



CHAPTER 2

SUPPLY AND DEMAND: OUTDOOR RECREATION TRENDS IN ALASKA

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SECTION A

INTRODUCTION AND SYNTHESIS OF FINDINGS

This chapter presents information on trends in outdoor recreation, answering questions about how outdoor recreation and related tourism activities are growing and changing in Alaska. To provide a more complete picture, the chapter includes several different ways of measuring outdoor recreation trends. This information provides the foundation for the policies in the SCORP.

Also presented here are two important new outdoor recreation tools: anonymized and aggregated cell phone data that tracks locations and relative numbers of outdoor recreation users, and a new GIS outdoor recreation data hub that provides a framework to track the supply of public outdoor recreation locations and infrastructure all over Alaska.

This chapter covers data on outdoor recreation supply, demand, and trends in the following sections:

- A. Introduction and synthesis of findings (*this section*)
- B. National and statewide outdoor recreation benefits and trends statistics
- C. Anonymized and aggregated mobility data
- D. Public survey
- E. Land managers' survey
- F. Tribal survey
- G. Outdoor recreation GIS database
- H. References

The following five themes were notable findings that were derived from the surveys and data gathered.

1. OUTDOOR RECREATION IS A GROWING, MAJOR ECONOMIC FORCE

- **Outdoor recreation is a large contributor to the U.S. Gross Domestic Product.** In 2019, outdoor recreation contributed \$459 billion to the nation's gross domestic product; 2.4 times more than oil and gas development and 3 times more than both motor vehicle manufacturing and air transportation.³⁵
- **Outdoor recreation is one of the few bright spots in Alaska's economy.** Alaska tops the only four states in the U.S. where growth in outdoor recreation GDP increased while statewide GDP decreased between 2012 and 2017. Alaska saw a nine percent drop in statewide GDP and a 19 percent increase in outdoor recreation.¹⁴
- **\$250 Million a year!** That's the increase in annual spending if typical out-of-state visitors had reason to add just one more day to their Alaska visit.¹⁰

2. SUBSTANTIAL GROWTH IN DEMAND FOR OUTDOOR RECREATION IN ALASKA, BY BOTH RESIDENTS AND VISITORS

- **Nationwide, the percentage of the U.S. population participating in outdoor recreation slowly and steadily increased between 2008 and 2021, from 48 to 53 percent.** New participants are younger and have more racial, ethnic, and gender diversity.¹⁴ "We were slammed in June, July, and August. I believe we had a record year (in 2022),"¹² said Chelsea Smith, Operations Manager for Go Hike Alaska, an Anchorage-based company that leads excursions into the Chugach Mountains and other parts of Alaska.

- **The total number of outdoor recreation users in Alaska increased substantially between 2019 and 2021, despite a dramatic drop off in cruise visits.** See the *Patterns of Use* chart on page 7 of this chapter for annual trends and more information.³³

3. EVOLUTION OF THE ALASKA TOURISM MARKET – TOWARDS ACTIVE OUTDOOR RECREATION AND INDEPENDENT TRAVEL

- **"COVID accelerated a change that's been happening over the last 10 years – a big shift in Alaska tourism.** The traditional, older demographic (65 plus) is still coming but we are seeing more families and young couples looking for active outdoor adventure. They want to get out and experience Alaska in person, in small groups, or independently," said Alexis Shubin, Reservation Specialist for Alaska Wildland Adventures.
- **The fastest growing activities nationwide from 2019 to 2021 were day hiking, bicycling, and camping.**³¹
- **Between 2011 and 2016, hiking and nature walks were the fastest growing area of participation of all visitor activities for both independent and cruise out-of-state Alaska visitors.**¹⁴
- **Alaska resident activities?** Nearby, day-use recreation is popular, as well as non-motorized and motorized trail uses, camping, boating, and nature viewing.

SCORP Land Managers Survey: What were the top growth areas in recreation demand 2019-2022? (Question 36)	SCORP Public Survey Select all year-round outdoor activities you have done in the past year. (Q-8)
1. Day-use recreation (city parks, picnic areas)	1. Visiting public parks and picnic areas
2. Winter biking (trailhead parking, trails, open space)	2. Neighborhood strolling
3. Walking/biking (paved trails, parking areas)	3. Hiking
4. Cross-country skiing (trailheads, groomed & open space trails)	4. Scenic viewing
5. Camping/RV-ing (campgrounds)	5. Camping
6. Mountain Biking (unpaved trails, trailheads, open space)	6. Biking
7. ATV riding (places to ride, developed trails)	7. Wildlife viewing
	8. Boating



Fat-tire biking on the Homer Spit

4. UNMET NEEDS AND FUNDING SHORTFALLS: OUTDOOR RECREATION FACILITIES CAPACITY VERSUS GROWING DEMAND

- **“More interest in outdoor recreation is a good thing for society, advocates say. But the increased use is also leading to problems like trail erosion, overfull parking lots and conflicts over previously low-key trailheads in neighborhoods,”** writes Michelle Theriault Boots of the Anchorage Daily News.²⁷
- **From 2010 to 2019, budgets of Alaska’s major public outdoor recreation agencies have been stable or declining while outdoor use continues to grow** (two examples below):

	National Park Service – Denali National Park ⁴⁷		USFS – Chugach National Forest**		Bureau of Land Mgt. – Statewide data ⁴⁸	
	2010	2019	2010	2019	2010	2019
Visitation	380,000	601,000	1.2M	1.4M	644,000	993,000
Recreation Budget	\$13.9M	\$14.7M	\$9.18M	\$7.26M	\$3.34 M	\$3.58 M
Recreation User Fees					\$318,000	\$426,000

* Budget figures are not adjusted for inflation

** USFS Data compiled by Tyler Glenn, the Chugach National Forest Recreation, Lands, Minerals, and Heritage Staff Officer, for this planning effort.

- **Federal outdoor recreation budgets are tight; state budgets are tighter.** Below is one example comparing Chugach State Park budget and staff with two other popular recreation destinations.²⁷

Public Park/Forest	Acres	Annual Visitors	Annual Budget and Staff
Chugach State Park	495,000	1-1.5M	\$1M; 8 full time, 1 seasonal
Chugach National Forest ⁴⁹	5.4M	500,000	\$21M; 110 full time, 100 seasonal
Denali National Park	6.1M	600,000	\$15M; 129 full time, 135 seasonal

- But there is good news: a recent increase in DPOR's budget, plus Great American Outdoors Act (GAOA) funding. In 2022, DPOR was allocated an additional \$1.2 million in Vehicle Rental Tax, which provides a more stable, sustainable funding platform for state park field operations. Increase in overall state revenues allowed for timely investments in capital projects for outdoor recreation infrastructure, including public use cabins, trails, parking lots, and deferred maintenance. At the federal level, the passage of the GAOA provides a five-year boost in outdoor recreation funding for the federal land managers.²⁸

5. CONTRIBUTIONS TO HEALTH AND QUALITY OF LIFE

- According to a study conducted by the School of Human Kinetics, University of British Columbia, **there is “irrefutable evidence of the effectiveness of regular physical activity in the primary and secondary prevention of several chronic diseases (e.g., cardiovascular disease, diabetes, cancer, hypertension, obesity, depression, and osteoporosis) and premature death.”**¹⁶
- **The combination of nature and physical activity leads to significant mental and physical health benefits.**³⁹ Outdoor recreation has an important role in helping to address health epidemics such as obesity and heart disease.
- **Outdoor recreation is especially important to Alaskans.**⁴⁴ Alaska is tied with Montana for the highest rate of participation in outdoor recreation in the U.S. overall. Nearly six out of ten Alaskans say that outdoor recreation opportunities were an important reason for living in the state. Top reasons for living in Alaska:

Living in a place where there are not a lot of people	61%
Opportunities for outdoor activities	58%
Freedom I feel in Alaska	57%
This is where my family is	56%
Wilderness character of Alaska	54%
I have a job here	52%
Fishing and hunting opportunities	50%

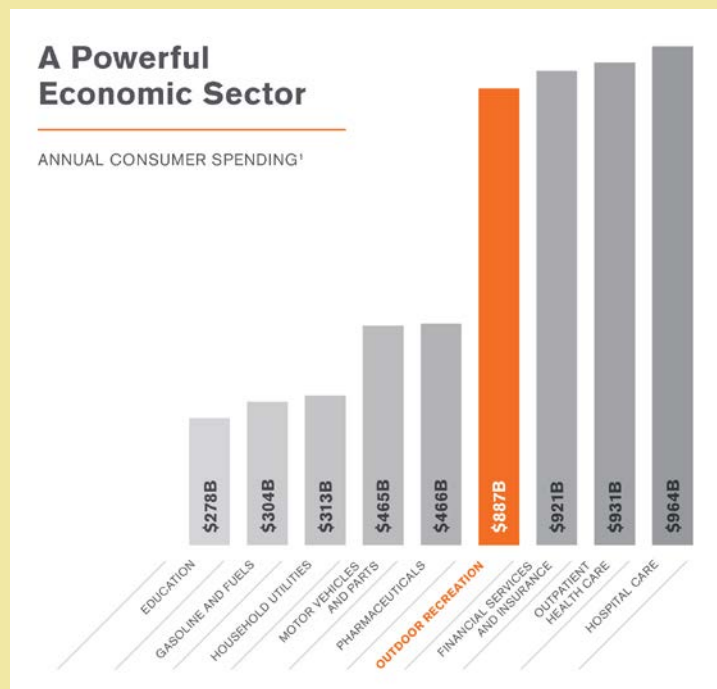
SECTION B

STATISTICS REVIEW: NATIONAL AND ALASKA OUTDOOR RECREATION TRENDS

Outdoor recreation is a major segment of the U.S. economy, generating jobs and business opportunities equal to or exceeding more identifiable economic sectors.³²

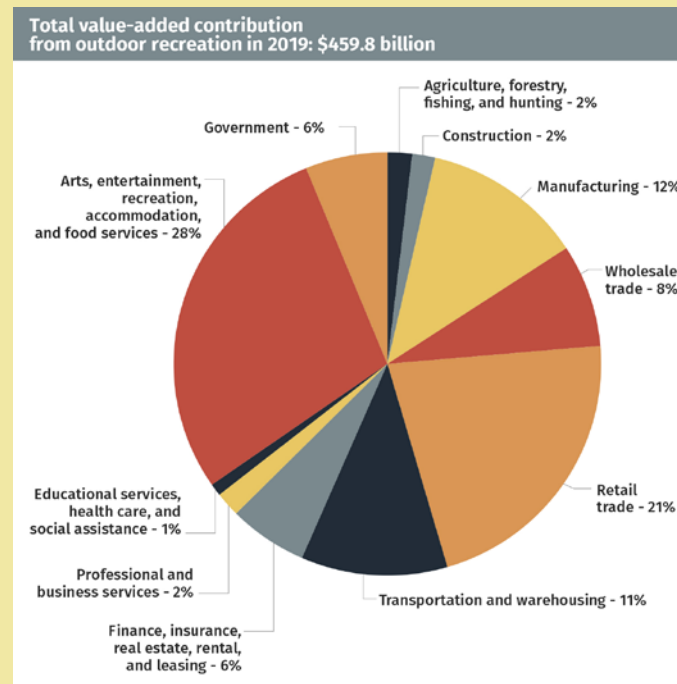
1A. OUTDOOR RECREATION IS A GROWING, MAJOR ECONOMIC FORCE: NATIONWIDE

OUTDOOR RECREATION IS A SLEEPING GIANT OF THE U.S. ECONOMY³²



The \$887 billion outdoor recreation industry includes everything from the cost of bait and tackle to the travel and the guide that takes you fishing, accommodations and food at the end of the day, and the cost to build and maintain the lodge or campsite. As a result, the full scope of outdoor recreation in the U.S. economy is complex and tends to be overlooked.

AN OUTDOOR RECREATION INDUSTRY, WITH MULTIPLE SUBSECTORS



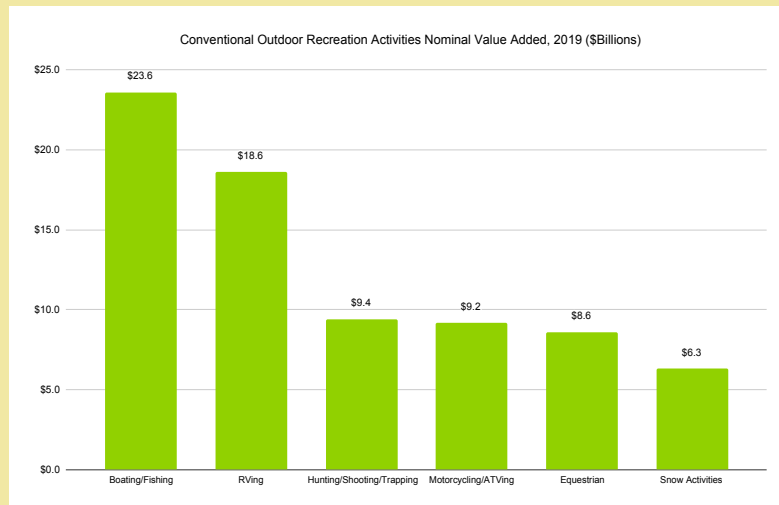
An industry with a complex economic ecosystem of components, which generate jobs, income, and business opportunities. As the pie chart shows, the industry's two largest components are retail and a bundle of activities including arts, entertainment, recreation, accommodations, and food.^{40,42}

Outdoor recreation is a significant and growing national employer, providing jobs to almost 5.2 million people in 2019 who earned more than \$226.3 billion dollars (up from 4.8 million in 2013, an eight percent increase).⁴³

MEASURING THE ECONOMIC IMPACT OF OUTDOOR RECREATION ACTIVITIES – NATIONWIDE DATA

Below are two ways of measuring outdoor recreation spending. The first way is from the Bureau of Economic Analysis (BEA) that tracks outdoor recreation’s portion of the value-added national gross domestic product (GDP).⁴³ “Value added” means the figures do not double count spending through steps between manufacturing, wholesaling, and final retail sales. BEA data only includes recreation goods manufactured inside the U.S.. The second way is from the Outdoor Industry Association (OIA) which uses surveys to track annual household spending on outdoor recreation goods and services.³² This allows a helpful breakdown of spending across recreation categories. Because the OIA data includes costs for outdoor gear and equipment manufactured *outside* the U.S., the two methodologies are not directly comparable. Both clearly indicate that outdoor recreation generates considerable consumer spending and revenues.

BEA: OUTDOOR RECREATION ADDED \$459.8 B IN 2019 AND \$374.3 B IN 2020 TO THE U.S. GROSS DOMESTIC PRODUCT



OIA: DIRECT IMPACTS OF THE OUTDOOR RECREATION ECONOMY BY ACTIVITY CATEGORY - 2017

AMERICANS PARTICIPATING IN OUTDOOR RECREATION ANNUALLY SPEND

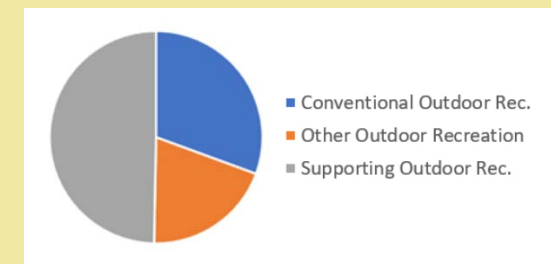
	GEAR, ACCESSORIES & VEHICLES	TRIP RELATED	TOTAL
CAMPING	\$31,271,155,486	\$135,591,624,999	\$166,862,780,485
FISHING*	\$11,867,666,850	\$23,908,160,290	\$35,775,827,140
HUNTING*	\$16,059,527,274	\$11,318,772,808	\$27,378,300,082
MOTORCYCLE RIDING	\$16,726,560,701	\$47,428,610,964	\$64,155,171,665
OFF ROADING	\$15,520,574,134	\$35,996,107,969	\$51,516,682,103
SNOW SPORTS	\$12,530,315,740	\$60,190,242,316	\$72,720,558,056
TRAIL SPORTS	\$25,342,546,672	\$176,144,141,213	\$201,486,687,885
WATER SPORTS	\$29,059,965,205	\$110,911,844,967	\$139,971,810,172
WHEEL SPORTS	\$13,857,894,195	\$82,864,146,456	\$96,722,040,651
WILDLIFE WATCHING	\$12,272,757,581	\$17,947,854,866	\$30,220,612,447
TOTAL	\$184,508,963,838	\$702,301,506,848	\$886,810,470,686

WHY THE DIFFERENCE IN THE TWO TABLES

The BEA table above shows value added in one of the three components of outdoor recreation’s contributions to U.S. GDP – “conventional” outdoor recreation. This includes spending on gear, equipment, fuel, concessions, maintenance, repair, and fees (see pie chart to the right, blue segment). Note: fishing makes up \$4.98 billion of the \$23.5 billion boating and fishing category.

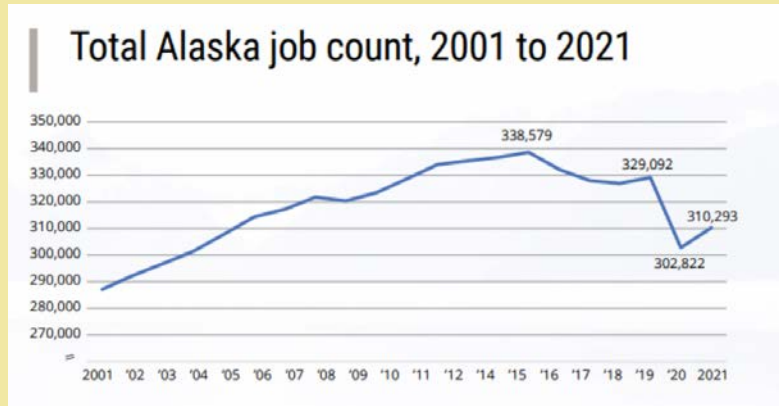
The OIA table to the right uses a different methodology. It shows spending over a larger set of categories with most of the spending in camping, trail, and water sports. There are two reasons for the difference. First, it includes all three of the BEA outdoor recreation categories (pie chart, grey and orange segments) which adds spending on food, accommodations, and travel. As mentioned above, this includes the value of equipment and apparel manufactured outside the U.S.. And second, as the OIA table indicates, trip-related expenses are the majority share of outdoor recreation spending. This is particularly relevant in Alaska because very little outdoor recreation gear used in Alaska is manufactured in-state.

BEA: Split of Outdoor Recreation “Value-Added” in Three Categories



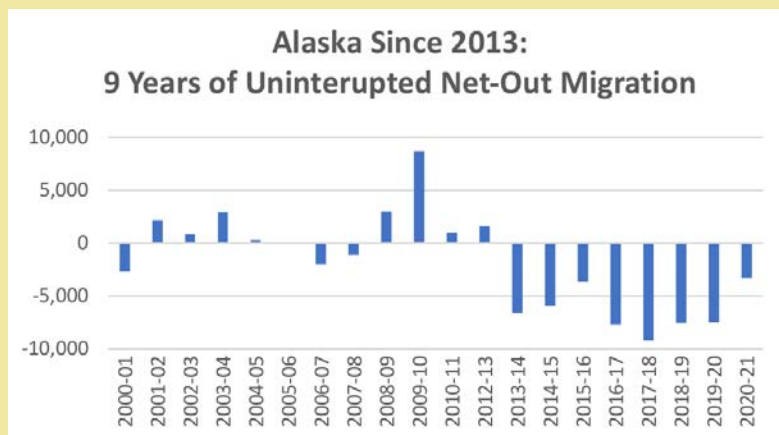
1B. ALASKA'S OUTDOOR RECREATION AND TOURISM INDUSTRY: A BRIGHT SPOT IN A STRUGGLING STATE ECONOMY

As of fall 2022, Alaska remains in a multi-year recession with declining jobs (Job Count chart below⁶) and significant out-migration (Out-Migration chart below).¹⁰ While the COVID years took a big bite out of the growth of the tourism and outdoor recreation industries, since 2011 this sector was one of the few growing segments in the Alaska economy with real prospects for continued growth.



ALASKA'S CURRENT ECONOMY: SOBERING DETAILS

- Job loss and out-migration: downward trends prior and accelerating during COVID. 2012 to 2021 was the longest period of negative net migration in Alaska's history.⁸
- Slowing Birth Rate: declining since 2015, the 9,445 births from 2020 to 2021 was the lowest since 1979 to 1980.²³
- Oil and gas jobs: down 8,406 from peak employment in 2015 through 2021. The Department of Labor projects a slow recovery and eventually settling slightly above pre-pandemic job counts in 2030.⁶
- Pandemic job loss recovery: from 2019 to the fall of 2022, Alaska ranked 47th among all U.S. states in post-pandemic job recovery while states with similar outdoor recreation resources (Idaho, Utah, and Montana) were ranked first, second, and third.⁶



ENCOURAGING STATISTICS

- Record low unemployment: despite Alaska's under-performing state economy.
- Wages rose: after being significantly down for much of 2020, total wages paid by Alaska employers rose in late 2021. In early 2022, wages were 2.4 percent above first quarter 2019.⁷
- A growing sector: outdoor recreation was one of the few sectors of Alaska's economy that grew between 2013 and 2019 and is now coming back strong post-COVID.
- \$250 million a year! That's the increase in annual spending if typical out-of-state visitors has a reason to add just one more day to their Alaska visit.¹⁰

1B. ALASKA'S OUTDOOR RECREATION AND TOURISM INDUSTRY: A BRIGHT SPOT IN A STRUGGLING STATE ECONOMY

The statistics presented in this section document the continuing growth of tourism and outdoor recreation. These industries overlap to a large degree, but do have differences. One distinction is tourism, as measured by the State of Alaska, only includes out-of-state visitors. This misses the significant spending by in-state residents traveling to other regions; for example, half of all visitors to Mat-Su Borough come from within Alaska. A second difference is that a portion of out-of-state traveler spending takes place indoors, at museums or other cultural venues, or in retail stores like the abundant gift shops in Southeast Alaska. Despite these differences, the large majority of spending measured in both categories is the same; that is, spending that opens up ways to experience Alaska's abundant outdoor recreation resources.

Tourism Economic Impacts

Including direct, indirect, and induced impacts, Alaska's out-of-state visitor industry accounted for 43,300 annual jobs in the state in 2017. Peak employment is estimated at 52,000 jobs. The industry generated \$1.5 billion in labor income, and \$4.5 billion in economic output, over the same period.

The visitor industry has shown strong growth over the last decade, reflecting significant increases in visitor volume. Between 2008 and 2017, visitor volume increased by 15 percent (and by 27 percent since the industry's low point in 2010), reaching a record 2.2 million visitors in 2017. Over the same period, the number of visitor industry jobs grew by 20 percent; and both labor income and economic output grew by 32 percent.

Economic impacts are based on direct visitor industry spending of \$2.8 billion, which includes \$2.5 billion in visitor spending, \$326 million in spending on air and ferry tickets to enter/exit the state, \$297 million in cruise line spending and payroll, and \$22 million in spending by cruise ship crew members.

In 2017, Alaska's visitor industry accounted for...



OVERLAPPING: TOURISM VERSUS OUTDOOR RECREATION⁴¹

- Contribution to Gross Domestic and Gross State Product: tourism (2.92%) and outdoor recreation (2.1%) using 2019 BEA reports
- Spending in Alaska: tourism (\$2.2 billion) and outdoor recreation (\$3.2 billion)
- Jobs in Alaska: tourism (55,000-peak) and outdoor recreation (38,100)

OUTDOOR RECREATION AND TOURISM ARE CREATING JOBS AND ADDITIONAL SPENDING: Yet it is concentrated in Southcentral and Southeast Alaska⁴⁵

FISCAL BENEFITS:

There were over \$126 million in state revenues and \$88 million in municipal revenues²⁵

COVID: A RESILIENT INDUSTRY DESPITE VULNERABILITY TO DISRUPTIONS

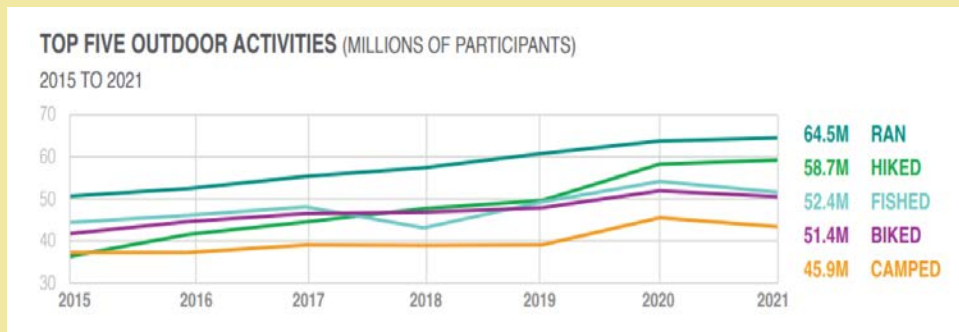
- Out-of-state visitors: Visitor volume fell by 82 percent between the April to December periods of 2019 and 2020 (from 2.4 million to 427,000 visitors), with a commensurate 78 percent drop in visitor revenue.²⁶
- 2021 rebound: Independent and in-state visitor spending surged in 2021. Approximately two million passengers passed through Anchorage which was a 93 percent increase from 2020.³⁸
- 2022 growing stronger: Anchorage hotel demand and overall visitor numbers is expected reach record levels in 2022. The city is on track to collect record bed and car-rental taxes, the latter in part also due to higher prices.¹²

Economic Impacts of Alaska's Visitor Industry, 2017, by Region



2. CONTINUING GROWTH IN DEMAND FOR OUTDOOR RECREATION IN ALASKA, BY BOTH RESIDENTS AND VISITORS

National and Alaska data tell the same story: the demand for outdoor recreation experiences and infrastructure continues to increase, driven by both higher participation rates and growing populations (in the lower 48 states and in parts of Alaska). See Chapter 2, Section C for more information on Patterns of Use and Mobility Device Count data.



NATIONAL OUTDOOR RECREATION PARTICIPATION CONTINUES TO RISE³¹

- The percentage of Americans ages six and over participating in outdoor recreation grew from 49 percent in 2010 to 54 percent in 2021.
- In 2021, 165 million Americans participated in outdoor recreation at least once, a 26 percent increase since 2020, the most notable increase ever recorded.
- In 2021, the average annual number of outdoor outings per participant increased 6.1 percent, from 71 to 76 outings per participant, or about one and a half times per week. The top five categories of outings were running, biking, fishing, hiking, and birdwatching.
- Despite slight increases in diversity across outdoor recreation, the current participant base is less diverse than the overall population, and significantly less diverse across younger age groups.
- The number of participants 55 years and older increased, and senior participants ages 65 and older were in the fastest-growing age category.

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



OUTDOOR RECREATIONAL USE IN ALASKA INCREASED

significantly between 2019 and 2021. Mobile phone “device days” grew from 1.0 million in 2019 to 1.4 million in 2020, and to 1.5 million in 2021. This growth occurred despite the dramatic drop in cruise visits.³³

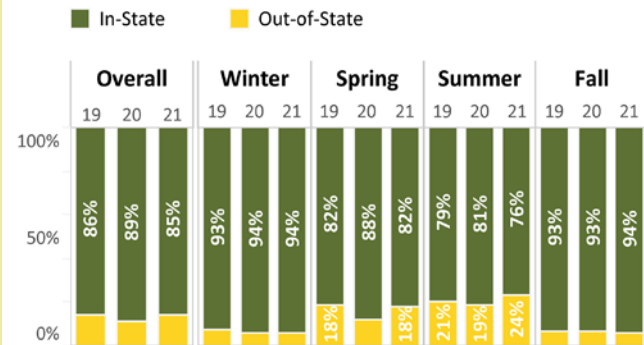
- 2019: a strong cruise year with 1.3 million cruise visitors, over 60 percent being out-of-state travelers.
- 2020: no cruise visitors, but the gap was filled by independent travelers and Alaska residents visiting much but not all of, Alaska.
- 2021: just 115,000 cruise visitors, but with a surge of independent travelers in the wake of COVID, leading to a net increase in out-of-state summer visitors from 2019 to 2021 (along with an increase in Alaskans getting out to public recreation sites statewide).

OUTDOOR RECREATION AND OUTDOOR EXPERIENCES ARE AT THE HEART OF ALASKA'S DRAW TO OUT-OF-STATE VISITORS

The primary driver of travel to Alaska are the state's natural wonders – mountains, glaciers and wildlife, and the public lands, facilities and services that open the door to these attractions. While shopping is the most common activity for visitors (*see Activity Participation table to the right*¹⁰), it is a secondary activity. Wildlife viewing, hiking or nature walks, and fishing are the top outdoor activities for visitors, with percentages of participation varying significantly between independent air travelers and the cruise, ferry, or highway visitors.

VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



OUTDOOR RECREATION IS ESPECIALLY IMPORTANT TO ALASKANS

Alaska has the highest rate of participation in outdoor recreation in the U.S. overall (tied with Montana). As the figure above shows, using SCORP mobility data, Alaskans were the main participants of outdoor recreation destinations in Alaska. *See Chapter 2, Section C for more information on Patterns of Use and Mobility Device Count data.*

TABLE 5.7 - Activity Participation
By Transportation Market, 2006, 2011, and 2016 (%)
Base: Intercept Respondents

	AIR			CRUISE			HWY/FERRY		
	2006	2011	2016	2006	2011	2016	2006	2011	2016
Shopping	61	61	59	77	80	85	60	64	63
Wildlife viewing	54	53	59	57	46	37	47	42	42
Birdwatching	20	11	14	18	6	6	14	11	12
Hiking/nature walk	38	39	46	25	20	26	38	34	37
Cultural activities	38	34	33	55	43	44	51	44	36
Museums	28	25	23	27	22	22	44	31	25
Historical/cultural attractions	14	13	12	21	15	17	15	19	15
Native cultural tours/ activities	11	8	7	26	13	16	8	10	4
Gold panning/mine tour	7	5	5	20	16	12	11	10	8
Fishing	38	39	34	8	6	4	36	26	29
Guided fishing	22	19	19	8	6	4	17	11	13
Unguided fishing	20	23	19	<1	1	<1	26	18	19
Day cruises	28	25	28	47	44	47	33	29	25
Business	23	19	18	<1	1	<1	5	5	2
City/sightseeing tours	18	15	13	60	48	44	25	13	15
Flightseeing	9	10	12	18	18	15	8	9	9
Train	10	10	9	56	54	48	11	10	9
Alaska Railroad	9	10	9	21	25	17	5	3	4
White Pass/Yukon Route	1	1	1	43	41	36	7	8	7
Camping	13	12	9	1	<1	<1	46	52	28
Dog sledding	5	5	8	9	10	14	2	2	3
Tramway/gondola	5	5	7	16	13	17	4	5	4
Kayaking/canoeing	4	6	6	5	4	5	3	4	3
ATV/4-wheeling	n/a	4	5	n/a	4	5	n/a	1	4
Biking	3	4	5	2	3	2	3	3	5
Rafting	5	4	4	5	6	3	2	3	2
Shows/Alaska entertainment	8	5	4	12	10	14	8	5	4
Salmon bake/crab feed*	5	4	4	17	10	14	7	3	4
Hot springs	n/a	n/a	4	n/a	n/a	<1	n/a	n/a	6
Northern Lights viewing	2	2	2	1	1	1	1	1	3
Hunting	1	2	2	-	<1	<1	1	1	-
Zipline	n/a	<1	1	n/a	7	6	n/a	1	1
Other	7	7	3	8	4	<1	1	7	1

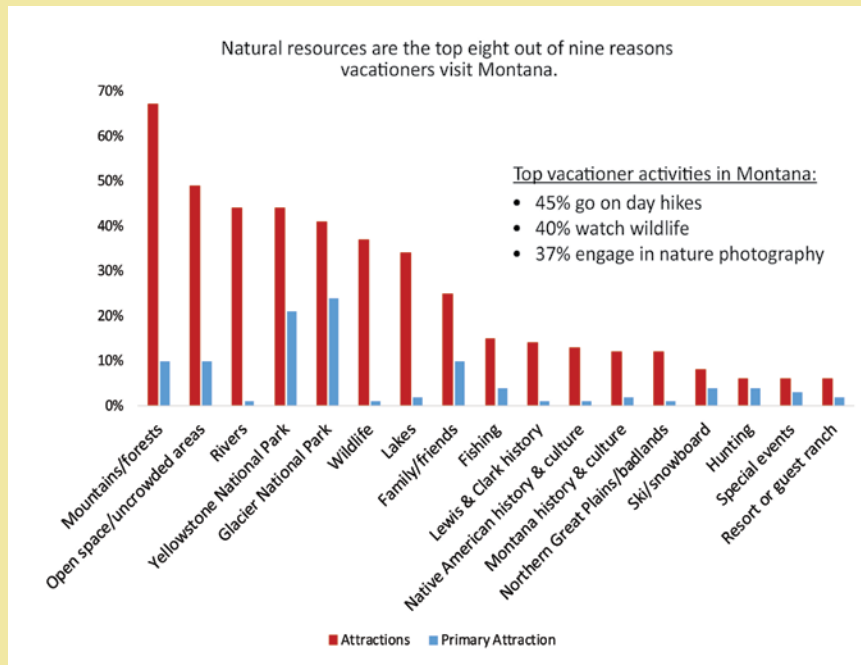
*Changes from the 2011 list of activities include the additional activity of hot springs; crab feed added to salmon bake; ORV and Jeep added to ATV/4-wheeling; and kennel tour added to dog sledding.

3. EVOLUTION OF THE ALASKA OUTDOOR RECREATION AND TOURISM MARKET – TOWARDS ACTIVE OUTDOOR RECREATION AND INDEPENDENT TRAVEL

Interests in outdoor recreation continue to evolve, for both residents and out-of-state travelers. Factors driving changes include new technologies, changing demographics, new gear, climate change, and underlying cultural changes like busier, urban lives.

“COVID accelerated a change that’s been happening over the last ten years – a big shift in Alaska tourism. The traditional, older demographic (65 plus) is still coming, but we’re seeing more families and young couples, looking for active outdoor adventure. They want to get out and experience Alaska in-person, in small groups or independently.”

– Alexis Shubin, Reservation Specialist for Alaska Wildland Adventures



WHAT ATTRACTS VISITORS IN A STATE LIKE ALASKA? (MONTANA³⁰)

Travelers seek active ways to experience the natural world:

- The chance to experience the natural world is a top draw.³¹
- During the COVID pandemic in 2019 to 2021, day hiking, camping, bicycling, and camping were the fastest growing activities in the U.S..³¹
- Between 2011 to 2016, hiking and nature walks were the fastest growing visitor activities for both independent and out-of-state cruise visitors.¹⁰



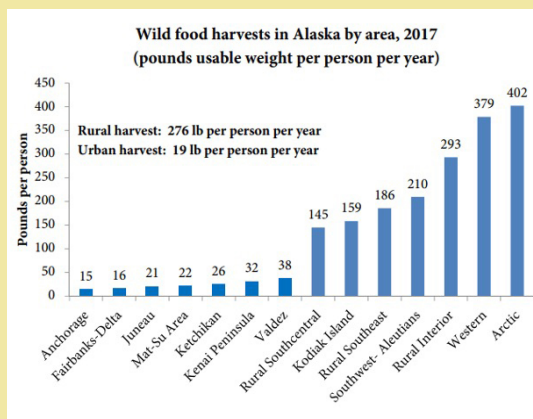
HOW DID OUTDOOR RECREATION CHANGE IN THE 2010'S?¹⁹

- Online maps took over the world, lowering the barrier for outdoor pursuits.
- The widespread popularity of social media increasingly drove where and when people recreate.
- Human-powered adventures, with a focus on friends and fitness, took center stage: fat tire bikes, rock climbing, stand-up-paddle boards.
- Drone photography created a buzz of excitement.
- Local activists worked to conserve local spaces and outdoor recreation opportunities.
- The pressing story was climate change which is transforming many outdoor experiences – from reduced snowfalls to more alpine brush, empty reservoirs, wildfires, and changes in wildlife.

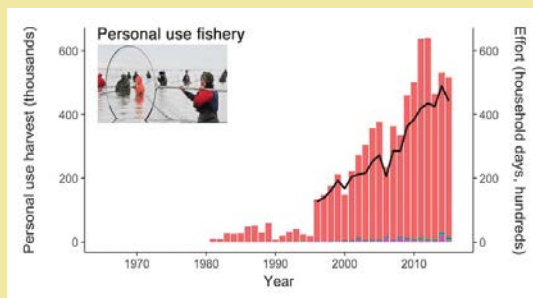
ALASKA IS DIFFERENT – OUTDOOR RECREATION TRENDS IN ALASKA VERSUS “OUTSIDE”

The previous page shared information on big picture trends in outdoor recreation, nationwide and by out-of-state visitors. Below is information in three categories that adds information specific to Alaska.

SUBSISTENCE WILD FOOD HARVEST: AN ESSENTIAL PART OF LIFE IN ALASKA



The most recent Subsistence Survey² gives an accurate picture of the magnitude of subsistence harvest in rural Alaska.



The latest personal use harvest data⁴⁶ shows the rapid increase in personal fishery use days through 2015. Since that time, harvests have gone up and down but have been relatively stable, on average.

GROWING INTEREST IN SNOWMACHINING, IN WINTER BY RESIDENTS AND VISITORS



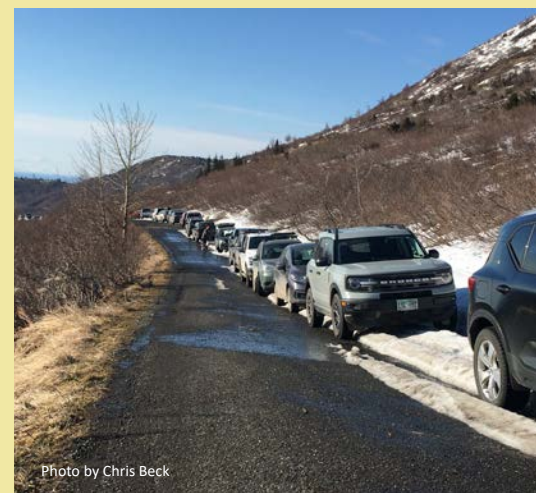
“Alaska Mining and Diving pre-order program for snowmobiles in 2020 set a record; exceeding all target sales by such a large margin that the factory suppliers restricted sales since they couldn’t keep up with the demand. There are six- to twelve-month waiting lists for snow machines, off-road vehicles, and boats.”

– Nick Olzenak, President and General Manager of Alaska Mining and Diving

“If we look at which season is growing at a faster rate over the last ten years or so, the winter season was growing faster than the summer. Summer remains our peak for number of visitors, but it’s winter that has been expanding the most.”

– Scott McCrea, CEO and president for Explore Fairbanks

NEWS FROM THE FRONTLINES – ALASKA LAND MANAGERS REPORT ON TRENDS IN USE



SCORP Land Managers Survey:

What were the top growth areas in recreation demand from 2019-2022? (Question #36)

1. Day-use recreation (city parks, picnic areas)
2. Winter biking (trailhead parking, trails, open space)
3. Walking or biking (paved trails, parking areas)
4. Cross-country skiing (trailheads, groomed and open space trails)
5. Camping or RV-ing (campgrounds)
6. Mountain biking (unpaved trails, trailheads, open space)
7. ATV riding (places to ride, developed trails)

TRENDS IN HUNTING AND FISHING – NATIONWIDE AND IN ALASKA

Sport hunting and fishing are big parts of Alaska life. Participation in Alaska in both activities grew rapidly in the 2000's. For example, Alaska resident hunting license sales increased 18 percent from 2000 to 2009.²⁰ Since that time, participation in Alaska in hunting and fishing has been stable to slightly declining, except in a recent increase during the COVID pandemic. In the lower 48 states, participation in both fishing and hunting has fallen over the last 50 years. Agencies and non-profits in both Alaska and nationwide are working to sustain and grow participation by expanding access, expanding programs, increasing diversity, and focusing on the "locavore" movement (eating locally sourced foods).^{3,37}

ALASKA DEPARTMENT OF FISH AND GAME: SALES OF HUNTING AND SPORTFISHING LICENSES³

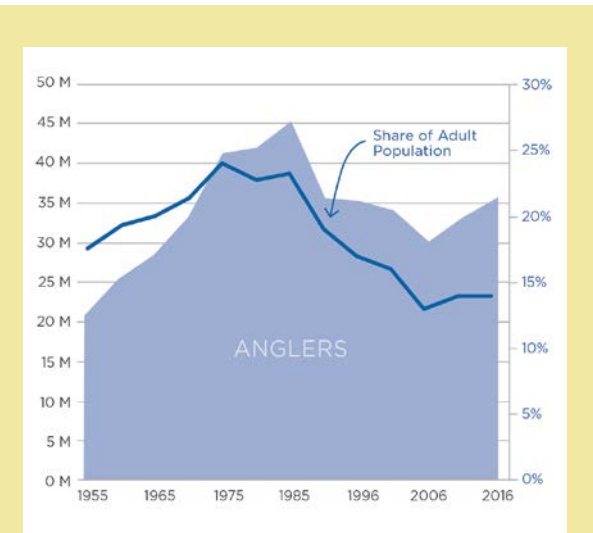
TYPE OF LICENSE	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Res Sport Fish	95,019	89,313	85,956	91,082	107,086	107,332	106,825	106,619	102,539	107,703
Res Hunt	17,796	16,077	16,707	17,331	19,814	19,544	19,453	19,358	19,143	19,431
Res Trap	848	781	824	856	892	876	1,048	1,029	1,061	933
Res Hunt/Sport Fish	44,129	39,748	41,169	38,602	57,124	47,838	46,232	44,893	45,314	44,936
Res Hunt/Trap	673	627	709	677	875	867	924	974	910	847
Res Hunt/Trap/Sport Fish	6,701	6,247	6,229	5,485	11,243	9,039	8,493	8,201	8,064	7,639
Res Low Income Hunt/Trap/Sport Fish	18,054	16,673	17,239	18,594	19,344	18,039	19,255	19,622	20,128	21,495
Res Blind Sport Fish	42	26	26	39	43	35	50	48	39	36
Res Blind Hunt	21	20	44	45	24	25	111	40	31	136
Res Nat'l Guard/Military Rsv Hunt/Sport Fish	1,894	1,850	1,699	1,380	1,034	1,172	1,788	1,506	1,498	1,878
Permanent Identification Cards	7,039	6,648	6,492	6,667	6,949	6,369	6,427	6,226	5,746	6,114
Military Disabled Veteran Hunt/Sport Fish	680	681	616	664	590	542	470	392	397	347
NonRes Sport Fish	11,537	17,028	16,476	15,974	14,856	14,742	13,436	12,818	12,640	12,771
NonRes 1 Day Sport Fish	33,463	121,439	118,191	116,658	110,109	105,718	99,086	97,200	90,980	93,113
NonRes 3 Day Sport Fish	26,576	56,720	56,910	56,260	55,829	54,005	51,263	48,945	46,565	48,488
NonRes 7 Day Sport Fish	44,647	83,702	86,586	81,936	85,169	81,476	78,386	76,287	72,735	74,086
NonRes 14 Day Sport Fish	9,193	16,477	16,855	17,178	22,389	21,811	20,364	20,209	20,504	20,542
NonRes YT-AK Reciprocal SF	8	2,527	2,242	2,228	2,383	2,190	2,255	2,507	2,464	2,385
NonRes Hunt	8,415	9,779	8,713	6,780	11,802	9,524	8,585	8,146	8,627	8,164

In Alaska, residents hunt and fish more than U.S. residents. The significant national decline in hunting is not as significant in Alaska.

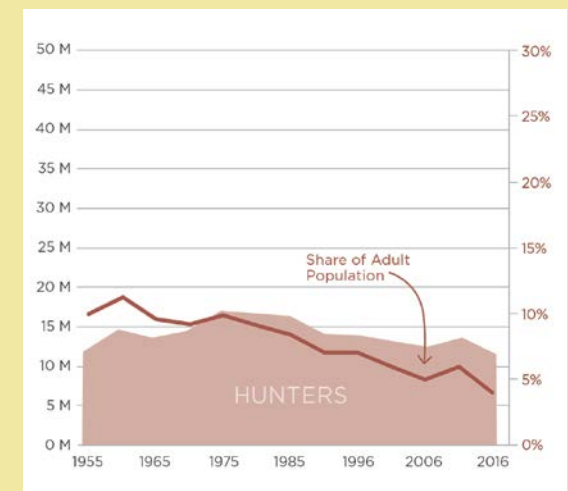
- Days fished in Alaska (residents and visitors):⁵

Year	2011	2015	2019	2020 (covid)
Use days	1.919M	2.212M	2.075M	1.567M

- At least a quarter of Alaskan residents obtain fishing licenses.³⁴ Note: "at least" is stated because Alaska residents over age 60 can get a lifetime license, so ADF&G is unable to track active licenses among users over 60.
- Deer harvests in Game Unit 4 [Admiralty, Baranof, and Chichagof Islands in Southeast] had stable harvest levels between 2011 and 2015 with an average annual harvest of 7,100 deer.^{36,21}
- Moose harvests in Game Unit 13 [Northcentral Mat-Su Borough] had stable harvest levels between 2011 and 2015 with an average annual harvest of 1,000 moose.²²



Sportfishing participation in the U.S. is up to approximately 17 percent of the population over age six fishing at least once a year.³⁷

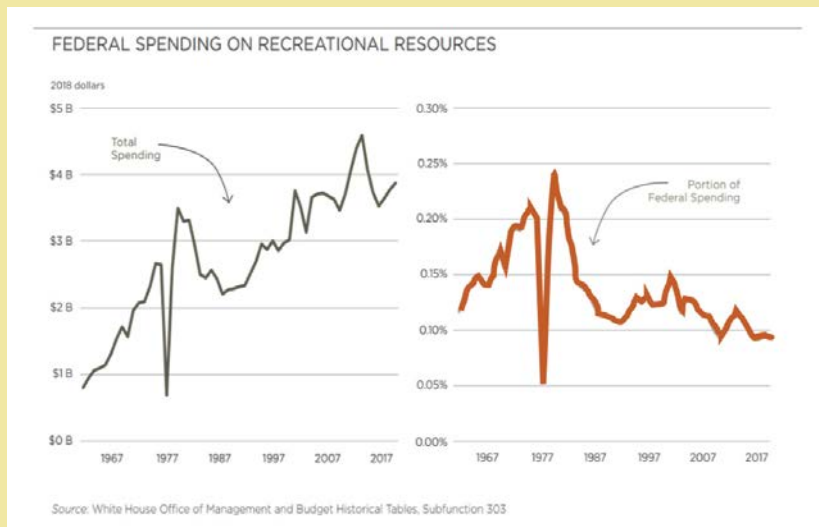


Participation in hunting in the U.S. has continued to decline over the last 20 years.³⁷

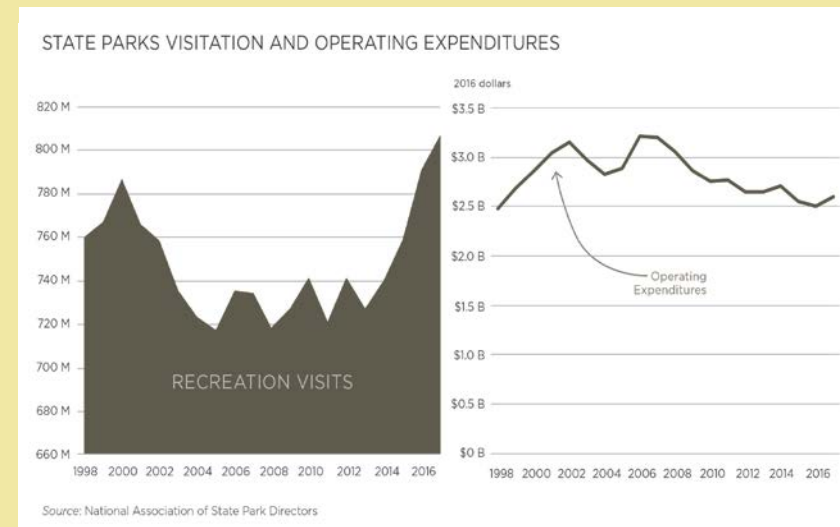
4. EVOLUTION OF THE ALASKA OUTDOOR RECREATION AND TOURISM MARKET – TOWARDS ACTIVE OUTDOOR RECREATION AND INDEPENDENT TRAVEL

Interests in outdoor recreation continue to evolve for both residents and out-of-state travelers. Factors that are driving changes include new technologies and gear, and changing demographics, climate change, and underlying cultural change.

OVERALL FEDERAL SPENDING GOES UP, WHILE PERCENTAGE SPENT ON OUTDOOR RECREATION GOES DOWN³⁷



RECREATION VISITS TO STATE PARKS NATIONALLY GO UP (and continued up since 2017) WHILE OPERATIONS FUNDING DRIFTS DOWN²⁸



WHILE FEDERAL OUTDOOR RECREATION BUDGETS ARE TIGHT; STATE OF ALASKA BUDGETS ARE TIGHTER. The examples below compare Chugach State Park budget and staff with two popular federal land outdoor recreation destinations.²⁷

Public Park/Forest	Acres	Annual Visitors	Annual Budget and Staff
Chugach State Park	495,000	1-1.5M	\$1M; 8 full time; 1 seasonal
Chugach National Forest	5.4M	500,000	\$21M; 110 full time; 100 seasonal
Denali National Park	6.1M	600,000	\$15M; 129 full time; 135 seasonal

GOOD NEWS!

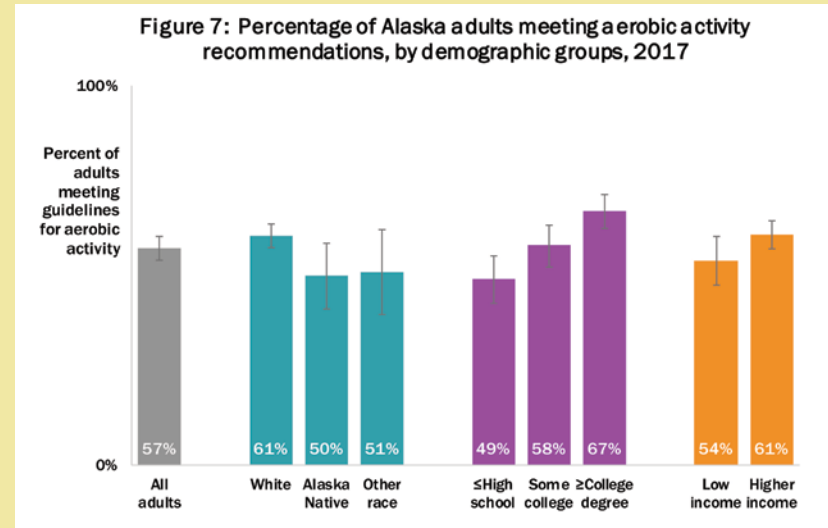
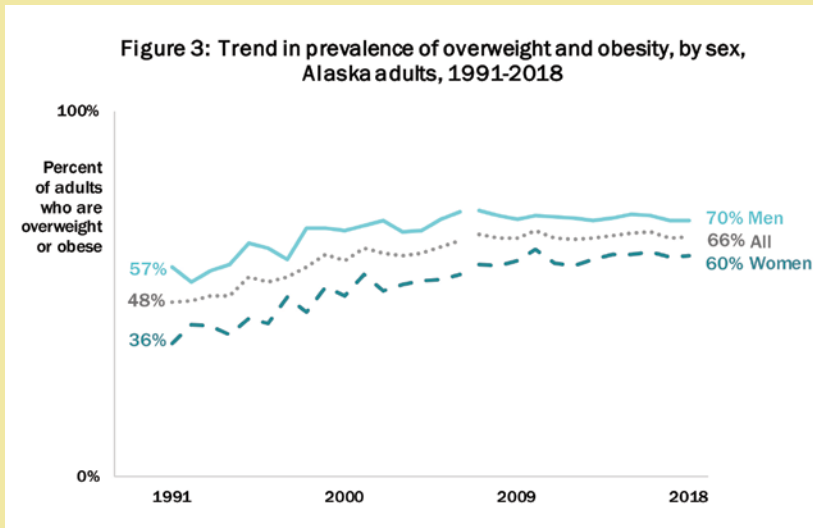
As referenced in the introduction to this chapter, the FY23 State of Alaska budget allocates an additional \$1.2 million in Vehicle Rental Tax to DPOR, which provides a more stable, sustainable funding platform for state park field operations. Increases in overall state revenue allowed for timely investments in capital projects for outdoor recreation infrastructure, including public use cabins, trails, parking lots, electronic fee stations, and deferred maintenance.

5. OUTDOOR RECREATION: IMPROVED PHYSICAL AND MENTAL HEALTH, REDUCED HEALTH COSTS

Outdoor recreation helps people stay healthy and happy. Outdoor recreation can play a big role in addressing this challenge. Ready access to trails, open space, and parks make it easier and more inviting to be physically active outside, which increases day-to-day health, reduces the odds of long-term serious diseases and premature death, and helps bring down medical expenses. A vast collection of studies has provided the solid proof behind these benefits, as highlighted below.¹⁸

THE FACTS: TWO-THIRDS OF ALASKA'S RESIDENTS ARE OBESE OR OVERWEIGHT, AS ARE 1 OUT OF 3 OF ALASKAN YOUTH.

Just over half of Alaskans meet the basic aerobic activity recommendations. Improved access to healthy, outdoor recreation activities and spaces can make the difference in Alaskan's health!⁴



FIVE HEALTHY BENEFITS OF ENJOYING OUTDOOR EXERCISE AND RECREATION – RESEARCH-BASED BENEFITS INCLUDE:⁵⁰

1. Reduced stress: restoration from mental fatigue
2. Improved mood: positive effects on mental health
3. Improved self-esteem
4. Improved physical health: increased fitness and cardiovascular functioning as well as reduced obesity, blood pressure, and risk of disease such as diabetes or cancer
5. Strengthened social connections: connections to community and to one another

RESEARCH CONFIRMS INTUITION – BENEFITS OF BEING OUTSIDE:¹⁸

- In 24 different locations, the researchers sent people to either a nearby forest or a nearby city where they spent approximately 15 minutes walking and 15 minutes sitting. Immediately after these activities, people who visited the forest had a lower heart rate, lower blood pressure, and lower levels of the stress hormone cortisol in their saliva than people who visited the city.
- People who spent two hours or more in nature during the last week were significantly more likely to report good health and high life satisfaction compared to people who said they spent no time outside.



Byers Lake in Denali State Park

SECTION C

TRACKING OUTDOOR RECREATION DEMAND: LOCATIONS AND TRENDS IN USE

1. INTRODUCTION

Alaska's size and variety of recreation use make it difficult and costly to measure recreational use patterns using traditional data collection methodologies. Traditional methods require relying on imprecise data like parking lot fees and commercial operator annual reports, or positioning researchers with GPS units at recreation sites who count and survey users while obtaining location information.

Federal and state agencies use variations of these methods in some locations, but the results are inconsistent, often out-of-date, less reliable, and do not provide a comprehensive statewide picture of use trends. And while the Alaska Visitor Statistics Program (AVSP)⁹ provides detailed and useful data on out-of-state visitors, it provides no information on Alaska resident activities. Because of the cost (over \$500,000), the State-funded AVSP process has been carried out less frequently than in the past. The most recent survey (AVSP VII) was completed in 2016.

To overcome these challenges, the SCORP employs a new cell-phone-based technology that collects aggregated and anonymized recreation user information with minimal on-the-ground efforts. Mobile cell phone location data (also known as *mobility data*) allows tracking of changes in the intensity and location of activities across all public lands and can be scaled at a statewide, regional, site-specific, or geographic levels – providing an updated, data-driven foundation for SCORP policies.

Diverse device apps – for example, weather, navigation, games, and social media – ask for permission to

collect anonymized location information. Collected anonymously and passively from cell phones and tablets, mobile location data uses the data already collected by cellular providers to access past use patterns in defined study areas. By monitoring over 150,000 different mobile phone apps, the location (latitude and longitude), timestamp, and anonymously assigned device IDs are collected and available for analysis. Devices record frequencies of pings while in a study area (dependent upon applications used and cell phone connectivity). Device data is recorded even without cell phone connectivity, albeit at a somewhat lower volume.

On average, approximately five to ten percent of all available devices in an area are captured through this methodology resulting in very large sample sizes when compared to traditional methods. Mobility data not only captures device numbers and movement patterns through time, but with analysis, it can distinguish device geographic origins (e.g., in-state versus out-of-state users).

Mobility data makes a variety of analyses possible across a variety of geographic scales – from statewide, to regional, to individual parks. Mobile location data's strongest capabilities come from the specific geographic origin of a device, movement patterns, "dwell time," usage hotspots, and other device movement-related information. Using *normalization* (see Section 2 that follows for definition of terms) across years to account for sample size differences, mobility data can also assess the relative magnitude of recreation demand and how that changes over time. Using this mobile location data, use on almost all public lands in the State of Alaska was recorded.

2. ANALYSIS

To begin the analysis, raw mobile location data was obtained for the entire state for 2019, 2020, and 2021. Comparing multiple years of data was important to learn how recreational demand increased, remained steady, or decreased over time. Once obtained, an extremely thorough data cleaning process was performed to validate and geofence hundreds of park lands throughout the state. The goal was to ultimately overlay mobile location data directly on park and recreation land boundaries.

In the end, over 2,200 lands (trails, parks, rivers, etc.) were mapped using mobile location data. The following analysis included a variety of steps to understand use on public lands across the state.

DEFINITION OF TERMS

- **Normalization:** use of statistical procedures to adjust for changes in core data over time (the technique used to standardize mobile data sample sizes over 2019, 2020, and 2021)
- **Geofence:** create geographic polygons around areas of interest
- **Device Days:** the product of the number of unique devices and the number of days those devices were observed

The visitor use analysis consists of the following steps:

1. Geofence all available sites of interest to explore use within the site.
 - a. The research team worked with a GIS company to produce defined study area polygons (in the form of GIS shapefiles) of public recreation lands across the state.
 - b. Researchers removed roadways and unnecessary lands from geofenced polygons.
2. Overlay mobile location data within public lands or recreational units.
 - a. Device days were overlaid and measured across all available study area GIS shapefiles. Multiple iterations of this process were undertaken to correct for outliers and polygon changes.
 - b. GIS shapefiles were refined to filter data down to only public land usage and to clean the data.
3. Normalize and adjust data across each sample year (2019, 2020, and 2021).
 - a. Data was normalized to account for sample size differences using calculations based on the study year's sample size. This is necessary to ensure the data is comparable on a year-to-year basis.
 - b. Normalized sample sizes, or the count of device days, are not a measurement of total recreation use. The data captured is just a sample of all devices in each area and cannot be extrapolated to total use in any particular study area. (See *Section 3 that follows for more information on limitations.*) However, because the same methodology is used in all areas and across all three years, this information does give a clear indication of relative changes in use.
4. Create individual dashboards with associated metrics for three levels of analysis:
 - a. Statewide data (includes state, federal, and other public lands)
 - b. Regional data (includes the six SCORP regions in Chapter 3)
 - c. Site-specific data (includes various sites that were selected that represent many recreational uses across Alaska to help understand how use has changed at a smaller scale).

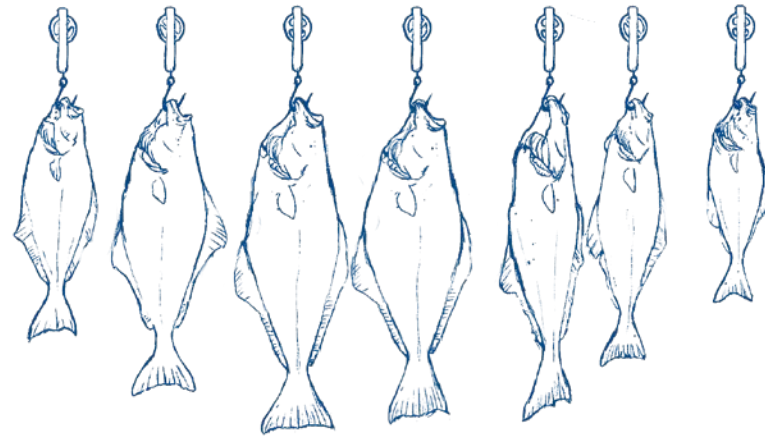


For example, Chugach State Park's mobility data "heat map" illustrates the intensity of use in different areas of the park.





Taku Harbor State Marine Park



3. LIMITATIONS

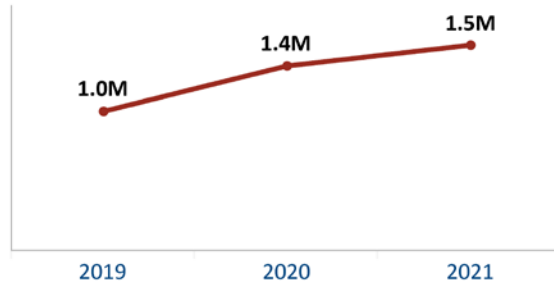
As with any dataset, mobile location data has a series of limitations and caveats that need to be understood when interpreting the results. Below are a few key points to consider when using this data:

1. This data represents a sample, or subset, of use and does not represent total visitation or use. Total population may be extrapolated but only with careful analysis that falls outside the scope of this project. However, the research team does not recommend this approach unless done at a site-specific scale, where, for example, the number of pings can be tied to a secondary source of use information, such as vehicle counts.
2. Some locations in the state may be impacted by lower volume of data due to connectivity limitations. While data is still collected, it may be at a lower volume than anticipated. Therefore, relative use figures are used to compare each site against itself and not against other locations. For instance, Chugach State Park's metrics are only compared for each year in Chugach and not compared to other individual parks.
3. Due to the sheer number of active geographic polygons required to analyze this data, some polygons may be more detailed than others. The team took as much care as possible to consider outlier areas in polygons; however, it was not possible to manually examine each polygon before analysis. All major polygons were assessed for accuracy. Therefore, some small outliers may exist in a subset of polygons.
4. Some data cleaning is undertaken by the cellular provider, or data warehouse, prior to purchase and cannot be described in this analysis. This is a limitation that cannot be avoided due to a limited number of providers of raw mobile location data. Data cleaning at this stage is mainly tied to removal of unnecessary or inaccurate data.
5. The types of use in each area are difficult to differentiate with mobile location data. Because we only have access to raw pings from devices, identifying the type of use from each device is not possible. Therefore, we cannot determine by devices what activity the device user is participating in.

Alaska Statewide Results

SAMPLE SIZE

DEVICE DAYS BY YEAR

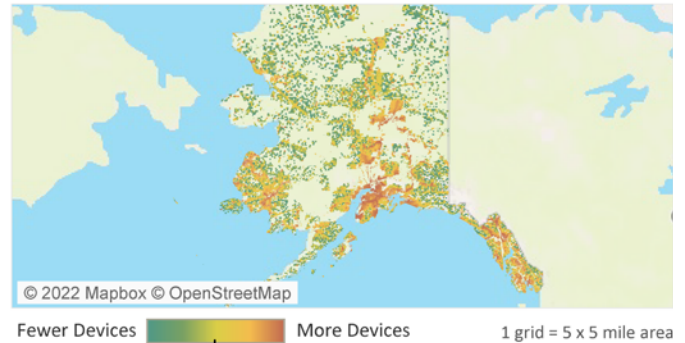


USE BY AGENCY

PERCENT OF DEVICE DAYS

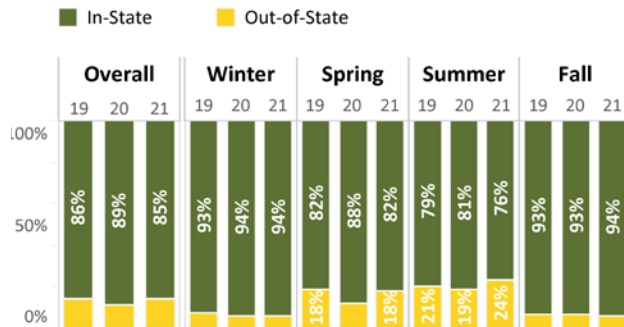


DISTRIBUTION OF USE



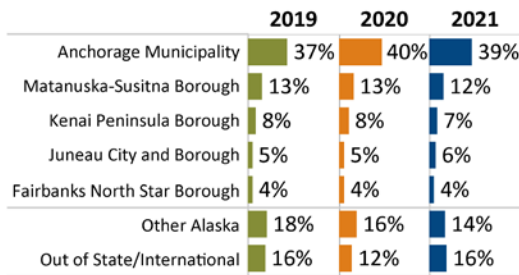
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



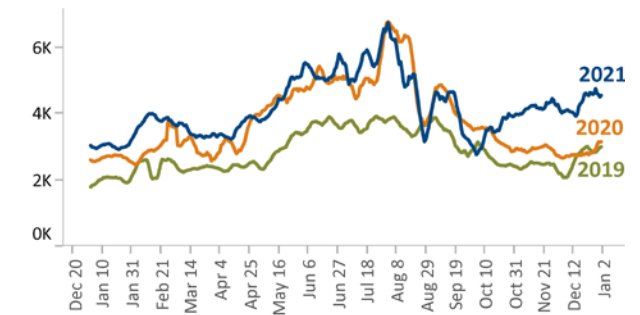
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR



PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS

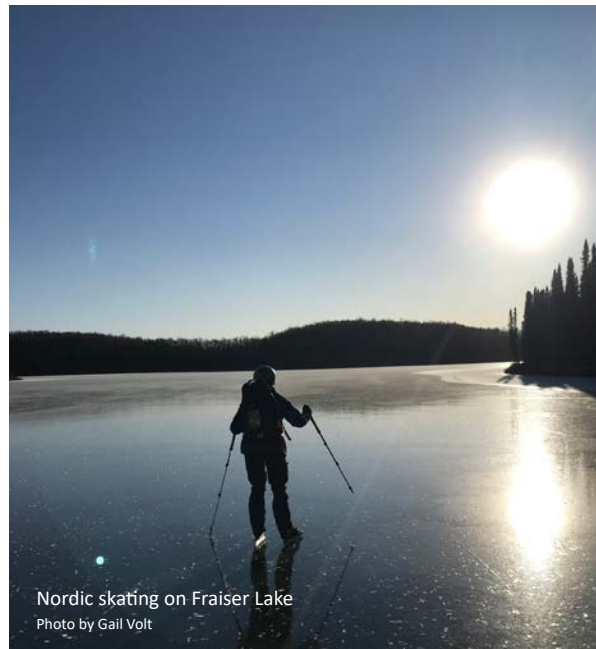


STATEWIDE MOBILITY DASHBOARD – KEY FINDINGS

- As measured by device days, the overall relative recreational use increased substantially between 2019 and 2021. Normalized sample size counts increased from approximately 1 million device days in 2019 to 1.5 million in 2021. (Note: Device days do not equal total use.)
- By coincidence, these three years of mobility data present a remarkable story about the evolving makeup of recreation use in Alaska. The net increase in relative use from 2019 to 2021 came from three sources:
 - Following a strong year for cruise travel in 2019 (1.3 million, or more than 60 percent of all out-of-state visitors), cruises to Alaska in 2020 were cancelled and cruise visitors dropped to zero that year, rising to only 115,000 in 2021;
 - However, in the wake of COVID, independent travel to Alaska surged, leading to a net increase in out-of-state summer visitors from 2019 to 2021; and
 - Adding to the overall net increase, Alaskans were out in full force at public recreation sites statewide, taking advantage of safe and enjoyable activities offered by outdoor recreation.

STATEWIDE MOBILITY DASHBOARD – KEY FINDINGS *CONTINUED*

3. Summer continues to be Alaska’s strongest outdoor recreation season, but other seasons are experiencing a rise in use. Driven by interest in activities such as viewing northern lights, biking, skiing, and riding snow machines, residents and a growing number of non-residents recreate outdoors year-round in Alaska.
4. State and other public lands (largely cities and boroughs) are almost tied in the share of device days across the state. Federal lands see lower use as there are fewer recreational options in remote locations. Additionally, use in popular, federally-managed sites such as Denali National Park historically has relied on out-of-state cruise travel that declined significantly in 2020 and 2021.
5. Mobility data clearly shows a significant increase in use of recreation areas in Alaska between 2019 and 2021. When combined with other demand information presented in this chapter (e.g., the public and land managers' surveys, tourism business interviews, and measures of use in state parks), there is strong evidence that outdoor recreation and tourism is evolving in Alaska. There is a growing shift towards active outdoor recreation by residents as well as independent and out-of-state visitors.
6. Outdoor recreation and tourism in early 2022 was very strong in Alaska.¹¹ According to Visit Anchorage, early passenger counts at Ted Stevens Anchorage International Airport were up from the previous summer, only seven percent below the 2019 levels which set a record with nearly six million travelers. Additionally, hotel performance is remarkably strong with demand nearly equal to 2019. And similar to 2021, many independent travelers visited Alaska using active recreation businesses such as those that serve hikers and bikers.

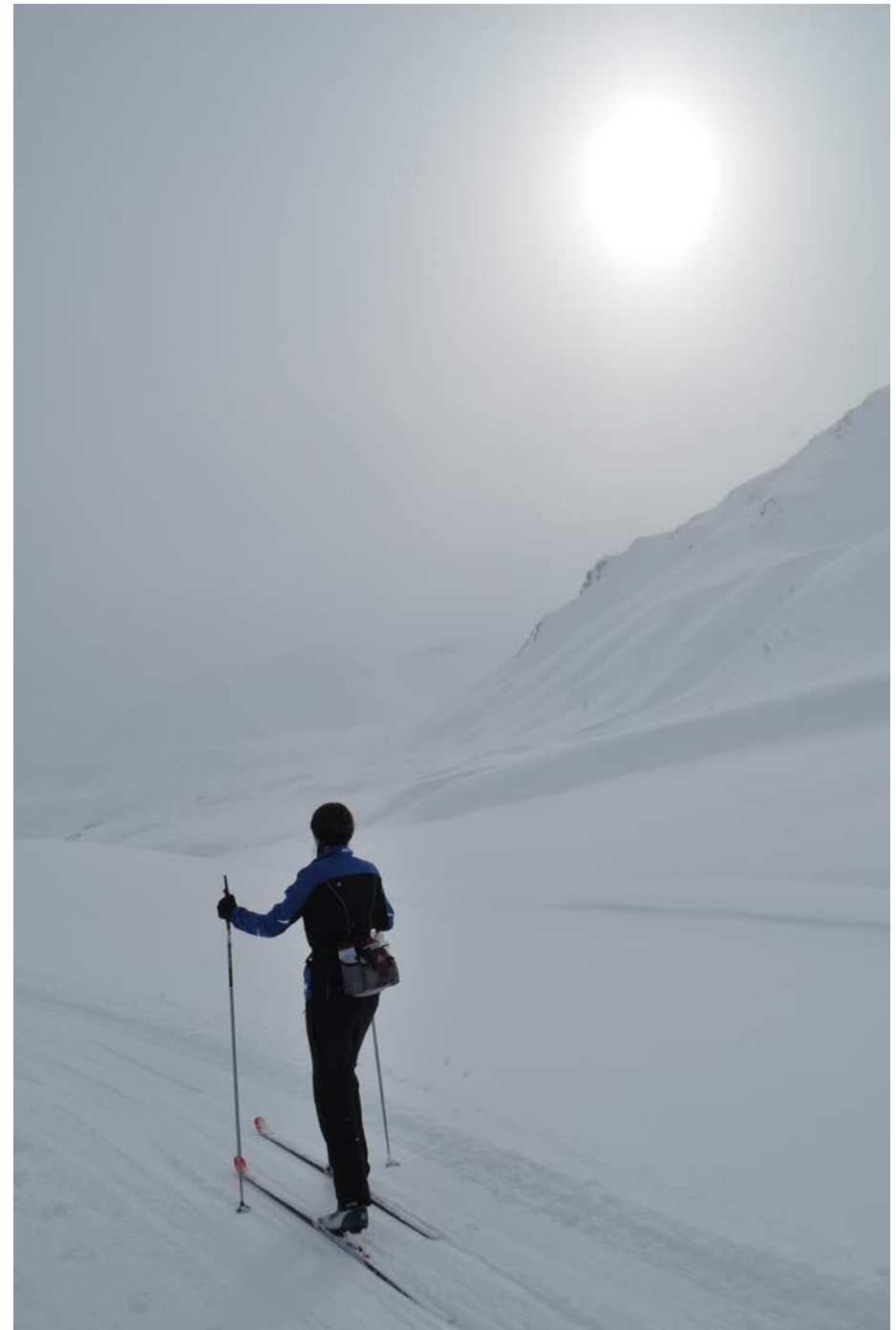


OUTDOOR RECREATION TRENDS AND ISSUES IN INDIVIDUAL RECREATION LOCATIONS

The remainder of this section presents mobility data in the specific public outdoor recreation locations listed below. These areas were selected to be representative of key categories of outdoor recreation activities. Examples include the changing use of snow machines as represented by device day counts in the Petersville area or the changing mixed use by visitors and residents in a state park next to a large community (such as Chugach State Park) as well as in a more outlying location (such as Denali State Park).

Information in these dashboards provides important details about the anonymized and aggregated mobility (cell phone) data presented in each of these locations. In the few places where descriptions of mobility data dashboards include additional, outside information, the source is cited.

- Denali State Park (state park on Parks Highway near a National Park)
- Petersville Road (primarily snow machine use, area with past state land sales)
- Talkeetna (small town tourism destination)
- Talkeetna Lakes Park
- Knik River Public Use Area (multi-season, motorized, multi-use area)
- Chugach State Park (year-round accessible park at the edge of a large community)
- Chester Creek Trail (urban trails and greenbelt)
- Resurrection Bay (marine activities, gateway community)
- Russian River Campground (summer campground with Kenai River fishing)
- Kenai River Special Management Area (sportfishing)
- Tsalteshi Park (multi-season, non-motorized area)
- Copper River Delta (multi-use, hunting, fishing, wildlife viewing, Chugach National Forest)
- Brooks River and Katmai National Park (world-famous bear viewing and fishing, fly-in location)
- Totem Bight State Park (developed historical park)



Denali State Park

STATE OF ALASKA (DPOR) | STATE PARK



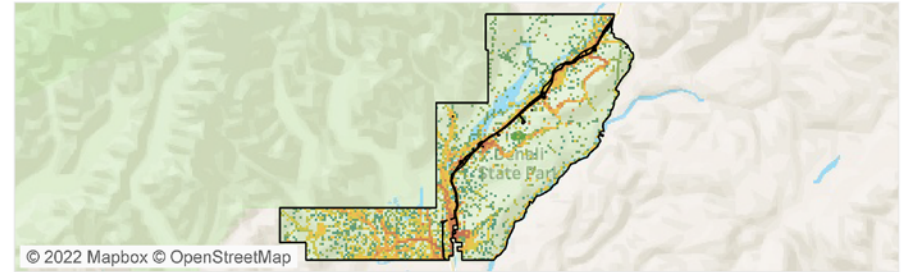
USE

RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

DISTRIBUTION OF USE

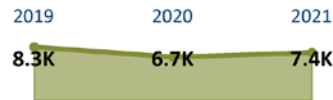


Fewer Devices More Devices

1 grid = .25 x .25 mile area

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR

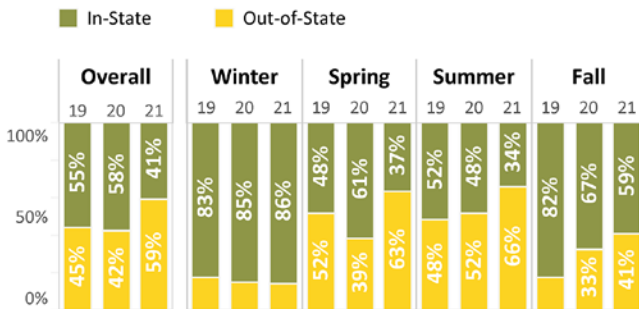


TOP 5 LOCATIONS OF INTEREST

- 1 Denali State Park (Denali Viewpoint South)
- 2 Denali State Park (K'esugi Campground)
- 3 Denali State Park (Veterans Memorial)
- 4 Denali State Park (Byers Lake Campground)
- 5 Denali State Park (Upper Troublesome Creek Trail Parking)

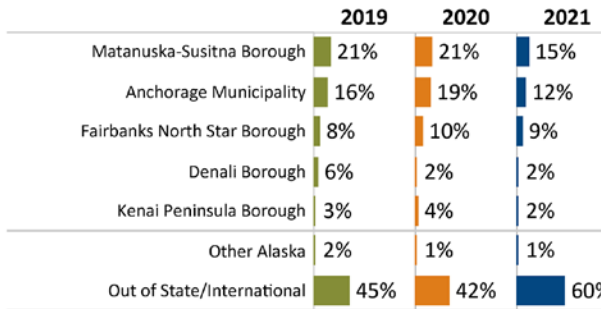
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



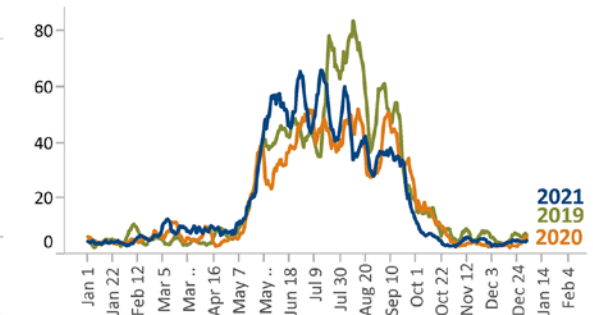
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR



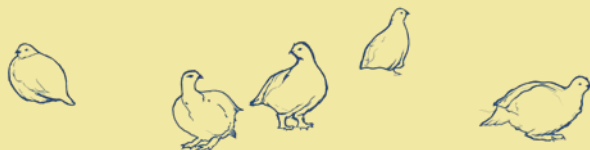
PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Denali State Park is on the Parks Highway in the northern Mat-Su Borough and shares a boundary with the more famous National Park.
- The park is renowned for its excellent trails and world class views of Denali and the Alaska Range. As the map shows, use is concentrated in two scenic highway turnouts and along the trails up both Curry and K'esugi ridges. West of the Chulitna River, most use is by snow machiners coming up from the south.



Trends and Issues

- Denali State Park is used for short stops, day adventures, and overnight camping by Alaska residents and by independent and cruise travelers. High use in summer 2019 reflects use by motorcoaches (taking restroom breaks at the Veterans Memorial and the two viewpoints). High level use from out-of-state visitors grew in 2020 and 2021 (from 48 percent to 65 percent) despite the drop in cruise traffic.
- While the large majority of device days happen in the summer, use by out-of-state independent travelers grew in fall and spring.
- Intense popularity of the recently-built K'esugi Ken campground, public-use cabins, and trails shows how high-quality new facilities in good locations quickly generate large amounts of use. Given the connection to Denali National Park, this state park presents opportunities for growth and improving or creating additional outdoor recreation infrastructure (such as connecting campgrounds to electricity).

Petersville Snow Machine Use Area

MAT-SU BOROUGH | OFF TRAIL AREA



USE

RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

SAMPLE SIZE

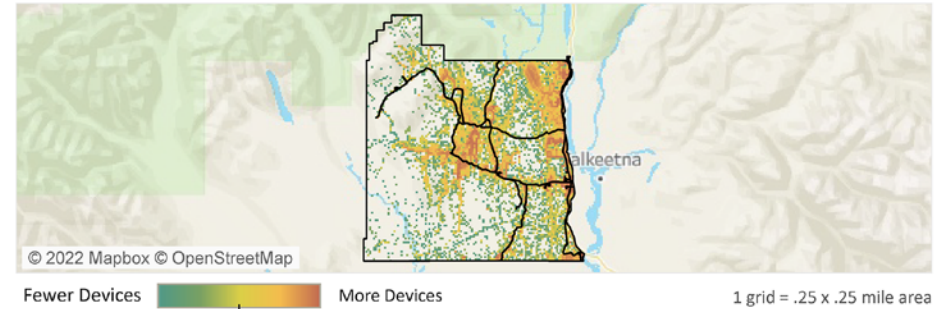
ADJUSTED DEVICE DAYS BY YEAR



TOP 5 LOCATIONS OF INTEREST

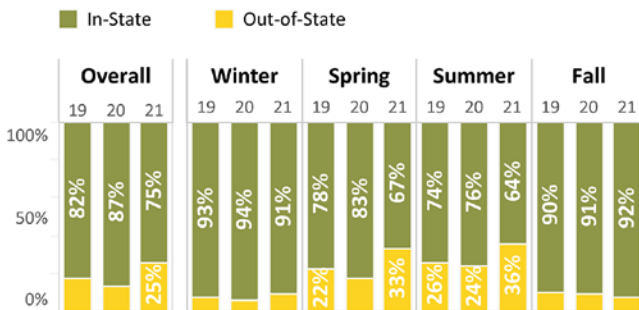
- 1 Off Trail Area
- 2 Public Road
- 3 Oilwell Road
- 4 Chulitna Bluff Trail (SnowTRAC)
- 5 MP 121.5 Parking Area

DISTRIBUTION OF USE: Off Trail Area



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



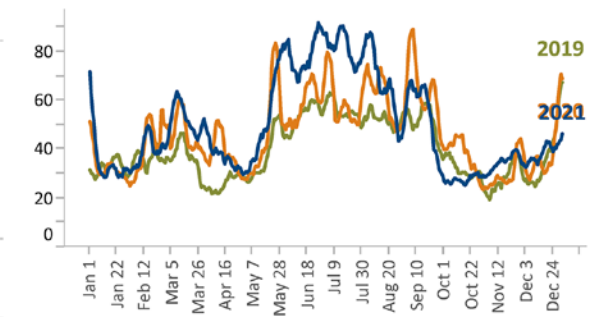
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Matanuska-Susitna Borough	60%	60%	52%
Anchorage Municipality	16%	19%	13%
Fairbanks North Star Borough	3%	4%	6%
Kenai Peninsula Borough	1%	2%	2%
Denali Borough	1%	1%	1%
Other Alaska	1%	1%	1%
Out of State/International	18%	13%	25%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- This area is located just west of the Parks Highway in the northern Mat-Su Borough and just south of Denali State and National Parks.
- State land sales over the last 50 years pepper this block of State-owned land (including the early "open to entry" and subsequent "remote parcel" and "subdivision" land sales programs). Thus, cabins have been built on many of these parcels. Much of the terrain is wetlands so most access is in the winter by snow machine (although some use occurs by ATV, ski, or on foot).
- The map shows the well-marked snow machine trails maintained by the Petersville Community non-profit group, in part with funding from the state SnowTRAC program. The combination of these trails, good snow, areas of wide-open terrain, and access into the Alaska Range foothills with grand views of Denali, has made this one of Alaska's more popular snow machine areas.

Trends and Issues

- Most use is by Alaska residents, primarily from within the Mat-Su Borough. The results of the mobility data show an interesting increase in out-of-state users during in spring and summer which suggests more travelers are finding ways to enjoy this area.
- Growing use is stretching the capacity of existing parking areas and the capacity of local, non-profit groups. Work is needed to increase the resources available to manage this steadily growing use (e.g., storage space for grooming equipment, search and rescue capabilities, etc.).

Talkeetna

STATE OF ALASKA (DNR) | RECREATION RIVER (2802)



USE

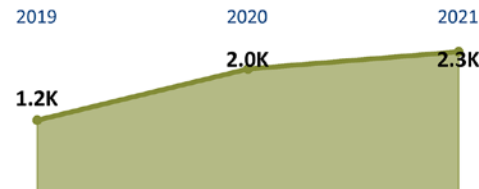
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



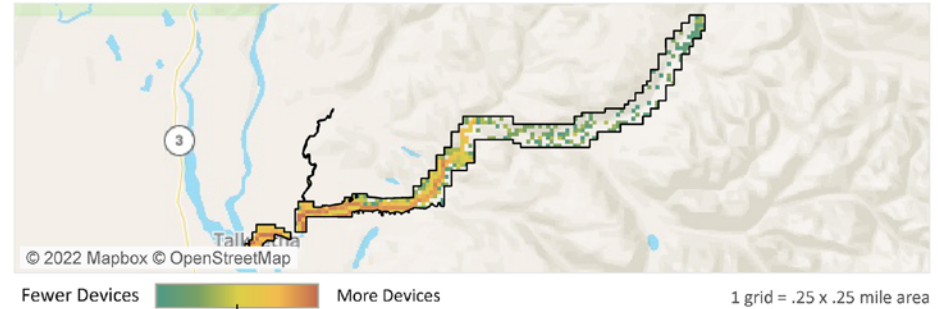
*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR

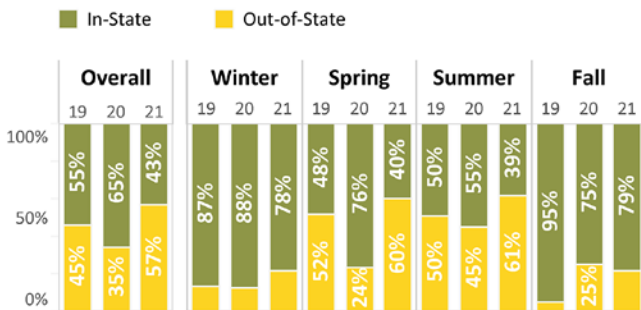


DISTRIBUTION OF USE



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



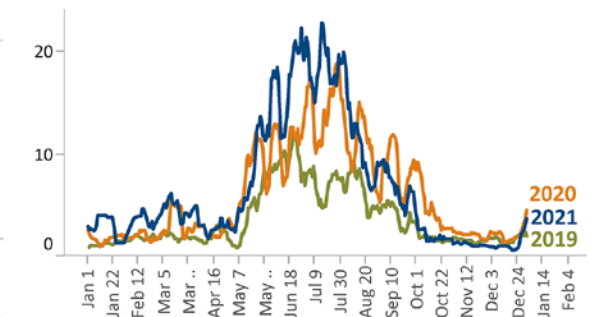
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Matanuska-Susitna Borough	30%	39%	23%
Anchorage Municipality	19%	22%	16%
Kenai Peninsula Borough	1%	2%	2%
Fairbanks North Star Borough	2%	2%	1%
Denali Borough	1%	0%	1%
Other Alaska	1%	1%	1%
Out of State/International	46%	35%	57%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Talkeetna is one of Southcentral Alaska's walkable, visitor-friendly, historic communities. It has accommodations such as a major hotel, smaller inns and rental homes, numerous second homes as well as a range of visitor excursions available such as zip-lining, flightseeing, guided hikes, and river tours.
- Prior to COVID, approximately 250,000 out-of-state travelers visited Talkeetna annually, most arriving by motorcoach, by train, or as part of land tours linked to cruise visits. Talkeetna is equally popular with out-of-state travelers and Alaska residents. It is also the main starting point for Alaska Range climbing and flightseeing.
- Unlike other recreation sites, the mobility data for Talkeetna showed use by independent visitors and cruise visitors, recreational use by Alaska residents from outside Talkeetna, and recreational use and regular activities by local residents.

Trends and Issues

- Relative recreational use, as measured by device days, increased between 2019 and 2021, including a high level of out-of-state visitor use despite very limited cruise traffic to Alaska in 2020 and 2021.
- Local merchants reported surprisingly strong sales, driven by spending from both independent travelers and Alaska residents. Late winter and spring out-of-state visits continue to grow in Talkeetna.
- Continued growth in outdoor recreation and tourism brings significant benefits for local businesses, but also challenges that include providing sufficient parking, water and sewer capacity, and maintaining the character that makes Talkeetna an enjoyable place to live and visit.

Talkeetna Lakes Park

MAT-SU BOROUGH | PARK



USE

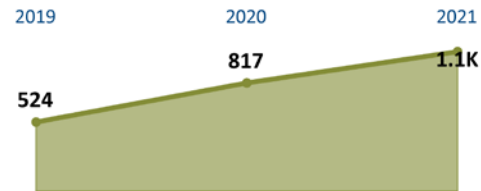
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



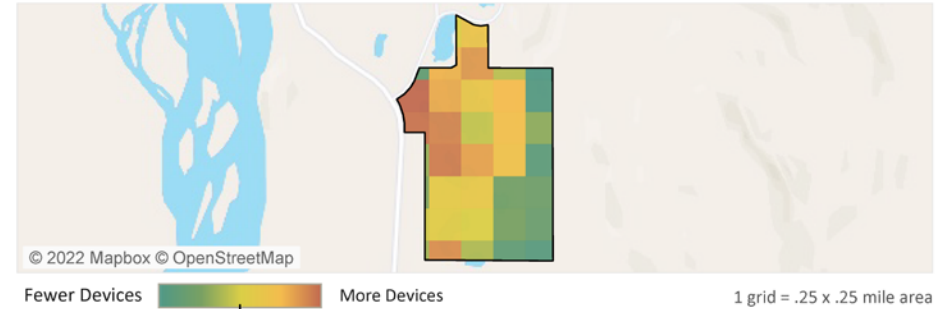
*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR

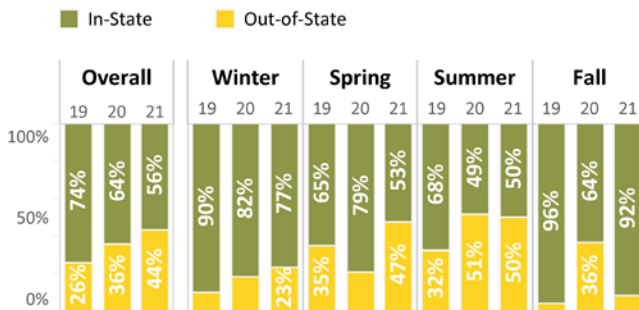


DISTRIBUTION OF USE



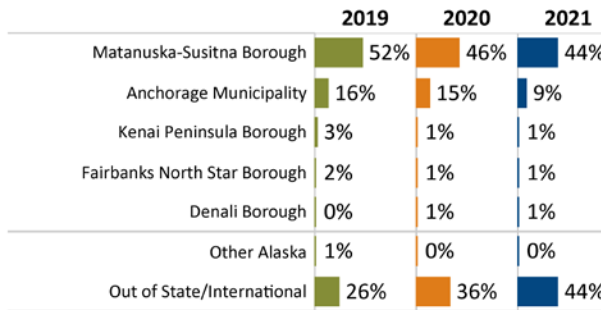
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



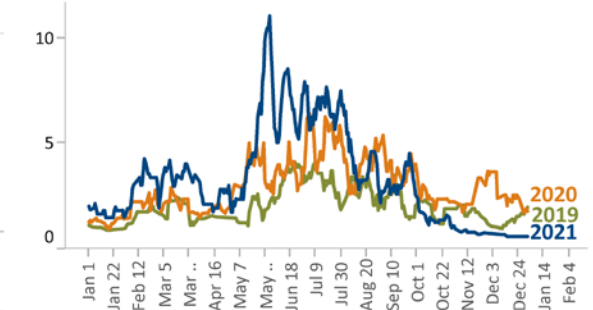
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR



PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Talkeetna Lakes is a small year-round park in the Mat-Su Borough with both single track and wider trails that wrap around the X-Y-Z Lakes. Trails were built and are groomed for skiing by the local trail organization. The Borough collects a day use fee at the park.
- The park is open to a range of non-motorized uses including walking, biking, and skiing. It provides one of the very few areas of well-marked and well-maintained trail systems in the northern Mat-Su.
- "Crust" skiing is a popular use in spring and the annual Oosik Ski Race often includes a section of trail from the park. The popularity of this race helped spur the Talkeetna Alaskan hotel to open for one month in the spring.

Trends and Issues

- While most use of this area is by local full-time and seasonal residents, this attractive small park is steadily gaining in popularity with out-of-state visitors (as shown by the steady increase in device day counts in the Patterns of Use chart above). Several local small businesses provide guided walks in the area.
- Nearly all the park's spruce trees have been killed by spruce beetles and are starting to fall, creating safety and maintenance issues.
- The trails committee is working to expand trails in the area which will add to the attraction of the park to locals and out-of-town visitors.

Knik River

STATE OF ALASKA (DNR) | PUBLIC USE AREA (2801)



USE

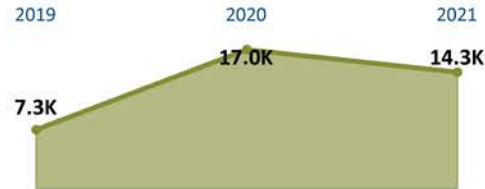
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



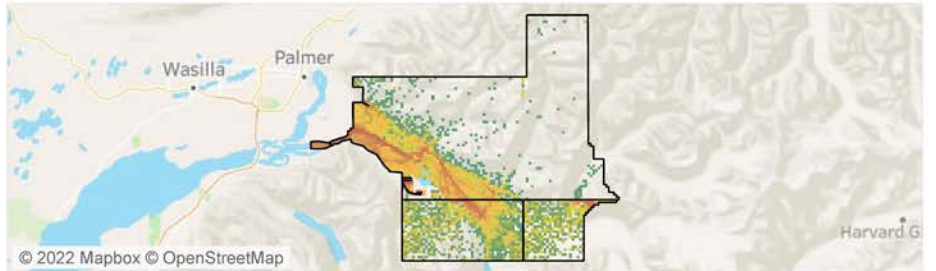
*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR



DISTRIBUTION OF USE

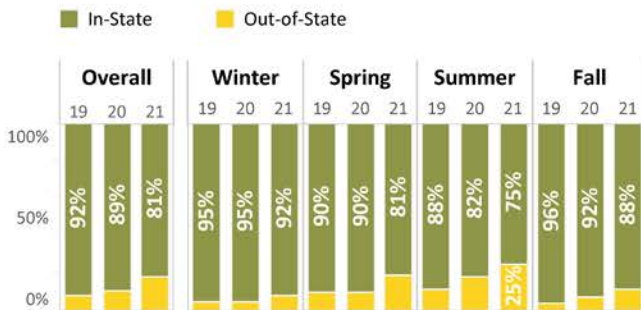


Fewer Devices More Devices

1 grid = .25 x .25 mile area

VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



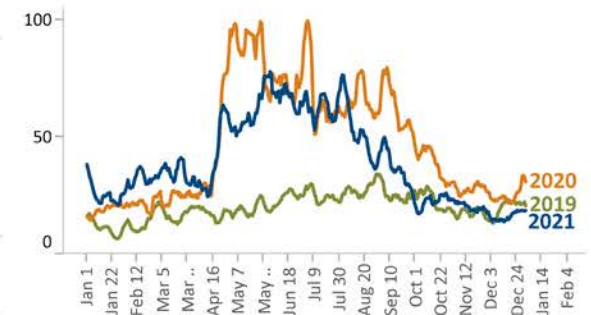
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Matanuska-Susitna Borough	69%	62%	56%
Anchorage Municipality	19%	24%	22%
Kenai Peninsula Borough	1%	1%	1%
Fairbanks North Star Borough	1%	1%	1%
Valdez-Cordova Census Area	0%	0%	0%
Other Alaska	1%	0%	0%
Out of State/International	9%	11%	19%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- The Knik River recreation area takes in the broad gravel outwash plain with steep mountains rising on both sides and the Knik Glacier to the east (landscapes that in a state other than Alaska would likely be a national park).
- Public access is available but not well marked or formalized. Access points are located on the west side while a road on the area's southern boundary extends east to a lodge that has a flightseeing business.
- Most use in the area is by ATV and snow machine, with a smaller but growing set of users on fat-tire bikes and skis.

Trends and Issues

- As the distribution map shows, use concentrates in the gravel outwash plain. Almost all use is by in-state residents from the Mat-Su and Anchorage. Use has steadily grown over the years, as word gets out about the area's special attractions. Larger jumps in use in both 2020 and 2021 likely reflect the acceleration of outdoor activity during COVID and this continuing word-of-mouth information.
- In the past, the Jim and Swan Lakes areas, on the western boundary, and the gravel bar have been the scenes of reckless behaviors, gunfire, bonfires, and dumping of refuse and vehicles. A protracted effort by the State and Borough have reduced these issues. In the future, and with more marketing and improved facilities, this area could become a significant visitor destination.

Chugach State Park

STATE OF ALASKA (DPOR) | STATE PARK



USE

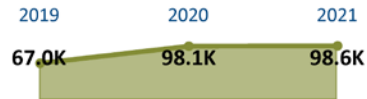
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR



TOP 5 LOCATIONS OF INTEREST

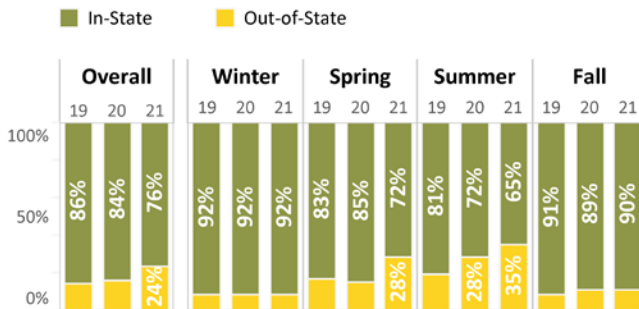
- 1 Glenn Alps Parking
- 2 Eagle River Campground
- 3 Turnagain Arm Trail
- 4 McHugh Trailhead
- 5 Glenn Alps Anchorage Overlook

DISTRIBUTION OF USE



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



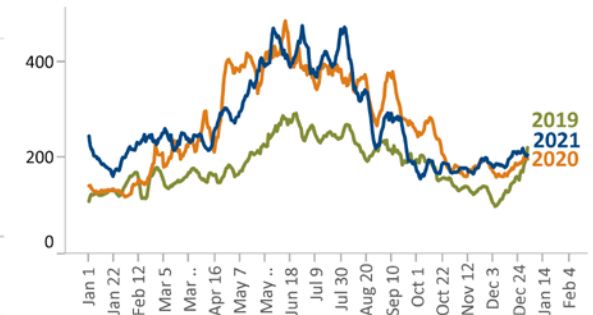
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Anchorage Municipality	71%	70%	64%
Matanuska-Susitna Borough	7%	7%	6%
Kenai Peninsula Borough	4%	4%	3%
Fairbanks North Star Borough	1%	1%	1%
Valdez-Cordova Census Area	0%	0%	0%
Other Alaska	1%	1%	1%
Out of State/International	16%	18%	25%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Chugach State Park, one of four largest state parks in the U.S., provides road accessible access to alpine wilderness on the eastern boundary of Alaska's largest city. The lower elevation mountains and valleys of park's front-country are heavily used year-round, primarily for short hikes, skiing, and as popular viewpoints. Summer and winter biking are rapidly growing new uses. The park's eastern backcountry is much more rugged, with higher peaks, snow fields and glaciers. As the Distribution of Use map shows, use is much lighter in this wild, spectacular terrain.
- Secondary uses in the park include hunting, snow machines, ATVs, and an increase in guided hikes.
- Established and less formal trailhead parking areas provide access to the park – almost all of which are much too small for current use and the growing demand.

Trends and Issues

- Chugach State Park is Alaska's most visited public recreation destination. Recreational use, as measured by device days, spiked significantly between 2019 and 2021. This included a jump in out-of-state visitor use, from 24 percent in 2019 to 35 percent in 2021. This growth occurred despite very limited cruise traffic to Alaska in 2020 and 2021 and despite the park not being marketed as a major visitor attraction.
- Continued growth in outdoor recreation and tourism brings significant benefits for residents and local businesses, but also challenges that include providing sufficient trailhead parking and maintaining existing or providing new trails.

Chester Creek Greenbelt

MUNICIPALITY OF ANCHORAGE | NATURAL RESOURCE USE



USE

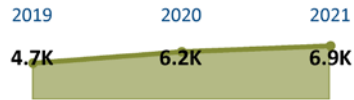
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

SAMPLE SIZE

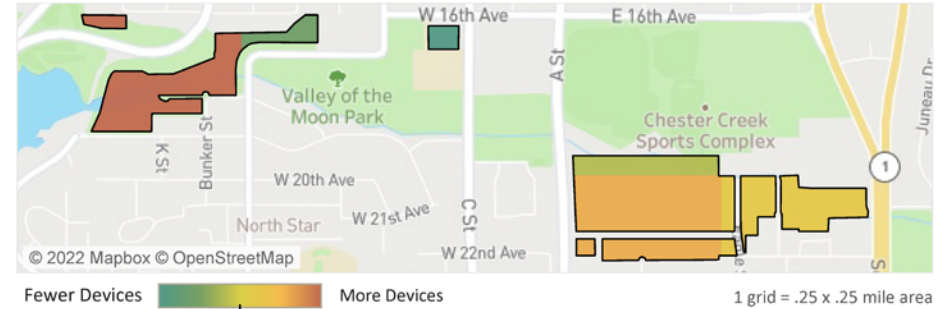
ADJUSTED DEVICE DAYS BY YEAR



TOP 5 LOCATIONS OF INTEREST

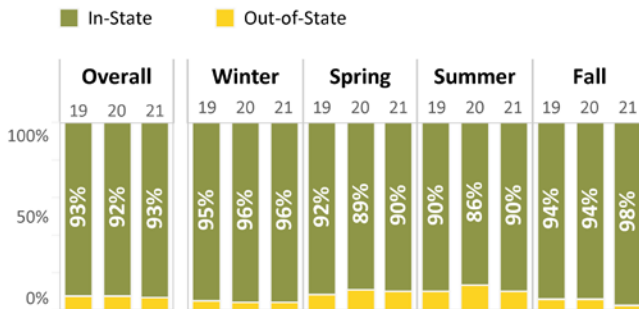
- 1 Chester Creek Sports Complex
- 2 Margaret Eagan Sullivan Park
- 3 Tikishla Park
- 4 Goose Lake Park
- 5 Chester Creek Greenbelt

DISTRIBUTION OF USE



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



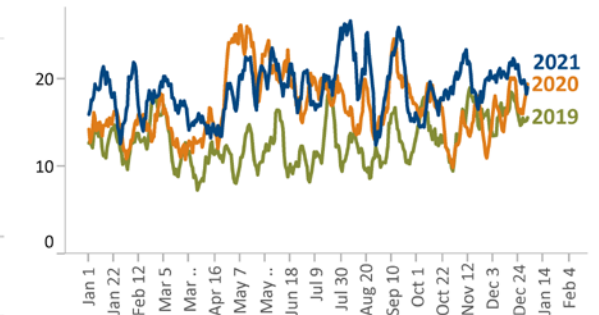
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Anchorage Municipality	80%	86%	88%
Kenai Peninsula Borough	8%	2%	1%
Matanuska-Susitna Borough	3%	3%	2%
Fairbanks North Star Borough	1%	1%	1%
Kodiak Island Borough	0%	0%	0%
Other Alaska	1%	1%	1%
Out of State/International	8%	8%	7%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- The Laine Fleischer Chester Creek Greenbelt is the core of the Anchorage greenbelt and trail system. The Chester Creek trail strings together a series of popular parks. It connects the Tony Knowles Coastal Trail with the University and Chester Creek Greenbelt.
- As the data shows, despite proximity to downtown and midtown hotels, this trail receives very little use by out-of-state travelers.

Trends and Issues

- Device day counts grew significantly between 2019 and 2021. This matches growth seen statewide, likely reflecting the burst of outdoor activity that came with COVID pandemic restrictions. Compared to other recreation locations around the state, use of this greenbelt is relatively constant year-round with recreational or commuter walking, running, biking, and skiing.
- This greenbelt (along with the overall trail system in Anchorage) could be a significant attraction for visitors – offering another way to spur one more day of spending. Reaching this goal will require better marketing and wayfinding material, as well as resolving the homeless camp issues in some locations that are a legitimate concern to both residents and visitors.

Resurrection Bay Special Use Area

STATE OF ALASKA (DNR) | SPECIAL USE AREA (209)



USE

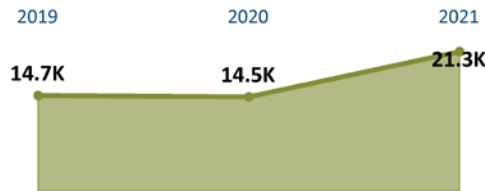
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



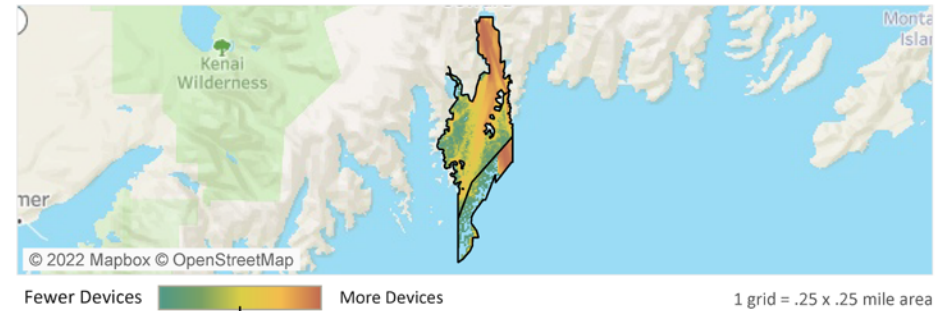
*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR

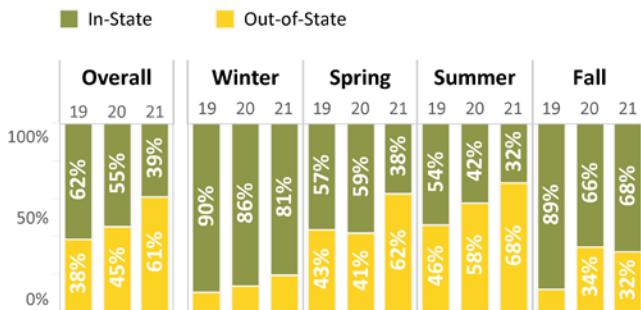


DISTRIBUTION OF USE



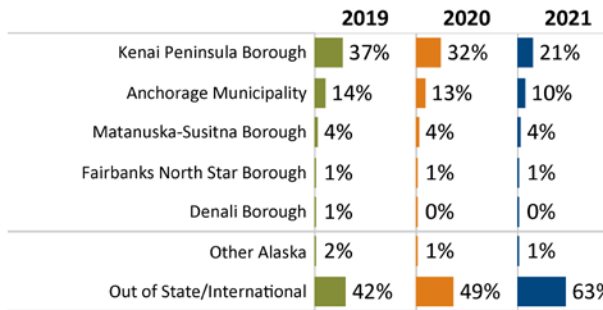
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



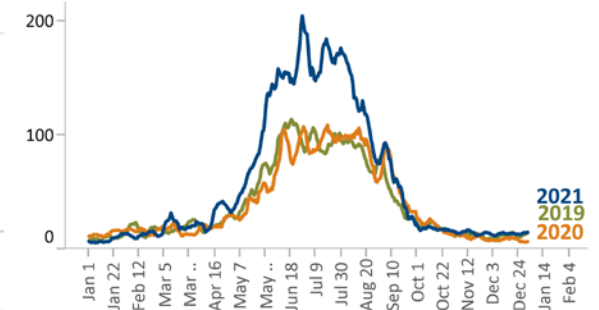
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR



PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Resurrection Bay is a scenic protected fiord and gateway to diverse marine recreation uses, from charter and private fishing boats, day tours by a small fleet of established excursion operators, and overnight stays at public and private camping areas, cabins and lodges. Seward is also one of two primary stopping and starting points for large cruise ships visiting Alaska.
- The popularity of Resurrection Bay builds on the accessibility and attractions of the community of Seward, which is the jumping off place for use in Resurrection Bay, and the larger Kenai Fjords National Park. Seward is the sixth most visited location in Alaska for out-of-state travelers, receiving over 425,000 visits in 2016.

Trends and Issues

- As the Visitor Origins graph shows, Resurrection Bay use went from a majority of Alaskan users in 2019 to a majority of out-of-state visitors in 2021. This growth occurred with very limited cruise traffic to Alaska. While most use happens in summer, the use in the fall and spring seasons is growing.
- Seward is a gateway community, one of few in Southcentral Alaska, and a place that illustrates how three things come together to generate substantial use and visitor spending: 1) an attractive, walkable, community, 2) an internationally known national park, and 3) a variety of outdoor recreation opportunities nearby.

Russian River Campground

USFS | CAMPGROUND



USE

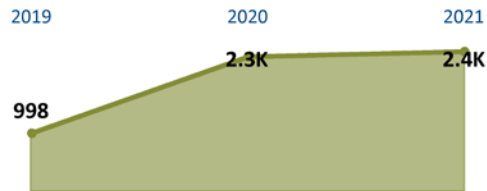
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



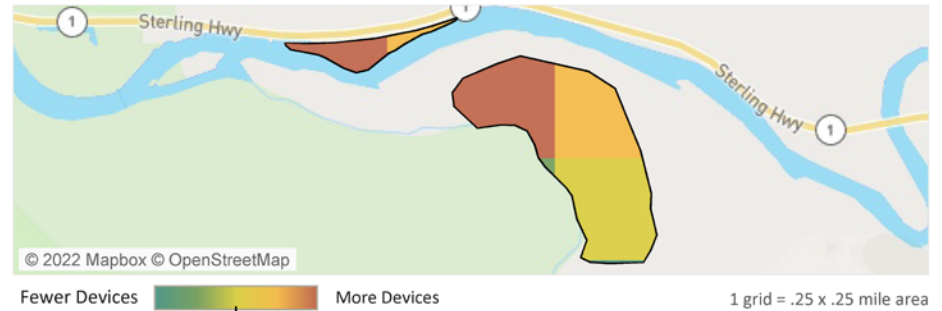
*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR

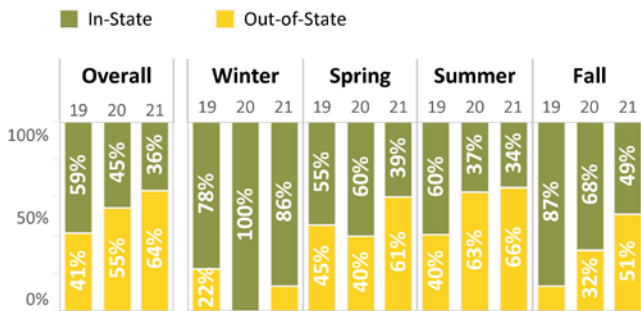


DISTRIBUTION OF USE



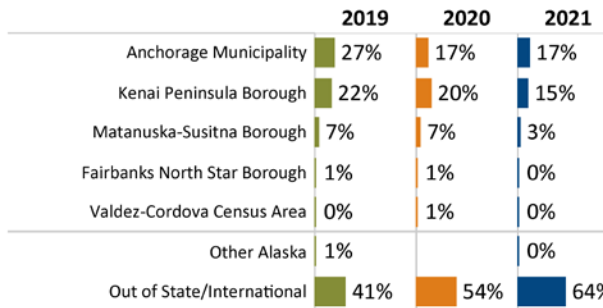
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



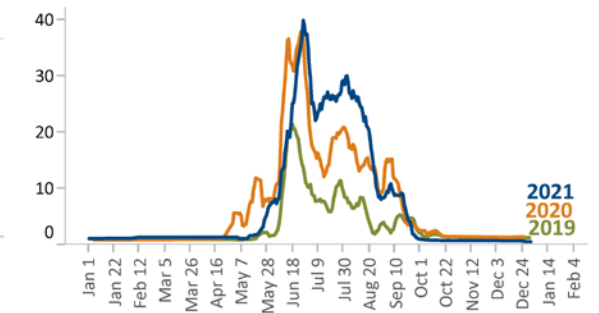
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR



PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Russian River Campground is a large facility with 83 sites, paved roads and spurs – although there are no hookups. The campground is popular all summer long, beginning Memorial Day weekend. Use intensifies with the arrival of the mid-summer fishing season.
- In addition to USFS campgrounds, a second important attraction of the location is the picturesque, easy trail up to Russian River Falls. The same trail continues up to the USFS public-use cabins on upper Russian Lakes.

Trends and Issues

- Use grew significantly between 2019, 2020, and 2021, by both in-state and out-of-state users with the percentage of out-of-state users growing steadily during that time.
- The growing use at this campground provides a reference point for what infrastructure attracts use. Distinctive features of this particular campground include: a beautiful mountain valley setting; a series of separated clusters of campsites with paved roads (which makes for endless fun by young recreatos on bikes, scooters, and skateboards) and discrete loops that reduce the amount of through traffic; and trail access that leads to the scenic falls and other points beyond. The trail's low incline, width, and well-drained surface make it popular for all kinds of users – suitable for walking, biking, and pushing baby strollers.

Kenai River Special Management Area

STATE OF ALASKA (DPOR) | SPECIAL MANAGEMENT AREA



USE

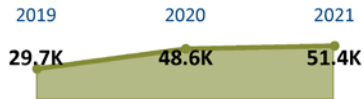
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR



TOP 5 LOCATIONS OF INTEREST

- 1 North Beach (Kenai Dip Net)
- 2 No Dip Netting (Kenai Dip Net)
- 3 Boat Area (Kenai Dip Net)
- 4 South Beach (Kenai Dip Net)
- 5 North Beach Parking (Kenai Dip Net)

DISTRIBUTION OF USE

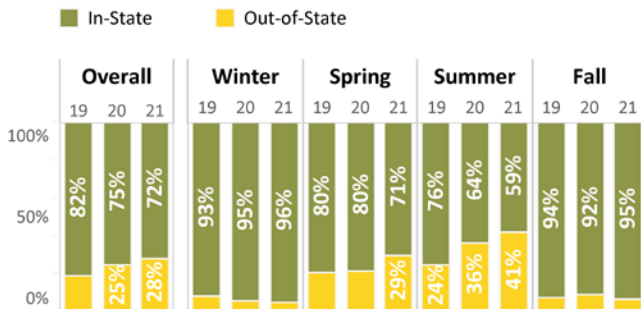


Fewer Devices More Devices

1 grid = .25 x .25 mile area

VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



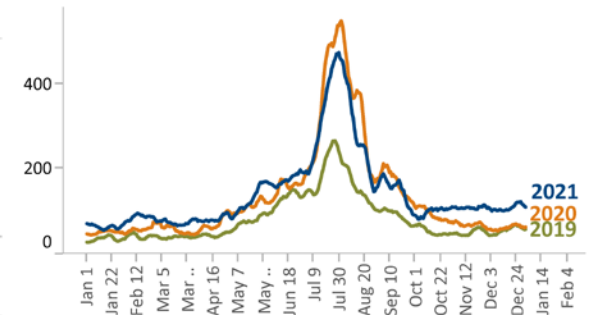
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Kenai Peninsula Borough	67%	63%	61%
Anchorage Municipality	10%	9%	7%
Matanuska-Susitna Borough	2%	2%	2%
Fairbanks North Star Borough	1%	1%	1%
Juneau City and Borough	0%	0%	0%
Other Alaska	1%	0%	1%
Out of State/International	19%	25%	28%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- The world-class Kenai River Special Management Area is an angler's paradise and the most popular sport fishery in Alaska.
- It is world-renowned for its record size Chinook salmon, and is also popular for sockeye, silver, and pink salmon as well as large rainbow trout.
- More than 105 miles of rivers and lakes adjacent to 16 publicly-managed parks offers prime opportunity for fishing, boating, wildlife viewing, and camping. Resident-only personal use and recreational salmon fisheries provide important food resources for Alaskans.

Trends and Issues

- High use creates ongoing demand for parking lots, boat launches, angling areas, fish cleaning stations, restrooms, trash management, and enforcement.
- Multiple federal, state, and local agencies deal with user expectations for accessible and clean public facilities,
- High use creates a need to engage in habitat restoration and protection efforts; and demand varies with fish returns and can spike with high escapements.
- Funding for maintenance, operations, and replacement or expansion of aging infrastructure are ongoing management issues.

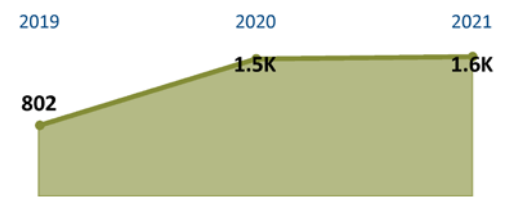


USE
RELATIVE TO STATEWIDE
LOCATIONS OF INTEREST

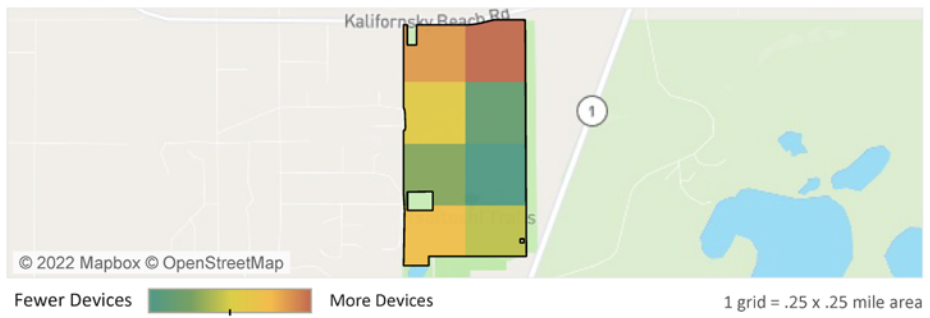


*Use is defined by cluster analysis

SAMPLE SIZE
ADJUSTED DEVICE DAYS
BY YEAR

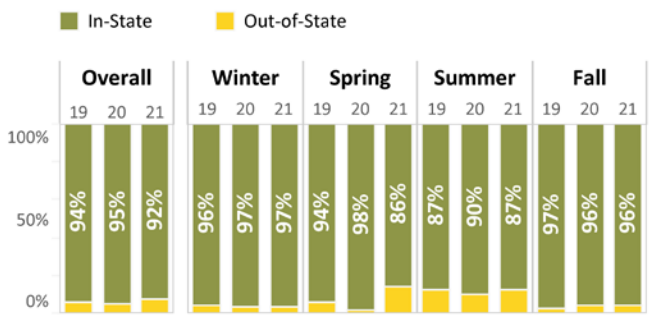


DISTRIBUTION OF USE



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



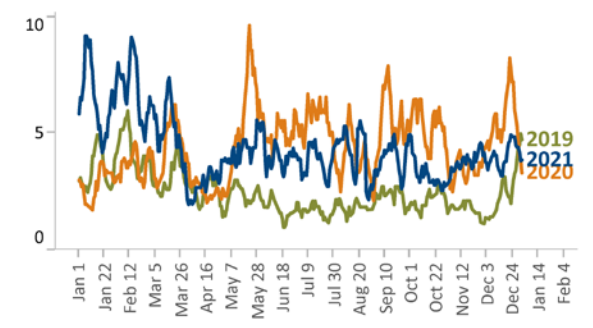
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Kenai Peninsula Borough	88%	92%	88%
Anchorage Municipality	4%	3%	2%
Matanuska-Susitna Borough	1%	0%	1%
Fairbanks North Star Borough	0%	0%	0%
Juneau City and Borough	0%	0%	0%
Other Alaska	0%	0%	0%
Out of State/International	6%	5%	9%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Located near Soldotna in the central Kenai Peninsula, the Tsalteshi Trails Association operates system of multi-use trails and promotes an both an outdoor lifestyle and community connection to the land.
- Over 25 miles of trail-oriented activities include cross-country skiing, snowshoeing, single-track winter biking, and eight miles of lighted trails (in winter), and access for walkers, runners, hikers, and mountain bikers (in summer).
- There are currently no fees for trail use as it is supported through grants, partnerships with governments agencies, memberships, and donations.

Trends and Issues

- Popularity continues to grow. Trail expansion or improvement are needed to meet increasing community demand.
- The annual budget is less than \$80,000. Providing a free outdoor fitness and recreation venue requires active and ongoing community support for trails, parking, lighting, maintenance and operations, and expansion of services to meet demand.

Copper River Delta

STATE OF ALASKA (DNR) | CRITICAL HABITAT AREA (2703)



USE

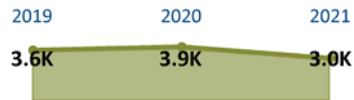
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

SAMPLE SIZE

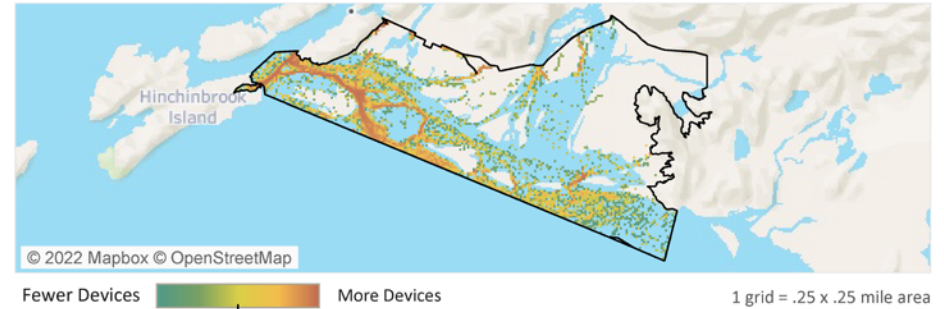
ADJUSTED DEVICE DAYS BY YEAR



TOP 5 LOCATIONS OF INTEREST

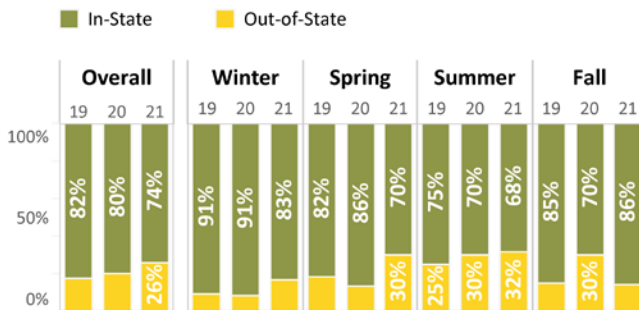
- 1 Chitina Townsite
- 2 South of Chitina
- 3 North Chitina
- 4 Mccarthy Rd/Kotsina
- 5 Chitina-Copper River - Water

DISTRIBUTION OF USE



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



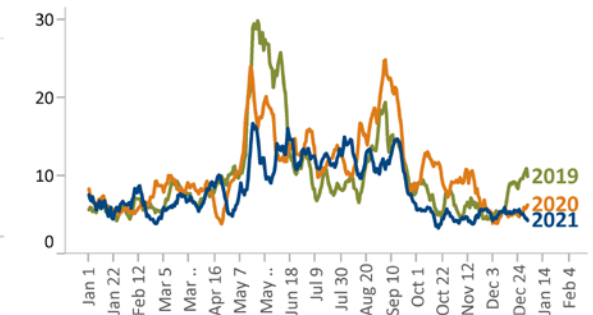
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Valdez-Cordova Census Area	66%	69%	59%
Anchorage Municipality	5%	4%	4%
Kenai Peninsula Borough	4%	4%	2%
Matanuska-Susitna Borough	2%	1%	1%
Kodiak Island Borough	0%	0%	0%
Other Alaska	1%	1%	1%
Out of State/International	21%	22%	33%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- The Copper River Delta is a scenic, wildlife-rich section of Chugach National Forest accessible by road from the small community of Cordova. Popular activities include fishing, hunting, wildlife viewing and, hiking, and visiting USFS public-use cabins. The delta is the end point for float trips down the Copper River from Chitina or McCarthy, following the historic route of the Copper River railway.
- The delta is a critical stopping point along the Pacific flyway for migrating birds.
- The delta road to the USFS campground (with views of Childs Glacier) has closed due to the Copper River's damage to several bridges. The distribution of use map, displayed above, would look very different if the road was still intact.

Trends and Issues

- The majority of use of this area comes from residents of Cordova. The spike in use in late spring is associated with the popular Cordova Shorebird Festival, a time when hundreds of thousands of shorebirds can be seen passing through the area.
- This site is one of the few recreation areas evaluated in the SCORP where device day counts declined from 2019 to 2021, even as the percentage of out-of-state users increased. Reasons for the decline are not clear but appear to be largely due to reduced use by community and in-state residents.
- Road access to the Childs Glacier is still closed.

Katmai National Park

NPS | NATIONAL PARK



USE

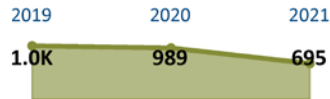
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR



TOP 5 LOCATIONS OF INTEREST

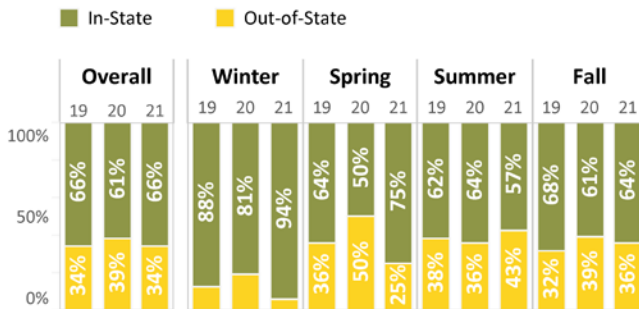
- 1 Katmai National Park (Brooks Camp Area)
- 2 Katmai National Park (Lake Camp)
- 3 Katmai National Park (Hallo Bay)
- 4 Katmai National Preserve (Moraine and Funnel Creek)
- 5 Katmai National Park (Geographic Bay)

DISTRIBUTION OF USE



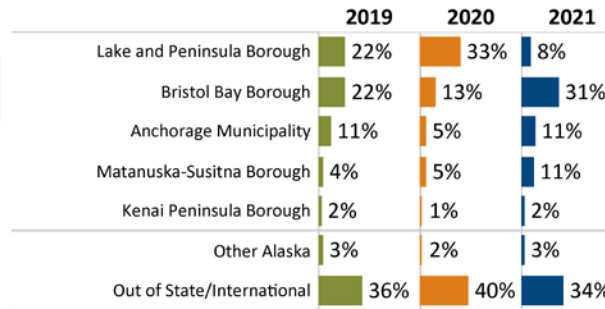
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



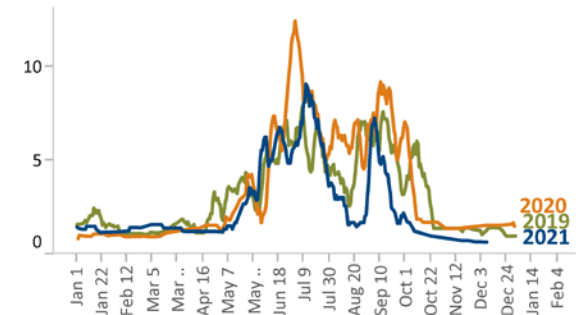
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR



PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Katmai National Park is known worldwide for its concentration of brown bears that fish atop the Brooks River falls. The same salmon run that brings the bears also creates world-class rainbow trout fishing. Other popular park destinations include the Valley of 10,000 Smokes and a set of high-end, sportfishing lodges.
- Access into the park is almost exclusively by air from the small community of King Salmon. King Salmon has regularly scheduled commercial air service from Anchorage. Because of these distances and costs, relatively few people make the journey to the park. NPS figures⁵¹ show use averaged about 40,000 per year from 2009 to 2018, and then spiked to 84,000 in 2019, the highest use ever recorded.
- Bristol Bay Native Corporation holds the National Park concession contract.

Trends and Issues

- Most use is from nearby residents including a mix of subsistence and non-consumptive recreation activities.
- Out-of-state device day counts in 2020 were slightly above the record use in 2019. The out-of-state users are primarily independent travelers who spend significantly more than cruise visitors in Alaska.
- Past surveys of Bristol Bay residents show mixed views about the growth of tourism with strongest support being for Katmai wildlife viewing and less support for Katmai sport fishing.

Totem Bight State Historical Park

STATE OF ALASKA (DPOR) | STATE HISTORICAL PARK



USE

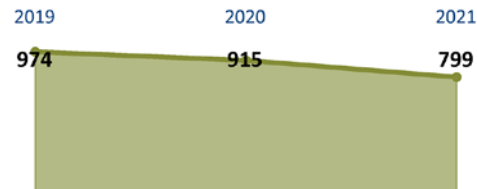
RELATIVE TO STATEWIDE LOCATIONS OF INTEREST



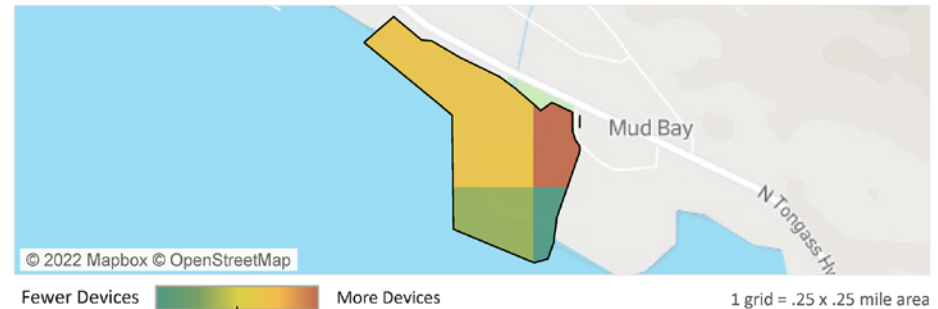
*Use is defined by cluster analysis

SAMPLE SIZE

ADJUSTED DEVICE DAYS BY YEAR

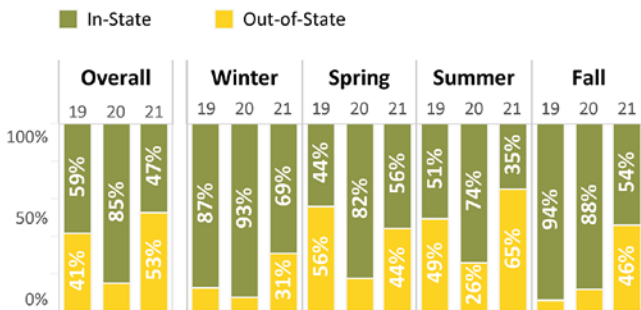


DISTRIBUTION OF USE



VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY SEASON AND YEAR



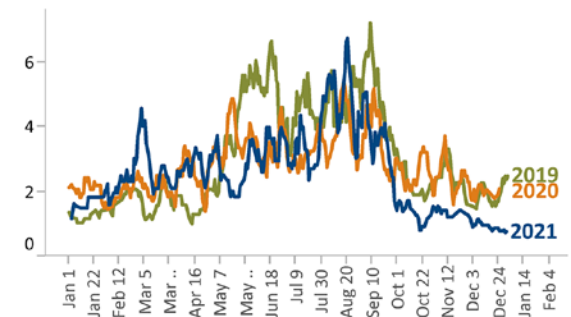
VISITOR ORIGINS

PERCENT OF DEVICE DAYS BY BOROUGH (TOP 5) AND YEAR

	2019	2020	2021
Ketchikan Gateway Borough	54%	81%	37%
Prince of Wales-Hyder Census Area	1%	1%	6%
Anchorage Municipality	1%	0%	1%
Juneau City and Borough	0%	1%	1%
Matanuska-Susitna Borough	0%	0%	0%
Other Alaska	1%	1%	1%
Out of State/International	42%	15%	53%

PATTERNS OF USE

7-DAY MOVING AVERAGE OF DAILY DEVICE COUNTS



Character of the Destination/Role in Outdoor Recreation

- Totem Bight State Historical Park is typically listed as a top destination for travelers to Ketchikan. Located ten miles north of Ketchikan and accessible by public bus, the park is a favorite destination for out-of-state travelers and tours as well as local Ketchikan residents.
- The park features 14 hand-carved totem poles and a replica of a Tlingit clan house. These were created in 1938 when the USFS hired Alaska Native carvers to repair or recreate traditional poles that were in disrepair.
- The park has an ADA-accessible path that meanders through the woods to the shore and leads visitors among the poles and clan house.

Trends and Issues

- The mobility data reflects the significant differences between out-of-state visitor patterns in Southeast cruise destination communities like Ketchikan compared to the rest of Alaska. The COVID pandemic stopped all cruise visits in 2020 and a majority of visits in 2021 leading to net decline in device day counts at Totem Bight. In contrast, device day counts grew significantly in other Alaska destinations, driven by resident and independent travelers.
- Interestingly, as shown in the Visitor Origins and Sample Size tables above, while the total amount of device days declined, the *percentage* of out-of-state users increased which shows a rise in use by independent travelers.
- Use by Ketchikan residents occurs in every season, as shown by spikes in use as late as September.

SECTION D

PUBLIC SURVEY – SUMMARY OF RESULTS

This SCORP update conducted a comprehensive statewide outdoor recreation public survey of Alaska in 2022. Alaskans were surveyed on outdoor recreation participation, needs for new or improved facilities, and preferences for funding sources.

Alaskans enjoy a mix of outdoor recreation opportunities both close to home and farther away. Survey results reflected this lifestyle. Visiting public parks and picnic areas along with neighborhood walks ranked highest for year-round activities. But, when asked to rank which new or improved facilities are most needed, public-use cabins and campgrounds topped the list. For trails, trailhead parking with signage and restrooms, long interconnected summer trail systems, and trails accessible to persons with disabilities ranked as most highly preferred.

This section provides the summary of survey findings. See Appendices for full survey results including crosstabs for the six Alaskan regions.

METHODOLOGY

The methodology was designed to produce a statistically valid, representative sample of all Alaskans. The survey was distributed online via the Qualtrics survey platform. Qualtrics is a nationally-known survey services company contracted by the State for this purpose. Survey respondents were a sample of Alaskans open to participating in online surveys through a DMV survey opt-in process. Completing the survey required an active internet connection and could be completed on computer, mobile device, or tablet.

Data was collected from participants from June 27 through July 18, 2022. For data presented in this document:

- Any respondent indicating that they are not a full-time or part-time resident of Alaska was removed.
- Any respondent indicating that they preferred not to answer on any key demographic weighting factors was removed.

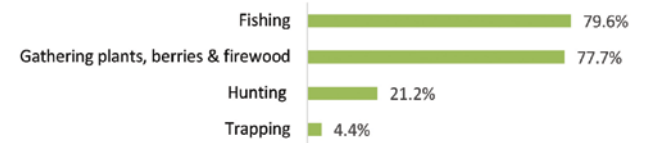
With these adjustments, 1491 surveys were used for the results presented here. Since the respondents represented a convenience sample of Alaskans (only those who opted in), there was a small deviation in the respondent distribution from the relative proportions of the Alaskan population. This issue was resolved using a weighted process so that the distribution of the adjusted sample closely aligned with the population's distribution of key demographics. Using demographic information from the 2020 U.S. Census⁵², survey results were minimally weighted to be representative of the full Alaska population based on age, income, and residence location.

ALASKANS' CURRENT OUTDOOR RECREATION BEHAVIOR

Results from survey questions will be referenced by their question numbers (i.e. results from survey Question 2 are referenced as "Q2").

Over 99 percent of Alaskans engage in outdoor activities (Q2). In the past year, the top reasons Alaskans engaged in outdoor recreation activities were to visit public parks and picnic areas (52%), go

Consumptive Outdoor Activities (Q10)

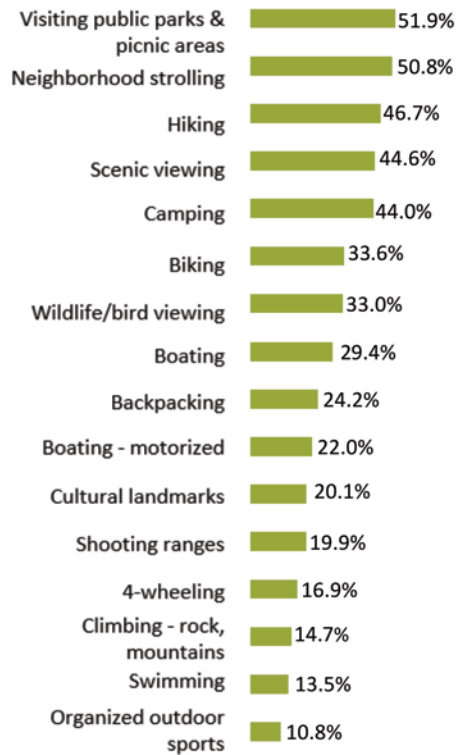


on neighborhood strolls (51%), hike (47%), and participate in scenic viewing (45%) (Q8). And 90 percent of Alaskans partook in winter activities led by ice skating and outdoor ice hockey (52%), snow machining (50%), Northern lights viewing (35%) and cross-country skiing (24%) (Q9).

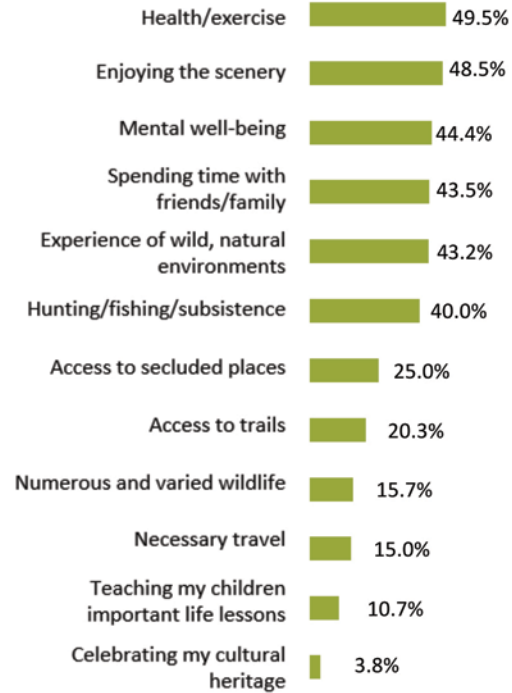
The most common consumptive outdoor recreation activities Alaskans have participated in over the past year are fishing (79.6%) and gathering plants, berries, herbs, or firewood (77.7%) (Q10). In general, Alaskans primarily spend time outdoors for health and exercise purposes (49.5%), to enjoy the scenery (48.5%), and for mental well-being (44.4%) (Q5).

When asked about frequency of participation in year-round outdoor activities, 35.4 percent of Alaskans stated they participate in neighborhood strolls most frequently (Q11). A lack of time and work is the greatest limitation to outdoor participation (42.9%) (Q14) which explains why the most common outdoor activities engaged in by Alaskans are local, easily accessible activities, which can happen daily or multiple times a week. The next highest limitations to outdoor participation are safety concerns due to wildlife (24.3%), expenses (23.0%), lack of knowledge of outdoor opportunities (21.4%), and lack of supporting infrastructure (20.8%).

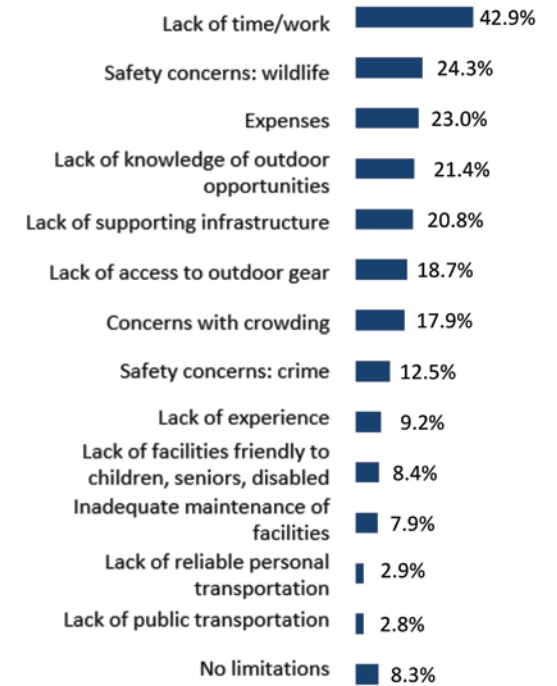
Year-round Outdoor Activities Alaskans Have Participated In (Q8)



Reasons Alaskans Spend Time Outdoors (Q5)



Limitations to Participating in Outdoor Recreation Activities (Q14)



Running on Wolverine Ridge
Photo by Wayne Todd



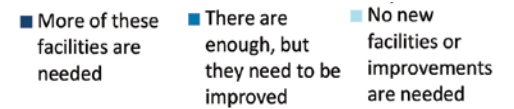
PUBLIC DESIRE FOR NEW OR IMPROVED FACILITIES AND TRAILS

When asked which additional facilities are most needed, Alaskans ranked public-use cabins (46.2%), campgrounds (42.2%), and restrooms and highway waysides (42.0%) as needing the most development (Q15). Furthermore, when asked to describe the crowdedness of outdoor recreation facilities, Alaskans describe campgrounds (41.1%) and trailheads or trailhead parking areas (37.3%) as the most crowded (Q21).

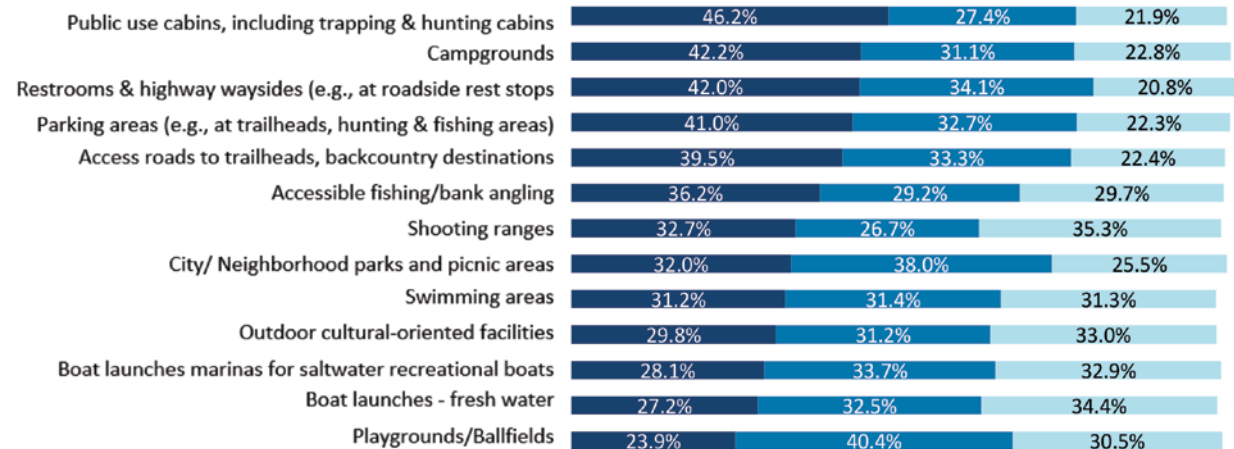
Regarding desires for improvements related to trails, Alaskans' top rankings were trailhead parking areas with signage, restrooms (44.5%), long, interconnected summer trail systems (43.5%), and trails accessible to persons with disabilities (43.1%). Next on the list were groomed cross-country ski trails (35.5%), backcountry hiking (33.2%), and easy, well signed trails that access natural settings (33.0%) (Q16).

As mentioned above, Alaskans rated trailheads and trailhead parking areas as the second most crowded outdoor recreation facility (Q21) – accordingly, they expressed strong interest in roadside or trailside recreational hubs access to services, rentals, shelter, food, and information (34.0%) (Q22).

Regarding priorities for improved outdoor-related educational programs, Alaskans expressed the most interest in adult outdoor recreation programs (37.9%), water and boating education (34.2%), roadside or trailside recreational hubs (34.0%), and cultural or natural history interpretation (33.3%) (Q22).



Categories of Most Needed Outdoor Recreation Facilities (Q15)



Top choices for accommodations for travel were hotel, motel, lodges, and B&Bs, followed by public campgrounds. Most Alaskans stay in hotels or motels for overnight stays by a slight majority (45.9%), and many Alaskans, use public campgrounds for their accommodations (45.0%) (Q17). Within the campground setting, Alaskans state that dump stations for RVs (29.4%) and water for RV hookups (23.9%) are the most important to have onsite (Q18).

Travel tops outdoor recreation spending followed by equipment (Q25). When asked to rank how much money they spend annually on outdoor recreation, most Alaskans selected the \$1,000 to \$5,000 range (Q24).

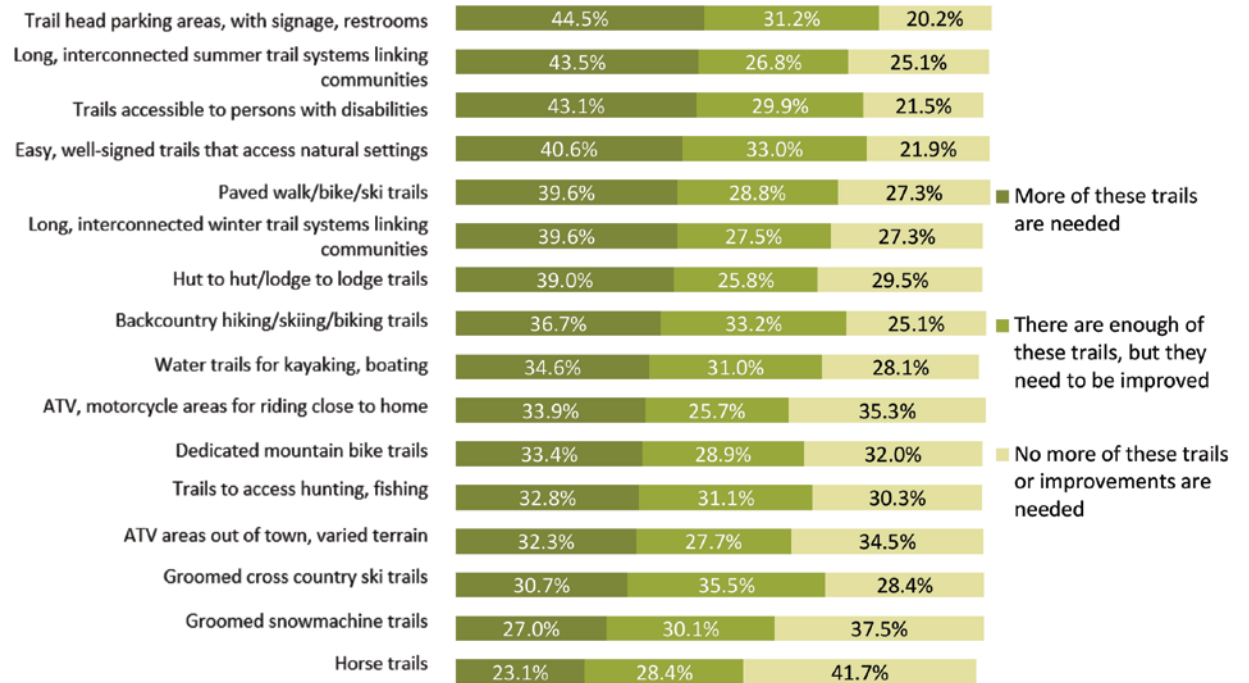
Overnight Accommodations Used in the Past Two Years (Q17)

Hotel/motel, commercial lodge, bed and breakfast	45.9%
Public campgrounds with spaces for tents, RV's, cars, and/or walk-in camping	45.0%
Personally owned, private accommodations (cabin, lake house, etc.)	37.1%
Backcountry camping	36.0%
Public use cabins	22.0%
Private boats	16.4%
Have not used overnight accommodations	5.1%
Other	1.4%

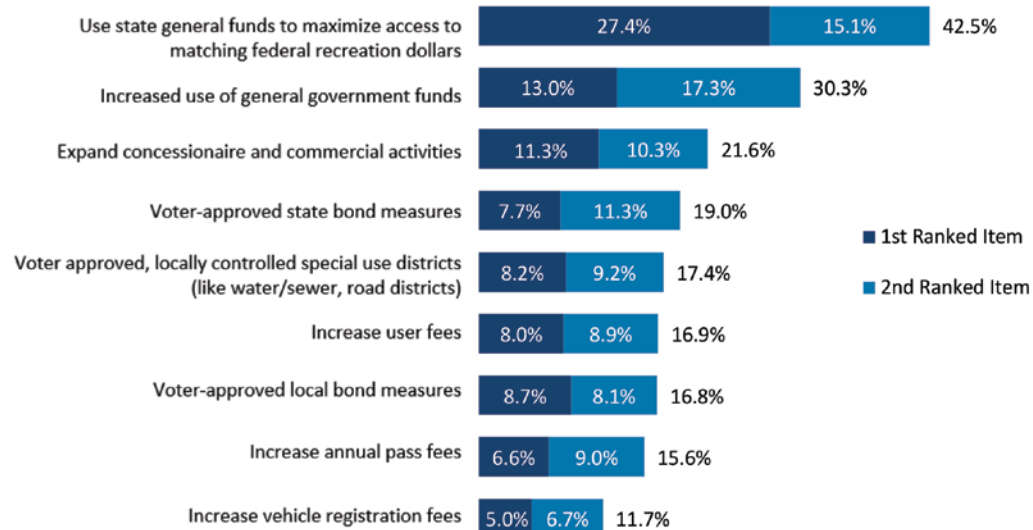
PUBLIC PREFERENCE FOR FUNDING SOURCES

Alaskans want state and government general funds to support new facilities. When asked how to support the development of new facilities, Alaskans want to primarily use state general funds to maximize access to matching federal recreation dollars (42.5%), increase use of general government funds (30.3%), and expand concessionaire and commercial activities (21.6%) (Q25).

Categories of Most Needed Trail-Related Infrastructure (Q16)



Funding Facilities Strategies (Q25)

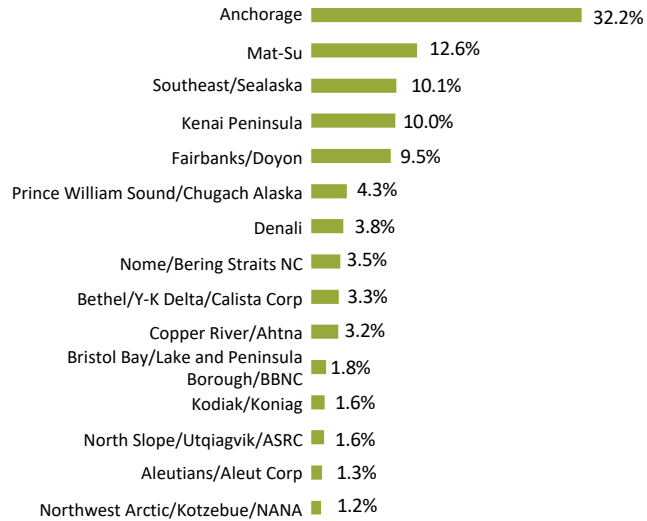




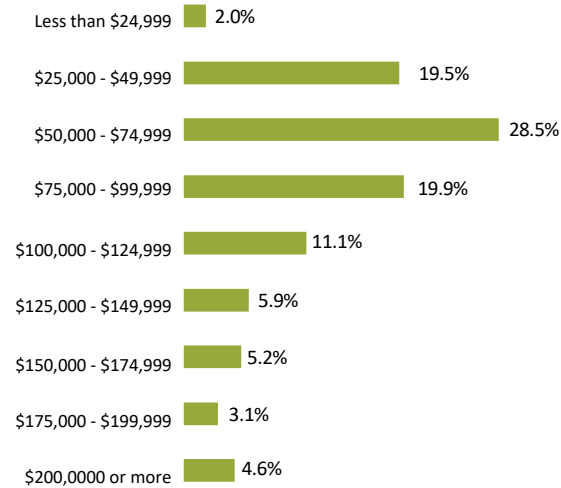
Climbing Peters Peak
Photo by Wayne Todd

Demographics N=1491

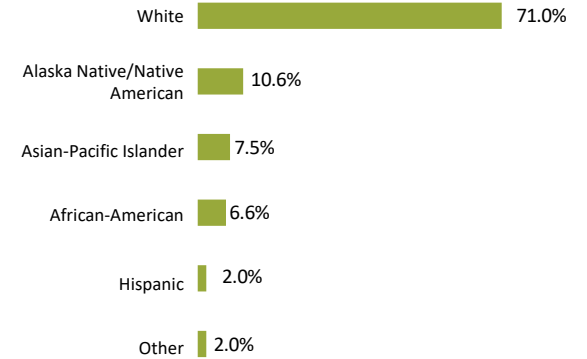
Alaska Residency



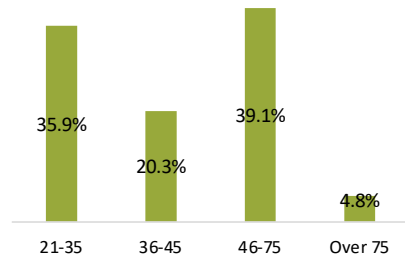
Income



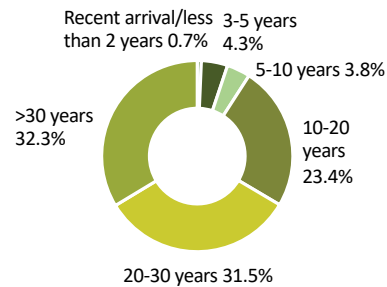
Race



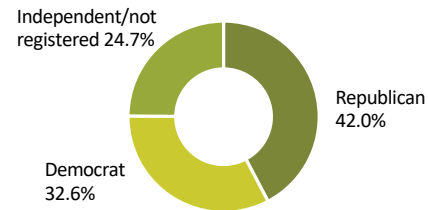
Age



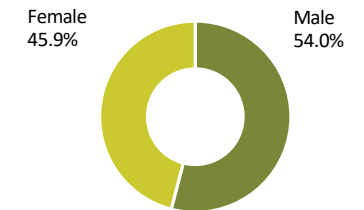
Years Lived in Alaska as a Full-time Resident



Political Affiliation



Gender



SECTION E

LAND MANAGERS' SURVEY – SUMMARY OF RESULTS

In July 2022, 50 land managers were surveyed to learn about their priorities for maintaining and expanding outdoor recreation, challenges for managing resources, trends in outdoor recreation, and ideas for funding. This section presents key findings from the Land Managers Survey. *See Appendices for full survey results.*

The table below summarizes survey respondents by category of land management entity. Sixty-five percent of the respondents had been professionals in outdoor recreation for over ten years. Alaska's land managers oversee lands ranging from local municipal parks to some of the world's largest protected areas. The survey responders run the gamut from seasonal rangers to supervisors of vast refuges.

Federal parks and refuges had the strongest representation among respondents followed by state and local agencies. Responsibilities ranged from renting gym space to maximizing revenue from raw land. While not a fully representative sample of Alaska land managers, this survey does provide a valuable snapshot of issues on the front lines of Alaska outdoor recreation.

Category of Agency	Number of Respondents
Federal land managers (NPS, USFS, USFWS)	17
State agencies (DNR, ADFG)	8
Local (cities and boroughs)	10
Private (AK Native, Land Trusts, UAA, non-profits)	7
Other	3
Unknown	5

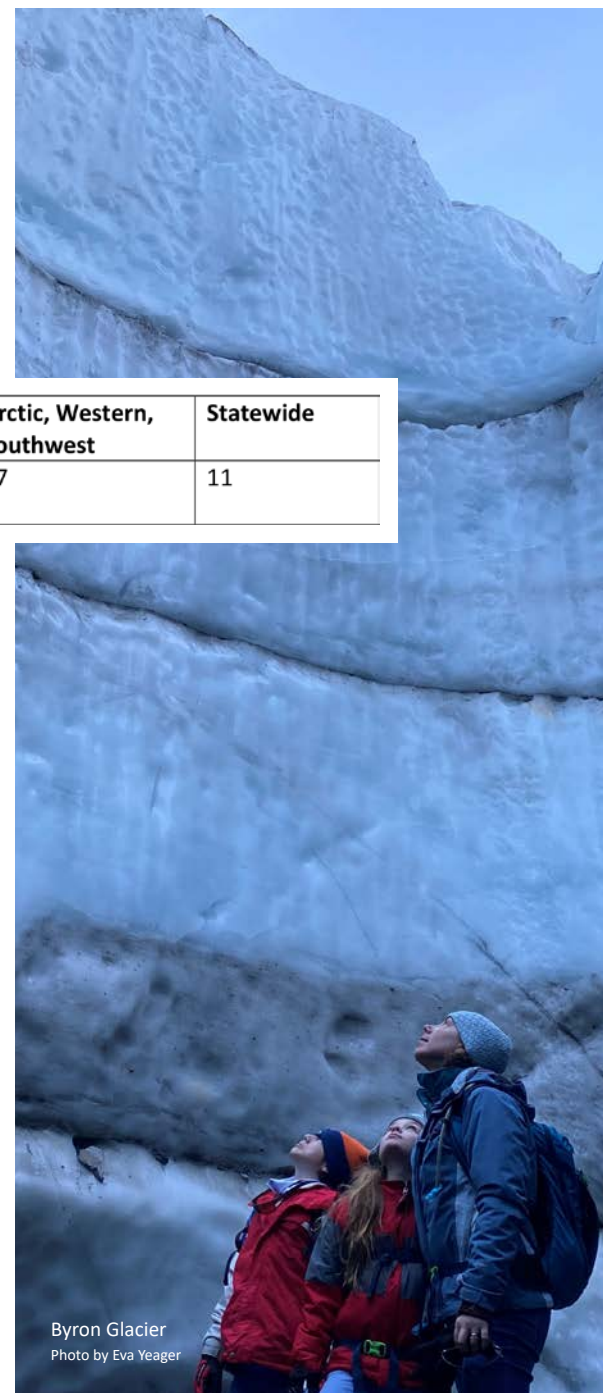
The respondents represented agencies and organizations across Alaska – this table shows the distribution of respondents across areas of their geographic jurisdiction.

Location	Southcentral	Interior	Southeast	Arctic, Western, Southwest	Statewide
Number of Respondents	9	4	4	17	11

NEEDS AND OBJECTIVES IN PROVIDING OUTDOOR RECREATION

Analysis of cell phone data usage from 2019 to 2021 shows a substantial increase in demand for outdoor recreation across the state. *See Chapter 2 for more information.* The Land Managers Survey included a question about how demand for the outdoor recreation services and facilities under their jurisdiction changed from 2019 to the present (Q5). Survey respondents ranked increased demand in their area:

1. Day use recreation (city parks, waysides, scenic viewing, picnic areas, group event spaces)
2. Winter biking (trailhead parking, trails)
3. Walking or biking on paved trails (paved trails, parking areas)
4. Cross-country skiing (parking areas, groomed trails, open space)
5. Camping or RVing
6. Mountain biking
7. ATV riding



Byron Glacier
Photo by Eva Yeager

Managers noted a slight decrease or no change of demand for horseback riding, safety programs, and commercial use permits. The top reasons identified for increased demand were COVID-19 and increased popularity of an activity (Q6).

Land managers face a variety of challenges in providing outdoor recreation opportunities and identifying objectives to meet increased demand. Managers were asked to rank the importance of objectives for their jurisdiction and serving outdoor recreation users (Q10). Top objectives ranked in order as combined “extremely important” and “very important” are:

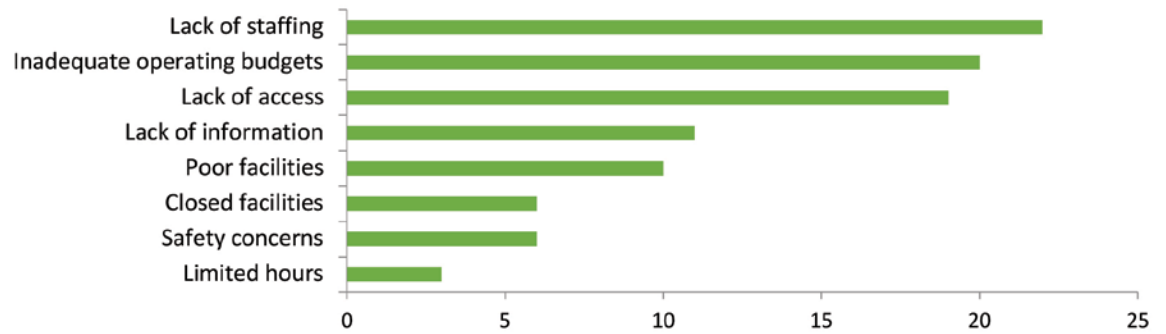
1. investing in deferred maintenance
2. finding resources to complete existing projects (due to inflation)
3. protecting natural resources from recreation use impacts
4. providing outdoor recreation opportunities tied to Alaska’s diverse cultures and
5. promoting outdoor recreation as a local or regional economic development strategy.

Outdoor recreation depends on conditions in the natural environment which may be changing or under stress, such as natural disasters and climate change. Land managers face increased challenges in planning for these changes. Top environmental factors that negatively affect capacity to manage or provide outdoor recreation (Q8) were:

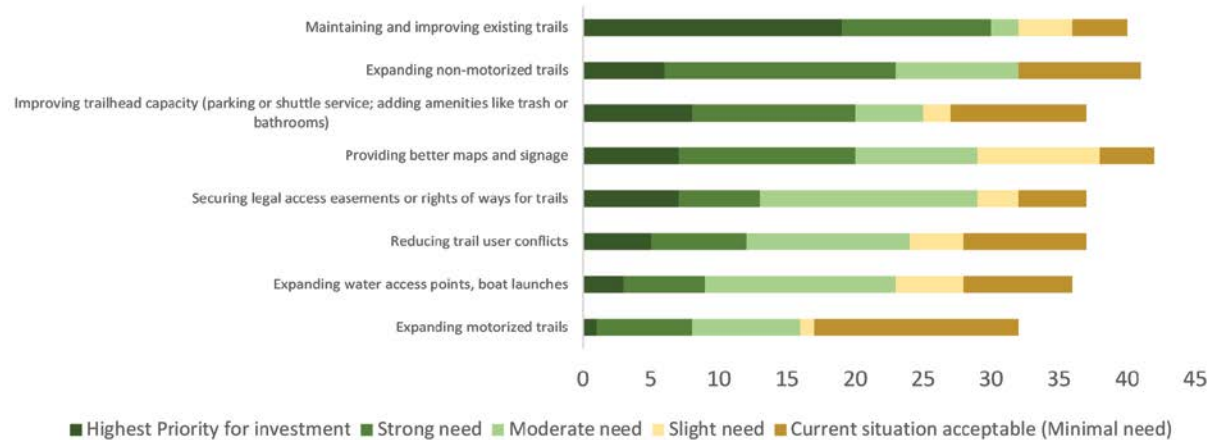
1. degraded road access
2. spruce bark beetle and falling trees
3. unpredictable snow and ice for winter activities and
4. wildfires.

The two major challenges in responding to these issues (Q9) were lack of maintenance staff and lack of dedicated emergency repair funds.

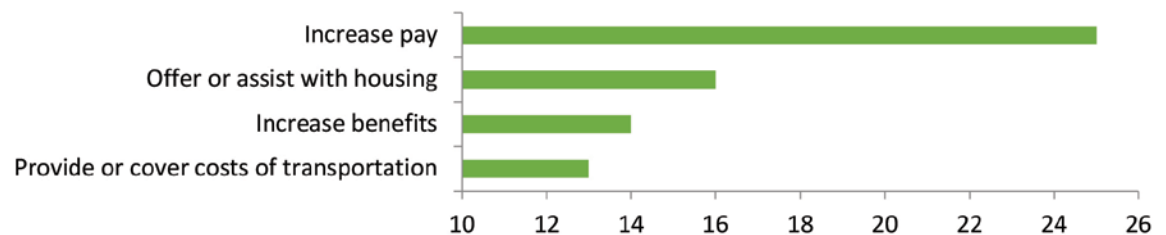
Factors restricting user demand for outdoor recreation were ranked as follows (Q7)



Q14



Q21





As demand for outdoor recreation increases, land managers are faced with decisions on which types of facilities to improve or create, in two categories.

The first is the need for new, expanded, or improved outdoor facilities and programs. Priorities, after combining after combining “extremely important” and “very important” (Q13), were ranked as follows:

1. outdoor interpretive and education programs
2. campgrounds
3. public-use cabins
4. historic and cultural facilities and
5. skill development programs.

Secondly, land managers ranked the highest three priorities for investment in trails (Q14), combining “highest priority” and “strong need” as:

1. maintaining and improving existing trails
2. expanding non-motorized trails and
3. improving trailhead capacity.

CHALLENGES IN STAFFING AND FUNDING

Land managers have to balance limited budgets with increased demands for outdoor recreation. This includes identifying gaps in funding, creating new means of funding, and adjusting services to work within budgets. All these affect agencies’ ability to recruit and retain staff and volunteers as well as to maintain and develop facilities.

Top challenges to recruit and retain workforce (Q17) included inability to offer year-round employment, insufficient pay scale and benefits, and lack of housing. Increased pay was ranked as a top solution for the workforce issues (Q21), followed by assistance with housing.

Close to 70 percent of respondents think that the current commercial permitting system needs improvements (Q11). More staff to process single- and multi-year permits was identified as a top priority to see improvements with permitting (Q12).

Reliable funding is central to the ability to offer outdoor recreation. Respondents in management conditions were asked to consider funding needs, available actions to increase or balance budgets, and larger-scale potential funding solutions.

Top funding challenges (Q22) were lack of a dedicated funding source, lack of funding for administrative staff, instability of agency budgets, and lack of matching funds for federal grant programs. Top actions available to increase or balance budgets (Q23) were public-private partnerships, reducing services or staff, additional volunteer services, and grants. The most effective, larger-scale potential solutions to funding challenges (Q24) were reserving more federal funding for outdoor recreation in Alaska on state and local lands, using state general funds to maximize access to matching federal recreation dollars, and increased use of general State of Alaska funds. The top planning strategies (Q15) were tied:

1. plans and strategies to grow funding, including support from non-profit, business, or other partners, and
2. site and facility planning, to move from good ideas to shovel-ready and permitted designs and projects.

See Appendix 3 for a full set of Land Managers’ Survey questions and responses.



SECTION F

TRIBAL SURVEY - OUTDOOR RECREATION FOR ALASKA TRIBES

Alaska tribal governments offer a range of services for their 180,000 tribal members, local communities, and visitors including outdoor recreation facilities and programs. These tribal governments are located statewide from southeast Alaska to the Arctic Coast and from the Canadian border to the far reaches of the Aleutian chain.

On August 16, 2022, an outdoor recreation survey was emailed to 226 Alaska tribal governments listed in the Bureau of Indian Affairs' Tribal Leaders Directory. The survey questions requested input on issues such as outdoor recreation funding, facilities, trails, cultural and education programs, and use of staff or volunteers. When the response window closed in September, 18 responses were received. As the response rate is less than ten percent of tribal governments statewide, the survey results include

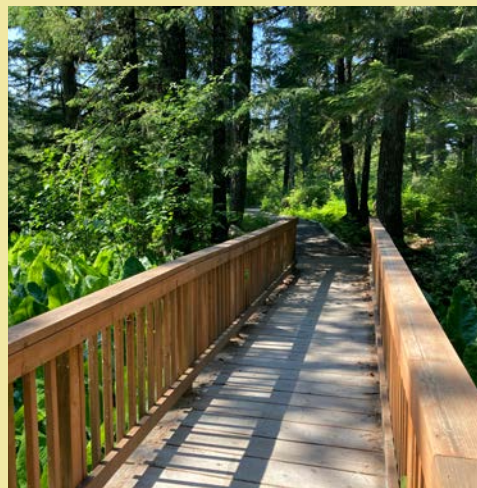
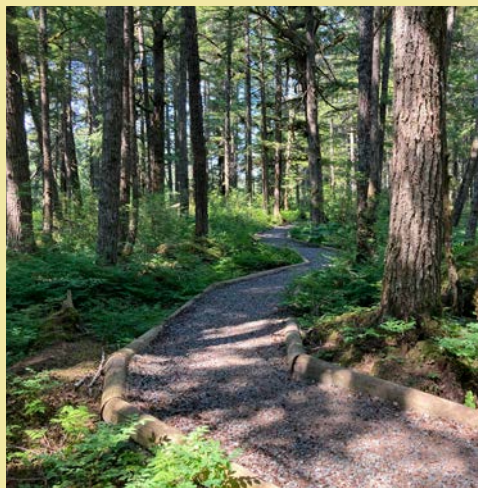
the stipulation that this is not a statistically representative sample. This limited outcome in response from tribal governments emphasizes the need for increased communication, improved partnerships, and varied outreach methods to ensure that the voice of tribal governments is incorporated in future SCORP updates. *See Appendices for full survey results.*

The survey responses confirm that tribal governments face many of the same needs and challenges as public and private land managers in providing outdoor recreation. These include lack of funding, staffing shortages, and equipment maintenance issues (Q7). In addition to partnering with federal and state agencies as well as school districts, tribes partner with Alaska Native regional and village corporations and Alaska Native non-profit organizations to support outdoor recreation (Q4).

Community gardens, boat launches, access roads, and parking areas are the top three areas for additional infrastructure developments (Q8). The top three needs were identified as ADA-accessible trails, interconnected ATV trails, as well as walking, biking, and ski trails (Q9).

Top environmental factors affecting respondents' areas of jurisdiction are unstable or damaged facilities, dead or falling trees, and unpredictable snow or ice for winter activities (Q11). Lack of maintenance staff and emergency funding are the two main challenges respondents experience in addressing the environmental factors (Q12).

The three following case studies share perspectives on the opportunities and challenges for tribal governments in providing outdoor recreation in Alaska.



Photos by Sue Libenson

HAINES-BASED TRIBE PROVIDES OUTDOOR RECREATION FOR COMMUNITY: A BEAUTIFUL TRAIL RIGHT DOWNTOWN

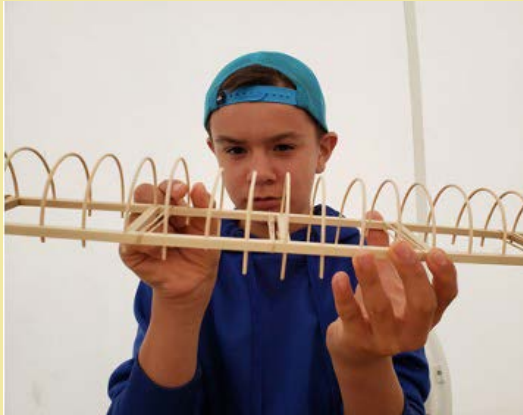
Tribal governments may qualify for federal funding to create outdoor recreation infrastructure. Chilkoot Indian Association (CIA)¹⁵ in Haines has built several miles of trails under a funding agreement with the USDOT Federal Highway Administration's Indian Reservation Roads Program. The trails are a major boon for outdoor recreation in Haines, joining two neighborhoods and connecting them to downtown and the school. Besides providing a footpath for walking, jogging or biking, the trails wind deep into the heart of a rich wetland, home to rearing salmon and trout, birdlife, moose, and bear. CIA's trails promise to be the first link in a chain of trails around downtown connecting the town's waterfront, Chilkat River, the fairgrounds, and other points of interest.

UNANGAĀ CULTURE CAMPS TEACH OUTDOOR AND TRADITIONAL VALUES IN ALEUTIAN PRIBILOF ISLANDS REGION^{1,13,24}



Alaska Native culture camps are offered throughout the Aleutian and Pribilof Islands Region including in Atka, Unalaska, Akutan, Sand Point, St. Paul, Cold Bay, False Pass, St. George, and Anchorage. Outdoor cultural activities include hiking, beach combing, subsistence activities on the beach, and sea kayaking.

Traditional UnangaĀ values are taught on a wide range of topics including respect for the sea, the land, freshwater streams, animals, birds, and humans. Other activities include building full-size and model iqyax or kayaks, drum-making, dance, traditional foods, painting, and regalia sewing. Kids learn about local flora — what they can use for medicine and what is dangerous to eat or touch. In some camps, the bulk of the meals are traditional foods gathered at low tide or hunt.



"That's the whole purpose, you know, of trying to preserve culture and save culture, is making sure that you always pass on your knowledge to somebody else, so that they can continue to pass it on."

— Sharon Svarny-Livingston, Camp AdgayuxĀ

Camp participant builds a model iqyax, a traditional UnangaĀ kayak.

Photo by Darling Anderson and Millie McKeown, Aleutian Pribilof Islands Association



Red-legged
Kittiwake colony on
St. George Island
Photo by AdobeStock



CHICKALOON NATIVE VILLAGE²⁹



Chickaloon Native Village (CNV) is a federally recognized Ahtna Dene Tribal government with traditional lands in the Matanuska Watershed.

Their Tribal government, Chickaloon Village Traditional Council (CVTC), has offices and services based in the lower Matanuska River valley in a scenic location along the river framed by the Chugach Mountains to the south and Talkeetna Mountains to the north. CVTC has a strong focus on environmental stewardship and sustaining Ahtna Dene cultural traditions. The lessons from CVTC's experiences suggest both the opportunities and challenges facing tribal governments and other partners interested in growing outdoor recreation and cultural tourism.

CVTC manages the small, state-owned Moose Creek Campground and wayside that lies seven miles outside of Palmer on the Glenn Highway.

The land management authority passes through the Matanuska-Susitna Borough (MSB) from the State of Alaska (as a current state statute does not allow the State to contract directly with a Tribal government for land management) and agreements between the State and Tribal governments often require a waiver of Tribal sovereignty. CVTC takes on the responsibility for the campground primarily to be good stewards of this important cultural site within their community rather than with expectations of profit. CVTC finished the existing Moose Creek Campground and wayside infrastructure in 2014 with federal grant funds and an allocation from MSB. Facilities include a campground with picnic tables, fire rings, signage, vaulted toilets, pavilions with grills, a playground, and interpretive kiosks. Working with minimal income from user fees for operations and maintenance, CVTC's ongoing responsibilities include cleaning facilities and restrooms, emptying trash, pumping the vaulted toilets, monitoring use, and responding to ongoing challenges of vandalism and theft. Managing the campground is demanding,

and often disheartening. It illustrates many common challenges facing campground managers in locations statewide.

CVTC Cultural Interpreters share Ahtna culture, stories, and history with residents and visitors. They work in partnership with local schools, museums and businesses (including the Palmer and Wasilla Museums), the Alpine Historical Park, and Salmonberry Tours.

In the past decade, CVTC had hoped to develop a campground and wayside at Kings River and build a separated multi-use bridge and pathway for a trail crossing at Eska Creek in Sutton. This project was going to be possible with federal grant funds CVTC had secured. Neither project moved forward as planned due to state rules restricting options for Tribal government improvements on state lands. CVTC hopes the recent recognition of Tribal governments by the State of Alaska opens new opportunities for mutually beneficial partnerships.

SECTION G

ALASKA'S OUTDOOR RECREATION PLACES, PARKS, FACILITIES

A new, coordinated, statewide GIS outdoor recreation data hub

To make informed decisions about outdoor recreation policy and investments, land managers require data that show where the recreation is happening on their lands and trends in both the use of and type of specific resources, amenities, and activities. In geographic information terms, the data must be “spatially representative” of locations and uses at multiple scales. Currently, the available data for recreation use in Alaska is limited and spread among multiple organizations and agencies.

To create goals and provide a necessary tool for ongoing recreation management, a consolidated Geographic Information System (GIS) was produced to represent outdoor recreation resources statewide. This cutting-edge resource includes a standardized geodatabase, hard copy maps, interactive dashboards, and reports on the supply and status of Alaska’s public outdoor recreation facilities and locations. This database will be available to land managers and the public, providing easy on-line access to a rich collection of outdoor recreation information.

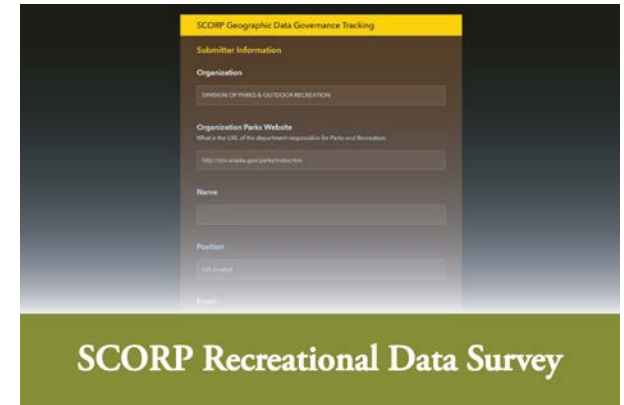
While not yet fully populated, this database framework provides a means to record and share information on size, ownership, and use of a facility, the status of the facility, as well as the cost or need for improvements. This technology supports data-driven decision-making that is needed to better understand the outdoor recreation industry in Alaska and can help guide investments to achieve SCORP goals.

METHODOLOGY

Developing the unified SCORP geodatabase entailed an extensive effort to identify, collect, review, and consolidate geographic data from multiple organizations into a single, standardized geodatabase. This new database was then used to develop statewide reports and analysis. Primary data were gathered from publicly available sources, some readily available while others required contacting data managers from various organizations statewide. This process revealed that accurate and complete GIS information for outdoor recreation is difficult to come by in large portions of Alaska. Through this process, and for the first time in Alaska, broad and representative coverage of data sources from various organizations and regions was achieved.

Identification of Data Sources

Building a GIS supply of outdoor recreation data initially required developing an inventory of the organizations that manage outdoor recreation lands. The SCORP team worked together to develop an inventory of organizations and associated GIS layers that accurately represent the supply of outdoor recreation resources. Initially, over 70 different data sources were identified with some organizations publishing multiple datasets per layer. This inventory was compiled and reviewed by the SCORP team for completeness and compared to existing statewide data for land status and to identify any missing information.



Collecting data

Some organizations, particularly the larger state and federal organizations, have the resources to create and publish their data online as open data. These resources are often well documented, easy to access, publicly available, and ready to download. In these cases, the process to obtain data is straightforward. While some larger local organizations have these capabilities, many smaller communities and boroughs do not. To obtain information from borough and local governments we contacted data managers from sixteen organizations. During brief phone interviews, we requested internal data for the SCORP and also collected basic information about the organization to better understand the availability and status of their data. The results of this outreach effort were mapped in a “cities and boroughs GIS dashboard.” This effort revealed that in several cases, locally maintained data is not readily available, requires a request and processing fee to obtain, and often came with caveats with the quality, currency, and completeness. Of the 16 local organizations contacted, only six were able to provide data that could be added to the SCORP geodatabase.

Data review and development of the SCORP outdoor recreation data hub

The new SCORP GIS model was developed to be a simple, comprehensive, consolidated geodatabase representing the layers, fields, and attributes common to most of the organizations reviewed during the data collection process. This geodatabase maintains the simplicity to be easily populated by organizations of any size and budget and to create a complete report. The SCORP geodatabase is not exhaustive or inclusive of all potential data for parks and recreation management. The design was influenced primarily by the common data across all sources to build a complete and usable inventory with minimal missing values. It was also designed to accommodate the requirements of the SCORP and associated geographic information products.

The core layers created were park **polygons**, **trail lines**, and **facility points**. For the preparation of this SCORP, region, borough, and census area were added to the core layer, but are not included in the overall geodatabase model. Although robust models contain many fields to support various operations, the two standard fields for each layer are the name of the feature and type, for example *Hatcher Pass and State Park*. Types varied across organizations, park types were specific to each organization, trail types were standardized to those being used by DPOR, and facility types were standardized to the National Park Service symbol library. In the source data over 300 different facility types were encountered with the final geodatabase containing 100 of the most common facility types.

Upon completion of the SCORP geodatabase design, each source layer was standardized and appended to the statewide SCORP layer for parks, trails, and facilities. These layers were symbolized then uploaded to be shared online. The online data automatically feeds into the dynamic dashboards, maps, and apps presented

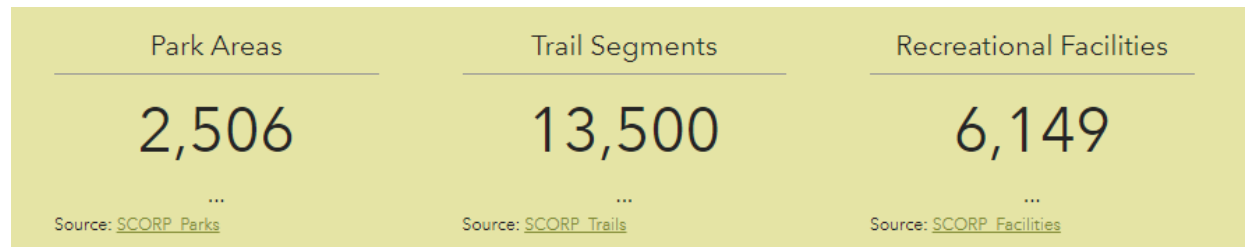


Figure 1

in the next section. At the time of writing over 20,000 features were consolidated (Figure 1). See *Appendices for more detailed steps on this process*.

GEOSPATIAL SCORP PRODUCTS IN DEVELOPMENT

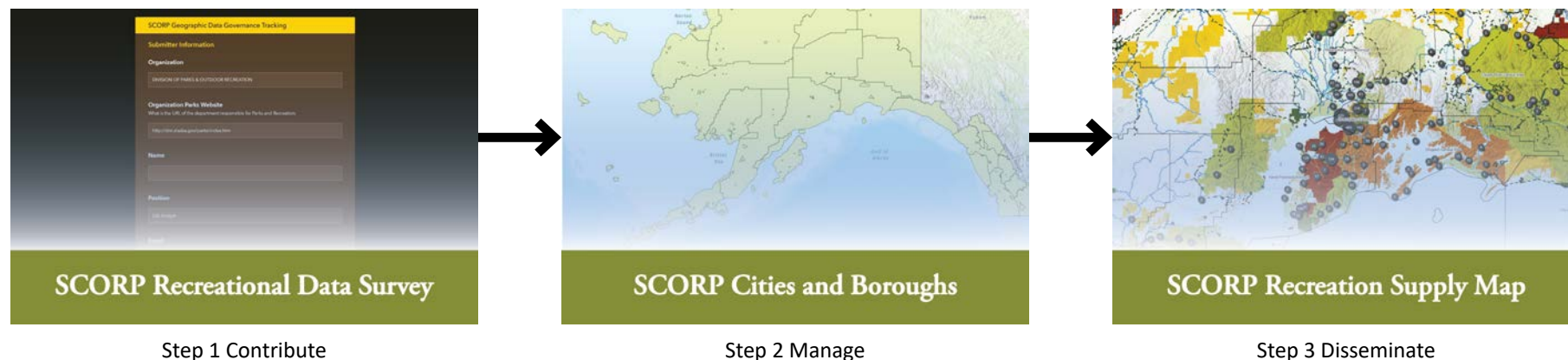
SCORP GIS Hub

The SCORP GIS Hub is located in the State of Alaska Department of Natural Resources ArcGIS Online Organizational account. ESRI hub sites were designed to share open data and provide a collaborative digital framework to modernize government processes. The hub centralizes statewide GIS information developed during the SCORP and provides a single portal to focus outdoor recreation data development efforts across organizations. This central repository for statewide GIS data and standards will be convenient and accessible for land managers, data managers, and recreationists. SCORP layers can be accessed by GIS specialists as open data.

Organizations that can't host open data themselves benefit from being able to share their data publicly through the SCORP. Organizations that have yet to develop data for parks, trails, and facilities can download and use the SCORP geodatabase from the hub to help jump-start their individualized GIS. This section of the hub site highlights the process, provides a link to download the template, and creates the path forward to put individualized recreational data on the map! See *Appendices more detailed information*.



Figure 2



Hub Dashboards, Maps, and Apps

The hub contains purpose-built dashboards that fall into one of four general categories:

1. Data Management
2. Park Visitors
3. Park Management
4. Geographic Analysis

DASHBOARDS FOR DATA MANAGEMENT

This series of three applications is used to maintain and distribute the data from the SCORP geodatabase. It includes an input form for contributors, a city and borough tracking dashboard for the data manager, and a public facing supply dashboard for data consumers. This combination of applications provides the framework to support a statewide recreational geodatabase.

Step 1: Contribute

SCORP Recreational Data Survey

Summary: This online questionnaire allows managers of recreational data to contribute to the SCORP Geodatabase.

Description: A GIS data manager can use this questionnaire to provide data, metadata, and contact information to the SCORP data manager using this online form. Recreational data can be provided as either a zip file or as links to open data. Contained on the questionnaire

is a map which allows the contributor to provide the location of the organization. This helps build a point layer and inventory of recreational data managers and their associated data. This point layer is used to indicate to the SCORP data manager a new dataset is ready to be reviewed for addition to the SCORP geodatabase.

Step 2: Manage

SCORP Cities and Boroughs Dashboard

Summary: This dashboard is intended to be used internally by the SCORP data manager to track new data submissions by local governments as well as existing data provided by local organizations.

Description: This process is triggered by the submission of a new recreational data survey. Upon submission, a survey is automatically added to this dashboard as a point on the map that contains the answers to the survey questions and the data file attached to the survey (Figure 2). The map overlays the survey point on the borough and city polygon boundaries. The borough and city polygons contain fields for the data manager to fill in. When the final step is completed and the data is moved into the SCORP geodatabase, the polygon changes color to indicate the data is now contained in the SCORP. The dashboard keeps count of the total number of organizations that have been added to the SCORP geodatabase and which ones remain to be

added. At the time of writing, 16 organizations have been contacted and 6 have been added to the SCORP. Approximately 170 organizations remain. The survey targets the borough and local governments which have not yet been contacted or added to the SCORP.

Step 3: Disseminate

SCORP Recreational Supply Dashboard

Summary: This dashboard is the final destination for the data that is in the SCORP geodatabase. The map is the public facing version of all the outdoor recreation facilities, trails, and parks added to the SCORP.

Description: Dashboard users can browse the state to find parks, trails, and facilities. They can click on the feature from the SCORP geodatabase in the map to see the critical information gathered in the SCORP process and use the Source URL link to access the data or the website for the originating organization to get the latest version of these data. The margins of the map contain charts that show total trail miles, number of facilities, and park acres. Filters towards the top of the map allow the user to isolate data by organization or combinations of organizations. This updates the charts and map to show only those in the filter to compare data across organizations and inform the user about the most appropriate data source to be used for their purposes.

Dashboards for Park Visitors

Alaska State Parks Story Map

Summary: This story map was developed to guide visitors through the Alaska State Park System on a virtual tour to help plan their experience.

Description: This story map was built on the SCORP parks layer and contains park locations with media and narrative. As the user scrolls through the story, they learn about the park system and are led through a series of regional maps that contain detailed park information and multimedia.

Dashboards for Park Management

This series of two dashboards contains information about where funding has gone in the past and where it may go in the future. Having a central view of grant funding distribution and proposed maintenance projects will help policymakers and managers determine the most strategic and equitable way to manage the park system as a single state-wide resource.

LWCF Funding Sources Map

Summary: This dashboard shows where LWCF funds have been applied in the past.

Description: More than \$40 million in LWCF grants has been invested in over 350 projects in Alaska since its inception in 1965. Locally sponsored projects vary widely. This map depicts the location and funding associated with each project. The dashboard also contains regional reports so funding allocation can be reviewed by individual project, region, and borough or census area.

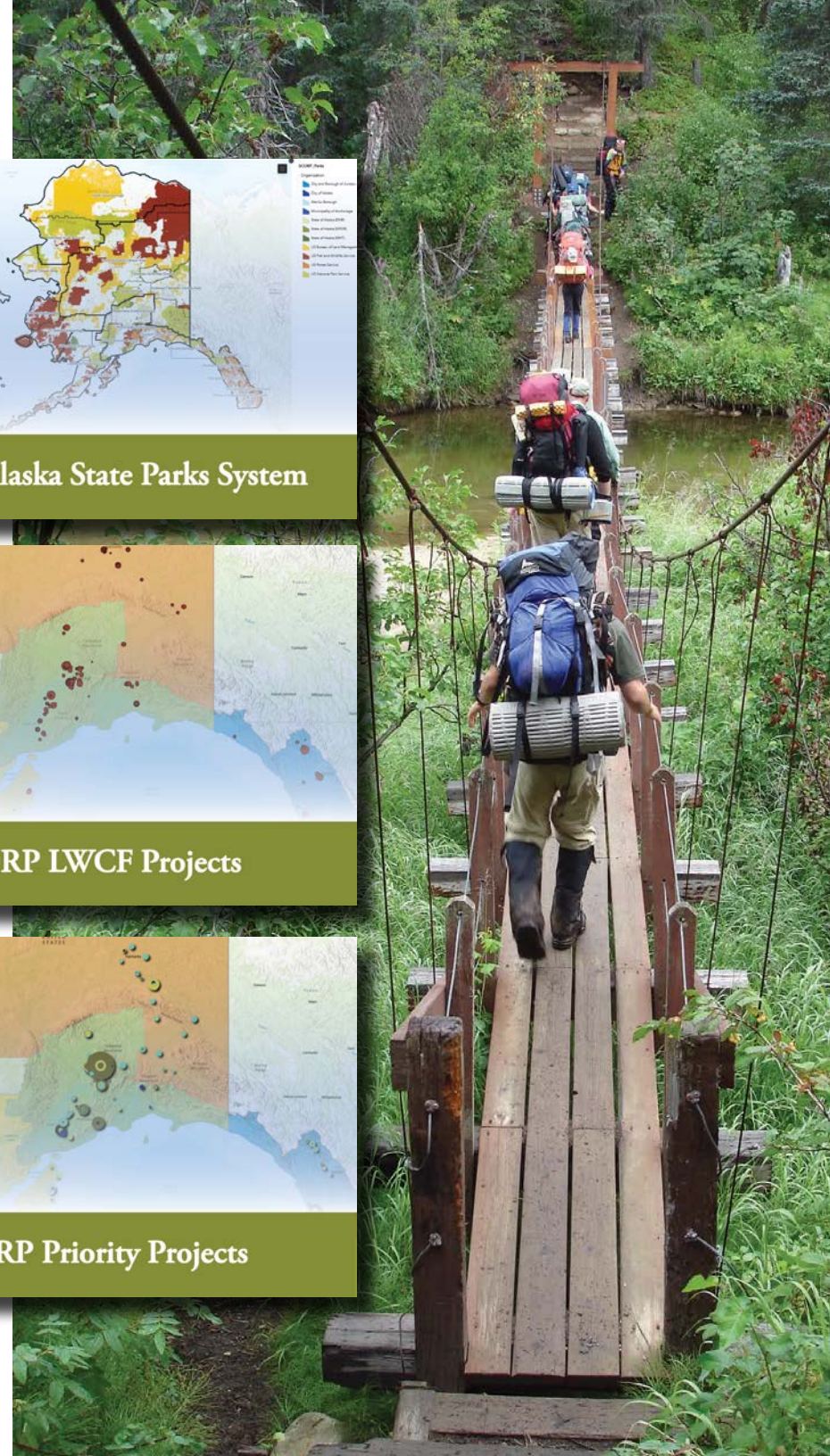
Priority Projects Dashboard

Summary: This dashboard contains the locations of statewide priority projects for DPOR.

Description: The current inventory of priority projects was provided by the DPOR Engineering department. Project locations were georeferenced to the park and then assigned park related and regional information. This allows the user to see summary reports on large projects, total proposed cost per region, and cost by project type.

Dashboards for Geographic Analysis

This series of two dashboards contains the source data that was used to support the demand analysis of regional and detailed areas using mobility data.



Regional Parks Dashboard

Summary: This map contains the comprehensive inventory of park boundaries and used to analyze the mobility data represented in the demand portion of this report.

Description: Over 2,500 polygons collected during the data consolidation process are represented on this map. The original polygons were processed to remove roads and inholdings and were then combined with SCORP regions, boroughs, and census areas to drive dashboard reports. The dashboard enables the user to isolate each region to create an interactive regional report displaying the five largest park areas, percentage of park land by agency category, and acres of park by organization in each borough and census area.

Detailed Park Dashboard

Summary: This map contains detailed areas to support the mobility demand analysis.

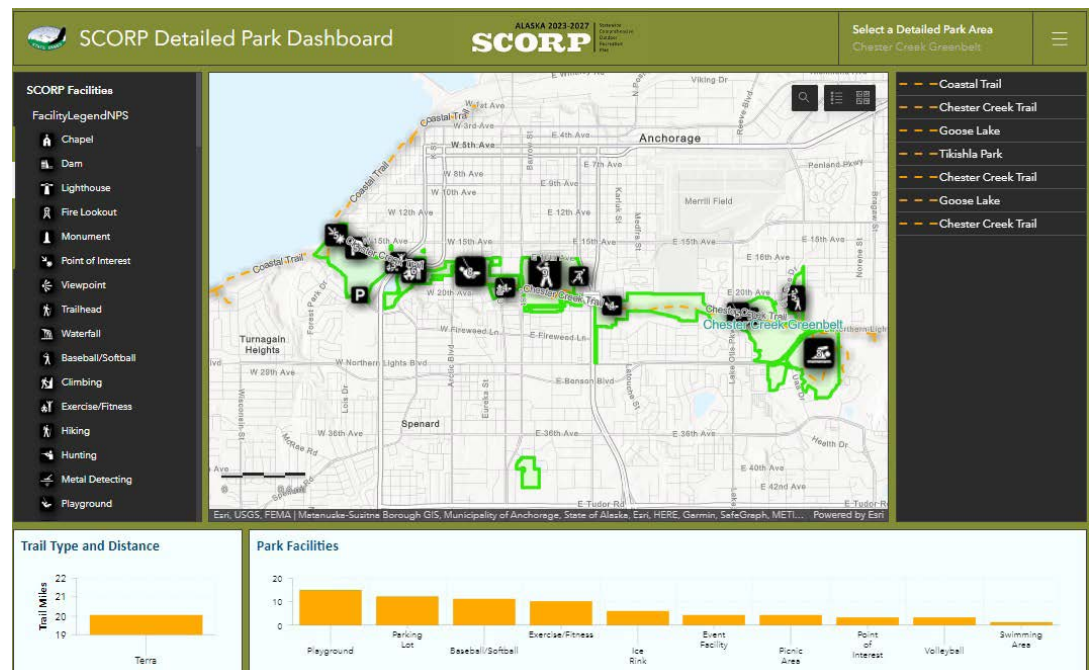
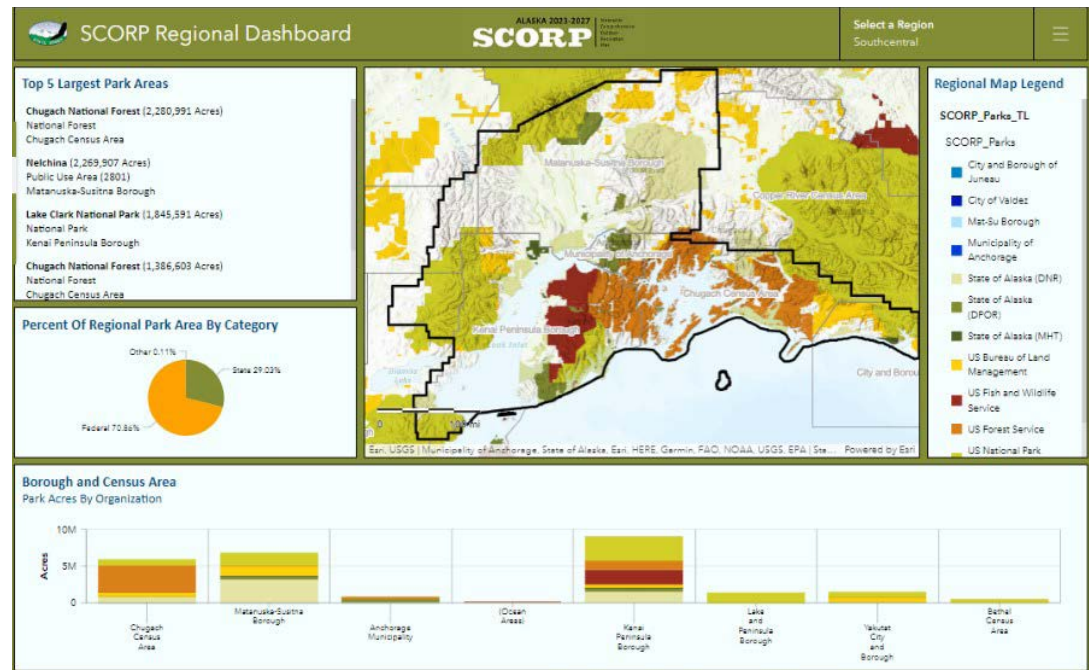
Description: This map represents recreation areas of various types to include parks as well as facilities and trails within parks and nonpark areas, like marine statistical areas and game management units. The map allows the user to choose an area to zoom in on, displaying details from the trails and facilities layers located in the selected vicinity.

Sustaining Alaska's Outdoor Recreation Data Hub

The hub, associated apps, and workflows will be instrumental in centralizing, organizing, and streamlining the management of statewide park resources. Participating organizations will benefit from shared templates, reduced development costs, and leveraging the collective input of a broad user community. This will elevate the capacity and utility of the outdoor recreation industry but ultimately requires maintenance by a skilled GIS Analyst.

CONCLUSION

Additional work is needed to take full advantage of the value of this outdoor recreation data hub. That work, including populating and then operating and updating the GIS hub, requires resources beyond what is currently available within DPOR. See *Goal 7 for more information on the proposed strategies to support the ongoing operations of the hub.*



CHAPTER 2

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Fishing on Kenai Lake
Photo by Greg Wilkens