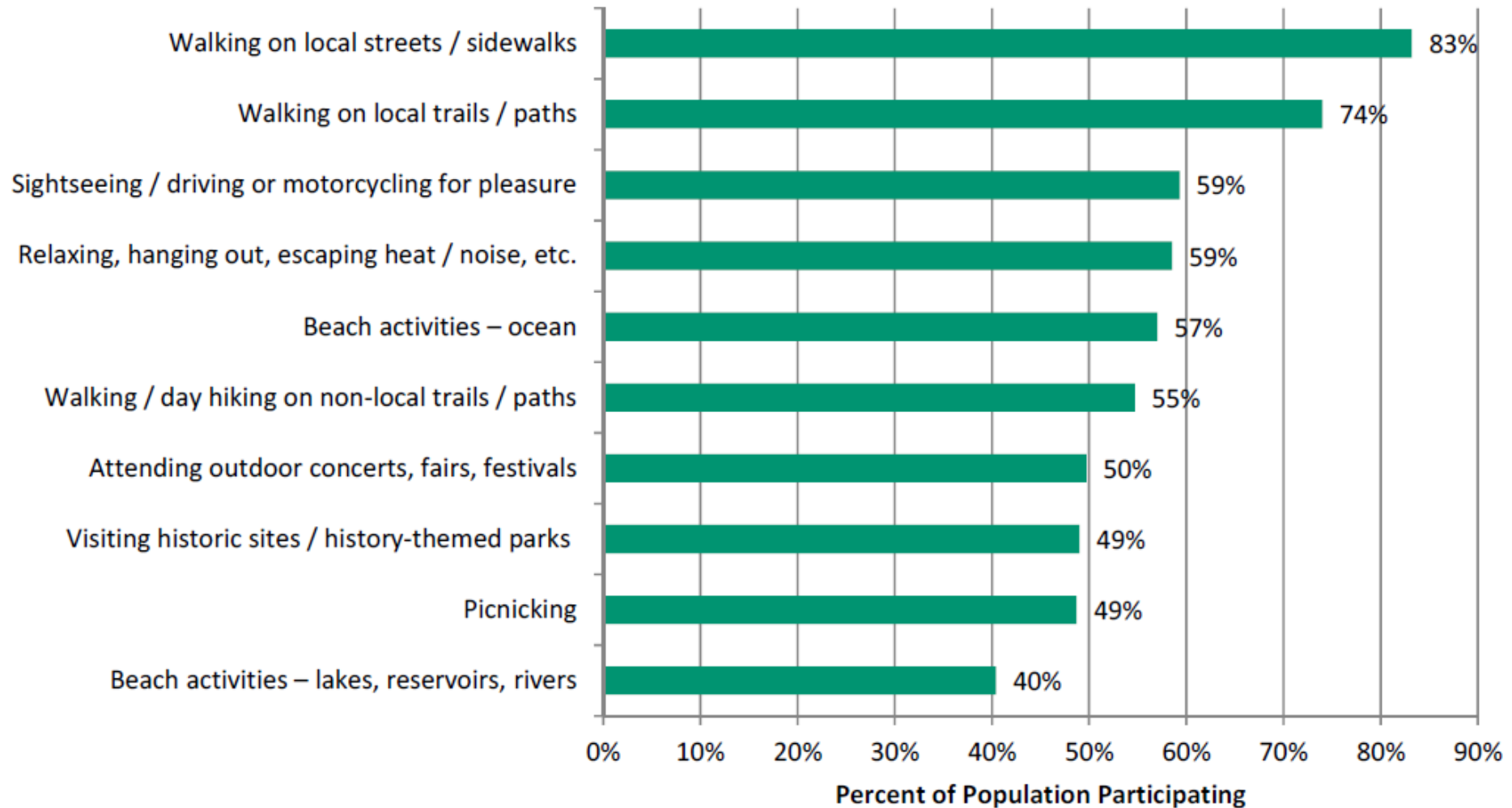
	Number	% of Mailed	% of Delivered
Mailed	17,016		
Delivered	15,351	90%	
Completed	3,069	18%	20%

2017 Oregon Outdoor Recreation Survey

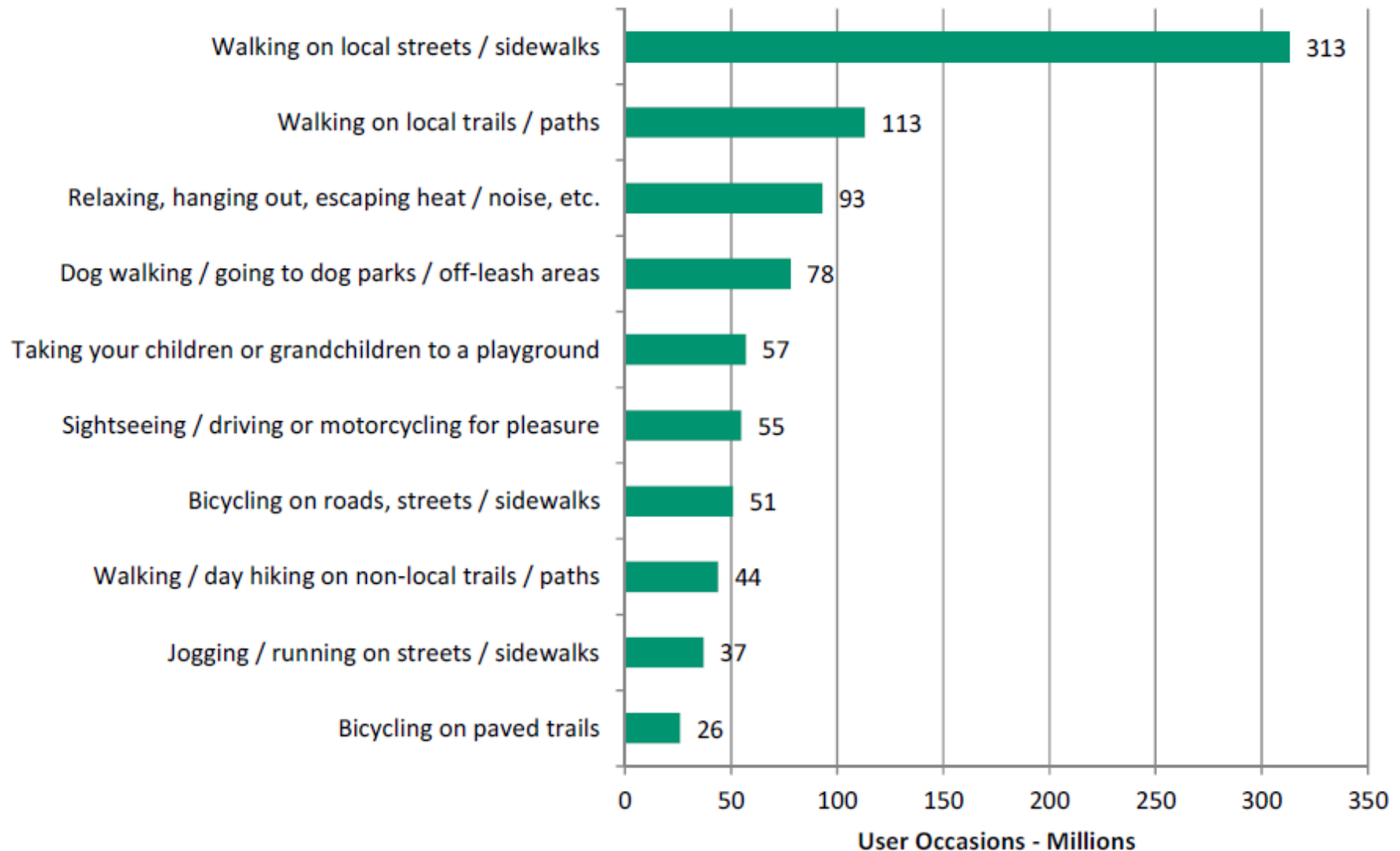
Total respondents by demographic group probability and online research samples

	Participant	Non-participant	Total
Asian	377	11	408
Latino	390	18	408
Families with Children	1,041	--	1,041
Aging - Young	666	52	718
Aging - Middle	381	83	464
Urban	732	45	777
Suburban	1,257	86	1,343
Rural	1,054	62	1,116

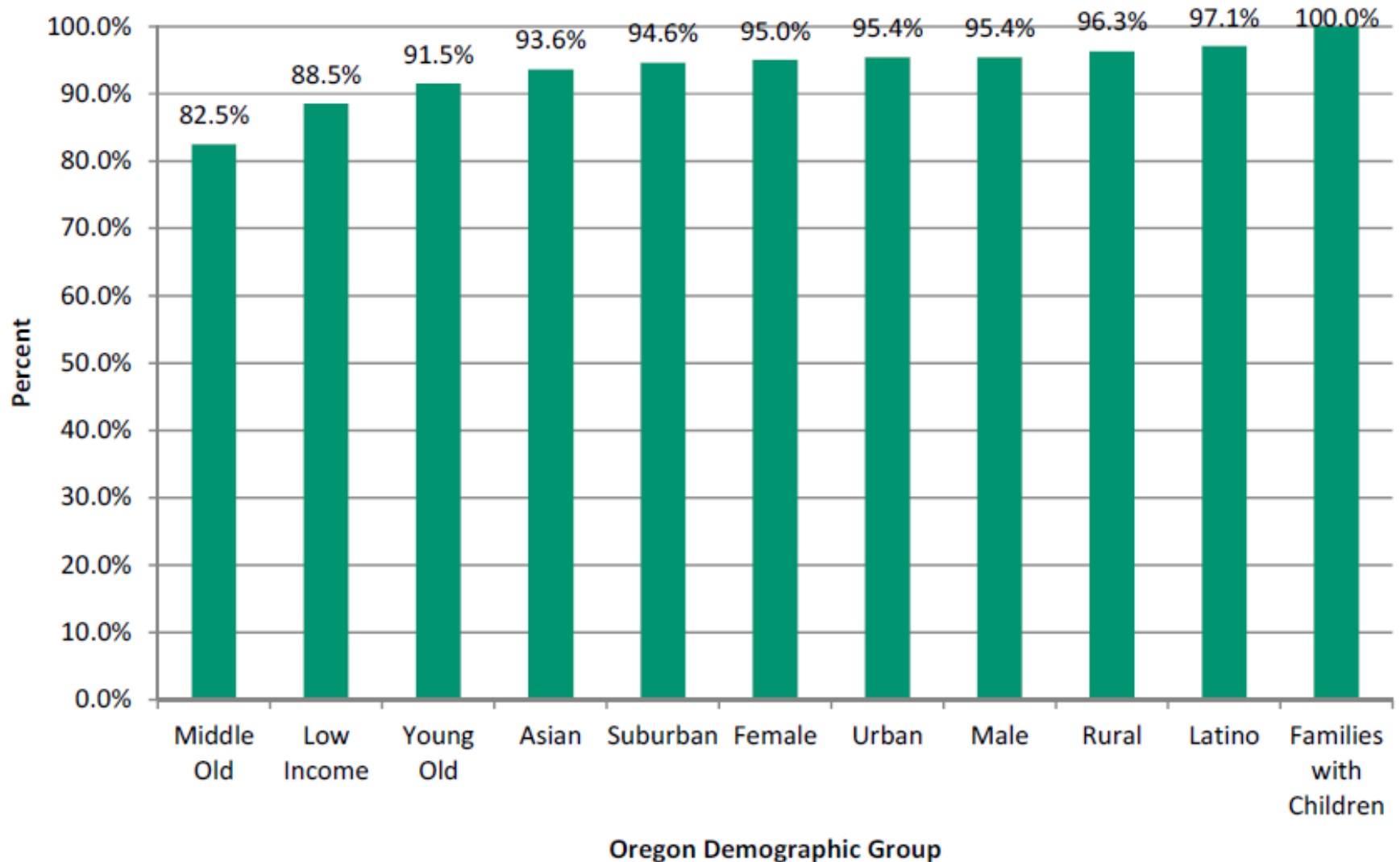
State Scale – Top Activities (% Of Population)



State Scale – Top Activities (User Occasions)



Total Percent of Demographic Group Participating in One or More Outdoor Activities, 2017



Percent of Population Participating in Activities, Oregon Resident Demographic Groups, 2017

Table 2.3. Percent of Population Participating in Activities, Oregon Resident Demographic Groups, 2017⁴

Activity	% State Pop	% Latino Pop	% Asian Pop	% Families With Children	% Urban Pop	% Suburban Pop	% Rural Pop	% Low Income Pop (HH Income <\$25 k)	% Young Old (age 60-74)	% Middle Old (age 75-84)	% Male Pop	% Female Pop
Non-motorized Trail Activities												
Walking on local streets / sidewalks	83.2	84.6	80.8	<u>91.4</u>	<u>85.5</u>	84.4	<u>77.3</u>	<u>72.1</u>	<u>75.1</u>	61.7	<u>81.4</u>	<u>85.0</u>
Walking on local trails / paths	74.0	73.3	68.8	<u>84.0</u>	74.9	<u>76.0</u>	<u>68.0</u>	58.5	<u>63.0</u>	37.3	73.3	74.7
Walking / day hiking on non-local trails / paths	54.7	<u>45.3</u>	<u>47.4</u>	<u>61.9</u>	<u>57.7</u>	54.1	51.9	<u>40.3</u>	<u>43.3</u>	19.8	56.3	53.1
Long-distance hiking (back packing)	13.2	11.0	10.5	15.3	<u>16.0</u>	12.7	<u>10.5</u>	11.0	<u>5.2</u>	<u>1.5</u>	<u>16.0</u>	<u>10.5</u>
Jogging / running on streets / sidewalks	26.8	<u>33.8</u>	31.2	38.1	<u>31.3</u>	<u>28.7</u>	<u>16.0</u>	<u>16.0</u>	<u>6.8</u>	<u>1.5</u>	26.9	26.8
Jogging / running on trails / paths	21.2	24.1	24.3	<u>29.8</u>	<u>25.8</u>	22.6	<u>11.6</u>	<u>11.8</u>	<u>5.8</u>	0.8	22.0	20.5
Horseback riding	3.9	4.2	<u>1.2</u>	<u>5.5</u>	<u>2.8</u>	<u>2.7</u>	<u>8.3</u>	5.5	2.9	<u>1.1</u>	3.3	4.5
Bicycling on unpaved trails	14.9	13.4	<u>8.1</u>	<u>22.0</u>	16.0	<u>15.3</u>	12.6	<u>9.5</u>	<u>7.8</u>	<u>1.1</u>	<u>19.6</u>	<u>10.3</u>
Bicycling on paved trails	30.1	28.5	<u>22.7</u>	<u>40.2</u>	<u>36.0</u>	31.3	<u>19.3</u>	<u>18.5</u>	<u>21.0</u>	6.1	<u>32.9</u>	<u>27.4</u>
Bicycling on roads, streets / sidewalks	38.4	37.4	<u>30.8</u>	51.6	<u>45.4</u>	39.4	<u>26.2</u>	<u>29.7</u>	<u>27.2</u>	8.3	<u>41.2</u>	<u>35.6</u>
Motorized Activities												
Class I – All-terrain vehicle riding (3 & 4 wheel ATVs, straddle seat and handle bars)	8.6	<u>12.3</u>	5.8	<u>11.7</u>	<u>4.8</u>	<u>7.5</u>	16.6	8.5	<u>5.9</u>	<u>3.0</u>	<u>9.8</u>	<u>7.5</u>
Class II – Off-road 4-wheel driving (jeeps, pick-ups, dune buggies, SUVs)	10.1	11.3	7.0	<u>13.9</u>	8.7	<u>8.4</u>	<u>15.9</u>	11.3	<u>6.6</u>	<u>2.7</u>	<u>12.9</u>	<u>7.3</u>
Class III – Off-road motorcycling	3.2	4.5	1.7	<u>5.2</u>	3.7	<u>2.3</u>	<u>4.6</u>	<u>0.8</u>	<u>1.0</u>	<u>0.4</u>	<u>5.1</u>	<u>1.3</u>
Class IV – Riding UTVs / side-by-side ATVs (non-straddle seat, driver and passenger sit side-by-side in the vehicle, steering wheel for steering control)	4.1	5.0	<u>1.2</u>	5.1	<u>2.2</u>	<u>3.1</u>	<u>8.8</u>	3.7	2.9	<u>1.1</u>	4.0	4.2

⁴ Activities participation rates with a statistically significant difference with the overall population participation rate (p-value $\leq .05$) are underlined. Activity differences with an effect size for a Chi-square analysis of 0.15 and above are identified as large differences and are bolded and shaded.

Analysis Identifies the Most Underserved Populations in Oregon:

1. Middle Old (age 75-84)
2. Low Income (Household income <\$25,000)
3. Asian
4. Young Old (age 60-74)

Table 2.1. Comparison of percent of population participating in activities between resident demographic groups and all Oregon residents, 2017

Target Demographic Group	# of Activities With Statistically Higher Participation Than Statewide Participation %	# of Activities With Statistically Lower Participation Than Statewide Participation %	# of Activities With No Statistical Difference With Statewide Participation %	Total Activities
Families with Children	40	2	14	56
Male	16	14	26	56
Female	15	15	26	56
Rural	14	19	23	56
Urban	13	12	31	56
Suburban	6	8	42	56
Latino	6	16	34	56
Young Old	4	34	18	56
Asian	1	29	26	56
Low Income	0	37	19	56
Middle Old	0	50	6	56

Table 2.2. Comparison of mean participating times for all activities between resident demographic groups and all Oregon residents, 2017

Demographic Group	Mean Annual Participation Times - Respondent
State Population	354.00
Families with Children	443.60
Urban	396.72
Female	360.64
Male	347.24
Suburban	341.19
Rural	326.27
Low Income	312.30
Latino	300.40
Young Old	282.98
Asian	249.28
Middle Old	164.11

Statewide Participation by Type of Outdoor Recreation Area

Recreation Area Type	Did you visit this type of area in last 12 months?			Mean Days Per Year For This Type of Area in Last 12 Months	Percentage Use of the Types of Areas For The Average Survey Respondent
	Yes	No	Don't Know		
Local / municipal parks	89.4	7.8	2.0	15.3	33.2
County parks	63.2	19.2	17.6	7.3	15.8
State parks, forests, or game lands	83.2	12.0	4.8	8.7	18.7
National parks, forests, and recreation areas	73.0	20.5	6.6	6.9	15.0
Private / commercial areas	34.9	45.9	19.2	4.9	10.6
Other	12.2	50.9	36.6	3.1	6.7

Local/ municipal parks experienced the highest percentage of use, followed by state parks/forests/game lands.

Statewide Likelihood and Priority Need for Camping Type

Camping Type	How likely to use camping type in Oregon*						Level of priority need for camping type near your community*					
	Mean	1	2	3	4	5	Mean	1	2	3	4	5
RV sites	2.5	48.8	10.1	9.8	6.3	25.0	2.4	42.9	12.3	19.8	11.0	13.9
Cabins or yurts w/ heat, lights	3.2	20.9	14.1	19.8	15.8	29.5	3.0	20.1	15.2	26.3	19.1	19.3
Cabins or yurts w/ heat, lights, bathroom, kitchen	3.2	21.6	13.8	17.3	15.7	31.6	3.0	22.4	15.5	24.3	17.7	20.1
Drive-in tent sites	3.6	18.9	7.5	13.7	14.7	45.2	3.4	16.4	9.1	23.4	21.5	29.6
Hike-in tent sites	2.6	37.5	14.3	16.4	13.2	18.7	2.8	28.3	15.0	24.3	16.3	16.1
Hiker-biker sites	2.0	55.6	16.7	12.0	6.9	8.7	2.4	37.8	16.9	24.4	11.3	9.6
Other type	2.2	63.2	2.1	7.2	4.7	22.8	2.3	52.4	6.0	16.8	6.8	17.9

* Means and Percentages for 5-point Likert Scale

(1 = "Not at all likely" or "Lowest priority need" to 5 = "Very likely" or "Highest priority need")

- **Drive-in tent campsites had the largest proportion of very likely to use responses. Similarly, drive-in tent campsites had the largest proportion of highest priority need. RV sites had the largest proportion of lowest priority need.**

Statewide Likelihood and Priority Need for Camping Type

Camping Type	Demographic Group											
	General Population	Latino	Asian	Families with Children	Urban	Suburban	Rural	Low Income	Young Old	Middle Old	Male	Female
RV sites	2.4	2.2	2.1	2.3	2.1	2.3	2.7	2.2	2.8	2.7	2.4	2.4
Cabins or yurts w/ heat, lights	3.0	3.2	3.2	3.1	3.1	3.1	2.9	3.0	3.0	2.5	2.8	3.2
Cabins or yurts w/ heat, lights, bathroom, kitchen	3.0	3.1	3.3	3.1	3.0	3.0	2.9	3.0	2.9	2.6	2.8	3.1
Drive-in tent sites	3.4	3.4	3.6	3.5	3.6	3.5	3.2	3.6	3.1	2.5	3.4	3.4
Hike-in tent sites	2.8	2.9	3.0	2.9	3.0	2.8	2.6	2.9	2.3	1.9	2.8	2.7
Hiker-biker sites	2.4	2.5	2.5	2.4	2.6	2.4	2.2	2.7	2.1	1.7	2.4	2.3
Other type	2.3	2.4	2.3	2.4	2.4	2.1	2.5	2.7	2.3	1.6	2.3	2.3

* Means and Percentages for 5-point Likert Scale (1 = "Lowest priority need" to 5 = "Highest priority need")

- The general pattern of priority need from statewide reporting are maintained when the data is disaggregated to demographic groups.



Identification of Funding Priorities

Q17. Now please tell us about your priorities for the future – what should park and forest agencies invest in? For each of the following amenities, please indicate the level of priority for future investment – separately for in your community and outside your community. “In your community” amenities refer to city / municipal parks, whereas “outside your community” amenities refer to state and national parks and forests.

Example, If you feel that more nature and wildlife viewing areas is a high priority in your community, but only a slight priority outside your community, you would circle 5 in the first column and 2 in the second column for that row.

Outdoor recreation amenity	Priority for outdoor recreation amenities in Oregon 1 = Lowest priority need, 5 = Highest priority need									
	In your community					Outside your community				
Children’s playgrounds and play areas made of natural materials (logs, water, sand, boulders, hills, trees)	1	2	3	4	5	1	2	3	4	5
Children’s playgrounds and play areas built with manufactured structures like swingsets, slides, and climbing apparatuses	1	2	3	4	5	1	2	3	4	5
Picnic areas and shelters for <u>small</u> visitor groups	1	2	3	4	5	1	2	3	4	5
Picnic areas and shelters for <u>large</u> visitor groups	1	2	3	4	5	1	2	3	4	5
Paved / hard surface walking trails and paths	1	2	3	4	5	1	2	3	4	5
Dirt / other soft surface walking trails and paths	1	2	3	4	5	1	2	3	4	5
Off-street bicycle trails and pathways	1	2	3	4	5	1	2	3	4	5
Community gardens (where you can grow vegetables)	1	2	3	4	5	1	2	3	4	5
Nature and wildlife viewing areas	1	2	3	4	5	1	2	3	4	5
Off-leash dog areas	1	2	3	4	5	1	2	3	4	5
Designated paddling routes for canoes, kayaks, rafts, driftboats	1	2	3	4	5	1	2	3	4	5
Public access sites to waterways	1	2	3	4	5	1	2	3	4	5
Off-highway vehicle trails / areas	1	2	3	4	5	1	2	3	4	5
Low-impact exercise equipment	1	2	3	4	5	1	2	3	4	5
Additional lighting	1	2	3	4	5	1	2	3	4	5
Security cameras in key places	1	2	3	4	5	1	2	3	4	5
More places and benches to observe nature and others	1	2	3	4	5	1	2	3	4	5
More restrooms	1	2	3	4	5	1	2	3	4	5
Cleaner restrooms	1	2	3	4	5	1	2	3	4	5
More shaded areas	1	2	3	4	5	1	2	3	4	5
Multi-use sports fields	1	2	3	4	5	1	2	3	4	5

Funding priorities identified for both within communities and outside of communities.



Statewide SCORP Funding Priorities

Resident Outdoor Recreation Survey Results:

Close-To-Home Priorities	Dispersed-Area Priorities
Dirt/ other soft surface walking trails & paths	Dirt/ other soft surface walking trails & paths
More restrooms	Nature & wildlife viewing areas
Children's playgrounds & play areas made of natural materials (logs, water, sand, boulders, hills, trees)	More restrooms
Nature & wildlife viewing areas	Public access sites to waterways
Public access sites to waterways	More places & benches to observe nature & others



Priorities for the Future, What Park and Forest Agencies Should Invest In

Within Communities, Mean and Percentage for 5-Point Likert (1=lowest priority, 5=highest priority)

Information Source	Demographic Group											
	General Population	Latino	Asian	Families with Children	Urban	Suburban	Rural	Low Income	Young Old	Middle Old	Male	Female
Cleaner restrooms	3.94	4.22	4.16	3.99	3.94	3.93	3.98	4.14	3.99	3.82	3.82	4.06
Dirt / other soft surface walking trails and paths	3.71	3.75	3.57	3.70	3.70	3.78	3.55	3.67	3.69	3.15	3.65	3.77
More restrooms	3.62	3.94	3.76	3.66	3.63	3.61	3.63	3.82	3.78	3.56	3.46	3.78
Children's playgrounds and play areas made of natural materials (logs, water, sand, boulders, hills, trees)	3.54	3.89	3.32	4.01	3.62	3.52	3.48	3.72	3.32	3.24	3.43	3.65
Nature and wildlife viewing areas	3.52	3.85	3.55	3.41	3.64	3.52	3.37	3.67	3.58	3.38	3.44	3.61
Public access sites to waterways	3.52	3.63	3.23	3.50	3.60	3.46	3.57	3.57	3.62	3.35	3.54	3.50
Picnic areas and shelters for <u>small</u> visitor groups	3.48	3.70	3.49	3.59	3.51	3.46	3.50	3.72	3.47	3.47	3.39	3.57
More places and benches to observe nature and others	3.39	3.83	3.69	3.36	3.48	3.39	3.28	3.63	3.44	3.44	3.25	3.53
Security cameras in key places	3.33	3.81	3.80	3.36	3.41	3.36	3.13	3.52	3.38	3.40	3.13	3.52
Paved / hard surface walking trails and paths	3.32	3.48	3.59	3.46	3.33	3.37	3.18	3.40	3.27	3.15	3.15	3.48
Off-street bicycle trails and pathways	3.26	3.43	3.15	3.46	3.40	3.28	3.00	3.28	2.98	2.55	3.25	3.26
Children's playgrounds and play areas built with manufactured structures like swingsets, slides, and climbing apparatuses	3.25	3.61	3.32	3.70	3.27	3.28	3.19	3.40	3.19	3.10	3.16	3.35
More shaded areas	3.25	3.77	3.55	3.31	3.24	3.28	3.18	3.53	3.20	3.22	3.08	3.41
Picnic areas and shelters for <u>large</u> visitor groups	3.05	3.50	3.13	3.20	3.00	3.03	3.14	3.36	2.92	2.85	2.90	3.19
Additional lighting	3.02	3.50	3.62	3.12	3.12	3.06	2.79	3.30	2.85	2.89	2.83	3.21
Community gardens (where you can grow vegetables)	2.94	3.45	3.04	2.99	3.24	2.84	2.76	3.45	2.61	2.56	2.68	3.20
Off-leash dog areas	2.92	3.09	2.79	2.91	2.97	2.89	2.94	3.11	2.89	2.37	2.91	3.02
Multi-use sports fields	2.80	3.30	3.14	3.09	2.84	2.80	2.76	2.89	2.55	2.57	2.81	2.80
Designated paddling routes for canoes, kayaks, rafts, driftboats	2.79	3.14	2.83	2.88	2.87	2.77	2.74	2.84	2.61	2.20	2.68	2.90
Low-impact exercise equipment	2.48	3.23	2.86	2.58	2.49	2.55	2.30	2.84	2.29	2.29	2.31	2.64
Off-highway vehicle trails / areas	2.44	2.84	2.58	2.52	2.32	2.44	2.62	2.89	2.25	2.09	2.54	2.35

Outside Your Community Priority for the Future, What Park and Forest Agencies Should Invest In, Oregon - Mean and Percentage for 5-Point Likert (1= "Lowest priority need" to 5= "Highest priority need" - ordered by mean)

Information Source	Demographic Group											
	General Population	Latino	Asian	Families with Children	Urban	Suburban	Rural	Low Income	Young Old	Middle Old	Male	Female
Cleaner restrooms	3.89	4.07	4.10	3.90	3.98	3.98	3.82	3.80	3.98	3.84	3.92	3.89
Dirt / other soft surface walking trails and paths	3.68	3.62	3.47	3.63	3.61	3.71	3.23	3.65	3.72	3.72	3.72	3.55
Nature and wildlife viewing areas	3.65	3.78	3.70	3.56	3.74	3.73	3.57	3.59	3.71	3.81	3.62	3.51
More restrooms	3.59	3.80	3.79	3.63	3.73	3.76	3.57	3.48	3.71	3.56	3.61	3.59
Public access sites to waterways	3.57	3.41	3.22	3.54	3.53	3.66	3.45	3.61	3.54	3.63	3.52	3.63
More places and benches to observe nature and others	3.36	3.65	3.65	3.32	3.64	3.47	3.40	3.28	3.45	3.41	3.37	3.29
Picnic areas and shelters for <u>small</u> visitor groups	3.34	3.39	3.41	3.43	3.47	3.31	3.28	3.30	3.38	3.36	3.31	3.37
Children's playgrounds and play areas made of natural materials (logs, water, sand, boulders, hills, trees)	3.22	3.40	3.14	3.58	3.43	3.02	2.93	3.14	3.30	3.24	3.24	3.16
Security cameras in key places	3.21	3.64	3.66	3.25	3.44	3.29	3.31	3.04	3.37	3.18	3.27	3.09
Off-street bicycle trails and pathways	3.18	3.34	3.11	3.35	3.15	2.88	2.53	3.20	3.15	3.28	3.20	2.96
More shaded areas	3.15	3.62	3.49	3.19	3.40	3.18	3.06	3.02	3.28	3.09	3.20	3.10
Paved / hard surface walking trails and paths	3.14	3.29	3.38	3.25	3.22	3.04	3.07	2.99	3.30	3.14	3.19	3.03
Picnic areas and shelters for <u>large</u> visitor groups	2.98	3.25	3.13	3.09	3.16	2.89	2.81	2.87	3.08	2.92	2.98	3.04
Children's playgrounds and play areas built with manufactured structures like swingsets, slides, and climbing apparatuses	2.90	3.20	3.04	3.25	3.17	2.77	2.71	2.84	2.95	2.88	2.92	2.84
Designated paddling routes for canoes, kayaks, rafts, driftboats	2.90	3.04	3.00	3.04	2.92	2.72	2.32	2.82	2.97	3.01	2.86	2.84
Additional lighting	2.88	3.41	3.46	2.98	3.12	2.75	2.74	2.70	3.07	2.90	2.94	2.71
Off-leash dog areas	2.80	2.96	2.73	2.81	3.04	2.72	2.20	2.70	2.90	2.85	2.76	2.84
Community gardens (where you can grow vegetables)	2.63	3.19	2.77	2.68	3.20	2.35	2.31	2.44	2.83	2.81	2.54	2.62
Off-highway vehicle trails / areas	2.58	2.83	2.77	2.72	2.95	2.34	2.25	2.71	2.45	2.51	2.55	2.73
Multi-use sports fields	2.58	3.12	2.89	2.85	2.72	2.34	2.38	2.57	2.60	2.55	2.62	2.54
Low-impact exercise equipment	2.28	2.92	2.63	2.38	2.62	2.09	2.07	2.15	2.42	2.31	2.31	2.18

Statewide SCORP Funding Priorities

Recreation Provider Survey Results:

Close-To-Home Priorities	Dispersed-Area Priorities
Community trail systems	Restrooms
Restrooms	RV/ trailer campgrounds & facilities
Children's playgrounds & play areas built with manufactured structures	Day-use hiking trails
Picnic areas & shelters for small visitor groups	Connecting trails into larger trail systems
Trails connected to public lands	Interpretive displays
Picnicking/ day-use facilities	

Which Actions In Your Community Would Increase Physical Activity?

Q31. Would the creation or expansion of any of the following programs or facilities in your community cause you or members of your household to be more physically active? For each action, circle the number indicating whether it would have no effect, would lead to a small increase in your physical activity, or would lead to a large increase.

Action	No effect	Lead to small increase	Lead to large increase
Fitness classes (e.g. yoga, tai chi, pilates, zumba, cross-fit, water exercise)	1	2	3
Walking trails or paths	1	2	3
Bicycle trails or paths	1	2	3
Outdoor exercise equipment (e.g., elliptical trainer, stationary bike, rower)	1	2	3
Organized walks	1	2	3
Improved walking routes to parks	1	2	3
More parks closer to where I live	1	2	3
Community gardens (where you can grow vegetables)	1	2	3
Separate areas in parks for older adults to be with others their age	1	2	3
Functional strength training (training the body for the activities performed in daily life)	1	2	3
Adult dance classes	1	2	3
Adult sports leagues	1	2	3
Senior activity centers	1	2	3
Provide accessibility for people with disabilities	1	2	3
Provide seniors-only park areas	1	2	3
Classes tailored to specific health concerns (e.g., heart disease, arthritis, diabetes or falls)	1	2	3



In Your Community Actions, How Would Actions Effect Physical Activity, Oregon General Population, Mean for 3-Point Likert (1=no effect, 2=lead to small increase, 3=lead to large increase)

Action	Mean	Percent		
		1	2	3
Walking trails or paths	2.21	16.1	46.5	37.4
More parks closer to where I live	1.96	33.1	37.6	29.3
Improved walking routes to parks	1.93	34.5	38.2	27.2
Bicycle trails or paths	1.90	37.9	34.1	27.9
Fitness classes (e.g., yoga, tai chi, pilates, zumba, cross-fit, water exercise)	1.72	46.9	34.2	19.0
Outdoor exercise equipment (e.g., elliptical trainer, stationary bike, rower)	1.60	55.4	29.4	15.2
Functional strength training (training the body for the activities performed in daily life)	1.56	56.3	31.3	12.4
Community gardens (where you can grow vegetables)	1.53	61.2	24.6	14.2
Adult sports leagues	1.49	63.0	25.3	11.8
Organized walks	1.48	62.4	27.3	10.4
Classes tailored to specific health concerns (e.g., heart disease, arthritis, diabetes or falls)	1.46	64.9	24.5	10.7
Adult dance classes	1.45	66.1	22.5	11.4
Provide accessibility for people with disabilities	1.40	70.2	19.3	10.6
Separate areas in parks for older adults to be with others their age	1.36	72.3	19.9	7.8
Senior activity centers	1.35	72.9	19.6	7.5
Provide seniors-only park areas	1.27	78.9	14.9	6.1

In Your Community Actions, How Would Actions Effect Physical Activity, Oregon Demographic Group, Mean for 3-Point Likert (1=no effect, 2=lead to small increase, 3=lead to large increase)

Actions	Demographic Group											
	General Population	Latino	Asian	Families with Children	Urban	Suburban	Rural	Low Income	Young Old	Middle Old	Male	Female
Walking trails or paths	2.21	2.36	2.30	2.30	2.23	2.25	2.10	2.21	2.09	1.76	2.14	2.29
More parks closer to where I live	1.96	2.25	2.14	2.13	2.01	1.99	1.82	2.03	1.76	1.50	1.91	2.01
Improved walking routes to parks	1.93	2.20	2.07	2.05	1.94	1.98	1.77	1.95	1.77	1.49	1.87	1.99
Bicycle trails or paths	1.90	2.00	1.92	2.07	1.95	1.94	1.73	1.87	1.65	1.29	1.93	1.87
Fitness classes (e.g., yoga, tai chi, pilates, zumba, cross-fit, water exercise)	1.72	1.99	1.78	1.78	1.76	1.74	1.63	1.77	1.62	1.37	1.55	1.89
Outdoor exercise equipment (e.g., elliptical trainer, stationary bike, rower)	1.60	1.97	1.81	1.76	1.62	1.64	1.48	1.68	1.39	1.21	1.53	1.66
Functional strength training (training the body for the activities performed in daily life)	1.56	1.90	1.69	1.59	1.58	1.58	1.47	1.69	1.50	1.39	1.52	1.60
Community gardens (where you can grow vegetables)	1.53	1.86	1.66	1.61	1.60	1.53	1.43	1.81	1.35	1.24	1.45	1.60
Adult sports leagues	1.49	1.75	1.58	1.66	1.50	1.51	1.43	1.52	1.24	1.12	1.49	1.48
Organized walks	1.48	1.80	1.64	1.53	1.48	1.49	1.46	1.65	1.42	1.34	1.37	1.59
Classes tailored to specific health concerns (e.g., heart disease, arthritis, diabetes or falls)	1.46	1.71	1.60	1.43	1.47	1.46	1.45	1.73	1.56	1.56	1.39	1.53
Adult dance classes	1.45	1.75	1.59	1.49	1.50	1.45	1.40	1.60	1.35	1.22	1.33	1.57
Provide accessibility for people with disabilities	1.40	1.71	1.50	1.39	1.43	1.38	1.43	1.85	1.44	1.48	1.37	1.44
Separate areas in parks for older adults to be with others their age	1.36	1.58	1.50	1.31	1.36	1.35	1.37	1.57	1.45	1.40	1.32	1.39
Senior activity centers	1.35	1.51	1.48	1.27	1.34	1.34	1.36	1.61	1.52	1.59	1.32	1.37
Provide seniors-only park areas	1.27	1.46	1.46	1.22	1.29	1.27	1.25	1.52	1.39	1.38	1.25	1.29

SCORP Planning Components – Oregon Outdoor Recreation Metrics: Health, Physical Activity, and Value

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)
19 November, 2018

Randall S. Rosenberger
Tara Dunn



Corvallis, OR 97331

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

2019-2023 Oregon Statewide Comprehensive Outdoor Recreation Plan
Supporting Documentation

Part B:

Total Net Economic Value from Residents' Outdoor Recreation Participation in Oregon

FINAL REPORT (Revised)
19 November, 2018

Randall S. Rosenberger
Department of Forest Ecosystems & Society



Corvallis, OR 97331



STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

Health Benefits Estimates

Recreation Health Impact Estimator Outputs Page

Annual physical activity benefit per 30920 participants

	YLL	YLD	DALYs (YLL+YLD)	Value	Deaths
Physical Activity	-18.17	-16.38	-34.55	-\$1,555,341.28	-2.8383

Health Outcomes by Disease

	YLL	YLD	DALYs (YLL+YLD)	Value	Deaths
Breast cancer	-0.36700	-0.13704	-0.50404	-\$64,948.74	0
Hypertensive HD*	-0.25359	-0.05753	-0.31112	-\$520,947.81	0
Inflammatory HD*	0.00000	0.00000	0.00000		0
Ischemic HD*	-7.99766	-1.87671	-9.87437		-1
Stroke*	-3.82166	-3.46318	-7.28484		-1
Colon cancer	-0.13373	-0.02152	-0.15525	-\$18,552.85	0
Depression	-0.01318	-2.28350	-2.29667	-\$76,889.91	0
Dementia	-2.32781	-2.99158	-5.31939	-\$265,186.38	-1
Diabetes	-3.25357	-5.55067	-8.80424	-\$481,750.98	0
TOTAL	-18.16820	-16.38172	-34.54992	-\$1,555,341.28	-3

*Cardiovascular diseases

DALYs

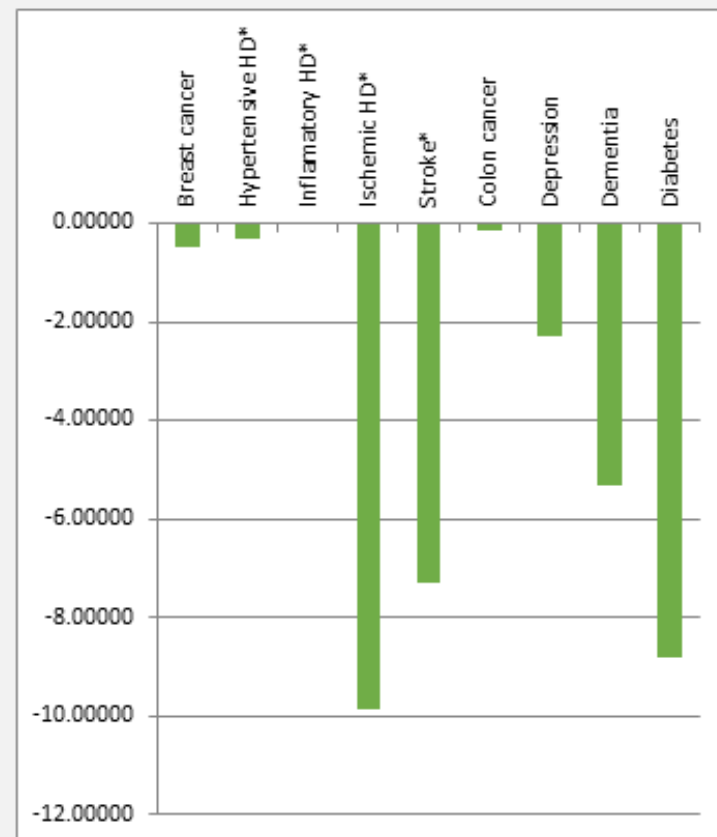


Table 1. Energy Expenditures and Cost of Illness Savings from 2017 Outdoor Recreation Activity Participation in Oregon (2018 USD)

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
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
		TOTAL OREGON kCAL (billion)		502.622	TOTAL OREGON COI SAVINGS (\$millions)		\$735.271 - \$1,415.872		

Health Benefits Estimates

\$1.42 billion year in Cost of Illness Savings

Top three activities:

Walking on local streets / sidewalks = \$630 million

Jogging / running on streets / sidewalks = \$146 million

Walking on local trails / paths = \$126 million

17% of the estimated \$8.1 billion spent on chronic illnesses, or 4% of total health care expenditures in Oregon

Total Net Economic Value

- Total value net of the costs of participation
 - Net Economic Value = Net Benefits = Net Willingness to Pay = Consumer Surplus

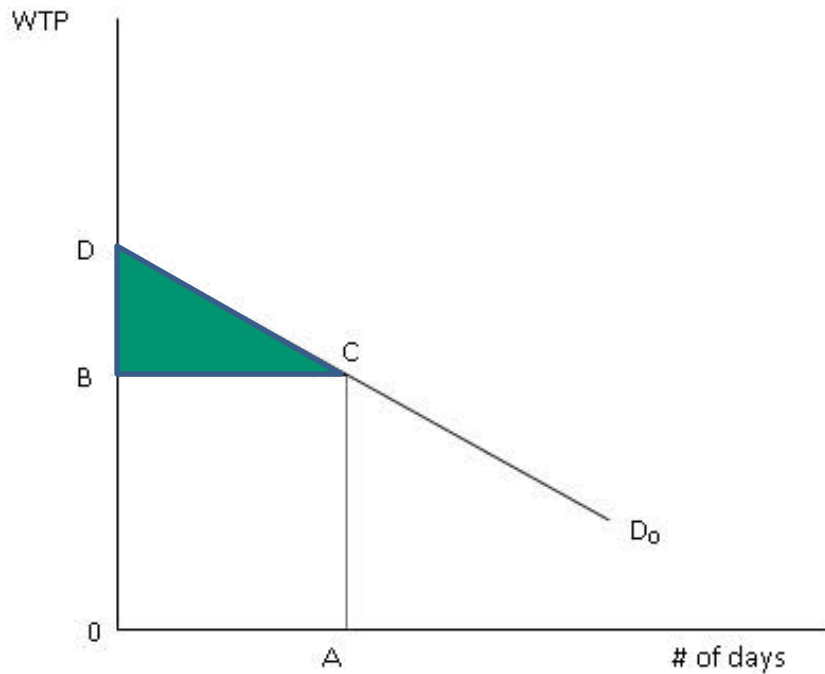


Figure 1: Consumer surplus in demand

The maximum amount an individual is willing to pay to participate in the activity minus the costs incurred in participating.

Recreation Use Values Database

- U.S. and Canada
- 1958-2015
- 421 documents
- 3,192 estimates of value
- 132 fields coded
- 42 recreation activity categories

Benefit Transfer of Outdoor Recreation Use Values

RANDALL S. ROSENBERGER AND JOHN B. LOOMIS



A Technical Document Supporting the Forest Service Strategic Plan (2000 Revision)

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE



United States Department of Agriculture

Recreation Economic Values for Estimating Outdoor Recreation Economic Benefits From the National Forest System

Randall S. Rosenberger, Eric M. White, Jeffrey D. Kline, and Claire Cvitanovich



Forest Service

Pacific Northwest Research Station

General Technical Report PNW-GTR-957

August 2017

recvaluation.forestry.oregonstate.edu

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Recreation Use Values Database



Jackson Lake, by Kylie Brooks

Welcome to the 2016 updated Recreation Use Values Database (RUVD) for North America. What you will find here are links to the database, bibliography, and background information. If you have questions, comments and/or suggestions about the RUVD, would like assistance in using it for benefit transfer, or would like to submit documentation on North American studies not in it, please contact Dr. Randall Rosenberger (R.Rosenberger@oregonstate.edu).

We also are interested in how you apply benefit transfer for recreation valuation, so please submit documentation about your applications.

Table 1. User occasions, activity days, and total net economic value.

SCORP Activity	RUVD Activity	2017 SCORP User Occasions (million)	Activity Days per User Occasion	2017 Activity Days (million)	MRA RUVD Value / Person / Activity Day (\$; 2018 USD)	Total Net Economic Value (\$million; 2018 USD)
Non-motorized Trail Activities						
Walking on local streets / sidewalks	Walking	312.726	0.993	310.586	\$14.47	\$4,493.226
Walking on local trails / paths	Walking	113.083	0.998	112.843	\$14.47	\$1,632.495
Walking / day hiking on non-local trails / paths	Hiking	44.035	1	44.035	\$87.66	\$3,860.354
Long-distance hiking (backpacking)	Backpacking	4.915	2.080	10.222	\$23.33	\$238.470
Jogging / running on streets / sidewalks	Jogging / running	37.224	1	37.224	\$69.29	\$2,579.240
Jogging / running on trails / paths	Jogging / running	17.284	1	17.284	\$69.29	\$1,197.586
Horseback riding	General other recreation	2.626	1	2.626	\$72.00	\$189.074
Bicycling on unpaved trails	Mountain biking	11.403	1	11.403	\$131.03	\$1,494.086
Bicycling on paved trails	Leisure biking	26.105	1	26.105	\$58.14	\$1,517.812
Bicycling on roads / streets / sidewalks	Leisure biking	51.251	0.996	51.061	\$58.14	\$2,968.863
Sub-total - Non-motorized Trail Activities		620.651	---	623.390	---	\$20,171.206
Motorized Activities						
Class I – All-terrain vehicle riding (3 & 4 wheel ATVs, straddle seat and handle bars)	Off-road vehicle driving	5.746	1	5.746	\$50.38	\$289.475
Class II – Off-road 4-wheel driving (jeeps / pick-ups / dune buggies / SUVs)	Off-road vehicle driving	8.895	1	8.895	\$50.38	\$448.157
Class III – Off-road motorecycling	Off-road vehicle driving	2.038	1	2.038	\$50.38	\$102.672

Total Net Economic Value

SCORP Activity	Total Net Economic Value
Non-motorized Trail Activities	\$20.2 billion
Outdoor Leisure / Sporting Activities	\$11.8 billion
Nature Study Activities	\$10.8 billion
Non-motorized Water-based and Beach Activities	\$3.8 billion
Hunting and Fishing Activities	\$3.5 billion
Vehicle-based Camping Activities	\$1.8 billion
Motorized Activities	\$1.4 billion
Non-motorized Snow Activities	\$0.9 billion

\$54.2 billion

Figure 3. SCORP activity categories by total net economic value

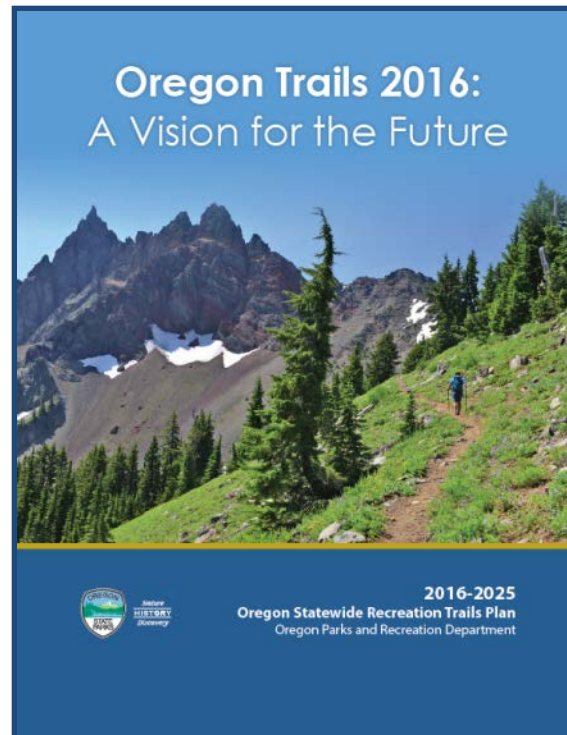
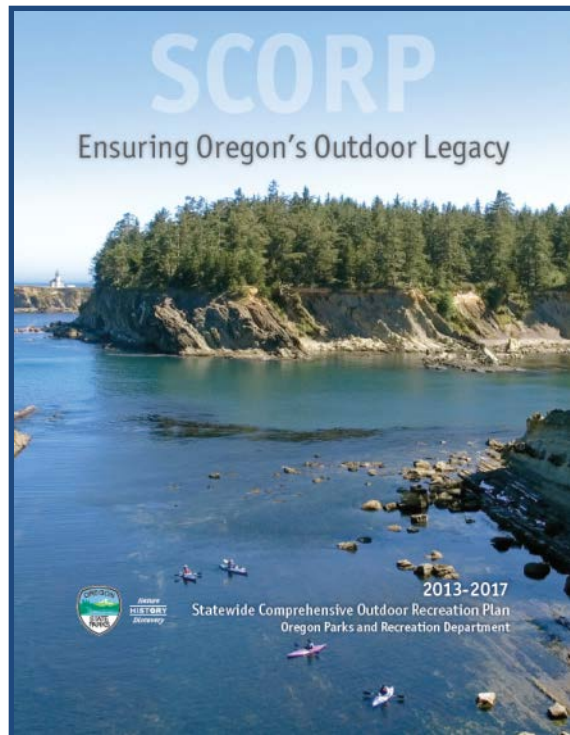
Direct economic impacts from outdoor recreation spending in Oregon:
\$12 billion - \$16 billion

SCORP Activity	Total Net Economic Value
Walking on local streets / sidewalks	\$4.5 billion
Walking / day hiking on non-local trails / paths	\$3.9 billion
Other nature / wildlife / forest / wildflower observation	\$3.5 billion
Sightseeing / driving or motorcycling for pleasure	\$3.1 billion
Relaxing / hanging out / escaping heat / noise, etc.	\$3.0 billion
Bicycling on roads / streets / sidewalks	\$3.0 billion
Jogging / running on streets / sidewalks	\$2.6 billion
Bird watching	\$2.4 billion
Fishing	\$2.2 billion
Beach activities - ocean	\$2.0 billion

Figure 2. Top ten SCORP activities by total net economic value

SCORP Planning Components – Need For Non-motorized Trail Funding

Recent Statewide Planning efforts have identified a need for additional non-motorized trail funding in Oregon.



Planning Recommendations

- 1. Connect trails into larger trail systems**
- 2. Need for improved trail maintenance & major rehabilitation**
- 3. Recognize and strengthen park and recreation's role in increasing physical activity in Oregon**
- 4. Support the development and ongoing maintenance of priority Signature Trail systems**



SCORP Advisory Subcommittee Recommendations:

- 1. Funding need for non-motorized trail development and major rehabilitation within Urban Growth Boundaries.**
- 2. Funding need for non-motorized trail ongoing maintenance and major rehabilitation in dispersed settings.**
- 3. Funding need for Signature Trail development and maintenance.**



Nine Chapter Components:

- 1. Identifying the primary benefits of a new non-motorized trails fund for the state.**
- 2. Identifying the existing sources of funding for non-motorized trails.**
- 3. Identifying a total annual dollar estimate for the current level of need.**
- 4. Recommending a total annual dollar amount needed for a proposed dedicated non-motorized trails fund.**



Nine Chapter Components:

5. Describing the objectives of a non-motorized trails fund.
6. Identifying the types of non-motorized projects to be funded and specific organizations/ agencies that would qualify for funding.
7. Identifying example funding sources.
8. Describing options for administering a new non-motorized trails fund.
9. Identifying implementation actions for moving forward with establishing a dedicated non-motorized trails fund for Oregon.



Total non-motorized trail need estimates, 2018

Trail Need Category	Estimated Need	% of Total Need
Close-To-Home Trail Development	\$502,800,000	78%
Close-To-Home Trail Major Rehabilitation	\$60,900,000	10%
Dispersed-Setting Trail Major Rehabilitation	\$62,000,000	10%
Dispersed-Setting Trail Deferred Maintenance	\$14,700,000	2%
Total	\$640,400,000	



Annual non-motorized trail annual funding allocation for two planning scenarios, Oregon

Trail Need Category	Scenario #1 20 year timeframe	Scenario #2 30 year timeframe
	Annual funding allocation	
Close-To-Home Trail Development	\$20.1 million	\$13.4 million
Close-To-Home Trail Major Rehabilitation	\$2.4 million	\$1.6 million
Dispersed-Setting Trail Deferred Maintenance	\$0.6 million	\$0.4 million
Dispersed-Setting Trail Major Rehabilitation	\$2.5 million	\$1.7 million
Signature Trail Development and Maintenance	\$9.4 million	\$7.9 million
Total Annual Allocation	\$35 million	\$25 million
Total Scenario Allocation	\$700 million	\$750 million

This analysis identifies a funding need of \$50 - \$70 million a biennium

Objectives of a non-motorized trails fund

- 1. Expand the state's outstanding non-motorized trail infrastructure to meet the needs of a growing population.**
- 2. Provide high-quality non-motorized trail experiences that meet the demands of Oregonians.**
- 3. Increase non-motorized trail connectivity to better use the state's existing trail infrastructure and provide more trail opportunities.**
- 4. Strengthen the individual health of Oregonians by enabling them to engage in daily physical activity on non-motorized trails.**



- 5. Strengthen Oregon community health by enabling residents to engage in a range of highly valued non-motorized trail activities.**
- 6. Strengthen the economic health of local economies by providing high-quality non-motorized trail opportunities for non-local residents and out-of-state tourists.**
- 7 Support the development and maintenance of priority signature trail systems* in the state.**



*Examples of signature trails include the Salmonberry Trail, Oregon Coast Trail, Joseph Branch Rail Trail, and trails with Scenic or Regional Trail designation.



Major Benefits of Non-motorized Trails

Objective: Strengthen the individual health of Oregonians

Close-to-home non-motorized linear / trail based activities (i.e., activities that occur on trails, paths, roads, streets, and sidewalks) account for 80% of total Cost of Illness Savings associated with Oregonians participating in 30 outdoor recreation activities of moderate- to vigorous-intensity.

- **\$1.1 billion in COI savings associated with 8 chronic illnesses.**

Findings from the SCORP study: Total Net Economic Value from Residents' Outdoor Recreation Participation in Oregon.

Major Benefits of Non-motorized Trails

Objective: Provide highly valued activities

Total Net Economic Value – Within Communities

- **\$14.4 billion for non-motorized trail activities.**

Total Net Economic Value – Dispersed Settings

- **\$5.8 billion for non-motorized trail activities.**

Findings from the SCORP study: Total Net Economic Value from Residents' Outdoor Recreation Participation in Oregon.

Major Benefits of Non-motorized Trails

Objective: Strengthen the economic health of local economies

Table 4.5. Multiplier effects of non-motorized trail user trip expenditure, out-of-state trail users included; employment in jobs, other measures in dollars

Origin	Employment	Labor Income	Value Added	Output
In-state	21,730	672,448,000	1,038,317,000	1,725,751,000
Out-of-state	2,610	80,694,000	124,598,000	207,090,000
Combined	24,340	753,142,000	1,162,915,000	1,932,841,000

- Statewide, non-motorized trail use by Oregon residents contributes 21,730 jobs, \$672 million in labor income, and \$1.04 billion in value added.
- Inclusion of out-of-state non-motorized trail users is estimated to add another 11% to in-state amounts.

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2019-2023
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