



2022 Virginia Outdoors Survey Report of Results

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Institutional Review Board Statement

The 2022 Virginia Outdoors Survey proceeded as exempt, per Virginia Commonwealth University Institutional Review Board protocol HM20024070 and associated amendments.

Executive Summary

Background

This report examines results from the 2022 administration of the *Virginia Outdoors Survey*. The survey is conducted every five years to help meet public input requirements of the federal Land and Water Conservation Fund and also Virginia's Statewide Comprehensive Outdoor Recreation Plan (SCORP). It also reflects the Virginia Department of Conservation and Recreation's commitment to understanding and meeting the outdoor recreation needs of the Commonwealth's residents. The 2022 *Virginia Outdoors Survey* was conducted by the Survey and Evaluation Research Laboratory in the L. Douglas Wilder School of Government and Public Affairs at Virginia Commonwealth University, under contract to the Virginia Department of Conservation and Recreation.

The 2022 *Virginia Outdoors Survey* fielded in two ways – first, with a probability sample carefully designed to allow for generalizations to the broader state population and to four geographic regions within the state; and second, with a crowd-source approach making the survey more widely available via email, the Internet and social media. Although data from the crowd-source survey cannot be generalized to the Commonwealth at large because it was a sample of convenience, the crowd-source effort is helpful for understanding the perspectives and activities of more motivated users and subgroups, some of whom may not have been included in large numbers in the probability-based survey.

Respondents in the probability sample could complete the survey by web or paper, but the crowd-source survey was available exclusively online. No matter the format, the survey was limited to current Virginia residents age 18 and older. At the close of data collection, there were 888 probability sample completions out of 6,100 households invited to participate, and 3,567 crowd-source completions.

The probability sample had a response rate of 14.6%. Accounting for the weighting of the probability sample data, the responses to questions answered by all 888 respondents have a sampling error.¹ of +/- 5.5 percentage points at the 95 percent level of confidence. A survey of this size can represent the entire state with reasonable accuracy because it uses a probability-based sample. Because the crowd-source survey was not randomly or systematically recruited and the chances of selection for people getting invitations or responding were unknown, no response rate or sampling error can be calculated for the crowd-source survey.

¹ Response rates reported in this document do not attempt to exclude estimated ineligible households. Therefore, they are equivalent to response rate 1 (RR1) – the “minimum response rate” – promulgated by the American Association for Public Opinion Research (AAPOR). For more, see https://www-archive.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf.

Altogether, combining both techniques – probability sample and crowd-source convenience sample – provided ample opportunity for public participation involving all segments of the state's population.

Diversity, Inclusion and the Underserved

The survey had several questions related to diversity, inclusion and the underserved in outdoor recreation. For example, 82.3% of the probability sample respondents considered access to outdoor recreation to be very important. Crowd-source participants were even more inclined to this sentiment – 95.8% of them said that access was very important.

Nearly two-thirds of probability sample respondents – 64.6% – indicated they felt very welcome in outdoor recreation areas, and another 29.5% reported they felt somewhat welcome. However, only 43.1% of non-Hispanic/Latino(a) Black/African-American respondents said they felt very welcome, while 37.4% felt somewhat welcome.

Approximately 63.2% overall said they did not have a public park within a 10-minute walk of home, and 57.0% said they had (ever) avoided visiting a trail or park due to crowding. Lack of time was the leading factor limiting or preventing probability sample respondents' participation in outdoor recreation, mentioned by 58.2% – yet 52.7% also said that one of the main reasons they participate in outdoor recreation was to take a break, reduce stress, and/or improve mental health.

Notably, too, respondents in the probability sample were more likely to say that health issues prevented them from partaking in outdoor recreation activities (19.0%) than were crowd-source respondents (11.2%). Meanwhile, 20.1% of probability sample respondents said that lack of money to travel or pay entry fees prevented them from involvement in outdoor recreation, compared to 12.5% of crowd-source respondents.

Probability sample respondents most often found out about outdoor recreation opportunities from the Internet, friends/family/word of mouth, as well as social media. Crowd-source respondents were more likely to get their information from the Internet (85.9%), compared to probability sample respondents (73.4%). Probability sample respondents were more likely to get their information from television ads than were crowd-source respondents (13.2% compared to 3.0%), and less likely to get information by email (8.8% compared to 21.1%).

When asked for ways to enhance outdoor engagement, probability sample respondents most frequently suggested adding restrooms/bathrooms (49.3%) and easy to walk/paved trails (42.7%).

General Safety

Probability sample participants most often selected well-maintained parks, equipment and trails (56.7%); restrooms/bathrooms (41.3%); lighting (39.5%); and cell phone service (39.0%) as physical improvements important to ensure safety in parks and outdoor recreation settings. More

than half – 54.1% – described cell phone service at parks or natural areas as very important or extremely important, although 65.5% said they would use a park or natural area without cell phone service.

Outdoor Activities Done in the Last 12 Months

The survey presented eight standalone “activity grids” which asked up to five questions for each of 105 specific outdoor recreation activities. The questions were:

1. Is more of this activity needed?
2. Did you or anyone in your household do this activity in the last 12 months?
3. If yes to #2:
 - a. On how many days in the last 12 months did you or anyone in your household do this activity?
 - b. Was an overnight stay involved?
 - c. Was the activity done mostly in Virginia?

Within the probability sample, the top four outdoor activities done in the last 12 months were:

1. Walking for pleasure (56.0%)
2. Visiting parks – local, state, national (39.3%)
3. Viewing the water (35.4%)
4. Swimming/outdoor pool (34.5%)

The leading four activities by median number of days of activity per year (minimum of 30 participants) were jogging/running (50 days), walking for pleasure (30 days), basketball (25 days) and gardening (25 days).

Within the crowd-source survey, the top four outdoor activities done in the last 12 months were:

1. Walking for pleasure (70.0%)
2. Visiting parks – local, state, national (64.5%)
3. Viewing the water (50.4%)
4. Swimming/outdoor pool (49.8%)

The leading four activities by median number of days of activity per year (minimum of 30 participants) were walking for pleasure (55.5 days), gardening (45 days), jogging/running (45 days) and horseback riding (40 days).

The 2022 survey seems to show a small but general decline in participation in outdoor recreation since the 2017 survey. It is not clear whether that might be due to COVID-19, changes in the demographics of the state’s population, or real declines in participation.

Outdoor Activities Needed

The survey had one standalone question that asked participants for the most needed outdoor recreation resources in Virginia. The question presented a list of 10 possibilities. The top three most needed resources mentioned by probability sample respondents were:

1. Natural areas (47.3%)
2. Trails (42.5%)
3. Parks (37.5%)

The top three most needed resources mentioned by crowd-source respondents were:

1. Trails (68.2%)
2. Natural areas (65.4%)
3. Water access (38.9%)

In addition, as noted above, the survey presented eight standalone activity grids containing 105 specific outdoor recreation activities. One of the questions asked for each of those activities was whether more of that activity was needed. In those activity grids, the probability sample respondents most frequently mentioned as more being needed:

1. Walking for pleasure (48.0%)
2. Outdoor festivals (40.6%)
3. Visiting working farms (36.9%)
4. Music festivals (35.5%)

Crowd-source survey respondents most frequently mentioned as more being needed:

1. Walking for pleasure (53.7%)
2. Nature-based tours/trails (52.1%)
3. Canoeing/kayaking (47.4%)
4. Visiting parks (local, state, national) (47.1%)

Crowd-source respondents were more likely to write in “other specify” needed resources or activities in addition to the 105 activities listed in the questionnaire – 14.8% did so, compared to 7.6% in the probability survey. Most notably, the “other specify” responses contained large numbers of requests related to equestrian activities and resources – almost all of them originating from the crowd-source survey.

Motivations for Outdoor Recreation

More than two-thirds (68.0%) of the probability sample respondents reported involvement in outdoor recreation primarily for physical activity/exercise purposes. This was followed by taking a break/reducing stress/improving mental health (52.7%) as well as experiencing nature (48.7%). Of note, individuals in the crowd-source survey were much more likely to engage in outdoor

recreation to experience nature than were persons in the probability sample (72.3%, and 48.7%, respectively).

There also was a question in the survey that asked about reasons for using trails – the leading three motivations among probability sample participants were pleasure or relaxation (75.4%), scenery and natural environment (61.6%), and health and physical training (56.0%).

Technology for Outdoor Recreation

When asked what kinds of technology they used as part of their outdoor recreation, the predominant answer among probability sample participants was a cellphone/smartphone (72.2%). A distant second (30.4%) was a Fitbit, Apple Watch, or other smartwatch.

Timing of Participation in Outdoor Recreation

Probability sample respondents and others in their household most often engaged in outdoor recreation 1 to 2 days per week (22.2%), 3 to 4 days per week (19.9%) or a few days per month (18.9%). The timing of participation for a plurality of probability sample respondents was “about equally on weekends and during the week” (47.4%), with most others saying “mostly on weekends” (35.8%).

Crowd-source respondents were more likely to say that they and others in their household participated in outdoor recreation three or more days per week (69.2%) than were probability survey respondents (49.5%). Additionally, the timing of participation in outdoor recreation for most respondents from the crowd-source survey was “about equally on weekends and during the week” (64.8%).

Support for Outdoor Recreation Funding

There was solid support in the survey for more funding for outdoor recreation, including increased taxation for that purpose. About 7 in 10 probability sample respondents (70.1%) said that the state should increase spending for outdoor recreation, and a larger majority (89.2%) of the crowd-source respondents said this.

Also, in the probability sample survey there was majority support (55.5%) for an increased state tax for outdoor recreation. A little more than one-third (34.3%) said they would “somewhat support” the idea and 1 in 5 (21.2%) said they would “strongly support” it. Approximately 19.1% said they would “neither support nor oppose” such an increased tax, while 8.4% said they would “somewhat oppose” it and 17.1% would “strongly oppose” it.

Within the crowd-source survey, more than three-quarters of respondents (79.2%) said they would somewhat or strongly support an increased state tax to fund outdoor recreation in Virginia, while 10.6% said they would neither support nor oppose it.

These differences are not surprising because the methods used to recruit respondents for the crowd-source survey started with subsets of Virginia residents who are more highly motivated, active and engaged with outdoor recreation.

Support for Conservation

A substantial majority (85.7%) of probability sample respondents said it was “very important” to protect Virginia’s natural and open spaces from development, and 94.5% in the crowd-source survey did so. A similar phenomenon appeared regarding the state’s Natural Area Preserve System, with 72.6% of probability sample respondents saying that resource was very important. Results were more evenly split, though, regarding a sense that natural and open spaces are adequately protected from development – 48.6% of probability sample respondents said yes, they were; 51.4% said they were not. Nearly all probability sample respondents (91.3%) went on to say that the state should spend public funds to acquire land to prevent the loss of natural areas.

Trails

Trails are usually frequently mentioned and highly valued in surveys about outdoor recreation, and that trend held true in the 2022 *Virginia Outdoors Survey*. The survey included several additional questions about trails.

Overall, probability sample respondents most frequently cited pleasure/relaxation as their reason for using trails (75.4%), followed by scenery/natural environment (61.6%) and health/physical training (56.0%). Crowd-source survey respondents had the same rankings, with pleasure/relaxation (86.3%) leading scenery/natural environment (82.0%) and health/physical training (59.0%).

The most important trailhead amenities in the probability survey were restrooms/bathrooms (69.4%), trailhead parking (45.0%), drinking water (41.5%) and information kiosks (39.3%). In the crowd-source survey, the most important trailhead amenities were trailhead parking (76.1%), restrooms/bathrooms (61.0%), information kiosks (51.7%) and drinking water (23.6%).

Probability sample respondents most often considered a trail to be close-to-home if it took about a 10-15 minute walk, a 15-minute bike ride, or a 15-19 minute drive. A majority of probability sample respondents (55.6%) reported enjoying both gravel/natural surface and paved trails equally.

Virginia State Parks

Approximately two-thirds (67.0%) of probability sample respondents said they would be more likely to stay overnight in a Virginia State Park if it had cabins. However, most (79.6%) had not tried to make an overnight reservation at a Virginia State Park in the 12 months leading up to the survey. About 1 in 10 (10.9%) reported that they had been turned away or left a Virginia State Park due to crowding in the preceding 12 months. A minority (17.6%) had been camping in a Virginia State Park in the preceding 12 months.

When asked about their most desired amenities if staying overnight in a Virginia State Park, natural area, or other park-like setting, probability sample respondents most frequently selected cabins (69.6%), camp cabins/yurts (40.4%), and drive-in campsites with water/electric capabilities (30.4%).

COVID-19

Nearly 6 in 10 probability sample respondents (57.7%) indicated that COVID-19 had affected how their household participates in outdoor recreation. Subsequent questions revealed that most respondents' households (53.2%) engaged in outdoor recreation less often due to COVID-19. Roughly 70.6% of probability sample respondents said that the pandemic made them want to have more local places for outdoor recreation.

Demographic Differences

The survey classified respondents in several demographic variables such as race/ethnicity, age, region of the state, household income, and presence of children in the household. The source of the survey completion – the probability sample or the crowd-source survey – could also be thought of as a demographic variable.²

It should be noted that some of the demographic variables apply only to the individual who completed the survey, but many of the questions on the survey apply to all members of the household, who may not have the same demographic characteristics as the responding household member.

Broadly speaking, younger respondents and those with children in the household were more likely to have participated in activities in the last 12 months, compared to older respondents and those without children in the household. Many activities during winter, in water or on sports fields were more popular among households with children compared to those without children.

Older respondents were far more likely to say that health issues and physical mobility issues limited their participation in outdoor recreation. Their access to, and enjoyment of, outdoor recreation may depend on the amenities and accommodations available. For example, older respondents were more likely to say that access for mobility chairs would be a way to improve access to outdoor recreation.

Similarly, transportation issues were much more likely to be a barrier to outdoor recreation for respondents with annual household incomes below \$25,000, and lack of money to pay for travel or entry fees was more likely to be a barrier for those with household incomes below \$75,000. Older respondents were not more likely than younger ones to report lack of money or transportation as barriers, but older respondents were more likely to say that senior discount/low-cost access would improve participation in outdoor recreation.

² A question about the gender of the respondent was inadvertently omitted from the questionnaire.

Activities associated with coastal waters and navigable rivers were more frequently mentioned in Region 1 (Virginia's coastal areas) and Region 2 (the Piedmont area). Winter activities were generally more popular in Region 4 (Virginia's mountainous areas).

Compared to respondents in the probability sample, crowd-source respondents were generally more active, more supportive of access to outdoor recreation, and more likely to support increased spending and a tax increase for outdoor recreation. Crowd-source respondents were more oriented toward natural areas and activities in natural areas such as canoeing/kayaking, while respondents to the probability sample survey were a little more oriented toward developed parks, activities on sports fields and courts, and activities that might usually occur as special occasions or trips.

Because these findings are similar to the 2017 surveys and seem logical on their face, they support confidence in the credibility of the survey results.

Open-Ended Responses

At the end of the 2022 *Virginia Outdoors Survey*, participants were invited to share open-ended written comments. No formal response coding was done, but a review of these remarks showed that they typically centered around positive experiences at parks, comments about preservation and conservation, crowding, facilities and maintenance, accessibility, and the cost of using parks.

About the Respondents

Most of the survey respondents were non-Hispanic/Latino(a) White/Caucasian, whether in the probability sample (86.8%) or the crowd-source survey (92.9%). Probability sample participants were slightly older than crowd-source participants, with median ages of 54.5 and 51.0 years old, respectively. The most common 2021 pretax household income range in both surveys was \$100,000 to \$149,999. Majorities in both the probability sample and the crowd-source survey did not have children under 18 living in their households.

As is the case in most surveys of the general public, both the probability sample and crowd-source surveys underrepresented non-Whites, younger people, and lower-income households, compared to the known demographics of the population of interest. In the probability sample survey, this was due in part to unequal rates of response among these demographic categories, and in part to the sampling plan, which overrepresented less populated regions of the state that tend to be whiter and older. The probability sample data were weighted to state population values for analysis, to correct for the sampling approach and help reduce the non-response biases. The underrepresentation in the crowd-source survey is likely due in part to non-response bias but also in part to non-representative recruitment through convenience methods. The crowd-source survey data were not weighted because there would be no benchmark data for that population.

It should also be noted here that people who do not speak or read English would have needed to find someone to help them complete the survey, as it was offered only in English. Weighting the data to known demographics can address these problems to some degree, but not entirely. If additional funds are available for future iterations of the surveys, more robust approaches should be developed to promote diversity and inclusion among the survey respondents.

See the full report for more details about methods, sampling error, potential limitations of the survey, and ideas for improvements in the next iteration of the survey.

Summary

The 2022 *Virginia Outdoors Survey* shows that Virginia residents highly value access to outdoor recreation, and support greater expenditures for outdoor recreation even to the point of a tax increase. The survey results reveal different communities of interest defined by geography and proximity to particular natural resources, demographic variables such as age and household composition, the activities that residents enjoy, and the methods used to reach survey respondents. As part of the update of the Virginia Outdoors Plan, the survey gives voice to these many communities in the Commonwealth. As a data resource, the survey results may assist outdoor recreation providers and advocates in planning and grant-seeking efforts into the future.

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Introduction

Every five years, the Virginia Department of Conservation and Recreation (DCR) administers the *Virginia Outdoors Survey*. This survey informs DCR's statewide strategy for outdoor recreation and related resources, which is published in the *Virginia Outdoors Plan* (VOP). Survey fielding also helps satisfy requirements associated with the federal Land and Water Conservation Fund. Additionally, the survey data help to shape discussions within the Virginia Land Conservation Foundation (<https://www.dcr.virginia.gov/recreational-planning/vop>). The survey was last conducted in 2017.

In 2022, DCR collaborated with the Survey and Evaluation Research Laboratory (SERL) at Virginia Commonwealth University (VCU) to conduct the most recent *Virginia Outdoors Survey*. The survey was fielded between June and September 2022; it was limited to current Virginia residents age 18 and older. There were two paths to the survey: a probability sample route with web and paper survey formats, and a crowd-source route with a web-only survey format.

The probability sample was drawn from residential mailing addresses in Virginia and recruited by up to four postal mailings. At the close of data collection, there were 888 probability sample completions out of 6,100 addresses attempted. The response rate for the probability sample was 14.6%. Accounting for the weighting of the probability sample data, the responses to questions answered by all 888 respondents have a sampling error.³ of +/- 5.5 percentage points at the 95 percent level of confidence. This means that if this survey were administered 100 times in the same fashion to 100 different samples of the study population and got 888 respondents each time, then 95 out of those 100 surveys would produce answers to a given survey question that are within +/- 5.5 percentage points of one another. Additionally, if survey sampling were the only source of error in the survey, we would expect that the true value in the population is within +/- 5.5 percentage points of the survey estimate 95 percent of the time.

Technically, each question or survey statistic has its own individual sampling error. Questions with little variation in the responses will have smaller sampling errors. Questions answered by fewer respondents will have larger sampling errors, which means that sampling errors are larger for questions not answered by everyone, and for subgroups. For example, the sampling errors for respondents from the individual regions range from +/- 7.5 percentage points to +/- 11.8 percentage points. The probability sample results are generalizable to the population of Virginia.

³ Response rates reported in this document do not attempt to exclude estimated ineligible households. Therefore, they are equivalent to response rate 1 (RR1) – the “minimum response rate” – promulgated by the American Association for Public Opinion Research (AAPOR). For more, see https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf.

The crowd-source survey was recruited by DCR using email lists and social media postings. People were free to share the survey link with others. At the close of data collection, there were 3,567 crowd-source completions.

The crowd-source survey results are generalizable strictly to those individuals who responded to that survey. This is because the crowd-source survey was not randomly or systematically recruited, and the chances of selection for people getting invitations or responding were unknown. Consequently, no response rate or sampling error can be calculated for the crowd-source survey, and the results cannot be assumed to represent the full population of Virginia. However, the crowd-source survey is helpful for understanding the perspectives and activities of more motivated recreation users and subgroups, some of which may not have been included in large numbers in the probability-based survey.

Interpreting this Report

Probability sample and crowd-source results are presented separately in this report because of the differences in generalizability noted above.

Results described in this report exclude “Don’t know/Prefer not to say” as well as “Don’t know/Prefer not to say/Don’t recall” answers from counts and percentage calculations.

Total numbers of responses (N, n) may fluctuate because not every survey respondent answered every survey question. This could be due to question-skipping or -branching logic, in which case the respondents would not see certain questions; respondents choosing to leave unanswered some questions that they saw; or respondents using the “Don’t know/Prefer not to say” or “Don’t know/Prefer not to say/Don’t recall” answer choices.

Percentages displayed may sum to slightly more or less than 100.0% due to rounding.

The probability survey dataset was weighted for analysis to several known demographic variables for Virginia, so percentages from the probability survey in this report are weighted unless otherwise specified. The crowd-source dataset was not weighted. Weighting was done because, as is the case in most surveys of the general public, the probability sample survey underrepresented non-Whites, younger people, and lower-income households, compared to the known demographics of the population of interest. In the probability sample survey, this was due in part to unequal rates of response among these demographic categories, and in part to the sampling plan, which overrepresented less populated regions of the state that tend to be Whiter and older. The probability sample data were weighted to state population values for analysis to correct for the sampling approach and help reduce the non-response biases. The underrepresentation in the crowd-source survey is likely due in part to non-response bias but also in part to non-representative recruitment through convenience methods. The crowd-source survey data were not weighted because there would be no benchmark data for that population.

This report usually presents *weighted* percentages but *unweighted* numbers of responses for the probability-based survey. This is because the weighted percentages are the most accurate representations of the population of Virginia, but the unweighted numbers of responses give the best indication of how stable the weighted percentages are. The larger the unweighted number of responses, the more stable the weighted percentage is, and the more confidence we can have in that percentage. Because weighting was not applicable to the crowd-source data, results from that the crowd-source survey always involve unweighted percentages and unweighted numbers of responses.

The web versions of the survey automatically limited the number of choices that could be selected for questions that asked for a maximum number of answer choices, but respondents to the paper survey sometimes marked more than three choices. In these cases, the SERL team selected three answers using a random number generator.

Several questions on the survey used a multiple-response (“check all that apply”) design. When data from multiple-response questions are presented in this report, the percentages are the number of responses (total times a particular box was checked) divided by the number of respondents (total number of individuals who saw the question). Therefore, the percentages reported for multiple-response items can sum to more than 100%. Also, if they sum to 345%, for example, then respondents checked an average of 3.45 answers for that question.

Description of the data for several survey questions are repeated in different areas of this report to make it easier for readers to have topical information at hand. Where this occurs, a note is included.

The report includes summaries of notable differences in response by several demographic variables. Each demographic variable was reviewed in isolation from other demographic variables. Some of the demographic variables can be closely related to one another. For example, younger respondents are more likely to also report living in households with children. Respondents who reported higher household incomes may be more likely to be working rather than retired, living in multi-income households, living in geographic areas with higher prevailing wages, and/or having more years of formal education.

It should also be noted that some of the demographic variables apply only to the individual who completed the survey, but many of the questions on the survey apply to all members of the household, who may not have the same demographic characteristics as the responding household member.

Summary of Methods

Overview

The Survey and Evaluation Research Laboratory (SERL) at Virginia Commonwealth University (VCU) conducted the *Virginia Outdoors Survey* on behalf of the Virginia Department of

Conservation and Recreation (DCR) in the Summer of 2022. The survey was offered in two ways: (a) through a probability sample of 6,100 residential mailing addresses, and (b) via crowd-source recruitment.

Persons in the probability sample were contacted by mail up to four times and could take the survey electronically – using Qualtrics – or they could fill out a paper booklet. Probability sample web completions and paper completions were combined and cleaned prior to analysis.

The crowd-source survey was advertised and made accessible via the DCR website, DCR social media accounts, and DCR email messages. Although its content was nearly identical to the probability questionnaire, the crowd-source survey was only available online through Qualtrics. SERL also cleaned the crowd-source dataset before assessing results.

Furthermore, SERL created a project-specific email address to handle survey-related questions and to respond to participants' technical assistance needs, whether they originated in the probability sample or crowd-source survey.

No incentives were offered to any survey respondents, whether in the probability or crowd-source survey.

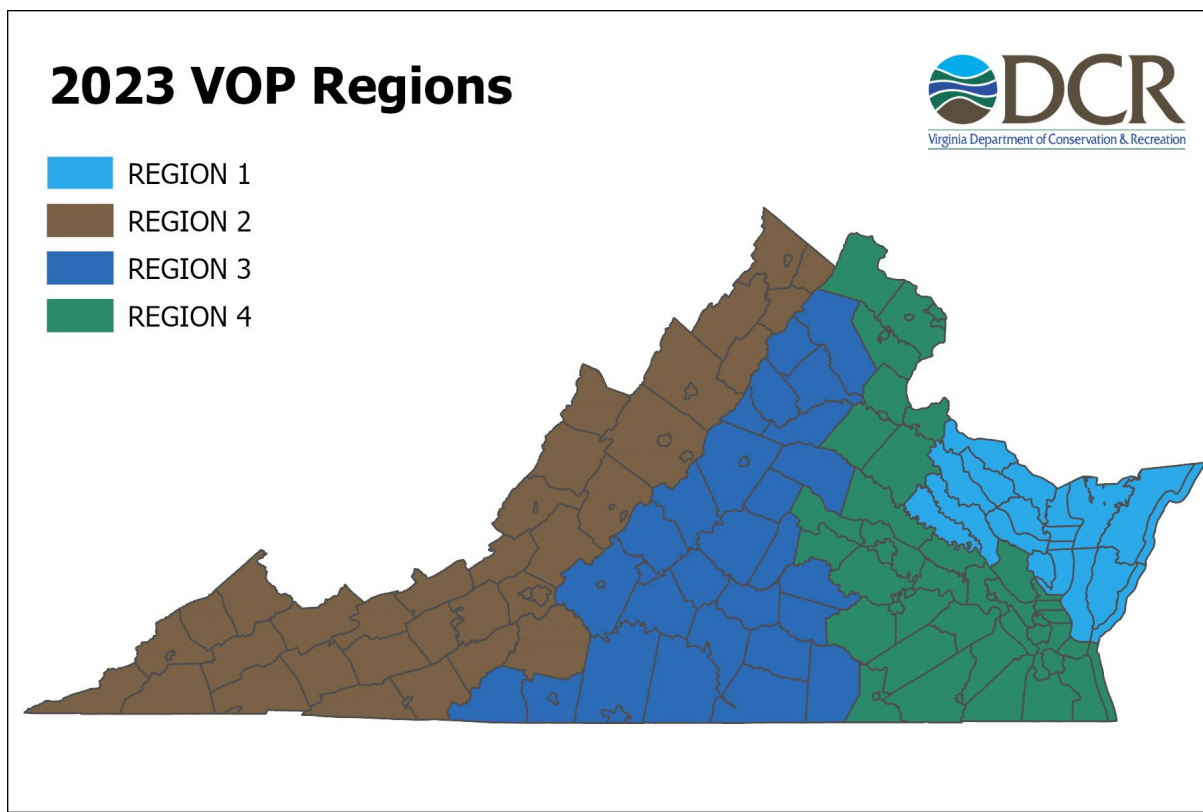
Institutional Review Board

In March 2022, SERL staff submitted information about the 2022 *Virginia Outdoors Survey* to VCU's Institutional Review Board (IRB). In April 2022, reviewers determined that the study qualified for exemption under protocol HM20024070. SERL amended the study as needed (e.g., to adjust sample size, to file a corrected copy of the survey instrument).

Probability Sampling

In consultation with Marketing Systems Group, a leading vendor of survey samples and lists, SERL developed sampling parameters for the probability arm of the 2022 *Virginia Outdoors Survey* using two primary sources. First were four DCR-recognized regions used in the 2017 survey, into which 23 Planning District Commissions were subsumed (see Figure 1.).⁴ Second were U.S. Census Bureau 5-year *American Community Survey* Occupied Housing Units data (see <http://data.census.gov> subject tables S2504).

⁴ Franklin County was moved from Region 3 in the sample to Region 2 for analysis of the data, at DCR's request. This move affected 15 completed surveys in the probability sample survey.

Figure 1: Map of VOP regions, 2022 Virginia Outdoors Survey

The project team estimated that 1,275 to 1,925 residential addresses should be sampled in each DCR region to meet three goals:

1. Provide for a small pilot survey of 100 addresses (25 in each region)
2. Obtain enough completed surveys for good regional representativeness given different assumptions about response rates by region
3. Stay within the budget for the project

SERL proceeded with a probability sample of 6,100 residential mailing addresses, expecting approximately 1,264 total survey completions. Addresses were sampled at random in each of the four DCR regions (i.e., no apportioning occurred at sub-regional levels such as FIPS code or ZIP code). Addresses included residential post office boxes, but excluded vacant and vacation homes. No names were appended to addresses in the sample. See Table 1 for details.

Table 1: Sampling, response and sampling error by region, 2022 Virginia Outdoors Survey

Region number	Addresses sampled	Expected completed	Expected response rate	Actual completed	Actual response rate*	Sampling error*
1	1,275	300	24.0%	195	15.3%	+/- 11.8%
2	1,325	312	24.0%	204	15.4%	+/- 9.2%
3	1,575	310	20.0%	209	13.3%	+/- 11.1%
4	1,925	342	18.0%	280	14.5%	+/- 7.5%
Total	6,100	1,264	21.0%	888	14.6%	+/- 5.5%

*Note: The sampling error calculations include the effects of weighting the data. See the introduction to this report for more about sampling error.

It is important to note that variation in the numbers of addresses sampled reflected large population differences in the regions (e.g., region 4 – the urban corridor of Virginia – contains about 70% of Virginia’s population) and also dissimilar expected response rates (e.g., urbanized areas tend to respond to surveys at lower rates than do rural areas).

As noted in the introduction to this report, technically, every question on the survey has its own sampling error, which depends on the number of valid answers, the distribution of answers, and the impacts of the weights for the respondents giving particular answers. To illustrate this, Table 2 shows sampling errors by region for five questions from the survey:

1. Q3: In general, how important is it to you and any other persons living in your household to have access to outdoor recreation opportunities?
2. Q4: In general, how often do you and others in your household participate in outdoor recreation activities?
3. Q8: In general, how welcome do you feel in outdoor recreation areas?
4. Q11: Is there a public park within a 10-minute walk of your home? Please do not include parks or recreation areas maintained by homeowners’ associations.
5. Q49: Would you support or oppose an increased state tax to fund outdoor recreation in Virginia?

Table 2: Sampling errors by region for selected questions, 2022 Virginia Outdoors Survey

Question	Statistic	Region number				Total
		1	2	3	4	
Q3 (Response: "Not very important")	response %	5.7%	6.0%	6.1%	3.7%	4.4%
	N of all responses	193	201	206	277	877
	sampling error	+/- 4.6%	+/- 5.6%	+/- 4.2%	+/- 2.0%	+/- 1.8%
Q4 (Response: "Every day")	response %	11.4%	18.4%	16.2%	16.7%	16.8%
	N of all responses	195	201	206	276	878
	sampling error	+/- 6.3%	+/- 8.5%	+/- 7.7%	+/- 4.9%	+/- 3.8%
Q8 (Response: "Very welcome")	response %	51.4%	65.4%	61.5%	65.4%	64.6%
	N of all responses	173	189	194	257	813
	sampling error	+/- 12.8%	+/- 9.0%	+/- 11.3%	+/- 7.2%	+/- 5.3%
Q11 (Response: "Yes")	response %	10.9%	33.9%	27.4%	40.4%	36.8%
	N of all responses	188	197	203	272	860
	sampling error	+/- 5.2%	+/- 9.4%	+/- 9.7%	+/- 7.4%	+/- 5.3%
Q49 (Response: "Strongly support")	response %	20.4%	13.8%	16.1%	24.3%	21.2%
	N of all responses	167	172	183	230	752
	sampling error	+/- 8.6%	+/- 5.7%	+/- 8.0%	+/- 6.6%	+/- 4.6%

Probability Sample Printing and Mailing Activities

Cases in the probability sample received up to four mailing contacts (see Table 3 for details):

1. Advance letter
2. Paper survey packet with a business reply envelope
3. Reminder post card
4. Final reminder letter

SERL contracted with Worth Higgins & Associates for printing and mailing services.

Additionally, DCR staff approved mailing proofs prior to use. Mockups of these items appear in Appendix B.

Almost all correspondence was addressed to "Virginia Resident," featured a Richmond postmark, and traveled with pre-sort first class postage (the pilot wave of 100 cases had full first-class postage to expedite service). Persons who completed the survey or opted out were removed from subsequent contact waves.

Of note, postage rates increased during survey fielding for mailing waves two, three and four (see <https://about.usps.com/newsroom/national-releases/2022/0406-usps-new-prices-for-2022.htm>).

Table 3: Probability sample contact sequence, 2022 Virginia Outdoors Survey

Phase	Contact wave	Number of cases contacted	Mailing date
PILOT	A1, Advance letter	100	June 17, 2022
	A2, Paper survey packet with cover letter & business reply envelope	100	June 28, 2022
MAIN	B1, Advance letter	6,000	July 7, 2022
	B2, Paper survey packet with cover letter & business reply envelope	5,844	August 1, 2022
	B3, Reminder postcard	5,532	August 17, 2022
	B4, Final reminder letter	5,147	September 12, 2022
Survey Deadline: September 30, 2022 Dataset Closed: October 7, 2022			
Total Probability Sample Completions* = 888		438 by paper	450 by web

*Note: Total completions reflect application of quality assurance measures. After the survey closed, SERL discarded several survey completions that had substantial amounts of missing data.

SERL assigned a survey ID and PIN to each person in the probability sample. Together with these credentials, individuals could access the *Virginia Outdoors Survey* online using an individualized link, a Quick Response (QR) code, or a text-back option appearing in mailings (see Appendix B). Although only one round of paper questionnaire booklet packets was mailed due to budget constraints, the reminder postcard and final reminder letter offered to furnish a replacement paper questionnaire booklet upon request. Only a handful of requests were received.

There were 888 probability sample completions across web and paper formats. The geographic distribution of probability sample respondents is displayed in Figure 2. Locations were mapped using latitude/longitude coordinates of respondents' sampled mailing addresses.

Figure 2: Geographic distribution 2022 *Virginia Outdoors Survey* probability sample respondents

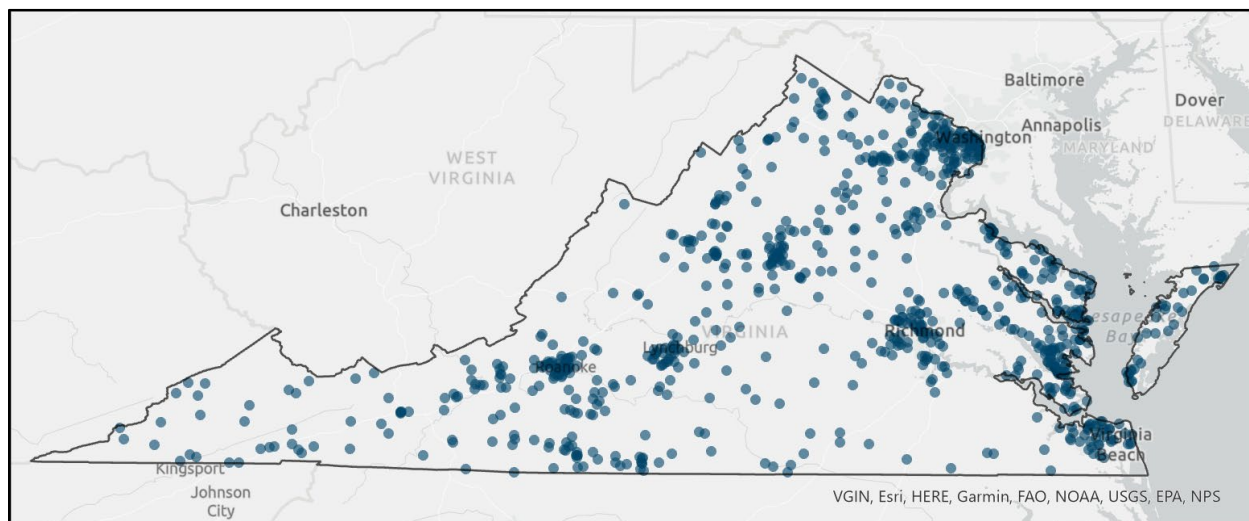
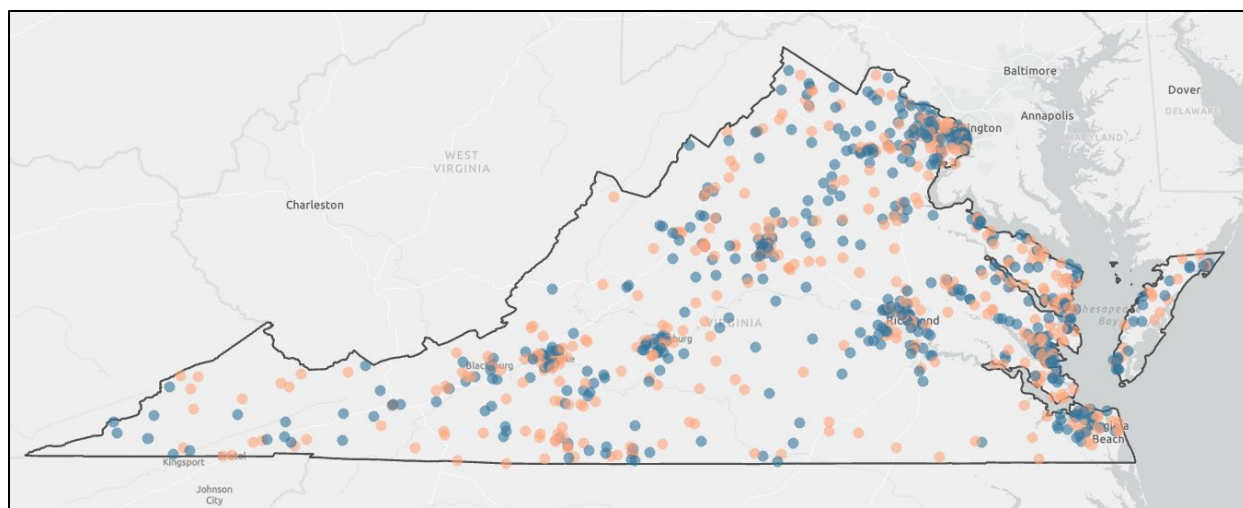


Figure 3 shows the distribution of probability samples by the completion mode (web or paper). Locations were mapped using latitude/longitude coordinates of respondents' sampled mailing addresses.

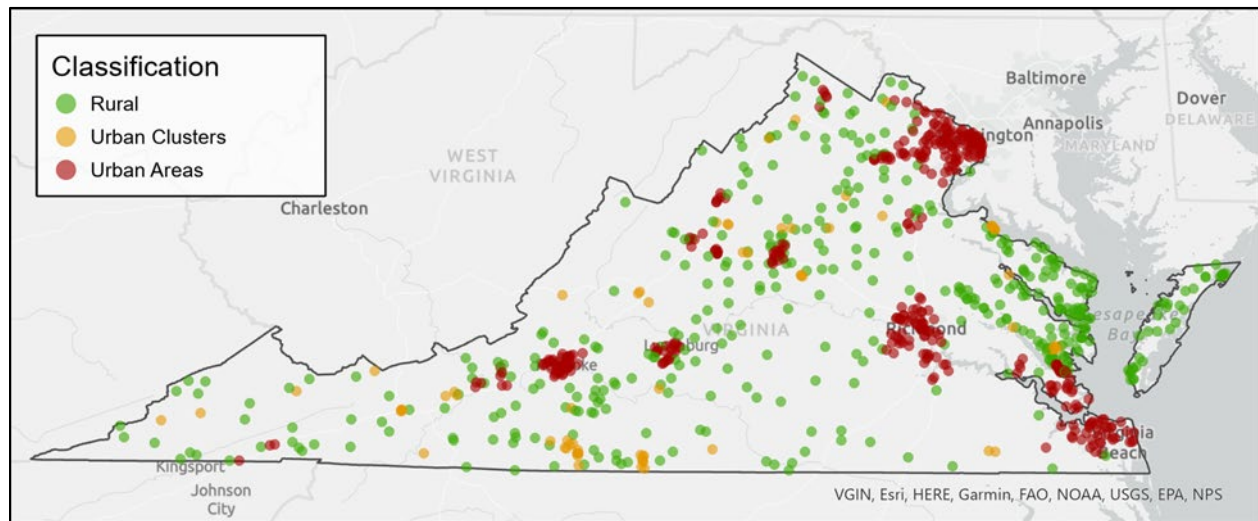
Figure 3: Web and paper survey completion distribution 2022 *Virginia Outdoors Survey* probability sample respondents



*Note: In this map, blue dots represent web completions; peach dots represent paper completions.

The urban area, urban cluster and rural distribution of probability sample respondents appears in Figure 4. Geographic definitions reflect the U.S. Census Bureau's *2010 Urban and Rural Classification and Urban Area Criteria* (see <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urban-rural.html>). Per this guide, urban areas are comprised of 50,000 or more people and urban clusters have a population greater than 2,500 but less than 50,000 people.

Figure 4: Urban area, urban cluster and rural distribution 2022 *Virginia Outdoors Survey* probability sample respondents*



Crowd-Source Survey

The 2022 *Virginia Outdoors Survey* also featured a crowd-source strategy which deployed concurrently with the probability approach. As part of this effort, staff within DCR used their Internet pages, email modules, electronic newsletters, as well as social media platforms Facebook, Twitter and Instagram to recruit survey respondents. DCR staff sent emails/made posts at various dates and times and included a link to the survey (see Table 4). Persons seeing these emails/posts were invited to share the survey link with their friends or post it to their own sites.

Of note, the crowd-source survey was a Qualtrics near-clone of the version provided to probability sample cases. Unlike the probability sample, however, the crowd-source survey was not available on paper. The crowd-source survey also asked the respondents for the county or independent city and ZIP code where they lived.

There was a total of 3,567 crowd-source survey completions. See Table 4 for the contact sequence for the crowd-source survey.

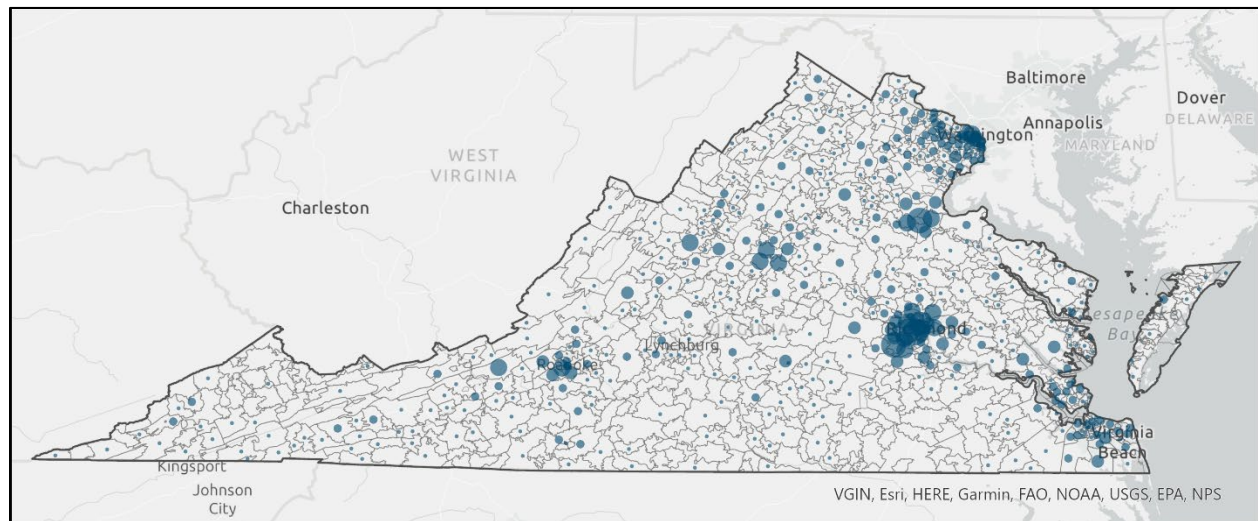
Table 4: Crowd-source contact sequence, 2022 Virginia Outdoors Survey*

Contact type	Date
Article placed in DCR Greenways and Trails ENEWS, Summer 2022 edition (sent via email, including introductory statement and survey link)	June 23, 2022
Post to DCR homepage with link	July 5, 2022
Posts to Facebook, Instagram, Twitter and LinkedIn with civic organization tags	July 8, 2022
Flyer and email provided to Virginia State Parks (email available to share)	July 14, 2022
Email to all DCR staff	July 22, 2022
<i>Virginia Outdoors Survey</i> blog post to DCR homepage	July 25, 2022
Posts to Facebook, Instagram, Twitter and LinkedIn with civic organization tags	July 29, 2022
Article with link sent to Virginia's United Land Trusts (VAULT) listserv	August 5, 2022
Email and link provided to Parks and Recreation contacts throughout Virginia (email available to share)	August 8, 2022
Posts to Facebook, Instagram, Twitter and LinkedIn with civic organization tags	August 8, 2022
Email and link provided to Planning District Commission contacts throughout Virginia (email available to share)	August 9, 2022
Posts to Facebook, Instagram, Twitter and LinkedIn with civic organization tags	August 14, 2022
Email and link provided to diversity-focused organizations at eight Virginia colleges and universities (email available to share)	September 13, 2022
<i>Survey Deadline: September 30, 2022</i>	
<i>Dataset Closed: October 3, 2022</i>	
<i>Total Crowd-Source Completions* = 3,567 by web</i>	

*Note: Total completions reflect application of quality assurance procedures. After the survey closed, SERL discarded survey completions that had substantial missing data.

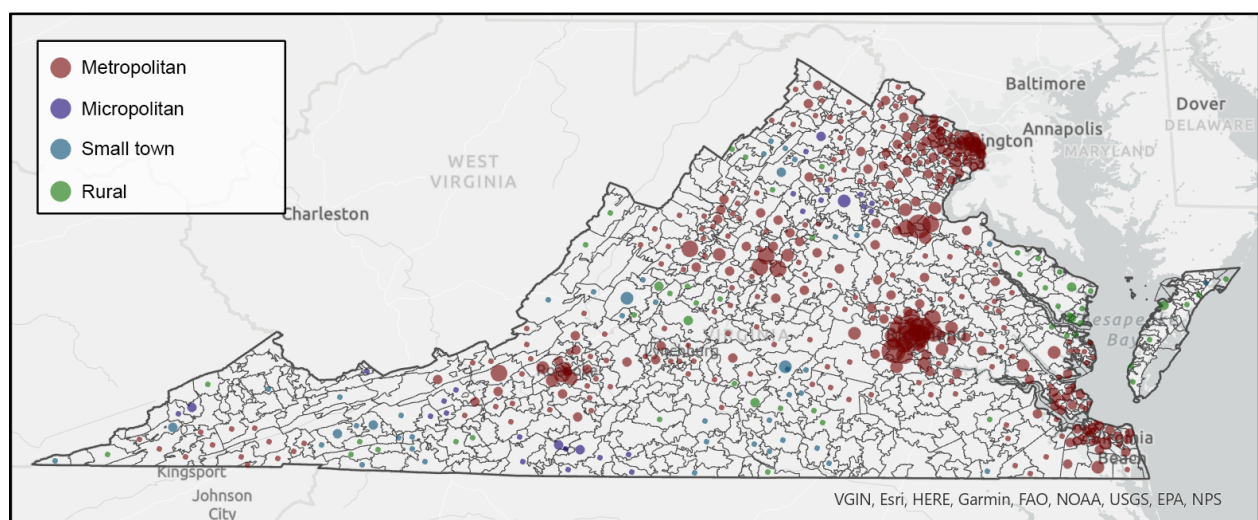
The geographic distribution of crowd-source survey respondents is shown in Figure 5. Locations were mapped using ZIP codes because dependable latitude/longitude coordinates were not available for crowd-source respondents. A respondent's location was excluded if/when they did not provide a ZIP code answer in the survey.

Figure 5: Geographic distribution 2022 *Virginia Outdoors Survey* crowd-source respondents



The urban-rural distribution of crowd-source respondents is displayed in Figure 6. Using ZIP codes, the SERL team applied the U.S. Department of Agriculture Economic Research Service’s Rural-Urban Commuting Area Codes (RUCA) to assign respondents into four groups – metropolitan, micropolitan, small town and rural. For example, a rural area is one in which most movement is to a location not in an urbanized area (UA) or an urban cluster (UC). A respondent’s location was excluded if/when they did not provide a ZIP code answer in the survey. (See <https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation/> for more.)

Figure 6: Metropolitan, micropolitan, small town and rural distribution 2022 *Virginia Outdoors Survey* crowd-source respondents



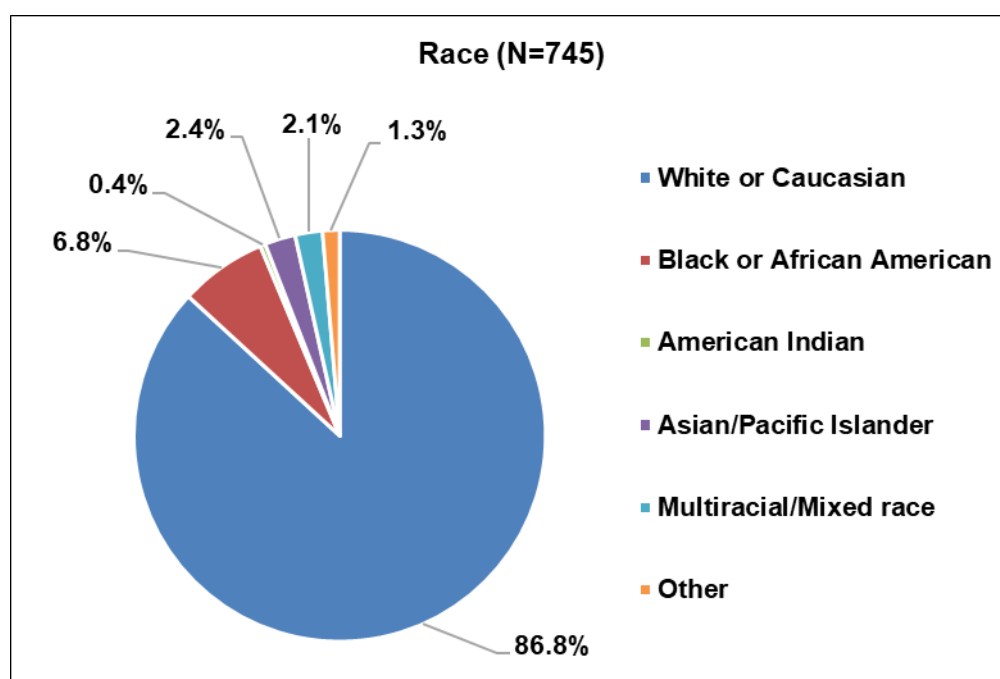
Respondent Demographics: Probability Sample, Unweighted

The 2022 *Virginia Outdoors Survey* asked several demographic questions to better understand the characteristics of respondents. As noted above, the probability sample data were weighted to known statewide demographics for analysis. To see the impacts of the weighting on the data, refer to Table 5 below, found in the report section comparing respondent demographics of the probability sample and crowd-source survey. To describe the actual respondents to the survey, unweighted data are discussed in this section of the report for the probability sample. The crowd-source survey is always unweighted. Note that a gender question was not included in this year's questionnaire. Thus, findings for gender cannot be provided; nor can they be used to crosstabulate other survey results.

Race: Probability Sample, Unweighted

The majority of respondents in the probability sample were White/Caucasian (86.8%). Black/African American respondents made up 6.8% of the total. Persons of Asian/Pacific Islander (2.4%) or Multiracial/Mixed race (2.1%) backgrounds were represented in near equal numbers. Results are displayed in Figure 7.

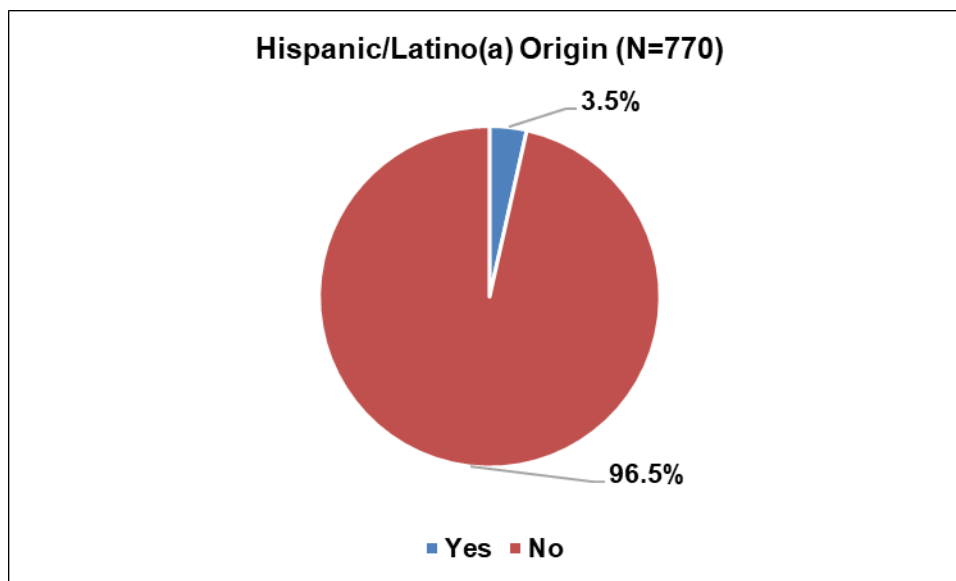
Figure 7: Race of probability sample respondents, 2022 *Virginia Outdoors Survey* (unweighted data)



Ethnicity: Probability Sample, Unweighted

Among 770 probability sample respondents, nearly all (96.5%) indicated that they were not of Hispanic/Latino(a) origin.⁵ Only 3.5% identified as such. Refer to Figure 8.

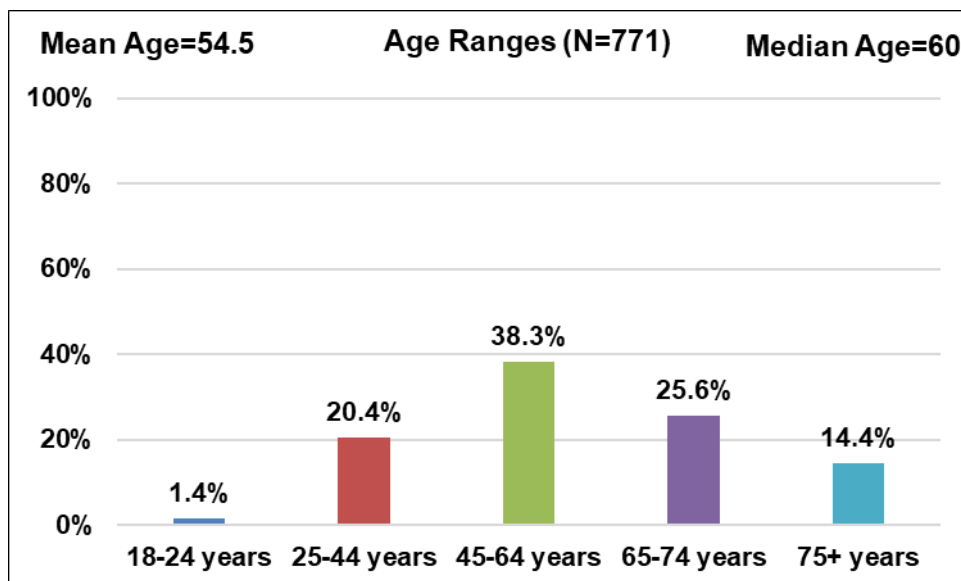
Figure 8: Hispanic/Latino(a) origin, 2022 Virginia Outdoors Survey probability sample respondents (unweighted data)

**Age: Probability Sample, Unweighted**

The mean age for probability sample respondents was 54.5 years old, and the median age was 60 years old. More than a third of respondents (38.3%) were between the ages of 45-64 years old. Approximately one quarter (25.6%) were 65-74 years old. Another 20.4% were 25-44 years old, and 14.4% of respondents were 75 years of age or older. There were no respondents under age 18. Younger persons attempting to complete the survey were screened out via a question at the beginning of the survey. See Figure 9.

⁵ The 2022 Virginia Outdoors Survey questionnaire followed standard US Census Bureau practice in asking about and analyzing race and Hispanic/Latino(a) ethnicity, which are two separate co-existing concepts in the federal statistical system. See <https://www.census.gov/topics/population/hispanic-origin/about/comparing-race-and-hispanic-origin.html>, <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html> and https://www.census.gov/programs-surveys/decennial-census/technical-documentation/questionnaires.2020_Census.html.

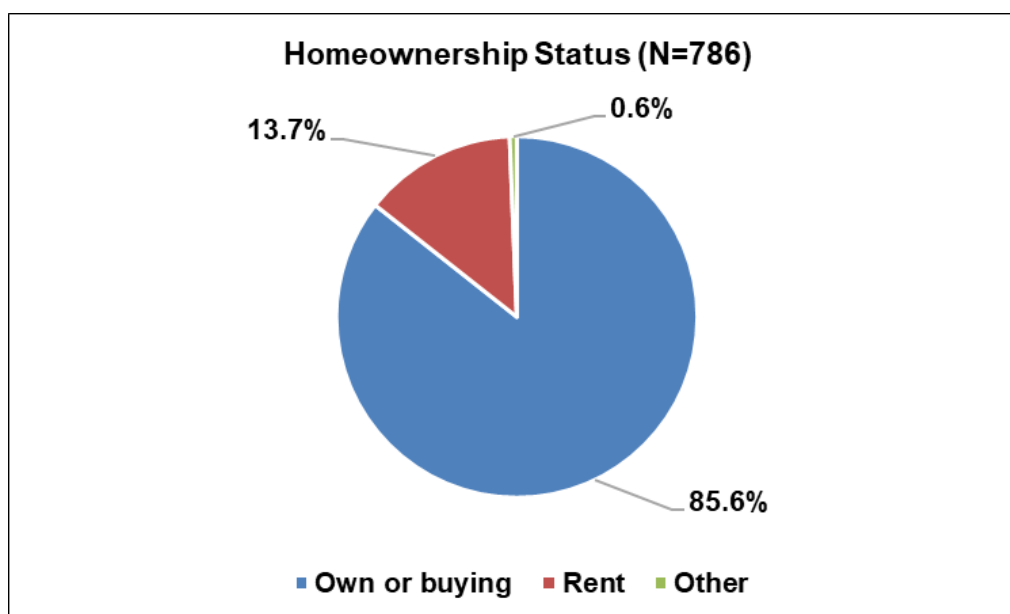
Figure 9: Age ranges, 2022 *Virginia Outdoors Survey* probability sample respondents (unweighted data)



Homeownership Status: Probability Sample, Unweighted

Most *Virginia Outdoors Survey* probability sample respondents (85.6%) owned – or were in the process of buying – their home. Another 13.7% rented their residence, and less than one percent (0.6%) had other living arrangements. See Figure 10.

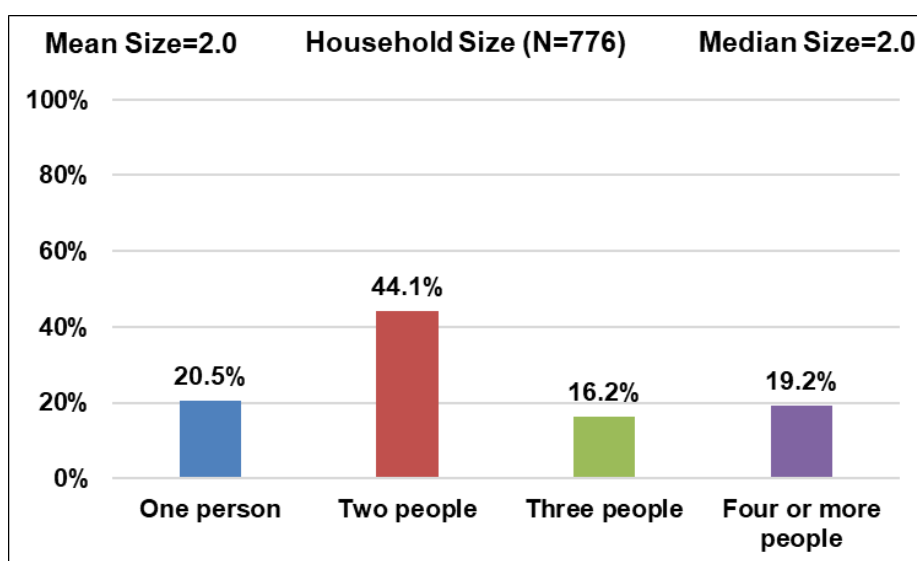
Figure 10: Homeownership status, 2022 *Virginia Outdoors Survey* probability sample respondents (unweighted data)



Household Size: Probability Sample, Unweighted

The mean and median household size for probability sample respondents was two. About 44.1% reported households of this size, while households comprised of one person (20.5%) or four or more people (19.2%) were nearly tied. Consult Figure 11 for more details.

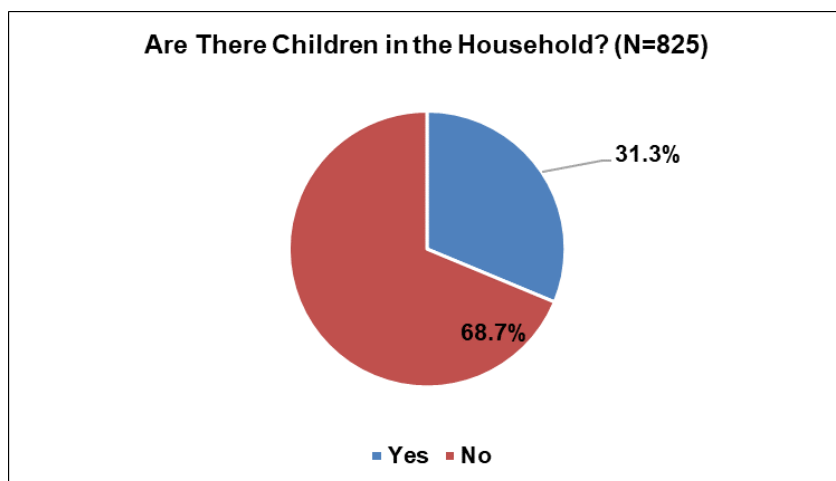
Figure 11: Household size, 2022 *Virginia Outdoors Survey* probability sample respondents (unweighted data)



Presence of Children in the Household: Probability Sample, Unweighted

About one-third of probability survey respondents (31.3%) reported children (someone under age 18) living in the household. See Figure 12.

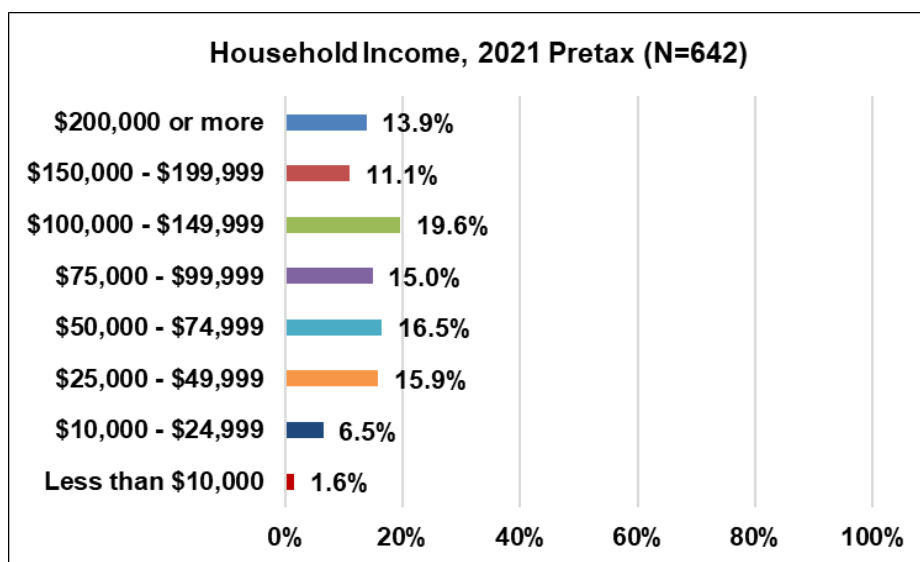
Figure 12: Presence of children in the household, 2022 *Virginia Outdoors Survey* probability sample respondents (unweighted data)



Household Income: Probability Sample, Unweighted

Probability sample survey respondents most often reported a 2021 pretax household income of \$100,000-\$149,999 (19.6%). The second most frequent answer was a household income ranging between \$50,000-\$74,999 (16.5%). Following close were household incomes of \$25,000-\$49,999 (15.9%), \$75,000-\$99,999 (15.0%) and \$200,000 or more (13.9%). See Figure 13 for more information.

Figure 13: Household income (2021 pretax), 2022 *Virginia Outdoors Survey* probability sample respondents (unweighted data)

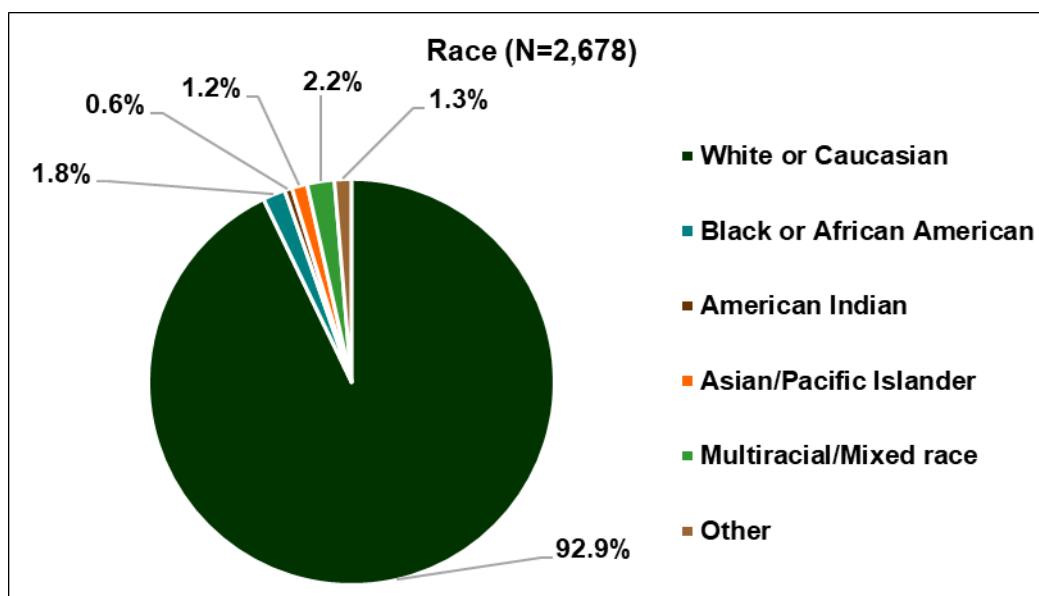


Respondent Demographics: Crowd-Source Survey

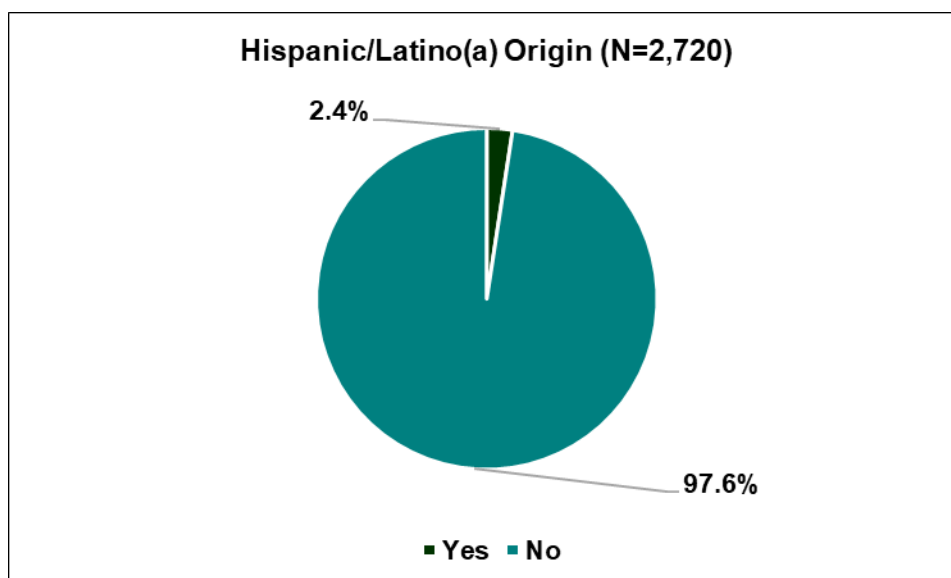
As a reminder, no weights could be applied to the crowd-source data, therefore all crowd-source statistics throughout this report are unweighted.

Race: Crowd-Source Survey

Compared to the probability sample, a higher percentage of crowd-source respondents were White/Caucasian (92.9%). There were fewer Black/African American respondents (1.8%), but roughly the same percentage of Multiracial/Mixed race respondents (2.2%). See Figure 14.

Figure 14: Race, 2022 Virginia Outdoors Survey crowd-source respondents**Ethnicity: Crowd-Source Survey**

Similar to the probability sample, the vast majority of crowd-source respondents were not of Hispanic/Latino(a) origin (97.6%). Refer to Figure 15.

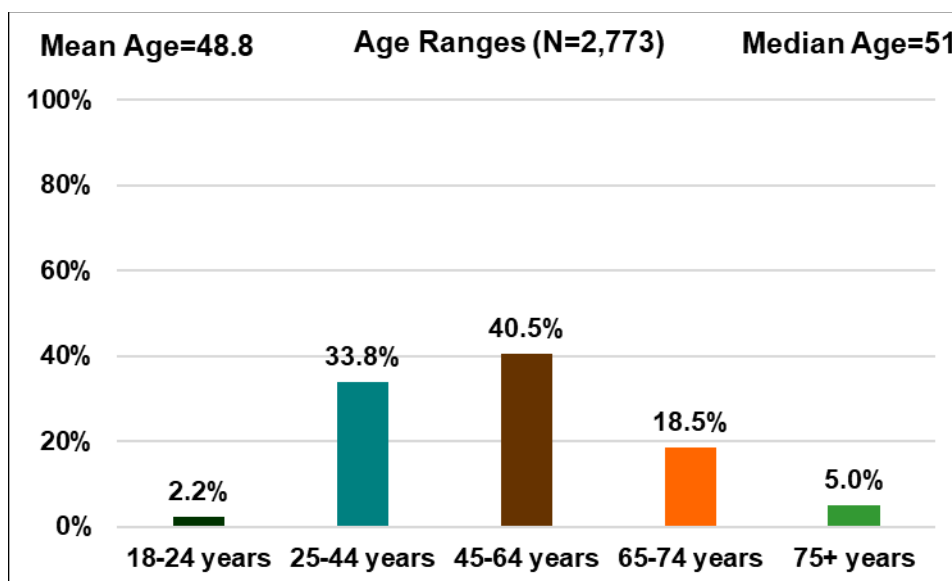
Figure 15: Hispanic/Latino(a) origin, 2022 Virginia Outdoors Survey crowd-source respondents

Age: Crowd-Source Survey

The mean and median age of the crowd-source respondents – 48.8 and 51 years, respectively – trended younger than the probability sample. About four in 10 respondents (40.5%) were between 45 and 64 years old, and another one-third (33.8%) were between 25 and 44 years old. An additional 18.5% were between 65 and 74 years old. Findings appear in Figure 16.

Younger persons attempting to complete the survey were screened out via a question at the beginning of the survey. However, three respondents in the crowd-source survey passed the screener question but then typed in ages below 18 years of age in question 59 near the end of the survey. Those responses were assumed to be typographical errors. Those cases were not included in age-related analyses but were included in other analyses.

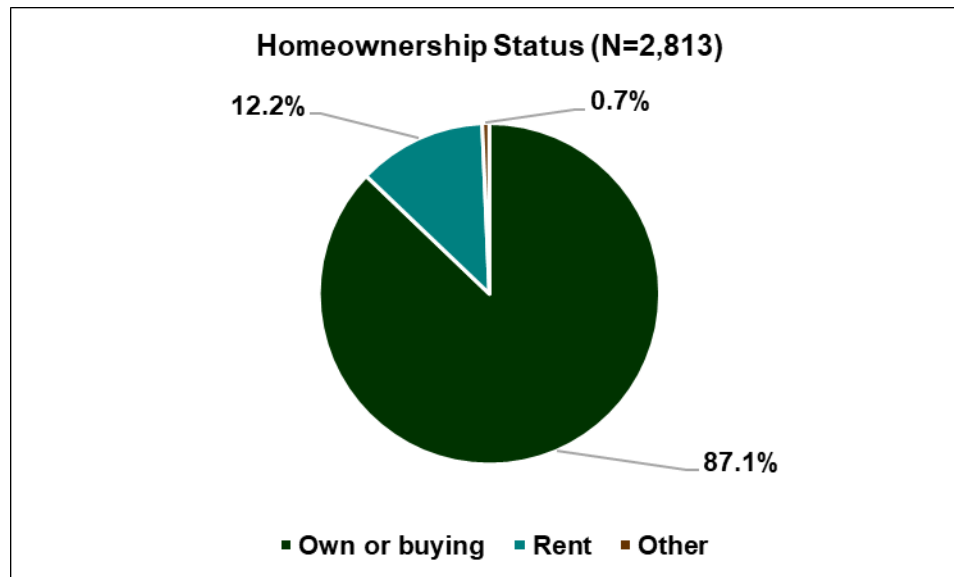
Figure 16: Age ranges, 2022 Virginia Outdoors Survey crowd-source respondents



Homeownership Status: Crowd-Source Survey

A slightly higher percentage of crowd-source respondents owned – or were attempting to buy – their home (87.1%) relative to the probability sample. An additional 12.2% rented their residence. Like the probability sample, less than one percent of crowd-source respondents had alternative living arrangements (0.7%). Results appear in Figure 17.

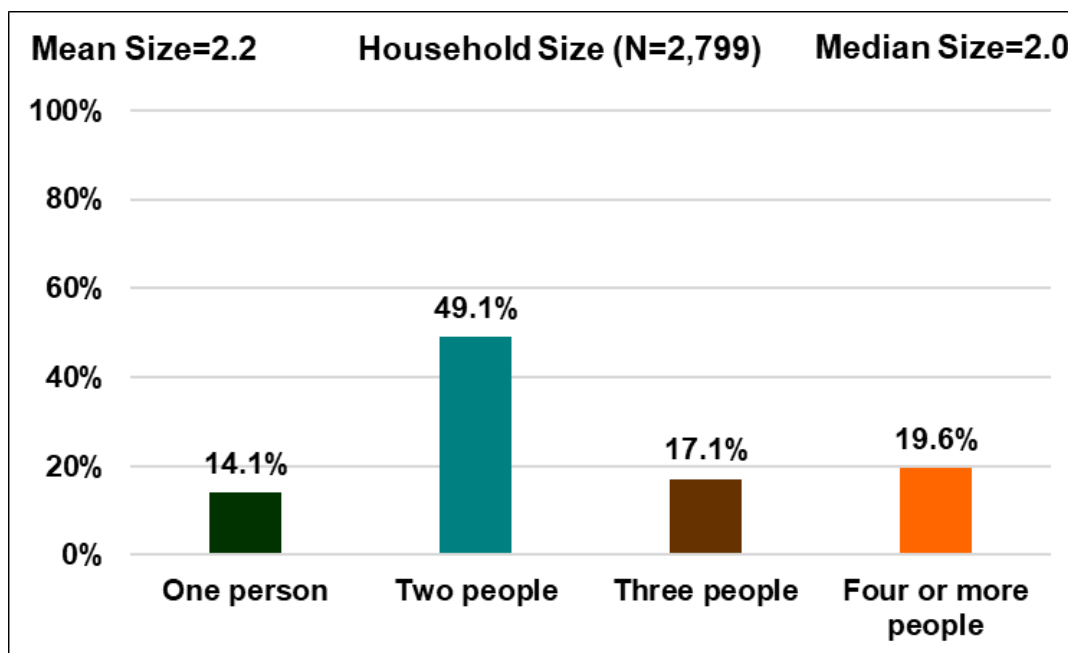
Figure 17: Homeownership status, 2022 *Virginia Outdoors Survey* crowd-source respondents



Household Size: Crowd-Source Survey

The mean household size for the crowd-source survey – 2.2 persons – was larger than the probability sample; however, the median size – 2.0 persons – was the same as the probability sample. Similar to the probability sample, the highest percentage of crowd-source respondents lived in households of two persons (49.1%). An additional 19.6% lived in households of four or more people. Approximately 17.1% and 14.1% resided in households of three people or households of one person, respectively. Data are displayed in Figure 18.

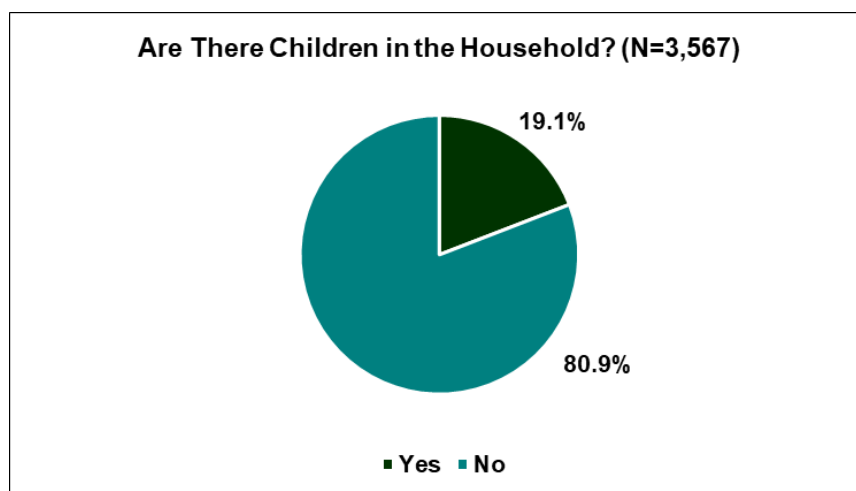
Figure 18: Household size, 2022 *Virginia Outdoors Survey* crowd-source respondents



Presence of Children in the Household: Crowd-Source Survey

About one in five crowd-source respondents (19.1%) reported children (someone under age 18) living in the household. See Figure 19.

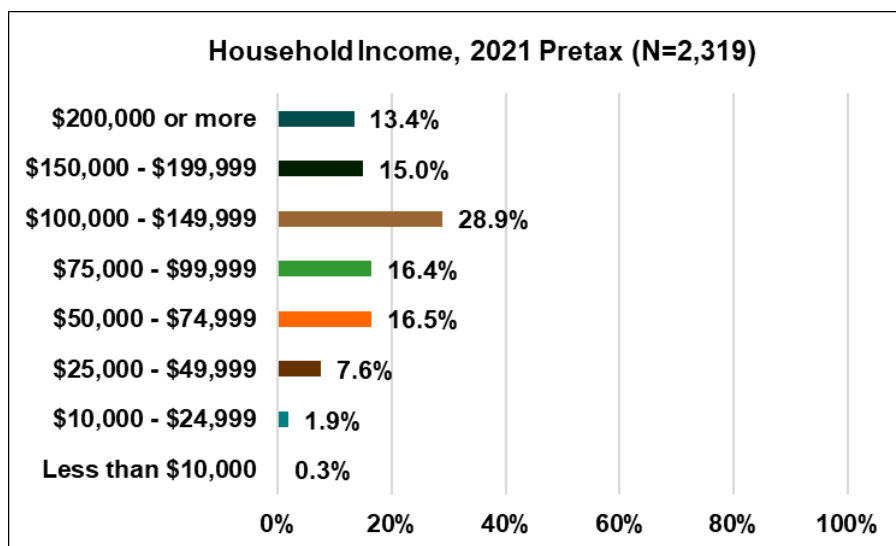
Figure 19: Presence of children in the household, 2022 Virginia *Outdoors Survey* crowd-source respondents



Household Income: Crowd-Source Survey

Relative to the probability sample, a higher percentage of crowd-source respondents (28.9%) had 2021 pretax household incomes ranging from \$100,000-\$149,000. Almost the same numbers of crowd-source respondents had household incomes between \$50,000-\$74,999 (16.5%) or \$75,000-\$99,999 (16.4%). Roughly 15.0% lived in households earning \$150,000-\$199,999 and 13.4% resided in households with income of \$200,000 or more. Consult Figure 20.

Figure 20: Household income (2021 pretax), 2022 Virginia *Outdoors Survey* crowd-source respondents



Comparison of Respondent Demographics: Probability Sample and Crowd-Source Survey

Some of the demographic variables in the unweighted probability data and the crowd-source data have some similar distributions. For example, in both surveys, most of the respondents owned the homes they lived in (86.2% for the unweighted probability data and 87.7% for the crowd-source data). In U.S. Census Bureau estimates from 2020, the statewide percentage of those who own their homes is 66.7%.

The percentages of respondents who considered themselves to be of Hispanic/Latino(a) origin were similar for the unweighted probability data and the crowd-source data: 3.5% of respondents in the unweighted probability data considered themselves to be of Hispanic/Latino(a) origin compared to 2.4% in the crowd-source data. In U.S. Census Bureau estimates from 2020, the statewide percentage for Hispanic/Latino ethnicity is 9.5%.

The overall race breakdown was different between the datasets for White/Caucasians, Black/African Americans and Asian/Pacific Islanders. In the unweighted probability data, 86.8% of respondents considered themselves to be White/Caucasian compared to 92.9% of the crowd-source respondents. Black/African American respondents made up 6.8 % of the unweighted probability data but only 1.8% of the crowd-source data. All others made up 6.2% of the unweighted probability data and 5.3% of the crowd-source data. Statewide, 61.2% of Virginians are White/Caucasian, 18.7% are Black/African-American, and 20.1% include all other identities. Compared to statewide U.S. Census Bureau estimates from 2020, both surveys underrepresented respondents of color (see Table 5), but weighting the probability sample adjusts for that issue to a reasonable extent.

Finally, the household incomes of respondents in the unweighted probability sample were lower than in the crowd-source data, but higher than the actual statewide figures. The percentage of respondents with an income less than \$25,000 was 8.1% for the unweighted probability sample but only 2.2% for the crowd-source data. The actual figure from statewide U.S. Census Bureau estimates from 2020 is 15.0%. The cumulative percentage of respondents with an income less than \$75,000 was 40.5% for the unweighted probability sample but only 26.3% for the crowd-source data. The actual statewide figure is 49.1%. Respondents who reported a total household income of \$75,000 or greater made up 59.6% of the unweighted probability sample, but 73.7% of the crowd-source data. The actual figure from statewide U.S. Census Bureau estimates from 2020 is 50.9%. See Table 5.

Table 5: Demographics of the probability sample and crowd-source data

		Crowd-Source Data	Probability Data (unweighted)	Probability Data (weighted)	Statewide Data*
Home Ownership	Own	87.7%	86.2%	66.7%	66.7%
	Rent	12.3%	13.8%	33.3%	33.3%
Hispanic/Latino(a) Origin	Yes	2.4%	3.5%	9.4%	9.5%
	No	97.6%	96.5%	90.6%	90.5%
Race	White/Caucasian	92.9%	86.8%	68.9%	61.2%
	Black/African American	1.8%	6.8%	19.5%	18.7%
	Everyone else	5.3%	6.2%	11.7%	20.1%
Household Income	Less than \$24,999	2.2%	8.1%	15.0%	15.0%
	\$25,000 to \$79,999	24.1%	32.4%	34.2%	34.2%
	\$75,000 to \$149,999	45.3%	34.6%	30.1%	30.2%
	\$150,000 or more	28.4%	25.0%	20.7%	20.7%
Children in household	Yes	19.1%	22.3%	31.3%	31.3%
	No	80.9%	77.7%	68.7%	68.7%
DCR region (with % if “Unknown” re-assigned in proportion)	Region 1	3.1% (4.1%)	22.0%	2.4%	2.4%
	Region 2	14.0% (18.5%)	23.0%	17.7%	17.0%
	Region 3	13.1% (17.3%)	23.5%	13.0%	13.7%
	Region 4	45.4% (60.1%)	31.5%	66.8%	66.8%
	Unknown	24.3% (0.0%)	0.0%	0.0%	--
Age	18-44	36.0%	21.8%	46.6%	46.7%
	45-64	40.5%	38.3%	33.5%	33.5%
	65+	23.5%	40.0%	19.8%	19.8%

*Note: Statewide data were obtained from the U.S. Census Bureau’s *American Community Survey* 2020 5-Year Estimates, tables S2504, S1901, DP05 and S1101.

As seen in Table 5 above, there are very different percentages of respondents in each DCR region in the unweighted probability data and the crowd-source data. This reflects one of the key features of the probability sample – it was stratified by region, and regions with smaller populations were oversampled. This disproportionate sampling ensures that enough unweighted cases are collected in each region to support statistical comparisons across regions. A convenience sample does not provide this assurance. The disproportionate sampling is adjusted in the weighted probability data to allow for accurate statewide statistics.

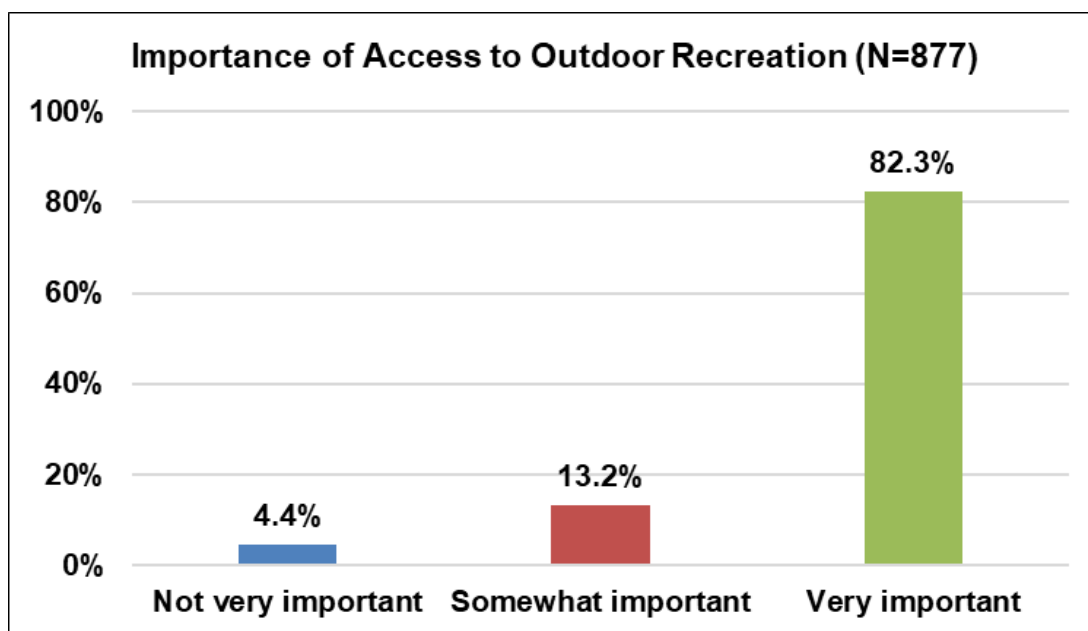
Results from the Probability Sample Survey

Diversity, Inclusion and the Underserved: Probability Sample

Importance of Access to Outdoor Recreation: Probability Sample

In Question 3, survey participants were asked to rate the importance of access to outdoor recreation opportunities for themselves and other people in their households. Of the 877 unweighted probability sample respondents who answered this question, a weighted percentage of 82.3%⁶ said that access was very important. Roughly 13.2% indicated that it was somewhat important. A little more than four percent (4.4%) suggested it was not very important. Findings are displayed in Figure 21.

Figure 21: Importance of access to outdoor recreation opportunities to respondent and others in household, 2022 Virginia Outdoors Survey probability sample respondents



Non-Hispanic/Latino(a) Black/African-American respondents were least likely to say that access to outdoor recreation opportunities was “very important” – 73.3% did so, compared to 82.2% of non-Hispanic/Latino(a) White respondents and 91.5% of everyone remaining. Only the

⁶ In this report, unweighted counts and weighted percentages are being cited unless otherwise stated. This is because the unweighted counts give the best indication of the stability of the percentages, but the weighted percentages give the best representation of Virginia households. One implication of this approach is that readers cannot calculate the (weighted) percentages cited in the text from the (unweighted) counts cited in the text. For this variable, 683 unweighted respondents said “very important” out of 877 total unweighted respondents (as noted in the text), which would yield an unweighted percentage of 77.9%. The weighted number of respondents saying “very important” was 726 out of 882 total weighted respondents, yielding the weighted percentage, 82.3% cited in the text.

difference between non-Hispanic/Latino(a) Black/African-Americans and everyone remaining was statistically significant, though.

Probability sample respondents between the ages of 18-44 and 45-64 were significantly more likely to rate access to outdoor recreation very important compared to respondents ages 65 and older. Similarly, respondents from households with children were significantly more likely to consider access to outdoor recreation very important relative to households without children (this latter group tended to endorse somewhat important more often than participants from households with children).

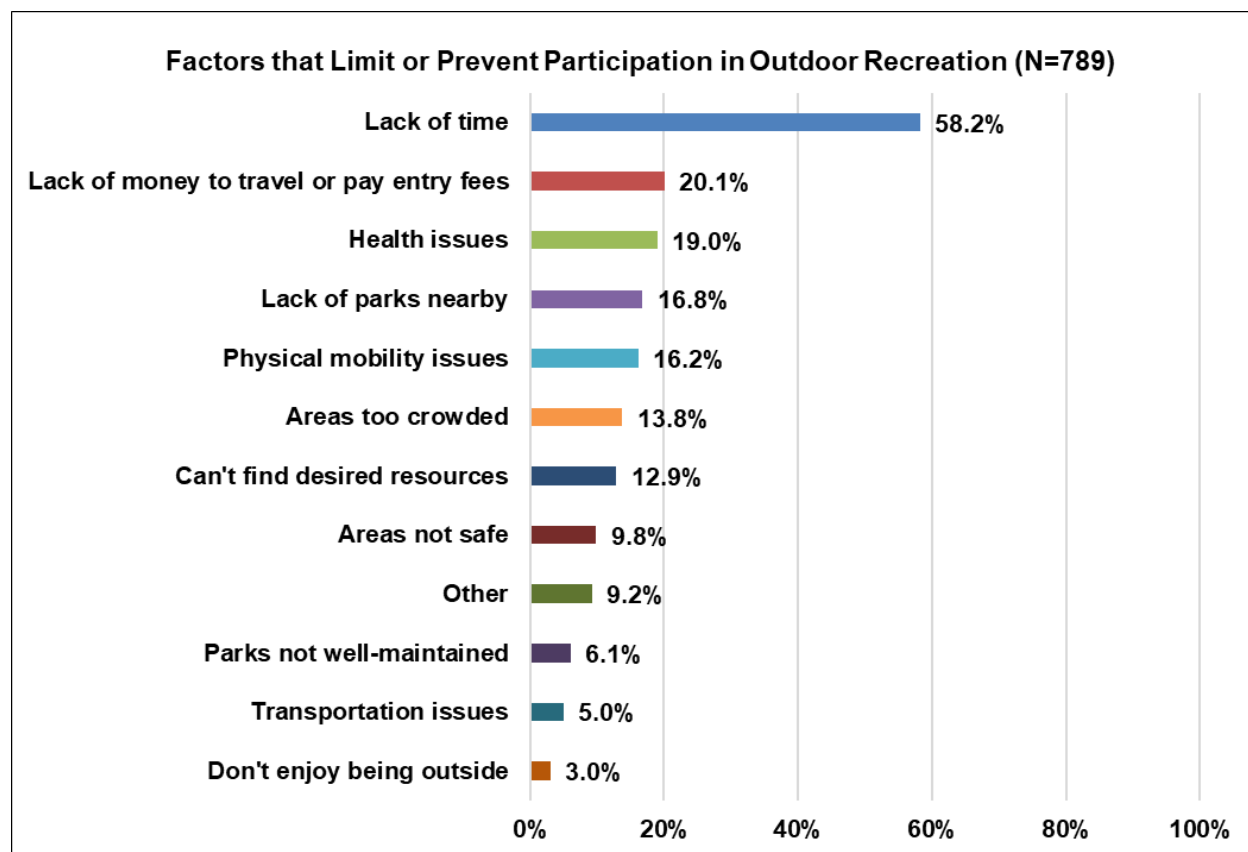
Probability sample respondents from households with incomes of \$25,000-\$74,999, \$75,000-\$149,999, and \$150,000 and above significantly more frequently described access to outdoor recreation as very important than did respondents from households with incomes of less than \$24,999.

Probability sample participants in Region 2 were significantly more likely to characterize access to outdoor recreation as somewhat important than respondents in Regions 3 and 4. Conversely, participants in Region 4 were significantly more likely than were respondents from Region 2 to describe access to outdoor recreation as very important.

Factors that Limit or Prevent Participation in Outdoor Recreation: Probability Sample

Question 6 on the survey asked about circumstances that might make it difficult for respondents – or other members of their households – to engage in outdoor recreation opportunities. A total of 789 probability sample respondents provided 1,451 answers via a multiple-response (“check all that apply”) question design. As presented in Figure 22, the top factor by far was lack of time (58.2%), followed by lack of money to travel or pay entry fees at parks (20.1%), health issues (19.0%), lack of parks nearby (16.8%) and physical mobility issues (16.2%).

Figure 22: Factors that limit or prevent participation in outdoor recreation opportunities for respondent or others in their household, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This was a multiple-response (“check all that apply”) question. A total of 789 individuals answered, providing 1,451 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

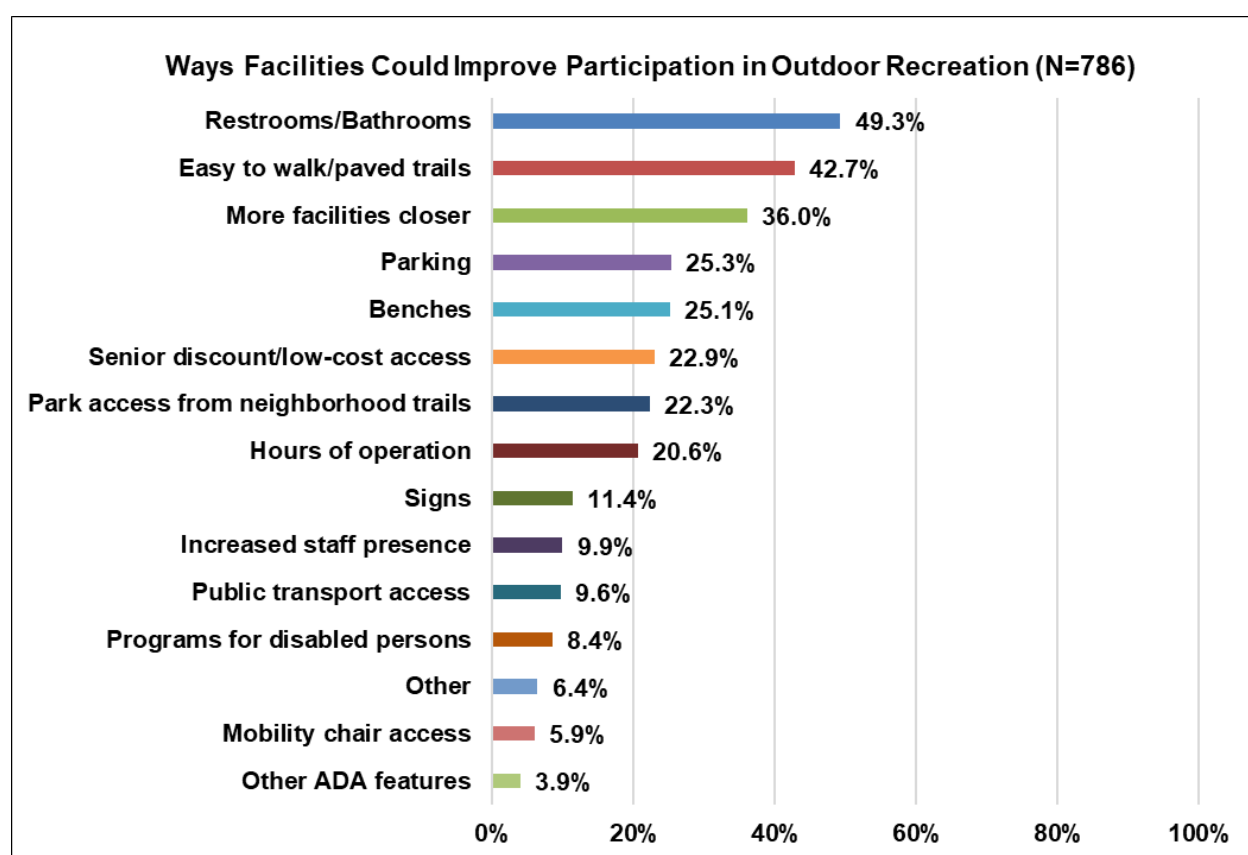
Probability sample respondents ages 65 and older were significantly more likely than those ages 45-64 to cite health and also physical mobility as issues that limit or prevent their participation in outdoor recreation. Respondents ages 18-44 were more likely to report lack of time as a limiting factor compared to respondents ages 45-64 and also 65 years and older. The same pattern appeared for participants ages 45-64 vis-à-vis participants 65 years and older. Persons with children in the household were more likely to select lack of money to travel or to pay entry fees at parks, compared to persons from households without children. Respondents renting their homes were also more likely to cite this issue than were homeowners.

Individuals from households earning at least \$150,000 were more likely than were households earning \$25,000-\$74,999 to report lack of time as a condition limiting or preventing participation in outdoor recreation. Participants living in Region 1 were more likely to choose lack of parks nearby compared to those living in Regions 2, 3 and 4.

Ways Outdoor Recreation Facilities Could Improve Participation in Outdoor Recreation: Probability Sample

Question 7 presented respondents with a list of changes outdoor recreation facilities could make to improve participation in outdoor recreation. Per Figure 23, a total of 786 probability sample respondents made 2,199 selections through a multiple-response (“check all that apply”) approach. The leading five improvements were restrooms/bathrooms (49.3%); easy to walk, paved trails (42.7%); more facilities closer to where participants live (36.0%); parking (25.3%); and benches (25.1%).

Figure 23: Ways outdoor recreation facilities could improve participation in outdoor recreation for respondent or others in their household, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format. A total of 786 individuals answered, providing 2,199 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Probability sample respondents ages 18-44 were more likely than were respondents ages 45-64 to select having more facilities closer as way to improve participation in outdoor recreation. Both of those age groups were more likely than individuals ages 65 years and older to choose having park access from neighborhood trails. However, participants ages 65 years and older were more likely to choose having senior discounts or low-cost access than were participants ages 45-64.

Persons with children in the household were more likely than were persons without children in the household to endorse having park access from neighborhood trails as a way to improve participation. Conversely, respondents without children in the household were more likely to indicate senior discount/low-cost access than participants with children in the household. Moreover, individuals from households earning \$25,000-\$74,999 were also more likely to mark senior discount/low-cost access than individuals from households with incomes of \$75,000 and up.

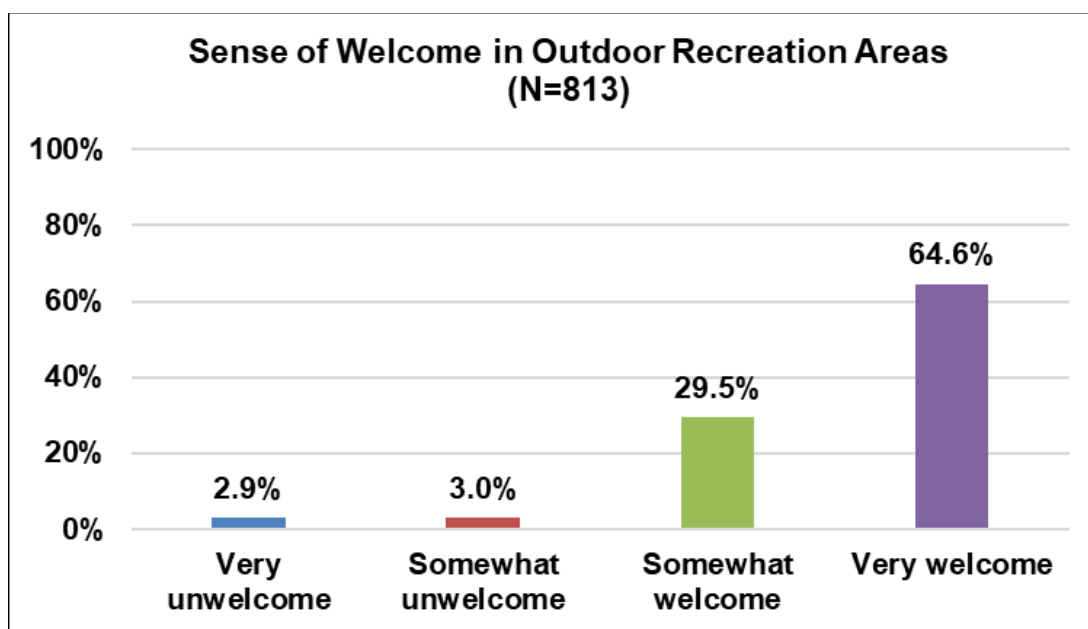
Probability sample respondents in Regions 3 and 4 were more likely to suggest parking than were respondents in Region 1. On the other hand, respondents in Region 1 were more likely to recommend having more facilities closer than were respondents in Regions 2, 3 and 4. Region 4 participants were more likely to choose restrooms/bathrooms than were participants in Regions 1, 2 and 3.

This data is also included in the Recreation Funding and Amenities section.

Sense of Welcome in Outdoor Recreation Areas: Probability Sample

Question 8 asked a question about participants' feelings of welcome in outdoor recreation areas. In total, 813 probability sample respondents answered. More than 6 in 10 (64.6%) said they felt very welcome; about 3 in 10 (29.5%) reported feeling somewhat welcome. The responses of somewhat unwelcome (3.0%) and very unwelcome (2.9%) received almost the same endorsement. Results are displayed in Figure 24.

Figure 24: Sense of welcome in outdoor recreation areas, 2022 Virginia Outdoors Survey probability sample respondents



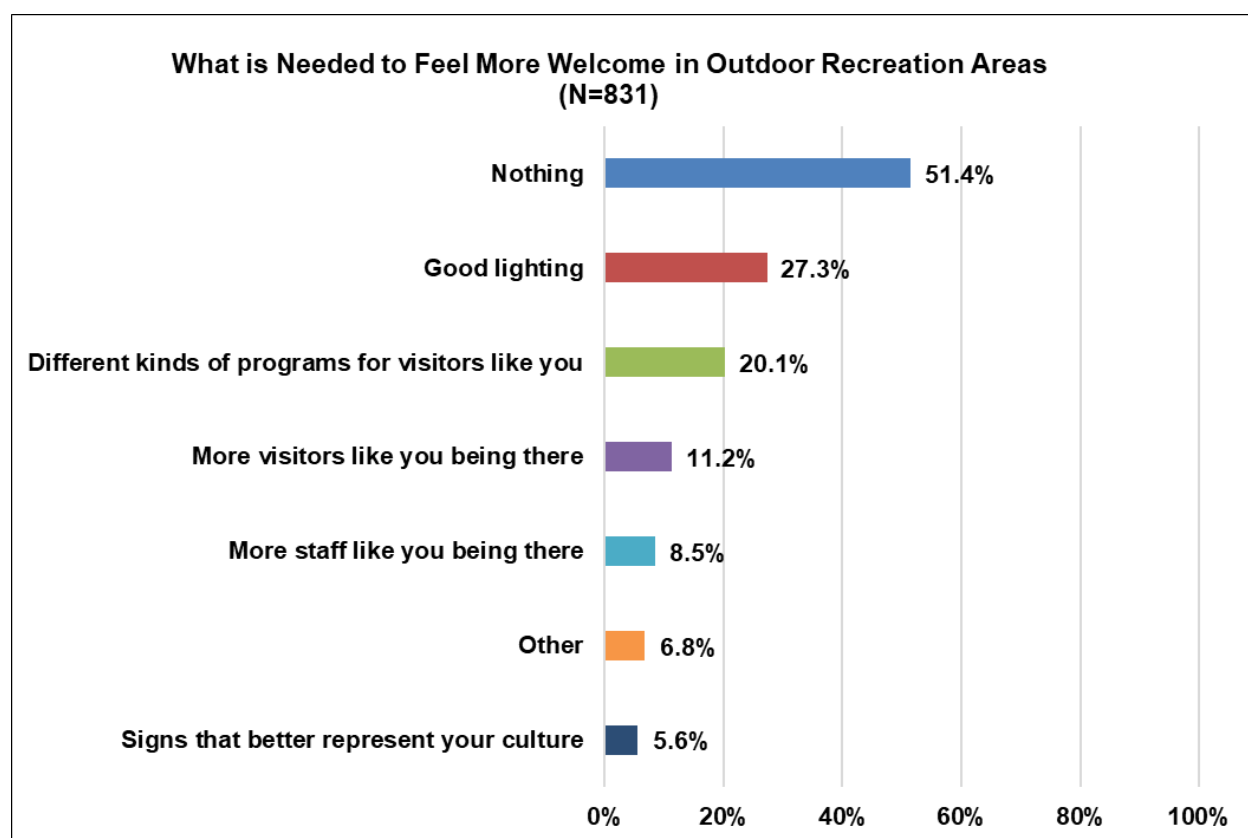
Nearly two-thirds of probability sample respondents – 64.6% – indicated they felt very welcome in outdoor recreation areas, and another 29.5% reported they felt somewhat welcome. However, only 43.1% of non-Hispanic/Latino(a) Black/African-American respondents said they felt very welcome, while 37.4% felt somewhat welcome.

In addition, respondents in Region 1 were less likely to report their sense of welcome as “very welcome.”

What is Needed to Feel More Welcome in Outdoor Recreation Areas: Probability Sample

In Question 9, participants were asked what would make them feel more welcome in outdoor recreation areas. Respondents made selections through a multiple-response (“check all that apply”) approach. The three most frequent responses were nothing (51.4%), good lighting (27.3%), and different kinds of programs for visitors like you (20.1%). See Figure 25.

Figure 25: What is needed to feel more welcome in outdoor recreation areas, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format. A total of 831 individuals answered, providing 1,043 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Respondents in Region 1 were more far more likely to select “More staff like you” as a requested change to enhance welcome. Respondents in Region 2 and Region 3 were more likely to select

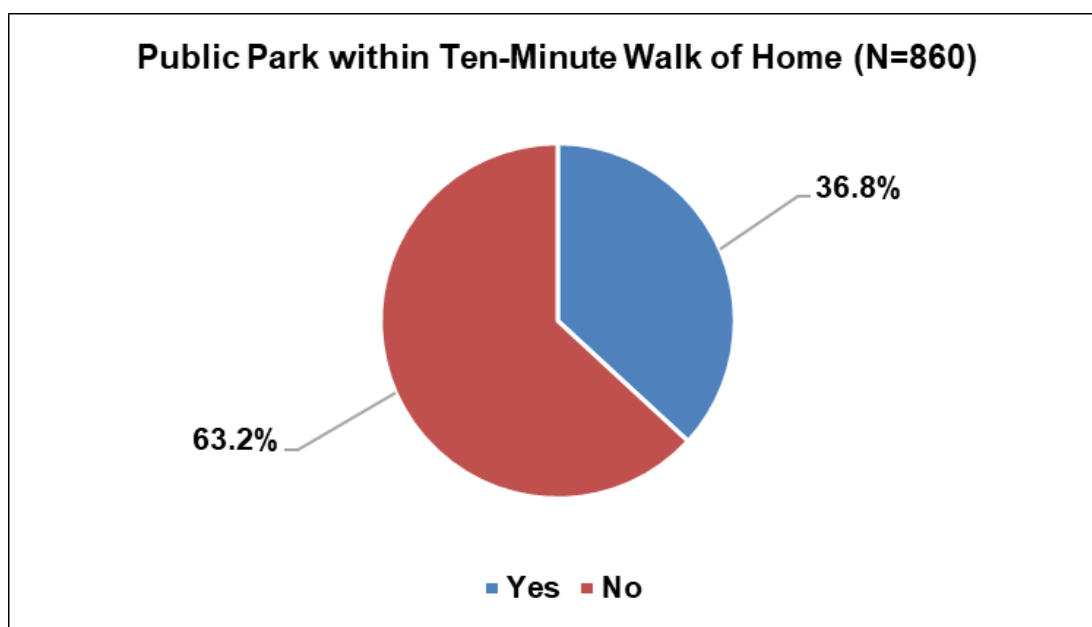
“Nothing.” Non-Hispanic/Latino(a) White respondents were more likely to select “Nothing,” whereas non-Hispanic/Latino(a) Black/African-American respondents and those in the remaining race categories were more likely to select “Programs for visitors like you” and “Good lighting.”

There were no large differences among the age categories, household income, whether or not respondents reported having children in the household, or home ownership status.

Existence of Public Park within Ten-Minute Walk of Home: Probability Sample

In Question 11, respondents were asked if there was a public park within a ten-minute walk of their home – not to include parks or recreation areas maintained by homeowners’ associations. Among the persons who answered, more than 6 in 10 (63.2%) said no. A little less than 4 in 10 (36.8%) said yes. Consult Figure 26.

Figure 26: Existence of a public park within a ten-minute walk of participant home, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This excludes parks or recreation areas maintained by homeowners’ associations.

Probability sample respondents ages 65 years and older were more likely to say they did not have a public park within a 10-minute walk of their home compared to younger respondents. No significant differences were observed among households with and without children, race/ethnicity, household income, or homeownership status factors. However, participants in Regions 2, 3 and 4 were more likely than were participants in Region 1 to report having a public park within a 10-minute walk of home.

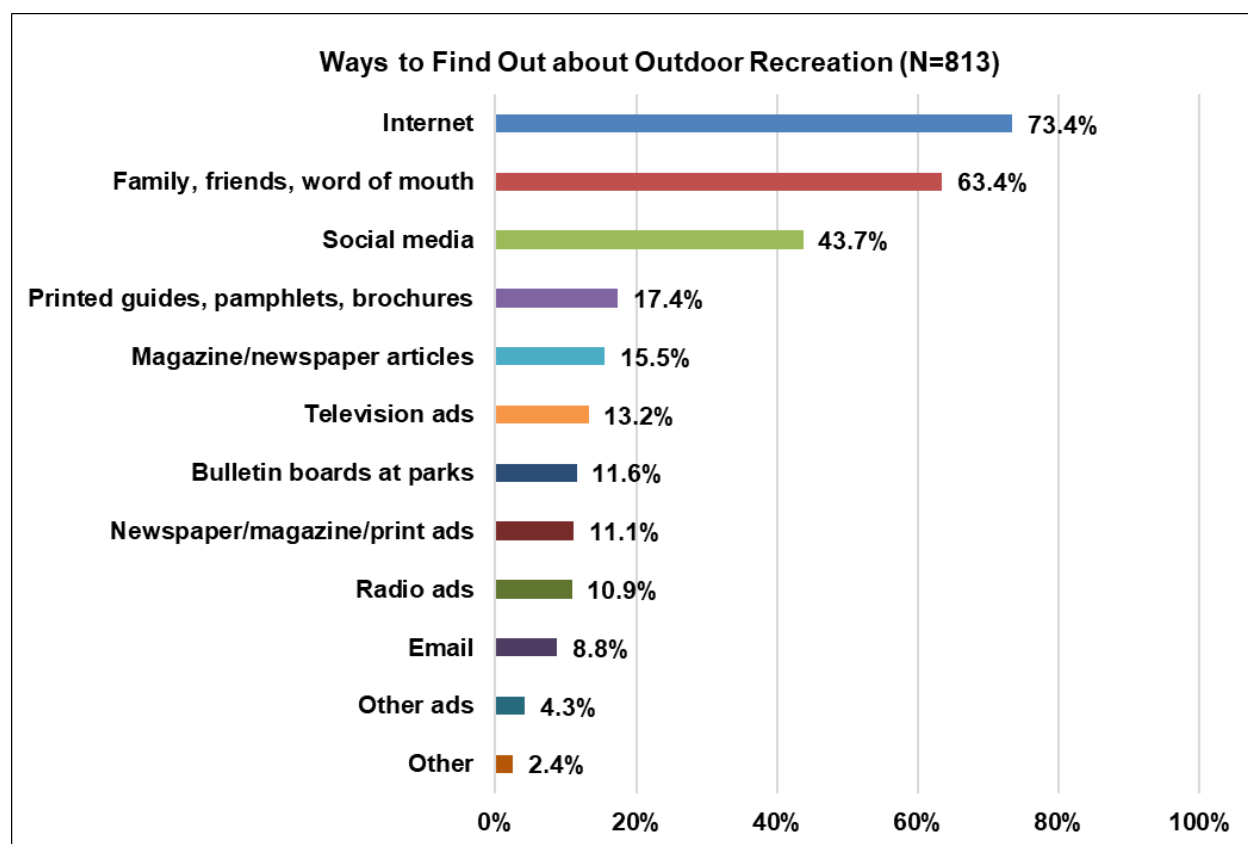
Typical Ways of Finding Out about Outdoor Recreation: Probability Sample

Question 13 asked participants how they usually found out about outdoor recreation information and opportunities. In all, 827 persons answered, with a total of 2,281 selections recorded via a

multiple-response (“check all that apply”) structure. Close to three-quarters of probability sample respondents said they typically learned of outdoor recreation information and opportunities from the internet (73.4%). The next two most popular methods were family, friends and/or word of mouth (63.4%), and social media (43.7%).

Rounding out the top five resources – at noticeably lower percentages – were printed travel guides, pamphlets and brochures (17.4%) and also magazine and newspaper articles (15.5%). Data appear in Figure 27.

Figure 27: Ways of finding out about outdoor recreation, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format. A total of 813 individuals answered, providing 2,347 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Probability sample respondents ages 18-44 were more likely than were participants ages 45-64 and also 65 years and older to find out about outdoor recreation opportunities from the Internet. Respondents ages 18-44 as well as 45-64 were also more likely than were older participants to learn about outdoor recreation via social media. Conversely, respondents ages 65 and older more often consulted printed guides, pamphlets and brochures than did younger respondents.

Non-Hispanic/Latino(a) White/Caucasian respondents were significantly more likely to hear about outdoor recreation opportunities from family, friends or word of mouth than were persons

of all other race/ethnicities except non-Hispanic/Latino(a) Black/African American. Participants from households earning in excess of \$150,000 were more likely to get information from the Internet compared to all other income groups.

Respondents in Region 1 were more likely to get details about outdoor recreation from magazine and newspaper articles than were those in Regions 2 and 4. Respondents in Region 4 were more likely to find out about outdoor recreation through the Internet than were respondents in Region 1.

No differences of note were observed relative to homeownership status or households with or without children.

Estimates of a Close-to-Home Park: Probability Sample

Question 21 in the 2022 *Virginia Outdoors Survey* prompted respondents to write in the travel time by walk, bike ride, and drive that would define a “close-to-home park.” Their answers – recorded in minutes – are summarized in Table 6. They suggest that a park within a 10- to 15-minute walk, a 10- to 15-minute bike ride, or a 10- to 18-minute drive is “close-to-home.”

Table 6: Close-to-home park estimates by walk, bike ride and drive travel time in minutes, 2022 *Virginia Outdoors Survey* probability sample respondents

Mode of travel to park and N value	Mean minutes	Median minutes	Mode minutes
Walk (n=622)	14.5	10.0	10.0
Bike ride (n=537)	14.7	10.0	10.0
Drive (n=792)	18.2	15.0	10.0

Probability sample respondents ages 18-44 were more likely than were older respondents to consider a park close-to-home if it involved a 6-10 minute bike ride. The same was true of a 6-10 minute drive. Participants from households without children were more likely to think of a park as close-to-home if it required a 16-20 minute car ride.

Respondents in Regions 2 and 4 were more likely than were those in Regions 1 and 3 to call a park close-to-home if it took a 6-10 minute bike ride. Respondents in Region 4 were more likely than respondents in all other regions to consider a park close-to-home if it involved a 6-10 minute drive. Participants in Regions 1 and 2 were more likely than participants in Region 4 to say a park was close-to-home if it required a 21-30 minute drive.

Estimates of a Close-to-Home Trail: Probability Sample

In Question 30, respondents were encouraged to consider what might be a close-to-home trail. Per Table 7, probability sample respondents listed an average of 14.8 minutes by walking, 15.2 minutes by biking, and 19.0 minutes by driving.

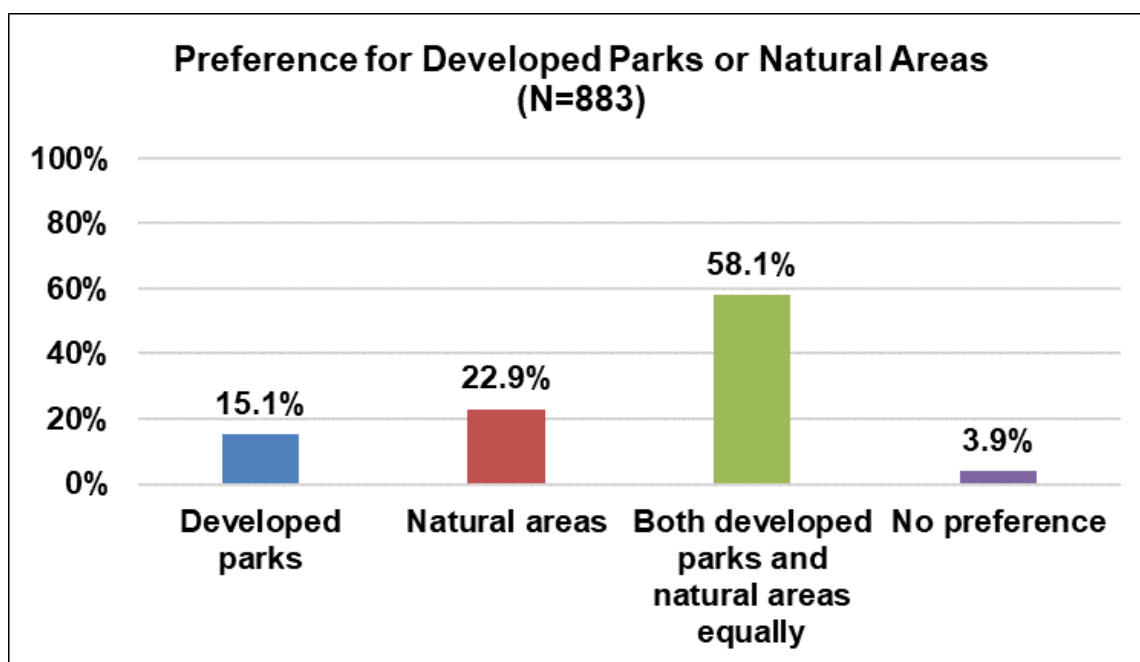
This data is also included in the Trails section.

Table 7: Close-to-home trail estimates by walk, bike ride and drive (minutes) 2022 Virginia Outdoors Survey probability sample respondents

Mode of travel to trail and N value	Mean minutes	Median minutes	Mode minutes
Walk (n=566)	14.8	10.0	10.0
Bike ride (n=491)	15.2	15.0	10.0
Drive (n=721)	19.0	15.0	10.0

Preference for Developed Parks or Natural Areas: Probability Sample

Question 16 in the 2022 *Virginia Outdoors Survey* asked about developed parks and natural areas. As Figure 28 shows, more than half of probability sample respondents (58.1%) liked these settings equally. Almost a quarter (22.9%) preferred natural areas, and 15.1% preferred developed parks.

Figure 28: Preference for developed parks or natural areas, 2022 Virginia Outdoors Survey probability sample respondents

Probability sample respondents between the ages 18-44 were more likely than were respondents 65 and older to enjoy developed parks and natural areas equally. Persons from non-Hispanic/Latino(a) Black/African American backgrounds were also more likely to prefer developed parks and natural areas equally relative to persons from non-Hispanic/Latino(a) White/Caucasian backgrounds. The same pattern displayed when looking at participants from households earning less than \$24,999 relative to participants from households earning more than \$150,000. It appeared again with respondents who rented compared to respondents who owned their homes.

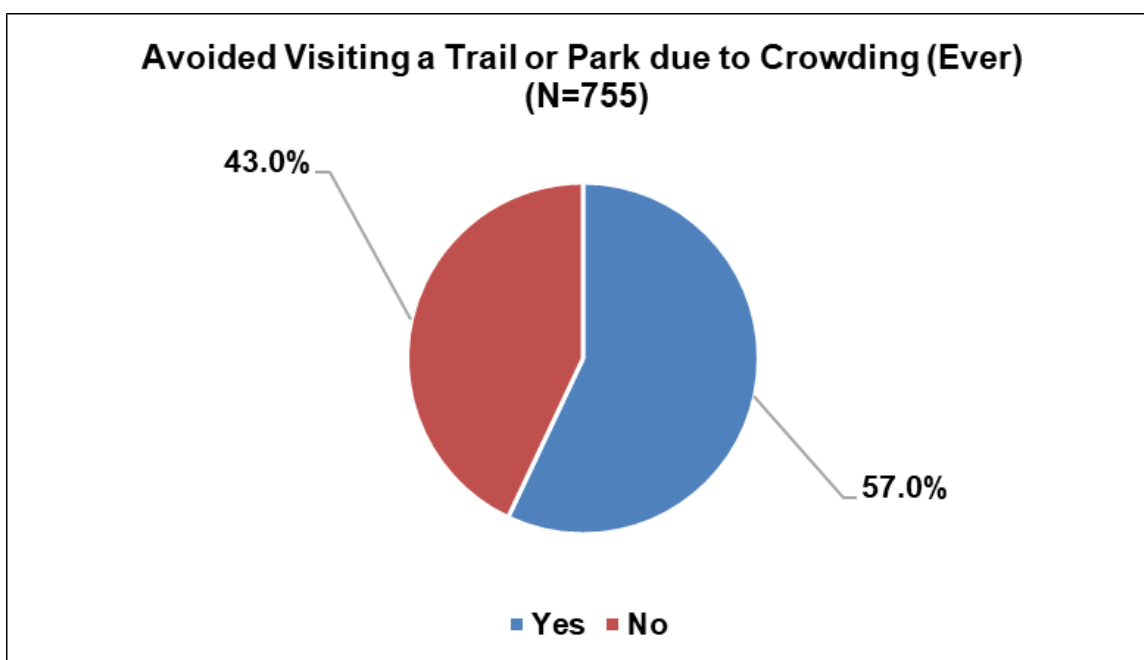
This data is also included in the Recreation Demand and Capacity section.

Ever Avoided a Visit to a Trail or Park Because of Crowding: Probability Sample

Question 33 asked respondents if they had ever avoided visiting a trail or park because it was too crowded. As indicated in Figure 29, more than half of probability sample respondents said yes (57.0%). Approximately 43.0% replied no.

This data is also included in the Recreation Demand and Capacity section.

Figure 29: Avoided visiting a trail or park due to crowding (ever), 2022 Virginia Outdoors Survey probability sample respondents



Respondents in Region 1 were less likely to say they avoided visiting a trail or park because it was too crowded. Respondents who reported having children in the household were more likely to say this had happened.

There were no large differences among the age categories, race categories, household income, or home ownership status.

General Safety: Probability Sample

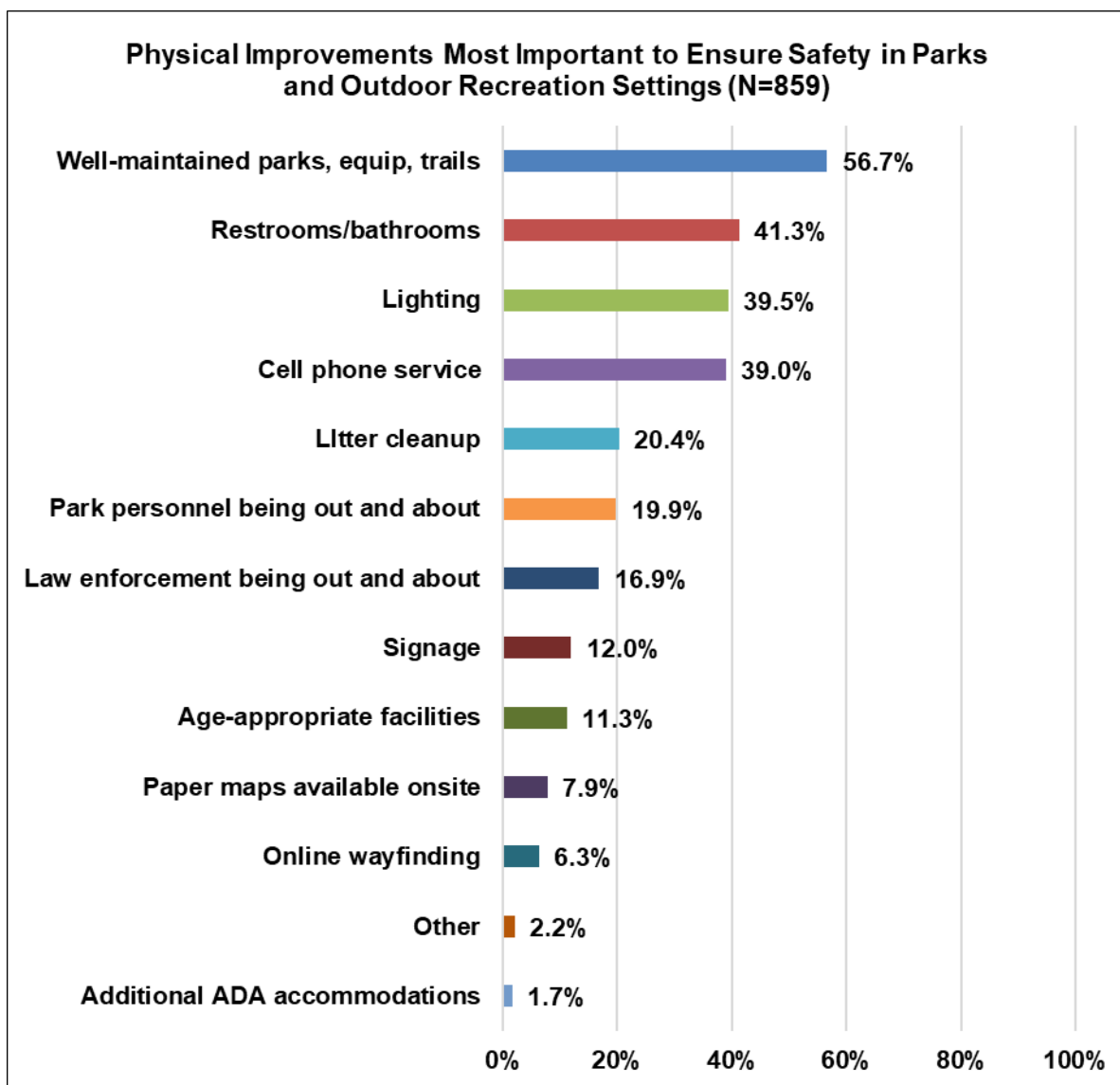
Physical Improvements Most Important to Ensure Safety in Parks and Outdoor Recreation Settings: Probability Sample

Question 10 in this year's survey asked which physical improvements were most important to ensure safety. Per Figure 30, 866 probability sample respondents made 2,382 selections through a multiple-response ("Top 3") question design. The most popular responses were well-

maintained parks, equipment and trails (56.7%). Restrooms/bathrooms followed (41.3%). Lighting (39.5%) and cell phone service (39.0%) received the next highest endorsements. Almost tied for fifth were litter cleanup (20.4%) and park personnel being out and about (19.9%).

This data is also included in the Recreation Demand and Capacity section.

Figure 30: Physical improvements most important to ensure safety in parks and outdoor recreation settings 2022, *Virginia Outdoors Survey* probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format, limited to the respondent’s top three choices. A total of 859 individuals answered, providing 2,327 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

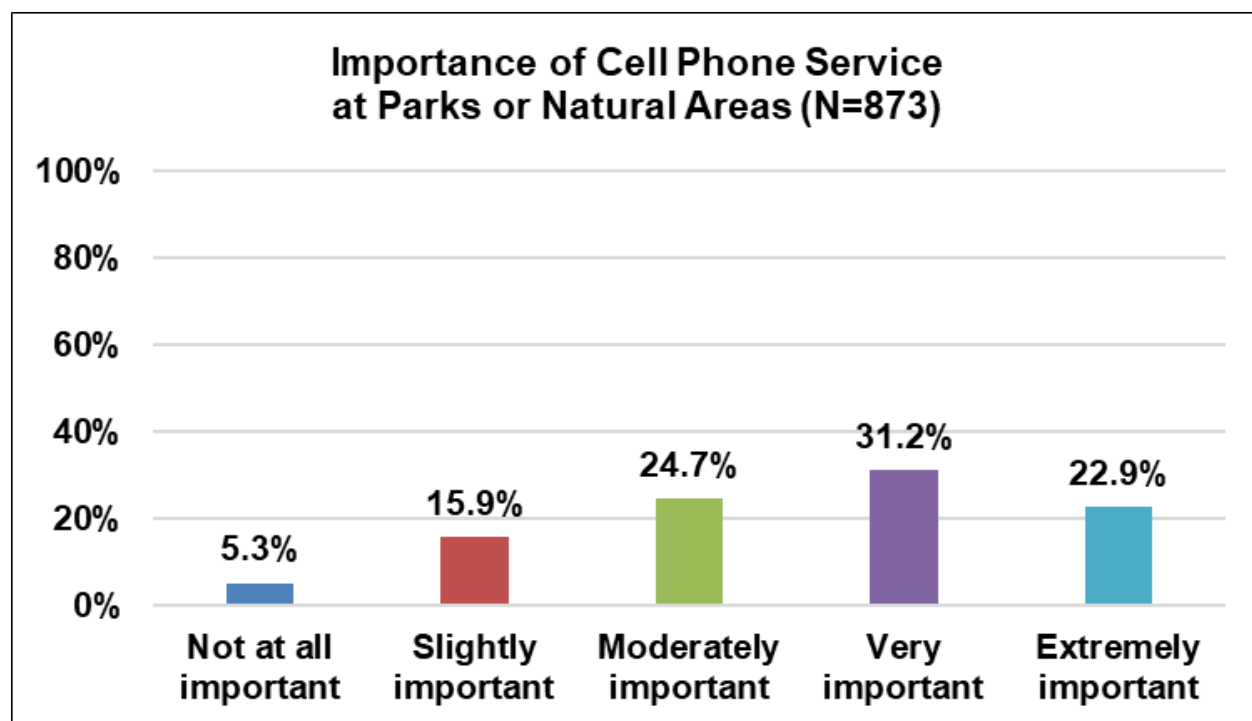
Respondents in Region 1 were less likely to select cell phone service as an improvement to ensure safety. Respondents ages 18-44 and those who reported having children in the household were more likely to select “Well-maintained resources.”

There were no large differences among the race categories and household income or home ownership status.

Importance of Cell Phone Service at Parks or Natural Areas: Probability Sample

Question 19 in the 2022 *Virginia Outdoors Survey* asked about the importance of having cell phone service at parks or natural areas. More than half of the probability sample respondents (54.1%) deemed this amenity very or extremely important. Details appear in Figure 31.

Figure 31: Importance of cell phone service at parks or natural areas 2022, Virginia Outdoors Survey probability sample respondents

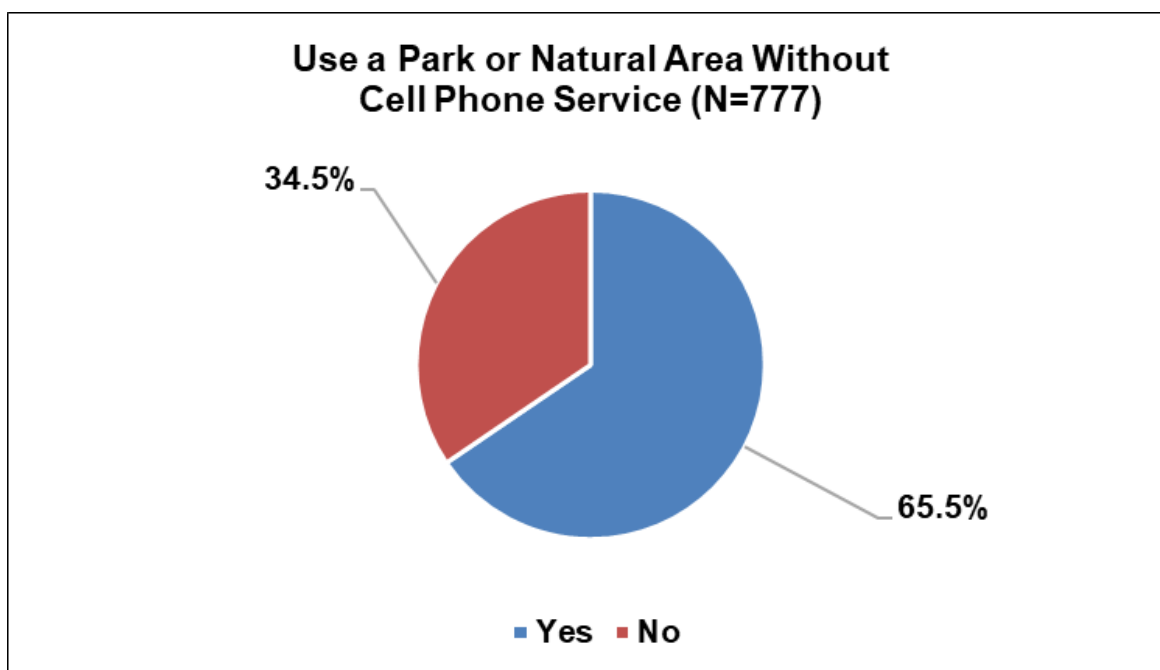


Probability sample respondents from non-Hispanic/Latino(a) Black/African American backgrounds were more likely than were non-Hispanic/Latino(a) White/Caucasian respondents to consider cell phone service in parks and natural areas very important. The same result appeared geographically, with respondents from Region 3 more likely than were respondents from Region 2 to rate cell phone service as very important.

Likelihood of Using a Park or Natural Area Lacking Cell Phone Service: Probability Sample

Question 20 asked respondents who likely they would be to use a park or natural area where there was no cell phone service. Nearly two-thirds (65.5%) of probability sample respondents said they would do so. Refer to Figure 32. This was markedly less willing than the inclination to use a park or natural area without WiFi or Internet access (83.4%) – see the Recreation Funding and Amenities section for that information.

Figure 32: Likelihood of using a park or natural area without cell phone service, 2022 Virginia Outdoors Survey probability sample respondents

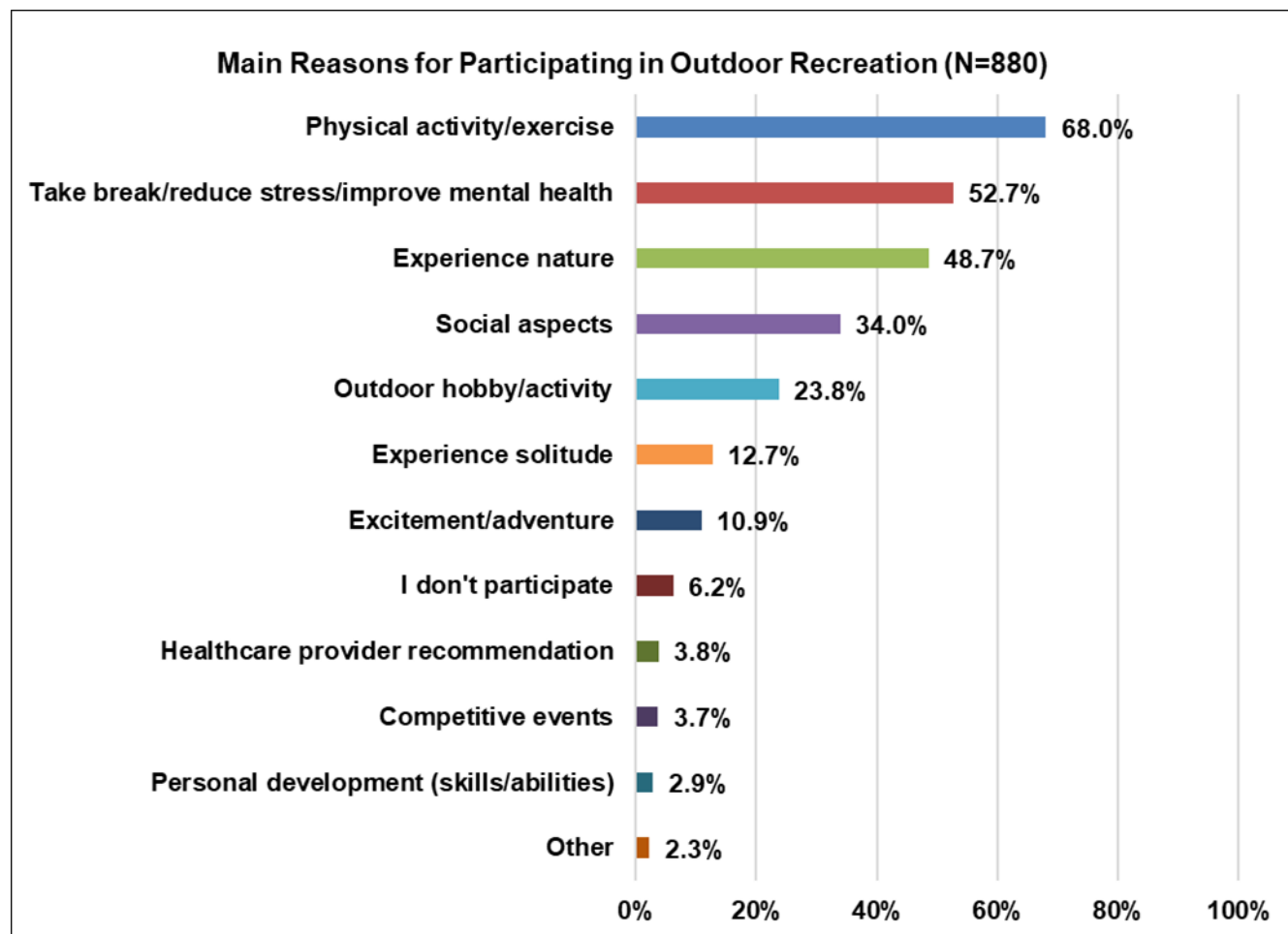


Interest and Motivation, Health: Probability Sample

Main Reasons for Participating in Outdoor Recreation: Probability Sample

In Question 12, respondents were asked to share their main reasons for participating in outdoor recreation. A total of 880 probability sample respondents cast 2,336 votes in a “Top 3” multiple-response format. As depicted in Figure 33, the foremost reasons for outdoor recreation were physical activity/exercise (68.0%), taking a break from the routine/reducing stress/improving mental health (52.7%), experiencing nature (48.7%), social aspects like being with family and friends (34.0%), and pursuing a particular outdoor hobby or activity (23.8%).

Figure 33: Main reasons for participating in outdoor recreation 2022 *Virginia Outdoors Survey* probability sample respondents*



*Note: This question had a multiple-response (“select your top three choices”) format. A total of 880 individuals answered, providing 2,336 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

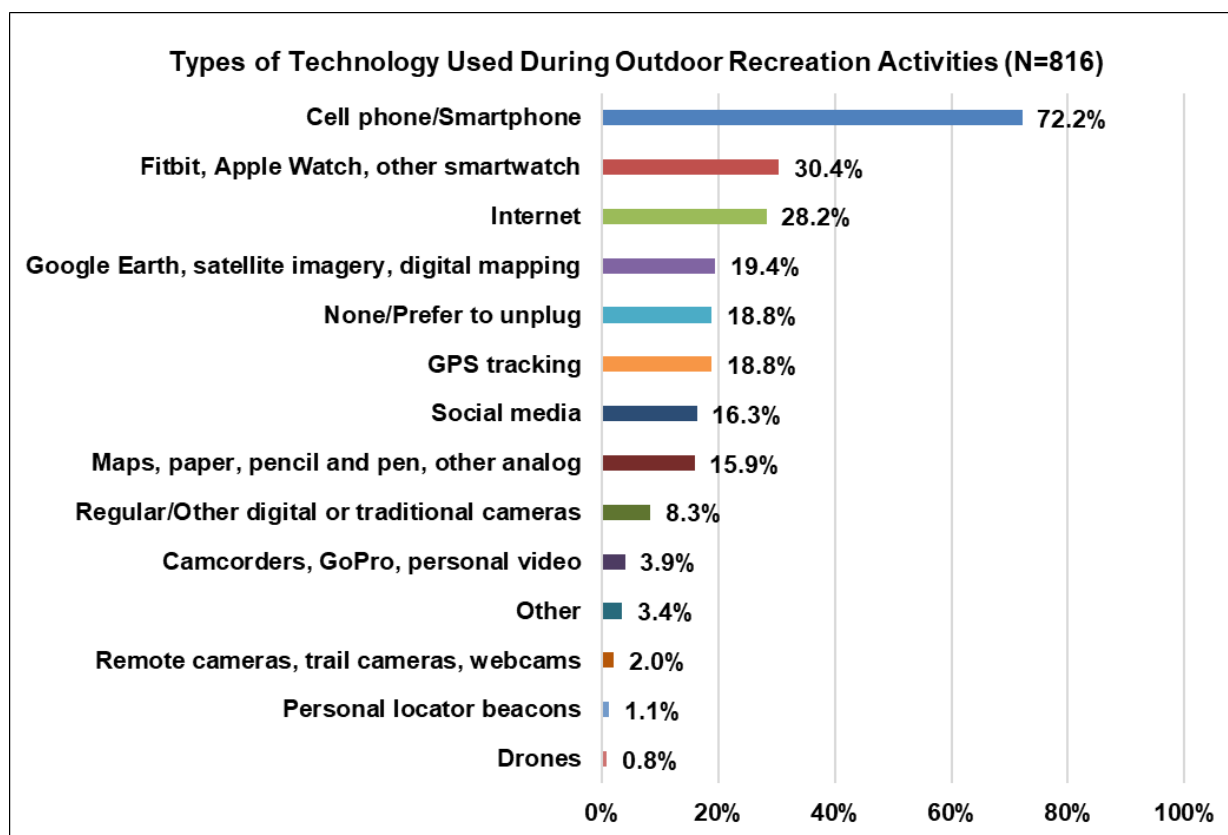
Probability sample respondents ages 18-44 and also 45-64 were more likely than were respondents ages 65 years and older to say they participated in outdoor recreation to take a break, reduce stress or improve mental health. Participants with children in the household were more likely to take part in outdoor recreation for social aspects than were participants without children in the home. Respondents reporting household incomes between \$75,000-\$149,999 and also \$150,000 or more were more likely to engage in outdoor recreation for physical activity/exercise than were respondents from households earning less than \$24,999. Additionally, respondents in Regions 1, 3 and 4 were more likely to participate in outdoor recreation for physical activity/exercise – which was the most frequently named reason in those three regions – than were respondents from Region 2, where the most frequently named reason was to take a break/reduce stress/improve mental health.

Types of Technology Used During Outdoor Recreation Activities: Probability Sample

Question 14 in this year's survey asked which kinds of technology participants used during outdoor recreation activities, and presented a list of possible technologies. Altogether, 816 probability sample respondents offered 1,864 answers through a multiple-response ("check all that apply") arrangement. As seen in Figure 34, the most commonly used technology was a cell phone/smartphone (72.2%). The next three choices – registering much lower percentages – were a Fitbit/Apple Watch or other smartwatch (30.4%); the Internet (28.2%); and Google Earth, MapQuest, Google Maps, satellite imagery or digital mapping (19.4%).

Interestingly, tied for fifth place were GPS tracking (18.8%) and no technology/prefer to unplug (18.8%).

Figure 34: Types of technology used during outdoor recreation activities, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response ("check all that apply") format. A total of 816 individuals answered, providing 1,864 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Probability sample respondents ages 18-44 and also 45-64 were more likely to use cell phones/smartphones, Fitbits, Apple Watches and other smartwatches during outdoor recreation than were participants ages 65 years and older. Younger respondents were also more likely to consult Google Earth, satellite imagery and digital mapping than were those 65 and older. Those

older respondents were more likely than their younger counterparts to report using no technology or preferring to unplug when engaged in outdoor recreation.

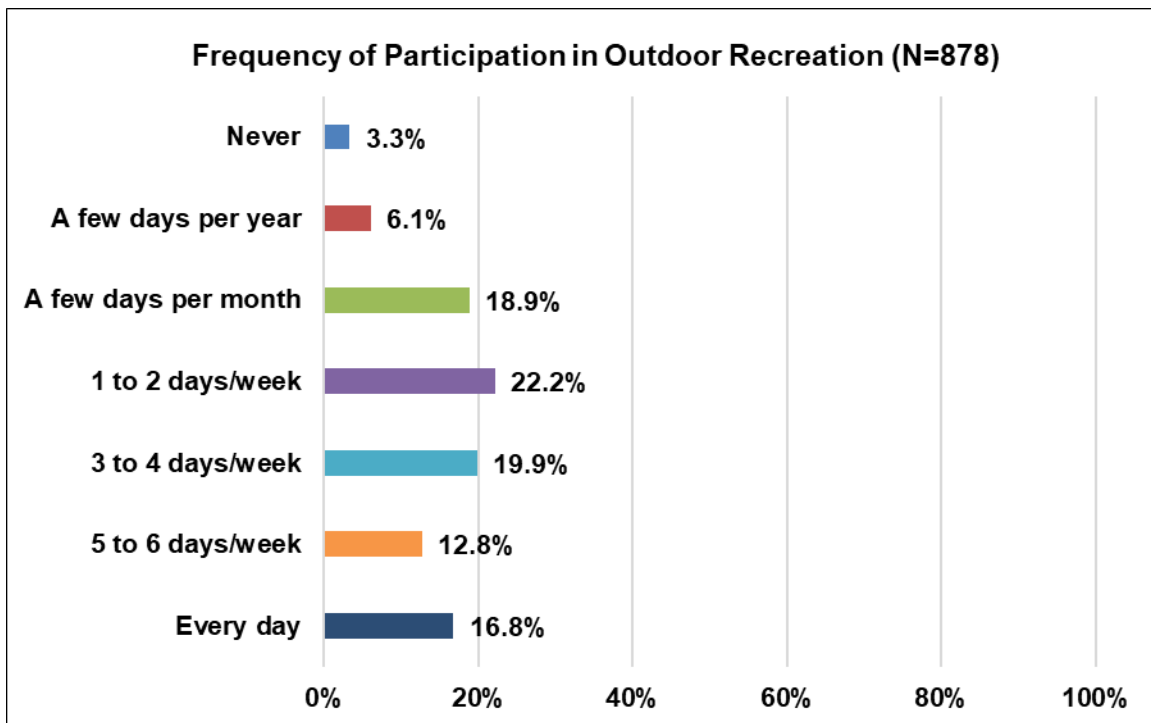
Participants with children in the household were also more likely to use Fitbits, Apple Watches and other smartwatches than were respondents without children in the household. The same phenomenon held true for respondents in households earning \$75,000-\$149,000 compared to peers from households making \$25,000-\$74,999. It likewise appeared geographically – participants in Region 4 were more likely to use these devices than were participants in Region 2. Notably, too, respondents in Region 1 were more likely than were respondents in Region 3 to not use any technology when taking part in outdoor recreation.

Recreation Demand and Capacity: Probability Sample

Frequency of Participation in Outdoor Recreation: Probability Sample

Question 4 in the 2022 *Virginia Outdoors Survey* elicited information about the frequency of participation in outdoor recreation for respondent and others in household. Altogether, 878 probability sample respondents answered – not only for themselves, but for others in their households as well. As Figure 35 suggests, the most common answer was 1 to 2 days per week of activity (22.2%). Not far behind was 3 to 4 days per week (19.9%). In third place was a few days per month (18.9%).

Figure 35: Frequency of participation in outdoor recreation for respondent and others in household, 2022 *Virginia Outdoors Survey* probability sample respondents

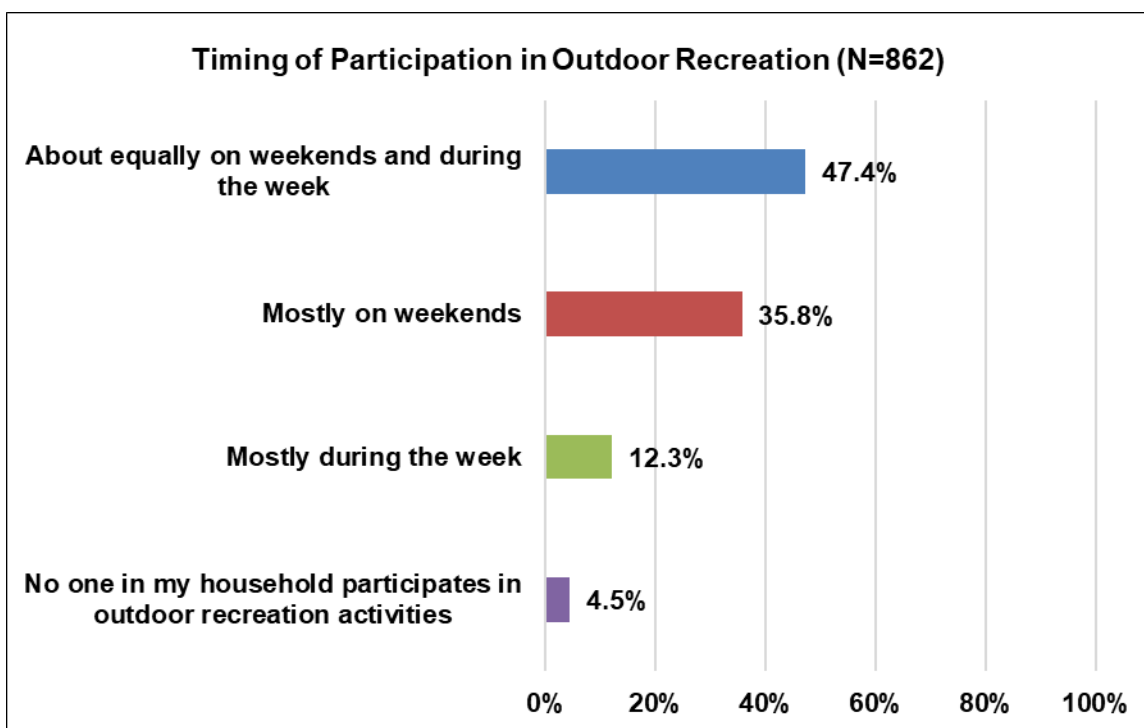


Probability sample respondents between the ages of 18-44 were significantly more likely to participate in outdoor recreation 1-2 days per week than were persons ages 65 and older. Respondents with children in the household were also significantly more likely to engage in outdoor recreation a few days per month and also 5-6 days per week than were respondents without children in the household. Renters were significantly more likely than were homeowners to be involved in outdoor recreation only a few days per month. Geographically, respondents from Regions 1 and 3 were significantly more likely to take part in outdoor recreation 3-4 days per week than were those Region 2.

Timing of Participation in Outdoor Recreation: Probability Sample

Question 5 followed up on the question regarding frequency of participation and inquired about the general timing of outdoor recreation activity. Figure 36 reveals that among 862 probability sample respondents, 47.4% said that they and other members of their households usually participate in outdoor recreation about equally on weekends and during the week. Another 35.8% noted that they were typically active mostly on weekends. Fewer respondents indicated outdoor recreation activity mostly during the week (12.3%).

Figure 36: Timing of participation in outdoor recreation for respondent and others in household, 2022 Virginia Outdoors Survey probability sample respondents



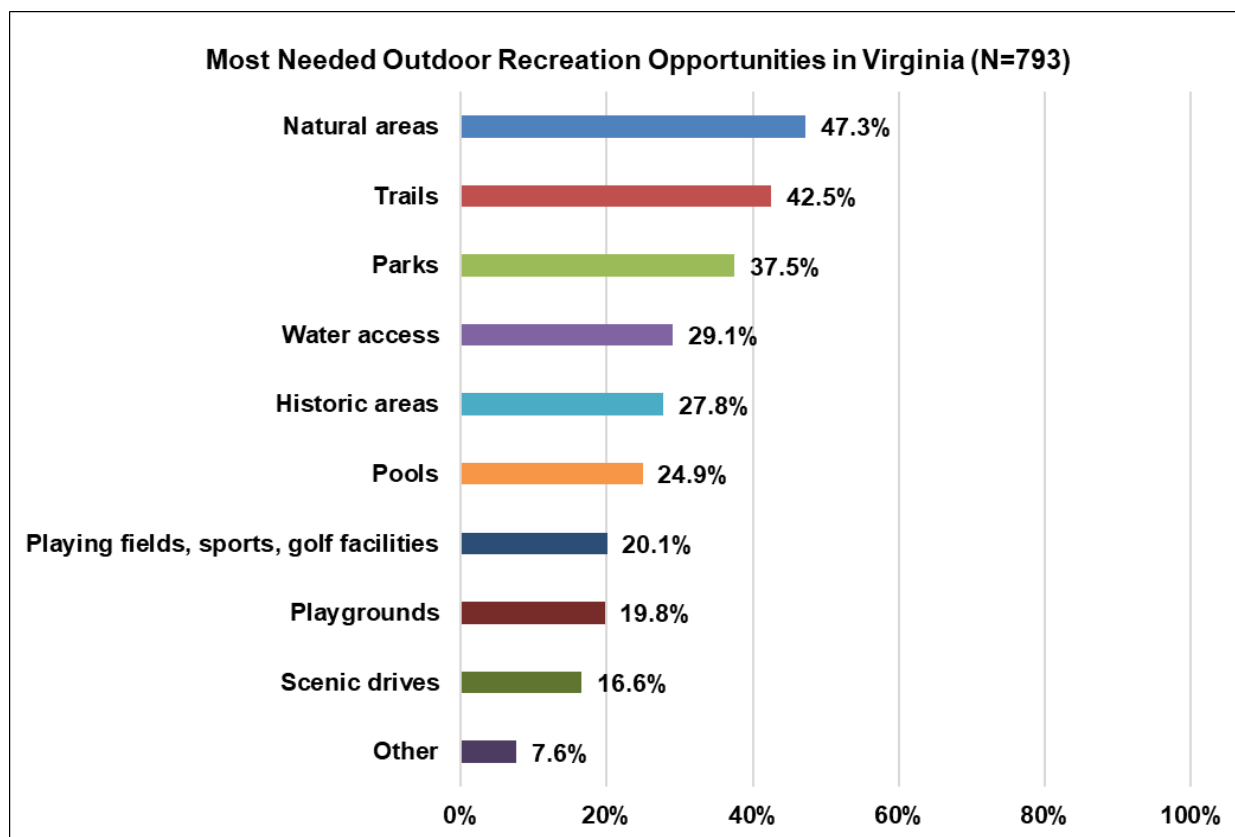
Probability sample respondents in age groups 18-44 and also 45-64 were significantly more likely to engage in outdoor recreation mostly on weekends than were persons ages 65 and older. Similarly, individuals who reported having children in the household were significantly more likely to be active mostly on weekends than were individuals who did not have children in the

household. Respondents from households earning more than \$150,000 were significantly more likely to take part in outdoor recreation mostly on weekends compared to persons from households earning between \$25,000-\$74,999. No statistically significant differences in the timing of outdoor recreation participation were observed across Regions 1-4.

Outdoor Recreation Opportunities Most Needed in Virginia: Probability Sample

Question 15 asked which among a variety of outdoor recreation resources were most needed in the state, and 793 probability sample respondents made 2,156 choices via a “Top 3” prompt. The most frequent selection was natural areas (47.3%). Close behind was trails (42.5%) followed by parks (37.5%), water access (29.1%) and historic areas (27.8%). Look to Figure 37 for details.

Figure 37: Outdoor recreation opportunities most needed in Virginia, 2022 *Virginia Outdoors Survey* probability sample respondents*



*Note: This question had a multiple-response (“Select your top 3 choices”) format. A total of 793 individuals answered, providing 2,156 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Probability sample respondents ages 45-64 and also 65 years and older were more likely than were respondents ages 18-44 to say that historic areas were among the most needed outdoor recreation resources in Virginia. Participants in households without children were more likely to indicate a need for natural areas than were participants in households with children. However, respondents from households with children were more likely to suggest pools compared to

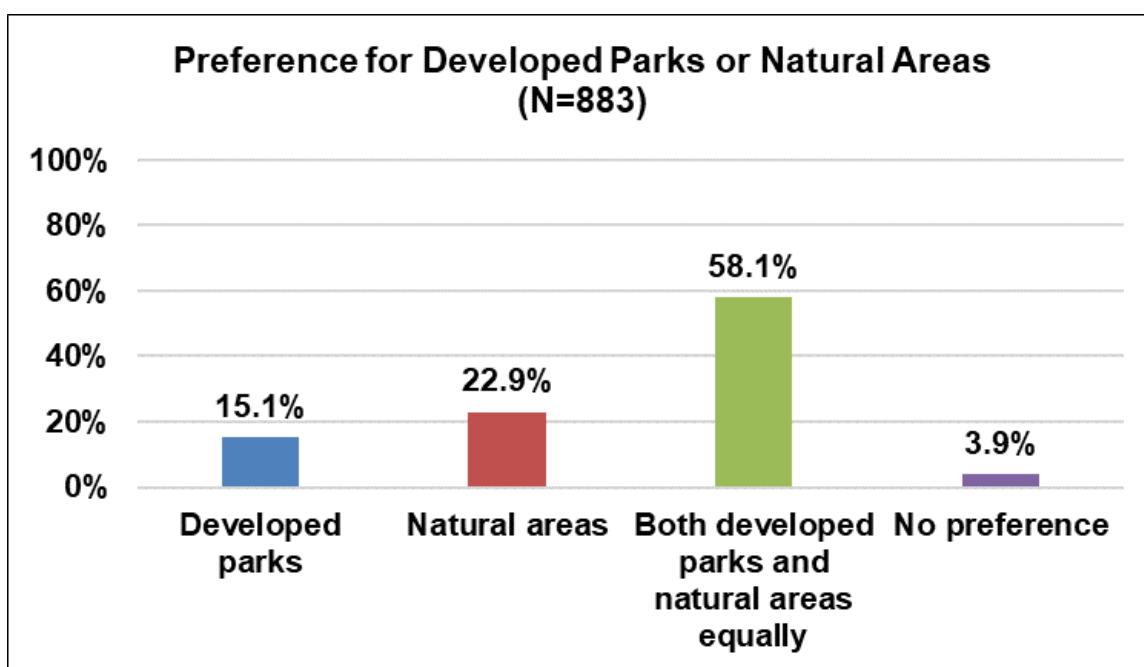
respondents from households without children. Pools were also mentioned more frequently by renters, vis-à-vis those who owned their homes.

Participants from households making at least \$150,000 were more likely to report trails as a most needed resource than were participants in households earning \$25,000-\$74,999 and also \$75,000-\$149,999. A similar result occurred geographically – respondents from Region 4 were more likely than were those in Regions 1 and 2 to suggest a need for trails.

Preference for Developed Parks or Natural Areas: Probability Sample

Question 16 in the 2022 *Virginia Outdoors Survey* asked about developed parks and natural areas. As Figure 38 shows, more than half of probability sample respondents (58.1%) liked these settings equally. Almost a quarter (22.9%) preferred natural areas, and 15.1% preferred developed parks.

Figure 38: Preference for developed parks or natural areas, 2022 *Virginia Outdoors Survey* probability sample respondents



Probability sample respondents ages 18-44 were more likely than were respondents 65 and older to prefer developed parks and natural areas equally. Non-Hispanic/Latino(a) Black/African American respondents were also more likely to weigh developed parks and natural areas equally (72.7% did so) than were persons from non-Hispanic/Latino(a) White/Caucasian backgrounds (53.0%). The same pattern displayed when looking at participants from households earning less than \$24,999 relative to participants from households earning more than \$150,000. It appeared again with respondents who rented compared to respondents who owned their homes.

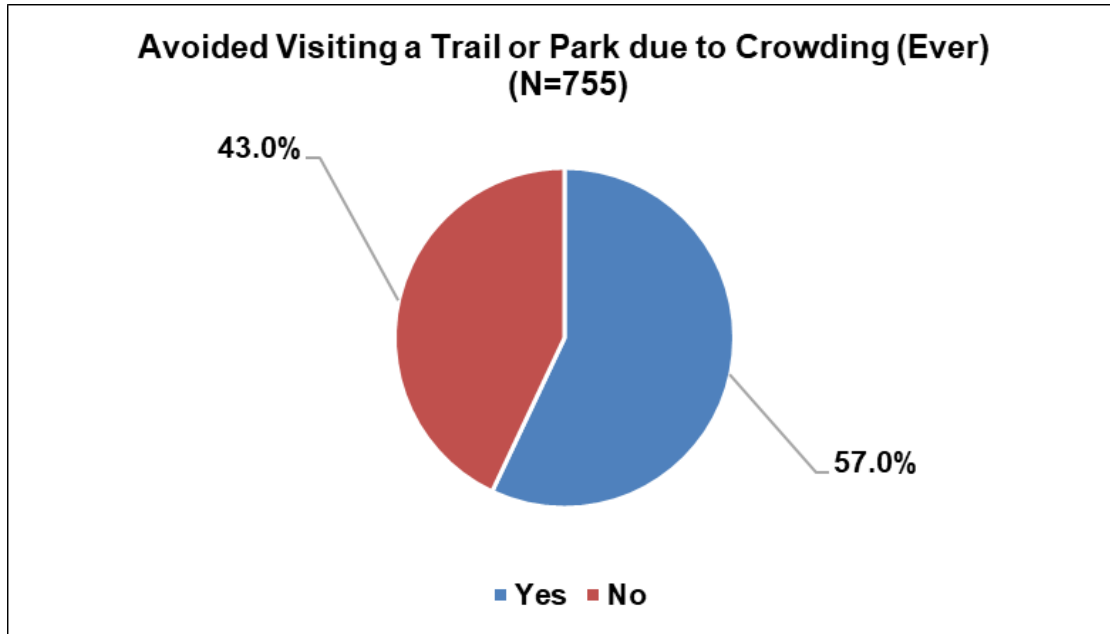
This data is also included in the Diversity, Inclusion and the Underserved section.

Avoided a Visit to a Trail or Park Because of Crowding (Ever): Probability Sample

Question 33 asked respondents if they had ever avoided visiting a trail or park because it was too crowded. As indicated in Figure 39, more than half of probability sample respondents said yes (57.0%). Approximately 43.0% replied no.

This data is also included in the Diversity, Inclusion and the Underserved section.

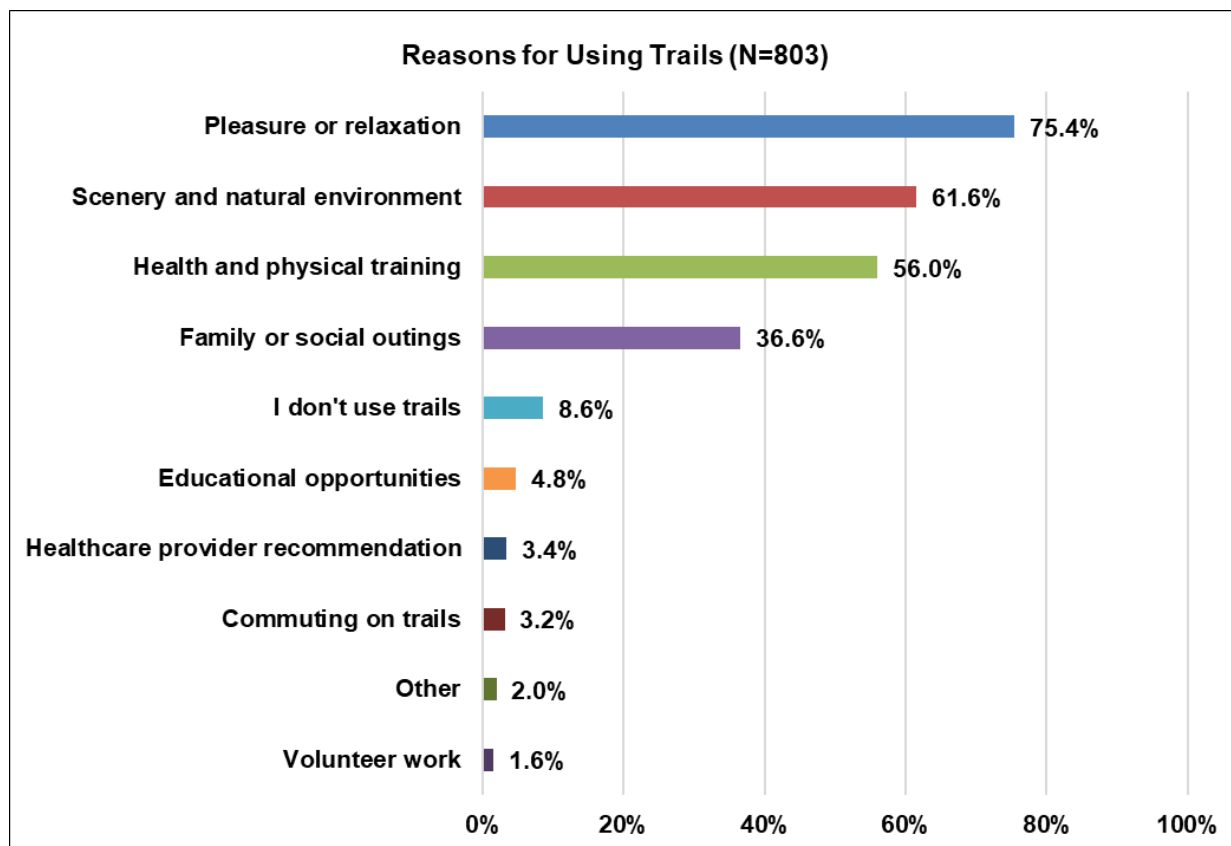
Figure 39: Avoided visit to trail or park due to crowding (ever), 2022 Virginia Outdoors Survey probability sample respondents

**Reasons for Using Trails: Probability Sample**

Question 32 in the 2022 Virginia Outdoors Survey asked participants why they use trails. In sum, 803 probability sample respondents made 1,978 choices using a multiple-response ("Top 3") question design. The most popular answers involved using trails for pleasure or relaxation (75.4%), scenery and natural environment (61.6%) and health and physical training (56.0%). Results appear in Figure 40.

This data is also included in the Trails section.

Figure 40: Reasons for using trails 2022, Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“Select your top 3 choices”) format. A total of 803 individuals answered, providing 1,978 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

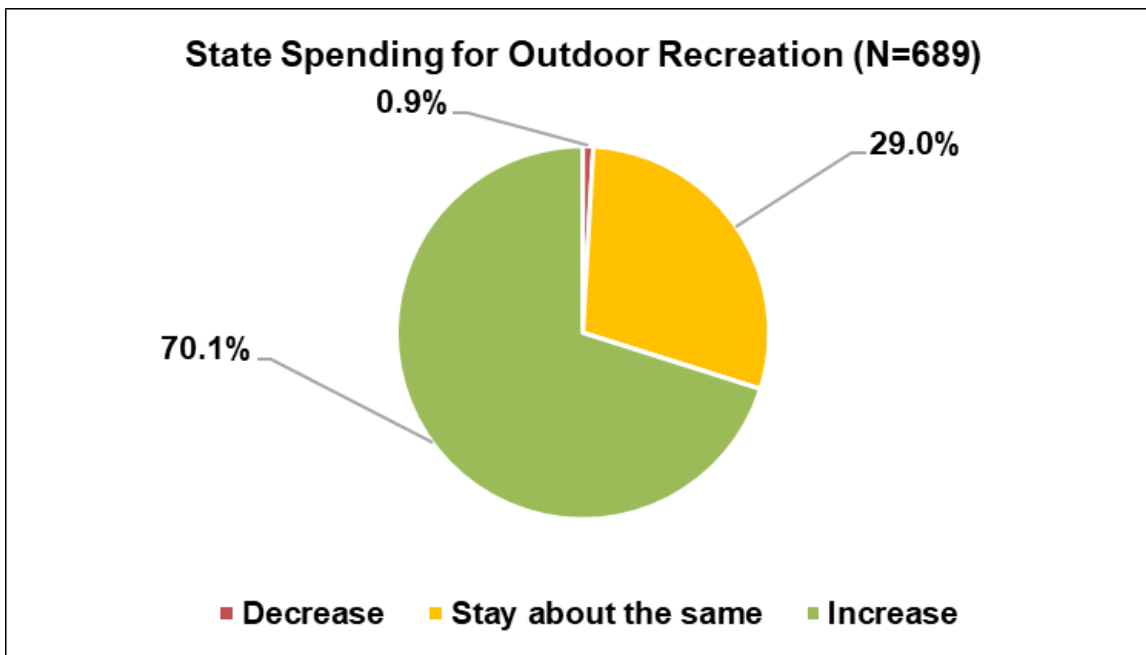
Respondents in Region 1 were more likely to select scenery/natural environment as their reason for using trails. Respondents in Region 2 were less likely to select health/physical training. Respondents aged 65+ were more likely to say they don’t use trails compared to younger respondents. Those who reported having children in the household were more likely to select family/social outings as a reason for using trails. Non-Hispanic Latino(a) Black/African American respondents were less likely to select pleasure/relaxation as a reason for using trails, compared to those of other races/ethnicities. Respondents with a reported household income of less than \$25,000 were more likely to say they don’t use trails compared to all remaining household income categories. Respondents who rented their homes were more likely to select family/social outings as their reason for using trails, compared to respondents who owned or were in the process of buying their home.

Recreation Funding and Amenities: Probability Sample

State Spending for Outdoor Recreation: Probability Sample

In Question 47, a majority of probability sample respondents (70.1%) indicated that, given all the priorities for the state to fund, state spending for outdoor recreation should increase. Almost 3 in 10 (29.0%) suggested that spending stay about the same. See Figure 41.

Figure 41: State spending for outdoor recreation, 2022 *Virginia Outdoors Survey* probability sample respondents

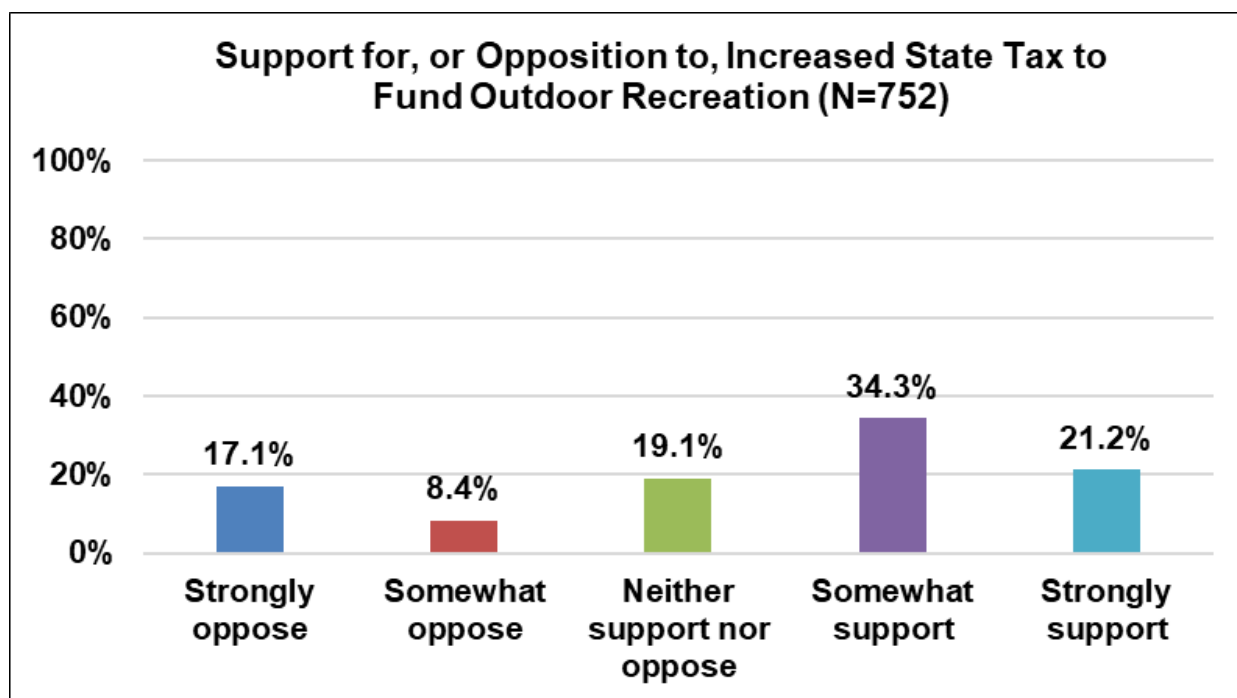


There were no large differences among the four DCR regions, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Increased State Tax to Fund Outdoor Recreation in Virginia: Probability Sample

Question 49 in this year's survey measured support for – and opposition to – the idea of increased state taxes to fund outdoor recreation in the commonwealth. About one-third of probability sample respondents (34.3%) said they would somewhat support an increase and approximately 1 in 5 (21.2%) said they would strongly support an increase. Roughly 1 in 5 (19.1%) would neither support nor oppose an increase. About 1 in 6 (17.1%) indicated they would strongly oppose an increase, and the remainder (8.4%) said they would somewhat oppose an increase. See Figure 42 for details.

Figure 42: Support for, or opposition to, increased state tax to fund outdoor recreation 2022, Virginia Outdoors Survey probability sample respondents



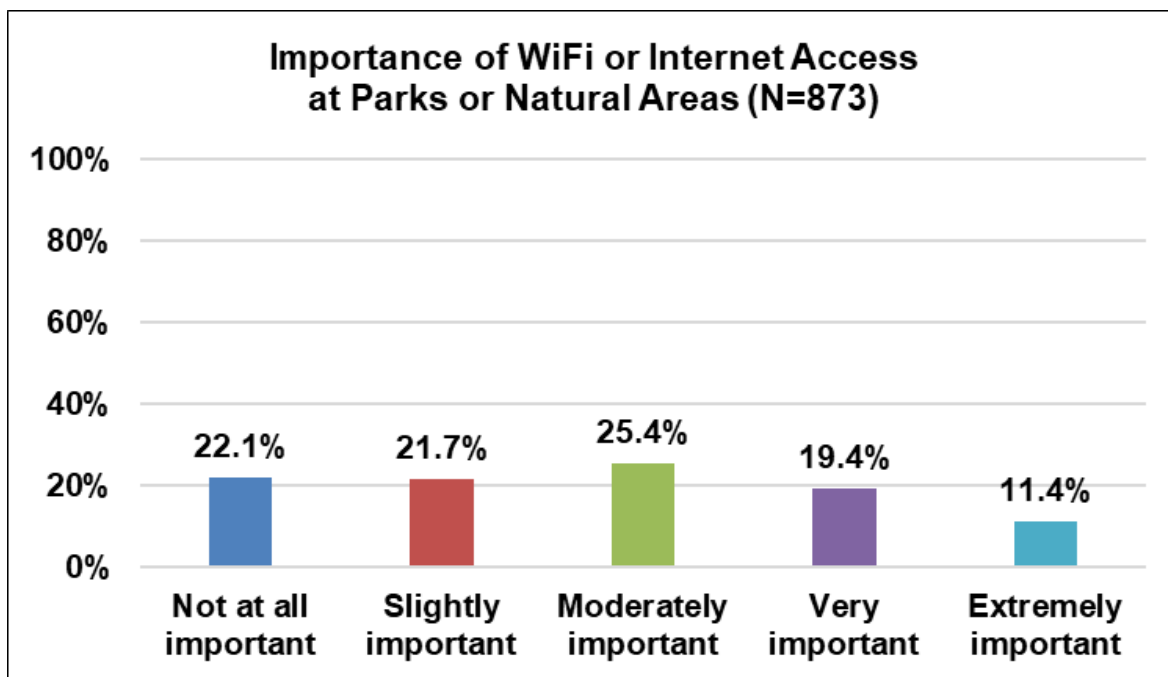
Respondents in Region 1 were more likely to select “somewhat oppose” when asked if they would support or oppose an increased state tax to fund outdoor recreation in Virginia.

Respondents in Region 4 were more likely to select “somewhat support” than were respondents in Region 1, and more likely to select “strongly support” than were respondents in Region 2.

Importance of WiFi and Internet Access at Parks or Natural Areas: Probability Sample

Question 17 asked about the importance of WiFi or Internet access at parks and natural areas. Approximately one quarter of probability sample respondents (25.4%) rated this feature moderately important. Ratings for not at all important (22.1%) and slightly important (21.7%) were virtually the same. Fewer respondents considered WiFi or Internet access very important (19.4%) or extremely important (11.4%). Findings appear in Figure 43.

Figure 43: Importance of WiFi or Internet access at parks or natural areas, 2022 Virginia Outdoors Survey probability sample respondents

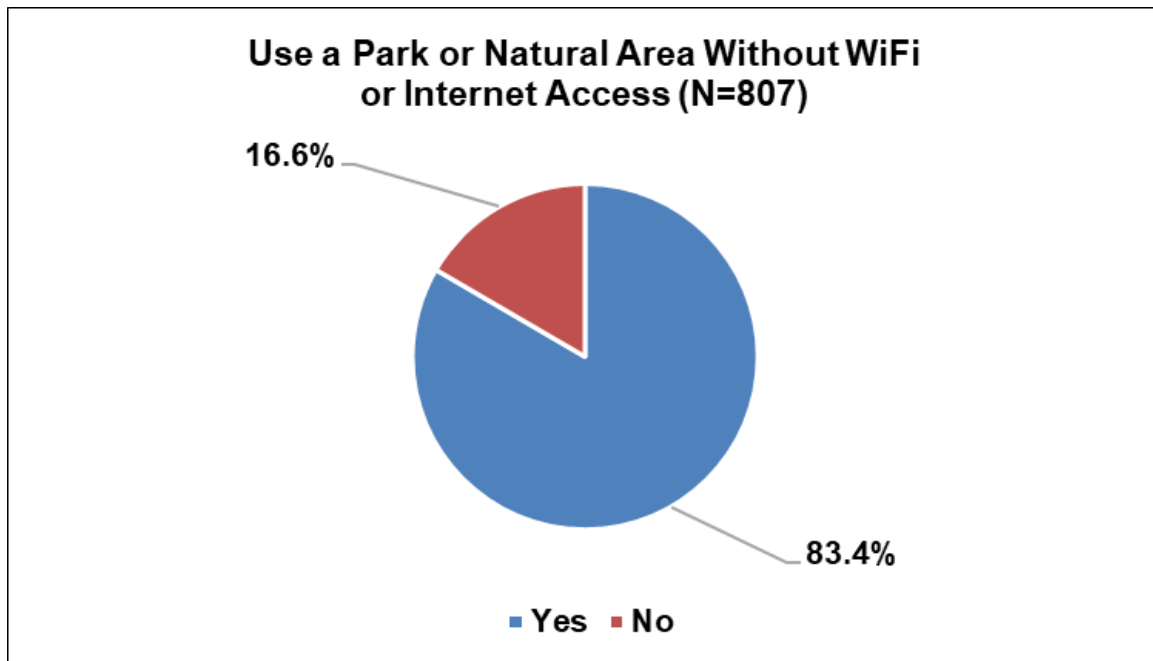


Probability sample respondents ages 65 and older were more likely than were younger respondents to consider WiFi and Internet access not at all important. No major differences were observed between households with/without children or homeownership status.

Likelihood of Using a Park or Natural Area Lacking WiFi or Internet Access: Probability Sample

Question 18 asked if respondents would use a park or natural area where there was no WiFi or Internet access, and a majority of probability sample respondents (83.4%) said they would. See Figure 44.

Figure 44: Likelihood of using a park or natural area without WiFi or Internet access, 2022 Virginia Outdoors Survey probability sample respondents

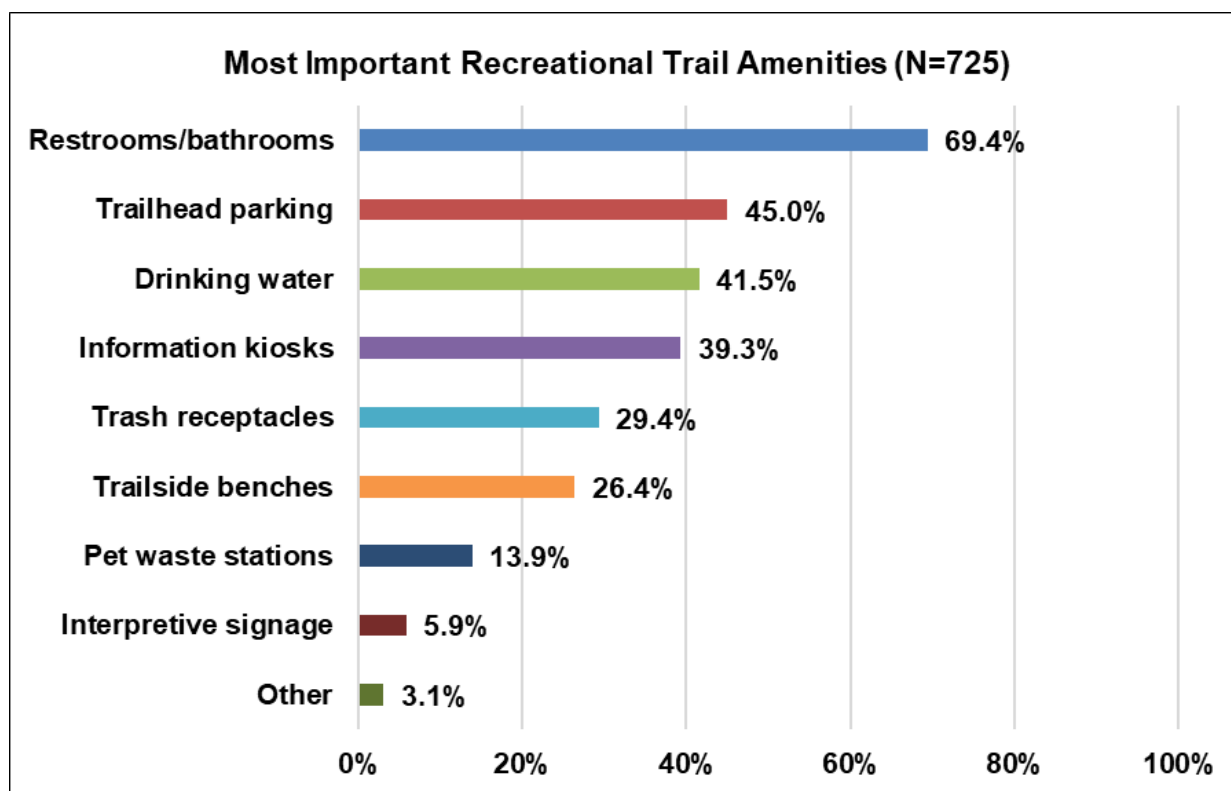


Importance of Amenities when Using Recreational Trails: Probability Sample

Question 29 asked which amenities were most important when using recreational trails. Altogether, 725 probability sample respondents made 2,002 selections through a multiple-response (“Select your top 3 choices”) approach. The foremost answers were restrooms/bathrooms (69.4%) followed by trailhead parking (45.0%) and drinking water (41.5%). Results are furnished in Figure 45.

This data is also included in the Trails section.

Figure 45: Importance of amenities when using recreational trails 2022, Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“Select your top 3 choices”) format. A total of 725 individuals answered, providing 2,002 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Respondents in Region 1 were more likely to select restrooms/bathrooms as the most important trail amenities. Respondents in Region 3 were less likely to list trash receptacles. Respondents aged 18-44 were more likely to select information kiosks, and respondents aged 65+ were more likely to select trailside benches.

In addition, non-Hispanic/Latino(a) White respondents were more likely to select trailhead parking, with non-Hispanic/Latino(a) Black/African American respondents more likely to select drinking water and trailside benches. A small difference was also observed by household

income, with lower-income respondents more likely to select drinking water and trailside benches.

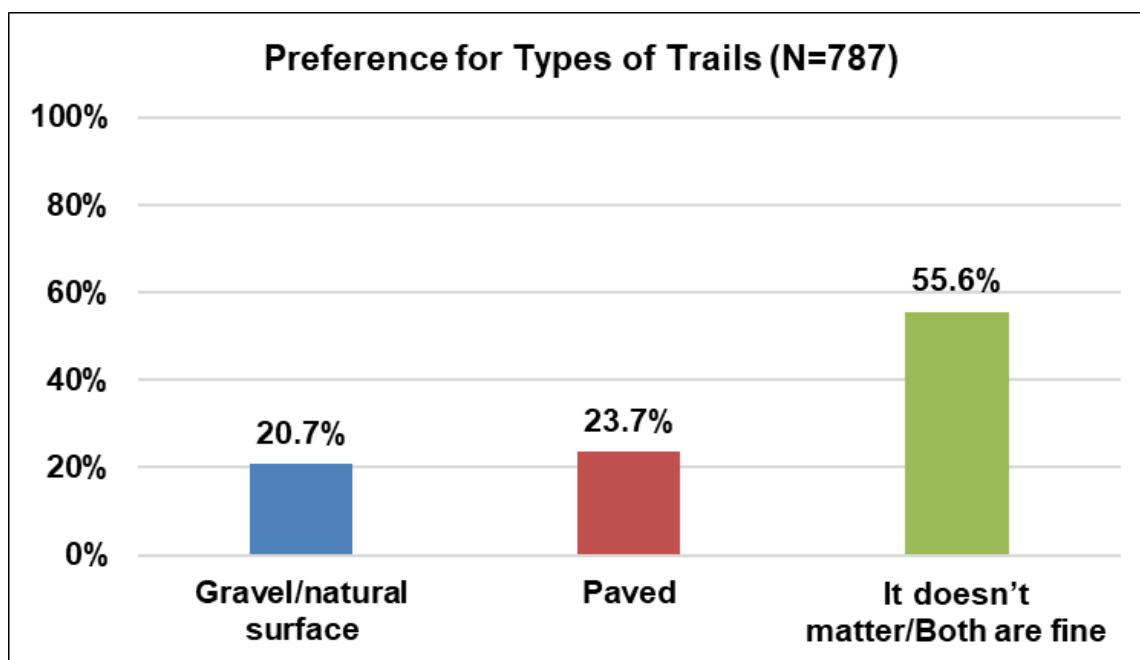
There were no large differences among whether or not respondents reported having children in the household or home ownership status.

Preference for Types of Trails: Probability Sample

Question 31 asked participants if they preferred paved trails or gravel/natural surface trails. More than half (55.6%) said they had no preference or both types of trails are fine. A little less than one-quarter (23.7%) preferred paved trails, and roughly 1 in 5 (20.7%) indicated a preference for gravel/natural surface trails. Consult Figure 46.

This data is also included in the Trails section.

Figure 46: Preference for types of trails, 2022 *Virginia Outdoors Survey* probability sample respondents



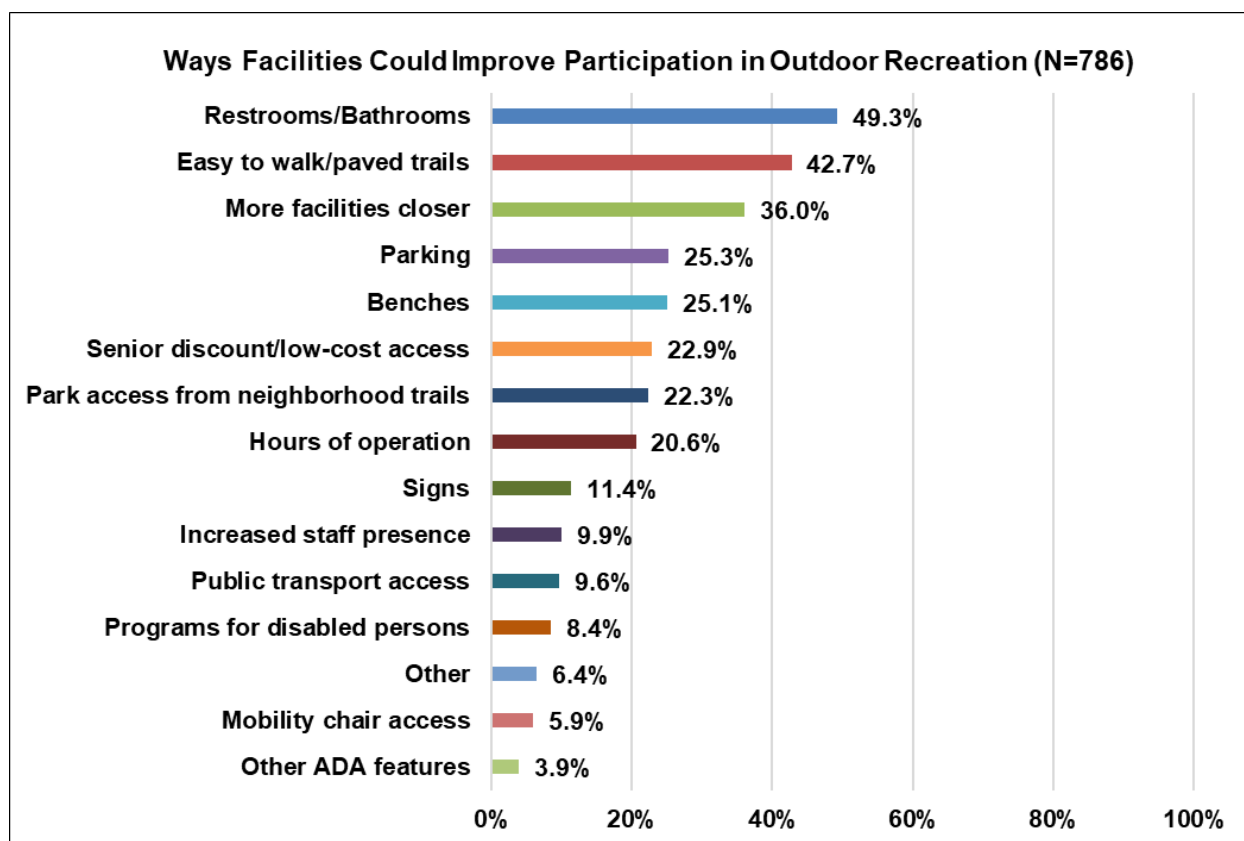
A small difference was observed across household income, with lower-income respondents more likely to select paved trails as their preferred surface.

No large differences were observed among the four DCR regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, or home ownership status.

Ways Outdoor Recreation Facilities Can Improve Participation in Outdoor Recreation: Probability Sample

Question 7 presented respondents with a list of changes that facilities could make to improve participation in outdoor recreation. Per Figure 47, 786 probability sample respondents made 2,199 selections through a multiple-response (“check all that apply”) approach. The leading five adjustments pertained to restrooms/bathrooms (49.3%); easy to walk, paved trails (42.7%); more facilities closer to where participants live (36.0%); parking (25.3%); and benches (25.1%). See Figure 47.

Figure 47: Ways outdoor recreation facilities can improve participation in outdoor recreation, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format. A total of 786 individuals answered, providing 2,199 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Probability sample respondents ages 18-44 were more likely to select having more facilities closer than were respondents ages 45-64. Both age groups were more likely than were individuals ages 65 years and older to choose having park access from neighborhood trails. However, participants ages 65 years and older were more likely to choose having senior discount or low-cost access than were participants ages 45-64.

Persons with children in the household were more likely than were persons without children in the household to endorse having park access from neighborhood trails as a way to improve participation. Conversely, respondents without children in the household were more likely to indicate senior discount/low-cost access than were participants with children in the household. Individuals from households earning \$25,000-\$74,999 were also more likely to mark senior discount/low-cost access than were individuals from households with incomes of \$75,000 and up.

Probability sample respondents in Regions 3 and 4 were more likely to suggest parking than were respondents in Region 1. On the other hand, respondents in Region 1 were more likely to recommend having more facilities closer than were respondents in Regions 2, 3 and 4. Region 4 participants were more likely to choose restrooms/bathrooms than were participants in Regions 1, 2 and 3.

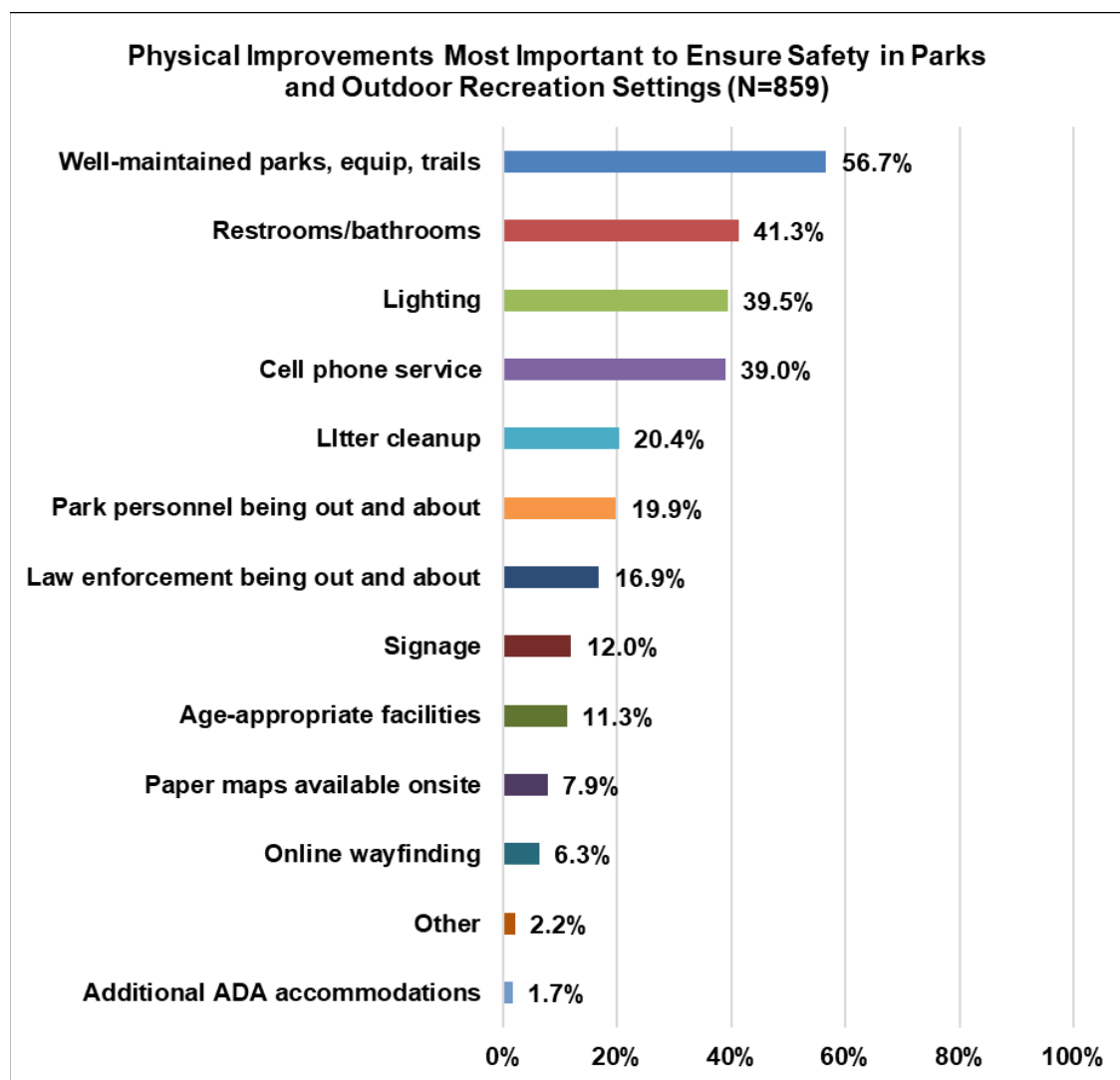
This data is also included in the Diversity, Inclusion and the Underserved section.

Physical Improvements Most Important to Ensure Safety in Parks and Outdoor Recreation Settings: Probability Sample

Question 10 in this year's survey asked which physical improvements were most important to ensure safety. Per Figure 48, 859 probability sample respondents made 2,327 selections through a multiple-response ("Top 3") question design. The most popular choices were well-maintained parks, equipment and trails (56.7%). Restrooms/bathrooms followed (41.3%). Lighting (39.5%) and cell phone service (39.0%) received the next highest endorsements. Almost tied for fifth were litter cleanup (20.4%) and park personnel being out and about (19.9%).

This data is also included in the General Safety section.

Figure 48: Physical improvements most important to ensure safety in parks and outdoor recreation settings 2022, Virginia Outdoors Survey probability sample respondents*

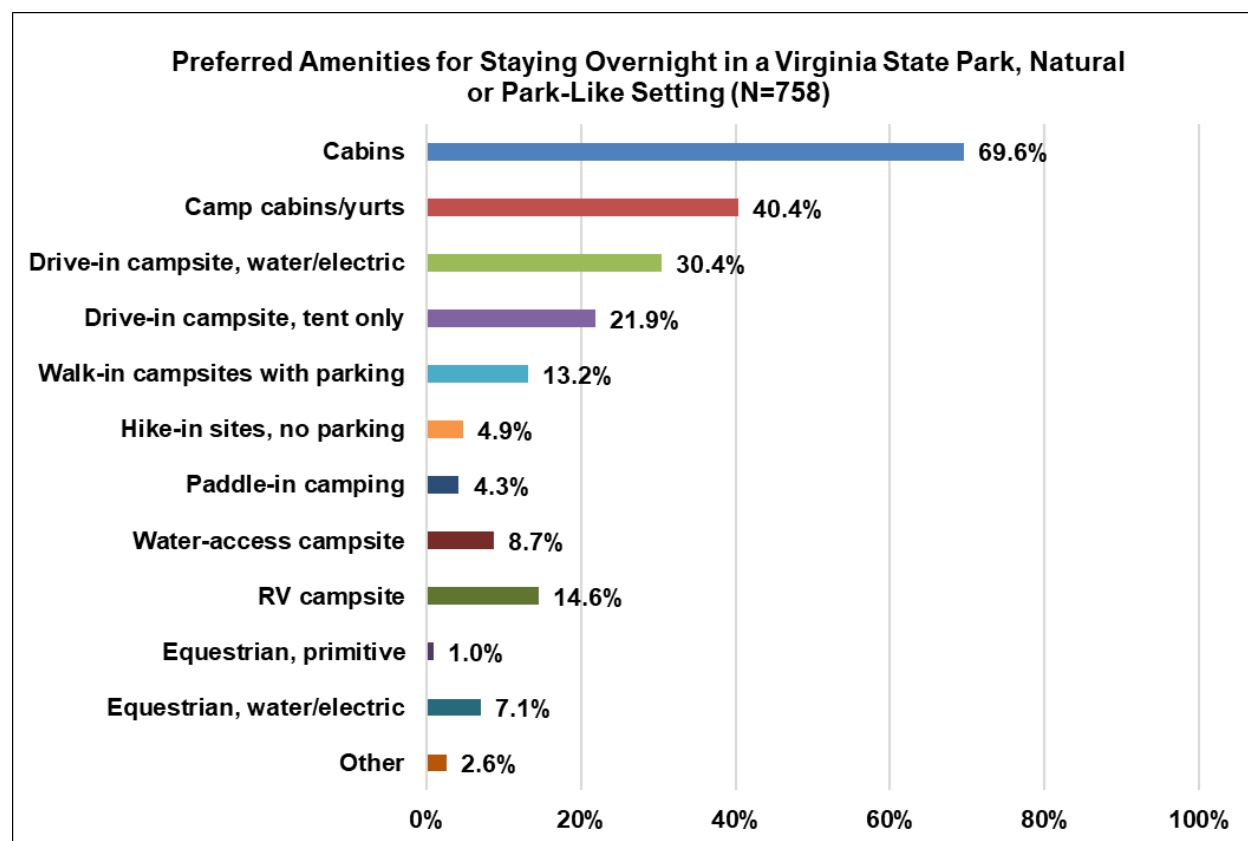


*Note: This question had a multiple-response ("select your top 3 choices") format. A total of 859 individuals answered, providing 2,327 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Preferred Amenities when Staying Overnight in a Virginia State Park, Natural or Park-Like Setting: Probability Sample

Question 34 in this year's questionnaire asked participants to consider amenities they might like to have when staying overnight in a Virginia State Park or other natural or park-like setting. Altogether, 758 probability sample respondents replied with 1,615 votes using a multiple-response ("Top 3") strategy. Examining Figure 49, the features most often preferred were cabins (69.6%), camp cabins/yurts (40.4%), drive-in campsites with water/electric hookups (30.4%), drive-in campsites for tents only (21.9%), and RV campsites (14.6%).

Figure 49: Preferred amenities for staying overnight in a Virginia State Park, natural or park-like setting, 2022 *Virginia Outdoors Survey* probability sample respondents*



*Note: This question had a multiple-response ("select your top 3 choices") format. A total of 758 individuals answered, providing 1,615 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Respondents in the 18-44 age category were more likely to select drive-in campsite, tent only as their preferred campsite or structure when staying overnight at a Virginia state park or other natural or park-like setting. Respondents over the age of 44 were more likely to select RV campsites. Non-Hispanic Latino(a) Black/African-American respondents were more likely to select drive-in campsite, water/electric.

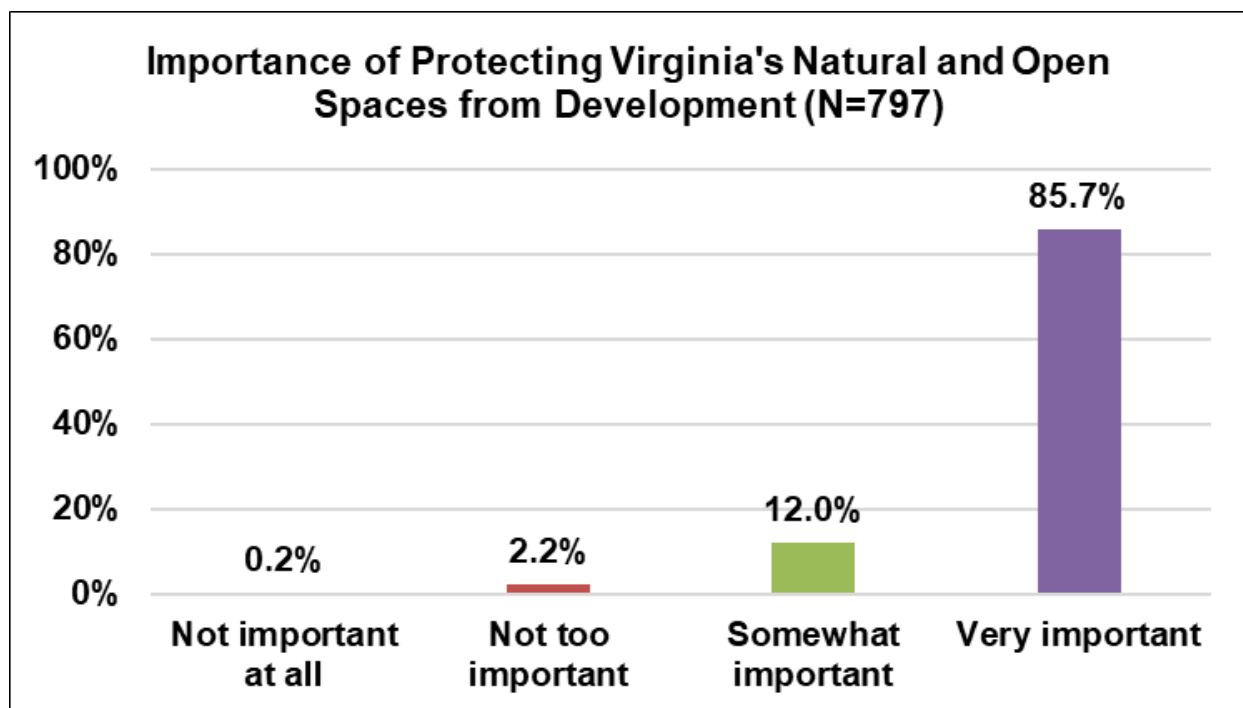
There were no large differences among the four main regions of the state used for geographic analysis, whether or not respondents reported having children in the household, household income, or home ownership status.

Conservation and Public Value: Probability Sample

Importance of Protecting Virginia's Natural and Open Spaces from Development: Probability Sample

Question 43 in the 2022 *Virginia Outdoors Survey* asked participants to rate the importance of protecting the state's natural and open space resources from development. As depicted in Figure 50, the vast majority of 797 probability sample respondents (85.7%) considered this very important. Another 12.0% characterized it as somewhat important.

Figure 50: Importance of protecting Virginia's natural and open spaces from development 2022, Virginia Outdoors Survey probability sample respondents

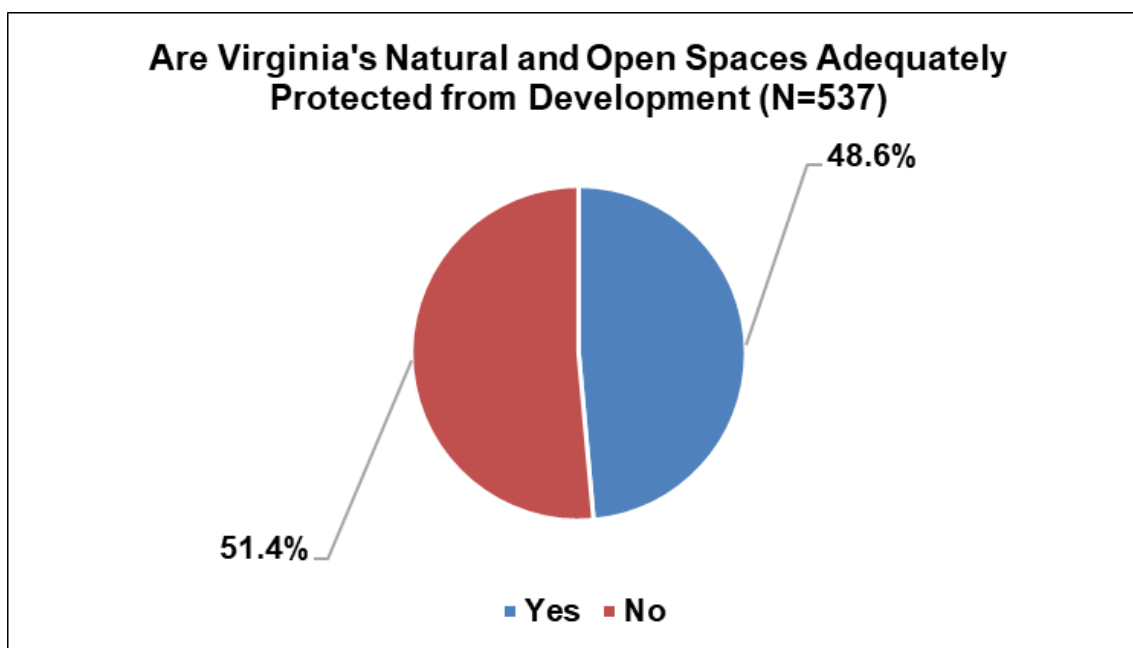


There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Are Virginia's Natural and Open Spaces Adequately Protected from Development: Probability Sample

Question 44 asked participants about their opinions on the level of protection afforded Virginia's natural and open spaces. A total of 537 probability sample respondents answered. Results were almost evenly split – 51.4% said they were not adequately protected from development and 48.6% suggested they were adequately protected from development. Refer to Figure 51.

Figure 51: Are Virginia's natural and open spaces adequately protected from development 2022, Virginia Outdoors Survey probability sample respondents



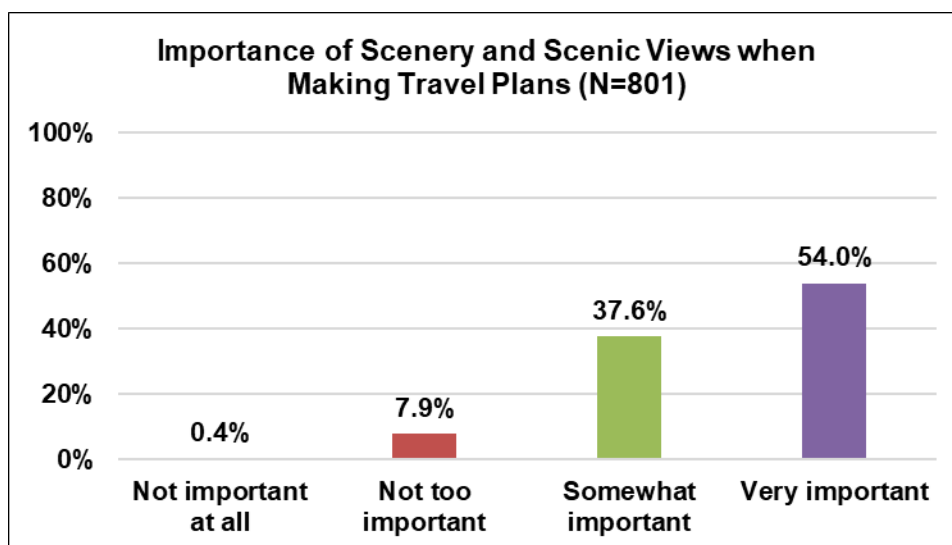
Respondents who rented their home were more likely to select Yes when asked if Virginia's natural/open spaces are adequately protected from development.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, or household income.

Importance of Scenery and Scenic Views when Making Travel Plans: Probability Sample

Question 45 asked respondents to consider the importance of scenery and scenic views when making travel arrangements. More than half of the 801 probability sample respondents to this question (54.0%) rated scenery and scenic views very important and greater than one-third (37.6%) described them as somewhat important. Far fewer respondents characterized scenery and scenic views as not too important (7.9%) to their travel plans. Data appear in Figure 52.

Figure 52: Importance of scenery and scenic views when making travel plans 2022, Virginia Outdoors Survey probability sample respondents

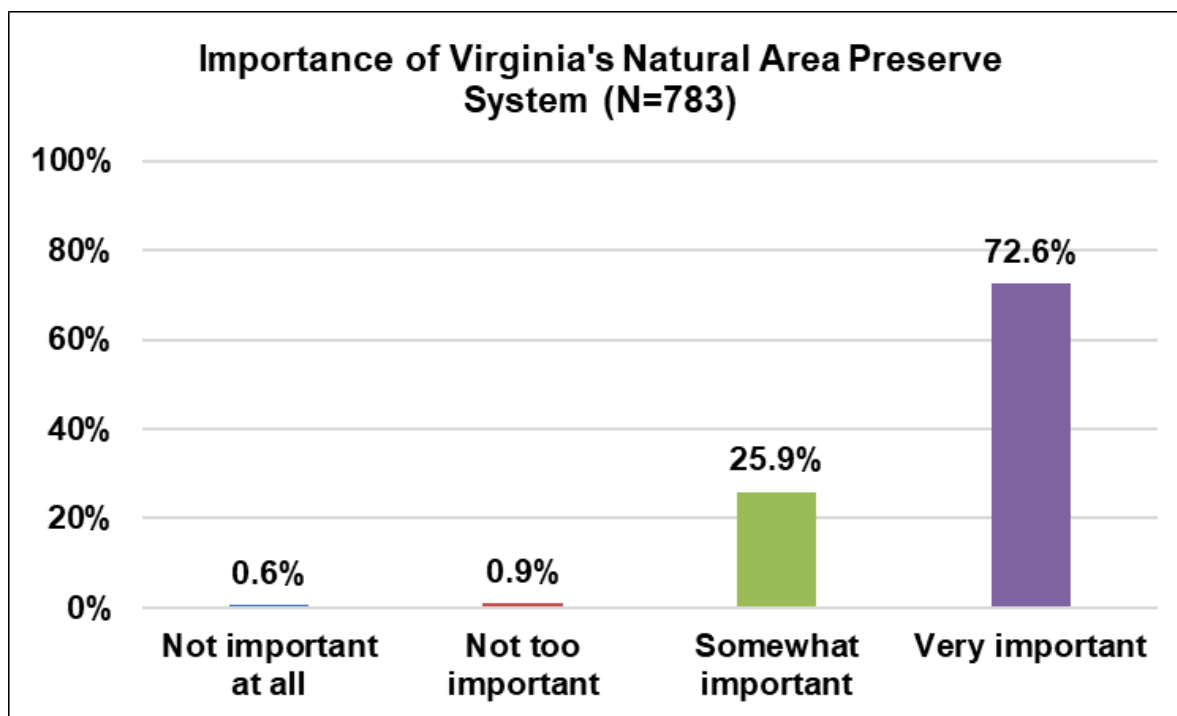


There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Importance of Virginia's Natural Area Preserve System: Probability Sample

Question 46 in this year's questionnaire prompted participants to reflect on Virginia's Natural Area Preserve System. Nearly all 783 probability sample respondents said it was either very important (72.6%) or somewhat important (25.9%) to them that the commonwealth have this system. Consult Figure 53 for more information.

Figure 53: Importance of Virginia's Natural Area Preserve System 2022, *Virginia Outdoors Survey* probability sample respondents



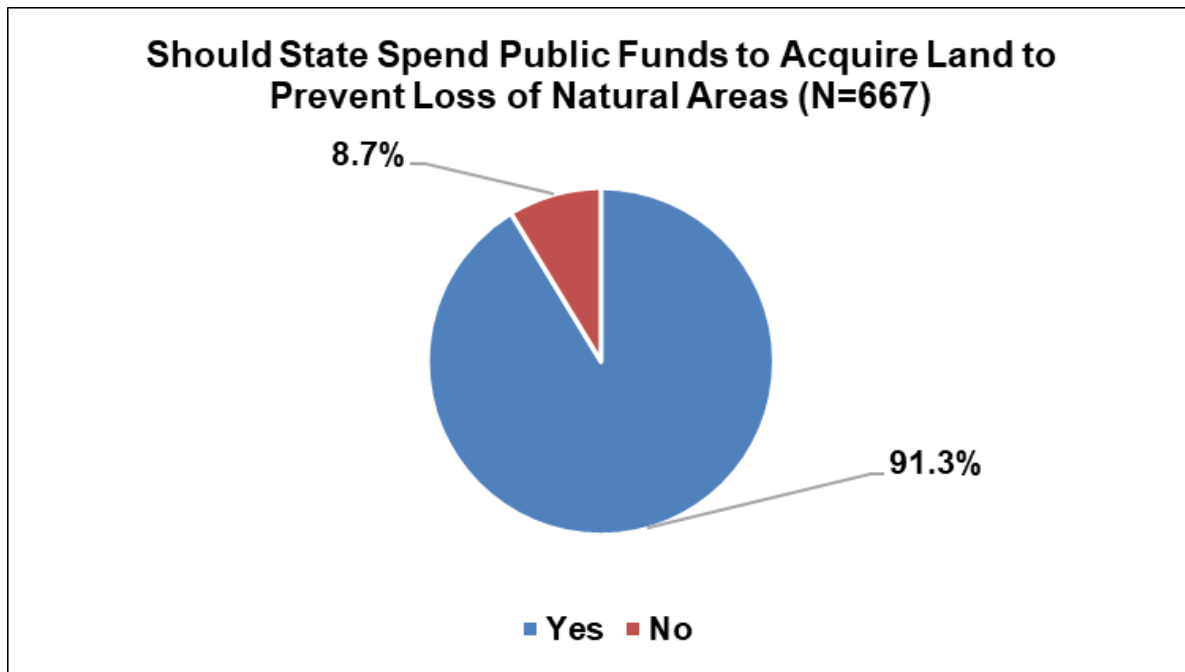
Respondents in Region 2 and Region 4 were more likely to rate having a Virginia Natural Area Preserve System as very important, compared to respondents in Region 1.

There were no large differences among the age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Should the State Spend Public Funds to Acquire Land to Prevent the Loss of Natural Areas: Probability Sample

Question 48 asked if the state should spend public funds to acquire land to prevent the loss of natural areas, almost all 667 probability sample respondents said yes (91.3%). Less than nine percent said no (8.7%). Results are displayed in Figure 54.

Figure 54: Should state spend public funds to acquire land to prevent loss of natural areas 2022 Virginia Outdoors Survey, probability sample respondents

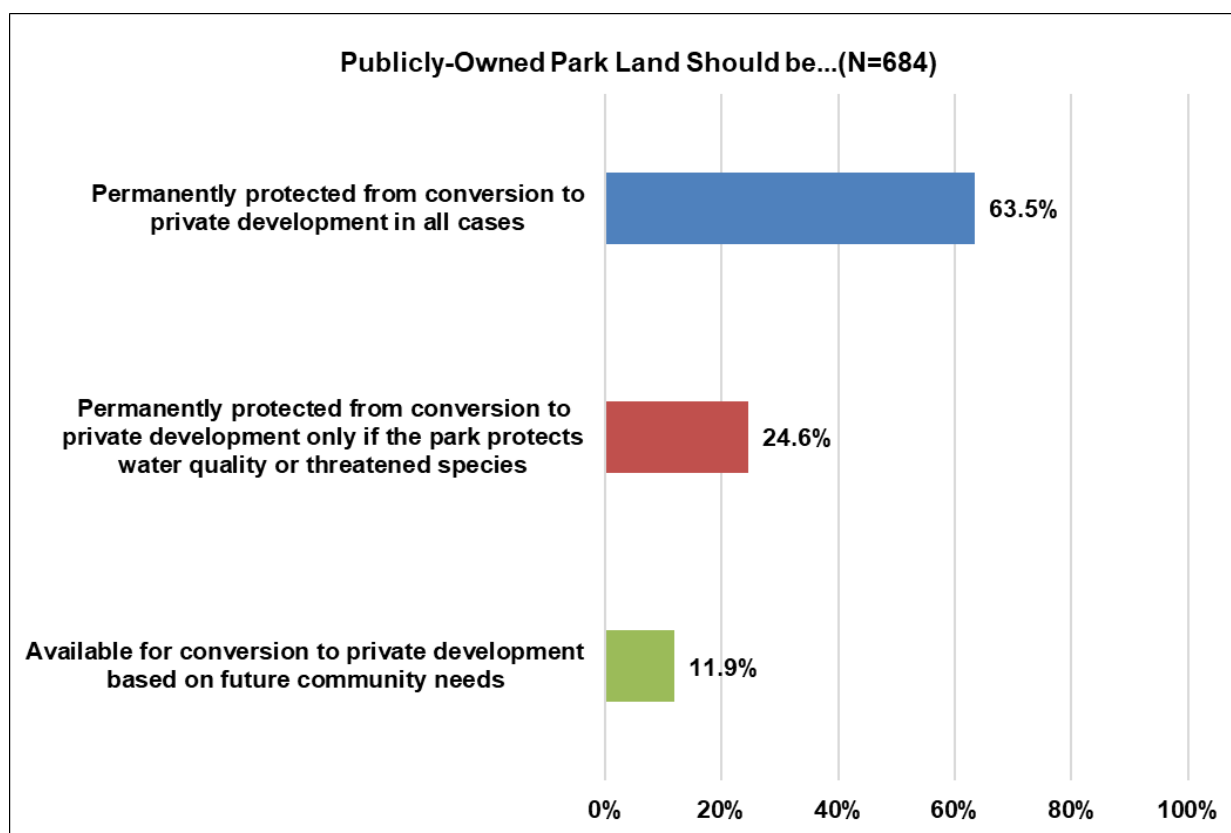


There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Perspectives on Publicly-Owned Park Land: Probability Sample

Question 50 in the 2022 *Virginia Outdoors Survey* gauged the sentiments of participants regarding publicly-owned park land. Per data in Figure 55, among 684 probability sample respondents, 63.5% believed that publicly-owned park land should be permanently protected from conversion to private development in all cases. Roughly one quarter (24.6%) thought that publicly-owned park land should be permanently protected from conversion to private development only if the park protects water quality or threatened species. Another 11.9% suggested that publicly-owned park land should be available for conversion to private development.

Figure 55: Perspectives on publicly-owned park land 2022 *Virginia Outdoors Survey*, probability sample respondents



Respondents within the 18-44 age category were more likely to select “Available for conversion to private development based on future community needs” when asked what should be done with publicly owned park land. Non-Hispanic/Latino(a) Black/African-American respondents were also more likely to select “Available for conversion to private development based on future community needs.” Respondents who rented their home were also more likely to select “Available for conversion to private development based on future community needs.”

There were no large differences among the four main regions of the state used for geographic analysis, whether or not respondents reported having children in the household, or household income.

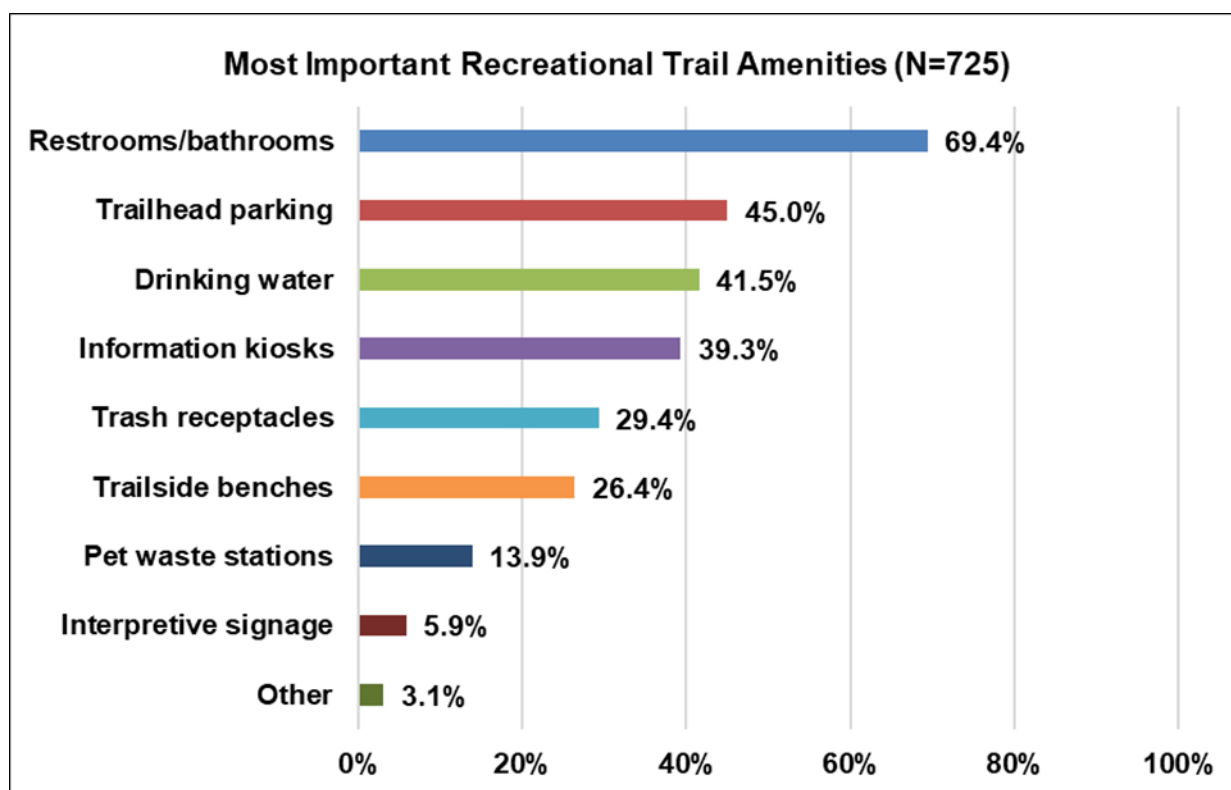
Trails: Probability Sample

Importance of Amenities when Using Recreational Trails: Probability Sample

Question 29 asked which amenities were most important when using recreational trails. Altogether, 725 probability sample respondents made 2,002 selections through a multiple-response (“Select your top 3 choices”) approach. The foremost answers were restrooms/bathrooms (69.4%) followed by trailhead parking (45.0%) and drinking water (41.5%). Results are furnished in Figure 56.

This data is also included in the Recreation Funding and Amenities section.

Figure 56: Importance of amenities when using recreational trails 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“select your top 3 choices”) format. A total of 725 individuals answered, providing 2,002 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%

Estimates of Close-to-Home Trail: Probability Sample

In Question 30, respondents were encouraged to consider what might be a close-to-home trail. Per Table 8, 566 probability sample respondents listed an average of 14.8 minutes by walking, 491 respondents recorded an average of 15.2 minutes by biking, and 721 respondents came up with an average of approximately 19.0 minutes by driving.

This data is also included in the Diversity, Inclusion and the Underserved section.

Table 8: Close-to-home trail estimates by walk, bike ride and drive (minutes) 2022 Virginia Outdoors Survey probability sample respondents

Mode of travel to trail and N value	Mean minutes	Median minutes	Mode minutes
Walk (N=566)	14.8	10.0	10.0
Bike ride (N=491)	15.2	15.0	10.0
Drive (N=721)	19.0	15.0	10.0

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

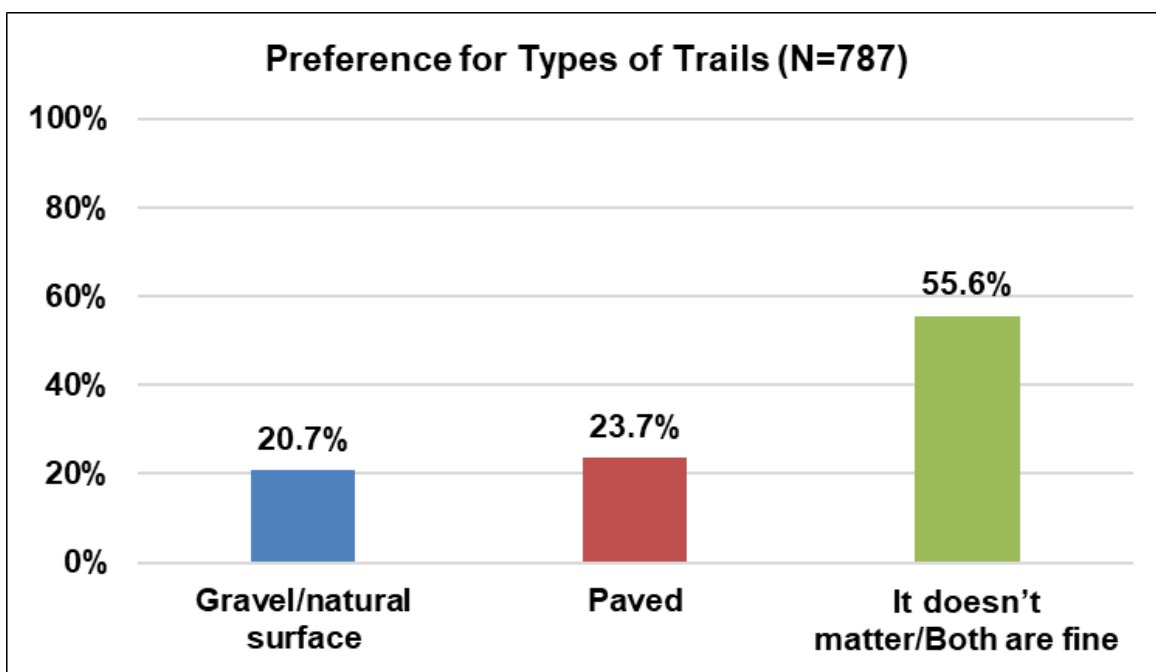
No differences were found regardless of whether the close-to-home trail was defined by walking, bicycling, or driving.

Preference for Types of Trails: Probability Sample

Question 31 invited participants if they preferred paved trails or gravel/natural surface trails. More than half (55.6%) said they had no preference or both types of trails are fine. A little less than one-quarter (23.7%) preferred paved trails, and roughly 1 in 5 (20.7%) indicated a preference for gravel/natural surface trails. Consult Figure 57.

This data is also included in the Recreation Funding and Amenities section.

Figure 57: Preference for types of trails, 2022 *Virginia Outdoors Survey* probability sample respondents

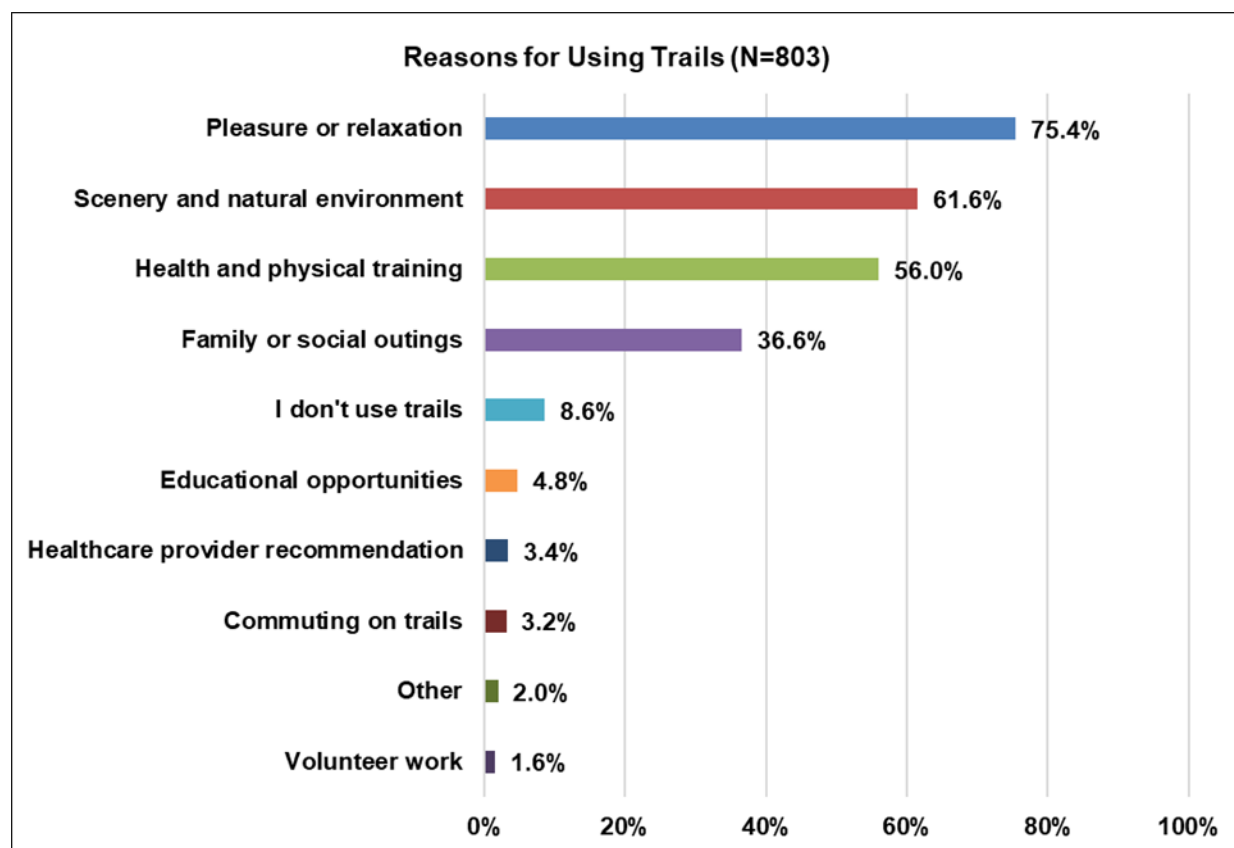


Reasons for Using Trails: Probability Sample

Question 32 in the 2022 *Virginia Outdoors Survey* asked participants why they use trails. In sum, 803 probability sample respondents made 1,978 choices using a multiple-response (“Top 3”) question design. The most popular answers involved using trails for pleasure or relaxation (75.4%), scenery and natural environment (61.6%) and health and physical training (56.0%). Results appear in Figure 58.

This data is also included in the Recreation Demand and Capacity section.

Figure 58: Reasons for using trails, 2022 *Virginia Outdoors Survey* probability sample respondents*



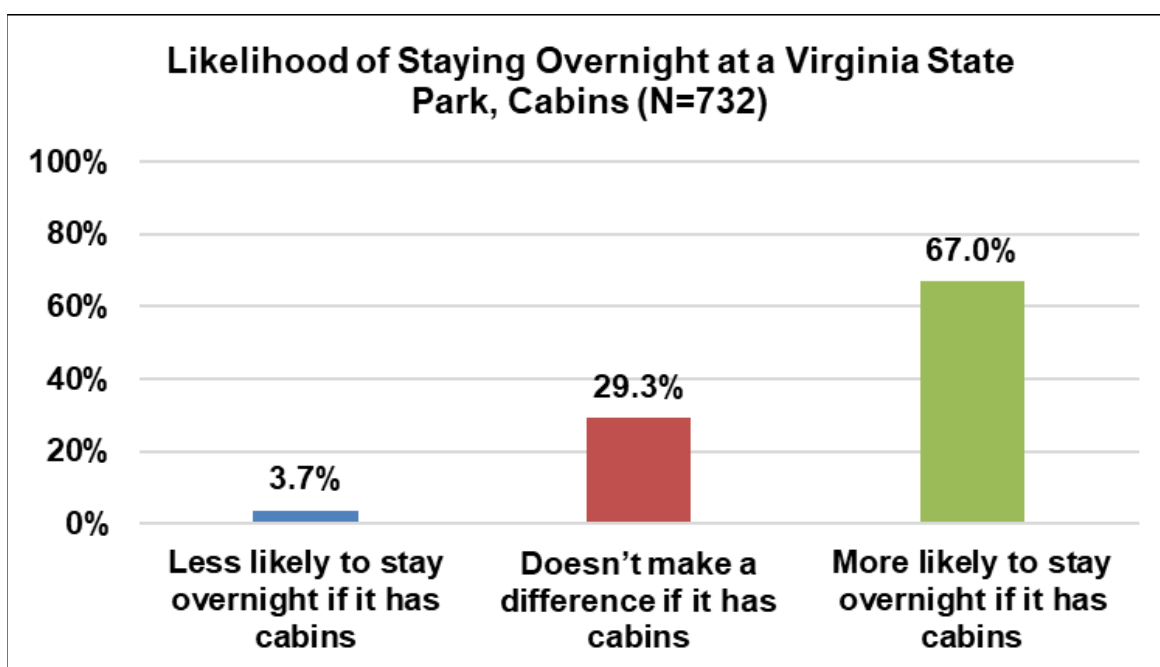
*Note: This question had a multiple-response (“Select your top 3 choices”) format. A total of 803 individuals answered, providing 1,978 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

Virginia State Parks: Probability Sample

Likelihood of Staying Overnight at a Virginia State Park, Cabins: Probability Sample

Question 35 in this year's survey asked participants how likely they might be to stay overnight at a Virginia State Park if it has cabins. Among 732 probability sample respondents, two-thirds (67.0%) indicated they would be more likely to stay overnight if it has cabins. Refer to Figure 59.

Figure 59: Likelihood of staying overnight at a Virginia State Park – cabins, 2022 *Virginia Outdoors Survey* probability sample respondents



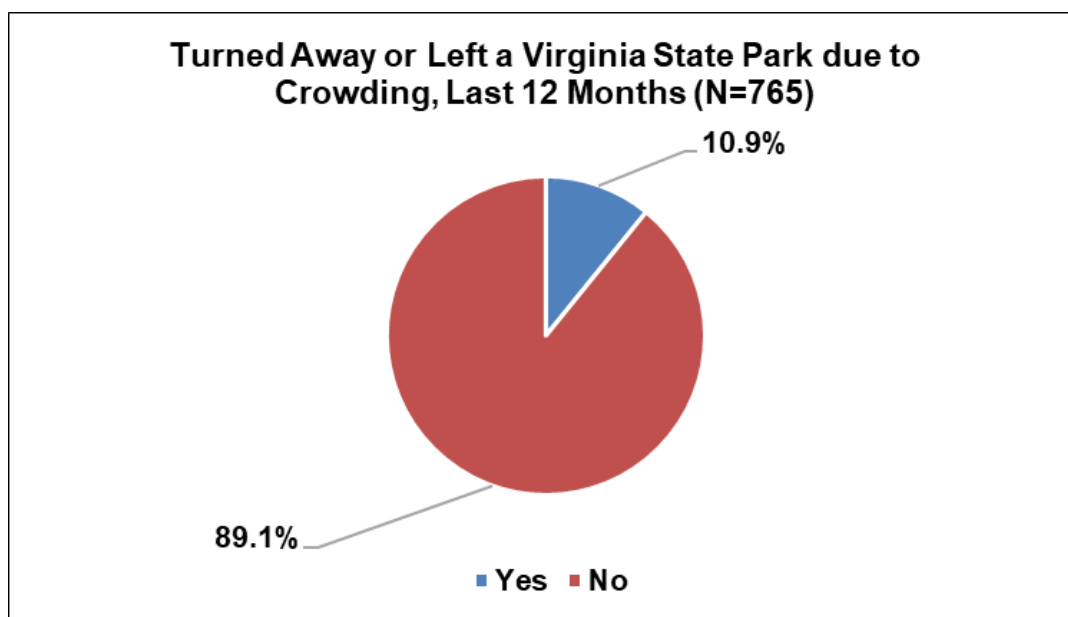
Compared to respondents in other DCR regions, those in Region 1 were more likely to select “Less likely to stay overnight if it has cabins” and less likely to say it doesn’t make a difference if the park has cabins. Non-Hispanic/Latino(a) White respondents were more likely to say it doesn’t matter if the park has cabins when asked about their likelihood to stay overnight. Non-Hispanic/Latino(a) Black/African American respondents were more likely to select “Less likely to stay overnight if it has cabins.”

There were no large differences among the age categories, whether or not respondents reported having children in the household, household income, or home ownership status.

Turned Away or Left a Virginia State Park due to Crowding, Last 12 Months: Probability Sample

In Question 36, respondents were asked if they – or anyone else in their households – had gone to a Virginia State Park and been turned away or left due to crowding in the preceding 12 months. A vast majority of probability sample respondents did not have this experience (89.1%), as demonstrated in Figure 60.

Figure 60: Turned away or left a Virginia State Park due to crowding in the last 12 months, 2022 Virginia Outdoors Survey, probability sample respondents

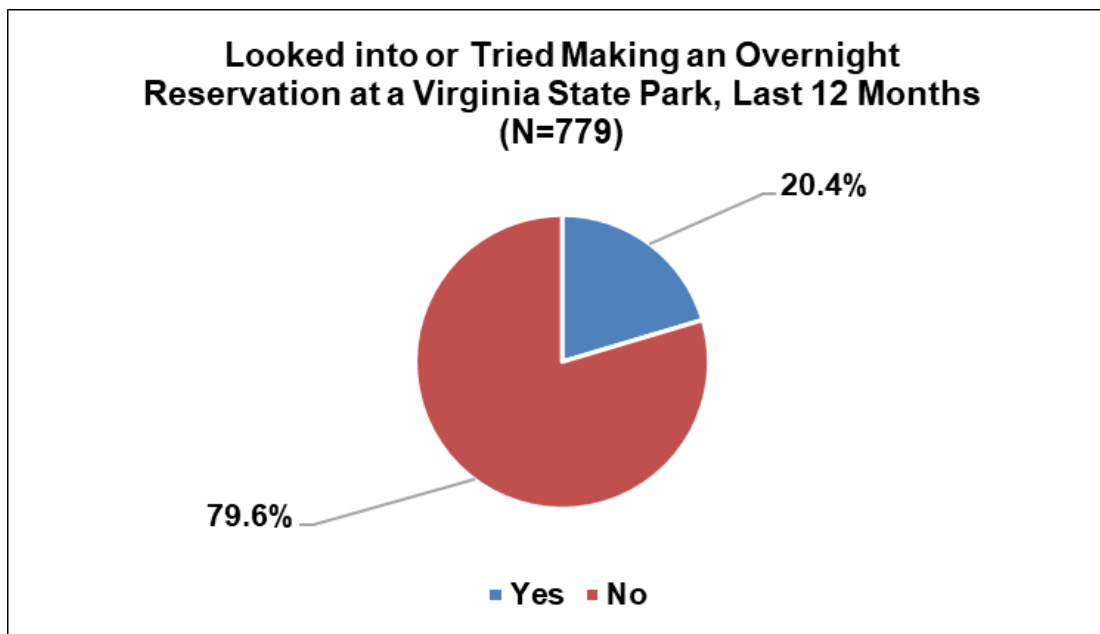


There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Looked into or Tried Making an Overnight Reservation at a Virginia State Park, Last 12 Months: Probability Sample

Question 37 in the survey went on to ask if participants – or others in their households – had researched and/or attempted to make an overnight reservation at a Virginia State Park in the prior 12 months. Per Figure 61, 79.6% of 779 probability sample respondents had not done this.

Figure 61: Looked into or tried making an overnight reservation at a Virginia State Park, in the last 12 months, 2022 *Virginia Outdoors Survey* probability sample respondents



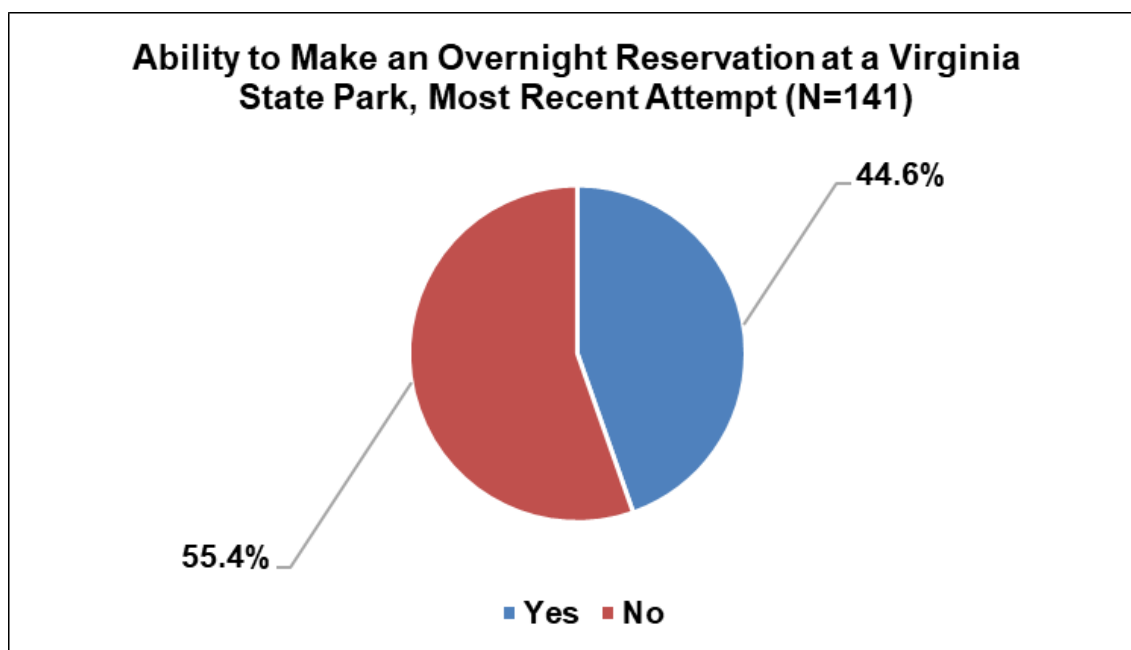
Respondents who reported having children in the household were more likely to say they attempted to make an overnight reservation in a Virginia state park within the last 12 months.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, race categories, household income, or home ownership status.

Ability to Make an Overnight Reservation at a Virginia State Park, Most Recent Attempt: Probability Sample

Question 38 was asked persons who had researched and/or tried to make an overnight reservation at a Virginia State Park in the last 12 months whether they had been able to make the reservation on their most recent attempt. Approximately half (55.4%) were unable to make the reservation. See Figure 62 for more details.

Figure 62: Ability to make an overnight reservation at a Virginia State Park (most recent attempt), 2022 Virginia Outdoors Survey probability sample respondents



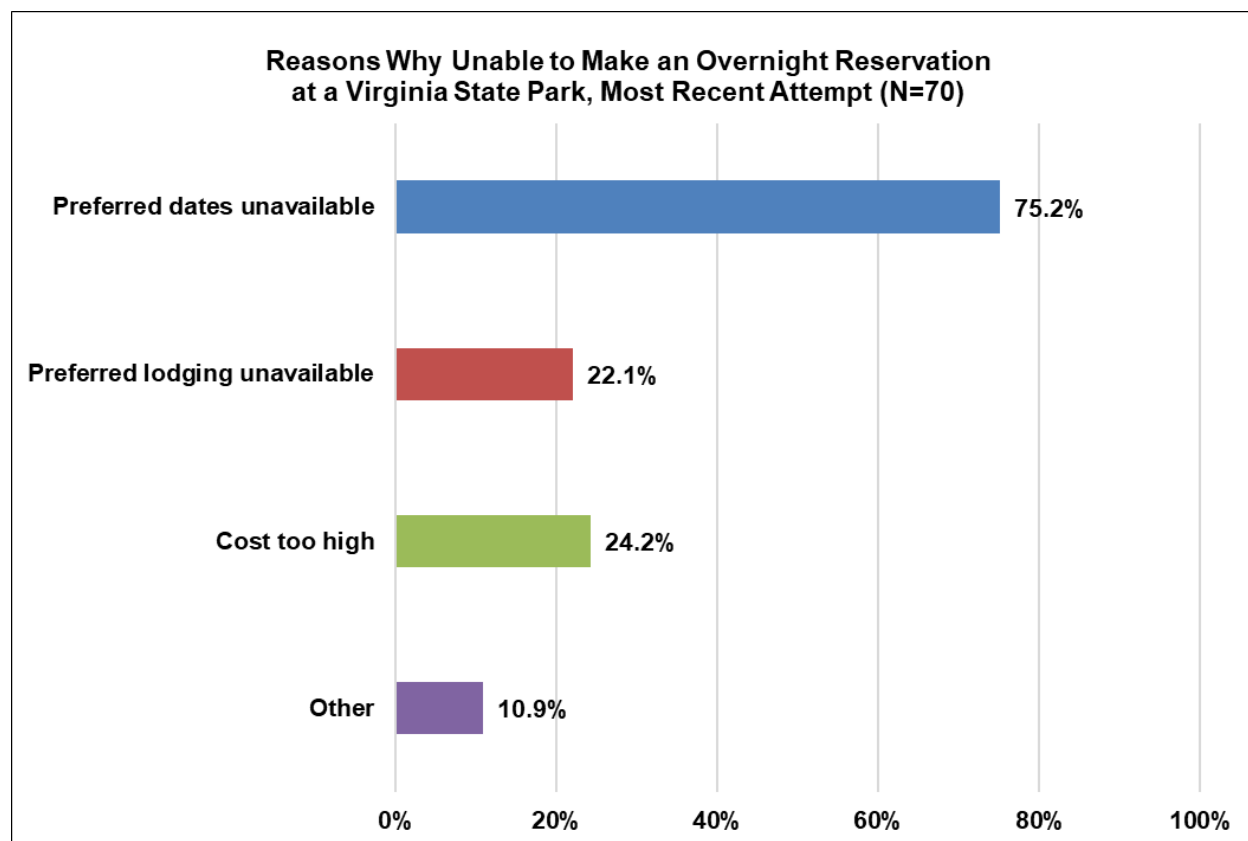
Respondents who did not have children in the household were more likely to select Yes when asked if they were able to make an overnight reservation in a Virginia state park.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, race categories, household income, or home ownership status.

Reasons for Not Being Able to Make an Overnight Reservation at a Virginia State Park, Most Recent Attempt: Probability Sample

In Question 39, the 70 probability sample respondents – or their household members – who were not able to make an overnight reservation at a Virginia State Park on their most recent attempt were asked why not. The leading reason was that their preferred dates were not available (75.2%). Other causes included costs (24.2%) and also the unavailability of preferred lodging (22.1%). This question had a multiple-response (“check all that apply”) design and a total of 97 responses were recorded. Consult Figure 63.

Figure 63: Reasons for not being able to make an overnight reservation at a Virginia State Park (most recent attempt), 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format. A total of 70 individuals answered, providing 96 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

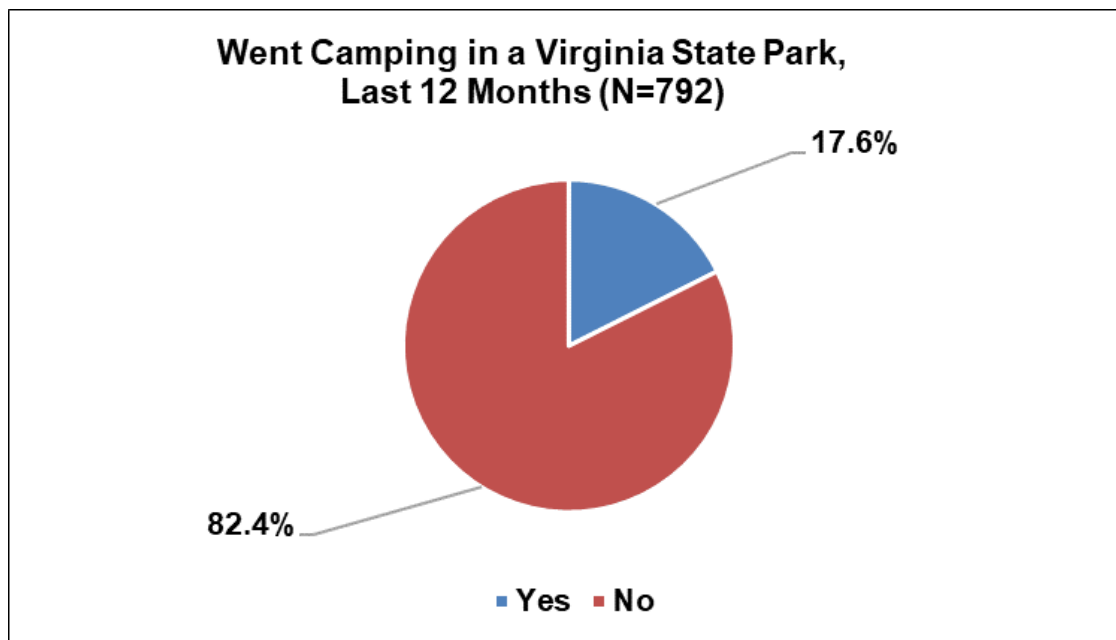
Respondents in Region 3 were more likely to select “Preferred lodging unavailable” as the reason why they were unable to make an overnight reservation at a Virginia state park. Respondents in the 18-44 age category were more likely to select “Preferred dates unavailable” as their reason. Respondents with household incomes in categories below \$75,000 were all more likely to select “Preferred lodging unavailable.” Respondents with a household income between \$75,000-\$149,999 were more likely to select “Preferred dates unavailable.” Respondents who rented their home were more likely to select “Preferred lodging unavailable.”

There were no large differences among whether or not respondents reported having children in the household or race categories.

Camping in a Virginia State Park, Last 12 Months: Probability Sample

Question 40 in the 2022 *Virginia Outdoors Survey* asked participants if they – or anyone else in their household – had gone camping in a Virginia State Park in the 12 months prior. Of the 792 probability sample respondents who answered, 82.4% had not been camping during this timeframe. Data appear in Figure 64.

Figure 64: Went camping in a Virginia State Park, last 12 months, 2022 *Virginia Outdoors Survey* probability sample respondents



Respondents under the age of 65 were more likely to select Yes when asked if they or anyone in their household went camping in a Virginia state park within the last 12 months. Non-Hispanic/Latino(a) Black/African American respondents were more likely to select No when compared to all other race categories.

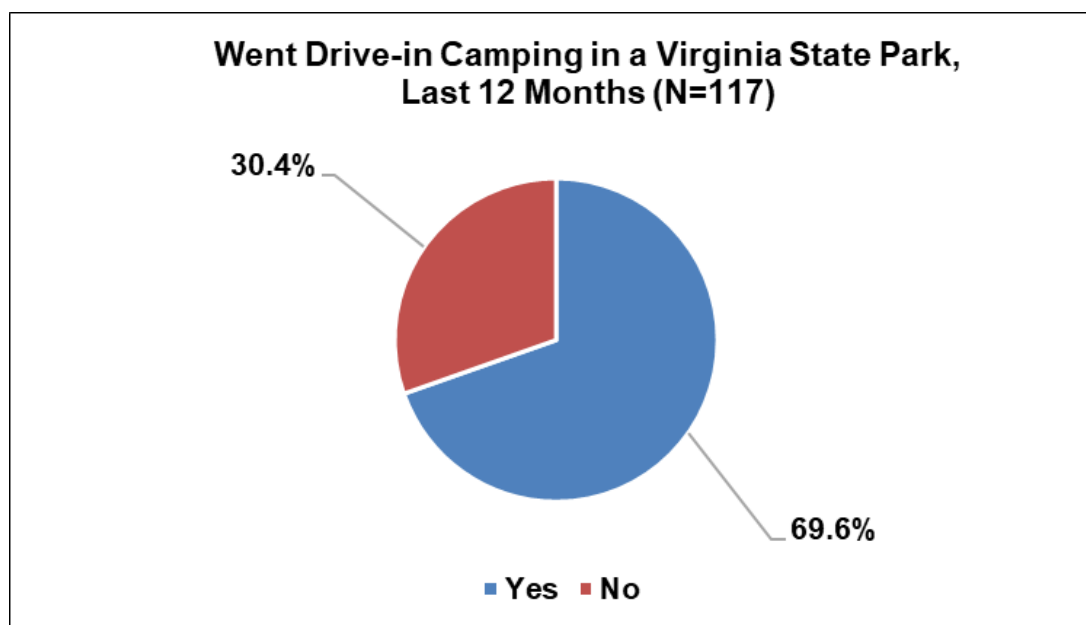
There were no large differences among the four main regions of the state used for geographic analysis, whether or not respondents reported having children in the household, household income, or home ownership status.

Drive-in Camping in a Virginia State Park, Last 12 Months: Probability Sample

Question 41 asked respondents who said they or other people in their households had gone camping in a Virginia State Park in the past 12 months if they – or other people in their households – had been drive-in camping in a Virginia State Park in the preceding 12 months.

As Figure 65 reveals, roughly 7 in 10 of these participants (69.6%) indicated that they had used drive-in camping in a Virginia State Park in the 12 months prior to the survey.

Figure 65: Went drive-in camping in a Virginia State Park (respondent or others in household), last 12 months, 2022 Virginia Outdoors Survey probability sample respondents



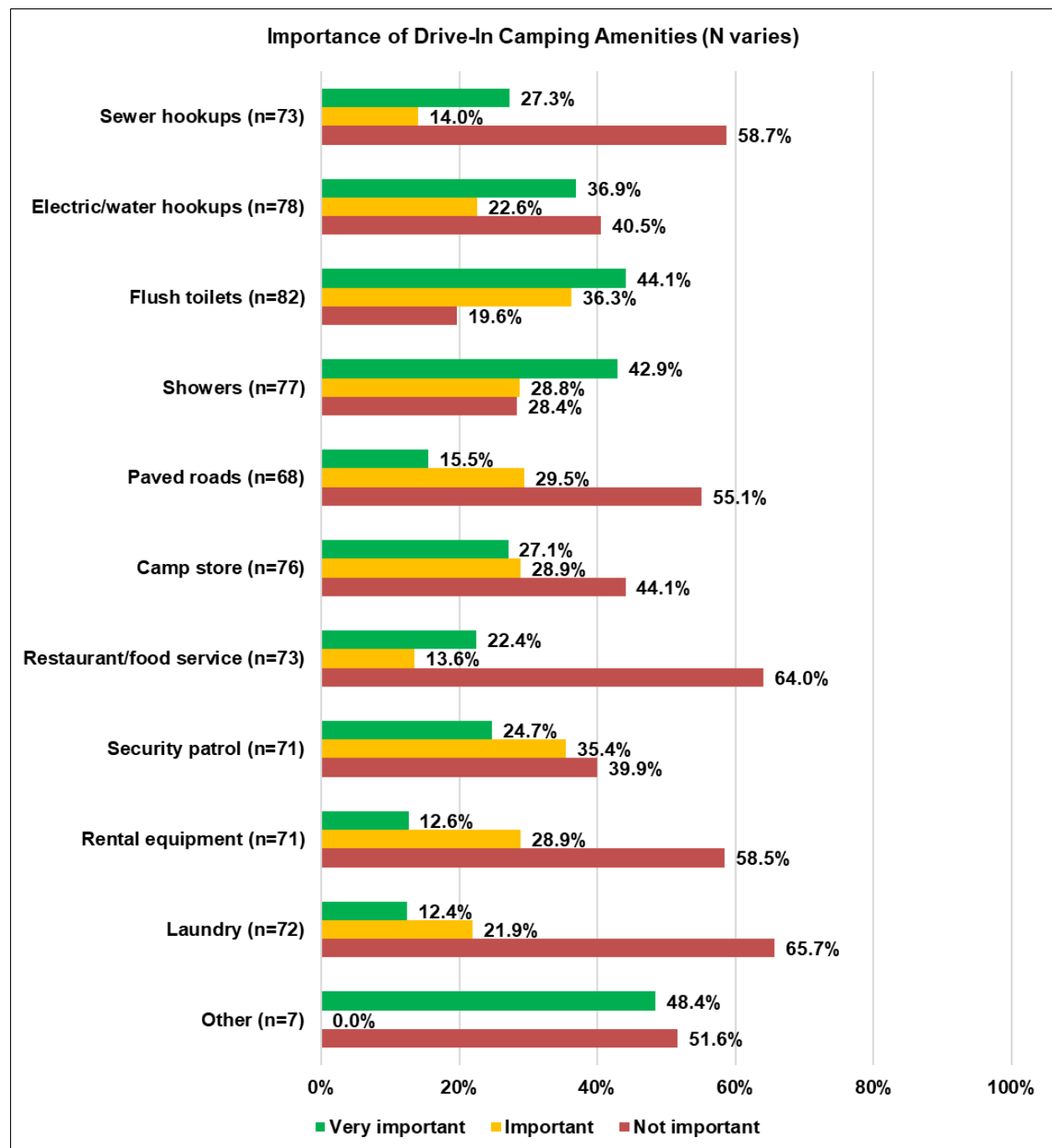
Respondents who did not have children in the household were more likely to select Yes when asked if they or anyone in their household went drive-in camping in a Virginia state park within the last 12 months. Respondents who rented their home were also more likely to select Yes.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, race categories, or household income.

Importance of Drive-In Camping Amenities: Probability Sample

Question 42 asked those who had done drive-in camping in a Virginia State Park in the last 12 months about the importance of several drive-in camping amenities. Features that received the highest percentages of “very important” ratings were flush toilets (44.1%) and showers (42.9%). Flush toilets also had the highest percentage of “important” responses (36.3%). This was followed by security patrol (35.4%). Conversely, when considered next to other amenities, laundry (65.7%) and restaurant/food service (64.0%) had the highest percentages of “not important” answers. Note that low numbers of responses may limit these conclusions.

Figure 66: Importance of drive-in camping amenities to respondent and others in household, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: Each amenity could be rated “not important,” “important” or “very important.” Results displayed here reflect percentages of total votes for the amenity in question.

Respondents in Region 3 were far more likely to rate electric/water hookups as an important amenity to drive-in camping sites compared to all other regions. Region 4 was also far more likely to rate showers as an important amenity to drive-in camping sites compared to all other

regions. Respondents within the 18-44 age category were more likely than older respondents were to rate nearly every option as important except for flush toilets and showers. Respondents who owned or were in the process of buying their home were more likely to select laundry.

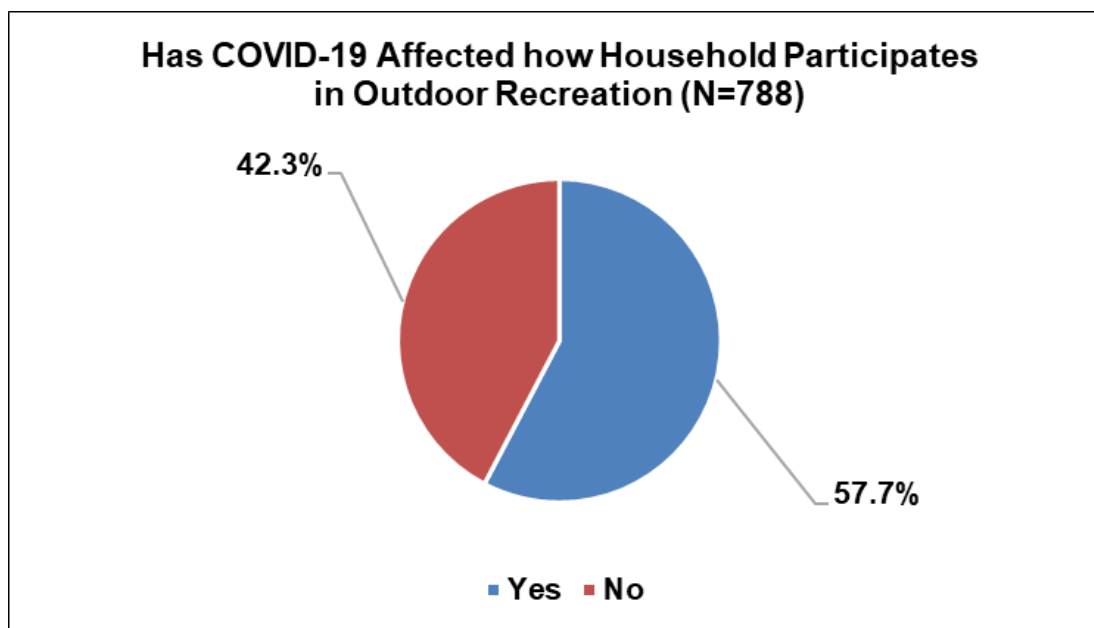
There were no large differences among whether or not respondents reported having children in the household, race categories, or household income.

COVID-19 Impacts: Probability Sample

Has COVID-19 Affected How Household Participates in Outdoor Recreation: Probability Sample

Question 51 was one of several new questions in the survey about COVID-19. Respondents were asked if the pandemic had affected how their household participates in outdoor recreation. As depicted in Figure 67, more than half of 788 probability sample respondents to this question (57.7%) said yes, it had been affected. On the other hand, 42.3% indicated it had not been affected.

Figure 67: Has COVID-19 affected how household participates in outdoor recreation, 2022 Virginia Outdoors Survey probability sample respondents



Respondents in Region 3 and Region 4 differed strongly on reporting whether COVID-19 affected their participation in outdoor recreation. Respondents in Region 3 were more likely to select No and respondents in Region 4 were more likely to select Yes. Non-Hispanic/Latino(a) White respondents differed from Non-Hispanic/Latino(a) Black/African-American respondents, with Non-Hispanic/Latino(a) White respondents more likely to select No while Non-Hispanic/Latino(a) Black/African-American non-Hispanic respondents more likely to select Yes.

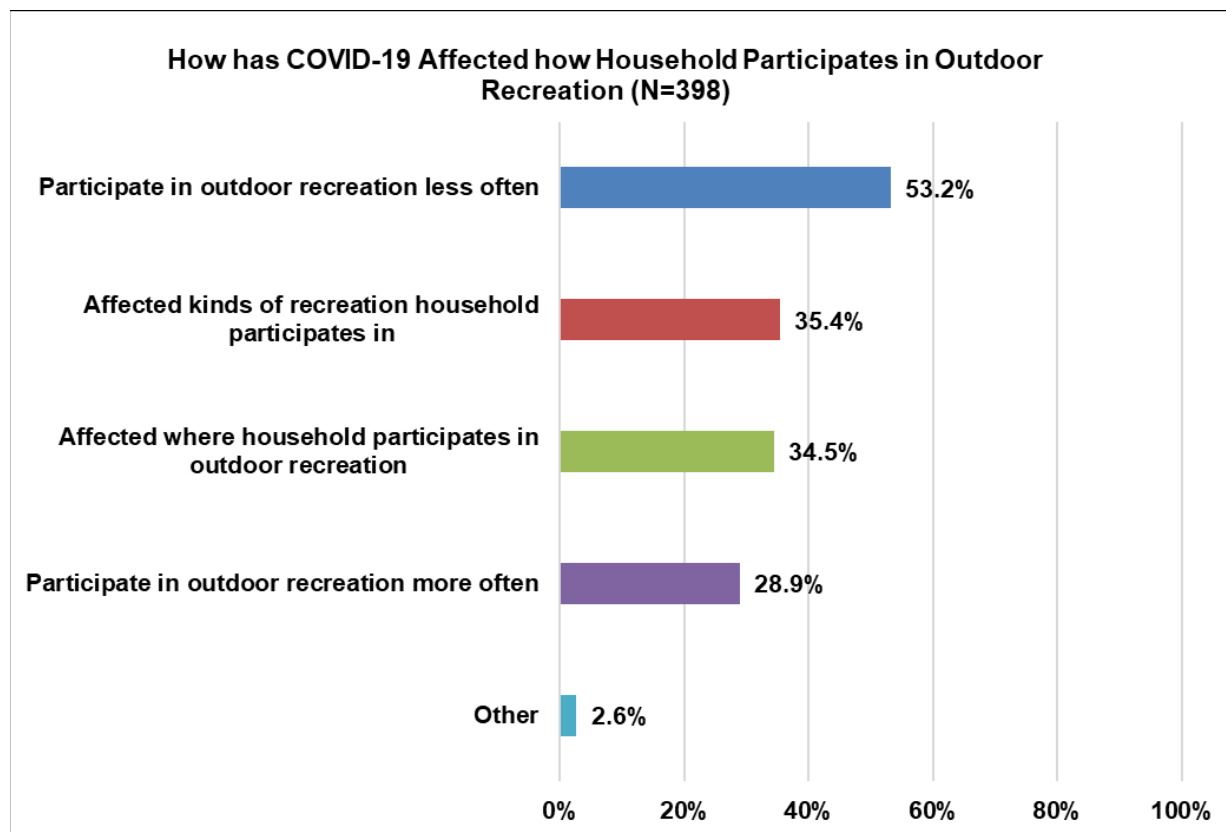
Respondents who owned or were in the process of buying their home differed from respondents who rented their home, with homeowners being more likely to select No while respondents who rented their home were more likely to select Yes.

There were no large differences among the age categories, whether or not respondents reported having children in the household, or household income.

How Has COVID-19 Affected Household Participation in Outdoor Recreation: Probability Sample

Question 52 followed up on the question above with those answered “Yes,” and asked how COVID-19 had affected household participation in outdoor recreation. A total of 398 probability sample respondents gave 607 answers through a multiple-response (“check all that apply”) strategy. The most frequent selection was that the household participates in outdoor recreation less often (53.2%). Next was that COVID-19 affected the kinds of outdoor recreation in which the household participates (35.4%). Following closely was that COVID-19 affected where the household participates in outdoor recreation (34.5%). In fourth place was that the household participates in outdoor recreation more often (28.9%). Look to Figure 68.

Figure 68: How has COVID-19 affected how household participates in outdoor recreation, 2022 Virginia Outdoors Survey probability sample respondents*



*Note: This question had a multiple-response (“check all that apply”) format. A total of 398 individuals answered, providing 607 responses. The data displayed in this chart reflect percentages of weighted numbers of respondents giving a particular answer. Percentages can sum to more than 100%.

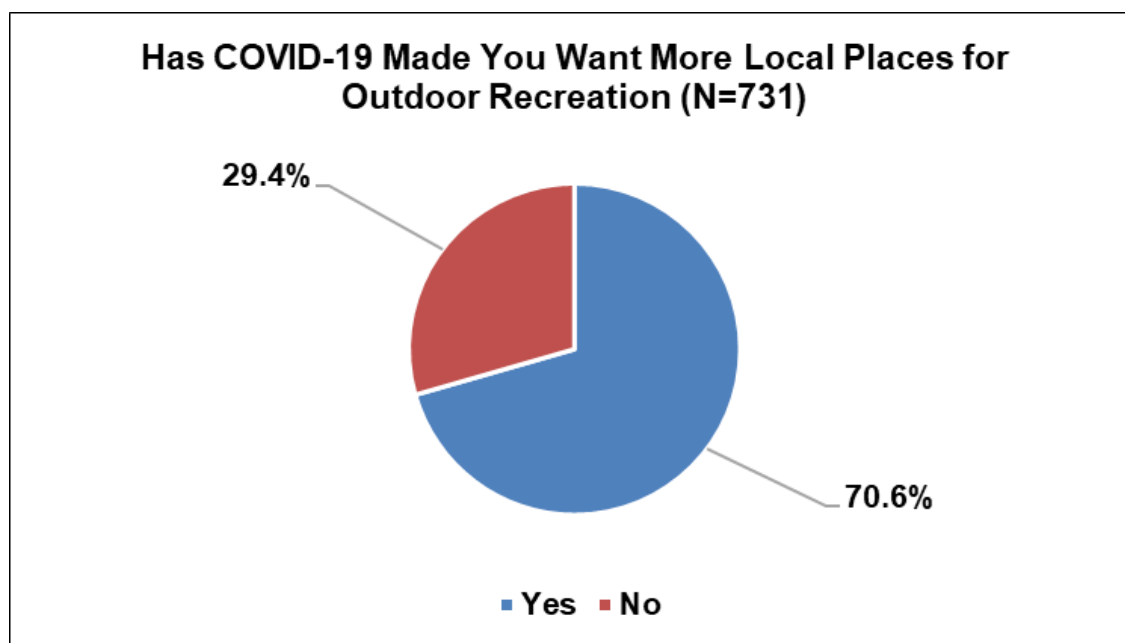
Respondents in Region 4 were more likely to say they participate less often as an impact of COVID-19 on their outdoor recreation activities. Respondents in Region 1 were more likely to select “Affected kinds of recreation.” Respondents in the 18-44 age category were more likely to select “Participate more often.” Respondents with a reported household income of \$150,000 or higher were far more likely to select “Participate more often.” whereas respondents in all other remaining income categories were more likely to select “Participate less often.” Respondents who rented their home were more likely to select “Participate less often.”

There were no large differences among whether or not respondents reported having children in the household or the race categories.

Has COVID-19 Made You Want More Local Places to Experience Outdoor Recreation: Probability Sample

Question 53 asked if COVID-19 made participants want more local places to experience outdoor recreation. Altogether, 731 probability sample respondents replied. Roughly 7 in 10 (70.6%) said yes; and about 3 in 10 (29.4%) said no. See Figure 69 for more information.

Figure 69: Has COVID-19 made you want more local places for outdoor recreation, 2022 Virginia Outdoors Survey probability sample respondents

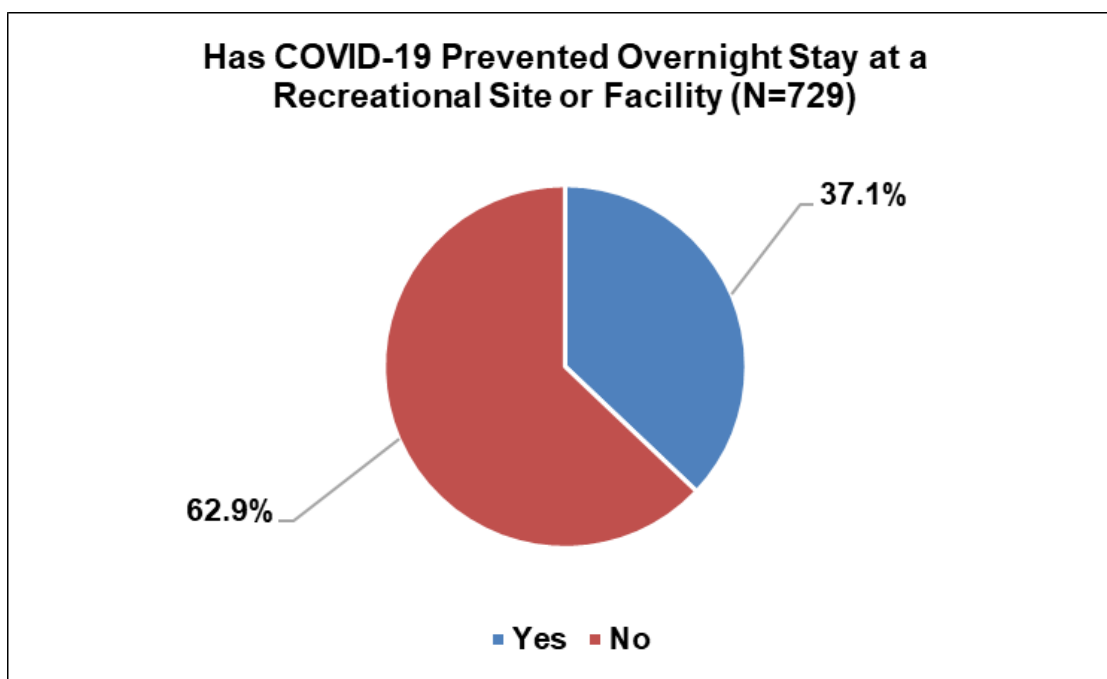


There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Has COVID-19 Prevented an Overnight Stay at a Recreational Site or Facility: Probability Sample

Question 54 was a fourth and final question about the pandemic. It asked if COVID-19 had prevented an overnight stay at a recreational site or facility. As Figure 70 illustrates, 729 probability sample respondents answered. Approximately 62.9% said no and around 37.1% said yes.

Figure 70: Has COVID-19 prevented an overnight stay at a recreational site or facility, 2022 Virginia Outdoors Survey probability sample respondents



Among the race categories, non-Hispanic/Latino(a) White respondents were far more likely to select No when asked if COVID-19 prevented them from staying overnight at a recreation site/facility compared to other race/ethnicity categories. Respondents with a reported household income of \$150,000 or higher were more likely to select No.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, or home ownership status.

Activities – Probability Sample

The 2022 Virginia Outdoors Survey asked participants several questions pertaining to 105 outdoor activities. Appearing in subsequent pages are data reflecting probability sample and crowd-source results.

To make the survey easier to complete, the 105 activities were grouped by eight themes and presented in eight standalone “activity grids.” For each activity in a grid, respondents were asked to indicate:

1. Is more of this activity needed?
2. Did you or anyone in your household do this activity in the last 12 months?
3. If yes to #2:
 - a. On how many days in the last 12 months did you or anyone in your household do this activity?
 - b. Was an overnight stay involved?
 - c. Was the activity done mostly in Virginia?

Note that data tables found on the following pages summarize the responses for all five of the questions listed above for all 105 activities across the eight activity grids. Data are shown statewide and broken down by DCR region for comparison purposes. Activities are sorted in descending order by the statewide percentage or median number of days. In these tables, the following abbreviations are found:

1. “w” indicates a weighted statistic
2. “Col” means “column”
3. “Med” stands for “median”

So, for example, “wCol %” means weighted column percent.

Activities – More Needed: Probability Sample

When probability survey respondents asked to indicate if more of a certain type of outdoor activity was needed, the top four answers were:

1. Walking for pleasure (48.0%)
2. Outdoor festivals (40.6%)
3. Visiting working farms (36.9%)
4. Music festivals (35.5%)

Within each standalone “activity grid,” the top three most-needed activities per grid were:

Winter activities

1. Snow skedding/tubing (24.0%)
2. Outdoor ice skating (23.2%)
3. Snowboarding (11.8%)

Water activities

1. Swimming/outdoor pool (35.1%)
2. Viewing the water (28.4%)
3. Canoeing/kayaking (28.1%)

Courts and golf activities

1. Basketball (20.9%)
2. Miniature Golf (20.8%)
3. Archery (20.7%)

Destination activities

1. Outdoor festivals (40.6%)
2. Visiting working farms, etc. (36.9%)
3. Music festivals (35.5%)

Sports field activities

1. Soccer (16.5%)
2. Volleyball (14.6%)
3. Softball (11.5%)

Other activities

1. Visiting parks – local, state, national (35.1%)
2. Visiting gardens/arboretums (30.2%)
3. Visiting natural areas (28.9%)

Activities on trails

1. Walking for pleasure (48.0%)
2. Hiking/backpacking day trips (22.9%)
3. Paved or gravel bicycle trails (20.7%)

See Table 9.

Table 9: Activities – More needed, 2022 Virginia Outdoors Survey, probability sample respondents

Activities – More needed Probability sample respondents	Overall total wCol %	DCR Region			
		Region 1 wCol %	Region 2 wCol %	Region 3 wCol %	Region 4 wCol %
Walking for pleasure	48.0%	51.3%	41.9%	46.4%	49.9%
Outdoor festivals	40.6%	47.9%	39.0%	38.7%	41.1%
Visiting working farms, etc.	36.9%	35.0%	37.5%	30.8%	38.0%
Music festivals	35.5%	43.0%	36.8%	36.3%	34.7%
Visiting parks (local, state, national)	35.1%	39.7%	27.8%	35.3%	36.9%
Swimming/outdoor pool	35.1%	40.2%	25.9%	38.2%	36.9%
Nature-based tours/trails	34.1%	34.6%	29.0%	23.1%	37.6%
Visiting gardens/arboretums	30.2%	30.4%	24.9%	32.5%	31.2%
Visiting natural areas	28.9%	29.6%	29.3%	21.1%	30.3%
Driving for pleasure	28.7%	35.2%	36.1%	26.2%	26.9%
Viewing the water	28.4%	34.3%	26.6%	22.7%	29.7%
Canoeing/kayaking	28.1%	25.0%	27.5%	21.8%	29.5%
Culinary tours/trails	27.6%	28.8%	24.4%	22.5%	29.5%
Fresh water fishing	26.7%	28.1%	31.5%	35.0%	23.6%
Visiting historic areas	26.1%	34.5%	23.3%	25.3%	26.7%
Stargazing, dark skies, astronomy	25.9%	24.4%	25.6%	26.6%	26.0%
Swimming beach, lake, river (open water)	24.8%	28.8%	20.1%	20.9%	26.7%
Pools	24.8%	33.4%	19.3%	25.9%	25.7%
Picnicking away from home	24.3%	30.5%	22.7%	25.0%	24.4%
Snow sledding/tubing	24.0%	16.9%	26.4%	27.9%	22.9%
Sunbathing/relaxing on a beach	23.8%	27.1%	16.0%	32.6%	24.1%
Ice skating, outdoor	23.2%	15.6%	26.4%	23.1%	22.7%
Hiking/backpacking day trips	22.9%	26.4%	19.4%	27.5%	22.8%
Nature study/nature programs	21.3%	25.6%	20.9%	16.4%	22.2%
Basketball	20.9%	19.7%	16.9%	27.0%	20.9%
Miniature golf	20.8%	16.2%	21.0%	25.8%	19.9%
Archery	20.7%	11.8%	19.5%	22.7%	21.0%
Paved or gravel bicycle trails	20.7%	32.8%	24.3%	14.9%	20.4%
Staying in cabins and/or Yurts	20.1%	22.6%	16.3%	19.3%	21.2%
Shooting range	20.1%	30.9%	26.2%	26.5%	16.8%
Paddling on scenic rivers	19.9%	19.3%	19.6%	19.8%	20.1%
Jogging/running	19.2%	14.5%	9.6%	15.0%	22.8%
Gardening	19.1%	20.6%	19.1%	19.6%	19.0%
Viewing scenery	19.0%	15.4%	18.5%	17.1%	19.6%

Activities – More needed Probability sample respondents	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Dog parks	18.9%	29.0%	18.5%	16.1%	19.2%
Fitness trail, not jogging	18.3%	18.8%	12.9%	18.8%	19.6%
Walks, runs, challenge-based events	18.1%	9.8%	11.7%	21.3%	19.6%
Tubing on water	17.8%	11.3%	22.6%	21.5%	16.0%
Bicycle touring on roads	17.5%	16.0%	13.9%	12.1%	19.6%
Driving range	17.4%	12.2%	18.4%	24.7%	15.8%
Horseback riding	17.2%	13.7%	18.6%	18.4%	16.7%
Zip line	17.2%	22.9%	18.8%	13.5%	17.2%
Soccer	16.5%	9.6%	9.0%	11.1%	19.8%
Visiting playgrounds	16.4%	21.1%	14.7%	11.6%	17.6%
Sporting events/tournaments	16.2%	16.9%	14.9%	14.6%	16.8%
Visiting private farms/forests	15.2%	13.7%	14.7%	9.5%	16.4%
Art-based tours/trails	15.2%	10.7%	14.6%	8.1%	16.8%
Volleyball	14.6%	15.8%	9.4%	15.2%	15.8%
Tent camping	14.2%	22.1%	12.7%	15.7%	14.1%
18-hole golf	13.8%	7.6%	11.0%	26.1%	12.3%
Pickleball	13.5%	9.7%	9.2%	17.1%	14.1%
Bird watching away from home	13.0%	8.5%	15.8%	3.9%	14.2%
Tennis	12.9%	16.6%	11.2%	19.2%	12.0%
Salt water fishing	12.8%	26.4%	10.5%	7.0%	14.1%
Snowboarding	11.8%	4.8%	17.2%	11.7%	10.6%
Softball	11.5%	20.8%	8.1%	11.1%	12.2%
Whitewater rafting (guided/solo)	11.2%	5.2%	12.1%	12.5%	11.0%
Mountain biking	11.1%	11.1%	10.0%	9.2%	11.7%
Downhill skiing	11.1%	5.1%	17.1%	15.8%	8.7%
Cross country ski/snowshoe	10.9%	7.1%	15.6%	7.5%	10.4%
Paddle boarding	10.8%	9.8%	8.5%	9.8%	11.6%
RV camping	10.3%	10.2%	12.9%	12.8%	9.1%
Track & Field	10.3%	11.8%	9.3%	6.2%	11.3%
Baseball	10.3%	9.5%	10.3%	4.2%	11.5%
Disc golf	9.9%	7.3%	9.9%	10.6%	9.8%
Splash pads	9.7%	7.1%	14.0%	10.7%	8.4%
Equestrian events	9.7%	12.0%	14.2%	7.0%	8.9%
Hunting	9.7%	12.8%	21.7%	13.5%	5.6%
ATV/UTV off-road	9.7%	12.4%	14.2%	23.0%	5.8%
Par-3 golf	9.4%	5.2%	8.7%	15.3%	8.5%
Driving 4 wheel off-road, Jeep, truck	9.2%	10.8%	17.1%	14.3%	6.0%

Activities – More needed Probability sample respondents	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Football	8.2%	14.6%	11.4%	4.3%	7.9%
Power boating	7.9%	7.6%	11.2%	5.3%	7.5%
Geocaching	7.3%	11.5%	6.4%	3.8%	8.0%
Racquetball	7.2%	4.5%	4.2%	13.7%	6.8%
Sailing	7.1%	6.4%	4.7%	8.5%	7.5%
Electric-assist bicycle on road	6.9%	8.8%	9.2%	5.9%	6.4%
Electric-assist bicycle on trail*	6.8%	8.1%	10.7%	4.3%	6.1%
Jet ski/personal watercraft	6.7%	5.1%	9.4%	3.9%	6.5%
Kickball	6.6%	3.5%	3.9%	11.7%	6.4%
Segway on sidewalks/paths	6.1%	8.2%	7.6%	2.3%	6.3%
Shuffleboard	6.1%	5.1%	4.1%	8.1%	6.3%
T-ball	6.1%	4.8%	6.5%	2.0%	6.8%
Field hockey	6.0%	3.0%	6.1%	1.5%	7.0%
Rugby	5.8%	3.2%	4.2%	4.5%	6.6%
Driving motorcycle off-road/dirt bike	5.7%	6.0%	11.5%	5.9%	4.2%
Paddle-in camping	5.7%	5.6%	6.8%	4.8%	5.6%
Surfing	5.4%	2.0%	2.5%	1.0%	7.2%
Water skiing/towed on water	5.2%	2.2%	6.0%	7.6%	4.7%
Electric-assist bicycle on trail**	5.0%	7.9%	10.5%	6.0%	3.2%
Lacrosse	4.7%	2.8%	4.2%	1.5%	5.5%
Kite boarding	4.2%	0.5%	2.1%	2.1%	5.3%
Croquet fields	4.2%	4.9%	6.4%	7.4%	2.9%
Cheerleading	4.1%	2.2%	3.7%	4.8%	4.1%
Squash	3.9%	2.3%	3.7%	4.4%	3.9%
Sail boarding	3.6%	2.7%	4.0%	2.0%	3.8%
Orienteering	3.4%	2.6%	4.1%	0.8%	3.7%
Courts and golf activities - Other	3.4%	3.5%	4.4%	1.2%	3.5%
Winter activities – Other	3.1%	9.2%	1.1%	3.1%	3.4%
Crew rowing	3.0%	0.8%	2.9%	1.4%	3.5%
Sports field activities - Other	2.7%	1.3%	0.7%	1.3%	3.6%
Other activities - Other	1.9%	0.0%	4.0%	0.3%	1.8%
Other	1.4%	1.0%	0.6%	3.9%	1.2%
Water activities - Other	1.0%	0.8%	0.7%	1.1%	1.0%
Destination activities - Other	0.9%	1.4%	0.8%	2.0%	0.7%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – More Needed: Demographic Differences, Probability Sample

Outdoor Winter Activities – More Needed: Demographic Differences, Probability Sample

Respondents in Region 2 and Region 3 were more likely to select downhill skiing and snowboarding. Respondents in the 65+ age category were more likely to select no winter activities. Respondents who did not have children in the household were more likely to select no winter activities. Respondents who rented their home were more likely to select snowboarding and ice skating, outdoor.

There were no large differences among the race categories or household income.

Water Activities – More Needed: Demographic Differences, Probability Sample

Respondents in Region 1 were more likely to select salt water fishing. Respondents in Region 3 were more likely to select sunbathing/relaxing on a beach. Respondents in the 65+ age category were far more likely to no water activities.

There were no large differences among whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Courts and Golf Activities – More Needed: Demographic Differences, Probability Sample

Respondents in Region 1 were more likely to select shooting range. Respondents in Region 3 were more likely to select 18-hole golf. Respondents in the 65+ age category were far more likely to select no courts and golf activities.

There were no large differences among whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Destination Activities – More Needed: Demographic Differences, Probability Sample

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Sports Field Activities – More Needed: Demographic Differences, Probability Sample

Non-Hispanic/Latino(a) Black/African-American respondents were far more likely to select nearly every sports field activity including softball, baseball, soccer, football, volleyball, and track & field. Respondents with a reported household income of less than \$25,000 were also far more likely to select nearly each activity including softball, baseball, T-ball, football, volleyball, lacrosse, field hockey, kickball, and track & field.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, or home ownership status.

Other Activities – More Needed: Demographic Differences, Probability Sample

Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select bird watching away from home and visiting historic areas.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, household income, or home ownership status.

Activities on Trails – More Needed: Demographic Differences, Probability Sample

Respondents with a reported household income of less than \$25,000 were far more likely to select “Driving 4 wheel off-road, Jeep, truck,” “Driving motorcycle off-road/dirt bike,” “ATV/UTV off-road,” and “Electric assist bike on trail.”

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, or home ownership status.

Activities - Done in the Last 12 Months: Probability Sample

Respondents were also asked if they or anyone in their household had participated in different outdoor recreation activities within the last 12 months. The four activities most frequently participated in were:

1. Walking for pleasure (56.0%) (2017 value: 67.0%)
2. Visiting parks – local, state, national (39.3%) (2017 value: 56.0%)
3. Viewing the water (35.4%) (2017 value: 38.0%)
4. Swimming/outdoor pool (34.5%) (2017 value: 48.0%)

Within each standalone “activity grid,” the top three activities most frequently participated in were as follows.

Winter activities

1. Ice skating outdoors (13.0%)
2. Snow sledding/tubing (11.8%)
3. Downhill skiing (6.8%)

Water activities

1. Viewing the water (35.4%)
2. Swimming/outdoor pool (34.5%)
3. Sunbathing/relaxing on a beach (32.9%)

Courts and golf activities

1. Basketball (17.9%)
2. Miniature golf (11.4%)
3. Driving range (11.0%)

Destination activities

1. Visiting working farms, etc. (29.5%)
2. Outdoor festivals (28.9%)
3. Nature-based tours/trails (28.4%)

Sports field activities

1. Soccer (12.2%)
2. Baseball (5.5%)
3. Volleyball (4.6%)

Other activities

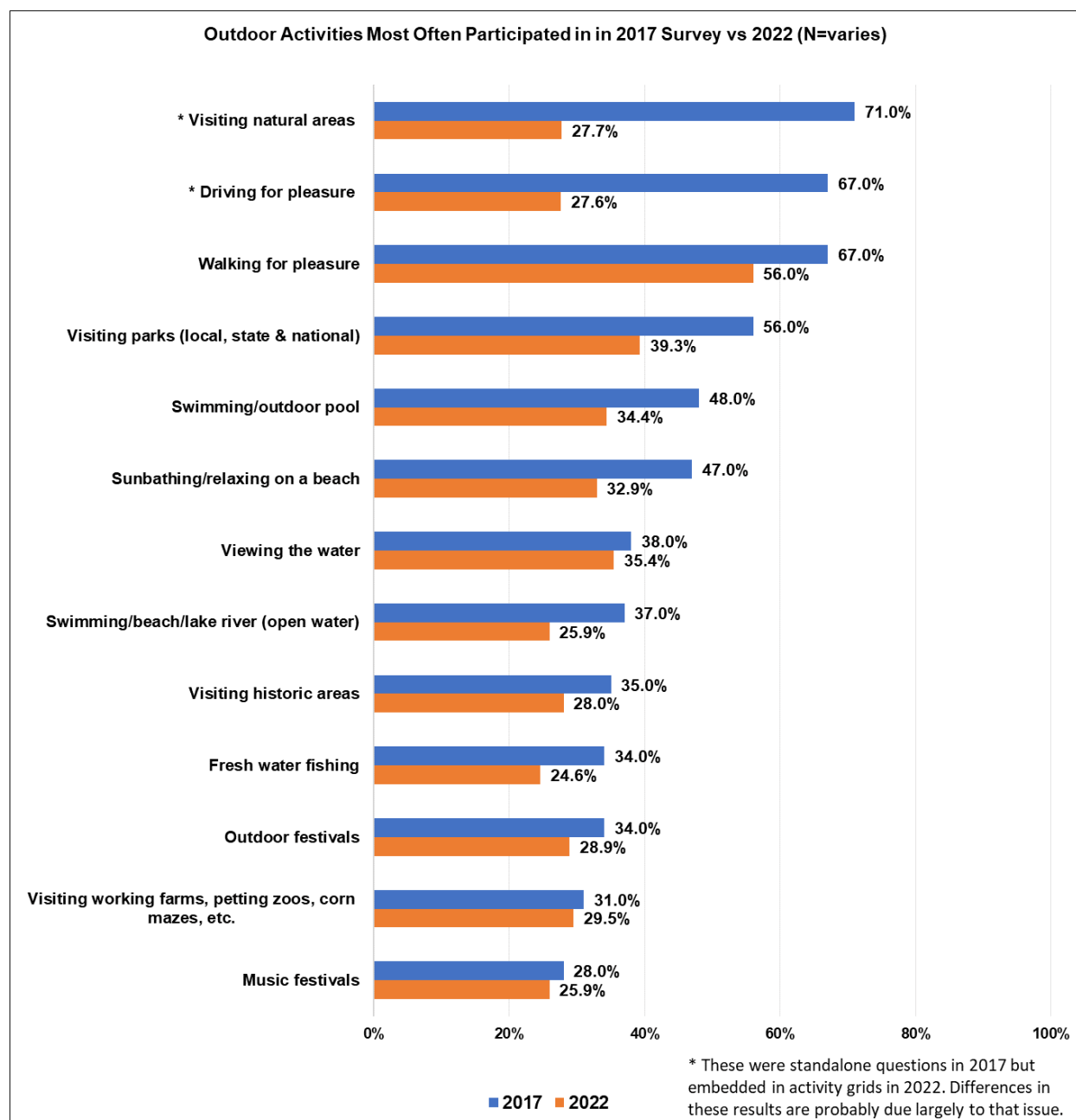
1. Visiting parks – local, state, national (39.3%)
2. Visiting historic areas (28.0%)
3. Visiting natural areas (27.7%)

Activities on trails

1. Walking for pleasure (56.0%)
2. Hiking/backpacking day trips (20.8%)
3. Jogging/running (19.5%)

A comparison of the top 13 most popular activities in 2022 and 2017 is shown in Figure 71. Comparisons of participation in visiting natural areas and driving for pleasure between the 2017 and 2022 surveys are potentially problematic because of changes to the 2022 questionnaire. In 2017, those activities were asked about in stand-alone questions near the beginning of the questionnaire; in 2022, they were embedded in larger activities grids found later in the questionnaire. In 2022, “driving for pleasure” was located in a grid titled “Destination Activities” and “visiting natural areas” was located in the grid titled “Other Activities.” This may have made those activities more difficult to identify and answer. Declines in reported participation for these activities are almost certainly due largely to the different placement of those activities within the 2022 questionnaire. However, there were also declines in participation from 2017 to 2022 in several other activities that were found in grids in both the 2017 and 2022 questionnaires. It is not clear whether declines in participation in those activities might be due to COVID-19, changes in the demographics of the state’s population, and/or real declines in participation.

Figure 71: Comparison of participation levels in selected activities, 2017 and 2022 Virginia Outdoors Survey probability sample respondents



The full table of participation rates broken down by DCR region for the 2022 probability survey is shown below in Table 10.

Table 10: Activities – Done in the last 12 months, 2022 Virginia Outdoors Survey probability sample respondents

Activities – Done in last 12 months Probability sample respondents	Overall total wCol %	DCR Region			
		Region 1 wCol %	Region 2 wCol %	Region 3 wCol %	Region 4 wCol %
Walking for pleasure	56.0%	48.2%	54.8%	54.8%	56.8%
Visiting parks (local, state, national)	39.3%	42.2%	36.0%	36.0%	40.7%
Viewing the water	35.4%	38.9%	33.2%	28.7%	37.2%
Swimming/outdoor pool	34.5%	25.6%	30.1%	43.8%	34.1%
Sunbathing/relaxing on a beach	32.9%	41.2%	28.2%	38.8%	32.8%
Visiting working farms, etc.	29.5%	24.7%	25.2%	22.6%	32.2%
Outdoor festivals	28.8%	37.0%	25.8%	28.4%	29.5%
Nature-based tours/trails	28.4%	20.7%	16.9%	23.8%	32.7%
Visiting historic areas	28.0%	34.1%	23.5%	24.5%	29.7%
Visiting natural areas	27.7%	26.4%	29.2%	25.2%	27.8%
Driving for pleasure	27.6%	43.5%	38.7%	31.4%	23.3%
Music festivals	25.9%	34.5%	22.9%	19.3%	27.7%
Swimming beach, lake, river (open water)	25.9%	28.3%	23.8%	26.4%	26.3%
Fresh water fishing	24.6%	25.1%	31.2%	32.9%	21.2%
Canoeing/kayaking	24.6%	25.1%	23.5%	32.5%	23.3%
Pools	23.9%	15.6%	22.4%	20.3%	25.3%
Visiting gardens/arboretums	22.9%	16.5%	17.5%	13.9%	26.3%
Viewing scenery	22.5%	21.8%	22.8%	22.5%	22.5%
Hiking/backpacking day trips	20.8%	11.0%	17.6%	28.2%	20.6%
Gardening	19.8%	20.1%	21.2%	21.9%	19.0%
Visiting playgrounds	19.6%	9.7%	19.8%	8.8%	22.0%
Jogging/running	19.5%	13.8%	13.1%	23.4%	20.7%
Picnicking away from home	19.2%	13.9%	21.7%	22.1%	18.2%
Culinary tours/trails	18.7%	13.7%	13.9%	17.3%	20.4%
Basketball	17.9%	12.3%	12.7%	21.1%	18.8%
Sporting events/tournaments	15.9%	9.6%	10.9%	15.6%	17.5%
Paved or gravel bicycle trails	13.8%	9.0%	11.5%	9.0%	15.5%
Walks, runs, challenge-based events	13.7%	10.4%	8.2%	15.6%	14.9%
Ice skating, outdoor	13.0%	1.9%	10.8%	8.4%	14.9%
Soccer	12.2%	7.6%	6.8%	4.0%	15.3%
Snow sledding/tubing	11.8%	5.3%	12.6%	19.2%	10.3%
Tent camping	11.4%	5.7%	10.8%	7.7%	12.5%
Stargazing, dark skies, astronomy	11.4%	14.0%	9.0%	13.0%	11.6%
Miniature golf	11.4%	6.6%	11.3%	12.0%	11.4%
Fitness trail, not jogging	11.0%	6.0%	5.3%	10.0%	13.0%

Activities – Done in last 12 months Probability sample respondents	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Driving range	11.0%	6.5%	9.8%	14.1%	10.9%
Paddling on scenic rivers	11.0%	9.7%	12.0%	10.5%	10.9%
18-hole golf	10.8%	7.9%	12.9%	14.7%	9.6%
Salt water fishing	10.7%	28.8%	8.0%	9.5%	11.1%
Shooting range	10.2%	10.7%	14.4%	7.9%	9.5%
Dog parks	9.9%	15.4%	6.7%	6.2%	11.3%
Bicycle touring on roads	9.7%	4.0%	8.5%	5.6%	11.1%
Mountain biking	9.7%	0.5%	7.8%	5.4%	11.4%
Tubing on water	9.1%	6.1%	14.5%	14.3%	6.7%
Power boating	8.7%	16.9%	7.0%	9.0%	8.8%
Visiting private farms/forests	8.5%	8.7%	10.7%	5.6%	8.5%
Hunting	8.1%	9.6%	13.2%	14.1%	5.5%
Bird watching away from home	7.9%	6.0%	10.3%	2.4%	8.3%
Nature study/nature programs	7.2%	12.2%	5.3%	6.2%	7.8%
Paddle boarding	6.9%	6.6%	5.1%	6.8%	7.4%
Splash pads	6.9%	3.2%	5.7%	6.7%	7.3%
Downhill skiing	6.8%	2.8%	2.3%	9.9%	7.6%
Zip line	6.4%	3.0%	3.6%	2.4%	8.1%
Staying in cabins and/or Yurts	6.2%	9.5%	6.9%	7.1%	5.7%
Disc golf	5.7%	3.6%	5.5%	5.7%	5.8%
Baseball	5.5%	4.5%	5.6%	3.9%	5.9%
RV camping	5.4%	5.0%	6.1%	5.7%	5.1%
Driving 4 wheel off-road, Jeep, truck	5.3%	2.9%	6.1%	3.0%	5.6%
Jet ski/personal watercraft	5.1%	5.2%	4.3%	4.1%	5.5%
Archery	5.0%	2.8%	7.0%	5.6%	4.5%
Horseback riding	5.0%	0.9%	8.7%	6.8%	3.7%
Snowboarding	4.9%	1.8%	3.2%	5.7%	5.3%
Equestrian events	4.7%	3.8%	4.0%	8.6%	4.2%
Volleyball	4.6%	1.9%	1.4%	9.1%	4.7%
Tennis	4.5%	5.6%	5.0%	5.6%	4.1%
Pickleball	4.5%	3.6%	3.4%	4.9%	4.7%
Track & Field	4.1%	8.7%	3.7%	0.5%	4.8%
Art-based tours/trails	4.1%	5.5%	3.2%	3.2%	4.5%
Whitewater rafting (guided/solo)	3.8%	1.6%	1.4%	4.4%	4.4%
ATV/UTV off-road	3.8%	3.0%	4.6%	8.1%	2.7%
Softball	3.3%	1.8%	1.6%	5.9%	3.4%
Par-3 golf	3.2%	3.7%	2.5%	1.4%	3.8%

Activities – Done in last 12 months Probability sample respondents	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Football	3.1%	2.5%	3.7%	2.7%	3.0%
Courts and golf activities – Other	3.0%	0.8%	3.7%	1.4%	3.2%
Water skiing/towed on water	2.9%	4.3%	3.0%	6.2%	2.2%
Geocaching	2.7%	0.5%	1.4%	2.4%	3.2%
Sailing	2.7%	5.3%	0.3%	5.5%	2.6%
Sports field activities – Other	2.3%	0.4%	1.0%	1.3%	3.0%
T-ball	2.2%	2.2%	1.1%	2.2%	2.5%
Driving motorcycle off-road/dirt bike	2.1%	2.0%	4.5%	4.2%	1.1%
Segway on sidewalks/paths	2.1%	0.4%	1.8%	0.0%	2.6%
Other activities – Other	2.1%	0.0%	3.5%	0.4%	2.1%
Shuffleboard	2.1%	0.3%	2.8%	0.7%	2.2%
Racquetball	2.0%	0.4%	0.6%	5.4%	1.8%
Winter activities – Other	1.9%	9.1%	1.4%	2.7%	1.7%
Cross country ski/snowshoe	1.9%	0.0%	0.9%	3.7%	1.8%
Activities on trails – Other	1.7%	1.8%	2.6%	3.6%	1.2%
Surfing	1.7%	1.3%	0.0%	0.7%	2.4%
Electric-assist bicycle on road	1.5%	1.3%	1.0%	1.0%	1.7%
Paddle-in camping	1.1%	0.8%	1.1%	1.0%	1.2%
Orienteering	1.1%	0.0%	0.4%	0.7%	1.4%
Lacrosse	1.1%	0.4%	0.7%	0.6%	1.3%
Electric-assist bicycle on trail*	1.1%	0.0%	0.8%	0.9%	1.2%
Destination activities – Other	0.9%	2.1%	1.4%	1.9%	0.6%
Electric-assist bike on trail**	0.8%	1.3%	1.6%	0.9%	0.5%
Cheerleading	0.8%	0.4%	0.9%	1.1%	0.7%
Water activities – Other	0.6%	1.3%	0.5%	1.5%	0.4%
Rugby	0.6%	0.4%	0.0%	0.2%	0.8%
Squash	0.5%	0.2%	0.0%	0.4%	0.7%
Kickball	0.4%	0.5%	0.5%	0.2%	0.5%
Sail boarding	0.3%	0.6%	0.1%	0.4%	0.4%
Crew rowing	0.2%	0.0%	0.0%	0.0%	0.3%
Croquet fields	0.2%	0.9%	0.3%	0.6%	0.0%
Field hockey	0.1%	0.3%	0.0%	0.0%	0.2%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Outdoor Winter Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents in Region 3 were more likely to select snow sledding/tubing, and respondents in Region 4 were more likely to select ice skating, outdoor. Respondents in the 18-44 age category were more likely to select snow sledding/tubing and ice skating, outdoor. Respondents who reported having children in the household were also more likely to select snow sledding/tubing and ice skating, outdoor. Non-Hispanic/Latino(a) Black/African-American respondents were far more likely to select no winter activities. Respondents with a reported household income of \$150,000 or more were more likely to select downhill skiing, snowboarding, and snow sledding/tubing.

There were no large differences among home ownership status.

Water Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents in Region 1 were far more likely to select salt water fishing, and respondents in Region 3 were more likely to select swimming/outdoor pool. Respondents in the 18-44 age category were more likely to select canoeing/kayaking, swimming/outdoor pool, and swimming beach, lake, river (open water). Respondents aged 45-64 were more likely to select fresh water fishing, salt water fishing, sunbathing/relaxing on a beach, and power boating. Respondents who reported having children in the household were more likely to select fresh water fishing, swimming/outdoor pool, and splash pads. Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select no water activities. Respondents with a reported household income of \$75,000 or lower were more likely to select no water activities.

Respondents with a reported household income of \$150,000 or higher were more likely to select fresh water fishing, sunbathing/relaxing on a beach, jet ski/personal watercraft, power boating, canoeing/kayaking, splash pads, and paddling on scenic rivers. Respondents who rented their home were more likely to select no water activities, compared to respondents who owned or were in the process of buying their home.

Courts and Golf Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents in the 65+ age category were more likely to select no courts and golf activities. Respondents who reported having children in the household were more likely to select basketball and archery. Respondents with a reported household income of less than \$75,000 were more likely to select no courts and golf activities. Respondents with a reported household income of

\$150,000 or higher were more likely to select tennis, pickleball, 18-hole golf, par-3 golf, driving range, disc golf and miniature golf.

There were no large differences among the four main regions of the state used for geographic analysis, race categories, or home ownership status.

Destination Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents in Region 1 were more likely to select music festivals and driving for pleasure. Respondents in Region 4 were more likely to select nature-based tours/trails. Respondents aged 18-44 were more likely to select visiting working farms, etc.; music festivals; driving for pleasure; and walks, runs, challenge-based events. Respondents who reported having children in the household were more likely to select visiting working farms, etc.; sporting events/tournaments; and walks, runs, challenge-based events. Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select no destination activities when compared to the other race/ethnicity categories. Respondents with a reported household income of \$75,000 or higher were more likely to select culinary tours/trails, nature-based tours/trails, and sporting events/tournaments. Respondents who owned or were in the process of buying their home were more likely to select culinary tours/trails, sporting events/tournaments, and driving for pleasure.

Sports Field Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents in Region 4 were more likely to select soccer. Respondents in the 65+ age category were more likely to select no sports field activities. Respondents who reported having children in the household were more likely to select baseball, soccer, and volleyball. Respondents with a reported household income of less than \$75,000 were more likely to select no sports field activities.

There were no large differences among the race categories or home ownership status.

Other Activities – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents who reported having children in the household were more likely to select visiting playgrounds. White respondents were more likely to select visiting gardens/arboretums, visiting parks (local, state, national), viewing scenery, and tent camping. Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select no other activities. Respondents with a reported household income of \$150,000 or higher were more likely to select visiting gardens/arboretums and RV camping.

There were no large differences among the four main regions of the state used for geographic analysis, age categories, or home ownership status.

Activities on Trails – Done in the Last 12 Months: Demographic Differences, Probability Sample

Respondents in Region 3 were more likely to select hiking/backpacking day trips. Respondents with a reported household income less than \$75,000 were more likely to select no activities on trails. Respondents who owned or were in the process of owning their home were more likely to select hiking/backpacking day trips.

There were no large differences among the age categories or race categories.

Activities – Total Number of Days on which Anyone did This During Last 12 Months: Probability Sample

For activities that had been done by the respondent or a member of their household in the last 12 months, the survey asked for the number of days they had done the activity. In order to avoid undue influence exerted by extreme values, the median statistic is used in this report and in Table 11 below, rather than the mean. Activities that were mentioned by small numbers of respondents are subject to unusual data values – for example, one crew rower in the survey reported doing the activity 365 days in the last 12 months, putting it at the top of the list of 105 activities when ordered by greatest number of days participated in. Similarly, the responses from two field hockey participants yielded a median of 360 days. Most likely, if more respondents had provided values for crew rowing and field hockey, their median numbers of days would be smaller.

Among probability sample respondents, the four activities with at least 30 participants statewide that had the highest median numbers of days participated in were:

1. Jogging/running (50 days) (2017 value: 30 days)
2. Walking for pleasure (30 days) (2017 value: 20 days)
3. Basketball (25 days) (2017 value: 10 days)
4. Gardening (25 days) (2017 value: 25 days)

For the 10 most frequently participated-in activities in the probability sample (see the prior section and Table 10), the number of days were as follows:

1. Walking for pleasure (30 days) (2017 value: 20 days)
2. Visiting parks (local, state, national) (10 days) (2017 value: 5 days)
3. Viewing the water (12 days) (2017 value: 8 days)
4. Swimming/outdoor pool (10 days) (2017 value: 8 days)
5. Sunbathing/relaxing on a beach (7 days) (2017 value: 6 days)
6. Visiting working farms, etc. (2 days) (2017 value: 2 days)
7. Outdoor festivals (2 days) (2017 value: 2 days)
8. Nature-based tours/trails (6 days) (2017 value: 4 days)
9. Visiting historic areas (4 days) (2017 value: 3 days)
10. Visiting natural areas (10 days) (no comparable 2017 question)

For many activities, the data about median number of days participated in are both too volatile (due to small numbers of participants in some cases) and too similar to warrant listing the top activities within each standalone “activity grid” by the highest median numbers of days participated in. The same issues made it problematic to look for differences in numbers of days of participation across demographic subgroups. Therefore, those lists and additional analyses are not presented here.

Table 11: Activities – Number of days done in last 12 months, 2022 Virginia Outdoors Survey probability sample respondents

Activities – # of days done Probability Sample	Overall total		DCR Region							
			Region 1		Region 2		Region 3		Region 4	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Crew rowing, Field hockey, Rugby, Sail boarding). However, all activities are presented here for completeness.										
Crew rowing	365.0	1		0		0		0	365.0	1
Field hockey	360.0	2	250.0	1		0		0	360.0	1
Other activities – Other	100.0	9		0	100.0	1	7.0	2	10.0	6
Jogging/running	50.0	98	35.0	16	10.0	20	35.0	29	50.0	33
Segway on sidewalks/path	45.0	7	20.0	1	45.0	2		0	90.0	4
Football	40.0	22	10.0	4	4.0	9	5.0	5	180.0	4
Sports field activities – Other	35.0	13	40.0	2	80.0	2	40.0	2	20.0	7
Outdoor winter activities – Other	30.0	17	6.0	6	1.0	3	15.0	2	30.0	6
Lacrosse	30.0	8	30.0	2	30.0	2	2.0	2	30.0	2
Kickball	30.0	3	25.0	1	30.0	1	2.0	1		0
Cheerleading	30.0	5		0	15.0	3	4.0	1	60.0	1
Walking for pleasure	30.0	394	50.0	83	20.0	92	25.0	100	30.0	119
Basketball	25.0	74	4.0	13	10.0	20	8.0	13	42.0	28
Gardening	25.0	147	30.0	36	45.0	42	60.0	32	20.0	37
Paved or gravel bicycle trails	24.0	91	5.0	21	50.0	18	35.0	13	15.0	39
Softball	20.0	22	10.0	3	3.0	5	20.0	6	34.0	8
Soccer	20.0	55	30.0	12	20.0	13	8.0	6	15.0	24
Track & Field	20.0	16	126.0	4	8.0	4	30.0	1	25.0	7
Volleyball	15.0	17	1.0	2	2.0	3	5.0	5	30.0	7
T-ball	14.0	17	15.0	5	5.0	2	1.0	4	20.0	6
Viewing the water	12.0	255	20.0	71	12.0	54	7.0	55	15.0	75
Bicycle touring on roads	12.0	63	10.0	10	12.0	11	20.0	9	10.0	33
ATV/UTV off-road	12.0	38	20.0	9	1.0	10	26.0	14	12.0	5

Activities – # of days done Probability Sample	Overall total		DCR Region							
			Region 1		Region 2		Region 3		Region 4	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Crew rowing, Field hockey, Rugby, Sail boarding). However, all activities are presented here for completeness.										
Swimming/outdoor pool	10.0	215	10.0	40	10.0	47	15.0	56	10.0	72
Pickleball	10.0	41	13.0	11	5.0	9	5.0	11	10.0	10
Driving range	10.0	77	5.0	17	15.0	17	1.0	13	12.0	30
Courts and golf activities – Other	10.0	8	2.0	1	100.0	1	60.0	2	8.0	4
Baseball	10.0	36	20.0	9	30.0	10	8.0	7	10.0	10
Bird watching away from home	10.0	54	2.0	16	365.0	10	2.0	7	7.0	21
Visiting parks (local, state, national)	10.0	290	5.0	71	10.0	64	10.0	65	8.0	90
Viewing scenery	10.0	163	10.0	42	15.0	36	7.0	39	10.0	46
RV camping	10.0	50	30.0	14	10.0	14	3.0	8	10.0	14
Visiting playgrounds	10.0	106	7.0	17	20.0	33	20.0	20	8.0	36
Visiting natural areas	10.0	201	5.0	40	12.0	47	5.0	51	12.0	63
Pools	10.0	137	6.0	27	12.0	38	5.0	25	10.0	47
Horseback riding	10.0	30	3.0	1	5.0	10	180.0	9	10.0	10
Driving 4 wheel off-road, Jeep, truck	10.0	25	6.0	7	1.0	9	4.0	5	10.0	4
Activities on trails – Other	10.0	9	2.0	2	30.0	2	50.0	3	10.0	2
Fitness trail, not jogging	8.0	48	3.0	12	4.0	10	30.0	8	8.0	18
Fresh water fishing	7.0	196	12.0	46	10.0	53	10.0	57	6.0	40
Sunbathing/relaxing on a beach	7.0	276	10.0	81	7.0	55	6.0	62	8.0	78
Tennis	7.0	43	12.0	14	6.0	10	10.0	9	7.0	10
Tent camping	7.0	66	4.0	9	10.0	18	6.0	15	7.0	24
Paddle-in camping	7.0	8	4.0	2	3.0	1	5.0	2	7.0	3

Activities – # of days done Probability Sample	Overall total		DCR Region							
			Region 1		Region 2		Region 3		Region 4	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Crew rowing, Field hockey, Rugby, Sail boarding). However, all activities are presented here for completeness.										
Hiking/backpacking day trips	7.0	152	7.0	23	10.0	36	5.0	45	8.0	48
Mountain biking	7.0	37	5.0	2	100.0	7	7.0	8	7.0	20
Swimming beach, lake, river (open water)	6.0	196	5.0	55	6.0	40	6.0	46	6.0	55
Squash	6.0	3		0		0	10.0	1	6.0	2
Nature-based tours/trails	6.0	206	5.0	49	7.0	36	5.0	45	6.0	76
Driving for pleasure	6.0	261	7.0	63	10.0	76	5.0	60	5.0	62
Hunting	6.0	85	10.0	20	14.0	21	25.0	29	3.0	15
Dog parks	6.0	57	300.0	14	6.0	8	3.0	10	10.0	25
Downhill skiing	5.0	51	3.0	6	4.0	5	2.0	17	7.0	23
Snowboarding	5.0	27	3.0	2	4.0	5	2.0	7	5.0	13
Surfing	5.0	9	3.0	2		0	7.0	1	5.0	6
Splash pad	5.0	42	3.0	5	2.0	10	2.0	12	5.0	15
18-hole golf	5.0	96	12.0	23	10.0	23	5.0	21	5.0	29
Par-3 golf	5.0	28	8.0	7	5.0	7	10.0	3	5.0	11
Archery	5.0	35	10.0	8	10.0	8	15.0	8	5.0	11
Shooting range	5.0	91	6.0	24	5.0	28	5.0	17	5.0	22
Sporting events/tournaments	5.0	108	6.0	22	10.0	21	5.0	21	4.0	44
Rugby	5.0	4	30.0	1		0	20.0	1	5.0	2
Picnicking away from home	5.0	133	5.0	26	4.0	38	2.0	32	5.0	37
Salt water fishing	4.0	112	14.0	59	5.0	12	5.0	21	3.0	20
Canoeing/kayaking	4.0	203	5.0	61	7.0	42	5.0	47	3.0	53
Paddling on scenic rivers	4.0	90	3.0	21	5.0	18	2.0	23	4.0	28
Visiting historic areas	4.0	205	3.0	55	3.0	37	3.0	52	4.0	61
Geocaching	4.0	11	2.0	1	2.0	2	1.0	1	5.0	7
Visiting private farms/forests	4.0	58	2.0	17	5.0	15	2.0	10	4.0	16

Activities – # of days done Probability Sample	Overall total		DCR Region							
			Region 1		Region 2		Region 3		Region 4	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Crew rowing, Field hockey, Rugby, Sail boarding). However, all activities are presented here for completeness.										
Stargazing, dark skies, astronomy	4.0	80	5.0	17	15.0	18	3.0	21	4.0	24
Cross country ski/snowshoe	3.0	19		0	1.0	3	3.0	9	3.0	7
Snow sledding/tubing	3.0	84	3.0	12	4.0	23	2.0	20	3.0	29
Power boating	3.0	96	20.0	41	3.0	14	3.0	16	3.0	25
Sailing	3.0	29	6.0	16	1.0	1	2.0	5	3.0	7
Water skiing/towed on water	3.0	32	5.0	12	1.0	6	10.0	9	2.0	5
Paddle boarding	3.0	54	5.0	17	4.0	9	10.0	8	3.0	20
Water activities – Other	3.0	9	10.0	3		0	250.0	4	3.0	2
Shuffleboard	3.0	8		0	1.0	3	2.0	1	10.0	4
Disc golf	3.0	39	14.0	6	3.0	10	1.0	8	3.0	15
Nature study/nature programs	3.0	56	2.0	16	4.0	11	3.0	12	3.0	17
Staying in cabins and/or Yurts	3.0	46	2.0	8	6.0	12	2.0	12	3.0	14
Jet ski/personal watercraft	2.0	32	5.0	9	2.0	6	2.0	8	2.0	9
Tubing on water	2.0	74	2.0	14	3.0	22	2.0	21	2.0	17
Racquetball	2.0	7	5.0	1	2.0	1	2.0	2	8.0	3
Miniature golf	2.0	90	2.0	17	3.0	25	2.0	19	2.0	29
Croquet fields	2.0	5	1.0	3	5.0	1	2.0	1		0
Visiting working farms, etc.	2.0	188	2.0	34	3.0	46	2.0	48	2.0	60
Music festivals	2.0	183	2.0	50	2.0	41	2.0	38	2.0	54
Equestrian events	2.0	45	2.0	6	2.0	9	10.0	17	2.0	13
Outdoor festivals	2.0	197	3.0	53	2.0	47	2.0	41	2.0	56
Culinary tours/trails	2.0	132	3.0	34	3.0	20	2.0	31	2.0	47
Art-based tours/trails	2.0	33	1.0	11	2.0	6	2.0	8	2.0	8
Walks, runs, challenge-based events	2.0	63	3.0	9	2.0	16	2.0	17	2.0	21

Activities – # of days done Probability Sample	Overall total		DCR Region							
			Region 1		Region 2		Region 3		Region 4	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Crew rowing, Field hockey, Rugby, Sail boarding). However, all activities are presented here for completeness.										
Destination activities – Other	2.0	17	3.0	5	3.0	3	5.0	7	2.0	2
Visiting gardens/arboretums	2.0	165	2.0	36	2.0	36	2.0	37	2.0	56
Electric-assist bicycle on road	2.0	11	10.0	4	1.0	2	7.0	3	2.0	2
Electric-assist bicycle on trail*	2.0	4		0	1.0	1	1.0	1	2.0	2
Orienteering	2.0	4		0	5.0	1	1.0	1	2.0	2
Electric-assist bike on trail**	2.0	8	15.0	2	2.0	3	1.0	2	3.0	1
Ice skating, outdoor	1.0	52	5.0	3	1.0	17	3.0	7	1.0	25
Sail boarding	1.0	4	1.0	2		0		0	1.0	2
Whitewater rafting (guided/solo)	1.0	26	1.0	4	2.0	3	2.0	8	1.0	11
Zip line	1.0	25	1.0	6	2.0	5	1.0	4	1.0	10
Driving motorcycle off-road/dirt bike	1.0	14	12.0	3	1.0	7	0.0	3	3.0	1
Kite boarding		0		0		0		0		0

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Total Number of Days on which Anyone did This During Last 12 Months: Probability Sample, Demographic Differences

As noted above, the data about median number of days participated in are both too volatile (due to small numbers of participants in some cases) and too similar to look for differences in numbers of days of participation across demographic subgroups. Therefore, those additional analyses are not presented here.

Activities – Involving an Overnight Stay at Any Time: Probability Sample

Among probability sample respondents, the activity most likely to involve an overnight stay was sunbathing/relaxing on a beach (31.6%). Swimming – whether at a beach, lake or river came in second at 22.1%. Downhill skiing (17.5%) and visiting parks – local, state, or national (17.0%) were nearly tied in third and fourth places, respectively. Viewing the water (15.5%) rounded out the top five. Completing the top 10 overnight activities were tent camping (13.8%), swimming/outdoor pool (13.2%), driving for pleasure (12.3%), hiking/backpacking day trips (12.3%) and snowboarding (12.0%). Refer to Table 12.

Table 12: Activities – Overnight stay involved at any time, 2022 Virginia Outdoors Survey probability sample respondents

Activities – Overnight stay involved Probability Sample	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Sunbathing/relaxing on a beach	31.6%	18.5%	27.8%	30.9%	33.3%
Swimming beach, lake, river (open water)	22.1%	7.8%	19.0%	15.1%	25.1%
Downhill skiing	17.5%	16.3%	9.3%	19.0%	18.9%
Visiting parks (local, state, national)	17.0%	18.6%	11.6%	9.2%	20.1%
Viewing the water	15.5%	17.3%	18.1%	11.6%	15.7%
Tent camping	13.8%	5.7%	11.3%	8.4%	15.9%
Swimming/outdoor pool	13.2%	5.0%	10.5%	11.8%	14.5%
Driving for pleasure	12.3%	27.3%	8.8%	12.2%	12.7%
Hiking/backpacking day trips	12.3%	9.2%	3.1%	9.1%	15.4%
Snowboarding	12.0%	10.5%	11.7%	9.3%	12.6%
Canoeing/kayaking	11.6%	3.8%	7.5%	10.1%	13.3%
Visiting historic areas	10.4%	19.0%	9.7%	5.3%	11.4%
Snow sledding/tubing	10.3%	15.7%	5.1%	6.7%	12.0%
Music festivals	9.4%	14.7%	7.9%	7.2%	10.0%
Visiting natural areas	9.1%	14.9%	5.2%	5.9%	10.7%
Nature-based tours/trails	8.9%	4.9%	3.2%	7.6%	10.7%
Sporting events/tournaments	8.8%	4.2%	3.9%	10.4%	9.9%
Walking for pleasure	8.7%	5.5%	8.5%	5.7%	9.5%
Outdoor festivals	8.3%	17.4%	8.0%	8.9%	8.0%
Miniature golf	7.7%	3.2%	5.4%	1.7%	9.8%
Fresh water fishing	7.3%	8.7%	5.7%	10.1%	7.0%
RV camping	6.4%	5.1%	6.4%	3.6%	7.0%
Soccer	6.1%	1.2%	0.0%	0.8%	8.0%
Viewing scenery	6.0%	8.2%	3.5%	5.5%	6.7%
Stargazing, dark skies, astronomy	6.0%	1.0%	1.1%	7.8%	7.1%
Staying in cabins and/or Yurts	5.7%	4.4%	6.7%	8.3%	4.9%
Baseball	5.2%	4.7%	4.4%	2.5%	5.8%
Cross country ski/snowshoe	5.2%	0.0%	3.8%	9.4%	4.7%
Salt water fishing	5.0%	10.6%	7.0%	4.9%	4.3%
Pools	4.9%	3.8%	3.1%	0.8%	6.3%
Culinary tours/trails	4.9%	4.4%	1.4%	1.4%	6.4%
Power boating	4.8%	7.6%	2.4%	3.7%	5.6%
Tubing on water	4.7%	5.6%	2.0%	6.4%	4.9%
18-hole golf	4.4%	3.7%	2.3%	3.9%	5.1%
Paddling on scenic rivers	4.1%	1.6%	3.2%	2.2%	4.9%

Activities – Overnight stay involved Probability Sample	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Ice skating outdoor	4.0%	8.1%	5.9%	9.6%	2.3%
Visiting gardens/arboretums	3.9%	4.5%	4.2%	5.4%	3.4%
Football	3.9%	3.8%	2.1%	2.3%	4.4%
Paddle boarding	3.5%	2.7%	3.4%	5.8%	3.0%
Picnicking away from home	3.4%	2.4%	0.9%	2.6%	4.3%
Paved or gravel bicycle trails	3.4%	0.4%	3.9%	3.0%	3.4%
Walks/runs/challenge-based events	3.3%	11.1%	1.7%	6.6%	2.9%
Track & Field	3.3%	0.9%	6.5%	0.0%	3.3%
Winter activities – Other	3.2%	48.5%	0.0%	6.7%	2.1%
Visiting working farms, etc.	3.1%	2.3%	2.0%	3.7%	3.3%
Volleyball	3.0%	0.8%	0.0%	14.7%	1.9%
Whitewater rafting (guided/solo)	2.9%	1.2%	0.8%	1.8%	3.8%
Shuffleboard	2.6%	0.0%	6.4%	0.0%	2.2%
Zip line	2.5%	1.7%	0.0%	1.1%	3.5%
Horseback riding	2.4%	0.0%	5.9%	0.4%	2.0%
Archery	2.2%	1.0%	1.1%	0.0%	3.0%
Visiting private farms/forests	2.2%	1.9%	3.2%	0.2%	2.4%
Bicycle touring on roads	2.2%	0.6%	1.3%	0.4%	2.8%
Jogging/running	2.1%	0.4%	2.2%	1.2%	2.3%
Hunting	2.0%	5.9%	3.7%	3.2%	1.1%
Water skiing/towed on water	1.7%	0.8%	0.9%	4.6%	1.3%
ATV/UTV off-road	1.6%	2.3%	3.7%	4.0%	0.6%
Other activities – Other	1.6%	0.0%	5.2%	0.0%	1.0%
Driving motorcycle off-road/dirt bike	1.5%	0.0%	3.5%	0.2%	1.4%
Courts and golf activities – Other	1.5%	0.0%	0.0%	0.4%	2.2%
Surfing	1.4%	0.4%	0.0%	0.4%	2.1%
Jet ski/personal watercraft	1.4%	0.7%	2.4%	1.2%	1.2%
Equestrian events	1.4%	1.6%	0.0%	3.3%	1.4%
Splash pads	1.4%	0.0%	2.0%	0.0%	1.6%
Disc golf	1.3%	0.0%	1.6%	0.6%	1.5%
Paddle-in camping	1.3%	0.0%	0.9%	0.0%	1.8%
Tennis	1.3%	0.0%	0.0%	0.1%	1.9%
Sailing	1.3%	3.3%	0.0%	3.5%	0.9%
Bird watching away from home	1.2%	0.6%	0.4%	0.0%	1.8%
Sports field activities – Other	1.2%	0.0%	0.0%	0.0%	1.6%
Mountain biking	1.1%	0.0%	0.0%	0.0%	1.7%
Lacrosse	1.1%	0.9%	1.8%	0.0%	1.2%
T-ball	1.1%	0.0%	0.0%	0.0%	1.5%

Activities – Overnight stay involved Probability Sample	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Shooting range	1.1%	0.0%	0.7%	1.0%	1.2%
Gardening	1.1%	0.0%	0.4%	1.0%	1.3%
Nature study/nature programs	1.0%	2.4%	0.5%	0.5%	1.2%
Driving range	0.9%	0.7%	1.8%	0.0%	0.9%
Fitness trail, not jogging	0.9%	0.6%	1.8%	0.0%	0.9%
Driving 4 wheel off-road, Jeep, truck	0.9%	3.0%	4.2%	0.6%	0.0%
Visiting playgrounds	0.9%	1.6%	0.7%	0.3%	1.0%
Softball	0.7%	0.0%	0.0%	1.3%	0.7%
Racquetball	0.7%	0.0%	0.0%	0.0%	1.0%
Electric-assist bicycle on road	0.6%	0.0%	1.1%	0.5%	0.6%
Par-3 golf	0.6%	1.1%	1.4%	0.0%	0.5%
Basketball	0.5%	0.0%	0.0%	3.6%	0.0%
Water activities – Other	0.5%	0.0%	0.0%	0.4%	0.7%
Dog parks	0.4%	0.4%	1.1%	0.0%	0.3%
Destination activities – Other	0.4%	1.7%	0.5%	1.1%	0.2%
Electric-assist bicycle on trail*	0.3%	0.0%	1.1%	0.0%	0.2%
Electric-assist bike on trail**	0.3%	0.4%	1.3%	0.5%	0.0%
Art-based tours/trails	0.3%	4.0%	0.0%	1.4%	0.0%
Rugby	0.1%	2.0%	0.0%	1.0%	0.0%
Pickleball	0.1%	0.7%	0.0%	0.8%	0.0%
Croquet fields	0.1%	0.7%	0.0%	0.4%	0.0%
Segway on sidewalks/paths	0.1%	0.0%	0.3%	0.0%	0.0%
Other	0.0%	1.5%	0.0%	0.0%	0.0%
Field hockey	0.0%	1.5%	0.0%	0.0%	0.0%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Involving an Overnight Stay at Any Time: Demographic Differences, Probability Sample

Outdoor Winter Activities – Overnight Stay at Any Time: Demographic Differences, Probability Sample

Respondents in Region 2 were more likely to select no winter activities. Respondents in the 45-64 age category were more likely to select cross country ski/snowshoe. Respondents who did not have children in the household were more likely to select snowboarding. Respondents with a reported household income of \$150,000 or higher were more likely to select downhill skiing.

There were no large differences among the race categories or home ownership status.

Water Activities – Overnight Stay at Any Time: Demographic Differences, Probability Sample

Respondents in Region 4 were more likely to select sunbathing/relaxing on a beach, canoeing/kayaking, swimming/outdoor pool, and swimming beach, lake, river (open water). Respondents in the 18-44 age category were more likely to select canoeing/kayaking and swimming beach, lake, river (open water). Respondents aged 65 or higher were more likely to select no water activities involving an overnight stay.

There were no large differences among whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Courts and Golf Activities – Overnight Stay at Any Time: Demographic Differences, Probability Sample

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Destination Activities – Overnight Stay at Any Time: Demographic Differences, Probability Sample

Respondents in Region 1 were more likely to select driving for pleasure. Respondents in the 45-64 age category were more likely to select nature-based tours/trails. Respondents who reported having children in the household were more likely to select sporting events/tournaments. Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select sporting events/tournaments and driving for pleasure. Respondents with a reported household income of \$150,000 or higher were more likely to select culinary tours/trails.

There were no large differences among whether or not respondents reported having children in the household or home ownership status.

Sports Field Activities – Overnight Stay at Any Time: Demographic Differences, Probability Sample

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Other Activities – Overnight Stay at Any Time: Demographic Differences, Probability Sample

Respondents in the 45-64 age category were more likely to select visiting parks (local, state, national) and visiting historic areas. White respondents were more likely to select visiting parks (local, state, national) and tent camping. Respondents with a reported household income of

\$150,000 or higher were more likely to select visiting parks (local, state, national), zip line, and RV camping.

There were no large differences among the four main regions of the state used for geographic analysis, race categories, or home ownership status.

Activities on Trails – Overnight Stay at Any Time: Demographic Differences, Probability Sample

Respondents in Region 4 were more likely to select hiking/backpacking day trips. Respondents in the 65+ age category were far more likely to select no activities on trails.

There were no large differences among, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Activities – Occurred Mostly in Virginia: Probability Sample

Considering probability sample data, the leading activity that occurred mostly in Virginia was walking for pleasure (70.4%). Visiting parks – local, state, or national was a distant second (38.5%). The next several activities were relatively close: viewing the water (37.9%), soccer (36.7%), swimming/outdoor pool (35.2%), outdoor festivals (34.7%), visiting working farms (33.0%), snow sledding/tubing (31.8%), nature-based tours/trails (30.5%) and outdoor ice skating (30.1%). Data are displayed in Table 13.

Table 13: Activities – Activity occurred mostly in Virginia, 2022 *Virginia Outdoors Survey* probability sample

Activities – Occurred mostly in Virginia Probability Sample	Overall total wCol %	DCR Region			
		Region 1 wCol %	Region 2 wCol %	Region 3 wCol %	Region 4 wCol %
Walking for pleasure	70.4%	67.6%	70.5%	67.6%	71.0%
Visiting parks (local, state, national)	38.5%	53.4%	42.9%	35.5%	37.3%
Viewing the water	37.9%	55.8%	37.8%	25.0%	40.5%
Soccer	36.7%	30.7%	39.3%	17.0%	39.3%
Swimming/outdoor pool	35.2%	32.9%	32.3%	37.9%	35.3%
Outdoor festivals	34.7%	31.0%	28.3%	29.7%	37.4%
Visiting working farms, etc.	33.0%	27.1%	32.7%	28.6%	34.1%
Snow sledding/tubing	31.8%	27.0%	34.7%	52.7%	27.0%
Nature-based tours/trails	30.5%	27.3%	16.7%	32.4%	33.7%
Ice skating, outdoor	30.1%	8.1%	36.6%	17.3%	32.0%
Visiting natural areas	29.6%	28.2%	33.2%	23.7%	29.9%
Fresh water fishing	28.8%	35.3%	44.7%	37.0%	22.1%
Driving for pleasure	28.1%	40.4%	51.2%	39.0%	19.7%
Basketball	27.9%	32.2%	19.6%	42.1%	26.9%
Visiting historic areas	27.1%	38.9%	24.7%	22.7%	28.2%
Music festivals	26.1%	37.6%	24.1%	23.5%	26.6%
Canoeing/kayaking	23.8%	38.2%	26.8%	37.6%	19.0%
Hiking/backpacking day trips	23.3%	15.6%	23.8%	32.4%	21.4%
Sunbathing/relaxing on a beach	23.2%	57.7%	23.4%	22.4%	22.1%
Pools	23.0%	23.9%	27.4%	20.4%	22.3%
Viewing scenery	22.9%	29.9%	26.1%	21.5%	22.1%
Swimming beach, lake, river (open water)	22.7%	42.2%	25.9%	19.3%	22.0%
Jogging/running	22.0%	11.9%	17.7%	23.8%	23.0%
Driving range	21.8%	16.8%	16.3%	27.7%	22.1%
Picnicking away from home	20.8%	18.0%	26.4%	18.5%	19.8%
Culinary tours/trails	20.2%	18.1%	14.8%	20.3%	21.6%
18-hole golf	20.0%	19.9%	18.7%	26.9%	18.9%
Baseball	19.5%	17.4%	28.9%	13.7%	18.9%
Visiting gardens/arboretums	19.2%	20.8%	19.4%	10.1%	21.1%
Gardening	19.2%	29.3%	25.8%	16.6%	17.6%
Shooting range	19.1%	27.4%	27.8%	14.1%	17.6%
Visiting playgrounds	18.6%	13.1%	19.8%	11.0%	20.1%
Sporting events/ tournaments	18.5%	12.5%	15.1%	16.2%	19.9%
Paved or gravel bicycle trails	17.0%	14.8%	15.2%	8.2%	19.4%
Miniature golf	16.5%	12.9%	15.0%	12.2%	18.0%

Activities – Occurred mostly in Virginia Probability Sample	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Paddling on scenic rivers	14.0%	13.4%	15.0%	11.5%	14.4%
Walks/runs/challenge-based events	12.1%	3.6%	8.9%	19.6%	11.9%
Volleyball	12.0%	8.0%	7.9%	19.1%	11.8%
Track & Field	11.9%	8.0%	12.8%	0.0%	13.6%
Stargazing, dark skies, astronomy	11.7%	10.1%	11.0%	11.5%	11.9%
Downhill skiing	11.6%	12.3%	8.4%	24.9%	9.5%
Dog parks	11.2%	11.9%	7.8%	6.8%	13.0%
Tubing on water	10.9%	8.7%	18.4%	14.1%	8.2%
Bicycle touring on roads	10.6%	5.2%	9.3%	6.6%	12.0%
Tent camping	10.4%	6.7%	10.4%	5.1%	11.7%
Archery	10.4%	4.7%	16.9%	10.2%	8.8%
Hunting	10.0%	11.3%	14.1%	16.0%	7.6%
Disc golf	10.0%	7.8%	11.7%	10.7%	9.5%
Visiting private farms/forests	9.9%	12.4%	11.2%	6.7%	10.1%
Softball	9.6%	5.5%	7.1%	14.9%	9.3%
Football	9.0%	11.8%	17.9%	7.4%	7.7%
Mountain biking	9.0%	0.9%	8.7%	7.0%	9.7%
Fitness trail, not jogging	8.9%	9.7%	2.8%	13.4%	9.4%
T-ball	8.4%	10.3%	2.7%	9.6%	9.1%
Pickleball	8.2%	8.4%	8.2%	5.1%	8.9%
Splash pads	7.9%	5.0%	3.3%	7.0%	9.5%
Sports field activities – Other	7.6%	2.0%	3.9%	6.0%	8.7%
Paddle boarding	7.5%	9.5%	6.7%	5.2%	8.2%
Bird watching away from home	7.3%	9.5%	8.8%	2.1%	8.0%
Power boating	7.1%	25.5%	5.8%	5.7%	7.2%
Nature study/nature programs	7.0%	8.1%	6.5%	3.7%	7.8%
Snowboarding	6.9%	4.2%	12.7%	10.6%	5.0%
Salt water fishing	6.8%	43.7%	4.6%	5.4%	6.4%
Tennis	6.0%	15.2%	5.8%	10.9%	4.7%
Par-3 golf	5.9%	8.0%	1.3%	2.7%	7.9%
Horseback riding	5.9%	1.6%	11.8%	7.0%	4.3%
Equestrian events	5.5%	3.2%	5.2%	11.9%	4.5%
Art-based tours/trails	5.1%	3.5%	5.4%	3.1%	5.5%
Staying in cabins and/or Yurts	4.9%	4.9%	7.3%	7.2%	3.8%
RV camping	4.7%	6.3%	5.7%	2.7%	4.7%
Courts and golf activities – Other	4.4%	2.3%	8.9%	1.7%	3.9%
Winter activities – Other	3.8%	52.3%	1.0%	2.9%	3.5%
Water skiing or towed on water	3.6%	7.2%	3.9%	7.5%	2.4%

Activities – Occurred mostly in Virginia Probability Sample	Overall total	DCR Region			
		Region 1	Region 2	Region 3	Region 4
	wCol %	wCol %	wCol %	wCol %	wCol %
Jet ski/personal watercraft	3.4%	7.5%	2.2%	3.5%	3.6%
Geocaching	3.4%	0.4%	2.0%	0.3%	4.5%
Zip line	3.1%	2.2%	4.8%	1.8%	2.9%
Racquetball	2.9%	0.0%	1.5%	10.8%	1.7%
ATV/UTV off-road	2.9%	4.5%	2.5%	8.0%	1.9%
Shuffleboard	2.5%	0.0%	0.0%	0.5%	3.7%
Other activities – Other	2.5%	0.0%	5.2%	0.5%	2.3%
Other	2.5%	3.4%	4.3%	4.5%	1.5%
Lacrosse	2.2%	1.0%	4.0%	1.8%	2.0%
Cheerleading	2.2%	2.0%	5.4%	1.7%	1.7%
Driving 4 wheel off-road, Jeep, truck	2.1%	5.4%	3.8%	2.7%	1.4%
Surfing	2.1%	1.8%	0.0%	0.6%	3.0%
Sailing	2.0%	7.3%	0.5%	1.8%	2.3%
Segway on sidewalks/paths	1.9%	0.3%	0.3%	0.0%	2.8%
Whitewater rafting (guided/solo)	1.9%	1.5%	0.9%	1.8%	2.2%
Kickball	1.6%	2.5%	2.7%	0.0%	1.6%
Rugby	1.5%	2.0%	0.0%	1.0%	1.8%
Squash	1.2%	0.5%	0.0%	0.4%	1.8%
Destination activities – Other	1.2%	2.9%	1.0%	2.7%	0.9%
Driving motorcycle off-road/dirt bike	1.1%	3.1%	3.2%	1.6%	0.4%
Cross country ski/snowshoe	1.0%	0.0%	3.2%	2.1%	0.4%
Orienteering	0.8%	0.0%	0.6%	0.3%	1.1%
Paddle-in camping	0.6%	0.6%	0.9%	0.3%	0.5%
Field hockey	0.6%	1.5%	0.0%	0.0%	0.7%
Sail boarding	0.5%	1.0%	0.0%	0.5%	0.6%
Croquet fields	0.4%	1.6%	0.8%	1.4%	0.0%
Electric-assist bicycle on road*	0.3%	2.0%	0.0%	0.6%	0.2%
Water activities – Other	0.3%	2.2%	0.0%	1.4%	0.0%
Electric-assist bike on trail**	0.3%	1.9%	0.8%	0.5%	0.0%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Outdoor Winter Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Respondents in Region 1 were more likely to select other, specify. Respondents in Region 2 were more likely to select snow sledding/tubing.

Respondents with a reported household income of \$150,000 or higher were more likely to select no winter activities as occurring mostly in Virginia

There were no large differences among the age categories, whether or not respondents reported having children in the household, race categories, or home ownership status.

Water Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Respondents in Region 1 were more likely to select salt water fishing; sunbathing/relaxing on a beach; power boating; swimming beach, lake, river (open water); and viewing the water.

Respondents in Region 2 were more likely to select fresh water fishing and tubing on water.

Respondents in Region 3 were more likely to select canoeing/kayaking. Respondents in Region 4 were more likely to select no water activities occurring mostly in Virginia.

Respondents aged 18-44 were more likely to select swimming beach, lake, river (open water).

Respondents in the 45-64 age category were more likely to select fresh water fishing, salt water fishing, and power boating.

Respondents who reported having children in the household were more likely to select swimming/outdoor pool.

Respondents with a reported household income of less than \$25,000 were more likely to select swimming/outdoor pool; swimming beach, lake, river (open water); and viewing the water.

There were no large differences among the race categories, or home ownership status.

Courts and Golf Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Respondents in the 45-64 age category were more likely to select pickleball and shooting ranges. Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select basketball.

Respondents with a reported household income of \$150,000 or higher were more likely to select par-3 golf and driving ranges.

There were no large differences among the four main regions of the state used for geographic analysis, whether or not respondents reported having children in the household, or home ownership status.

Destination Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Respondents in Region 2 were more likely to select driving for pleasure when compared to all other regions. Respondents in Region 4 were far less likely to select driving for pleasure compared to all other regions.

Respondents in the 65+ age category were more likely to select driving for pleasure.

Respondents who reported having children in the household were more likely to select visiting working farms, etc.

Non-Hispanic/Latino(a) White respondents were more likely to select driving for pleasure compared to the other race categories. Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select music festivals.

Respondents with a reported household income of less than \$25,000 were more likely to select visiting working farms, etc. Respondents with a reported household income of over \$75,000 were more likely to select culinary tours/trails and sporting events/tournaments.

There were no large differences among home ownership status.

Sports Field Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Other Activities – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Respondents in the 18-44 age category were more likely to select tent camping, visiting private farms/forests, and visiting playgrounds. Respondents aged 65+ were more likely to select bird watching away from home.

Respondents who reported having children in the household were more likely to select visiting playgrounds and pools.

There were no large differences among the four main regions of the state used for geographic analysis, household income, or home ownership status.

Activities on Trails – Occurred Mostly in Virginia: Demographic Differences, Probability Sample

Respondents who did not have children in the household were more likely to select walking for pleasure.

Non-Hispanic/Latino(a) White/Caucasian respondents were more likely to select paved/gravel bicycle trails.

Respondents with a reported income of \$150,000 or higher were more likely to select jogging/running, hiking/backpacking day trips, and mountain biking. They were also far more likely to select paved or gravel bicycle trails.

There were no large differences among the four main regions of the state used for geographic analysis or the age categories.

Activities – More of This is Needed: Crowd-Source Survey

When probability crowd-source respondents were asked to indicate if more of a certain type of outdoor activity was needed, the top four answers (see Table 14) were:

1. Walking for pleasure (53.7%)
2. Nature-based tours/trails (52.1%)
3. Canoeing/kayaking (47.4%)
4. Visiting parks (local, state, national) (47.1%)

Within each standalone “activity grid,” the top three most-needed activities per grid were:

Winter activities

1. Snow skedding/tubing (21.0%)
2. Cross country ski/snowshoe (19.7%)
3. Outdoor ice skating (19.4%)

Water activities

1. Canoeing/kayaking (47.4%)
2. Viewing the water (35.6%)
3. Paddling on scenic rivers (35.2%)

Courts and golf activities

1. Shooting range (15.9%)
2. Archery (14.9%)
3. Miniature Golf (14.7%)

Destination activities

1. Nature-based tours/trails (52.1%)
2. Outdoor festivals (36.0%)

3. Visiting working farms, etc. (30.9%)

Sports field activities

1. Soccer (7.1%)
2. Volleyball (5.1%)
3. Softball (5.1%)

Other activities

1. Visiting parks – local, state, national (47.1%)
2. Visiting natural areas (42.8%)
3. Visiting gardens/arboretums (36.8%)

Activities on trails

1. Walking for pleasure (53.7%)
2. Hiking/backpacking day trips (40.0%)
3. Paved or gravel bicycle trails (26.9%)

Table 14: Activities – More needed, 2022 Virginia Outdoors Survey crowd-source respondents

Activities – More needed Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Walking for pleasure	53.7%	55.4%	49.3%	52.1%	56.9%	46.7%
Nature-based tours/trails	52.1%	51.8%	45.9%	48.1%	56.5%	47.8%
Canoeing/kayaking	47.4%	42.9%	46.3%	50.6%	48.1%	44.5%
Visiting parks (local, state, national)	47.1%	44.6%	43.7%	47.6%	49.8%	40.9%
Visiting natural areas	42.8%	39.3%	40.3%	41.4%	46.4%	34.3%
Hiking/backpacking day trips	40.0%	33.0%	40.1%	39.1%	41.9%	34.5%
Visiting gardens/arboretums	36.8%	38.4%	36.5%	33.9%	37.9%	35.3%
Nature study/nature programs	36.4%	36.6%	32.1%	31.5%	40.3%	31.9%
Outdoor festivals	36.0%	40.2%	40.9%	35.0%	35.0%	34.1%
Viewing the water	35.6%	32.1%	27.7%	35.6%	40.2%	30.6%
Paddling on scenic rivers	35.2%	26.8%	35.1%	39.3%	37.1%	28.7%
Swimming beach, lake, river (open water)	32.4%	33.0%	29.9%	36.9%	31.3%	34.1%
Visiting working farms, etc.	30.9%	36.6%	28.7%	30.7%	30.9%	32.0%
Paved or gravel bicycle trails	29.9%	27.7%	27.5%	32.2%	31.8%	21.7%
Music festivals	29.7%	38.4%	31.5%	27.9%	29.3%	28.8%
Visiting historic areas	29.6%	31.3%	29.3%	30.0%	30.7%	24.3%
Stargazing, dark skies, astronomy	29.6%	32.1%	24.0%	28.8%	32.2%	26.3%
Viewing scenery	29.1%	29.5%	26.7%	25.1%	32.0%	24.8%
Swimming/outdoor pool	27.2%	32.1%	25.0%	30.9%	26.8%	26.2%
Staying in cabins and/or Yurts	26.4%	25.9%	24.6%	25.1%	28.1%	23.4%
Culinary tours/trails	25.7%	35.7%	20.6%	23.6%	28.0%	23.1%
Driving for pleasure	25.1%	30.4%	25.7%	26.0%	24.6%	24.5%
Picnicking away from home	25.1%	30.4%	26.7%	24.2%	24.9%	23.6%
Tent camping	25.1%	17.9%	23.2%	25.8%	26.5%	23.6%
Bird watching away from home	24.9%	24.1%	23.6%	20.6%	27.4%	21.9%
Fresh water fishing	24.8%	25.0%	29.1%	25.8%	21.7%	28.7%
Sunbathing/relaxing on a beach	24.8%	33.0%	16.4%	26.6%	25.5%	26.9%
Tubing on water	21.2%	17.9%	22.6%	23.0%	20.1%	22.2%

Activities – More needed Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Snow sledding/tubing	21.0%	25.0%	21.8%	18.0%	21.0%	21.7%
Horseback riding	20.7%	23.2%	25.7%	29.8%	16.5%	19.7%
Cross country ski/snowshoe	19.7%	16.1%	23.0%	23.4%	18.4%	18.1%
Ice skating, outdoor	19.4%	17.0%	17.8%	18.9%	19.2%	21.5%
Art-based tours/trails	19.1%	26.8%	19.2%	13.3%	20.4%	18.4%
Bicycle touring on roads	18.6%	22.3%	16.6%	18.2%	19.6%	17.0%
Equestrian events	18.2%	24.1%	23.2%	27.5%	13.1%	19.8%
Visiting private farms/forests	17.6%	21.4%	19.8%	18.0%	17.5%	14.1%
Dog parks	17.6%	19.6%	17.6%	17.8%	17.1%	18.2%
Jogging/running	17.1%	15.2%	17.6%	18.5%	17.1%	15.7%
Mountain biking	16.7%	9.8%	20.4%	20.4%	15.3%	15.7%
Pools	16.7%	30.4%	16.2%	17.8%	16.0%	15.1%
Shooting range	15.9%	20.5%	19.8%	16.3%	13.3%	18.9%
Walks, runs, challenge- based events	15.9%	18.8%	16.0%	17.8%	15.4%	15.1%
Paddle boarding	15.2%	17.9%	13.0%	18.0%	14.5%	16.1%
Fitness trail, not jogging	15.1%	24.1%	12.4%	15.0%	15.5%	14.2%
Paddle-in camping	14.9%	15.2%	16.2%	13.5%	14.4%	17.0%
Archery	14.9%	16.1%	16.0%	15.0%	14.7%	14.0%
Miniature golf	14.7%	20.5%	16.6%	17.2%	14.0%	11.4%
Pickleball	13.6%	17.0%	12.8%	12.0%	14.6%	12.2%
Hunting	12.9%	20.5%	18.4%	13.7%	9.5%	16.3%
Whitewater rafting (guided/solo)	12.8%	4.5%	14.8%	13.1%	13.1%	11.7%
Salt water fishing	12.1%	30.4%	7.6%	9.9%	12.8%	12.4%
RV camping	11.6%	12.5%	14.2%	13.9%	10.3%	10.9%
Splash pads	11.6%	19.6%	9.8%	14.4%	11.0%	11.0%
Downhill skiing	11.1%	5.4%	12.0%	12.7%	10.0%	12.9%
Tennis	10.7%	23.2%	9.8%	11.6%	9.9%	10.7%
Disc golf	10.5%	16.1%	10.2%	10.3%	10.9%	8.4%
Zip line	10.1%	14.3%	9.0%	9.0%	10.0%	11.7%
Sporting events/tournaments	9.6%	12.5%	10.4%	8.4%	9.0%	11.2%
Visiting playgrounds	9.5%	19.6%	8.6%	7.5%	9.8%	9.2%
Electric-assist bike on trail**	8.6%	10.7%	9.4%	7.9%	8.8%	6.7%
Sailing	8.4%	10.7%	5.0%	9.7%	9.1%	8.1%
Winter activities – Other	8.0%	6.3%	11.2%	10.7%	6.8%	6.8%

Activities – More needed Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Electric-assist bicycle on trail*	7.7%	8.0%	9.0%	8.4%	7.4%	6.6%
Snowboarding	7.5%	5.4%	6.8%	7.9%	6.7%	9.9%
Driving range	7.2%	10.7%	7.4%	8.6%	6.4%	7.9%
Basketball	7.2%	17.0%	6.8%	7.1%	7.0%	6.2%
Soccer	7.1%	13.4%	7.2%	7.3%	6.7%	6.6%
Geocaching	6.9%	8.0%	5.4%	4.3%	7.6%	8.8%
Driving 4 wheel off-road, Jeep, truck	6.8%	8.0%	9.6%	7.9%	5.5%	7.0%
Electric-assist bicycle on road	6.5%	7.1%	6.8%	7.7%	6.1%	5.8%
Other activities – Other	6.2%	13.4%	10.2%	8.2%	4.3%	4.4%
Par-3 golf	6.2%	6.3%	5.6%	5.8%	6.7%	5.4%
Orienteering	6.1%	2.7%	5.4%	6.0%	6.7%	5.8%
ATV/UTV off-road	6.0%	9.8%	10.4%	8.2%	3.6%	6.4%
18-hole golf	5.4%	8.9%	5.4%	6.4%	4.9%	5.2%
Power boating	5.2%	14.3%	3.2%	4.9%	5.2%	5.4%
Softball	5.1%	12.5%	7.6%	5.2%	3.8%	5.3%
Volleyball	5.1%	12.5%	6.0%	4.3%	4.8%	4.4%
Track & Field	4.7%	6.3%	5.6%	6.2%	4.1%	3.5%
Destination activities – Other	4.5%	7.1%	5.4%	8.2%	3.6%	2.7%
Baseball	4.4%	8.9%	5.8%	4.3%	3.6%	5.1%
Croquet fields	4.3%	8.9%	5.0%	3.9%	4.1%	3.6%
Jet ski/personal watercraft	4.0%	6.3%	1.0%	5.4%	3.8%	5.6%
Crew rowing	3.2%	3.6%	2.2%	3.2%	3.7%	2.8%
Driving motorcycle off-road/dirt bike	3.2%	6.3%	4.8%	3.4%	2.5%	2.6%
Water activities – Other	3.1%	2.7%	4.2%	4.5%	2.5%	2.6%
Racquetball	3.0%	7.1%	3.4%	1.5%	3.2%	2.6%
Kickball	2.9%	7.1%	3.8%	1.7%	2.7%	3.1%
Shuffleboard	2.8%	5.4%	3.8%	2.6%	2.8%	1.7%
Courts and golf activities – Other	2.8%	4.5%	3.2%	3.2%	2.3%	2.8%
Water skiing/towed on water	2.8%	3.6%	1.6%	2.6%	2.6%	4.1%
Surfing	2.7%	0.0%	1.4%	4.1%	2.7%	3.1%
Segway on sidewalks/paths	2.6%	3.6%	2.4%	2.8%	2.6%	2.4%
Sports field activities – Other	2.6%	3.6%	3.8%	3.2%	1.8%	3.1%
T-ball	2.5%	8.9%	2.8%	2.6%	1.9%	2.6%

Activities – More needed Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Lacrosse	2.5%	6.3%	3.6%	2.1%	2.1%	2.0%
Sail boarding	2.4%	6.3%	0.8%	3.0%	2.7%	1.5%
Rugby	2.3%	4.5%	2.2%	1.9%	2.5%	1.8%
Field hockey	2.2%	6.3%	1.8%	1.9%	2.2%	2.0%
Football	2.1%	5.4%	3.0%	1.5%	1.9%	2.0%
Other	1.9%	4.5%	3.2%	1.1%	1.7%	1.2%
Kite boarding	1.8%	1.8%	0.6%	2.6%	2.0%	2.0%
Cheerleading	1.3%	4.5%	1.6%	0.9%	1.0%	1.3%
Squash	1.2%	4.5%	1.2%	1.3%	0.9%	1.3%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – More of This is Needed: Crowd-Source Survey, Demographic Differences

Outdoor Winter Activities – More Needed: Demographic Differences, Crowd-Source Survey

In general, younger respondents and those with children were more likely to feel there was more of a need for many outdoor winter activities. Many of these differences were small (10 percentage points or less), but the patterns seem clear. For example, respondents with children were significantly more likely to state that more snow sledding/tubing was needed compared to respondents without children (32.2% versus 18.1%).

Similarly, 26.2% of respondents age 18-44 that more snow sledding/tubing was needed, compared to 20.3% of those age 45-64 and 12.7% of those age 65 and over.

Respondents with household incomes of \$150,000 or more were slightly more likely to say that more downhill skiing and cross country skiing/snowshoeing was needed, compared to those with lower household incomes.

Respondents who rented their homes were more likely to say that more outdoor ice skating was needed.

There were no large differences among the four main regions of the state used for geographic analysis, or the race categories.

Water Activities – More Needed: Demographic Differences, Crowd-Source Survey

In general, respondents with children in the household were significantly more likely to say that more water activities were needed, but these differences were small (10 percentage points or

less). Respondents with children in the household were significantly more likely to indicate a need for more splash pads (28.0% versus 7.3%) and swimming/outdoor pools (40.7% versus 23.6%).

Similarly, age influenced the perception of need of more water activities, but some of these individual differences were small (10 percentage points or less). For example, 38.8% of respondents aged 18-44 and 31.3% of respondents aged 45-64 stated more swimming beach, lake, river (open water) was needed compared to 24.0% of respondents over 65.

Respondents in the different regions generally said more was needed for the kinds of activities that would be found in those regions. These differences were not large, but the pattern was evident. For example, respondents in Region 2 wanted more fresh water fishing and whitewater rafting compared to respondents in Region 1. Those in Region 1 – and to a lesser extent, also those in Region 3 and Region 4 – tended to say that more was needed for activities often done in coastal waters or navigable rivers, such as saltwater fishing, jet ski/personal watercraft, sunbathing/relaxing on a beach, power boating, sailing and sail boarding.

There were no large differences among race categories, household income, or home ownership status.

Courts and Golf Activities – More Needed: Demographic Differences, Crowd-Source Survey

Respondents in Region 1 were more likely to say that more was needed for tennis and basketball, compared to respondents in all other regions.

Compared to respondents age 65 and older, younger respondents felt there was more of a need for some of these activities. For example, only 40.1% of respondents aged 65 and older chose at least one court and golf activity as “more needed,” compared to 52.8% of respondents aged 45-64 and 52.7% of respondents aged 18-44. Younger respondents were also more likely to state that more archery was needed.

Although many results in the survey show the relationship between being younger and having children in the household, respondents with children in the household were less likely to select any courts and golf activities as more needed compared to those with no children in the household.

Non-Hispanic/Latino(a) White/Caucasian respondents were also less likely to choose any court or golf activity as being more needed compared to non-Hispanic/Latino(a) Black/African-American respondents. Also, non-Hispanic/Latino(a) Black/African-American respondents were more likely to say that more tennis courts and basketball courts were needed compared to non-Hispanic/Latino(a) White/Caucasian respondents and respondents of other races. The number of non-Hispanic/Latino(a) Black/African-American respondents in the crowd-source survey is small (unweighted n=46), so these findings are tentative.

There were no large differences among the categories for household income and home ownership status.

Destination Activities – More Needed: Demographic Differences, Crowd-Source Survey

Younger respondents were more likely to say that more was needed for outdoor festivals; culinary tours/trails; and walks, runs, challenge-based events. Older respondents were a little more likely to say that more was needed for nature-based tours/trails and driving for pleasure.

Non-Hispanic/Latino(a) Black/African-American respondents were more likely to state that more music festivals were needed compared to non-Hispanic/Latino(a) White/Caucasian respondents and those of other races.

Respondents with lower household incomes were more likely to say that more visiting working farms and music festivals were needed.

There were no large differences among the four main regions of the state used for geographic analysis, whether or not respondents reported having children in the household, race categories, or home ownership status.

Sports Field Activities – More Needed: Demographic Differences, Crowd-Source Survey

For almost every activity listed in this grid, respondents in Region 1 tended to be more likely to say that more was needed. These differences were not large because most of the activities did not reach 10%, but the pattern held for almost the entire grid.

Similar patterns were seen by age (younger respondents were more likely to name many of the activities as needing more, compared to older respondents) and children in the household (those with children were more likely to name many of the activities as needing more, compared to those without children).

Non-Hispanic/Latino(a) Black/African-American respondents were more significantly more likely to say more sports field activities were needed (football, kickball, cheerleading, and track and field), but these differences were small (10 percentage points of less). Consistent with this pattern, White non-Hispanic respondents and respondents of other races were less likely to name any sports field activities as being needed compared to non-Hispanic/Latino(a) Black/African-American respondents.

There were no large differences among household income or home ownership status.

Other Activities – More Needed: Demographic Differences, Crowd-Source Survey

Respondents in Region 4 were the least likely to say that more hunting was needed, compared to all other regions but especially compared to Region 1. Respondents in Region 1 were more likely to say that more of visiting playgrounds was needed, as well as pools.

Respondents aged 18-44 were more likely to say that more tent camping and paddle-in camping were needed, compared to respondents age 65 or over.

Compared to respondents without children in the household, those with children felt more needs for visiting playgrounds and pools.

Respondent with lower household incomes were more likely to say that more nature study/nature programs were needed, as well as viewing scenery, zip line, visiting private farms/forests, gardening, visiting natural areas, and pools.

Those who rented their homes were more likely to say that more tent camping was needed.

Activities on Trails – More Needed: Demographic Differences, Crowd-Source Survey

Respondents in Region 1 were more likely to say that more “fitness trail, not jogging” was needed.

Respondents aged 65 and over were more likely to say that more walking for pleasure was needed, compared to respondents aged 45-64 and 18-44. However, respondents aged 18-44 felt that more jogging/running trails, hiking/backpacking day trips and mountain biking were needed, compared to respondents aged 45-64 and 65 and over.

Tracking with the difference observed by age, respondents with children in the household were more likely to say that more jogging/running trails, hiking/backpacking day trips and mountain biking were needed.

There were no large differences household income or home ownership status.

Activities – Done in the Last 12 Months: Crowd-Source Survey

Respondents to the crowd-source survey were also asked if they or anyone in their household had participated in any of 105 different outdoor recreation activities within the last 12 months. The four activities most frequently participated in were:

1. Walking for pleasure (70.0%) (2017 value: 76.1%)
2. Visiting parks – local, state, national (64.5%) (2017 value: 73.6%)
3. Viewing the water (50.4%) (2017 value: 43.9%)
4. Swimming/outdoor pool (49.8%) (2017 value: 42.0%)

Within each standalone “activity grid,” the top three most-needed activities per grid were:

Winter activities

1. Snow skedding/tubing (13.8%)
2. Downhill skiing (12.2%)
3. Ice skating outdoors (7.1%)

Water activities

1. Viewing the water (49.8%)
2. Canoeing/kayaking (48.0%)
3. Sunbathing/relaxing on a beach (41.5%)

Courts and golf activities

1. Miniature Golf (12.8%)
2. Shooting range (12.2%)
3. Tennis (10.4%)

Destination activities

1. Nature-based tours/trails (47.5%)
2. Driving for pleasure (39.2%)
3. Outdoor festivals (31.5%)

Sports field activities

1. Soccer (7.3%)
2. Baseball (3.1%)
3. Softball (2.9%)

Other activities

1. Visiting parks – local, state, national (64.5%)
2. Visiting natural areas (50.4%)
3. Viewing scenery (44.0%)

Activities on trails

1. Walking for pleasure (70.0%)
2. Hiking/backpacking day trips (46.5%)
3. Paved or gravel bicycle trails (26.7%)

Table 15: Activities – Done in the last 12 months, 2022 Virginia Outdoors Survey crowd-source respondents

Activities – Done in the last 12 months Crowd-source respondents	Overall total wCol %	DCR Region				
		Region 1 wCol %	Region 2 wCol %	Region 3 wCol %	Region 4 wCol %	Unknown wCol %
Walking for pleasure	70.0%	63.4%	69.1%	67.8%	74.5%	55.4%
Visiting parks (local, state, national)	64.5%	60.7%	62.3%	60.1%	69.3%	54.7%
Visiting natural areas	50.4%	42.0%	48.9%	48.1%	54.8%	39.9%
Viewing the water	49.8%	50.9%	42.9%	42.5%	56.6%	42.7%
Canoeing/kayaking	48.0%	51.8%	47.5%	51.7%	48.2%	44.2%
Nature-based tours/trails	47.5%	42.9%	40.1%	46.1%	51.9%	42.9%
Hiking/backpacking day trips	46.5%	30.4%	52.7%	47.9%	47.1%	38.6%
Viewing scenery	44.0%	37.5%	41.9%	40.1%	47.6%	38.2%
Sunbathing/relaxing on a beach	41.5%	54.5%	32.9%	38.2%	44.4%	41.2%
Visiting historic areas	41.0%	42.9%	35.7%	38.6%	44.3%	36.3%
Visiting gardens/arboretums	40.5%	33.9%	34.1%	32.6%	45.8%	37.7%
Swimming beach, lake, river (open water)	39.5%	46.4%	39.3%	39.3%	39.1%	39.4%
Driving for pleasure	39.2%	41.1%	43.1%	41.2%	38.8%	34.3%
Swimming/outdoor pool	33.4%	27.7%	30.9%	31.8%	35.5%	32.3%
Gardening	31.9%	25.0%	31.3%	29.6%	34.3%	27.3%
Picnicking away from home	31.6%	26.8%	34.1%	31.8%	32.1%	27.5%
Outdoor festivals	31.5%	29.5%	36.7%	27.9%	31.6%	29.6%
Visiting working farms, etc.	30.7%	31.3%	28.9%	30.9%	31.5%	29.8%
Fresh water fishing	30.6%	33.9%	37.1%	33.0%	27.3%	31.6%
Paddling on scenic rivers	28.0%	23.2%	29.3%	30.5%	28.2%	25.5%
Paved or gravel bicycle trails	26.7%	15.2%	28.5%	26.4%	28.6%	18.8%
Music festivals	25.3%	23.2%	31.9%	20.0%	25.0%	25.1%
Bird watching away from home	25.2%	20.5%	22.6%	24.2%	27.7%	20.9%
Nature study/nature programs	25.1%	20.5%	19.4%	25.1%	27.8%	22.9%
Tent camping	24.7%	16.1%	26.5%	22.5%	25.5%	23.8%
Jogging/running	23.1%	11.6%	27.5%	22.7%	23.3%	19.4%
Culinary tours/trails	19.9%	18.8%	17.8%	23.6%	20.2%	18.2%
Stargazing, dark skies, astronomy	18.5%	17.0%	15.2%	20.4%	19.0%	18.7%

Activities – Done in the last 12 months Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Pools	18.3%	12.5%	16.2%	18.2%	19.4%	17.8%
Staying in cabins and/or Yurts	17.2%	14.3%	16.8%	17.6%	18.3%	13.6%
Tubing on water	16.5%	15.2%	23.0%	17.0%	14.5%	16.5%
Walks, runs, challenge-based events	16.2%	11.6%	16.6%	17.2%	16.3%	15.9%
Visiting private farms/forests	15.6%	15.2%	18.4%	19.5%	13.6%	16.1%
Salt water fishing	15.5%	44.6%	11.8%	12.9%	15.4%	15.3%
Bicycle touring on roads	15.2%	8.0%	15.2%	13.3%	17.1%	11.9%
Visiting playgrounds	14.9%	17.9%	12.6%	11.6%	16.2%	15.6%
Sporting events/tournaments	14.2%	12.5%	14.4%	14.2%	14.4%	13.5%
Mountain biking	14.2%	7.1%	19.6%	17.0%	13.2%	9.3%
Equestrian events	13.8%	14.3%	19.0%	24.5%	9.2%	13.5%
Snow sledding/tubing	13.8%	14.3%	17.0%	14.2%	12.7%	13.5%
Paddle boarding	13.5%	13.4%	10.8%	12.9%	13.6%	15.8%
Horseback riding	13.1%	14.3%	18.6%	21.7%	8.9%	12.8%
Dog parks	13.0%	7.1%	11.8%	11.8%	13.9%	14.1%
Miniature golf	12.8%	13.4%	12.0%	12.0%	13.4%	12.0%
Hunting	12.3%	21.4%	20.0%	16.3%	7.7%	14.4%
Shooting range	12.2%	11.6%	15.4%	11.8%	11.0%	13.5%
Downhill skiing	12.2%	6.3%	12.0%	16.7%	11.4%	12.0%
Power boating	11.8%	38.4%	11.0%	10.1%	11.7%	9.2%
Tennis	10.4%	3.6%	9.8%	7.9%	11.6%	10.7%
18-hole golf	10.1%	15.2%	9.6%	8.2%	10.2%	11.2%
Fitness trail, not jogging	10.0%	7.1%	9.2%	9.9%	10.2%	10.7%
RV camping	9.8%	8.0%	13.0%	11.6%	9.3%	6.6%
Driving range	9.7%	6.3%	7.2%	8.4%	11.1%	9.6%
Art-based tours/trails	9.6%	13.4%	9.0%	8.4%	10.0%	9.4%
Pickleball	8.4%	3.6%	7.6%	6.4%	9.5%	8.8%
Basketball	8.2%	4.5%	9.6%	7.9%	7.6%	9.4%
Archery	7.9%	5.4%	8.0%	9.2%	7.6%	8.2%
Disc golf	7.7%	6.3%	8.8%	8.6%	7.3%	7.5%
Soccer	7.3%	8.0%	6.6%	7.9%	7.7%	5.5%
Ice skating, outdoor	7.1%	3.6%	6.8%	4.5%	7.2%	9.3%
Winter activities – Other	7.1%	6.3%	8.8%	11.2%	6.0%	5.6%
Cross country ski/snowshoe	6.9%	2.7%	10.0%	9.9%	5.9%	5.8%

Activities – Done in the last 12 months Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Whitewater rafting (guided/solo)	6.5%	0.0%	5.8%	6.2%	7.5%	6.1%
Snowboarding	6.3%	4.5%	7.0%	6.4%	5.9%	6.7%
Splash pads	6.0%	3.6%	4.6%	6.7%	6.0%	7.4%
Other activities -- Other	5.8%	12.5%	9.6%	7.1%	4.3%	3.4%
Geocaching	5.7%	3.6%	4.6%	4.5%	6.4%	6.1%
Jet ski/personal watercraft	5.0%	8.9%	5.6%	4.3%	4.5%	5.9%
Sailing	4.9%	8.0%	2.8%	6.0%	5.1%	4.6%
Par-3 golf	4.5%	1.8%	5.4%	4.3%	4.6%	4.1%
Zip line	4.5%	2.7%	4.2%	4.5%	4.3%	6.1%
Driving 4 wheel off-road, Jeep, truck	4.0%	1.8%	6.2%	4.5%	3.3%	4.3%
Destination activities - Other	4.0%	4.5%	5.2%	6.4%	3.3%	2.7%
Water skiing/towed on water	3.8%	2.7%	4.0%	3.4%	3.8%	4.3%
Paddle-in camping	3.8%	0.0%	3.4%	3.9%	4.3%	3.4%
Electric-assist bicycle on trail*	3.8%	3.6%	4.4%	3.0%	3.4%	5.4%
Electric-assist bike on trail**	3.6%	2.7%	4.0%	3.2%	3.8%	2.9%
ATV/UTV off-road	3.5%	7.1%	6.2%	3.4%	2.1%	5.2%
Electric-assist bicycle on road	3.4%	2.7%	2.8%	3.4%	3.8%	3.2%
Baseball	3.1%	4.5%	2.8%	4.1%	2.6%	4.2%
Softball	2.9%	2.7%	3.8%	4.3%	2.5%	1.8%
Track & Field	2.6%	0.0%	3.6%	4.1%	2.3%	1.8%
Volleyball	2.5%	4.5%	2.6%	3.0%	2.5%	1.8%
Water activities – Other	2.5%	1.8%	3.8%	3.9%	2.2%	1.5%
Courts and golf activities – Other	2.4%	4.5%	3.6%	2.8%	1.9%	2.1%
Sports field activities - Other	2.3%	2.7%	2.4%	2.4%	2.1%	2.9%
Surfing	2.3%	0.9%	2.0%	1.7%	2.5%	2.6%
Orienteering	2.2%	0.0%	3.0%	1.1%	2.3%	2.2%
Football	1.8%	1.8%	2.8%	3.2%	1.2%	1.5%
Driving motorcycle off-road/dirt bike	1.6%	1.8%	3.0%	1.5%	1.2%	1.4%
Activities on trails – Other	1.3%	3.6%	1.4%	0.9%	1.4%	0.9%
T-ball	1.3%	2.7%	0.6%	1.7%	1.2%	1.5%
Kickball	1.2%	0.0%	2.2%	1.1%	1.1%	1.1%

Activities – Done in the last 12 months Crowd-source respondents	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Shuffleboard	1.1%	0.0%	1.6%	0.6%	1.2%	0.9%
Croquet fields	1.1%	1.8%	1.8%	1.5%	0.9%	0.7%
Crew rowing	1.1%	1.8%	0.2%	0.6%	1.2%	1.5%
Segway on sidewalks/paths	1.0%	1.8%	0.8%	0.6%	1.0%	1.2%
Lacrosse	1.0%	0.0%	0.8%	1.1%	1.2%	0.7%
Racquetball	1.0%	0.0%	1.2%	0.4%	0.9%	1.5%
Field hockey	0.7%	1.8%	0.0%	0.9%	0.8%	0.4%
Sail boarding	0.6%	1.8%	0.0%	0.9%	0.7%	0.7%
Cheerleading	0.6%	1.8%	0.4%	1.3%	0.4%	0.2%
Rugby	0.5%	0.0%	0.2%	0.0%	0.7%	0.4%
Kite boarding	0.4%	0.9%	0.0%	0.4%	0.3%	0.7%
Squash	0.3%	0.0%	0.0%	0.0%	0.4%	0.6%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Done in the Last 12 Months: Crowd-Source Survey, Demographic Differences

Outdoor Winter Activities – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

In general, respondents with children were more likely to report participating in outdoor winter activities (downhill skiing, snowboarding, ice skating) than were respondents without children. For example, respondents with children were more significantly more likely to report participating in snow sledding/tubbing than were respondents without children (28.8% and 9.9%, respectively).

Water Activities – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

In general, respondents aged 18-44 were significantly more likely to report participating in water activities compared to respondents aged 45-64 and 65-plus. For example, 51.6% of respondents aged 18-44 reported sunbathing/relaxing on the beach compared to 40.2% of respondents aged 45-64 and 28.7% of people over 65. Similarly, 43.1% of respondents aged 18-44 reported swimming/outdoor pool compared to 32.8% of respondents aged 45-64 and 19.0% of respondents over 65.

Swimming in open water (beach, lake, river) followed a similar pattern, with 50.1% of respondents aged 18-44 saying they did open-water swimming in the last 12 months compared to 38.8% of respondents aged 45-64 and 23.5% of respondents aged 65 and over.

Canoeing/kayaking rates were similar for those aged 18-44 and 45-64 (53.5% and 50.1%, respectively), but significantly lower for those aged 65 and over (37.9%). Paddling on scenic rivers followed a similar pattern: 32.7% of respondents aged 18-44 and 30.0% of respondents aged 45-64 reported paddling on scenic rivers in the last 12 months, compared to 18.7% of respondents age 65 and over.

Respondents with children were also significantly more likely to report participating in water activities compared to respondents without children. For example, 55.1% of respondents with children reported swimming in and outdoor pool compared to 27.8% of respondents without children. Similarly, 55.6% of respondents with children reported swimming in open water (beach, lake, river) compared to 35.3% of respondents without children in the household. While 17.4% of respondents with children reported visiting splash pads in the last 12 months, only 3.1% of respondents without children reported doing so.

Courts and Golf Activities – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

Younger respondents, those with children in the household and those with higher household incomes were more likely to say they had done many of these activities in the last 12 months, but

most of the differences in percentages were not large – even those that were statistically significant.

Destination Activities – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

For destination activities, 39.4% of respondents aged 18 to 44 reported having visited a working farm in the last 12 months compared to 28.0% of respondents aged 45-64 and 21.2% of respondents aged 65 and over. Respondents aged 65 and over had significantly higher rates of participating in nature-based tours/trails – 56.4% compared to 44.2% and 46.8% for respondents aged 18-44 and 45-64, respectively.

Sports Field Activities – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

Respondents with children were more likely to name at least one sports field activity compared to those without children (36.7% versus 11.9%). For example, those with children were more likely to report someone in the household playing soccer compared to respondents without children (19.2% versus 4.0%).

There were no large differences among the four main regions of the state used for geographic analysis, race categories, household income or home ownership status.

Other Activities – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

In this activity grid for the crowd-source survey, tent camping was related to age – 35.1% of respondents aged 18-44 reported tent camping compared to 23.5% of respondents aged 45-64 and 12.1% of respondents aged 65 and over. As one might expect, respondents with children were more likely to report going to playgrounds compared to respondents without children (39.1% versus 8.1%).

There were no large differences among the four main regions of the state used for geographic analysis, race categories, household income or home ownership status.

Activities on Trails – Done in the Last 12 Months: Demographic Differences, Crowd-Source Survey

Respondents in Region 1 and those who did not report their county or independent city of residence were less likely to have done any activities on trails – 72.3% in Region 1 and 64.1% in unknown regions did any activities on trails, compared to 83.0% in Region 2, 82.8% in Region 3 and 84.0% in Region 4.

Respondents aged 18-44 were more likely to report jogging/running than were respondents aged 45-64 or 65 and over (36.0%, 22.4% and 8.3%, respectively). Respondents with children were also more likely to report jogging/running than were those without children (36.0% and 19.3%).

Non-Hispanic/Latino Black/African-American respondents were significantly less likely to report hiking/backpacking day trips (17.4% did so) than were Non-Hispanic/Latino White/Caucasian respondents (47.4%) and those of other races (51.1%).

There were no large differences among the household income categories.

Activities – Total Number of Days on which Anyone did This During Last 12 Months: Crowd-Source Survey

For activities that had been done by the respondent or a member of their household in the last 12 months, the crowd-source survey asked for the number of days they had done the activity. In order to avoid undue influence exerted by extreme values, the median statistic is used in this report and in Table 16 below, rather than the mean. Activities that were mentioned by small numbers of respondents – such as squash, kite boarding, rugby and sail boarding in the crowd-source survey – may have unusual data values for median number of days.

Among crowd-source survey respondents, the four activities with at least 30 participants statewide that had the highest median numbers of days participated in were:

1. Walking for pleasure (55.5 days)
2. Gardening (45 days)
3. Jogging/running (45 days)
4. Horseback riding (40 days)

For the 10 most frequently participated-in activities in the crowd-source survey (see the prior section and Table 15), the number of days were as follows:

1. Walking for pleasure (55.5 days)
2. Visiting parks (local, state, national) (12 days)
3. Visiting natural areas (12 days)
4. Viewing the water (20 days)
5. Canoeing/kayaking (5 days)
6. Nature-based tours/trails (10 days)
7. Hiking/backpacking day trips (10 days)
8. Viewing scenery (20 days)
9. Sunbathing/relaxing on a beach (7 days)
10. Visiting historic areas (5 days)

For some activities, the data about median number of days participated in are both too volatile (due to small numbers of participants in some cases) and too similar to warrant listing the top

activities within each standalone “activity grid” by the highest median numbers of days participated in. The same issues may make it problematic to look for differences in numbers of days of participation across demographic subgroups. Therefore, those lists and additional analyses are not presented here.

Table 16: Activities – Number of days done in last 12 months, 2022 Virginia Outdoors Survey crowd-source respondents

Activities – # of Days Done Crowd-Source	Overall total		DCR Region									
			Region 1		Region 2		Region 3		Region 4		Unknown	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Squash, Rugby, Kite boarding, Sail boarding). However, all activities are presented here for completeness.												
Walking for pleasure	55.5	2008	50.0	69	52.0	328	52.0	306	60.0	1146	52.0	159
Gardening	45.0	885	40.0	26	40.0	142	45.0	125	45.0	503	45.0	89
Jogging/running	45.0	641	50.0	11	40.0	130	50.0	101	40.0	343	60.0	56
Horseback riding	40.0	380	55.0	16	45.0	92	50.0	98	30.0	138	40.0	36
Outdoor winter activities – Other	30.0	219	90.0	7	20.0	41	25.0	47	35.0	92	30.0	32
Field hockey	30.0	21	60.0	2		0	55.0	4	18.0	13	295.0	2
Other activities – Other	30.0	164	40.0	13	20.0	45	30.0	31	30.0	62	45.0	13
Water activities – Other	29.0	74	50.0	1	55.0	18	30.0	18	24.0	29	16.0	8
Soccer	25.0	219	10.0	9	20.0	31	16.0	35	30.0	120	37.0	24
Activities on trails – Other	24.0	39	18.5	4	6.0	7	16.0	4	30.0	23	80.0	1
Viewing the water	20.0	1503	25.0	54	20.0	201	13.0	188	20.0	859	20.0	201
Squash	20.0	6		0		0		0	17.5	4	55.0	2
Courts and golf activities – Other	20.0	70	10.0	5	27.5	16	25.0	11	15.0	29	30.0	9
Baseball	20.0	90	10.0	5	10.0	13	20.0	16	17.5	40	27.5	16
Football	20.0	52	15.0	2	12.0	13	30.0	11	20.0	19	15.0	7
Lacrosse	20.0	29		0	20.0	4	10.0	5	20.0	17	50.0	3
Cheerleading	20.0	13	22.5	2	23.5	2	22.5	4	14.0	4	8.0	1
Sports field activities – Other	20.0	70	7.0	3	27.5	12	9.5	10	20.0	33	62.5	12
Viewing scenery	20.0	1234	25.0	39	20.0	194	20.0	170	20.0	703	20.0	128
Track & Field	19.0	74		0	27.5	16	24.0	17	12.0	35	40.0	6
Rugby	18.0	12		0		0		0	16.0	11	20.0	1
Softball	16.0	85	20.0	3	15.0	19	20.0	17	15.0	38	21.5	8

Activities – # of Days Done Crowd-Source	Overall total		DCR Region									
			Region 1		Region 2		Region 3		Region 4		Unknown	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Squash, Rugby, Kite boarding, Sail boarding). However, all activities are presented here for completeness.												
Crew rowing	15.0	29	8.0	2	1.0	1	5.5	2	30.0	17	50.0	7
Destination activities – Other	15.0	118	82.5	4	22.5	26	13.0	29	15.0	49	25.0	10
Visiting playgrounds	15.0	405	10.0	18	10.0	57	15.0	48	15.0	234	20.0	48
Mountain biking	15.0	399	5.0	6	20.0	94	10.0	76	15.0	201	19.0	22
Paved or gravel bicycle trails	15.0	754	5.0	17	15.0	136	12.0	118	15.0	434	15.0	49
T-ball	12.0	34	12.0	3	22.5	2	10.0	6	10.0	17	14.5	6
Hunting	12.0	356	10.0	23	10.0	96	12.0	73	14.0	116	17.5	48
Visiting parks (local, state, national)	12.0	1862	10.0	65	10.0	296	10.0	267	15.0	1054	12.0	180
RV camping	12.0	278	22.0	8	10.0	61	12.0	49	10.0	137	15.0	23
Visiting natural areas	12.0	1441	15.0	43	12.0	229	11.0	214	12.0	827	20.0	128
Fresh water fishing	10.0	937	10.0	36	8.0	178	10.0	147	8.0	421	10.0	155
Swimming/outdoor pool	10.0	979	5.0	29	8.0	140	10.0	131	10.0	530	10.0	149
Tennis	10.0	312	10.0	4	5.0	46	8.0	37	10.0	176	10.0	49
Basketball	10.0	245	10.0	5	15.0	45	10.0	35	10.0	120	20.0	40
Equestrian events	10.0	411	11.0	16	10.0	92	10.0	108	7.0	141	10.0	54
Nature-based tours/trails	10.0	1402	10.0	44	10.0	185	10.0	207	10.0	795	10.0	171
Volleyball	10.0	76	3.0	5	10.0	13	9.0	13	10.0	38	15.0	7
Bird watching away from home	10.0	698	10.0	21	6.5	102	7.0	106	10.0	409	10.0	60
Bicycle touring on roads	10.0	411	10.0	7	15.0	71	10.0	56	10.0	247	9.5	30
Pools	10.0	504	6.0	13	10.0	74	10.0	73	10.0	289	10.0	55
Hiking/backpacking day trips	10.0	1322	5.0	33	12.0	254	10.0	217	10.0	713	10.0	105
Fitness trail, not jogging	10.0	249	5.0	7	10.0	41	10.0	40	10.0	135	11.0	26
Driving motorcycle off-road/dirt bike	10.0	42	1.0	1	17.5	12	15.0	6	7.0	19	12.5	4
ATV/UTV off-road	10.0	93	15.0	8	12.0	27	10.0	16	7.0	31	10.0	11
Kite boarding	8.0	7	20.0	1		0	1.0	1	8.0	3	5.5	2

Activities – # of Days Done Crowd-Source	Overall total		DCR Region									
			Region 1		Region 2		Region 3		Region 4		Unknown	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Squash, Rugby, Kite boarding, Sail boarding). However, all activities are presented here for completeness.												
Driving for pleasure	8.0	1150	10.0	41	10.0	201	9.0	183	6.0	586	8.0	139
Electric-assist bike on trail**	7.5	98	5.0	3	5.0	20	7.0	14	8.0	55	22.5	6
Sunbathing/relaxing on a beach	7.0	1255	10.0	56	6.0	152	6.0	171	7.0	677	8.0	199
Swimming beach, lake, river (open water)	7.0	1177	10.0	47	6.0	186	6.0	170	7.0	588	7.0	186
18-hole golf	7.0	302	10.0	17	5.5	46	6.0	36	7.0	153	10.0	50
Electric-assist bicycle on road	7.0	85	7.5	2	27.5	12	20.0	14	5.0	50	3.0	7
Pickleball	6.0	254	85.0	4	5.0	36	10.0	29	6.5	144	5.0	41
Kickball	5.5	38		0	10.0	11	3.0	5	5.0	17	5.0	5
Salt water fishing	5.0	461	8.5	46	3.0	55	4.0	56	5.0	234	5.0	70
Power boating	5.0	348	10.0	39	5.0	53	7.0	45	5.0	175	5.0	36
Canoeing/kayaking	5.0	1455	6.0	54	5.0	226	5.0	226	5.0	735	5.0	214
Paddling on scenic rivers	5.0	824	4.0	23	5.0	136	4.0	127	4.0	421	5.0	117
Driving range	5.0	291	2.0	7	3.0	32	5.0	35	5.0	172	5.0	45
Archery	5.0	235	2.5	6	5.0	38	5.0	41	5.0	113	10.0	37
Shooting range	5.0	368	5.0	13	5.0	73	10.0	52	5.0	167	5.0	63
Sporting events/tournaments	5.0	406	8.0	13	5.0	68	5.0	60	5.0	215	5.5	50
Picnicking away from home	5.0	904	4.0	26	5.0	159	5.0	139	5.0	493	5.0	87
Nature study/nature programs	5.0	684	5.0	19	4.0	88	5.0	107	5.0	404	6.5	66
Visiting historic areas	5.0	1160	4.0	44	3.0	164	4.0	167	5.0	667	5.0	118
Dog parks	5.0	348	4.0	7	4.5	50	5.0	49	10.0	197	3.0	45
Tent camping	5.0	718	4.0	17	5.0	128	4.0	99	5.0	392	5.0	82
Visiting private farms/forests	5.0	424	5.0	17	6.0	79	5.0	84	4.0	197	10.0	47
Electric-assist bicycle on trail*	5.0	90	5.0	3	4.0	19	2.0	12	5.0	44	12.5	12
Stargazing, dark skies, astronomy	5.0	518	6.0	18	5.0	69	5.5	90	5.0	280	10.0	61

Activities – # of Days Done Crowd-Source	Overall total		DCR Region									
			Region 1		Region 2		Region 3		Region 4		Unknown	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Squash, Rugby, Kite boarding, Sail boarding). However, all activities are presented here for completeness.												
Driving 4 wheel off-road, Jeep, truck	5.0	111	27.0	2	6.0	29	4.0	18	5.0	51	5.0	11
Downhill skiing	4.0	392	6.0	7	5.0	56	4.0	77	4.0	181	4.0	71
Jet ski/personal watercraft	4.0	133	5.0	7	3.0	26	5.0	18	3.0	62	4.5	20
Sailing	4.0	139	6.5	8	2.5	14	3.5	26	4.0	73	3.0	18
Paddle boarding	4.0	389	3.0	12	5.0	50	3.0	57	5.0	200	4.0	70
Splash pad	4.0	176	5.0	4	3.0	20	3.5	30	5.0	87	3.0	35
Disc golf	4.0	235	4.0	7	4.0	43	3.0	36	5.0	116	4.0	33
Geocaching	4.0	160	6.0	4	2.0	21	2.0	18	5.0	98	4.0	19
Surfing	3.5	66	1.0	1	1.5	10	3.5	8	5.0	35	6.0	12
Snowboarding	3.0	197	1.0	4	3.0	34	4.0	28	3.0	91	4.0	40
Cross country ski/snowshoe	3.0	219	4.0	3	5.0	47	2.0	45	3.0	91	4.0	33
Water skiing/towed on water	3.0	104	5.0	2	4.0	19	3.0	15	3.0	56	2.0	12
Par-3 golf	3.0	123	1.5	2	2.5	22	3.0	17	4.0	67	3.0	15
Racquetball	3.0	26		0	3.0	5	7.0	2	7.0	13	2.5	6
Visiting working farms, etc.	3.0	897	2.0	33	2.0	135	2.0	131	3.0	486	3.0	112
Culinary tours/trails	3.0	576	2.0	20	4.0	83	4.0	103	3.0	300	4.0	70
Visiting gardens/arboretums	3.0	1149	3.0	33	3.0	154	2.0	143	3.0	698	3.0	121
Staying in cabins and/or Yurts	3.0	486	5.0	14	4.0	79	3.0	75	3.0	276	3.5	42
Orienteering	3.0	62		0	5.0	14	2.0	5	2.0	35	2.0	8
Snow sledding/tubing	2.0	431	2.0	15	3.0	80	3.0	64	2.0	196	3.0	76
Ice skating, outdoor	2.0	218	3.0	3	2.0	32	2.0	20	2.0	108	2.0	55
Whitewater rafting (guided/solo)	2.0	189		0	2.0	27	2.0	26	2.0	110	2.0	26
Tubing on water	2.0	475	2.0	14	2.0	104	2.0	71	2.0	211	2.0	75
Shuffleboard	2.0	31		0	2.0	7	2.0	3	1.0	17	3.0	4
Miniature golf	2.0	390	2.0	15	2.0	57	2.5	52	2.0	210	2.0	56
Croquet fields	2.0	31	1.5	2	2.0	9	1.0	7	2.0	11	5.5	2

Activities – # of Days Done Crowd-Source	Overall total		DCR Region									
			Region 1		Region 2		Region 3		Region 4		Unknown	
	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN	wMed	uN
Note: The numbers of valid responses (“uN”) for some activities may be too small to produce meaningful statistics (e.g., Squash, Rugby, Kite boarding, Sail boarding). However, all activities are presented here for completeness.												
Music festivals	2.0	731	3.0	23	3.0	147	3.0	85	2.0	382	2.0	94
Outdoor festivals	2.0	897	2.0	31	3.0	168	3.0	120	2.0	464	2.0	114
Art-based tours/trails	2.0	264	3.0	13	2.0	40	2.0	35	2.0	142	2.0	34
Walks, runs, challenge-based events	2.0	471	3.0	11	3.0	81	3.0	76	2.0	243	2.0	60
Paddle-in camping	2.0	96		0	2.5	16	3.0	16	2.0	56	2.5	8
Segway on sidewalks/path	2.0	20	2.0	2	38.0	1	1.0	1	2.5	12	1.5	4
Sail boarding	1.5	14	2.0	1		0	5.5	4	1.0	7	8.0	2
Zip line	1.0	121	1.0	2	1.0	19	1.0	19	1.0	62	1.0	19

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Involving an Overnight Stay at Any Time: Crowd-Source Survey

In the crowd-source survey, the leading activities that involved an overnight stay were visiting parks – local, state, or national (34.2%), and sunbathing/relaxing on a beach (32.3%). The next several activities were relatively close: Downhill skiing (26.5%), tent camping (23.6%), hiking/backpacking day trips (23.4%), viewing the water (23.3%), swimming beach, lake, river (open water) (21.9%), nature-based tours/trails (20.2%), visiting natural areas (19.4%) and viewing scenery (19.2%). Data are displayed in Table 17.

Table 17: Activities – Overnight stay involved at any time, 2022 Virginia Outdoors Survey crowd-source respondents

Activities – Overnight stay involved Crowd-source survey	Overall total wCol %	DCR Region				
		Region 1 wCol %	Region 2 wCol %	Region 3 wCol %	Region 4 wCol %	Unknown wCol %
Visiting parks (local, state, national)	34.2%	30.0%	30.6%	31.4%	37.5%	28.2%
Sunbathing/relaxing on a beach	32.3%	18.9%	28.7%	36.2%	33.9%	30.4%
Downhill skiing	26.5%	21.4%	16.8%	27.7%	28.4%	30.8%
Tent camping	23.6%	15.6%	23.2%	22.0%	24.7%	23.8%
Hiking/backpacking day trips	23.4%	18.5%	20.9%	21.8%	26.1%	16.4%
Viewing the water	23.3%	21.1%	18.7%	23.7%	26.5%	17.6%
Swimming beach, lake, river (open water)	21.9%	14.7%	21.1%	21.8%	22.3%	23.5%
Nature-based tours/trails	20.2%	10.7%	13.6%	16.6%	23.9%	20.7%
Visiting natural areas	19.4%	11.1%	15.6%	17.3%	22.5%	15.5%
Viewing scenery	19.2%	17.8%	14.7%	16.5%	21.9%	16.6%
Driving for pleasure	17.0%	23.8%	11.4%	13.0%	20.0%	15.1%
Canoeing/kayaking	16.5%	4.2%	14.7%	18.1%	17.6%	16.1%
Staying in cabins and/or Yurts	15.8%	13.3%	14.5%	16.2%	17.1%	11.9%
Visiting historic areas	14.4%	11.1%	14.7%	16.0%	14.4%	13.4%
Walking for pleasure	14.2%	12.3%	8.9%	12.2%	17.0%	10.8%
Fresh water fishing	13.0%	7.4%	15.3%	15.5%	12.4%	11.7%
Snowboarding	12.0%	14.3%	9.2%	9.2%	13.2%	14.3%
Winter activities – Other	10.3%	10.7%	12.5%	12.5%	7.9%	12.1%
Cross country ski/snowshoe	10.2%	3.6%	11.4%	8.2%	10.5%	11.0%
RV camping	10.0%	7.8%	13.0%	12.0%	9.1%	7.9%
Music festivals	9.9%	9.5%	13.8%	9.4%	8.6%	10.8%
Salt water fishing	9.7%	10.5%	9.7%	12.4%	9.2%	8.9%
Bird watching away from home	9.5%	6.7%	6.2%	9.9%	11.4%	5.4%
Swimming/outdoor pool	9.2%	6.3%	7.1%	11.6%	9.2%	9.7%
Paddling on scenic rivers	9.0%	4.2%	8.7%	8.5%	9.8%	8.2%
Outdoor festivals	8.8%	6.0%	11.6%	8.8%	8.0%	9.3%
Snow sledding/tubing	8.8%	17.9%	3.3%	4.9%	11.0%	11.0%
Miniature golf	8.6%	10.0%	9.6%	7.9%	8.8%	7.5%
Visiting gardens/arboretums	8.4%	7.8%	8.1%	11.8%	8.2%	5.4%
Stargazing, dark skies, astronomy	7.8%	6.7%	3.6%	6.0%	10.0%	6.5%

Activities – Overnight stay involved Crowd-source survey	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Paved or gravel bicycle trails	7.7%	3.7%	7.7%	8.8%	7.9%	6.6%
Picnicking away from home	7.6%	5.6%	6.2%	5.2%	9.3%	5.4%
Equestrian events	7.0%	11.9%	12.1%	10.4%	3.8%	8.0%
Nature study/nature programs	6.9%	5.6%	3.6%	7.6%	8.3%	4.7%
Horseback riding	6.6%	11.1%	10.8%	11.1%	4.0%	5.6%
Culinary tours/trails	6.4%	7.1%	3.9%	4.4%	7.8%	5.9%
Sports field activities – Other	5.9%	8.3%	10.6%	5.6%	4.4%	5.7%
Power boating	5.6%	4.2%	8.2%	7.3%	5.2%	3.3%
Hunting	5.4%	6.7%	7.1%	6.8%	4.0%	7.9%
Visiting working farms, etc.	5.4%	9.5%	5.6%	3.6%	5.4%	5.9%
Tubing on water	5.2%	8.4%	5.0%	5.6%	4.9%	5.4%
Bicycle touring on roads	4.9%	0.0%	5.0%	3.1%	6.0%	3.2%
Soccer	4.8%	0.0%	4.7%	3.4%	5.8%	4.3%
Mountain biking	4.6%	0.0%	7.7%	4.7%	4.2%	2.8%
Sporting events/tournaments	4.6%	3.6%	5.3%	4.9%	4.8%	2.5%
Paddle boarding	4.2%	1.1%	5.0%	4.8%	3.9%	4.8%
18-hole golf	3.9%	8.0%	4.1%	1.5%	4.2%	4.0%
Walks/runs/challenge-based events	3.9%	1.2%	4.6%	5.5%	3.6%	2.8%
Pools	3.6%	3.3%	3.3%	5.5%	3.0%	4.3%
Other activities – Other	3.6%	10.0%	7.6%	4.2%	2.2%	1.4%
Visiting private farms/forests	3.4%	3.3%	1.9%	3.7%	4.0%	2.9%
Whitewater rafting (guided/solo)	3.3%	0.0%	2.6%	4.2%	3.5%	2.8%
Shooting range	3.2%	8.0%	3.7%	3.9%	2.6%	3.1%
Paddle-in camping	3.1%	0.0%	2.8%	3.7%	3.4%	2.2%
Jogging/running	3.0%	0.0%	3.1%	4.7%	2.7%	2.8%
Ice skating outdoor	3.0%	7.1%	0.5%	3.8%	2.6%	4.9%
Softball	2.9%	4.2%	3.5%	4.5%	2.5%	1.4%
Archery	2.9%	2.0%	3.2%	2.5%	2.9%	3.1%
Jet ski/personal watercraft	2.6%	0.0%	5.0%	2.3%	2.2%	2.3%
Destination activities – Other	2.5%	4.8%	3.9%	3.6%	1.7%	1.9%
Volleyball	2.4%	0.0%	3.5%	3.4%	1.8%	2.9%
Art-based tours/trails	2.4%	3.6%	1.9%	2.1%	2.5%	2.5%
Sailing	2.3%	2.1%	2.1%	4.8%	1.9%	1.8%

Activities – Overnight stay involved Crowd-source survey	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Water skiing/towed on water	2.3%	0.0%	2.9%	2.8%	2.4%	1.3%
Track & Field	2.2%	0.0%	4.7%	3.4%	1.5%	1.4%
Disc golf	2.0%	0.0%	1.4%	1.0%	2.1%	3.5%
Pickleball	1.9%	2.0%	1.4%	2.5%	2.2%	0.9%
Driving 4 wheel off-road, Jeep, truck	1.8%	1.2%	1.7%	1.6%	2.1%	0.9%
Surfing	1.8%	0.0%	2.4%	1.4%	1.6%	2.6%
Tennis	1.7%	0.0%	2.3%	1.5%	1.5%	2.2%
Baseball	1.7%	0.0%	0.0%	3.4%	1.1%	4.3%
Zip line	1.6%	0.0%	1.7%	2.1%	1.5%	2.2%
Water activities – Other	1.6%	0.0%	3.4%	2.0%	1.2%	1.0%
Electric-assist bike on trail**	1.5%	0.0%	2.2%	1.0%	1.5%	1.4%
Lacrosse	1.5%	0.0%	2.4%	1.1%	1.8%	0.0%
ATV/UTV off-road	1.4%	2.5%	1.9%	2.1%	1.0%	1.4%
Geocaching	1.4%	0.0%	1.2%	0.8%	1.7%	1.1%
Visiting playgrounds	1.3%	0.0%	0.9%	1.0%	1.5%	1.8%
Gardening	1.3%	0.0%	1.7%	2.1%	1.1%	1.1%
Splash pads	1.3%	1.1%	2.4%	0.8%	1.0%	1.5%
Shuffleboard	1.3%	0.0%	2.7%	0.5%	1.4%	0.4%
Par-3 golf	1.2%	0.0%	0.5%	2.5%	1.1%	1.3%
Courts and golf activities – Other	1.2%	0.0%	2.3%	2.0%	1.0%	0.4%
Rugby	1.1%	0.0%	0.0%	0.0%	2.2%	0.0%
Field hockey	1.1%	0.0%	0.0%	0.0%	1.8%	1.4%
Electric-assist bicycle on trail*	1.1%	1.1%	0.5%	1.0%	1.1%	1.4%
Fitness trail, not jogging	1.0%	0.0%	0.5%	1.0%	1.1%	1.4%
Basketball	0.9%	0.0%	1.8%	0.5%	0.3%	2.6%
Electric-assist bicycle on road	0.9%	0.0%	0.9%	1.0%	0.9%	1.1%
Dog parks	0.8%	1.1%	1.2%	1.6%	0.5%	0.7%
Driving motorcycle off-road/dirt bike	0.7%	0.0%	0.7%	0.8%	0.7%	0.9%
Orienteering	0.7%	0.0%	0.9%	0.3%	0.7%	0.7%
Driving range	0.6%	0.0%	0.9%	0.5%	0.7%	0.4%
Football	0.6%	0.0%	2.4%	0.0%	0.4%	0.0%
Other, specify	0.5%	2.5%	0.7%	0.3%	0.4%	0.0%
Kickball	0.4%	0.0%	1.2%	0.0%	0.4%	0.0%

Activities – Overnight stay involved Crowd-source survey	Overall total	DCR Region				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Croquet fields	0.3%	0.0%	0.0%	0.5%	0.4%	0.0%
Segway on sidewalks/paths	0.2%	0.0%	0.0%	0.0%	0.3%	0.4%
T-ball	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%
Crew rowing	0.1%	0.0%	0.0%	0.0%	0.1%	0.3%
Kite boarding	0.1%	0.0%	0.0%	0.0%	0.1%	0.3%
Racquetball	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Squash	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Sail boarding	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%

* Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Other activities” grid.

** Note: “Electric-assist bicycle on trail” was included in two grids. This is from the “Activities on trails” grid.

Activities – Involving an Overnight Stay at Any Time: Crowd-Source Survey, Demographic Differences

Outdoor Winter Activities – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

More respondents in Region 1 (53.6%), which is near Virginia’s coastline, said one or more winter activities involved an overnight stay compared to those in Region 2 (38.0%), which includes Virginia’s mountains. This probably reflects Region 1’s relative distance from more wintry locations. Respondents in the 18-44 and 45-64 age categories were more likely to have had overnight stays when downhill skiing and snowboarding, compared to respondents in the 65 and older age group. Respondents with reported household incomes of \$75,000-\$149,999 or \$150,000 and higher were more likely to list at least one winter activity that involved an overnight stay, and more likely to say that downhill skiing involved an overnight stay.

There were no large differences among the race categories or home ownership status.

Water Activities – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

Respondents in Region 1 were less likely to select any water activity involving an overnight stay – 43.2% did so, compared to 56.6% in Region 2, 61.6% in Region 3, 59.4% in Region 4 and 51.0% among those did not report their county or independent city. Respondents with children were slightly more likely to report overnight stays for numerous water activities, compared to those without children.

There were no large differences among race categories, household income, or home ownership status.

Courts and Golf Activities – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Destination Activities – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Sports Field Activities – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Other Activities – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

There were no large differences among the four main regions of the state used for geographic analysis, age categories, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Activities on Trails – Overnight Stay at Any Time: Demographic Differences, Crowd-Source Survey

Respondents in Region 4 were more likely to select hiking/backpacking day trips. Respondents in the 65+ age category were a little more likely to say that no activities on trails involved an overnight stay.

There were no large differences among, whether or not respondents reported having children in the household, race categories, household income, or home ownership status.

Activities – Occurred Mostly in Virginia: Crowd-Source Survey

In the crowd-source survey, the leading activity that occurred mostly in Virginia was walking for pleasure (75.9%). Visiting parks – local, state, or national was second (61.4%), followed by viewing the water (51.5%), canoeing/kayaking (50.2%), visiting natural areas (48.9%), nature-based tours/trails (48.1%), hiking/backpacking day trips (46.1%), viewing scenery (42.3%), viewing historic areas (38.4%) and soccer (38.3%). Data are displayed in Table 18.

Table 18: Activities – Activity occurred mostly in Virginia 2022 Virginia Outdoors Survey crowd-source respondents

Activities – Occurred Mostly in Virginia Crowd-Source	Overall total	DCR Region (alternate)				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Walking for pleasure	75.9%	74.1%	71.9%	74.4%	78.2%	72.8%
Visiting parks (local, state, national)	61.4%	58.9%	55.0%	56.3%	66.1%	55.2%
Viewing the water	51.5%	50.5%	45.5%	46.6%	57.2%	43.1%
Canoeing/kayaking	50.2%	54.7%	52.1%	55.6%	49.3%	45.4%
Visiting natural areas	48.9%	41.1%	46.4%	49.2%	51.9%	39.4%
Nature-based tours/trails	48.1%	46.4%	37.8%	46.0%	53.6%	42.6%
Hiking/backpacking day trips	46.1%	29.6%	51.7%	49.0%	44.9%	43.7%
Viewing scenery	42.3%	34.4%	39.6%	39.0%	45.1%	39.7%
Visiting historic areas	38.4%	42.2%	31.5%	37.2%	40.9%	36.1%
Soccer	38.3%	37.5%	35.3%	38.2%	41.5%	30.0%
Driving for pleasure	37.4%	36.9%	40.9%	40.5%	37.0%	30.9%
Visiting gardens/arboretums	36.7%	26.7%	27.5%	26.4%	43.2%	35.4%
Swimming beach, lake, river (open water)	35.7%	44.2%	36.8%	41.5%	33.7%	34.2%
Fresh water fishing	33.8%	33.7%	42.4%	37.9%	29.5%	36.2%
Gardening	33.4%	25.6%	32.0%	32.2%	35.6%	28.9%
Swimming/outdoor pool	33.4%	25.3%	32.9%	32.8%	35.1%	30.9%
Picnicking away from home	32.3%	23.3%	32.2%	34.6%	33.0%	28.5%
Snow sledding/tubing	32.0%	39.3%	34.2%	30.4%	30.8%	33.5%
Visiting working farms, etc.	30.5%	26.2%	28.1%	30.1%	31.8%	29.6%
Sunbathing/relaxing on a beach	29.6%	43.2%	18.2%	25.1%	32.2%	32.7%
Outdoor festivals	29.1%	28.6%	33.7%	24.9%	29.5%	27.2%
Paddling on scenic rivers	28.6%	21.1%	31.6%	33.3%	27.7%	26.0%
Paved or gravel bicycle trails	27.4%	16.0%	29.8%	25.9%	28.6%	22.1%
Jogging/running	24.9%	12.3%	28.6%	24.4%	24.3%	27.2%
Nature study/nature programs	24.5%	20.0%	16.8%	25.1%	27.4%	22.0%
Music festivals	23.3%	26.2%	28.1%	17.9%	23.3%	22.5%
Bird watching away from home	23.3%	16.7%	19.9%	22.3%	25.8%	19.1%

Activities – Occurred Mostly in Virginia Crowd-Source	Overall total	DCR Region (alternate)				
		Region 1	Region 2	Region 3	Region 4	Unknown
		wCol %	wCol %	wCol %	wCol %	wCol %
Tent camping	21.7%	11.1%	21.1%	20.4%	22.6%	23.1%
Shooting range	21.7%	24.0%	29.2%	20.7%	20.3%	18.9%
Tennis	20.0%	6.0%	16.4%	16.7%	22.7%	20.7%
Culinary tours/trails	19.1%	16.7%	17.2%	23.9%	19.3%	16.0%
Driving range	18.8%	10.0%	13.2%	18.2%	21.4%	18.1%
18-hole golf	18.3%	28.0%	16.9%	16.3%	18.1%	19.8%
Winter activities – Other	18.1%	21.4%	19.6%	23.4%	16.6%	14.8%
Stargazing, dark skies, astronomy	17.1%	14.4%	13.5%	21.2%	17.2%	17.3%
Pools	16.9%	12.2%	13.0%	17.0%	18.3%	17.0%
Tubing on water	16.4%	12.6%	25.0%	18.4%	14.0%	15.3%
Miniature golf	16.4%	12.0%	12.8%	17.7%	17.9%	14.5%
Baseball	16.2%	20.8%	14.1%	19.1%	13.5%	24.3%
Downhill skiing	16.2%	7.1%	11.4%	20.7%	16.6%	16.5%
Walks/runs/challenge- based events	16.1%	10.7%	16.5%	16.4%	16.2%	16.7%
Basketball	15.6%	6.0%	16.9%	17.2%	15.4%	15.4%
Pickleball	15.1%	6.0%	13.2%	12.3%	17.2%	14.5%
Visiting playgrounds	15.1%	18.9%	12.1%	11.8%	16.2%	17.0%
Visiting private farms/forests	14.9%	16.7%	15.4%	20.7%	12.6%	16.6%
Ice skating, outdoor	14.8%	3.6%	14.7%	6.5%	16.0%	21.4%
Softball	14.7%	12.5%	16.5%	20.2%	13.5%	11.4%
Bicycle touring on roads	14.5%	7.8%	14.7%	12.6%	16.4%	9.7%
Staying in cabins and/or Yurts	14.5%	11.1%	11.8%	15.2%	16.2%	10.1%
Mountain biking	14.2%	4.9%	20.2%	16.8%	13.1%	8.0%
Disc golf	14.0%	6.0%	16.4%	16.3%	13.4%	13.7%
Archery	13.5%	8.0%	14.2%	17.2%	13.5%	11.0%
Volleyball	13.3%	20.8%	11.8%	14.6%	13.5%	10.0%
Equestrian events	13.0%	11.9%	16.0%	22.3%	9.3%	13.3%
Track & Field	12.9%	0.0%	20.0%	15.7%	11.6%	10.0%
Paddle boarding	12.8%	10.5%	10.8%	13.0%	12.8%	15.3%
Destination activities - Sporting events/ tournaments	12.7%	11.9%	12.1%	12.5%	12.9%	13.0%
Hunting	12.5%	23.3%	18.5%	17.8%	7.8%	16.2%
Dog parks	12.3%	6.7%	8.5%	11.3%	13.6%	14.8%

Activities – Occurred Mostly in Virginia Crowd-Source	Overall total	DCR Region (alternate)				
		Region 1	Region 2	Region 3	Region 4	Unknown
		wCol %	wCol %	wCol %	wCol %	wCol %
Sports Field activities – Other	12.2%	12.5%	10.6%	10.1%	12.0%	17.1%
Horseback riding	12.0%	16.0%	14.7%	21.8%	7.9%	14.1%
None of the above	11.6%	14.8%	14.2%	9.8%	10.1%	18.8%
Salt water fishing	11.6%	43.2%	6.1%	6.5%	12.6%	10.7%
Power boating	11.0%	36.8%	9.5%	10.7%	10.7%	7.4%
Fitness trail, not jogging	9.3%	6.2%	8.2%	8.3%	9.6%	12.2%
Snowboarding	9.0%	7.1%	8.7%	4.3%	9.7%	12.1%
Football	8.8%	4.2%	11.8%	14.6%	6.5%	8.6%
Cross country ski/snowshoe	8.7%	3.6%	15.8%	12.5%	5.3%	7.7%
RV camping	8.0%	7.8%	10.2%	10.2%	7.4%	4.7%
Art-based tours/trails	7.7%	13.1%	8.7%	5.5%	7.9%	7.1%
Par-3 golf	7.1%	4.0%	9.1%	7.4%	7.2%	4.8%
Kickball	6.3%	0.0%	9.4%	5.6%	6.2%	5.7%
Splash pads	6.1%	3.2%	3.2%	8.2%	6.1%	7.9%
T-ball	6.1%	12.5%	3.5%	7.9%	5.5%	7.1%
Other activities – Other	5.6%	14.4%	8.8%	6.5%	4.1%	4.3%
Geocaching	5.5%	4.4%	3.8%	4.5%	6.0%	6.9%
Lacrosse	4.8%	0.0%	2.4%	4.5%	6.5%	2.9%
Jet ski/personal watercraft	4.2%	7.4%	5.0%	4.5%	3.7%	4.3%
Whitewater rafting (guided/solo)	4.0%	0.0%	2.6%	3.4%	5.1%	3.6%
Destination activities – Other	3.9%	4.8%	4.4%	6.8%	3.3%	2.2%
Sailing	3.9%	8.4%	2.1%	4.0%	4.3%	2.8%
Courts and golf activities – Other	3.7%	8.0%	6.4%	3.4%	2.8%	3.1%
Field hockey	3.5%	8.3%	0.0%	4.5%	4.0%	2.9%
Driving 4 wheel off-road, Jeep, truck	3.3%	1.2%	4.8%	3.9%	2.7%	4.2%
Zip line	3.2%	1.1%	2.8%	3.7%	3.1%	4.3%
Water skiing or towed on water	3.0%	2.1%	3.4%	2.8%	3.0%	2.8%
Electric-assist bike on trail	3.0%	2.5%	2.6%	2.1%	3.4%	2.8%
ATV/UTV off-road	2.8%	8.6%	4.8%	2.8%	1.8%	3.8%
Paddle-in camping	2.8%	0.0%	2.6%	2.9%	3.1%	2.5%
Electric-assist bicycle on trail	2.8%	2.2%	3.3%	1.8%	2.7%	3.6%

Activities – Occurred Mostly in Virginia Crowd-Source	Overall total	DCR Region (alternate)				
		Region 1	Region 2	Region 3	Region 4	Unknown
	wCol %	wCol %	wCol %	wCol %	wCol %	wCol %
Cheerleading	2.8%	8.3%	2.4%	5.6%	1.8%	1.4%
Electric-assist bicycle on road	2.7%	2.2%	2.1%	2.4%	2.9%	2.5%
Water activities – Other	2.6%	2.1%	4.7%	4.8%	1.7%	1.5%
Orienteering	2.0%	0.0%	2.6%	1.0%	2.2%	2.2%
Croquet fields	1.8%	4.0%	3.2%	3.0%	1.3%	0.9%
Racquetball	1.8%	0.0%	2.3%	1.0%	1.8%	2.2%
Rugby	1.5%	0.0%	0.0%	0.0%	2.5%	1.4%
Other	1.5%	4.9%	1.4%	1.0%	1.5%	0.9%
Driving motorcycle off-road/dirt bike	1.4%	2.5%	2.6%	1.6%	1.0%	0.9%
Surfing	1.4%	1.1%	1.1%	1.1%	1.6%	1.3%
Crew rowing	0.9%	1.1%	0.3%	0.6%	1.2%	1.0%
Shuffleboard	0.8%	0.0%	0.0%	0.5%	1.3%	0.9%
Segway on sidewalks/paths	0.7%	1.1%	0.5%	0.0%	0.8%	1.1%
Sail boarding	0.3%	1.1%	0.0%	0.3%	0.5%	0.0%
Squash	0.3%	0.0%	0.0%	0.0%	0.4%	0.4%
Kite boarding	0.2%	1.1%	0.0%	0.3%	0.2%	0.0%

Activities – Occurred Mostly in Virginia: Crowd-Source Survey, Demographic Differences

Outdoor Winter Activities – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Respondents with children in the household were more likely to report that snow sledding/tubing and outdoor ice skating were done mostly in Virginia, compared to households without children.

There were no large differences among the geographic regions used for analysis, age categories, race categories, household income, or home ownership status.

Water Activities – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Compared to respondents in other parts of the state, respondents in Region 1 were more likely to say that the following activities were done mostly in Virginia: salt water fishing; sunbathing/relaxing on a beach; power boating; sailing; and swimming beach, lake, river (open water). Respondents in Region 2 and Region 3 were more likely to select fresh water fishing, paddling on scenic rivers and tubing on water.

Because younger respondents were generally more likely to engage in water activities, higher percentages of respondents aged 18-44 and 45-64 reported that they engaged in water activities mostly in Virginia, compared to respondents aged 65 and older.

The same is true for respondents who said they had children in the household, compared to those without children.

Non-Hispanic/Latino White/Caucasian respondents were more likely to report that canoeing/kayaking was done mostly in Virginia compared to other racial/ethnic groups.

There were no large differences among the household income categories or home ownership status.

Courts and Golf Activities – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Respondents in Region 4 were a little more likely to report tennis pickleball and driving range activities occurring mostly in Virginia.

Respondents in the 18-44 age category were more likely to select disc golf and archery, while those aged 65 and over were more likely to select pickleball and 18-hole golf.

Respondents with children in the household were more likely to select tennis, basketball, disc golf, miniature golf and archery.

Non-Hispanic/Latino(a) Black/African-American respondents were more likely to select basketball and miniature golf as occurring mostly in Virginia.

Respondents with reported household incomes of \$75,000 to \$149,999 or \$150,000 and higher were more likely to select pickleball, 18-hole golf and driving ranges.

Those who owned their homes were more likely to select 18-hole golf as occurring mostly in Virginia.

Destination Activities – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Respondents in Region 3 – and those in Region 2 to a lesser extent – were more likely to select equestrian events they attended as occurring mostly in Virginia.

Respondents in the 65+ age category were less likely than younger respondents to select visiting working farms, outdoor festivals, culinary tours/trails, sporting events/tournaments and walks/runs/challenge-based events.

Respondents who reported having children in the household were more likely to select visiting working farms, outdoor festivals, sporting events/tournaments and walks/runs/challenge-based events.

Respondents with a reported household income of \$150,000 or more were more likely to select culinary tours/trails, and sporting events/tournaments walks/runs/challenge-based events.

There were no large differences among home ownership status.

Sports Field Activities – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Respondents aged 18-44 were more likely to report soccer and kickball occurring mostly in Virginia.

Respondent with children in the household were more likely to report soccer and track and field as occurring mostly in Virginia.

There were no large differences among the four main regions of the state used for geographic analysis, race categories, household income, or home ownership status.

Other Activities – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Respondents in Region 4 were the least likely to report hunting occurring mostly in Virginia and most likely to report visiting gardens/arboretums mostly in Virginia, compared to all other regions of the state.

Respondents in the 18-44 age category were the least likely to say that nature study/nature programs occurred mostly in Virginia, and more likely to have visited dog parks, done tent camping, visited playgrounds and used pools mostly in Virginia. Respondents aged 65+ were more likely to select bird watching away from home occurring mostly in Virginia.

Respondents who reported having children in the household were more likely to select picnicking away from home, tent camping, visiting playgrounds and using pools occurring mostly in Virginia.

Respondents who rent their homes were more likely to say they did tent camping mostly in Virginia.

There were no large differences among race categories or household income.

Activities on Trails – Occurred Mostly in Virginia: Demographic Differences, Crowd-Source Survey

Respondents in Region 1 were less likely than those in other regions to select most of these activities, with exceptions for horseback riding and ATV/UTV off-road (where Region 4 was least likely to select both of them).

As in other areas of the survey, respondents aged 65 and older were least likely to name several of these activities – jogging/running; hiking/backpacking day trips; fitness trail, not jogging; mountain biking; and paved or gravel bicycle trails.

Respondents who had children in the household were more likely to select jogging/running, hiking/backpacking day trips, mountain biking, and paved or gravel bicycle trails.

Respondents with a reported income of \$150,000 or higher were more likely to select jogging/running, mountain biking, and paved or gravel bike trails.

There were no large differences among race categories or homeownership status.

Crowd-Source Data and Probability Sample: Comparisons on Substantive Data

As described earlier, the 2022 *Virginia Outdoors Survey* included a crowd-source version of the questionnaire available only by web. This approach was also used in the 2017 survey. DCR promoted the crowd-source survey through social media and email lists as noted in Appendix B. There were 3,567 usable responses to the crowd-source survey. These responses provide a valuable description of households that tend to be more engaged with outdoor recreation. Because the crowd-source survey was based on convenience sample, however, it cannot support statistical inferences to the general population of Virginia. It is generalizable only to those who responded to the survey, but it offered an additional way for residents to offer feedback to DCR, it was open to anyone who was told how to access it, and it allowed special interest groups to provide feedback in numbers that might not have been possible in the probability sample.

Convenience samples are assumed to have biases in responses compared to what a probability sample would yield. Many studies include only convenience samples, and their biases would be unknown. In the case of the 2022 *Virginia Outdoors Survey*, though, the results from the convenience sample can be considered relative to those from the probability sample.

This section of the report compares selected substantive responses in the crowd-source data and the probability sample data. Full comparisons of the substantive responses from the crowd-source and probability surveys are found in the crosstabulation tables in Appendix M.

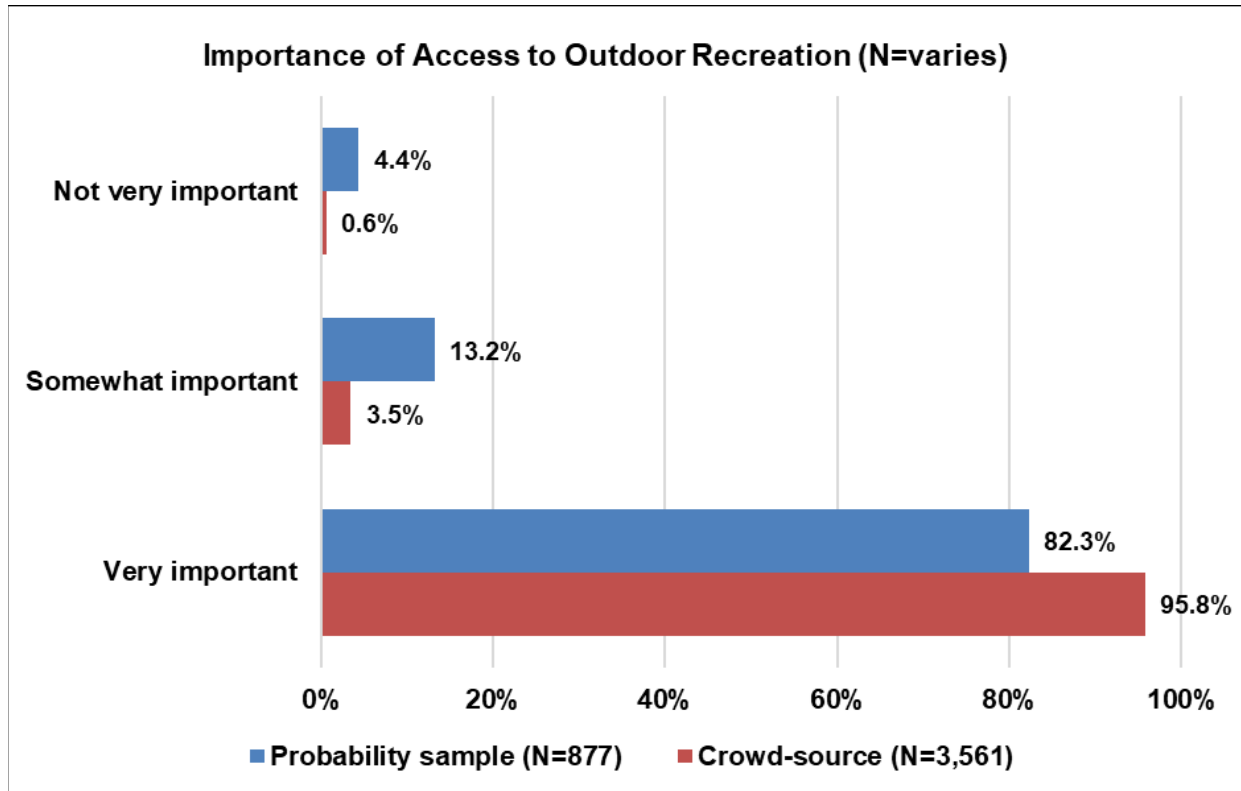
The substantive comparisons here – as well as the demographic comparisons found earlier in this report – show why it is so important to dedicate resources to a good probability sample. Doing so does a better job of representing the full population of Virginia so that the weighted data can provide estimates of opinions, participation and demand related to outdoor activities that are more accurate across all households in the state.

Importance of Access to Outdoor Recreation

Other comparisons between the crowd-source and probability sample surveys can be made based on several substantive items in the questionnaires.

For example, respondents from the crowd-source survey were more likely to say that it is very important to have access to outdoor recreation opportunities (95.8%) compared to the probability sample (82.3%). Look to Figure 72.

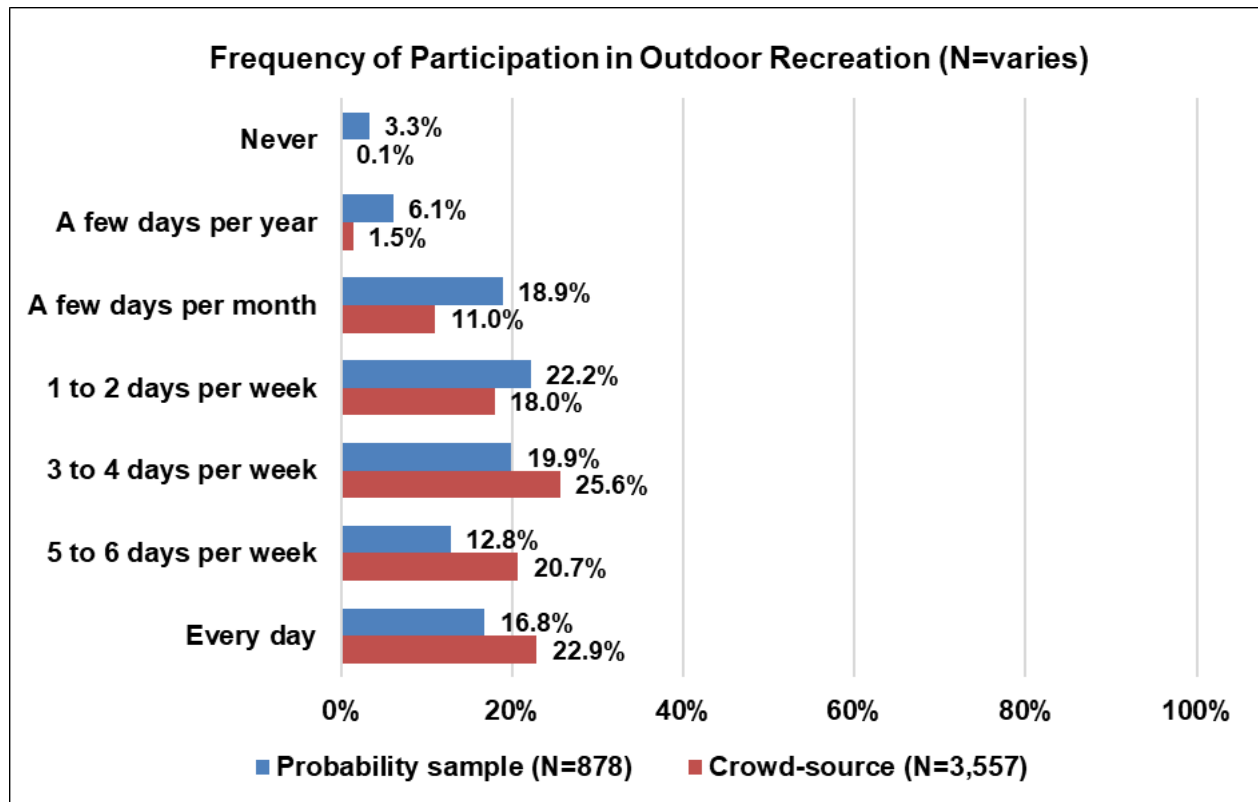
Figure 72: Importance of access to outdoor recreation opportunities



Frequency of Participation in Outdoor Recreation

Crowd-source respondents were more likely to say they and others in their household participate in outdoor recreation three or more days per week (69.2%) than probability survey respondents (49.5%). See Figure 73.

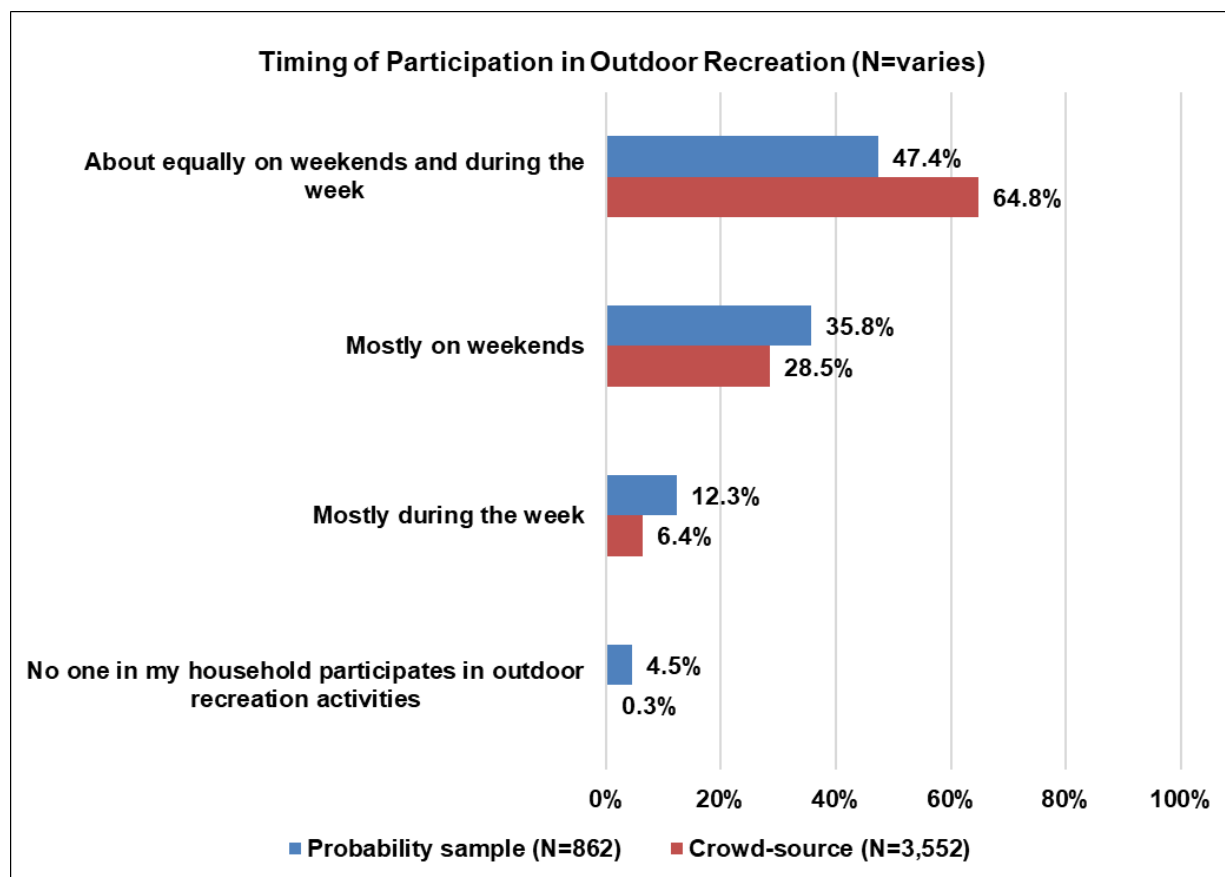
Figure 73: Frequency of participation in outdoor recreation



Days of Participation in Outdoor Recreation

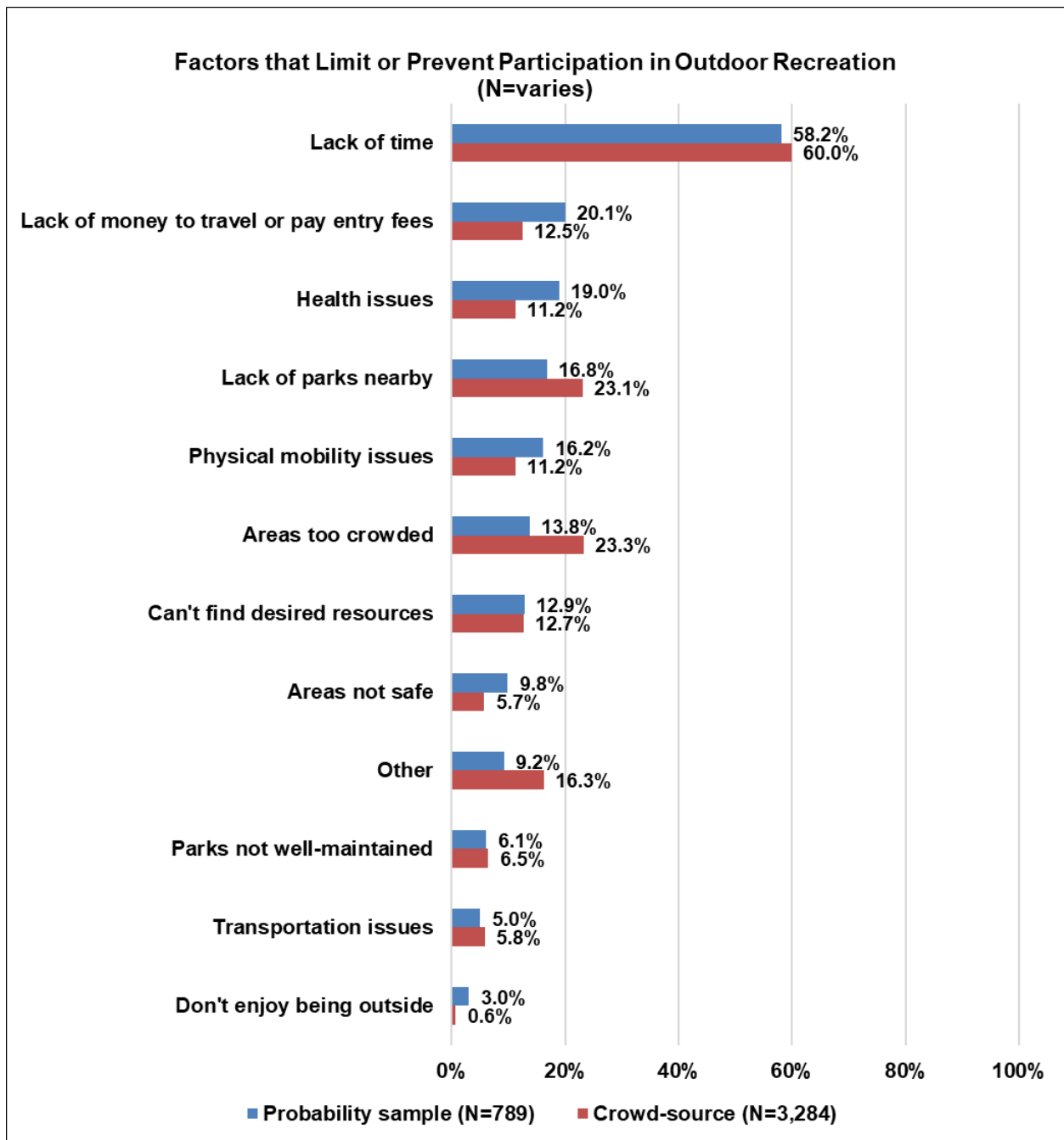
Furthermore, respondents from the crowd-source survey were more likely to participate in outdoor recreation equally on the weekends and during the week (64.8%) compared to probability sample respondents (47.4%). Overall, only 0.3% of the respondents in the crowd-source survey said that no one in their household participates in outdoor recreation activities compared to 4.5% in the probability sample. Look to Figure 74.

Figure 74: Days of participation in outdoor recreation



Barriers to Participating in Outdoor Recreation

There were also differences in the barriers that respondents or their household members face in participating in outdoor recreation activities. Respondents in the probability sample were more likely to say that health issues prevent them from partaking in outdoor recreation activities (19.0%) than were the crowd-source respondents (11.2%). Meanwhile, 20.1% of respondents from the probability sample survey said that lack of money to travel or pay entry fees is what prevents them from doing outdoor recreation, compared to 12.5% of the crowd-source respondents. This result is consistent with the earlier finding that the household incomes in the crowd-source data are higher than in the probability sample. Consult Figure 75.

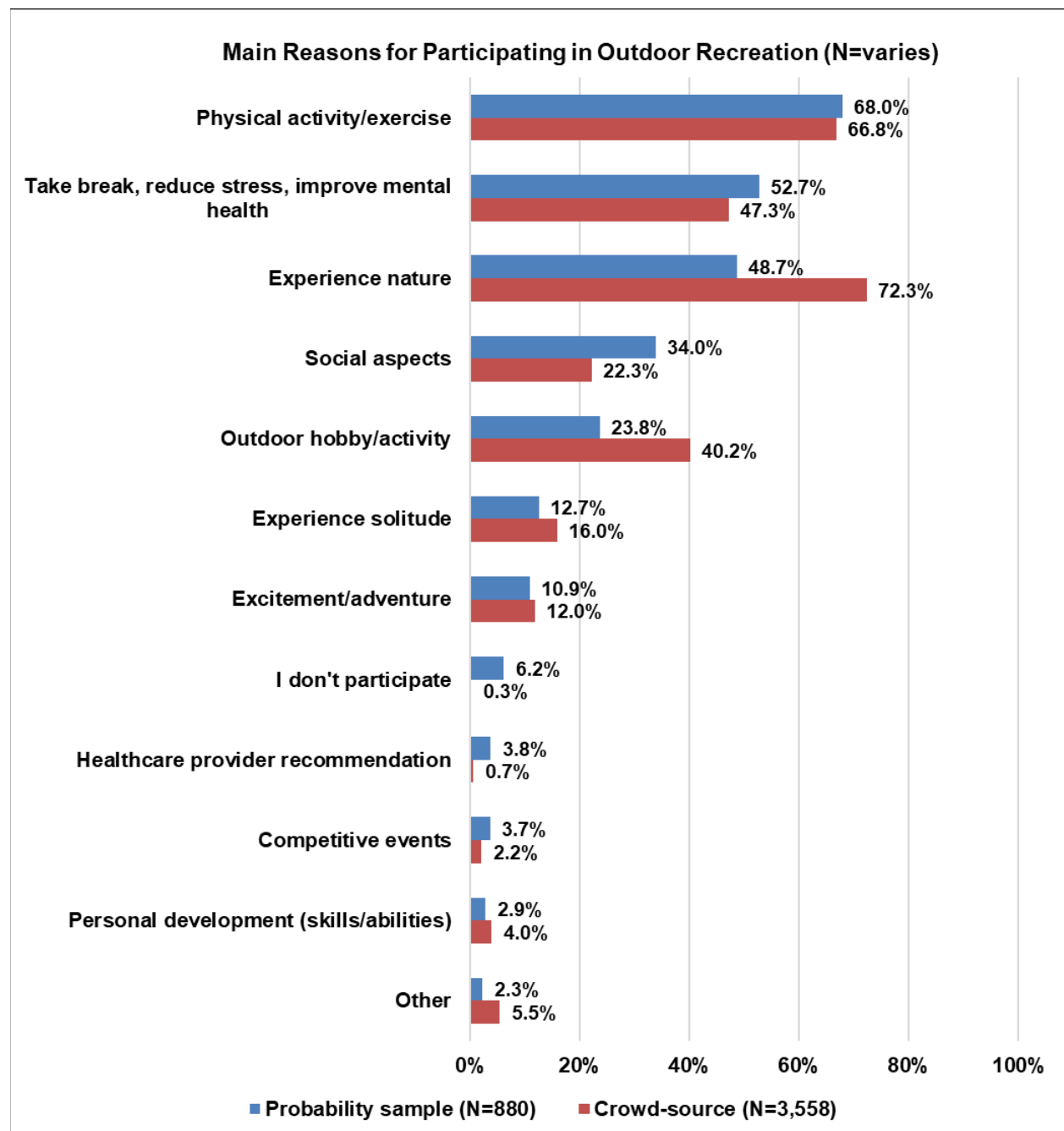
Figure 75: Barriers to participation in outdoor recreation

Reasons for Participating in Outdoor Recreation

When respondents were asked why they themselves participate in outdoor recreation activities, only 0.3% of respondents from the crowd-source survey said that they do not participate in outdoor recreation, which is much lower than the 6.2% who gave that answer in the probability sample. The respondents from the probability sample were also more likely to participate in outdoor recreation because of the social aspects (34.0%) compared to the crowd-source survey

(22.3%). The respondents in the crowd-source survey were much more likely to participate in outdoor recreation to experience nature than were respondents in the probability sample (72.3%, and 48.7%, respectively). Data appear in Figure 76.

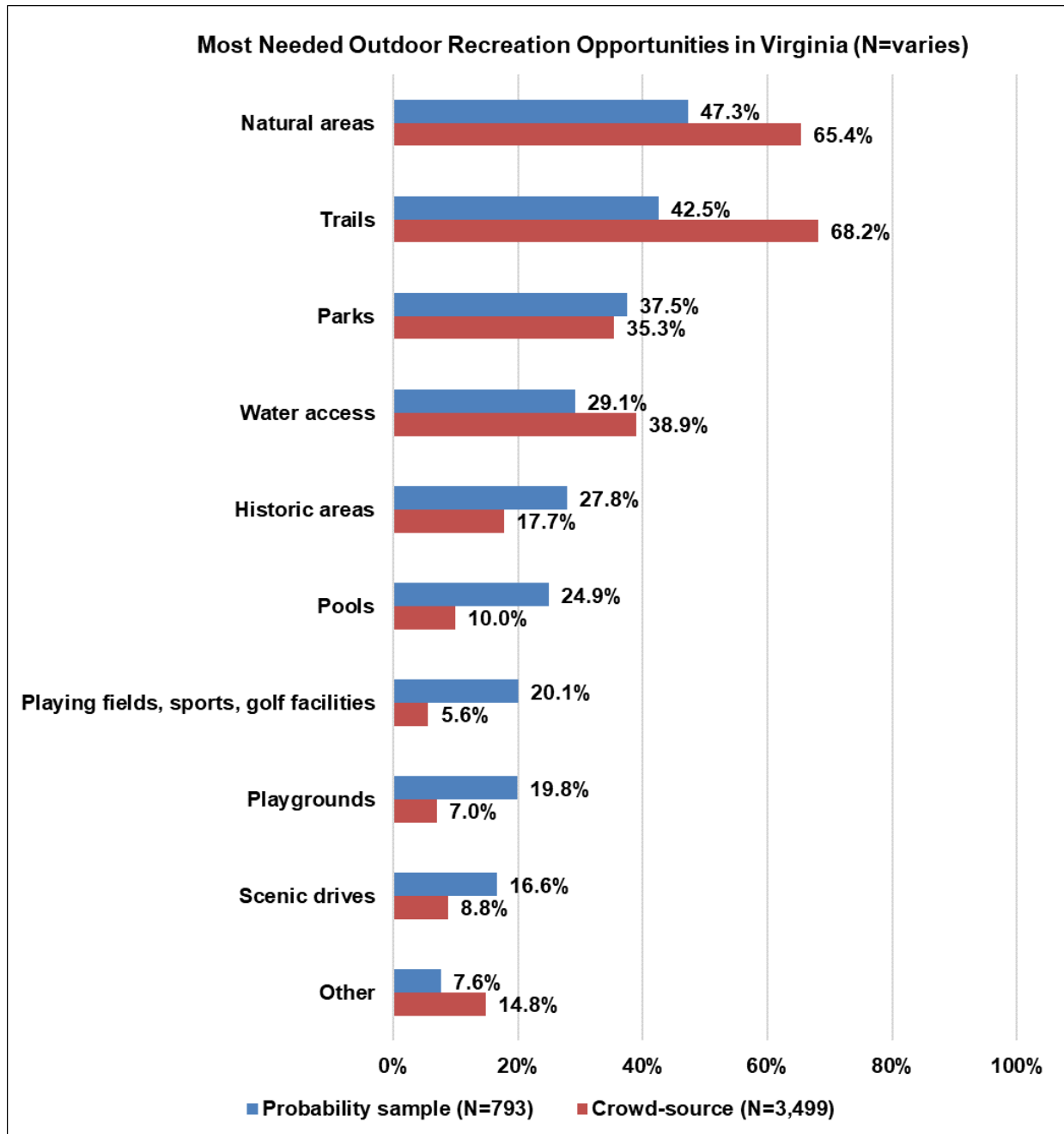
Figure 76: Reasons for participating in outdoor recreation



Most-Needed Recreation Opportunities

In general, the probability survey respondents were more likely to say that the most needed outdoor recreation opportunities are historic areas; playing fields, sports and golf facilities; scenic drives; pools and playgrounds. Crowd-source respondents were more likely to say natural areas, trails, and water access. Results are displayed in Figure 77.

Figure 77: Most Needed Outdoor Recreation Opportunities



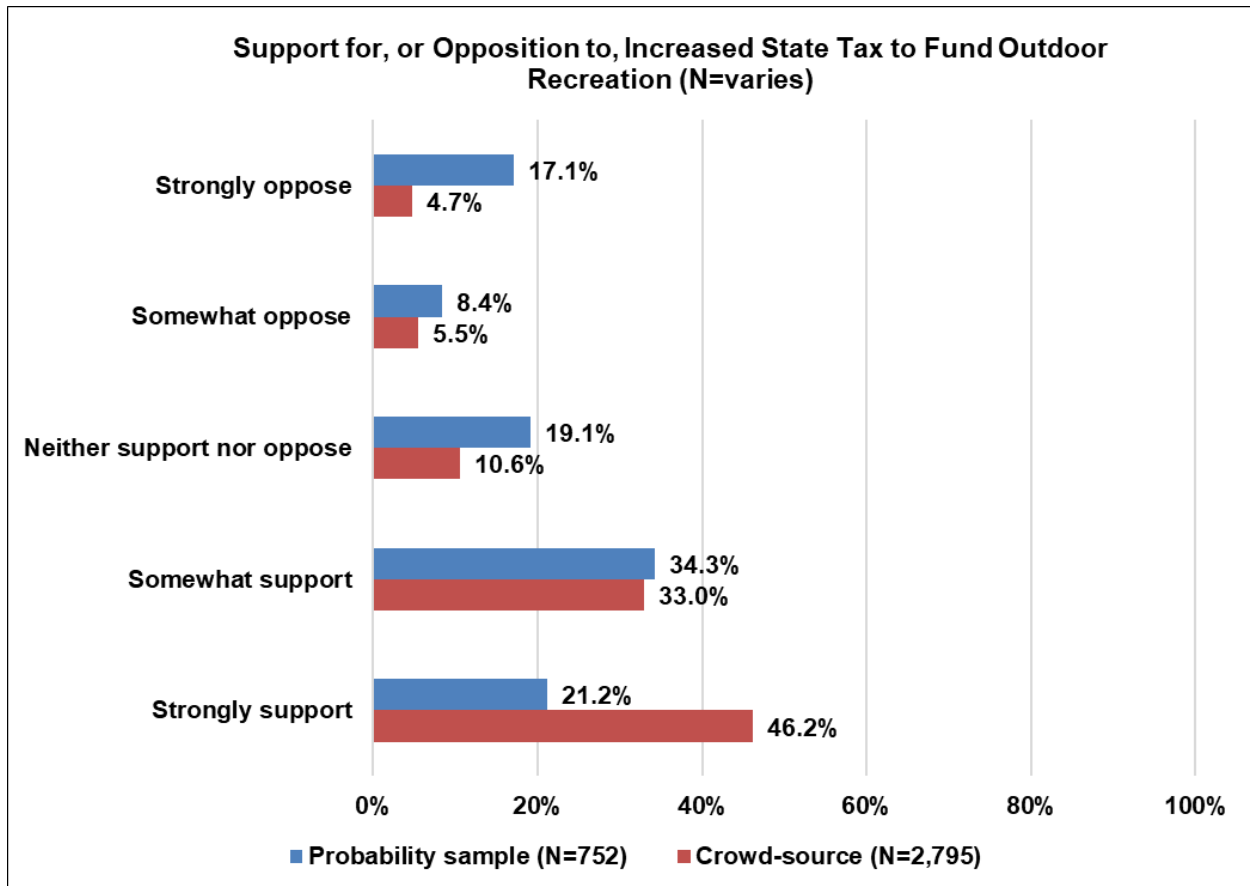
Crowd-source respondents were also more likely to write in an “other specify” most-needed resource that was not listed in the questionnaire – 14.8% compared to 7.6% in the probability survey. Those “other specify” responses show large numbers of requests for equestrian-related opportunities – almost all originating from the crowd-source survey. Other needs mentioned in smaller numbers included hunting, dark sky access, bicycling, skate parks and dog parks. This demonstrates one of the key advantages of the crowd-source approach – the ability for interest groups or user communities centered on particular activities or resources to make their voices heard in numbers that might not be present in a probability-based survey.

Support for an Increased State Tax to Fund Outdoor Recreation

Respondents were asked if they would support an increased state tax to fund outdoor recreation in Virginia. There was strong support in the crowd-source survey for such spending. More than three-quarters of crowd-source respondents (79.2%) said they would somewhat or strongly support an increased state tax to fund outdoor recreation in Virginia, while 10.6% said they would neither support nor oppose it. Only one in ten crowd-source respondents (10.2%) indicated they would somewhat or strongly oppose an increased state tax to fund outdoor recreation.

This support is much higher than in the probability sample, where 55.5% said they would somewhat or strongly support an increased state tax to fund outdoor recreation in Virginia, while 19.1% said they would neither support nor oppose it, and 25.5% indicated they would somewhat or strongly oppose an increased state tax to fund outdoor recreation. See Figure 78.

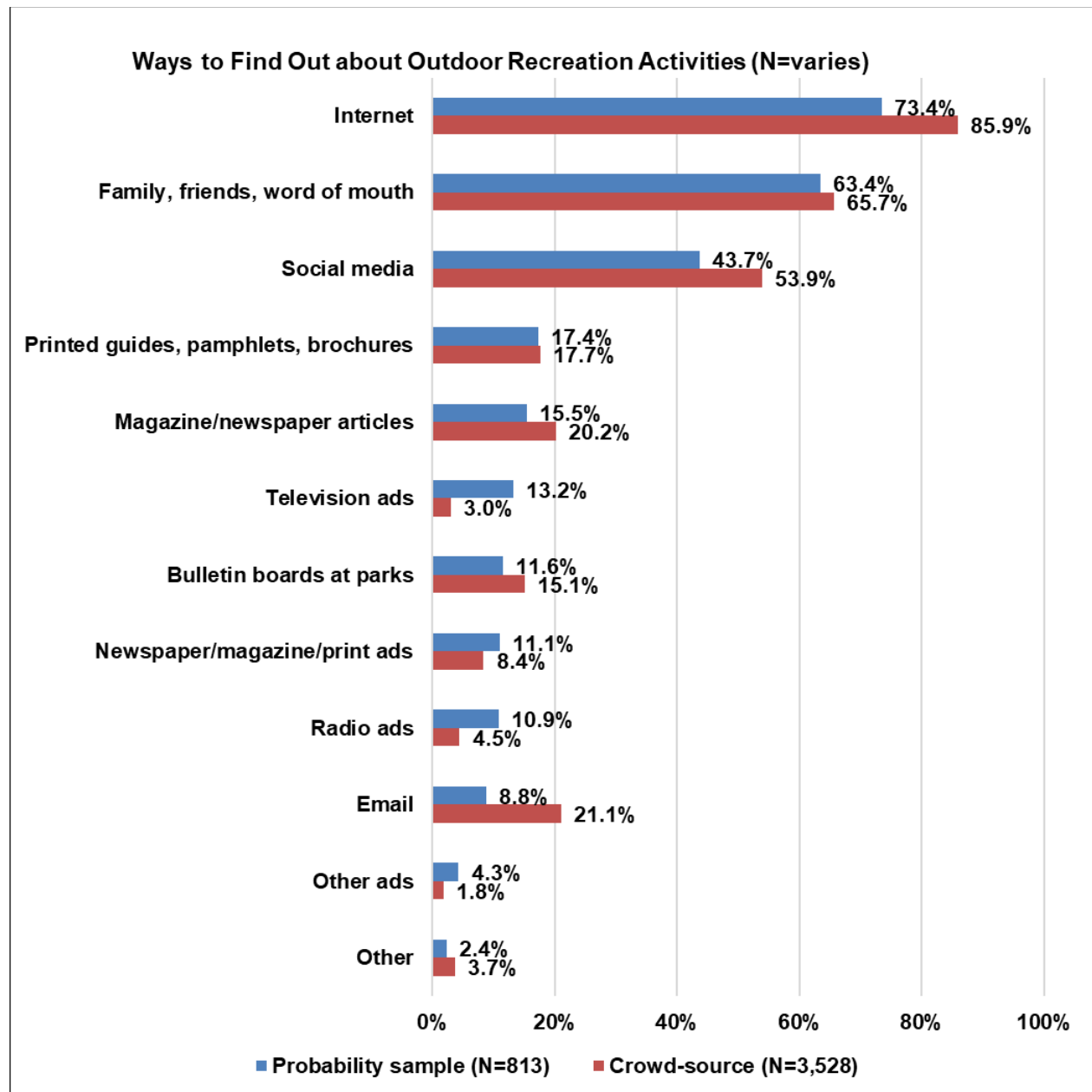
Figure 78: Support for a state tax increase to fund outdoor recreation



Ways to Find out about Outdoor Recreation

Another key difference between the two data sets is in the sources of information about recreation opportunities that respondents reported using. The crowd-source respondents were more likely to get their information from the Internet (85.9%), compared to probability sample respondents (73.4%). Probability sample respondents were more likely to get their information from television ads than were crowd-source respondents (13.2% compared to 3.0%), and less likely to get information by email (8.8% compared to 21.1%). See Figure 79 for more information.

Figure 79: Ways to find out about outdoor recreation

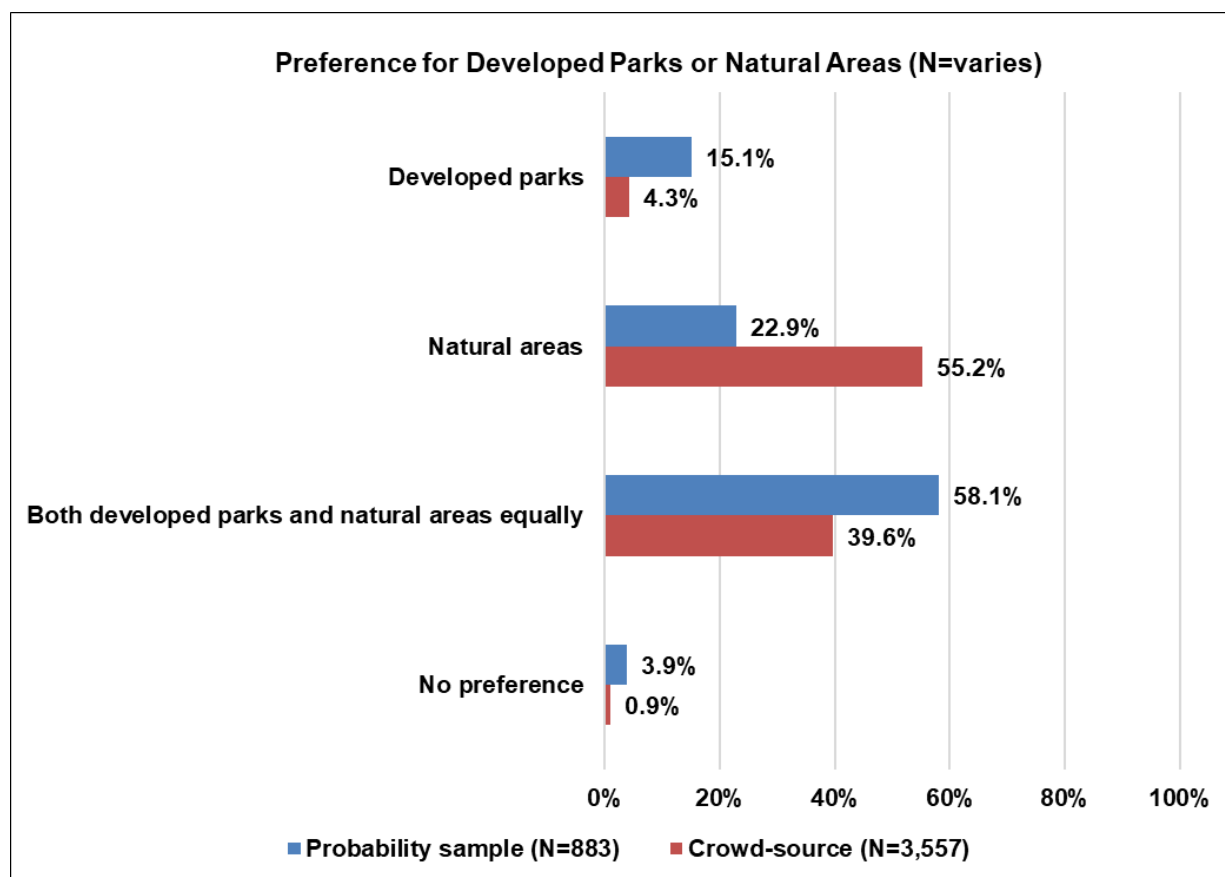


Preference for Developed Parks Versus Natural Areas

When asked for a preference between developed parks and natural areas, respondents from the crowd-source survey preferred natural areas more than respondents in the probability sample (55.2% compared to 22.9%). Those from the crowd-source survey were more likely to use parks without cell phone service (89.5%), compared to the probability sample (65.5%). This may be because crowd-source respondents were more interested in experiencing nature than were respondents in the probability sample. Similarly, crowd-source respondents were more likely to say that protecting Virginia's natural and open space resources from development was very important (94.5%) than were respondents from the probability sample (85.7%), although both groups show strong support here. See Figure 80.

Appendix M contains detailed crosstabulation tables displaying the probability sample and crowd-source data side by side.

Figure 80: Do you prefer developed parks or natural areas



Differences in Activities: Probability Sample by Crowd-source Survey

There were not many large differences in the activity-related answers of probability sample and crowd-source respondents. In general, the differences that were observed tended to characterize the probability sample respondents as more oriented toward developed parks and activities on fields and courts, while the crowd-source respondents were more oriented toward passive natural areas and activities done in less developed areas such as canoeing and kayaking.

For example, when asked about more-needed activities, respondents in the probability sample were less likely to select canoeing/kayaking (28.1%) and nature-based tours/trails (34.1%) compared to respondents in the crowd-source survey (47.4% and 52.1%, respectively). Similarly, respondents in the probability sample were more likely to select nearly every activity in the Sports Field and Courts and Golf activity tables compared to respondents in the crowd-source survey.

The results for activities done in the last 12 months roughly paralleled those for most-needed activities. Respondents in the probability sample (24.6%) were less likely to have done canoeing/kayaking when compared to respondents in the crowd-source survey (48.0%). There were no large differences between respondents from the probability sample and respondents from the crowd-source survey in having actually done Courts and Golf activities (despite the probability sample respondents being more likely to say more of these were needed), but respondents in the probability sample were more likely to say they had done at least one Sports Field and Courts activity (24.9%) than were respondents in the crowd-source survey (17.2%). Also, respondents in the probability sample were less likely to select hiking/backpacking day trips (20.8%) than were respondents in the crowd-source survey (46.5%).

Crowd-source respondents were more likely to have stayed overnight to take part in destination activities than were respondents in the probability sample (47.5% compared to 36.7%), and also for activities in the Other Activities grid (60.9% compared to 38.7%) and the Activities on Trails grid (41.3% compared to 20.6%).

Respondents in the probability sample were less likely to say that their canoeing/kayaking was done mostly in Virginia (23.8%) compared to crowd-source respondents (50.2%). This may reflect canoeing/kayaking being a more routine and frequent activity for those in the crowd-source survey. Similarly, respondents in the probability sample were less likely to say that activities on nature-based tours/trails were done mostly in Virginia (30.5%) compared to crowd-source respondents (48.1%).

Summary

The unweighted demographics in the crowd-source and probability samples were not always very different, but the crowd-source respondents were Whiter, wealthier, more active in outdoor recreation, more likely to be interested in natural areas and doing activities in natural areas, and more likely to represent the opinions of specific user groups such as equestrians and hunters.

Some of the differences in activities between the probability survey and crowd-source respondents indicate that the crowd-source survey was more routine, frequent and local in some of their outdoor recreational activities, but also more likely to have overnight stays involved in some of those activities.

The probability survey represented all Virginia residents more accurately than the crowd-source survey did, although it also underrepresented some demographic groups. After the probability sample survey data were weighted to statewide target values obtained from U.S. Census Bureau data, they represented the known demographics of the population of Virginia very well. To the extent that responses to substantive survey questions varied systematically by the demographic variables that were used in the weighting, the weighting further improved the accuracy of the data from the probability survey.

However, the crowd-source approach is attractive due to several factors including its low cost, its appeal to highly motivated respondents who may be drawn more heavily from the core users of outdoor recreation resources, and its rich store of data pertaining to residents who are more connected to outdoor recreation. As noted elsewhere, it cannot provide results that are unbiased and generalizable to Virginia's population, nor can it guarantee results that are usable at the regional level for all DCR regions in the state due to small numbers of completed crowd-source surveys in some regions.

The two datasets provide generalizable data from which statistical inferences can be made (the probability survey), plus detailed data from more frequent and highly motivated users of outdoor recreational resources in Virginia (the crowd-source survey). These two datasets allow DCR to offer the opportunity for all Virginia residents to provide representative, useful and actionable feedback for outdoor recreation planning.

Open-Ended Responses

Open-Ended Responses – Probability Sample

In Question 63 at the end of the 2022 *Virginia Outdoors Survey*, respondents were provided with an opportunity to write in additional comments or suggestions.

All responses were reviewed by SERL staff. A formal thematic analysis of remarks was not conducted, but following are overall themes that emerged from a review of these comments in the probability sample survey. Themes described below include sample quotes from participants. Please note that a comment from a respondent may contain multiple themes.

Responses have been redacted for identifying information and profanity; however, they have not been edited for spelling, punctuation, grammar, capitalization, etc.

Theme 1: Positive comments about DCR, Virginia state and local parks and/or the survey

Respondents expressed their gratitude and appreciation for Virginia's parks and the outdoors generally. Participants likewise shared thanks for the opportunity to provide feedback through the survey.

- *We love Belle Isle State Park!!*
- *Thank you for the work you do to preserve our ability to enjoy the great outdoors near Roanoke VA!*
- *Thank you to everyone for striving to protect and nurture the natural environment in this beautiful state!*

Theme 2: Comments encouraging preservation and conservation

Respondents shared concerns regarding continued development in Virginia, and the importance of preserving natural areas and setting aside lands for conservation purposes. Comments also mentioned improving management of wild areas (e.g., removing invasive species).

- *Parks are important for body, mind, and soul. We should protect Virginia's natural treasures and make sure they are safe, accessible, and welcoming to all citizens of and visitors to our great Commonwealth. Thank you for this important work you do. Virginia is for Nature Lovers.*
- *We used to go on vacation; camping etc. so parks should be protected for future generations, and virginia is a beautiful state and should remain pristine if at all possible.*
- *Protect land from development too much buying & building & destroying old homes & farmlands*
- *FUnds and labor to fight invasive plant sepies are critally needed. I'd love to see a renewed effort to plant and promote the value of Native plants to increase biodiversity and help the North american bird populations*
- *I love the outdoors and want to see them preserved, but I think it is important to also manage them appropriately for fire safety and species preservation. I am a proponent of*

forest management, controlled burns, and managed habitats to preserve species - not just leaving things willy-nilly to become overgrown or be overcome by invasive species.

Theme 3: Comments about crowds and overcrowding

There were many remarks focused on current overcrowding in parks, or concerns about overcrowding in the future. Comments included suggestions to build more trails and parks to reduce overcrowding:

- *In my opinion, it would be nice to have more opportunities for kids to participate in without being overcrowded.*
- *The most popular trails in our area are very crowded, especially on weekends and holidays, and in the fall. The solution to that is to make more trails, especially in areas where there are few.*
- *We moved from the NoVa area 3 years ago to get away from the crowds and live in area (Wmsburg) with an abundance of preserved/open/park areas. So it is an important consideration for us.*
- *I prefer state forests to state parks normally due to the ability to hunt and have less crowded areas.*

Theme 4: General comments about facilities, services or additional maintenance respondents would like to see in the future across parks and localities

Respondents discussed changes to parks they would like to see in the future, including additional features like bathrooms, playgrounds, campgrounds, and certain types of trails for walking and/or biking. Participants also referenced infrastructure adjustments to improve accessibility (see Theme 5), and they talked about improvements in specific parks or localities (see Theme 6).

- *Non blacktop trails for pets*
- *Need dog free areas near playgrounds. Playgrounds need to be fenced in (like dogparks are) Free water play areas need to be in parks. Small playground areas needed in less advantaged neighborhoods.*
- *more playgrounds that are fenced in for little ones!*
- *More easy walking trails needed!*
- *Bike trails are important and should be provided for people for more than recreation. Biking encourages less gas useage, better health, mental & phycal. Our roads are too dangerous for bikes unfortunately, they are not watched*
- *Virginia, and all parks, need more secluded, quiet, natural surface hiking trails. Hiking trails are the most cost effective form of recreation development. Hiking trails and mountain bike trails should be separate. When I'm a hiker, I hate the bikes zooming into my space and ruining the zen, when I am a biker, I hate the walkers blocking the trail and running my flow. There need to be more of both.*

Theme 5: Comments about accessibility of parks, especially for seniors or those with mobility issues

Some participants observed a need for additional areas and services for seniors or persons with mobility issues to increase accessibility of parks.

- *how about areas of parks designed for seniors – elec. wheel chairs – rails to lean on & watch ducks, egrets, or fish – no little kids running & pushing us. maybe even a van to pick up seniors 1 day a wk & take them?*
- *Handicap accessible*
- *Having side walks that are wheel chair and stroller friendly to get on and off would greatly increase the ability of people where I live to have out door access.*

Theme 6: Comments about specific parks or localities

Respondents often gave feedback about their local/state parks and improvements or amenities they wished to see there. Respondents described their communities' needs and how parks could help fulfill these.

- *Please bring back parks such as Deer Trail Park and Dark Horse Hollow. Please repair and remode Big Bend on top of Big Walker Mountain!*
- *I think there should be a public pool in Gloucester Point*
- *Matthews Co. only has apx 8,400 people. We have a small park with a ball field & basketball court. No path or trail to walk (our roads are narrow & unwalkable) We are mainly a senior population who needs areas to walk. Thank you*
- *At Fort Hunt Park there were many trees down due to storms. (also very large branches). It seemed to take a long time to clean up the paths.*
- *We need access to pool in Occoquan.*
- *Need more RV campgrounds with water & electric to that are more secluded and in northern Virginia. Shenandoah River State Park is nice but never available and sites are very close to each other.*

Theme 7: Comments about the price of admissions or facilities rental in parks; affordability of parks

Respondents discussed the overall cost and affordability of visiting Virginia State Parks or renting facilities in Virginia State Parks.

- *There have been times while looking to book overnight tent camping w/ power or water that the final cost was near what it would be for a hotel. Understand that costs should be recouped but can see that we've cancelled plans at least 4 occasions because it just didn't make sense- financially. However, we love camp stores and frequent them so maybe some costs can be recouped in other ways to reduce the overnight costs? Just a thought.*

- *Those who live and pay taxes in Virginia should not have to pay a fee to enjoy the state parks.*

Theme 8: Comments about additional staff, park personnel or law enforcement

Some respondents mentioned the need for additional park personnel or law enforcement in parks.

- *Virginia has an abundance of parks, trails and outdoor activities. I do feel we need more personnel to adequately monitor and maintain what we have.*
- *Having more park officials and or police in public parks with the way our world is today is also needed.*
- *Need to see more law enforcement out there or conservation officers. Enforce the litter laws, and limit dog droppings, enforce pet leash laws.*

Theme 9: Comments about their own responses to survey

Participants referenced their own usage of parks and outdoors spaces and how this may have influenced their answers to survey questions.

- *I answered these questions mostly because I feel outdoor recreation is very important even tho I am no longer able to participate. I have done quite a few of them in my lifetime.*
- *Due to age & physical stamina I do not participate any longer. I answered some questions with an eye toward younger people. My sport was hunting, fishing, rifle shooting when I was active.*
- *We don't go anywhere like parks, only to the grocery store.*
- *I'm an old "stuck-in-the-mud" woman who loves to stay home. (I'm sure you figured that.)*
- *This was a dumb survey for this household. My husband and I avoid being outside at all costs. We barely get the yard mowed and the bushes trimmed.*

Theme 10: Comments about the survey

Participants offered their opinions about the survey as well as technical issues associated with accessing the survey. Respondents also talked about why they wanted a paper copy of the survey, or why they felt a paper copy of the survey was not needed.

- *I tried your online survey. It did not work. It was stuck!*
- *In regards to questions 47 & 49...next time maybe put in a why? Do you agree w/ one but oppose in the state tax increase. They should take the money from another fund. Not schools, etc. but from other.*
- *I think this survey is a waste of paper and money and could have better served Virginia's goals if it had been online only. Despite decreased response rates, this is foolishly counter to objectives. But as you'd already wasted it, I decided to fill it*

Open Ended Responses – Crowd-Source Survey

In Question 63 at the end of the 2022 *Virginia Outdoors Survey*, respondents were provided with an opportunity to write in additional comments or suggestions.

All responses were reviewed by SERL staff. A formal thematic analysis of remarks was not conducted, but following are overall themes that emerged from a review of these comments in the probability sample survey. Themes described below include sample quotes from participants. Please note that a comment from a respondent may contain multiple themes.

Responses have been redacted for identifying information and profanity; however, they have not been edited for spelling, punctuation, grammar, capitalization, etc.

Theme 1: Positive comments about DCR, Virginia state and local parks and/or the survey itself

Respondents shared their gratitude and appreciation for Virginia state parks and the outdoors. Respondents also expressed gratitude for the opportunity to give feedback through the survey.

- *Virginia's State Parks are an absolute treasure. I strongly support having the state allocate greater funding to them.*
- *You do a wonderful job with the Parks we have in VA. Need to keep developing new parks so everyone can enjoy the benefits even in urban areas.*
- *We moved from Ohio to Virginia in 2020. The parks system provided SUCH a relief from the confines of COVID. I am impressed by all of the parks and resources available within Virginia, and have created an "excursions" list based on the information in the Virginia State Parks newsletter.*
- *Virginia's State Parks are an absolute treasure. I strongly support having the state allocate greater funding to them.*

Theme 2: Comments encouraging preservation and conservation

Respondents shared their concern about continued development in Virginia and the importance of preserving natural areas and additional lands for conservation purposes. Responses also mentioned improving management of natural areas (e.g., removing invasive species):

- *Once natural lands and historic areas are lost, they are lost forever. Preserve, preserve, preserve.*
- *Nature and history are two of the leading reasons people move to Virginia or stay here if they grew up here (myself included.) Please do all you can to prevent any rollbacks of our beauty and history related to historical sites (legitimate history, not Confederate statues) and natural areas (parks, nature areas, trails, water, etc.)*
- *Virginia's natural areas are being destroyed by development at an alarming rate. DCR's number one priority should be to protect our remaining natural areas and incorporate them into our state parks or natural area preserve system!*

- *Virginia needs to preserve more natural areas from unrelenting suburban sprawl. Native flora and fauna needs protection. VA government can do more to buy land, incentivize conservation easements, educate citizens about what we can do in own yards, etc.*
- *DCR does not properly care for Natural Area Preserves. While I recognize these are natural areas and recreation is not the primary purpose, letting invasive species take over, or not slowing or halting erosion, or not maintaining the infrastructure that is there, are examples of mismanagement of these resources entrusted by the citizens to DCR.*
- *Invasive removal should be more of a priority in parks*
- *Are parks are being overwhelmed by non-native invasive plants. I would estimate that half of the plants at one of the Virginia parks that I go to are non-native invasive plants.*
- *State parks seem to be managed solely for visitor use. There should be more intentional management of natural habitats within the parks. For example, many of our forests are have the wrong structure and species composition because of the removal of fire from the landscape. Not only will appropriate management benefit natural habitats in state parks, it creates a opportunity to educate visitors are about the natural habitats. It's not enough to hold land for camping and swimming, we need to better manage the areas in the parks that are not all about people.*

Theme 3: Comments about crowds and overcrowding

There were many comments related to overcrowding in parks currently and in the future. Comments included suggestions to build more trails and parks to reduce overcrowding and reduce demands for cabins.

- *There is an urgent need for more multiuse and riding/hiking trails due to Covid and increased public visitation at parks. Many trail riders don't even go to parks on the weekends because of crowded trail conditions*
- *I know it's due to the large population, but recreation is kind of depressing in the hampton road/tidewater area. First Landing is such a great park, but it's so crowded it isn't even fun.*
- *The places we frequent are often so crowded we aim for weekdays or none excellent weather. That part is frustrating because our family days are weekends and holidays which are slammed park days.*
- *Reduce visitor numbers in overcrowded parks. Many states utilize online lotteries and reservation systems with some walk-up passes.*
- *Would love more nature/trail access close by that wasn't so crowded and/or had more parking so we could get there. COVID has made outdoor recreation more popular, which while a wonderful thing, has made us less likely to participate than before due to the crowds. I live in the city. I want to get away from so many other people!*
- *It has become almost impossible to get a weekend campsite at Virginia State Parks in the past few years unless you plan 6-11 months ahead. I miss camping*
- *Develop more state parks. What is available is getting more crowded(based 15 years of state park camping). Renting state park cabins is almost impossible they are always*

reserved. As I get older tent camping is becoming harder I would prefer the option of renting a cabin rather than buying a RV.

- *Love the VSP cabins just haven't been able to use this past year. Last time I looked they were filled so would be nice to have more of them.*

Theme 4: General comments about facilities, services or additional maintenance that respondents would like to see in the future across parks and localities

Respondents discussed overall changes to parks they would like to see in the future, including additional facilities such as bathrooms, playgrounds, campgrounds, and specific trails for walking, biking, hiking, and horseback riding. Respondents also discussed the need for infrastructure changes to improve accessibility (see also Theme 5). Some respondents talked about improvements specific to one park or localities (see also Theme 6).

- *Need bathrooms at trailheads*
- *Fenced in playgrounds are a HUGE benefit for families with small children. I will go out of my way to go to a park with a fenced in playground. Besides that, the ONE outdoor amenity I wish there were more of are splash pads. I would take my kids to a splash pad every week if there were one closer than 30-45 minutes from me.*
- *I am an avid horseback rider, but there are very few trails on which to ride, especially in state and national parks. The horse industry is very important in Virginia; I feel there should be more places for us to enjoy our sport.*
- *More canoe/kayak launches on rivers and streams would be appreciated.*
- *Need more dedicated bike trail. Open roads are too dangerous.*
- *We need more walking trails dedicated to walking; i.e., bicycles prohibited. Perhaps 1 or 2 out of 10 bike riders slow down and warn of their approach. Most ride at top speed with no concern for those walking, not even children or dogs. Bikes also cause damage and erosion to natural (unpaved) trails.*

Theme 5: Comments about the accessibility of parks, especially for seniors or those with mobility issues

Some respondents commented about the need for additional areas and services for seniors or those with mobility issues, to increase accessibility of parks.

- *Many parks with walking trails are not wheelchair friendly accessible or safe. Nothing more disappointing than starting down a path only to find it blocked by stairs rocks or huge roots that the wheelchair cannot travel over. Many family walks had to be stopped for this reason.*
- *Extremely limited wheelchair accessible outdoor trails in my vicinity- almost none nearby*
- *The State Parks are better when it comes to accessibility, but they still have a ways to go. Usually only a fraction of the parks are accessible, because chunky gravel is a wheelchair's worst nightmare. It's also frustrating that we live at least an hour away from all of them. The free access for wheelchairs is a nice touch, but we still pay anyway because we really care about having funds for well-maintained facilities.*

- *More availability of accessible trails and outdoor activities would be huge. It can be a challenge to figure out what is accessible in Virginia, and what level of accessibility is available.*
- *This county is aging therefore Seniors need appropriate outdoor areas with good parking, benches, water, bathrooms and SAFETY such as Cameras, first aid, patrols.*
- *Seniors need paved, leveled paths and benches.*
- *Need accommodation for active elderly. My Mom hiked/walked every day til she was 92. Some trails not accessible because they required long hike from parking to get up to trail (yet close parking available for campers).*

Theme 6: Comments about specific parks or localities

Respondents often gave feedback about their specific local/state parks, including improvements or additional amenities they wished to see in these parks. Respondents gave details about the needs of their community and how parks could help fulfill these needs.

- *Please consider adding Natural Area Preserves with hiking and public water access to the system, particularly in the coastal areas of the state such as the Northern Neck.*
- *I find it important to build wheel chair access to Shields Lake in Richmond*
- *Greene County needs a public pool*
- *My area (Franklin City) is lacking in parks and areas to walk.*
- *I would love to see more horse friendly trails and areas with trailer parking in the Radford City, Montgomery Co and Pulaski Co.*
- *Nelson County really needs to acquire land for parks NOW.*

Theme 7: Comments about the affordability of parks

Respondents gave feedback about the overall cost of admission to Virginia State parks, the price of lifetime passes, and rental facilities in Virginia State parks.

- *State park fees are not affordable. I have spent average 15 to 25 nights a year in Virginia state parks for 20+ years. Recent price increase has me going to national parks. I love Virginia state parks but not the price.*
- *State Parks have become very expensive in recent years and the rangers are a bit crazy on the rule enforcement. I have started to stay more at Federal parks that are much cheaper and less crazed on rule enforcement or select private parks that are reasonable.*
- *The improvements I feel most passionate about are 1) having additional and more affordable lodging options...*
- *Senior lifetime pass is too expensive!!*
- *Prices at Virginia state parks have increased to the point that I will frequent Virginia state parks much less. Prices are not affordable. National parks will now become my first option.*
- *Park fees are too high to allow for a greater diversity of visitors. Annual fee on par with NPS annual pass.*
- *I have looked at the price to stay overnight in a cabin and was shocked at the price!*

Theme 8: Comments about additional staffing, park personnel or law enforcement

Some respondents discussed the need for additional park personnel or law enforcement in parks to monitor areas:

- *Please consider providing more full time staff in our parks. Low paid workers with a restricted number of hours per year have a high turnover and require constant training to a basic level of performance. In addition, when one staff member is out due to illness, a station or position may be left unstaffed- leaving a store closed, an entrance kiosk closed, etc- losing income and inconveniencing guests.*
- *More conservation police are needed*
- *Desperately need more staffing in the parks, especially armed law-enforcement.*
- *Improved security, staff presence, check in points, phone reception, and general safety would be great and would motivate me to visit such trails more often regardless of distance.*
- *Cellphone (and park/police presence) is important for safety reasons. Especially if you are a woman.*

Theme 9: Comments about their own responses to survey

Respondents discussed their own use of parks and outdoors spaces, and how this may have influenced their responses to survey questions:

- *We ventured out much less than usual due to Covid, so asking about our activities during the last 12 months does not provide you with a true look at our typical outdoor activities.*
- *The COVID pandemic increased my number of camping experiences per year and changed where I participated. Now I am more likely to participate in primitive camping on National Forest land and to camp on private campsites procured through online services such as Hip Camp.*

Theme 10: Comments about the survey itself

Respondents expressed their opinions about the survey questions themselves and technical issues with accessing the survey.

- *I feel that this survey is very important. However, I am concerned that due to the length of the survey, not many people will fully complete it.*
- *noise is an important component of the "outdoor experience" and you should include preference and importance of noise in future surveys.*
- *I use a wheelchair for mobility and would like to see access included in these types of surveys. For example availability of accessible cabins/camp sites is critical to selection of parks to visit when over-nighting. Same with facility amenities - I'm a kayaker but find that access is NOT a feature of most canoe/kayak access points.*
- *Survey is a little complicated. Not sure if you include privately run parks. Also not sure if a household means only married/legal partners/families, or just people you live with (unmarried partners or roommates). But overall very thorough in asking about activities.*

- *This does not give sufficient opportunity to support conservation natural resources and restoration of degraded areas. It has too much emphasis on active recreation. Tennis and such are the responsibility of local recreation departments, not state agencies.*

Theme 11: Issues with state park website and/or online reservation system

Respondents gave specific feedback about improving the state park website:

- *The new reservation system for state park camping reservations is not user friendly and is poor compared to the previous system.*
- *Make it easier to make reservations for st parks. Different people like different ways.*
- *What could be improved is the website for booking. I'd like to be able to book on my phone and the date selection doesn't work on mobile. I'd love an app like recreation.gov has. Even if it stays on computer, it's just not intuitive to use (and I'm a web designer so tech typically comes easy for me).*
- *Improvements to state park website. I find it difficult to get a list of parks with equestrian camping and find information about facilities for the horses, miles of trails and availability of water and 30 amp power.*
- *The park reservation site needs to get photos uploaded and it is a clunky interface on the phone*
- *Websites... Some websites are horrible, poorly set up, reservation sites are not easy to navigate or info nicely laid out*

Theme 12: Comments about the length of the minimum stays in cabins

Respondents gave feedback about the length of the minimum stay in cabins and how it makes cabins less affordable (see also Theme 7).

- *The 1 week minimum on renting cabins during the summer a bummer. Too much demand?*
- *Often difficult to book state park cabins because of the week requirement. Would prefer something more lenient for booking.*
- *I would like to see the Virginia State Park reservation system allow shorter stays in the cabins during the peak seasons. The current system of waiting so many months out for less than a week is very frustrating. It's impossible to get a cabin for 2-3 nights because you can't reserve until a month out. Not everyone has the time or money to rent for a whole week!*
- *I understand there are many reasons for wanting to rent cabins for a 2 night minimum,; however, not everyone is able to break away for that long. Or be able to justify paying for two nights when only staying for one (plus unfair to other people to book and not use). Consider dropping this requirement at least during non-prime seasons (late fall, early spring).*
- *Would like more cabins with electricity/plumbing and loosening of minimum stays.*

Limitations of the Survey

A few limitations should be mentioned:

1. The probability sample did not generate the number of survey completions anticipated at the outset of the project. Despite this, the 888 probability sample completions are certainly enough to represent the state as a whole, and the sampling design provided adequate representation at the regional level.⁷
2. A question about the respondent's gender variable was accidentally omitted from this year's survey (see the Respondent Demographics section).
3. Declines in participation compared to the 2017 survey for walking for pleasure and driving for pleasure may have resulted from different placement of those activities within the 2022 questionnaire. However, there were also declines in participation from 2017 to 2022 in some other activities that were asked about in grids in both surveys. It is not clear whether that might be due to COVID-19, changes in the demographics of the state's population, or real declines in participation. See the Activities section for details.
4. Both the probability sample and crowd-source surveys underrepresented non-Whites, younger people, and lower-income households. Also, people who do not speak or read English would have needed to find someone to help them complete the survey, as it was offered only in English. These issues are often encountered in survey research. Weighting the data to known demographics can address these problems to some degree, but not entirely. The budget for the project did not allow for additional efforts to address this issue.
5. Surveys are subject to errors from various sources, some of which may be difficult or impossible to measure. Users should be mindful of the limitations of survey research.

Improvements for Next Time

The 2022 *Virginia Outdoors Survey* was well done and provides credible information, but it still contained some errors and areas that could be improved next time.

⁷ The principles of randomized probability-based sampling make it so that a sample does not need to be large to be representative – even if the population is large – as long as the sample includes all the characteristics of the population under study in rough proportion to how they occur in the population. As an example, if one makes a small pan of soup and wants to test the soup before eating, one would stir the soup (to get a representative sample) and taste a small spoonful. If one had a large vat of soup 100 times the size of the pan, one would not need 100 spoonfuls to test the soup, as long as the soup in the vat was well-mixed prior to tasting. The calculation of sampling error relies most crucially on the raw number of completed surveys, not the proportion of the population represented in the dataset. After about 800 completed surveys have been obtained, the sampling error curve levels off and the decrease in sampling error that comes with additional completions is usually not worth the cost of more completions. When sub-groups will be compared as standalone groups, the number of completed surveys in those groups is important, and can drive up the total number of survey completions that is desired. But for many surveys – as long as a good, representative, probability-based sample is used – about 800 completions is sufficiently accurate, and yields almost the same sampling errors whether representing 10,000 or 1 million or 100 million people.

1. A more fully articulated pilot survey – including analysis of the data – would likely have revealed some of the errors in the questionnaire. If funding allows next time, a more robust pilot survey should be included in the future.
2. If additional funds are available, more robust measures should be developed to promote diversity and inclusion by increasing the representation of non-Whites, younger people, and lower-income households in the survey data. Additional efforts might include paid incentives to complete the survey, targeted outreach through multiple channels of communication, networking with trusted people within the underrepresented groups, increasing the probability sample size to target geographic areas known to have higher proportions of the underrepresented groups, and offering the survey in multiple languages⁸. Given sufficient funding, supplemental data collection methods or community-engaged research activities could also be developed, such as focus groups, community outreach, and other non-probability methods.
3. Respondent gender should be collected in the next iteration of the survey.
4. The duplication of “electric-assist bicycle on trail” in two different activity grids should be eliminated.
5. The item “Music festivals” and the item “Outdoor festivals (music festivals, outdoor-themed festivals, extreme sports festivals, etc.)” overlapped to some degree, in that “Outdoor festivals” also included “music festivals” in the parenthetical examples. This might be done differently next time.
6. Consider eliminating Q15 (“Please indicate which of the following outdoor recreation opportunities, if any, you feel are MOST NEEDED in Virginia”) because the activity grids include the opportunity to indicate that “More of this is needed” for all 105 activities.
7. It may be worth looking more closely into how survey respondents differentiate among three related activities: Swimming/outdoor pool, Swimming beach, lake, river (open water), and Pools. The first two activities were presented in the Water Activities grid, while the third was presented in the Other Activities grid.
8. Continue to offer a paper survey booklet. About half of the completed probability sample surveys in 2022 were done on paper. This is one way to maintain inclusiveness in the survey, especially for people with limited internet accessibility.

Conclusions

The 2022 *Virginia Outdoors Survey* shows that Virginia residents highly value access to outdoor recreation, and support greater expenditures for outdoor recreation even to the point of a tax increase. The survey results reveal different communities of interest defined by geography and proximity to particular natural resources, demographic variables such as age and household

⁸ It should be noted that DCR paid for Spanish versions of the survey in 2012 and 2017 but received almost no Spanish-language completions.

composition, the activities that residents enjoy, and the methods used to reach survey respondents. As part of the update of the Virginia Outdoors Plan, the survey gives voice to these many communities in the Commonwealth. As a data resource, the survey results may assist outdoor recreation providers and advocates in planning and grant-seeking efforts into the future.

Appendix A

Questionnaires

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Survey Instrument



L. Douglas Wilder School of
Government and Public Affairs
Survey and Evaluation Research Laboratory

2022 VIRGINIA OUTDOORS SURVEY

Purpose of the survey

We want to understand the outdoor recreational activities that Virginians do. Information collected from this survey will be used to help shape the 2023 *Virginia Outdoors Plan*. Even if you don't get outdoors for recreation it's helpful to hear from you to get a good picture of all Virginians. Your participation in this research is voluntary. However, because you are part of a small sample of Virginians, your individual participation will make the results more accurate, and is greatly appreciated!

What do we mean by outdoor recreation?

Outdoor recreation includes a variety of things people do outside, whether on public or private property, including simple things like walking for pleasure, using a playground, going for a swim or playing sports outdoors. We are also interested in your visits to historic sites, campgrounds, and other open spaces.

Completely confidential

- Your answers are completely confidential.
- Your name or contact information will not be linked to your survey responses and will only be used to contact you for this survey.

General instructions

- There are no right or wrong answers. Your best guesses are OK.
- You will be asked about the recreational activities that all people living in your household did during the last 12 months.
- When asked for numbers, please just give us your best estimate.
- Circle the number of your response to the question or check the box(es) that apply. Skip activities and items that do not pertain to you and others in your household. The last few questions provide classification information needed for all households, even if no one participates in outdoor recreation.
- When you finish answering the questions, please put your survey in the envelope provided and drop it in any mailbox. You can also leave it in your own mailbox and your letter carrier will pick it up. **No postage is required.**

Who can participate?

- An adult who is 18 or older must complete this questionnaire.
- This survey is for current Virginia residents only.
- The person taking the survey should be the one who is best qualified to report on the recreational activities that all people living in the household did during the last 12 months.

How long will it take?

- The survey will probably take about 20 minutes depending on your answers. You can skip any survey question you want to. You can leave the survey and come back to it later where you left off if you need to.

For more information, contact:

- Jim Ellis, Director of Design and Methodology, VCU Survey & Evaluation Research Laboratory, jmellis@vcu.edu or 804-828-2839
- Kelly McClary, Department of Conservation and Recreation, kelly.mcclary@dcv.virginia.gov or 804-225-2738

1. Are you an adult 18 years of age or older?

- 1 Yes, I am an adult 18 years of age or older → (GO TO Q2)
- 2 No, I am under age 18
- 99 Prefer not to say

(If Q1 is not "Yes": This survey is approved only for adults to fill out. If you are not an adult, please stop here and return the survey for our records. Thank you.)

2. Do you currently live in Virginia?

- 1 Yes → (GO TO Q3)
- 2 No
- 99 Prefer not to say

(If Q2 is not "Yes": This survey is only for current residents of Virginia. If you do not currently live in Virginia, please stop here and return the survey for our records. Thank you.)

3. In general, how important is it to you and any other persons living in your household to have access to outdoor recreation opportunities? (Please circle one number.)

- 1 Not very important
- 2 Somewhat important
- 3 Very important
- 99 Don't know/Prefer not to say

4. In general, how often do you and others in your household participate in outdoor recreation activities? (Please circle one number.)

- 1 Every day
- 2 5 to 6 days per week
- 3 3 to 4 days per week
- 4 1 to 2 days per week
- 5 A few days per month
- 6 A few days per year
- 7 Never
- 99 Don't know/Prefer not to say

5. In general, when do you and others in your household most often participate in outdoor recreation activities? (Please circle one number.)

- 1 No one in my household participates in outdoor recreation activities
- 2 Mostly on weekends
- 3 Mostly during the week
- 4 About equally on weekends and during the week
- 99 Don't know/Prefer not to say

6. Which of the following limits or prevents you or your household from participating in outdoor recreation activities? (Please check all that apply. If none, please leave blank.)

- ☐ Health issues
- ☐ Physical mobility issues
- ☐ Lack of time
- ☐ Don't enjoy being outside
- ☐ Lack of parks nearby
- ☐ Transportation issues
- ☐ Lack of money to travel to or pay entry fees at parks
- ☐ Parks not well-maintained
- ☐ Areas not safe
- ☐ Areas too crowded
- ☐ Can't find my desired type of outdoor recreation resources
- ☐ Other (specify) _____

7. What could outdoor recreation facilities do to improve your or your household's ability to participate in outdoor recreation? (Please check all that apply.)

- ☐ Parking
- ☐ Hours of operation
- ☐ Signs
- ☐ Public transportation access to facilities
- ☐ Have more facilities closer to where you live
- ☐ Easy to walk, paved trails
- ☐ Restrooms/Bathrooms
- ☐ Benches
- ☐ Access for mobility chairs
- ☐ Access to parks from neighborhood trails
- ☐ Special programming for persons with disabilities
- ☐ Senior discount and low-cost access
- ☐ Increased staff presence
- ☐ Other Americans with Disabilities Act-accessible features (specify) _____
- ☐ Other (specify) _____

8. In general, how welcome do you feel in outdoor recreation areas?

- 1 Very welcome
- 2 Somewhat welcome
- 3 Somewhat unwelcome
- 4 Very unwelcome
- 99 Don't know/Prefer not to say

9. What would make you feel more welcome in outdoor recreation areas? (Please check all that apply.)

- ☐ Nothing is needed to make you feel more welcome
- ☐ Different kinds of programs for visitors like you
- ☐ Good lighting
- ☐ More visitors who are like you being there
- ☐ More staff who are like you being there
- ☐ Signs that better represent your culture
- ☐ Other (specify) _____

10. Which physical improvements are most important to ensure safety in parks and outdoor recreation settings? (Please select your top 3 choices.)

- ☐ Lighting
- ☐ Cell phone service
- ☐ Well maintained parks, equipment and trails
- ☐ Age-appropriate facilities
- ☐ Litter cleanup
- ☐ Restrooms/Bathrooms
- ☐ Paper maps available on site
- ☐ Online wayfinding
- ☐ Signage
- ☐ Park personnel being out and about
- ☐ Law enforcement personnel being out and about
- ☐ Additional Americans with Disability Act accommodations (specify) _____
- ☐ Other (specify) _____

11. Is there a public park within a 10-minute walk of your home? Please do not include parks or recreation areas maintained by homeowners' associations.

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say

12. What are the main reasons you participate in outdoor recreation? (Please select your top 3 choices.)

- ☐ I don't participate in outdoor recreation → (GO TO Q16)
- ☐ Physical activity/exercise
- ☐ Social aspects (being with family, friends, like-minded people, meeting new people, etc.)
- ☐ Taking a break from the routine/reducing stress/improving mental health
- ☐ Experiencing excitement or adventure
- ☐ Experiencing nature
- ☐ Personal development (develop skills and abilities, sense of accomplishment, self-confidence, etc.)
- ☐ Experiencing solitude
- ☐ Doing competitive events
- ☐ Because my healthcare provider recommends it
- ☐ Pursue a particular outdoor hobby or activity (dog walking, fishing, hunting, boating, photography, bird-watching, etc.)
- ☐ Other (specify) _____

13. How do you usually find out about outdoor recreation information and opportunities? (Please check all that apply.)

- ☐ Internet
- ☐ Bulletin boards at parks
- ☐ Printed travel guides, pamphlets, and brochures
- ☐ Magazine and newspaper articles
- ☐ Television ads
- ☐ Newspaper/magazine/print ads
- ☐ Radio ads
- ☐ Other advertisements
- ☐ Social media
- ☐ Family/Friends/Word of mouth
- ☐ Email
- ☐ Other (specify) _____

14. Which of the following types of technology do you use during your outdoor recreation activities? (Please check all that apply.)

- ☐ None/Prefer to unplug
- ☐ Maps/Paper/Pencil and pen/Other analog
- ☐ Internet
- ☐ Social media (Facebook, Twitter, Instagram, TikTok, etc.)
- ☐ Cell phone/Smart phone (iPhone, etc.)
- ☐ Camcorders and/or GoPro personal video equipment
- ☐ Remote cameras, trail cameras, web cams
- ☐ Regular/Other digital or traditional cameras
- ☐ Fitbit/Apple Watch, other smart watch, etc.
- ☐ Google Earth, MapQuest, Google Maps, satellite imagery, or digital mapping
- ☐ GPS tracking
- ☐ Personal locator beacons
- ☐ Drones
- ☐ Other (specify) _____

15. Please indicate which of the following outdoor recreation opportunities, if any, you feel are MOST NEEDED in Virginia. (Please select your top 3 choices.)

Access to...

- ☐ Historic areas
- ☐ Natural areas
- ☐ Parks
- ☐ Playing fields, sports and/or golf facilities
- ☐ Scenic drives (driving for pleasure)
- ☐ Trails
- ☐ Water access
- ☐ Pools
- ☐ Playgrounds
- ☐ Other (specify) _____

ABOUT NATURAL AREAS

In this and the next section of the survey, the term “natural areas” is used broadly to mean places that are maintained primarily in a natural condition with public facilities generally limited to parking, trails and observation areas. Examples are state natural area preserves, state wildlife management areas, national wildlife refuges and minimally developed local parks.

ABOUT DEVELOPED PARKS

In this and the next section of the survey, the term “developed parks” is used broadly to mean structured environments with amenities like ball fields, campgrounds, picnic areas, and paved walkways. They sometimes include concessions and some may have access fees.

16. Do you prefer developed parks with recreational facilities such as ball fields, campgrounds, picnic areas, and paved walkways; or do you prefer natural areas with limited recreational facilities such as parking, hiking trails and observation points? (Please circle one number.)

- 1 Developed parks
- 2 Natural areas
- 3 Both developed parks and natural areas equally
- 4 No preference

17. How important is it to you to have WiFi or Internet access at parks or natural areas?

- 1 Not at all important
- 2 Slightly important
- 3 Moderately important
- 4 Very important
- 5 Extremely important
- 99 Don't know/Prefer not to say

18. Would you use a park or natural area where there was no WiFi or access to the Internet?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say

19. How important is it to you to have cell phone service at parks or natural areas?

- 1 Not at all important
- 2 Slightly important
- 3 Moderately important
- 4 Very important
- 5 Extremely important
- 99 Don't know/Prefer not to say

20. Would you use a park or natural area where there was no cell phone service?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say

21. What do you consider a close-to-home park?

(Please write in a number of minutes for each mode of travel.)

Within a _____-minute walk

Within a _____-minute bike ride

Within a _____-minute drive

The next section of the survey is about different kinds of outdoor recreation activities. There are many activities listed, but you will only need to spend a little time on the ones for which you think more are needed, and the ones that anyone in your household actually did in the past 12 months.

22. For each of the following OUTDOOR WINTER ACTIVITIES check those for which you think MORE is needed. Then check those that YOU OR PERSONS LIVING IN YOUR HOUSEHOLD participated in during the last 12 months. For each activity PARTICIPATED IN, please provide the other information (total days, overnight stay, and mostly in Virginia).

OUTDOOR WINTER: SNOW/ICE ACTIVITIES	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Downhill skiing	☐ →	☐ →		☐ →	☐
b. Snowboarding	☐ →	☐ →		☐ →	☐
c. Cross country skiing, snowshoeing	☐ →	☐ →		☐ →	☐
d. Snow sledding/tubing	☐ →	☐ →		☐ →	☐
e. Ice skating (outdoor)	☐ →	☐ →		☐ →	☐
f. Other (specify) _____	☐ →	☐ →		☐ →	☐

23. For each of the following ***WATER DEPENDENT ACTIVITIES*** check those for which you think **MORE** is needed. Then check those that **YOU OR PERSONS LIVING IN YOUR HOUSEHOLD** participated in during the last 12 months. For each activity **PARTICIPATED IN**, please provide the other information (total days, overnight stay, and mostly in Virginia).

WATER ACTIVITIES	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Fresh water fishing	☐ →	☐ →		☐ →	☐
b. Salt water fishing	☐ →	☐ →		☐ →	☐
c. Sunbathing/relaxing on a beach	☐ →	☐ →		☐ →	☐
d. Jet ski/personal watercraft	☐ →	☐ →		☐ →	☐
e. Power boating	☐ →	☐ →		☐ →	☐
f. Sailing	☐ →	☐ →		☐ →	☐
g. Sail boarding	☐ →	☐ →		☐ →	☐
h. Canoeing/kayaking	☐ →	☐ →		☐ →	☐
i. Water skiing or towed on water	☐ →	☐ →		☐ →	☐
j. Whitewater rafting (guided or solo)	☐ →	☐ →		☐ →	☐
k. Tubing on water	☐ →	☐ →		☐ →	☐
l. Swimming/outdoor pool	☐ →	☐ →		☐ →	☐
m. Swimming/beach/lake river (open water)	☐ →	☐ →		☐ →	☐
n. Crew rowing	☐ →	☐ →		☐ →	☐
o. Surfing	☐ →	☐ →		☐ →	☐
p. Paddle boarding	☐ →	☐ →		☐ →	☐
q. Kite boarding	☐ →	☐ →		☐ →	☐
r. Splash pads	☐ →	☐ →		☐ →	☐
s. Viewing the water	☐ →	☐ →		☐ →	☐
t. Paddling on scenic rivers	☐ →	☐ →		☐ →	☐
u. Other (specify)	☐ →	☐ →		☐ →	☐

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24. For each of the following **COURTS AND GOLF ACTIVITIES** check those for which you think **MORE** is needed. Then check those that **YOU OR PERSONS LIVING IN YOUR HOUSEHOLD** participated in **during the last 12 months**. For each activity **PARTICIPATED IN**, please provide the other information (total days, overnight stay, and mostly in Virginia).

ACTIVITIES ON COURTS AND GOLF	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Tennis	☐ →	☐ →		☐ →	☐
b. Basketball	☐ →	☐ →		☐ →	☐
c. Pickleball	☐ →	☐ →		☐ →	☐
d. Shuffleboard	☐ →	☐ →		☐ →	☐
e. 18-hole golf	☐ →	☐ →		☐ →	☐
f. Par-3 golf	☐ →	☐ →		☐ →	☐
g. Driving range	☐ →	☐ →		☐ →	☐
h. Disc golf	☐ →	☐ →		☐ →	☐
i. Racquetball	☐ →	☐ →		☐ →	☐
j. Squash	☐ →	☐ →		☐ →	☐
k. Miniature golf	☐ →	☐ →		☐ →	☐
l. Archery	☐ →	☐ →		☐ →	☐
m. Shooting range	☐ →	☐ →		☐ →	☐
n. Croquet fields	☐ →	☐ →		☐ →	☐
o. Other (specify)	☐ →	☐ →		☐ →	☐

25. For each of the following **DESTINATION ACTIVITIES** check those for which you think **MORE** is needed. Then check those that **YOU OR PERSONS LIVING IN YOUR HOUSEHOLD** participated in during the last 12 months. For each activity **PARTICIPATED IN**, please provide the other information (total days, overnight stay, and mostly in Virginia).

DESTINATION ACTIVITIES	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Visiting working farms, petting zoos, corn mazes, etc.	☐ →	☐ →		☐ →	☐
b. Music festivals	☐ →	☐ →		☐ →	☐
c. Equestrian events (races, dressage, shows, ring-riding, exhibitions, auctions, etc.)	☐ →	☐ →		☐ →	☐
d. Outdoor festivals (music festivals, outdoor-themed festivals, extreme sports festivals, etc.)	☐ →	☐ →		☐ →	☐
e. Culinary tours/trails (brewery/winery/food)	☐ →	☐ →		☐ →	☐
f. Nature based tours/trails	☐ →	☐ →		☐ →	☐
g. Art based tours/trails (artisan, music)	☐ →	☐ →		☐ →	☐
h. Sporting events or tournaments	☐ →	☐ →		☐ →	☐
i. Walks/runs/challenge-based events (charity walks, 5K, 10K, marathon, triathlon, extreme sports, etc.)	☐ →	☐ →		☐ →	☐
j. Driving for pleasure (sightseeing or taking the "scenic route")	☐ →	☐ →		☐ →	☐
k. Other (specify)	☐ →	☐ →		☐ →	☐

26. For each of the following **ACTIVITIES ON SPORTS FIELDS** check those for which you think **MORE** is needed. Then check those that **YOU OR PERSONS LIVING IN YOUR HOUSEHOLD** participated in **during the last 12 months**. For each activity **PARTICIPATED IN**, please provide the other information (total days, overnight stay, and mostly in Virginia).

ACTIVITIES ON SPORTS FIELDS	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Softball	☐ →	☐ →		☐ →	☐
b. Baseball	☐ →	☐ →		☐ →	☐
c. T-ball	☐ →	☐ →		☐ →	☐
d. Soccer	☐ →	☐ →		☐ →	☐
e. Rugby	☐ →	☐ →		☐ →	☐
f. Football	☐ →	☐ →		☐ →	☐
g. Volleyball	☐ →	☐ →		☐ →	☐
h. Lacrosse	☐ →	☐ →		☐ →	☐
i. Field hockey	☐ →	☐ →		☐ →	☐
j. Kickball	☐ →	☐ →		☐ →	☐
k. Cheerleading	☐ →	☐ →		☐ →	☐
l. Track and field	☐ →	☐ →		☐ →	☐
m. Other (specify)	☐ →	☐ →		☐ →	☐

27. For each of the following ***OTHER ACTIVITIES*** check those for which you think **MORE** is needed. Then check those that **YOU OR PERSONS LIVING IN YOUR HOUSEHOLD** participated in **during the last 12 months**. For each activity **PARTICIPATED IN**, please provide the other information (total days, overnight stay, and mostly in Virginia).

OTHER ACTIVITIES	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Hunting	☐ →	☐ →		☐ →	☐
b. Picnicking away from home	☐ →	☐ →		☐ →	☐
c. Nature study/Nature programs	☐ →	☐ →		☐ →	☐
d. Visiting gardens/arboretums	☐ →	☐ →		☐ →	☐
e. Bird watching away from home	☐ →	☐ →		☐ →	☐
f. Visiting parks (local, state & national)	☐ →	☐ →		☐ →	☐
g. Visiting historic areas	☐ →	☐ →		☐ →	☐
h. Geocaching	☐ →	☐ →		☐ →	☐
i. Viewing scenery	☐ →	☐ →		☐ →	☐
j. Dog parks	☐ →	☐ →		☐ →	☐
k. Zip line	☐ →	☐ →		☐ →	☐
l. RV camping	☐ →	☐ →		☐ →	☐
m. Tent camping	☐ →	☐ →		☐ →	☐
n. Staying in cabins and/or Yurts	☐ →	☐ →		☐ →	☐
o. Paddle-in camping	☐ →	☐ →		☐ →	☐
p. Visiting private farms and forests	☐ →	☐ →		☐ →	☐
q. Gardening	☐ →	☐ →		☐ →	☐
r. Visiting playgrounds	☐ →	☐ →		☐ →	☐
s. Bicycle touring on roads	☐ →	☐ →		☐ →	☐
t. Segway on sidewalks and paths	☐ →	☐ →		☐ →	☐
u. Electric-assist bicycle on road	☐ →	☐ →		☐ →	☐
v. Electric-assist bicycle on trail	☐ →	☐ →		☐ →	☐
w. Orienteering	☐ →	☐ →		☐ →	☐
x. Stargazing/Dark skies/Astronomy	☐ →	☐ →		☐ →	☐
y. Visiting natural areas	☐ →	☐ →		☐ →	☐
z. Pools	☐ →	☐ →		☐ →	☐
aa. Other (specify) _____	☐ →	☐ →		☐ →	☐

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28. For each of the following **ACTIVITIES ON TRAILS** check those for which you think **MORE** is needed. Then check those that **YOU OR PERSONS LIVING IN YOUR HOUSEHOLD** participated in **during the last 12 months**. For each activity **PARTICIPATED IN**, please provide the other information (total days, overnight stay, and mostly in Virginia).

ACTIVITIES ON TRAILS	Check if MORE of this is needed	Check if anyone living in your household did this during the last 12 months	Total # of days on which anyone did this during the last 12 months	Check if an overnight stay was involved at any time	Check if the activity occurred MOSTLY in Virginia
a. Walking for pleasure	☐ →	☐ →		☐ →	☐
b. Jogging/running	☐ →	☐ →		☐ →	☐
c. Hiking/backpacking day trips	☐ →	☐ →		☐ →	☐
d. Fitness trail (not jogging)	☐ →	☐ →		☐ →	☐
e. Horseback riding	☐ →	☐ →		☐ →	☐
f. Mountain biking	☐ →	☐ →		☐ →	☐
g. Paved or gravel bicycle trails	☐ →	☐ →		☐ →	☐
h. Driving 4-wheel off-road (Jeep, truck)	☐ →	☐ →		☐ →	☐
i. Driving motorcycle off-road/dirt bike	☐ →	☐ →		☐ →	☐
j. ATV or UTV off-road	☐ →	☐ →		☐ →	☐
k. Electric-assist bicycle on trail	☐ →	☐ →		☐ →	☐
l. Other (specify) _____	☐ →	☐ →		☐ →	☐

29. What amenities are most important to you when using recreational trails? (Please select your top 3.)

- ☐ Trailhead parking
- ☐ Drinking water
- ☐ Restrooms/Bathrooms
- ☐ Trail side benches
- ☐ Information kiosks (trail map, routes, trail etiquette and wayfinding signage)
- ☐ Interpretive signage
- ☐ Trash receptacles
- ☐ Pet waste stations
- ☐ Other (specify) _____

30. What do you consider a close-to-home trail? (Please write in a number of minutes for each mode of travel.)

Within a _____-minute walk

Within a _____-minute bike ride

Within a _____-minute drive

31. Do you prefer paved trails or gravel/natural surface trails?

- 1 Paved
- 2 Gravel/natural surface
- 3 It doesn't matter/Both are fine
- 99 Don't know/Prefer not to say

32. Why do you use trails? (Please select your top 3 choices.)

- ☐ I don't use trails
- ☐ Pleasure or relaxation
- ☐ Health and physical training
- ☐ Family or social outings
- ☐ Scenery and natural environment
- ☐ Commuting on trails
- ☐ Educational opportunities
- ☐ Volunteer work
- ☐ Because my healthcare provider recommends it
- ☐ Other (specify) _____

33. Have you ever avoided visiting a trail or park because it was too crowded?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say/Don't recall

34. If you were to stay overnight in a Virginia state park or other natural or park-like setting, what types of campsites or structures would you most prefer? (Please select your top 3 choices.)

- ☐ Cabins
- ☐ Camp cabins or yurts
- ☐ Drive-in campsite with water/electric hookups
- ☐ Drive-in campsite for tent only
- ☐ Walk-in campsites with a nearby parking pad
- ☐ Hike-in sites without parking pad
- ☐ Paddle-in camping
- ☐ Water-access campsite (paddle-in, canoe-in, boat-in)
- ☐ RV campsite
- ☐ Equestrian campsite (primitive)
- ☐ Equestrian campsite (electric and water)
- ☐ Other (specify) _____

The next few questions are about Virginia state parks.

35. If a Virginia state park has cabins are you...?

- 1 More likely to stay overnight if it has cabins
- 2 Less likely to stay overnight if it has cabins
- 3 Doesn't make a difference if it has cabins
- 99 Don't know/Prefer not to say

36. In the last 12 months have you or anyone in your household gone to a Virginia state park and been turned away or left a Virginia state park due to crowding or too many people?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say/Don't recall

37. In the last 12 months have you or anyone in your household looked into or tried making an overnight reservation at a Virginia state park?

- 1 Yes → (GO TO Q38)
- 2 No → (GO TO Q40)
- 99 Don't know/Prefer not to say/Don't recall → (GO TO Q40)

38. On the most recent time you or anyone in your household looked into or tried, were you able to make the overnight reservation at a Virginia state park?

- 1 Yes → (GO TO Q40)
- 2 No → (GO TO Q39)
- 99 Don't know/Prefer not to say/Don't recall → (GO TO Q40)

39. If you were not able to make an overnight reservation at a Virginia state park, why not?

(Please check all that apply.)

- ☐ Preferred dates were not available
- ☐ Preferred type of lodging was not available
- ☐ The cost was too high
- ☐ Other (specify) _____

40. Did you (or anyone else in your household) go CAMPING in a Virginia state park in the last 12 months?

- 1 Yes → (GO TO Q41)
- 2 No → (GO TO Q43)
- 99 Don't know/Prefer not to say/Don't recall → (GO TO Q43)

41. Did you (or anyone else in your household) use DRIVE-IN CAMPING in a Virginia state park in the last 12 months?

- 1 Yes → (GO TO Q42)
- 2 No → (GO TO Q43)
- 99 Don't know/Prefer not to say/Don't recall → (GO TO Q43)

42. How important are each of the following amenities to you and your household, when camping at a drive-in campground? (Please circle one number in each row.)

DRIVE-IN CAMPING AMENITIES	IMPORTANCE			
	Not important	Important	Very important	Don't know/Prefer not to say
a. Sewer hookups	1	2	3	99
b. Electric/water hookups	1	2	3	99
c. Flush toilets	1	2	3	99
d. Showers	1	2	3	99
e. Paved roads	1	2	3	99
f. Camp store	1	2	3	99
g. Restaurant or food service	1	2	3	99
h. Security patrol	1	2	3	99
i. Rental equipment	1	2	3	99
j. Laundry	1	2	3	99
k. Other (specify)	1	2	3	99

43. How important do you feel it is to protect Virginia's natural and open space resources from development?

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all
- 99 Don't know/Prefer not to say

44. Do you feel that Virginia's natural and open space resources are adequately protected from development?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say

45. When making travel plans, how important are scenery and scenic views to you?

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all
- 99 Don't know/Prefer not to say

Survey and Evaluation Research Laboratory, VCU, on behalf of the Virginia Department of Conservation and Recreation

ABOUT VIRGINIA'S NATURAL AREA PRESERVES

Virginia has a Natural Area Preserve System of lands to protect the most intact natural places (old growth forests, pristine wetlands, coastal dunes and beaches, native grasslands, etc.) and maintain habitats for rare and endangered species. When public access does not damage habitat or threaten the species being protected, Natural Area Preserves are open to the public.

46. How important is it to you for Virginia to have a state Natural Area Preserve System?
- 1 Very important
 - 2 Somewhat important
 - 3 Not too important
 - 4 Not important at all
 - 99 Don't know/Prefer not to say
47. Thinking about all the priorities for the state to fund, do you think state spending for outdoor recreation should increase, stay about the same or decrease?
- 1 Increase
 - 2 Stay about the same
 - 3 Decrease
 - 99 Don't know/Prefer not to say
48. Should the state spend public funds to acquire land to prevent the loss of natural areas?
- 1 Yes
 - 2 No
 - 99 Don't know/Prefer not to say
49. Would you support or oppose an increased state tax to fund outdoor recreation in Virginia?
- 1 Strongly support
 - 2 Somewhat support
 - 3 Neither support nor oppose
 - 4 Somewhat oppose
 - 5 Strongly oppose
 - 99 Don't know/Prefer not to say
50. Publicly owned park land should be...*(Please select the answer choice that comes closest to your opinion.)*
- 1 Available for conversion to private development based on future community needs
 - 2 Permanently protected from conversion to private development only if the park protects water quality or threatened species
 - 3 Permanently protected from conversion to private development in all cases
 - 99 Don't know/Prefer not to say
51. Has the COVID-19 pandemic affected how your household participates in outdoor recreation?
- 1 Yes → (GO TO Q52)
 - 2 No → (GO TO Q53)
 - 99 Don't know/Prefer not to say → (GO TO Q53)

Survey and Evaluation Research Laboratory, VCU, on behalf of the Virginia Department of Conservation and Recreation

52. How has the COVID-19 pandemic affected how your household participates in outdoor recreation? (Please check all that apply.)

- ☐ Your household participates in outdoor recreation MORE often
- ☐ Your household participates in outdoor recreation LESS often
- ☐ It has affected what kind(s) of outdoor recreation your household participates in
- ☐ It has affected where your household participates in outdoor recreation
- ☐ Other (specify) _____

53. Has the COVID-19 pandemic made you want to have more local places to experience outdoor recreation?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say

54. Has the COVID-19 pandemic prevented you from staying overnight at a recreational site or facility?

- 1 Yes
- 2 No
- 99 Don't know/Prefer not to say

The remaining questions will help us understand the survey better by grouping answers together for analysis.

55. Do you own or rent the home in which you are living?

- 1 Own or buying
- 2 Rent
- 3 Other (specify) _____
- 99 Prefer not to say

56. Please write the name of the independent city or county and ZIP code in which your household is located.

City or County: _____ ZIP code: _____

57. Do you consider yourself to be of Hispanic/Latino origin?

- 1 Yes
- 2 No
- 99 Prefer not to say

58. Which one of the following best describes your race?

- 1 White or Caucasian
- 2 Black or African American
- 3 American Indian
- 4 Asian/Pacific Islander
- 5 Multiracial/Mixed race
- 6 Other (specify) _____
- 99 Prefer not to say

59. What is your age? (Please write in the number of years.) _____ years

60. Including yourself, how many people live in your household? (Please use numerals only.)

Number of people including yourself: _____

61. Please indicate how many people live in your household in each of the following age groups. (Please use numerals only.)

Age group	Number of people living in your household in this age group
0 to 11 years	
12 to 17 years	
18 to 24 years	
25 to 44 years	
45 to 64 years	
65 to 74 years	
75 years and older	
Total number of people	(should be same number as in Q60)

62. Which of the following income categories most closely describes your total household income in 2021 before taxes, including wages and all other income?

- 1 Less than \$10,000
- 2 \$10,000 - \$24,999
- 3 \$25,000 - \$49,999
- 4 \$50,000 - \$74,999
- 5 \$75,000 - \$99,999
- 6 \$100,000 - \$149,999
- 7 \$150,000 - \$199,999
- 8 \$200,000 or more
- 99 Prefer not to say

63. If you have additional comments or suggestions, please write them in the space below.

Thank you for taking the time to complete this questionnaire!

Results will be available online in 2023 –

See the *Virginia Outdoors Plan*:

<https://www.dcr.virginia.gov/recreational-planning/vop>

Survey and Evaluation Research Laboratory, VCU, on behalf of the Virginia Department of Conservation and Recreation

No postage is required to mail this survey.

Please use the postage-paid business reply return envelope provided. You may drop it in your home mailbox and your letter carrier will put it in the mail for you.

If you have lost your envelope, please return the survey to:

VCU Survey & Evaluation Research Laboratory

Box 843016

Richmond, VA 23284-3016

Survey and Evaluation Research Laboratory, VCU, on behalf of the Virginia Department of Conservation and Recreation

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Appendix B

Recruitment Materials

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Probability Sample Recruitment Materials

Advance Letter



June 2022

SURVEYID

**VIRGINIA RESIDENT
STREET ADDRESS
CITY, STATE ZIP**

Dear Virginia Resident:

This letter is to inform you that your household has been randomly selected to participate in the 2022 *Virginia Outdoors Survey*. Completing the survey is voluntary, but your cooperation is much appreciated! **Even if you don't get outside for recreation very much, your opinion is still important, and it can help the Virginia Department of Conservation and Recreation (DCR) better understand the experiences of all Virginians.**

DCR values your opinions. The survey is an opportunity to ask Virginia residents about their participation in outdoor recreation. This includes activities like walking, hiking, and playing sports. It can also mean going to playgrounds, visiting historic sites, and camping.

DCR is working with the Survey and Evaluation Research Laboratory at Virginia Commonwealth University (VCU-SERL) to conduct the *Virginia Outdoors Survey*. Findings from the survey will help shape DCR's *Virginia Outdoors Plan*, which serves as a blueprint for the state's future outdoor recreation programming and infrastructure.

The *Virginia Outdoors Survey* may be accessed using the link below. Once online, you will be prompted to enter your Survey ID and PIN, which are also provided below. **These login credentials are unique to your household; please do not share them.**

<https://serl.vcu.edu/dcr2022>

SURVEY ID: <<SURVEYID>> and PIN: <<PIN>>

If you prefer, you may begin the survey by using the QR code or text-back option indicated at the bottom of this letter.

If you have questions or comments about the *Virginia Outdoors Survey*, or if you need assistance completing it, please contact VCU-SERL at outdoorsSERL@vcu.edu or 804-827-0047.

Thank you in advance for your time!

Sincerely,
[SIGNATURE]

Kelly McClary, VCCO

Director of Planning and Recreation Resources



Get your survey
link by text!
Text “@DCR2022”
to 833-373-0395

Paper Survey Cover Letter



July 2022

SURVEYID

**VIRGINIA RESIDENT
STREET ADDRESS
CITY, STATE ZIP**

Dear Virginia Resident:

Recently, we reached out to you regarding the 2022 *Virginia Outdoors Survey*. The survey is a chance to share your perspectives on outdoor recreation activities – things like playing sports, hiking, or riding bikes. **Regardless of how much or how little you go outside for recreation, your input is important!** Your survey answers will shape future recreational opportunities in the Commonwealth.

The Virginia Department of Conservation and Recreation (DCR) is partnering with the Survey and Evaluation Research Laboratory at Virginia Commonwealth University (VCU-SERL) to conduct this survey. Taking the survey is voluntary, but we hope you will participate.

In our earlier correspondence, we asked you to complete the *Virginia Outdoors Survey* online. **However, we have not yet received your response.** If you prefer a paper version of the survey, one is included here for your consideration. You can fill it out and mail it back. A business reply envelope is provided for your convenience.

The *Virginia Outdoors Survey* also remains accessible online. You can take it using the link and login credentials below. **Please note that these login credentials are meant only for your household; please do not share them.**

<https://serl.vcu.edu/dcr2022>

SURVEY ID: <<SURVEYID>> and PIN: <<PIN>>

Alternatively, you can launch the survey with the QR code or text-back number appearing at the bottom of this letter.

If you have questions or comments about the *Virginia Outdoors Survey*, or if you need assistance completing it, please contact VCU-SERL at **outdoorsSERL@vcu.edu** or **804-827-0047**.

Thank you for your time!

Sincerely,
[SIGNATURE]
Kelly McClary, VCCO
Director of Planning and Recreation Resources



Get your survey
link by text!
Text “@DCR2022”
to 833-373-0395

Reminder Postcard

 Survey and Evaluation Research Laboratory Box 843016 Richmond, VA 23284-3016	POSTAGE SURVEYID VIRGINIA RESIDENT STREET ADDRESS CITY, STATE ZIP
---	--

Dear Virginia Resident:

We recently sent you an invitation to the 2022 *Virginia Outdoors Survey*. The purpose of this survey is to better understand outdoor recreation activities Virginians engage in. Your household has been randomly selected to participate in the survey. The survey is voluntary, but we hope that you will take it. Your perspective helps create a fuller picture of outdoor recreation among all Virginians.

If you have already completed the survey, thank you! You do not need to do anything else.

If you have not yet taken the survey, please do so at: <https://serl.vcu.edu/dcr2022>

Your 5-digit survey ID to enter the survey is: <SURVEY ID>

You'll also need this PIN: <PIN>

Alternatively, please return the paper survey booklet that was mailed to you previously. If you need a replacement, please contact us using the information below. We cannot send any replacement packets after September 7, 2022.

Questions? Please contact VCU's Survey and Evaluation Research Laboratory (VCU-SERL) at outdoorsSERL@vcu.edu or 804-827-0047. Please refer to your survey ID in your message.

Thank you for your time.

Kelly McClary, VCCO
Director of Planning and Recreation Resources

Final Reminder Letter



September 2022

<<SURVEYID>>

VIRGINIA RESIDENT
STREET ADDRESS
CITY, STATE ZIP

Dear Virginia Resident:

In the past few weeks, we've contacted you about the 2022 *Virginia Outdoors Survey*. **Your participation is important, but we have not heard from you.** Because you are part of a small scientifically-selected sample, your response will help make the survey findings more accurate. **If you have already completed the survey and this letter crossed in the mail, thank you! You do not need to do anything else. If not, we'd like to respectfully request your survey response by September 30, 2022.**

The *Virginia Outdoors Survey* is a chance to tell us about your outdoor recreation experiences – whether walking, swimming, camping, or other kinds of activities. **Even if you don't get outside for recreation very often, your input is valuable.** It can help the Virginia Department of Conservation and Recreation (DCR) understand and plan for the recreation needs of Virginians for years to come.

DCR is collaborating with the Survey and Evaluation Research Laboratory at Virginia Commonwealth University (VCU-SERL) on this effort. Taking the survey is voluntary, but we hope you will participate!

The *Virginia Outdoors Survey* is available in two formats: paper and web. A paper booklet was previously mailed to you for your review. If you need a replacement, please email us at outdoorsSERL@vcu.edu or call 804-827-0047. Please have your survey ID number, which is printed in the upper right of this letter, when you call. We cannot send any replacement packets after September 15, 2022.

You can also take the *Virginia Outdoors Survey* online by using the link and login credentials below. **Keep in mind that these login credentials are only for your household; please do not share them.**

<https://serl.vcu.edu/dcr2022>

SURVEY ID: <<SURVEYID>> and PIN: <<PIN>>

If you prefer, you can fill out the *Virginia Outdoors Survey* using the QR code or text-back number displayed at the bottom of this letter.

Thank you for your time!

Sincerely,
[SIGNATURE]

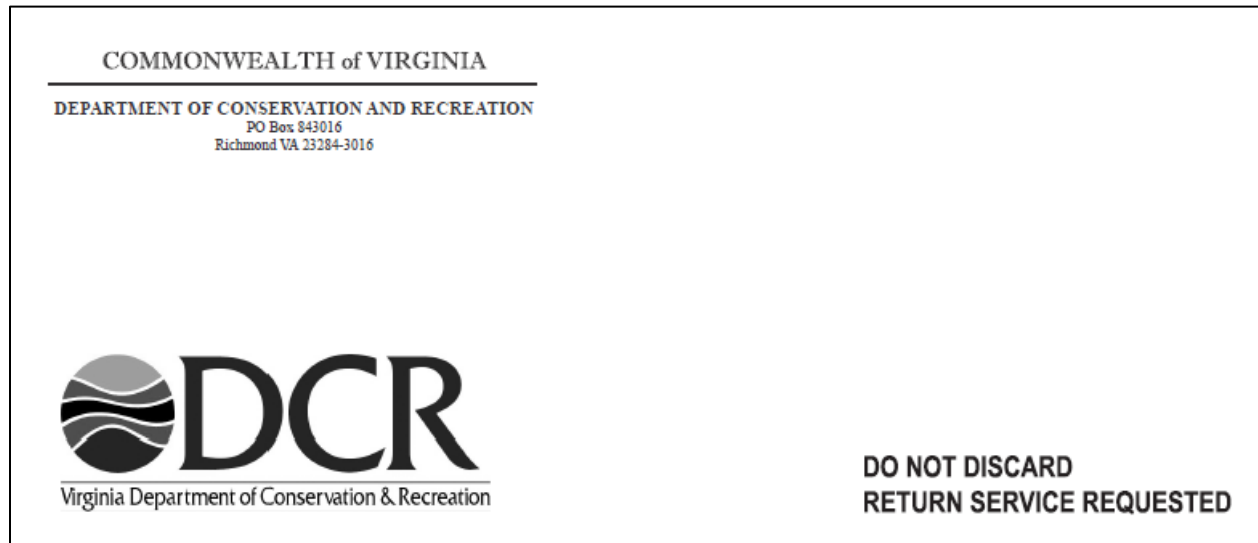
Kelly McClary, VCCO
Director of Planning and Recreation Resources



Get your survey
link by text!
Text "@DCR2022"
to 833-373-0395

Probability Sample Mailing Proofs

Number 10 Mailing Envelope



COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION
PO Box 843016
Richmond VA 23284-3016

<<SURVEYID>>

<<sequence>> T <<cont_id>> B<<gib_id>> <<endorse>>
Virginia Resident
<<address>>
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 DCR
Virginia Department of Conservation & Recreation

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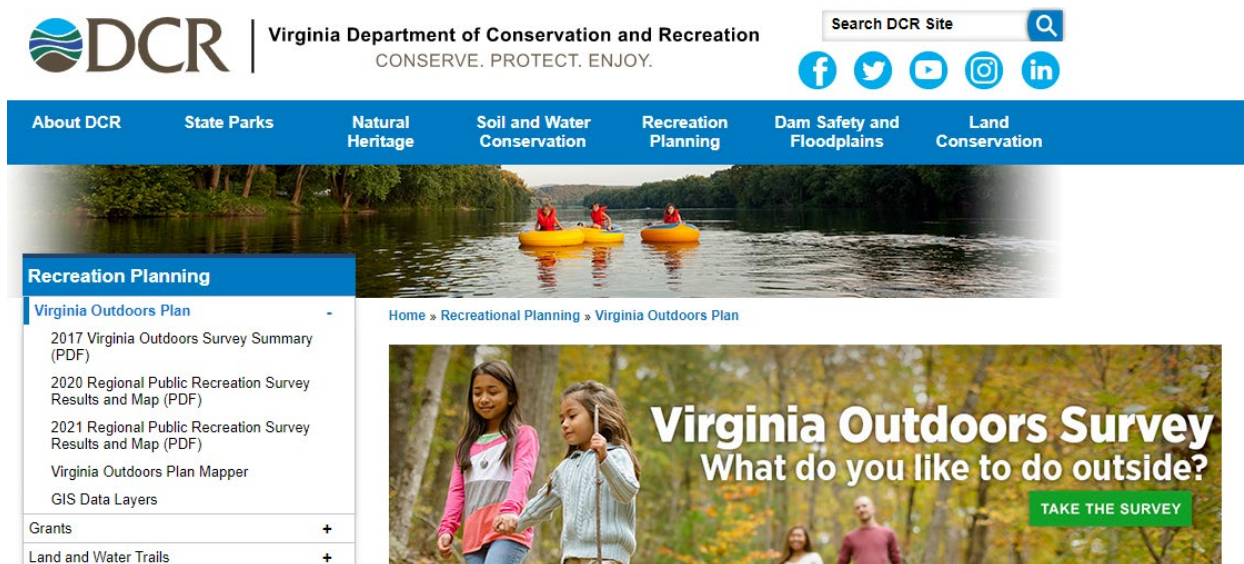
VIRGINIA COMMONWEALTH UNIVERSITY
SURVEY & EVALUATION RESEARCH LABORATORY
BOX 843016
RICHMOND VA 23286-0445

Crowd-Source Recruitment

DCR Homepage with Link to Survey



Virginia Outdoors Plan Page with Link to Survey



DCR Greenways and Trails ENEWS Summer 2022 edition

Sent June 23, 2022 11:58 a.m.



2022 Virginia Outdoors Survey is Launched

The Virginia Department of Conservation and Recreation (DCR) is pleased to launch the 2022 *Virginia Outdoors Survey* — a chance for you to tell us what you like to do outside.

Your answers to this brief survey will help us ensure that you'll have what you need to enjoy Virginia's amazing outdoor spaces.

Findings from the survey will help shape DCR's 2023 *Virginia Outdoors Plan*, a blueprint for the state's future outdoor recreation programming and infrastructure.

- [Please click here to begin the survey](#)
- Get your survey link by text! Text "**@vos2022**" to **833-373-0395**
- Use QR Code to access the survey

Please feel free to share this survey invitation with your friends! Please note that survey responses must be received by **August 15**.

DCR Blog Post with Link to Survey

Posted July 25, 2022



Virginia Department of Conservation and Recreation
CONSERVE. PROTECT. ENJOY.

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[Home » Insights » Five reasons to take the Virginia Outdoors Survey right now](#)

Five reasons to take the Virginia Outdoors Survey right now

By Rebecca Jones Posted July 25, 2022



This is your chance to let the commonwealth know what you need and value by taking the [2022 Virginia Outdoors Survey](#).

Results from this twice-in-a-decade survey shape the [Virginia Outdoors Plan](#), the state's comprehensive document for land conservation, outdoor recreation and open-space planning.

The survey only takes a few minutes to complete, and it gives you a voice in how the government and the private sector steward Virginia's natural spaces.

More survey-takers equals a better, more equitable Virginia Outdoors Plan. It's that simple.

Still not convinced? Here are five reasons you should stop what you're doing and take the Virginia Outdoors Survey right now.

1. It only happens once every five years. Taking the survey is easy — but your answers have a far-reaching impact. For the next five years, Virginia's outdoor planners will make decisions and allocate resources based on survey data. Please don't miss this opportunity. There won't be another one until 2027.

2. It helps bring resources to your area. Wish your neighborhood had more trees and trails? Concerned about water quality where you live? Data from the survey is a major driver in deciding where outdoors funding and resources are needed throughout the state. Your answers to the survey help your community get its share.

3. Federal dollars are on the line. Federal funding for all kinds of outdoor projects is available to Virginia — but only if the state can demonstrate a need. If you'd like Virginia to receive new dollars for public outdoor spaces, park enrichment and environmental conservation, let your voice be heard.

4. Virginia's economy will benefit. From the Chesapeake Bay to the Blue Ridge Mountains, Virginia's landscapes draw millions of tourists every year. These visitors dine in our restaurants, shop in our stores and generally keep our economy humming. Your survey participation helps ensure they keep coming — and spending.

5. It helps curb overdevelopment. The Virginia Outdoors Plan guides the protection of lands through the [Virginia Land Conservation Foundation](#). It also allows the state to participate in the federal [Land and Water Conservation Fund](#) program. By taking the survey, you're providing insights that help balance growth and greenspaces where you live.

You can take the Virginia Outdoors Survey at
www.dcr.virginia.gov/2022virginiaoutdoorssurvey.

Feel free to share the survey link with family, friends and neighbors.

If you don't take the survey right now, be sure to complete it by **Aug. 15**.

Categories

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