





The Great Outdoors:

Household Consumption of Outdoor Recreation from 2000 to 2022 from the CEX

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Abstract

The 2020 Covid19 pandemic caused many radical impacts on various forms of household consumption. This study looks to explore how households shifted their consumption of traditional recreation activities to and from outdoor recreational products and services. Travel and recreational options such as theme parks, hotels, group tours, museums, cultural events and cruises were unavailable or severely limited in scope during the pandemic. Thus, households were forced to seek other forms of recreation and relaxation – with the apparent growth in outdoor activities. The U.S. Forest Service (USFS) had conducted a study of outdoor recreation activity starting in the 1960's, but this survey was discontinued in **2009**, leaving a gap in our understanding of outdoor recreation. This study looks to compare some of the historic BLS CEX data to the USFS survey results and look to understand how outdoor recreation changed in response to the pandemic and how it is further changing as the result of a return to a new normal in our economy.

Outdoor Recreation

Just what do we consider Outdoor Recreation?

What components of Spending comprise Outdoor Recreation Spending?

Interest in Outdoor Recreation

- Important component of economic activity in many states
- Important component of employment in many states
- Radical Changes during the COVID19 Pandemic
- Interest in how consumption changed during that period
- How is this sector rebounding in terms of activity and spending?
- Will household change their consumption patterns after the shock of COVID19?

So – What is Outdoor Recreation?

- U.S Forest Service conducted a survey on outdoor recreation in the United States from 1960 to 2009.
- Survey had reported usage activity as well as frequency of use.
- Survey is not currently conducted.
- Other Potential Sources of Data:
- U.S. Bureau of Economic Analysis has started to collect and report data on Recreation via the National Income and Product Accounts – the Outdoor Recreation Satellite Account.
- BLS also has the American Time Use Survey
- And the BLS CEX Data ongoing data collection

Various Activities

- Capital Intensive Motorboating, RV's, and such
- Time Intensive Walking, Hiking and Such
- Fee Intensive Theme Parks, Downhill Skiing and such
- Studying these activities will require some discussion as to how best to measure these various items
- Economic Value
- Health Value
- Time Use

How Do we define Outdoor Recreation?

- One Component of the Leisure Sector that include Sports and Travel
- Leisure and Sports in the BLS Time Use Survey
- Part of Entertainment Consumption Group at BLS CEX Survey
- Encompasses a broad range of activities in the U.S. Forest Service Recreational Activities Survey.

BLS Time Use Survey

How Households Spend Their Time



DATA TOOLS

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✓ ECONOMIC RELEASES

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✓

Bureau of Labor Statistics > American Time Use Survey > Home

American Time Use Survey

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The American Time Use Survey (ATUS) measures the amount of time people spend doing various activities, such as paid work, childcare, volunteering, and socializing.

Notices

» Renaming of American Time Use Survey Webpages Read More »

CHARTS Percent of employed people who worked at home and at their workplace on days worked, 2022 annual averages Percent who worked at workplace Percent who worked at home Total Part-time workers Multiple jobholders

NEWS RELEASES

34% of employed persons do some work at home on days they work in 2022

06/22/2023

In 2022, 34 percent of employed persons did some or all of their work at home on days they worked, and 69 percent of employed persons did some or all of their work at their workplace.

HTML | PDF | RSS | Charts

Leisure and sports	5.20	5.58	4.84	95.0	95.8	94.2	5.47	5.82	5.14
Socializing, relaxing, and leisure	4.72	5.04	4.41	93.8	95.0	92.6	5.03	5.30	4.76
Socializing and communicating	0.56	0.51	0.61	28.7	26.8	30.4	1.95	1.90	1.99
Socializing and communicating (except social									
events)	0.50	0.47	0.54	27.5	25.8	29.2	1.83	1.81	1.84
Attending or hosting social events	0.05	0.04	0.07	1.8	1.4	2.1	3.11	3.04	3.15
Relaxing and leisure	4.09	4.46	3.73	90.2	91.9	88.5	4.53	4.85	4.22
Watching TV	2.79	3.06	2.53	76.5	78.5	74.6	3.65	3.90	3.40
Relaxing and thinking	0.35	0.36	0.35	21.6	21.1	22.1	1.64	1.69	1.60
Playing games	0.37	0.52	0.24	14.4	17.2	11.7	2.59	3.00	2.01
Computer use for leisure, excluding games	0.20	0.20	0.20	13.5	12.5	14.4	1.48	1.62	1.36
Reading for personal interest	0.26	0.21	0.32	16.7	13.6	19.7	1.58	1.54	1.61
Arts and entertainment (other than sports)	0.07	0.07	0.07	2.3	2.3	2.4	3.08	3.13	3.03
Sports, exercise, and recreation	0.32	0.37	0.27	20.8	22.0	19.7	1.52	1.67	1.37

See footnotes at end of table.

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Table A-1. Time spent in detailed primary activities and percent of the civilian population engaging in each activity, averages per day by sex, 2022 annual averages — Continued

Activity	Average hours per day, civilian population			Average percent engaged in the activity per day			Average hours per day for persons who engaged in the activity		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Participating in sports, exercise, and recreation	0.29	0.33	0.25	20.1	21.2	19.1	1.44	1.55	1.31
Walking	0.07	0.06	0.08	7.8	6.8	8.7	0.91	0.90	0.92
Attending sporting or recreational events	0.03	0.04	0.02	0.9	1.2	0.6	3.17	3.25	3.04
Travel related to leisure and sports	0.16	0.17	0.16	23.2	23.9	22.6	0.71	0.72	0.70
Telephone calls, mail, and e-mail	0.17	0.12	0.21	18.5	14.7	22.2	0.89	0.82	0.95
Telephone calls (to or from)	0.12	0.08	0.15	12.2	9.3	15.0	0.94	0.90	0.97
Household and personal messages	0.05	0.03	0.06	8.5	6.7	10.3	0.57	0.52	0.61
Household and personal mail and messages	0.02	0.01	0.02	4.0	3.3	4.6	0.39	0.28	0.46
Household and personal e-mail and messages	0.03	0.03	0.04	5.1	3.8	6.4	0.65	0.68	0.64
Travel related to telephone calls	_2	_2	_2	0.4	0.3	0.4	0.39	0.30	_3
Other activities, not elsewhere classified	0.21	0.20	0.22	16.3	14.9	17.6	1.30	1.34	1.27

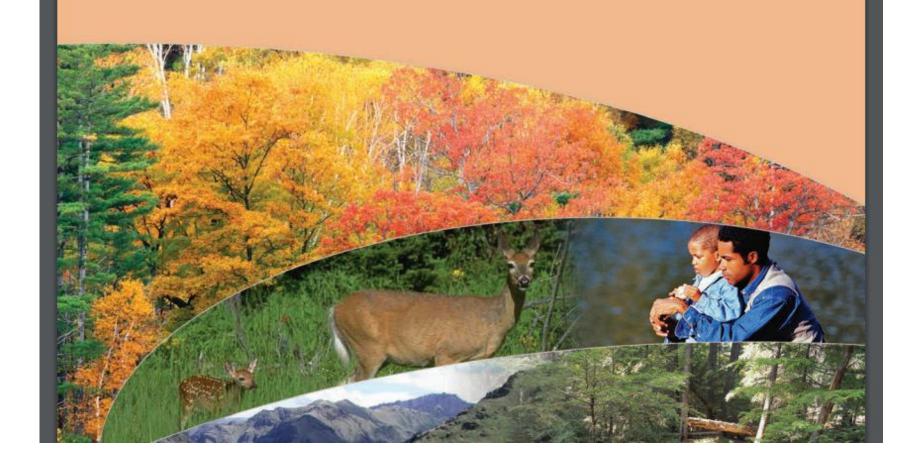
National Survey on Recreation and the Environment

U.S Forest Service – Lead Agency 1960-2009

Outdoor Recreation Trends and Futures

A Technical Document Supporting the Forest Service 2010 RPA Assessment

H. Ken Cordell



This publication presents a national study of outdoor recreation trends as part of the Renewable Resources Planning Act Assessment by the Forest Service, U.S. Department of Agriculture. The objectives are to review past trends in outdoor recreation participation by Americans, to describe in detail current outdoor recreation participation patterns, and to compare patterns across regional and demographic strata. Further objectives include describing recreation activity participation on public and private lands and providing projections of outdoor recreation participation out to the year 2060. One overriding national trend is quite evident: the mix of outdoor activities chosen by Americans and the relative popularity of activities overall have been evolving over the last several decades. One general category of activity that has been showing growth in the first decade of the 21st century is nature-based recreation. Between 2000 and 2009, the number of people who participated in nature based outdoor recreation grew by 7.1 percent and the number of activity days grew about 40 percent. Among types of nature-based recreation, motorized activities showed growth up to about 2005, but then ended up toward the end of the 2000-2009 decade at about the same level as in 2000. The trend in hunting, fishing, and backcountry activities remained relatively flat during this period. Various forms of skiing, including snowboarding, declined during this decade. The clear growth area was within the overall group of activities oriented toward viewing and photographing nature. Generally, outdoor recreation activities are projected to grow in number of participants out to 2060. Population growth is projected to be the primary driver of growth in number of adult participants under each RPA Assessment scenario. The top five activities in terms of growth of number of participants are developed skiing, other skiing, challenge activities, equestrian activities, and motorized water activities. The lowest rates of participant growth are visiting primitive areas, motorized offroad activities, motorized snow activities, hunting, fishing, and floating water activities. At the same time, a number of activities are projected to decline in per-capita adult participation rates.

Recreational Activities

- Level of Activity Hours and Days of Activity
- Growth Rate in Use How Use is changing

- Some activities growing in terms of use
- Some activities are very high in terms of total hours or days
- Some activities have a very high share of households that participate.

Table 4.7—Trends in number and percentage of people ages 16 and older participating in outdoor recreation activities in 1999-2001 and 2005-2009 (for activities with greater than 50 million participants from 2005 through 2009)

	To	otal participar	Percent participating	Percent change		
Activity	1994-1995	1999-2001	2005-2009	2005-2009	1999-2001 to 2005-2009	
	millions					
Walk for pleasure	138.4	175.6	200.0	85.0	13.9	
Gathering of family/friends	128.2	157.6	174.2	74.0	10.5	
Gardening/landscaping for pleasure	-	140.8	157.9	67.1	12.1	
View natural scenery	-	127.1	149.8	63.7	17.9	
Visit outdoor nature center/zoo	110.9	121.0	133.3	56.6	10.2	
Sightseeing	117.5	109.0	123.9	52.7	13.7	
Picnicking	112.1	118.3	121.6	51.7	2.8	

Picnicking	112.1	118.3	121.6	51.7	2.8
View wildflowers/trees	-	93.8	121.3	51.6	29.4
Driving for pleasure	-	107.9	120.5	51.2	11.6
View wildlife besides birds and fish	62.8	94.2	118.1	50.2	25.4
Visit historic sites/monuments	91.6	96.1	103.9	44.1	8.1
Swimming in an outdoor pool	99.0	85.0	102.0	43.3	20.0
Visit a beach	128.8	84.4	102.0	43.3	20.7
Swimming in lakes, streams, etc.	87.4	85.5	97.5	41.5	14.0
Bicycling	77.8	81.9	88.3	37.5	7.8
View or photograph birds	54.3	68.5	84.1	35.7	22.8
Day hiking	53.5	69.1	79.7	33.9	15.4
Visit a wilderness	-	67.2	79.1	33.6	17.7
Gather mushrooms/berries	-	60.0	77.2	32.8	28.6
Visit farm or agricultural setting	-	58.6	75.3	32.0	28.6
View salt/freshwater fish	27.6	52.3	63.5	27.0	21.4
Visit waterside besides beach	-	53.2	56.5	24.0	6.3
Developed camping	46.5	55.3	56.0	23.8	1.1
Warmwater fishing	49.3	47.6	55.7	23.7	17.1
Motorboating	59.5	50.7	55.0	23.4	8.6

Table 4.8—Trends in number and percentage of people ages 16 and older participating in outdoor recreation activities in 1999-2001 and 2005-2009 (for activities with between 25 and 49 million participants from 2005 through 2009)

	Т	otal participa	nts	Percent participating	Percent change				
Activity	1994-1995	1999-2001	2005-2009	1999-2001 to 2005-2009					
	millions								
Visit archaeological sites	36.1	44.0	48.8	20.8	11.1				
Off-highway vehicle driving	35.9	36.0	48.4	20.6	34.5				
Boat tours or excursions	_	40.8	46.1	19.6	13.1				
Bicycling on mountain/hybrid bike	_	44.0	42.7	18.1	-3.0				
Primitive camping	31.4	33.1	34.2	14.5	3.2				
Sledding	27.7	30.8	32.0	13.6	3.9				
Coldwater fishing	25.1	28.4	30.9	13.1	8.7				
Saltwater fishing	22.9	21.4	25.1	10.7	17.2				

Missing data are denoted with "-" and indicate that participation data for that activity were not collected during that time period. Percent change was calculated before rounding.

Note: The numbers in this table are annual participation estimates based on data collected during the three time periods. 1994-1995 participants based on 201.3 million people ages 16+ (Woods & Poole Economics, Inc. 2007). 1999-2001 participants based on 214.0 million people ages 16+ (U.S. Department of Commerce 2000). 2005-2009 participants based on 235.3 million people ages 16+ (U.S. Department of Commerce 2008).

Source: USDA Forest Service (1995) (n=17,217), USDA Forest Service (2001) (n=52,607), and USDA Forest Service (2009) (n=30,398).

Table 4.9—Trends in number and percentage of people ages 16 and older participating in outdoor recreation activities in 1999-2001 and 2005-2009 (for activities with between 15 and 25 million participants from 2005 through 2009)

	To	tal participar	Percent participating	Percent change	
Activity	1994-1995	1999-2001	2005-2009	2005-2009	1999-2001 to 2005-2009
		million	s		
Backpacking	17.0	21.5	23.2	9.9	7.9
Canoeing	17.9	19.3	22.8	9.7	18.2
Horseback riding	20.7	19.8	21.5	9.1	8.4
Waterskiing	22.7	16.0	21.3	9.0	33.1
Use personal watercraft	12.0	19.1	21.1	9.0	10.9
Big game hunting	19.0	17.8	20.9	8.9	17.1
Rafting	19.3	19.1	18.6	7.9	-2.8
Small game hunting	17.3	14.8	16.5	7.0	11.4
Horseback riding on trails	15.1	15.8	16.1	6.8	1.6
Downhill skiing	22.8	17.4	15.9	6.8	-8.5
Snorkeling	16.2	13.6	15.2	6.5	11.8

Table 4.11—Mean and total annual days for activities adding more than 100 million participation days between 1999-2001 and 2005-2009

	1999	9-2001	200	5-2009		
Activity	Mean annual days	Total annual days	Mean annual days	Total annual days	Percent change in total days 1999-2001 to 2005-2009	Change in total days 1999-2001 to 2005-2009
		millions		millions		millions
View wildflowers/trees	61.2	5,739.9	86.8	10,532.2	83.5	4,792.3
View natural scenery	56.2	7,141.5	77.5	11,608.6	62.6	4,467.1
Walk for pleasure	103.2	18,109.3	104.6	20,927.8	15.6	2,818.5
View or photograph birds	87.8	6,009.3	97.7	8,215.0	36.7	2,205.7
Visit farm or agricultural setting	29.9	1,750.4	48.5	3,655.3	108.8	1,904.9
View wildlife besides birds and fish	38.5	3,630.6	46.7	5,509.5	51.8	1,878.9
Swimming in an outdoor pool	23.2	1,971.1	25.7	2,621.1	33.0	650.0
Off-highway vehicle driving	19.7	710.4	21.6	1,048.2	47.6	337.8
Visit a beach	10.9	924.0	11.6	1,184.2	28.2	260.2
Sightseeing	14.8	1,616.5	14.9	1,842.5	14.0	226.0
Gathering of family/friends	6.2	970.4	6.8	1,179.3	21.5	208.9
Gather mushrooms/berries	10.2	614.3	10.3	799.0	30.1	184.7
Visit a wilderness	8.3	558.7	9.3	736.3	31.8	177.6
Visit waterside besides beach	11.5	611.4	13.9	783.4	28.1	172.0
Swimming in lakes, streams, etc.	12.4	1,062.4	12.6	1,232.4	16.0	170.0
Visit outdoor nature center/zoo	5.1	620.9	5.5	736.4	18.6	115.5

Note: The numbers in this table are *annual* activity days estimates based on data collected during the two time periods. Mean days is the average annual number of days in which participants engage in an activity. Total annual days (in millions) is the product of the estimated number of participants times the mean annual days.

Source: USDA Forest Service (2001) (n=52,607) and USDA Forest Service (2009) (n=30,398). Change in total days may not

Table 4.12—Mean and total annual days for activities adding between 20 and 100 million participation days between 1999-2001 and 2005-2009

	1999	9-2001	200	5-2009		
Activity	Mean Total annual annual days days		Mean annual days	Total annual days	Percent change in total days 1999-2001 to 2005-2009	Change in total days 1999-2001 to 2005-2009
		millions		millions		millions
Driving for pleasure	18.9	2,045.2	17.8	2,140.1	4.6	94.9
Warmwater fishing	15.2	721.8	14.6	816.3	13.1	94.5
Motorboating	11.5	581.6	11.9	653.1	12.3	71.5
Big game hunting	13.8	246.4	14.4	301.2	22.2	54.8
Backpacking	8.7	186.2	10.2	235.8	26.6	49.6
Kayaking	6.2	43.0	5.6	80.1	86.3	37.1
Visit historic sites/monuments	4.3	411.2	4.2	439.8	7.0	28.6
Waterskiing	8.1	129.7	7.3	155.6	20.0	25.9
Snowboarding	7.4	67.4	7.4	89.4	32.6	22.0

Note: The numbers in this table are annual activity days estimates based on data collected during the two time periods. Mean days is the average annual number of days in which participants engage in an activity. Total annual days (in millions) is the product of the estimated number of participants times the mean annual days.

Source: USDA Forest Service (2001) (n=52,607) and USDA Forest Service (2009) (n=30,398). Change in total days may not exactly equal the difference between the two time periods due to rounding.

	1999	-2001	2005	-2009			
Activity	Mean annual days	Total annual days	Mean annual days	Total annual days	Percent change in total days 1999-2001 to 2005-2009	Change in total days 1999-2001 to 2005-2009	
		millions		millions		millions	
Use personal watercraft	7.8	148.2	7.9	167.0	12.7	18.8	
Primitive camping	7.1	234.1	7.3	249.6	6.6	15.	
Visit archaeological sites	3.3	144.0	3.2	157.6	9.4	13.	
Surfing	21.1	67.2	17.1	79.7	18.6	12.	
Canoeing	5.1	98.8	4.7	106.7	8.0	7.	
Rafting	4.0	77.2	4.5	83.3	7.9	6.	
Anadromous fishing	7.2	62.1	6.4	68.1	9.7	6.	
Rock climbing	4.4	39.8	4.6	44.7	12.3	4.	
Coldwater fishing	11.3	320.9	10.5	325.4	1.4	4.	
Rowing	5.7	49.2	5.5	51.7	5.1	2.	
Caving	1.9	17.1	1.9	19.5	14.0	2.	
Developed camping	7.6	419.8	7.5	421.8	0.5	2.	
Sailing	6.0	62.4	6.1	63.8	2.2	1.	
Migratory bird hunting	11.1	54.8	11.3	55.0	0.4	0.	
Snorkeling	5.3	71.3	4.7	70.9	-0.6	-0.	
Small game hunting	14.3	212.0	12.7	210.6	-0.7	-1.	
Saltwater fishing	10.4	221.9	8.8	220.3	-0.7	-1.	
Windsurfing	5.5	8.5	4.6	6.4	-24.7	-2.	
Mountain climbing	4.7	62.4	4.8	59.7	-4.3	-2.	
Scuba diving	7.0	26.9	6.3	22.7	-15.6	-4.	
Snowshoeing	6.3	28.3	5.2	21.2	-25.1	-7.	
Cross-country skiing	6.9	53.5	5.9	35.9	-32.9	-17.	
Downhill skiing	6.3	109.5	5.5	88.3	-19.4	-21.	
Snowmobiling	9.0	101.4	7.2	77.4	-23.7	-24.	
Horseback riding on trails	18.3	290.3	16.3	262.1	-9.7	-28.	
Picnicking	6.8	808.9	6.3	762.0	-5.8	-46.	
Day hiking	27.8	1,919.6	22.9	1,825.5	-4.9	-94.	
Bicycling on mountain/hybrid bike	25.4	1,119.6	19.4	825.8	-26.2	-293.	

Hunting

Figure 4.1—Hunting participation by type of hunting (population 16 years of age and older). Note: The sum of the different types of hunting participants exceeds the total number of hunters because some people participated in more than one type of hunting.

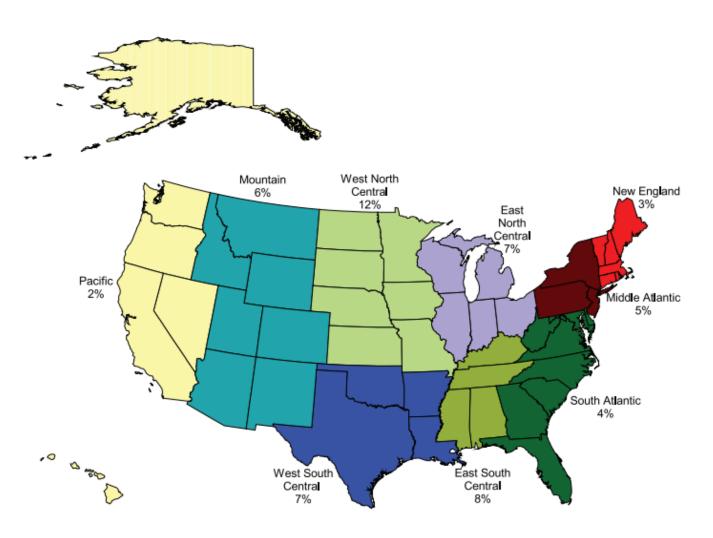


Figure 4.2—Percent of population that hunts by region (National participation rate: 5 percent).

Fishing

Figure 4.4—Fishing participation: 2006 (population 16 years of age and older).

Note: The sum of freshwater and saltwater anglers exceeds the total number of anglers because some people participated in both types of fishing.

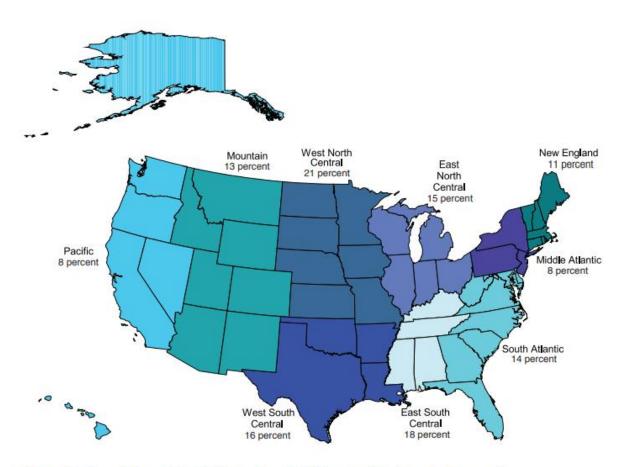


Figure 4.5—Percent of population that fishes by region (National participation rate: 13 percent).

National Survey on Recreation and the Environment - Partially Completed Surveys

National Survey on Recreation and the Environment

nsre2007_survey_questionnaires

National Survey on Recreation and the Environment - Partially Completed Surveys

OMB: 0596-0127

OMB.report / USDA/FS / OMB 0596-0127 / ICR 201010-0596-002 / IC 180219 / National Survey on Recreation and the Environment - Partially Completed Surveys

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BLIDDEN AND NONDISCRIMINIATION STATEMENTS



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				1. 2.						Don't know Refused
Q152	Did yo	ou go hi	unting d	luring tl	ne past 1	2 mor	nths?			
					202>					
	Q153	Did yo	ou hunt	big gan	ne?	<do< th=""><th>es no</th><th>t include bir</th><th>ds.</th><th>></th></do<>	es no	t include bir	ds.	>
								Don't know Refused	w	
		Q153a	a.On ho	w many	y differe	nt day	s did	you go big	gan	ne hunting?
			-98.	ENTE Don't Refus		PONS	E *:	* * *		
	Q159	Did yo	ou hunt	small g	ame?					
			1. 2.					Don't know Refused	w	
			Q159a	a. On ho	ow many	diffe	rent d	lays did you	go	small game hunting?

ENTER RESPONSE ****

<u>A..</u>

Q171	•	any winter ac ng, or sleddin			ice skating, snowboarding, skiing, snowshoeing, months?
	1.	Yes	8	8.	Don't know

2. No <go to Q202> 9. Refused

Q172 ... did you go ice skating outdoors?

- Yes
 Don't know
- 2. No <go to Q202> 9. Refused

Q174 Did you go downhill skiing?

- 1. Yes 8. Don't know
- No 9. Refused

Q174a On how many different days did go downhill skiing? <count any part of a day as a whole day>

A.. ENTER RESPONSE ****

-99.	Refused

Q202	During the past 12 months, did you go sightseeing, driving for pleasure, or driving ATVs or motorcycles?							
		1. 2.	Yes NO			Dor Ref		know ed
	Q203	203 Did you go sightseeing?						
			1. 2.	Yes NO <go q2<="" th="" to=""><th></th><th></th><th></th><th>Don't know Refused</th></go>				Don't know Refused
		-	hole da <u>A</u> -98.	•		•		go sightseeing? <count ***<="" a="" any="" day="" of="" part="" td=""></count>
	Q207		ou go d l setting	-	sur	e on	coi	untry roads or in a park, forest, or other
			1.	Yes			8.	Don't know

2.	NO <go q197="" to=""></go>	9.	Refused
- .	110 -g0 t0 Q17/-	7.	recrused

Q207a On how many different days did go driving for pleasure? <count any part of a day as a whole day>

- ENTER RESPONSE ****
- Don't know
- -99. Refused

Q197 Did you drive off-road for recreation using a 4-wheel drive, ATV, or motorcycle?

< Off-road is defined as off of paved or gravel roads. ATV stands for "All Terrain Vehicle".>

- Yes
- Don't know
- 2. NO <go to Q221> 9. Refused

Q197a On how many different days did you drive off-road? <count any part of a day as a whole day>

- ENTER RESPONSE **** Α..
- Don't know
- Refused

Q221 During the past 12 months did you go fishing in either fresh or saltwater?

Yes

- Don't know
- No <go to Q256>
- Refused

Q222 Did you go freshwater fishing?

U.S. Commerce Department Bureau of Economic Analysis

Outdoor Recreation Satellite Account

Home | BEA Data | Special Topics | Outdoor Recreation

Outdoor Recreation

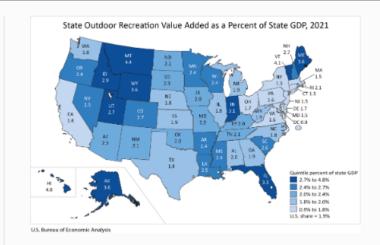
Outdoor Recreation Satellite Account, U.S. and States, 2021

The outdoor recreation economy accounted for 1.9 percent (\$454.0 billion) of current-dollar gross domestic product (GDP) for the nation in 2021. At the state level, outdoor recreation value added as a share of GDP ranged from 4.8 percent in Hawaii to 1.3 percent in New York and Connecticut. The share was 0.9 percent in the District of Columbia.

Current Release

Current Release: November 9, 2022

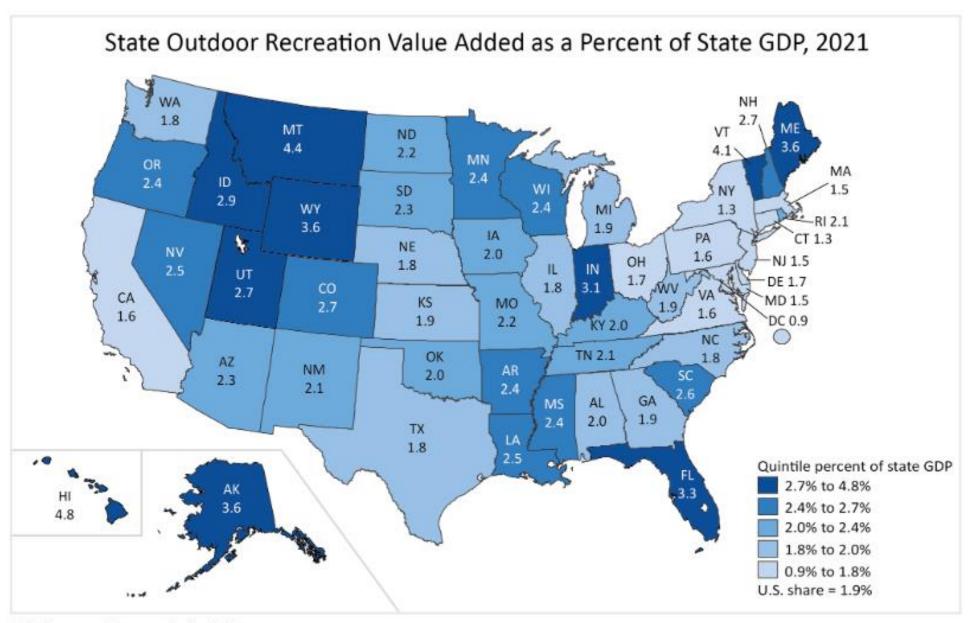
Next Release: November 2023



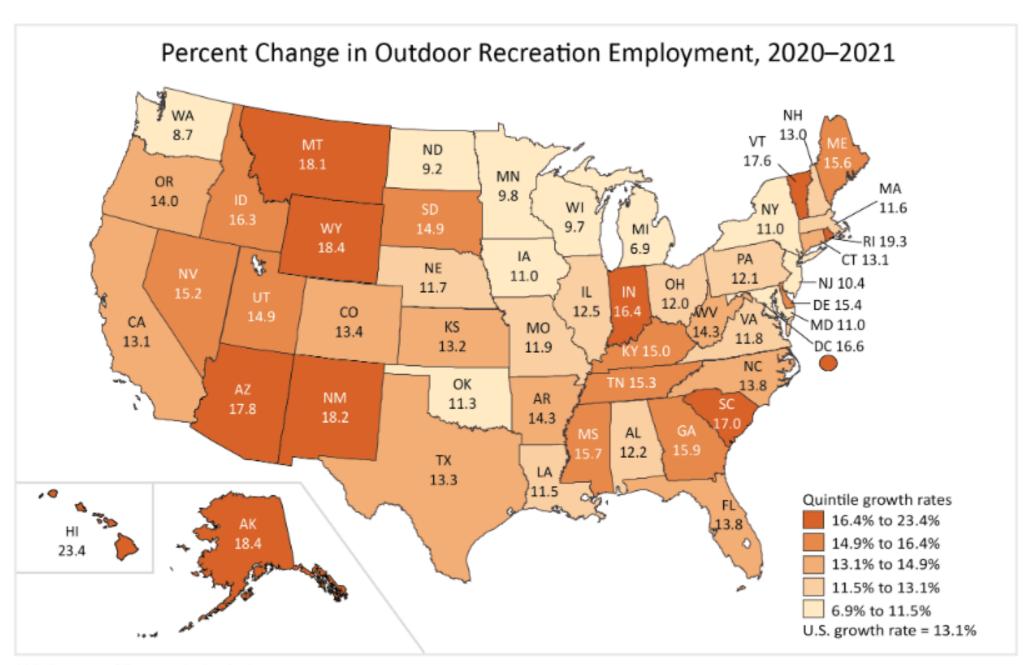
BEA - Geography of outdoor recreation

Outdoor recreation is measured by place of production, not residence of consumer. The value of manufactured goods, such as boats, is assigned to the state where they are produced, even if the goods are not ultimately used there. Services, such as sailing lessons, are assigned to the location where they are consumed. The value of services provided by retailers, such as boat dealers, is also assigned to the location of sale. The services of retailers (known as trade margins) are not measured by sales but are most akin to sales less the cost of goods sold. The production of imported goods is excluded from ORSA, but the value of the services of retailers selling the imported goods is included.

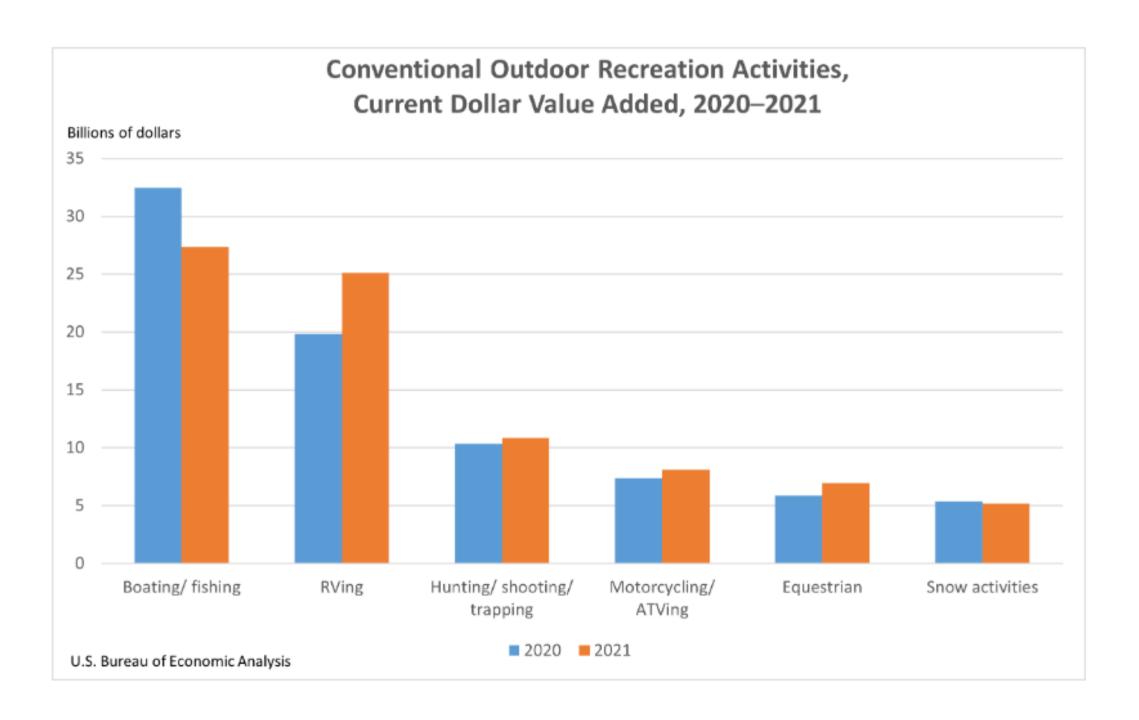
Outdoor recreation spending and production are allocated to states by applying state-level data to detailed, underlying national values. The underlying estimates are distributed to states before aggregation to publication levels to provide the most accurate state values possible. Statistics are primarily based on time-series data generated from the Economic Census and Quarterly Census of Employment and Wages. Additional government and nongovernment data sources are used to supplement the census data and to refine and evaluate the statistics.



U.S. Bureau of Economic Analysis



U.S. Bureau of Economic Analysis



BLS CEX Data

Products in Outdoor Recreation

Some Proposed Items and our Work Plan

Prior Work and Methods

- The BLS Staff has welcomed us to this conference before.
- We have benefited greatly from our interactions with BLS Staff
- This is a new area of study for us but is using similar methods as we used in prior studies.
- We have also developed some techniques that we have used in the past to study the consumption patterns.
- Four Basic Metrics:
- 1) Frequency of households having a particular spending item
- 2) Amount of money spent on item.
- 3) User Household Spending
- 4) Average Household Spending

BLS Locational Data

- BLS CEX data will be based on location of Consumer Unit
- A few different possible groupings:
- Local Consumption activities you do around home
- Consumption of Transportation Services travel services
- Away From Home Consumption activities you do away from home
- BLS provides us with some variables that help sort these items and let us examine these different activities.
- Pandemic may have altered the availability of away from home activies.

Outdoor Recreation in the CEX 1

- Hunting and Fishing Equipment UCC 600420
- Athletic Gear Game Table and Exercise Equip UCC 600210
- Bicycles UCC 600310
- Camping Equipment UCC 600410
- Hunting and Fishing Equip UCC 600420
- Water Sports Equip UCC 600901
- Purchase of boat with motor UCC 600132

Outdoor Stuff 2

- Outdoor Equipment Snow Lawn etc UCC 320410
- Outdoor Furniture UCC 290430
- Camp Fees
- Gasoline UCC
- Vehicles:
- Motorcycles New (UCC xx) and Used (UCC xx)
- RVs -
- Sports Wear -



Typical Camping Trip – New Jersey to Maryland

- Spending falls into a few categories
- Fuel consumed on trip
- Food likely purchased at home and used on trip
- Consumption goods purchased on trip additional food, travel guides, forgotten items, local goods.
- Food purchased on road ice cream, food at rest stops and such
- Cost of campsite
- Cost of Firewood

Consumptive Activities versus Capital Activities

- We may want to examine different types of consumption.
- Purchase of a bicycle or a boat or camping equipment Capital
- Purchase of Motorcycle or RV Capital
- Purchase of meals during activity Use
- Purchase of admission or user passes Use
- Purchase of lessons or training Use
- The 2020 Pandemic stimulated some consumptive activity that might not have been in the normal user consumption bucket.
- Other 2020 Purchases may be more of capital investment which is likely to have a rebound impact in later periods you bought a bicycle so you do not need another bicycle in 2021 or 2022.
- Supply chain issues may impact some purchases lack of stuff
- Operational Issues may impact some purchases lack of staff

Rebound or Not?

- When we force a household to change their consumption patterns how do they rebound after that change?
- Supply chain issues goods not available so you purchase something else.
- COVID19 Restrictions you cannot purchase former good or engage in activity – so you do something else.
- Theme Park Holiday versus Camping
- RV Use versus Hotel Stay
- Driving versus Flying
- Do you return to the original consumption pattern after the changes?

Rebound II

- So in this study we look to explore what changes occurred in outdoor recreation prior to, during and after the COVID19 Pandemic
- How much change can we observe in the BLS CEX in terms of consumption and how did the consumption change post the pandemic.

Hunting and Fishing Equipment

UCC 600420

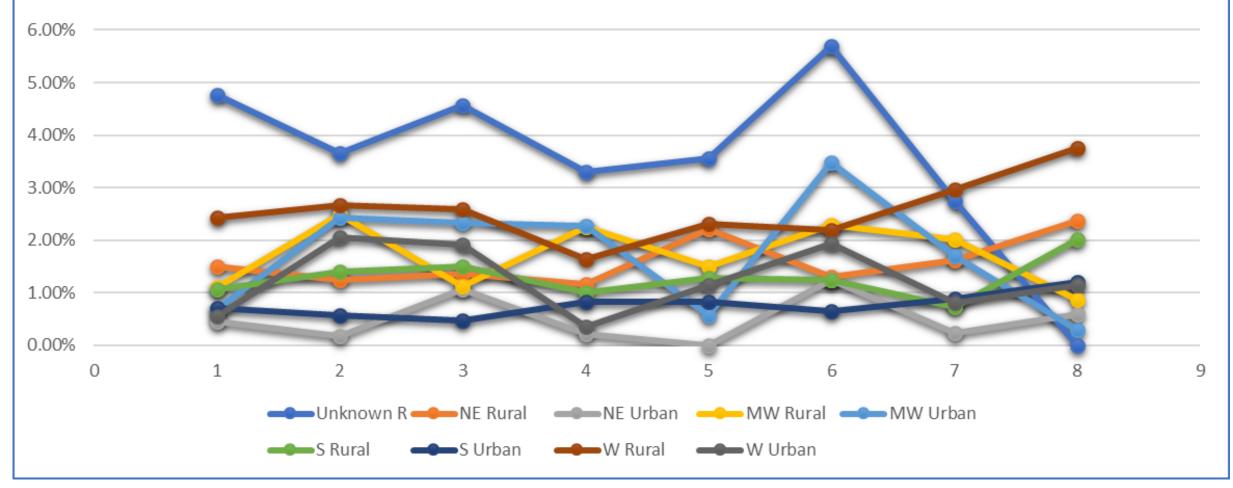
Hunting and Fishing Equipment – UCC 600420

- Hunting and fishing equipment experienced a strong 2020 with significant increases in households with this spending category.
- Spending is focused in urban households with major increases in spending in the Northeast and Midwest in 2020 compared to prior periods and post periods.

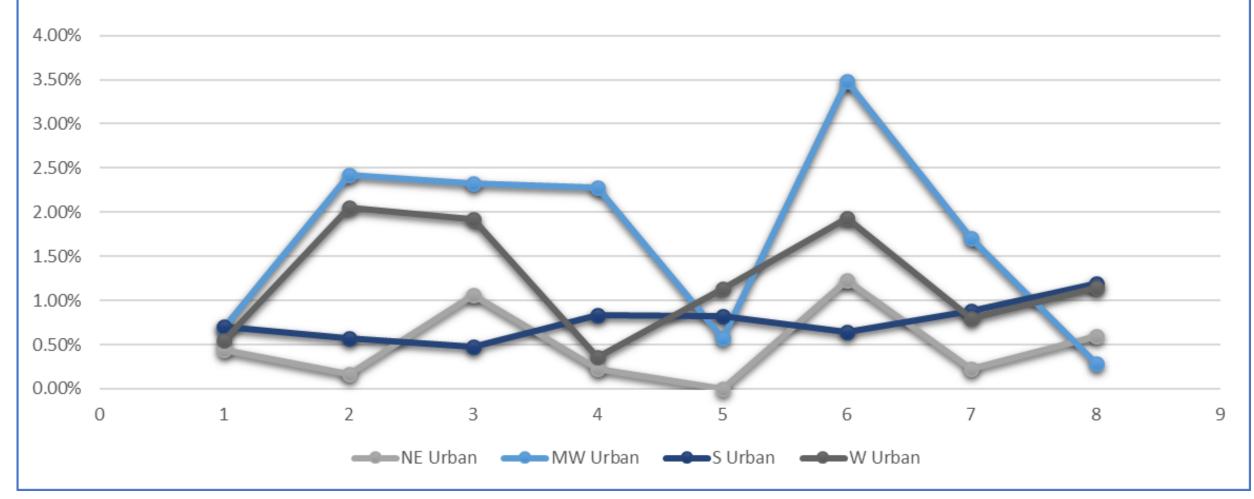
Hunting and Fishing Equipment

Share of HH with	Consumption	1						
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	4.76%	3.65%	4.56%	3.30%	3.56%	5.69%	2.75%	0.00%
NE Rural	1.49%	1.25%	1.36%	1.15%	2.21%	1.31%	1.62%	2.36%
NE Urban	0.44%	0.17%	1.06%	0.22%	0.00%	1.23%	0.23%	0.59%
MW Rural	1.10%	2.49%	1.13%	2.25%	1.50%	2.28%	2.02%	0.86%
MW Urban	0.69%	2.42%	2.33%	2.27%	0.57%	3.48%	1.70%	0.29%
S Rural	1.06%	1.39%	1.50%	1.01%	1.28%	1.23%	0.72%	2.02%
S Urban	0.71%	0.57%	0.48%	0.83%	0.82%	0.64%	0.88%	1.20%
W Rural	2.43%	2.66%	2.58%	1.63%	2.30%	2.20%	2.97%	3.75%
W Urban	0.54%	2.05%	1.92%	0.36%	1.13%	1.93%	0.80%	1.14%
Overall	1.03%	1.69%	1.64%	1.25%	1.39%	1.83%	1.31%	1.57%

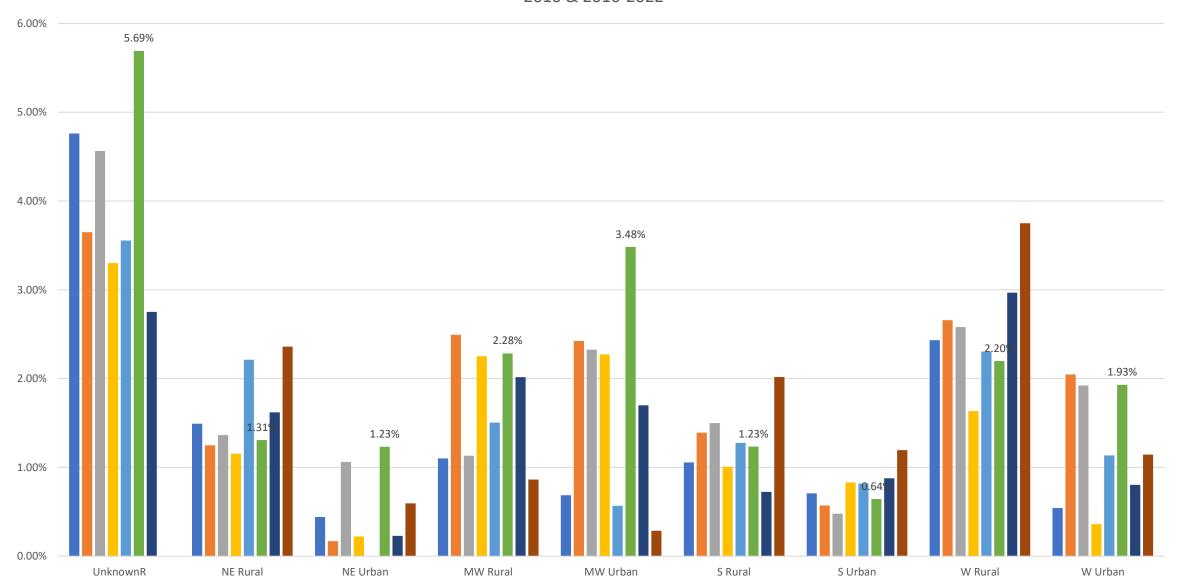




Hunting and Fishing Equipment Share of HH with Spending - June 2010 & 2016-2022



Hunting and Fishing Equipment UCC 600420 2010 & 2016-2022



Hunting

Figure 4.1—Hunting participation by type of hunting (population 16 years of age and older). Note: The sum of the different types of hunting participants exceeds the total number of hunters because some people participated in more than one type of hunting.

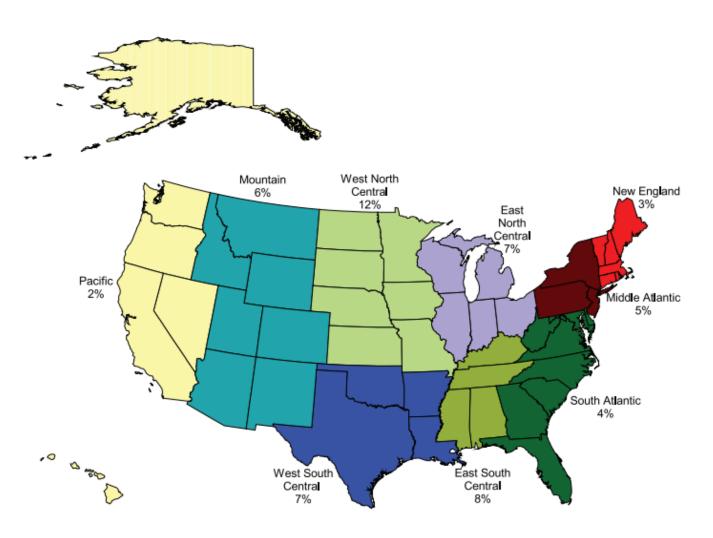


Figure 4.2—Percent of population that hunts by region (National participation rate: 5 percent).

Fishing

Figure 4.4—Fishing participation: 2006 (population 16 years of age and older).

Note: The sum of freshwater and saltwater anglers exceeds the total number of anglers because some people participated in both types of fishing.

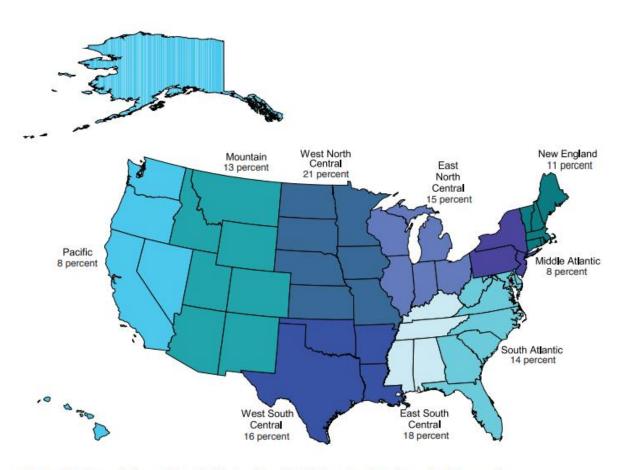


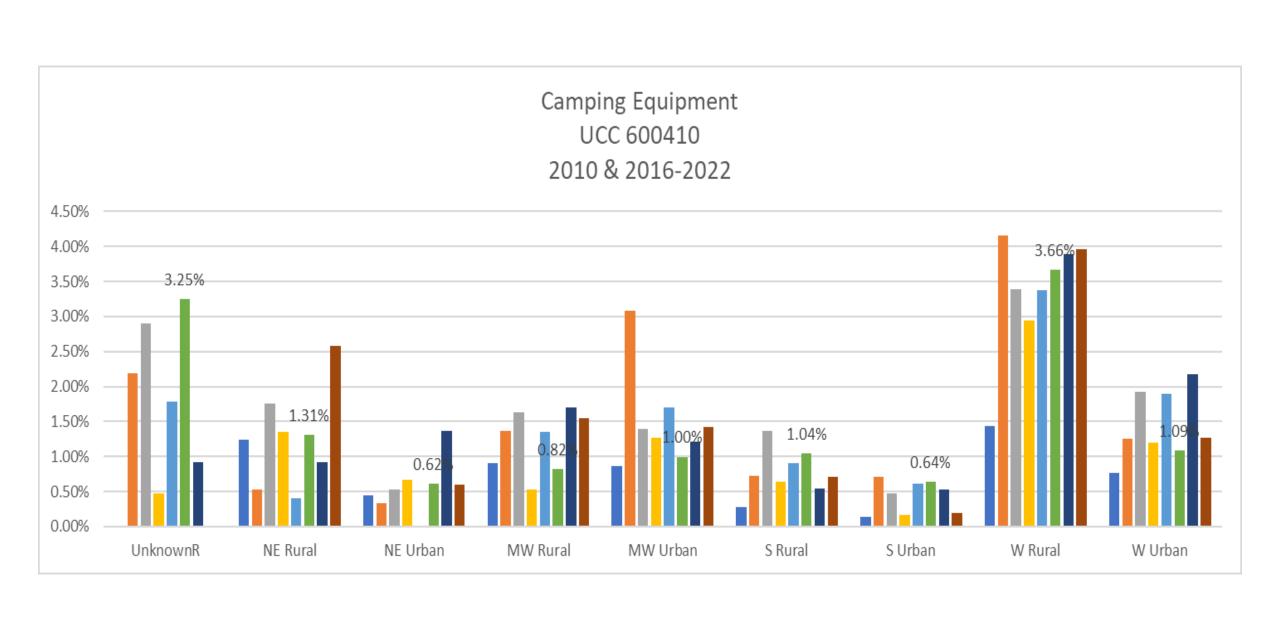
Figure 4.5—Percent of population that fishes by region (National participation rate: 13 percent).

Camping Equipment

UCC 600410

Camping Equipm	nent							
Share of HH with	Consumptio	n						
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR		2.19%	2.90%	0.47%	1.78%	3.25%	0.92%	0.00%
NE Rural	1.24%	0.53%	1.75%	1.35%	0.40%	1.31%	0.93%	2.58%
NE Urban	0.44%	0.34%	0.53%	0.67%	0.00%	0.62%	1.37%	0.59%
MW Rural	0.90%	1.37%	1.63%	0.53%	1.35%	0.82%	1.71%	1.55%
MW Urban	0.86%	3.08%	1.40%	1.26%	1.70%	1.00%	1.21%	1.43%
S Rural	0.28%	0.73%	1.36%	0.65%	0.90%	1.04%	0.54%	0.71%
S Urban	0.14%	0.71%	0.48%	0.17%	0.61%	0.64%	0.53%	0.20%
W Rural	1.43%	4.15%	3.39%	2.94%	3.37%	3.66%	3.90%	3.96%
W Urban	0.76%	1.25%	1.92%	1.20%	1.89%	1.09%	2.18%	1.27%
Overall	0.65%	1.38%	1.61%	1.00%	1.42%	1.31%	1.48%	1.42%

Camping Equipment								
Total Dollars Spent								
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR		\$4,224.00	\$5,135.97	\$48.00	\$4,560.00	\$16,356.00	\$1,308.00	
NE Rural	\$4,056.00	\$1,464.00	\$22,511.97	\$15,960.00	\$372.00	\$9,876.00	\$15,948.00	\$11,100.00
NE Urban	\$9,408.00	\$8,568.00	\$3,084.00	\$11,160.00	\$7,764.00	\$4,908.00	\$26,832.00	\$2,460.00
MW Rural	\$6,324.03	\$13,907.96	\$11,100.05	\$12,108.00	\$10,368.00	\$21,792.00	\$73,104.02	\$10,944.00
MW Urban	\$6,636.00	\$13,500.06	\$7,908.00	\$9,336.00	\$9,036.00	\$4,620.00	\$14,052.00	\$10,320.00
S Rural	\$30,168.00	\$21,263.99	\$36,564.00	\$7,296.03	\$9,864.00	\$56,147.96	\$11,232.00	\$6,552.00
S Urban	\$660.00	\$11,100.00	\$4,320.00	\$360.00	\$3,540.00	\$7,452.00	\$7,788.00	\$240.00
W Rural	\$8,280.00	\$23,304.00	\$21,252.00	\$25,740.00	\$25,391.98	\$23,184.00	\$28,716.03	\$43,740.09
W Urban	\$11,183.97	\$28,980.05	\$11,448.00	\$31,332.00	\$43,392.00	\$41,136.03	\$46,872.05	\$24,252.00
Total Survey Spending	\$76,716.00	\$126,312.06	\$123,323.99	\$113,340.03	\$114,287.98	\$185,471.99	\$225,852.10	\$109,608.09
Survey Count	7059	6372	6090	5773	5337	4980	5121	4580
Average CU Spending	\$10.87	\$19.82	\$20.25	\$19.63	\$21.41	\$37.24	\$44.10	\$23.93
Consumer Units	121,107,000	129,549,000	130,001,000	131,439,000	132,242,000	131,234,000	133,595,000	135,998,476
Total Annual Spending	\$ 1,316,170,082	\$ 2,568,047,875	\$ 2,632,552,056	\$ 2,580,512,767	\$ 2,831,866,414	\$ 4,887,596,614	\$ 5,891,956,903	\$3,254,701,576



Outdoor Equipment Snowblowers and Such

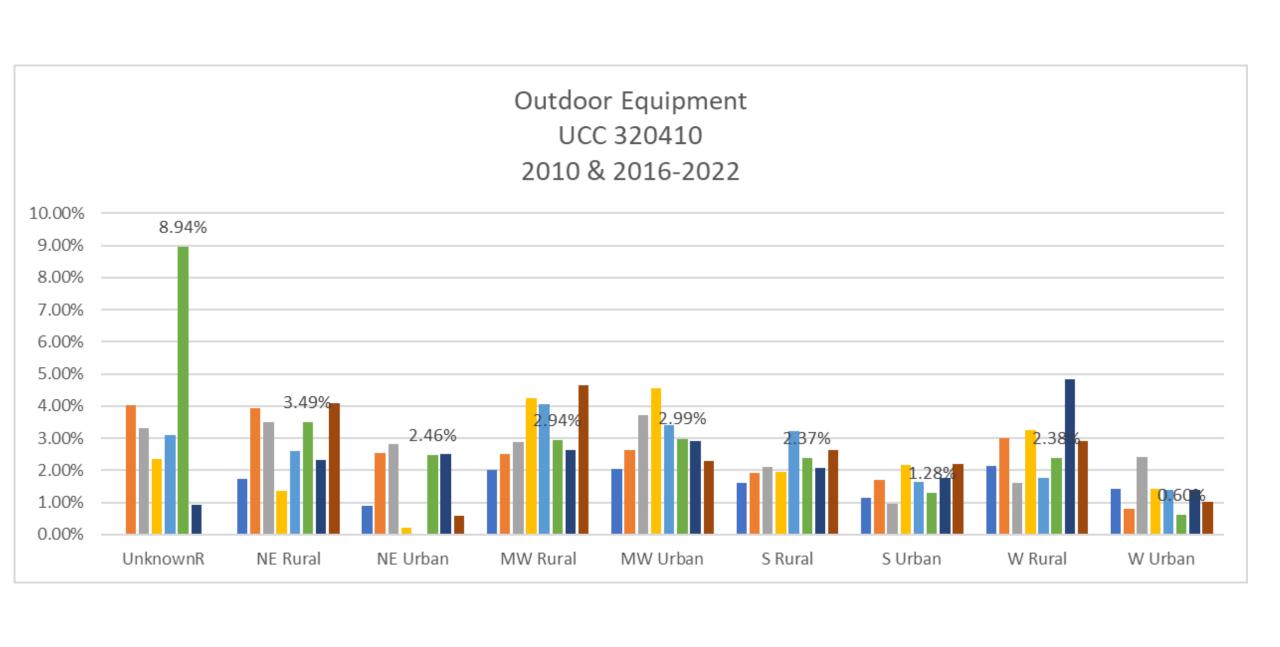
UCC 320410

Not fun stuff...

Lawn & Garden

Outdoor Equipme	ent - Snow B	lowers and	such - UC	C 320410				
Share of HH with	Consumptio	n						
A 40.0	2010	2016	2017	2010	2010	2020	2021	2022
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR		4.01%	3.32%	2.36%	3.11%	8.94%	0.92%	0.00%
NE Rural	1.74%	3.92%	3.51%	1.35%	2.62%	3.49%	2.31%	4.08%
NE Urban	0.88%	2.54%	2.83%	0.22%	0.00%	2.46%	2.52%	0.59%
MW Rural	2.00%	2.49%	2.89%	4.24%	4.06%	2.94%	2.64%	4.66%
MW Urban	2.06%	2.64%	3.72%	4.55%	3.40%	2.99%	2.91%	2.29%
S Rural	1.61%	1.92%	2.11%	1.94%	3.23%	2.37%	2.08%	2.62%
S Urban	1.13%	1.71%	0.96%	2.16%	1.64%	1.28%	1.75%	2.19%
W Rural	2.15%	2.99%	1.61%	3.27%	1.77%	2.38%	4.82%	2.92%
W Urban	1.41%	0.80%	2.40%	1.44%	1.39%	0.60%	1.38%	1.02%
Overall	1.59%	2.29%	2.43%	2.34%	2.49%	2.37%	2.38%	2.55%

Outdoor Equipment - Sn	iow Blowers and sur	ch - UCC 320410	1					
Total Dollars Spent								
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR		\$20,759.97	\$49,272.00	\$84,876.00	\$72,540.02	\$126,060.00	\$852.00	
NE Rural	\$24,539.97	\$197,424.04	\$83,532.06	\$27,516.02	\$81,827.98	\$86,472.00	\$113,424.00	\$89,112.09
NE Urban	\$17,964.00	\$20,964.00	\$49,284.00	\$4,800.00	\$28,200.00	\$40,344.00	\$78,660.01	\$5,100.00
MW Rural	\$88,008.00	\$199,392.00	\$106,920.10	\$240,792.00	\$87,720.03	\$142,932.06	\$73,955.95	\$51,828.12
MW Urban	\$21,924.00	\$99,600.00	\$87,348.00	\$70,668.00	\$39,276.00	\$44,508.00	\$61,224.00	\$172,236.00
S Rural	\$73,787.89	\$75,000.09	\$165,479.86	\$95,472.00	\$323,747.86	\$168,564.00	\$264,036.09	\$260,676.00
S Urban	\$12,492.00	\$22,848.00	\$36,228.00	\$45,407.96	\$194,880.00	\$31,788.00	\$34,212.00	\$26,411.99
W Rural	\$26,556.00	\$17,688.06	\$9,612.00	\$65,736.00	\$47,496.00	\$56,508.01	\$49,175.88	\$25,344.06
W Urban	\$16,560.05	\$18,984.00	\$43,248.00	\$20,376.00	\$22,583.99	\$7,056.00	\$26,880.00	\$24,192.00
Total Survey Spending	\$281,831.91	\$672,660.16	\$630,924.02	\$655,643.98	\$898,271.88	\$704,232.07	\$702,419.93	\$654,900.26
Survey Count	7059		·					4580
Average CU Spending	\$39.93	\$105.56	\$103.60	\$113.57	\$168.31	\$141.41	\$137.16	\$142.99
Consumer Units	121,107,000	129,549,000	130,001,000	131,439,000	132,242,000	131,234,000	133,595,000	135,998,476
Total Annual Spending	\$ 4,835,219,879	\$ 13,675,839,778	\$ 13,468,104,027	\$14,927,626,726	\$ 22,257,685,957	\$18,558,070,577	\$18,324,505,087	\$ 19,446,602,057



Sporting Equipment

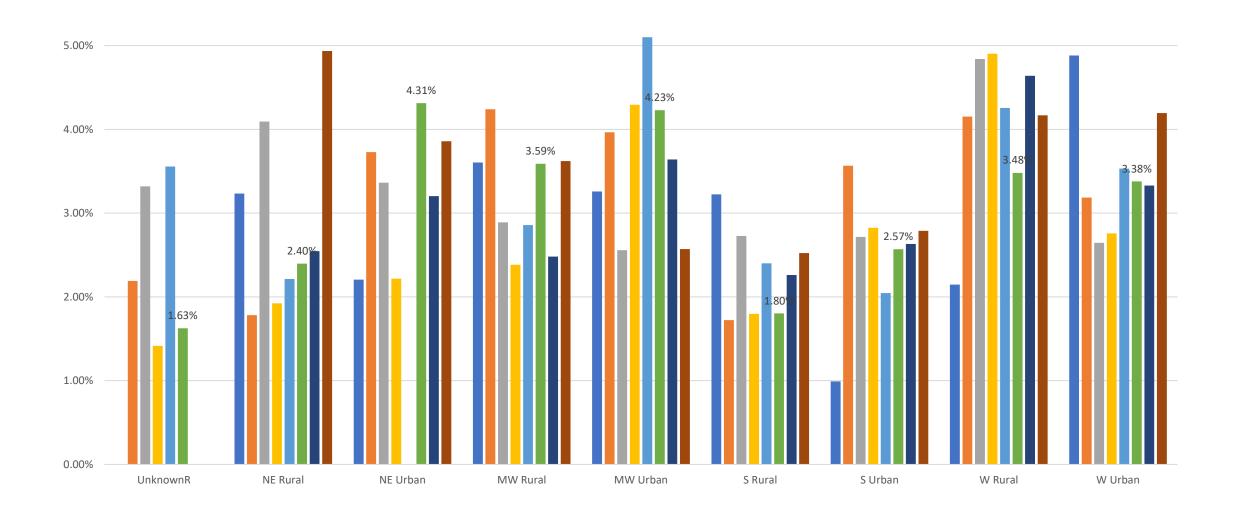
Athletic Gear, Game Tables and Exercise Equipment UCC 600210

Sporting Equipmed Share of HH with								
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR		2.19%	3.32%	1.42%	3.56%	1.63%		0.00%
NE Rural	3.23%	1.78%	4.09%	1.92%	2.21%	2.40%	2.55%	4.94%
NE Urban	2.21%	3.73%	3.36%	2.22%	0.00%	4.31%	3.20%	3.86%
MW Rural	3.60%	4.24%	2.89%	2.38%	2.86%	3.59%	2.48%	3.62%
MW Urban	3.26%	3.96%	2.56%	4.29%	5.10%	4.23%	3.64%	2.57%
S Rural	3.22%	1.72%	2.73%	1.80%	2.40%	1.80%	2.26%	2.52%
S Urban	0.99%	3.57%	2.72%	2.82%	2.04%	2.57%	2.63%	2.79%
W Rural	2.15%	4.15%	4.84%	4.90%	4.26%	3.48%	4.64%	4.17%
W Urban	4.88%	3.19%	2.64%	2.76%	3.53%	3.38%	3.33%	4.19%
Overall	3.06%	3.04%	3.14%	2.65%	3.07%	3.03%	2.93%	3.47%

Sporting Equipment - UC	C 600210							
Total Dollars Spent								
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	2010	\$4,512.00	\$8,664.00	\$4,404.00	\$18,576.00	\$5,124.00	2021	2022
NE Rural	\$24,119.94	\$12,264.00	\$18,120.06	\$13,596.00	\$26,567.97	\$19,632.03	\$58,032.04	\$78,467.95
NE Urban	\$30,540.00	\$39,816.04	\$47,987.92	\$33,288.00	\$44,051.98	\$73,752.00	\$11,772.04	\$26,424.06
MW Rural	\$42,120.00	\$76,355.84	\$49,151.92	\$56,795.94	\$109,079.95	\$88,056.10	\$41,400.00	\$96,900.09
MW Urban	\$19,896.04	\$61,524.00	\$16,308.05	\$37,836.05	\$16,704.00	\$26,483.96	\$30,684.00	
S Rural	\$80,172.24	\$62,520.12	\$68,076.00	\$42,540.00	\$59,988.16	\$91,548.08	\$41,436.00	
S Urban	\$5,232.01	\$60,120.00	\$47,675.99	\$20,447.94	\$16,548.00	\$10,176.00	\$36,888.00	\$35,303.94
W Rural	\$21,264.00	\$43,308.00	\$39,816.00	\$54,528.00	\$33,408.00	\$82,740.06	\$219,108.00	\$38,412.00
W Urban	\$44,724.15	\$63,456.12	\$40,692.08	\$46,859.97	\$52,200.12	\$94,872.12	\$70,536.12	\$48,083.97
Total Survey Spending	\$268,068.38	\$423,876.12	\$336,492.02	\$310,295.90	\$377,124.18	\$492,384.35	\$509,856.20	\$451,692.04
Survey Count	7059		6090					
Average CU Spending	\$37.98	\$66.52	\$55.25	\$53.75	\$70.66	\$98.87	\$99.56	\$98.62
Consumer Units	121,107,000	129,549,000	130,001,000	131,439,000	132,242,000	131,234,000	133,595,000	135,998,476
Total Annual Spending	\$ 4,599,087,307	\$ 8,617,816,615	\$ 7,182,971,936	\$ 7,064,781,362	\$ 9,344,511,113	\$12,975,415,218	\$13,300,964.468	\$ 13,412,539,116

Sporting Equipment UCC 600210 2010 & 2016-2022





Water Sports Equipment

UCC 600901

Water Sports and	d Misc. Equip	ment - UC	C 600901					
Share of HH with	Consumption	n						
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR	0.00%	1.82%	2.07%	0.94%	0.00%	1.63%	0.00%	0.00%
NE Rural	1.00%	0.89%	1.36%	0.77%	0.60%	0.65%	0.46%	1.07%
NE Urban	0.44%	0.34%	0.71%	0.22%	0.00%	0.21%	1.14%	1.19%
MW Rural	0.30%	0.62%	1.01%	0.66%	0.60%	1.14%	0.62%	0.52%
MW Urban	0.86%	1.32%	1.86%	0.51%	1.13%	1.74%	0.73%	0.57%
S Rural	0.44%	0.66%	0.82%	0.72%	0.68%	0.47%	0.54%	0.71%
S Urban	0.28%	0.71%	0.48%	0.66%	0.41%	0.00%	0.35%	0.60%
W Rural	0.72%	1.16%	1.45%	1.80%	0.89%	2.20%	1.67%	2.29%
W Urban	0.65%	0.68%	1.20%	0.36%	1.13%	0.60%	0.46%	1.27%
Overall	0.52%	0.80%	1.08%	0.73%	0.67%	0.84%	0.72%	0.98%

Water Sports and Misc. E	quipment - UCC 60	00901						
Total Dollars Spent								
Area	2010	2016	2017	2018	2019	2020	2021	2022
UnknownR		\$4,524.00	\$7,236.00	\$3,060.00		\$2,052.00		
NE Rural	\$8,076.00	\$8,172.00	\$3,839.99	\$2,160.00	\$1,020.00	\$15,060.00	\$2,076.00	\$12,192.00
NE Urban	\$1,044.00	\$1,212.00	\$18,300.00	\$480.00		\$1,440.00	\$7,464.00	\$7,296.00
MW Rural	\$1,476.00	\$8,304.00	\$7,680.00	\$21,000.00	\$6,672.00	\$27,143.97	\$11,796.00	\$3,024.00
MW Urban	\$3,876.00	\$3,024.00	\$10,260.00	\$9,636.00	\$1,224.00	\$3,720.01	\$21,384.00	\$2,316.00
S Rural	\$6,024.00	\$29,460.00	\$10,440.00	\$6,336.00	\$6,059.97	\$19,872.00	\$19,020.00	\$15,036.00
S Urban	\$996.00	\$6,144.00	\$5,916.00	\$1,164.00	\$612.00		\$720.00	\$5,100.00
W Rural	\$4,584.00	\$2,004.03	\$3,143.97	\$37,992.02	\$2,364.00	\$27,984.00	\$29,940.03	\$20,123.95
W Urban	\$8,136.00	\$25,788.00	\$19,764.00	\$1,464.00	\$14,856.03	\$19,560.00	\$20,772.00	\$33,576.00
Total Survey Spending	\$34,212.00	\$88,632.03	\$86,579.96	\$83,292.02	\$32,808.00	\$116,831.98	\$113,172.03	\$98,663.95
Survey Count	7059	6372	6090	5773	5337	4980	5121	4580
Average CU Spending	\$4.85	\$13.91	\$14.22	\$14.43	\$6.15	\$23.46	\$22.10	\$21.54
Consumer Units	121,107,000	129,549,000	130,001,000	131,439,000	132,242,000	131,234,000	133,595,000	135,998,476
Total Annual Spending	\$ 586,954,623	\$ 1,801,975,966	\$ 1,848,190,703	\$ 1,896,383,131	\$ 812,927,775	\$ 3,078,780,736	\$ 2,952,395,499	\$ 2,929,726,388

Questions?

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