



# Report of Results

Submitted to:

**Pennsylvania Department of Conservation &  
Natural Resources**

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**PennState**  
Harrisburg

Center for Survey Research

## INTRODUCTION

The Lion Poll is an omnibus survey conducted by the Center for Survey Research (CSR) at Penn State Harrisburg. A total of 1,065 self-administered web surveys were completed by adult Pennsylvanians between February 27 and March 21, 2019. The Lion Poll used a quota-based invitation system to produce a final dataset that is representative of Pennsylvania's population by region and, separately, by age/sex combined categories. Project activity was directed by Stephanie L. Wehnau, Director of the Center for Survey Research at Penn State Harrisburg.

The purpose of the Lion Poll is to provide timely and accurate data to agencies, organizations, and researchers with statewide interests and responsibilities. Sponsors of CSR's omnibus polls have used their results to track public policy issues; measure general attitudes, awareness, and knowledge of their organizations; and measure satisfaction with organizational services and performance.

### Data Analysis Notes

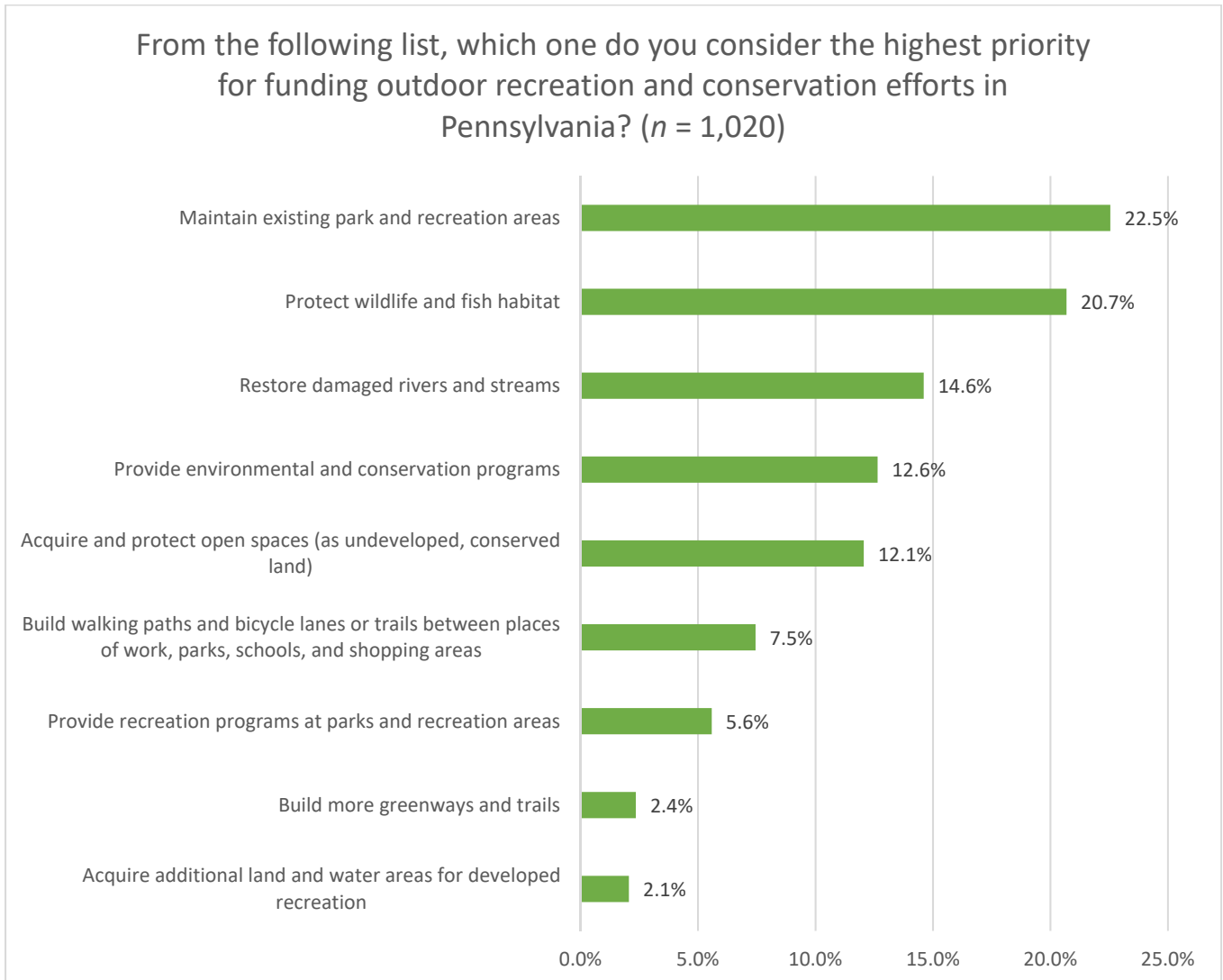
The following notes should be taken into account when reviewing the final dataset:

1. Results include discussion for relationships that are statistically significant (z-test statistics or regression statistics are significant at the .05 level). Graphics are included for the demographic variables that were found to be the strongest predictors of an outcome.
2. When reviewing figures, it is important to review the preceding text to determine which relationships are statistically significant. Figures may include information about relationships that are not statistically significant.
3. Data are not weighted; however, the final dataset is representative of Pennsylvania's population by region and by age/sex combined categories.
4. Percentages may not total to 100% due to the exclusion of 'Don't know' responses.
5. Cross-tabulations and frequencies may not add up to the sample size reported due to rounding in the weighting process and the exclusion of 'Don't know' and 'Declined to answer' responses.
6. See Appendices A and B of the Report of Methods for a map and list of the Lion Poll regions.
7. See Appendix C of the Report of Methods for the sponsored survey questions and standard demographics that were used in data collection.

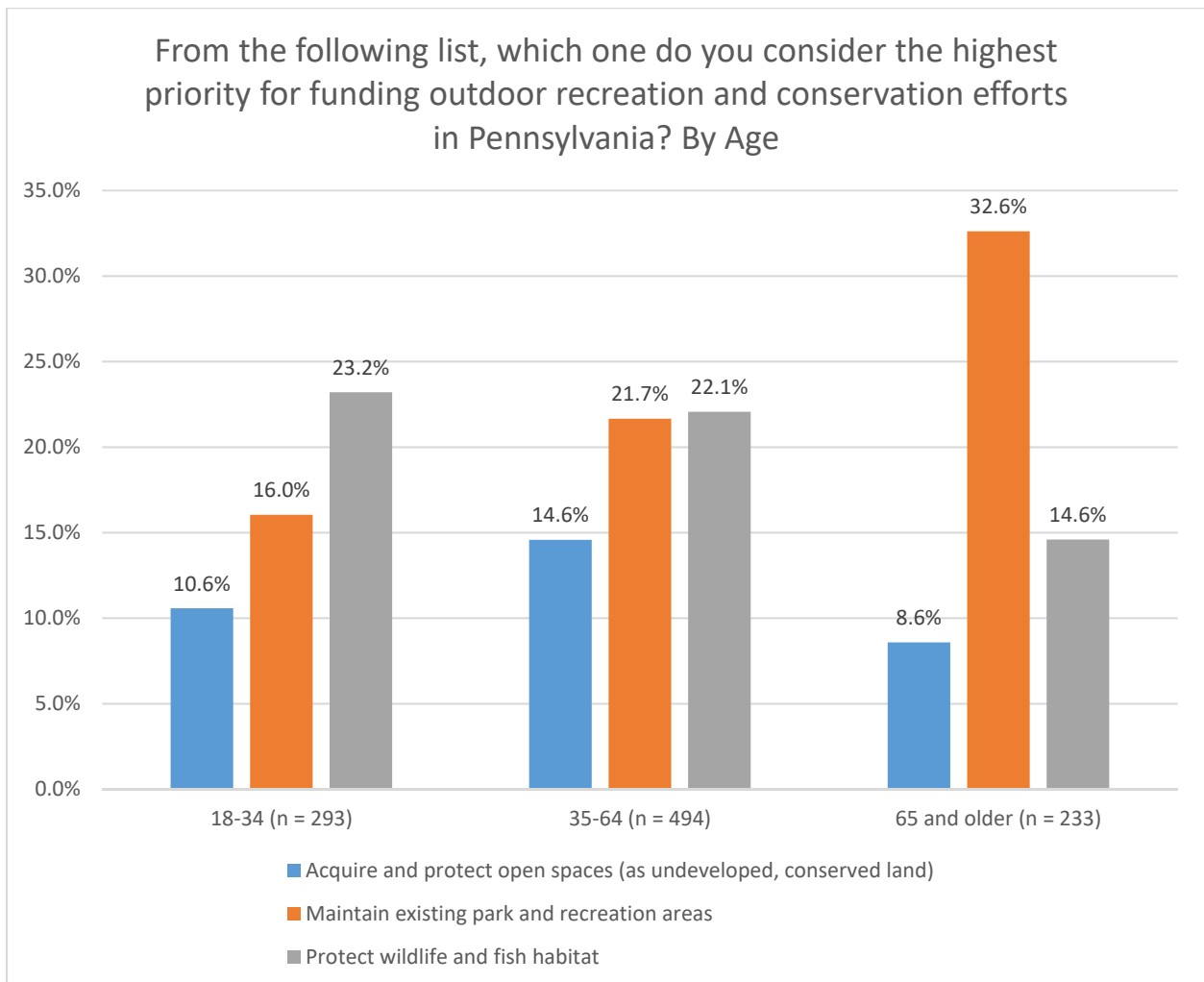
## SURVEY RESULTS

### Attitudes toward Parks and Outdoor Recreation

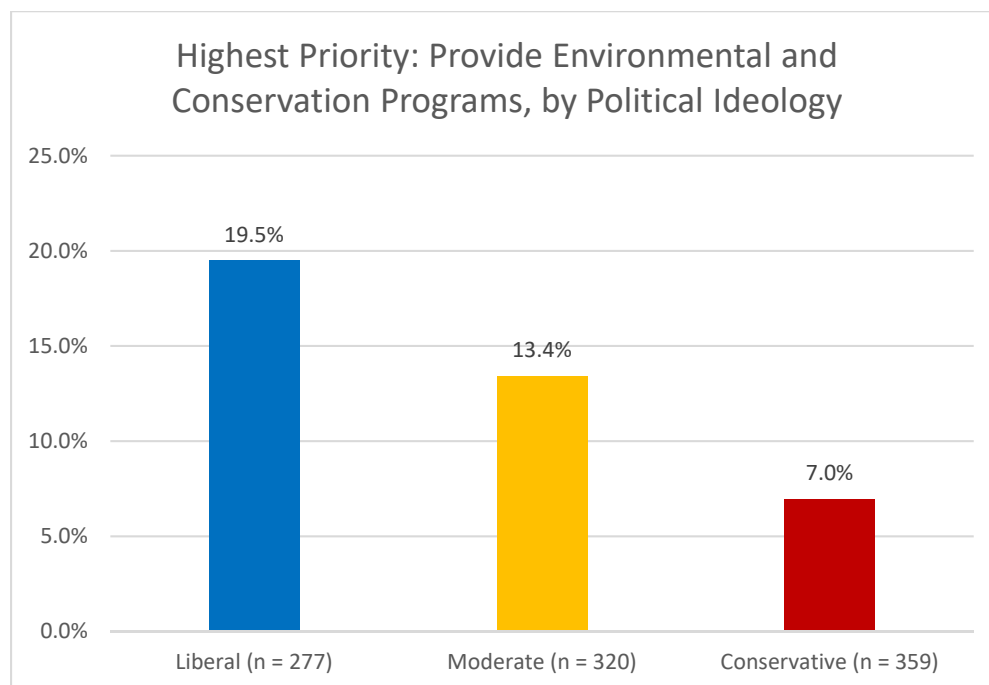
Respondents were first asked to indicate their highest priority for funding outdoor recreation and conservation efforts in Pennsylvania. A plurality of respondents preferred to maintain existing park and recreation areas (22.5%;  $n = 1,020$ ) or to protect wildlife and fish habitat (20.7%). About one in eight respondents said that efforts should focus on restoring damaged rivers and streams (14.6%), providing environmental and conservation programs (12.6%), and acquiring and protecting open spaces (12.1%). The remaining respondents would like to build walking paths and bicycle lanes or trails (7.5%), provide recreation programs and parks and recreation areas (5.6%), build more greenways and trails (2.4%), and acquire additional land and water areas for developed recreation (2.1%), as seen in the next figure.



Responses among those who selected Acquire and protect open spaces (as undeveloped, conserved land), Maintain existing park and recreation areas, and Protect wildlife and fish habitat differed by age in regression analysis. Regression analysis evaluates all demographic groups simultaneously, ensuring that differences are actually explained by a specific demographic and eliminating the chance that the difference shows up in one demographic because it is correlated with another demographic. Specifically, respondents between the ages of 35 and 64 were more likely to select Acquire and protect open spaces as their top priority (14.6%;  $n = 494$ ) than those who were 65 and older (8.6%;  $n = 233$ ). Respondents who were 65 or older were much more likely to select Maintain existing park and recreation areas (32.6%) than those between the ages of 35 and 64 (21.7%), and those between 18 and 34 (16.0%;  $n = 293$ ). Finally, those who were 65 and older were less likely to select Protect wildlife and fish habitat (14.6%) than those between the ages of 35 and 64 (22.1%) and those between 18 and 34 (23.2%), as seen in the next figure.



Liberal respondents were more likely to say that their highest priority was providing environmental and conservation programs (19.5%;  $n = 277$ ) than conservative respondents (7.0%;  $n = 359$ ), as seen in the next figure.



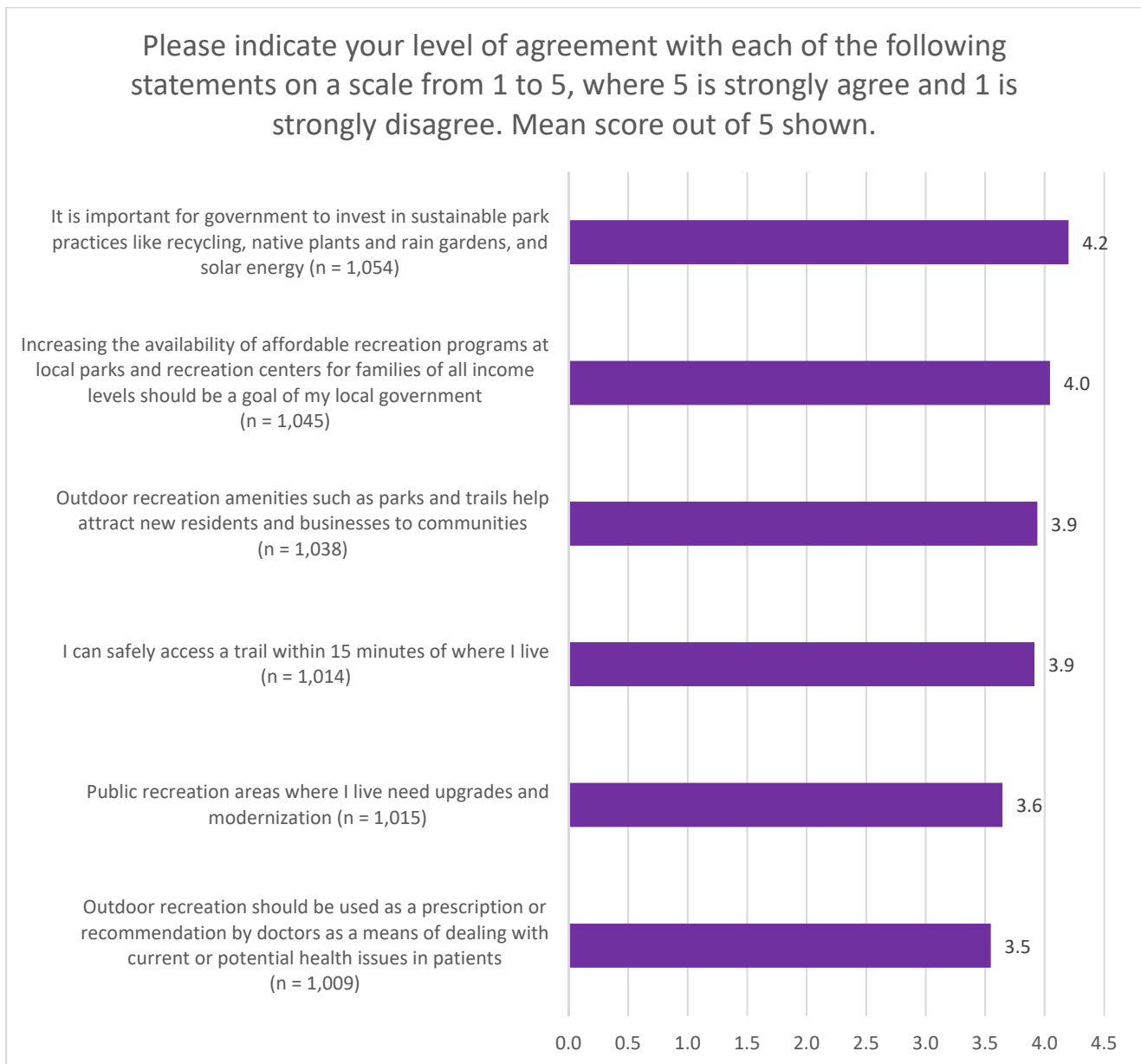
**Respondents' highest priorities for funding outdoor recreation and conservation efforts in Pennsylvania also differed by race, annual household income, and region.** There were no other significant differences by demographic sub-groups found in regression analysis.

- White respondents were more likely to select Protect wildlife and fish habitat (21.6%;  $n = 898$ ) than black/African American respondents (7.8%;  $n = 64$ ).
- Respondents living in households with annual incomes of less than \$30,000 were less likely to select Acquire and protect open spaces (4.0%;  $n = 198$ ) than those living in households with annual incomes of \$30,000 or more (14.0%;  $n = 770$ ).
- Respondents from the Southeast region were more likely to select Provide recreation programs at parks and recreation programs (9.3%;  $n = 322$ ) than those in the Central region (1.0%;  $n = 96$ ).

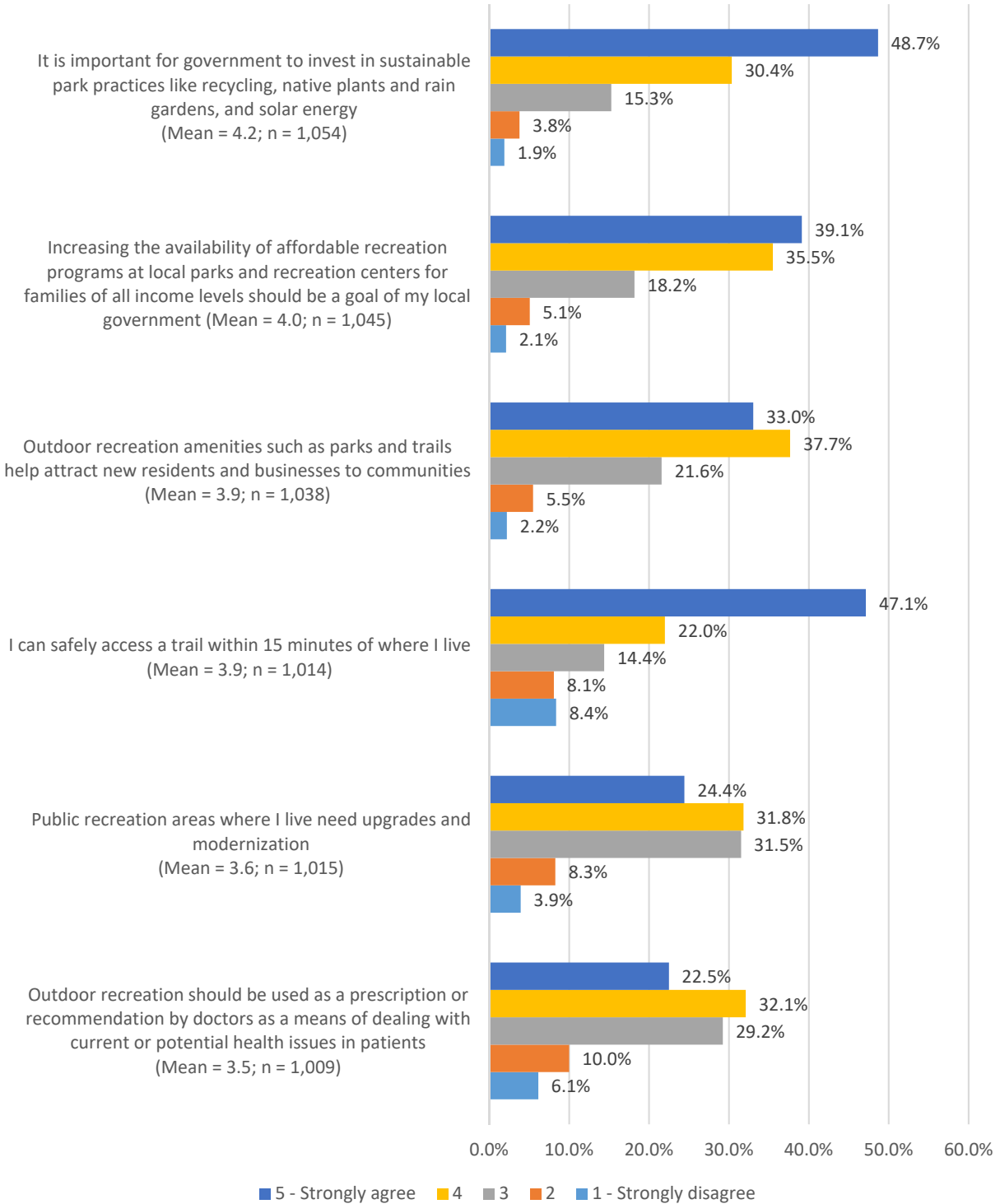
Respondents were then asked to indicate their level of agreement with a series of statements about parks and outdoor recreation on a scale of 1 to 5, where 1 represented Strongly Disagree and 5 represented Strongly Agree. The items were analyzed by looking at the mean score out of five, with a higher score representing a higher level of general agreement among respondents. **Overall, respondents were most in agreement that it is important for government to invest in sustainable park practices like recycling, native plants and rain gardens, and solar energy (mean = 4.2;  $n = 1,054$ ), but were slightly less likely to say that increasing the availability of affordable recreation programs at local parks and recreation centers for families of all**

**income levels should be a goal of their local government (mean = 4.0; n = 1,045).**

Respondents were equally likely to say that outdoor recreation amenities such as parks and trails help attract new residents and businesses to communities (mean = 3.9; n = 1,038) and that they can safely access a trail within 15 minutes of where they live (mean = 3.9; n = 1,014). The second lowest level of agreement was found with the statement that public recreation areas where they live need upgrades and modernization (mean = 3.6; n = 1,015). Finally, the statement respondents were least likely to agree with was that outdoor recreation should be used as a prescription or recommendation by doctors as a means of dealing with current or potential health issues in patients (mean = 3.5, n = 1,009). The following figures show the mean scores for each item and the proportion of respondents that chose each level of agreement for each item.

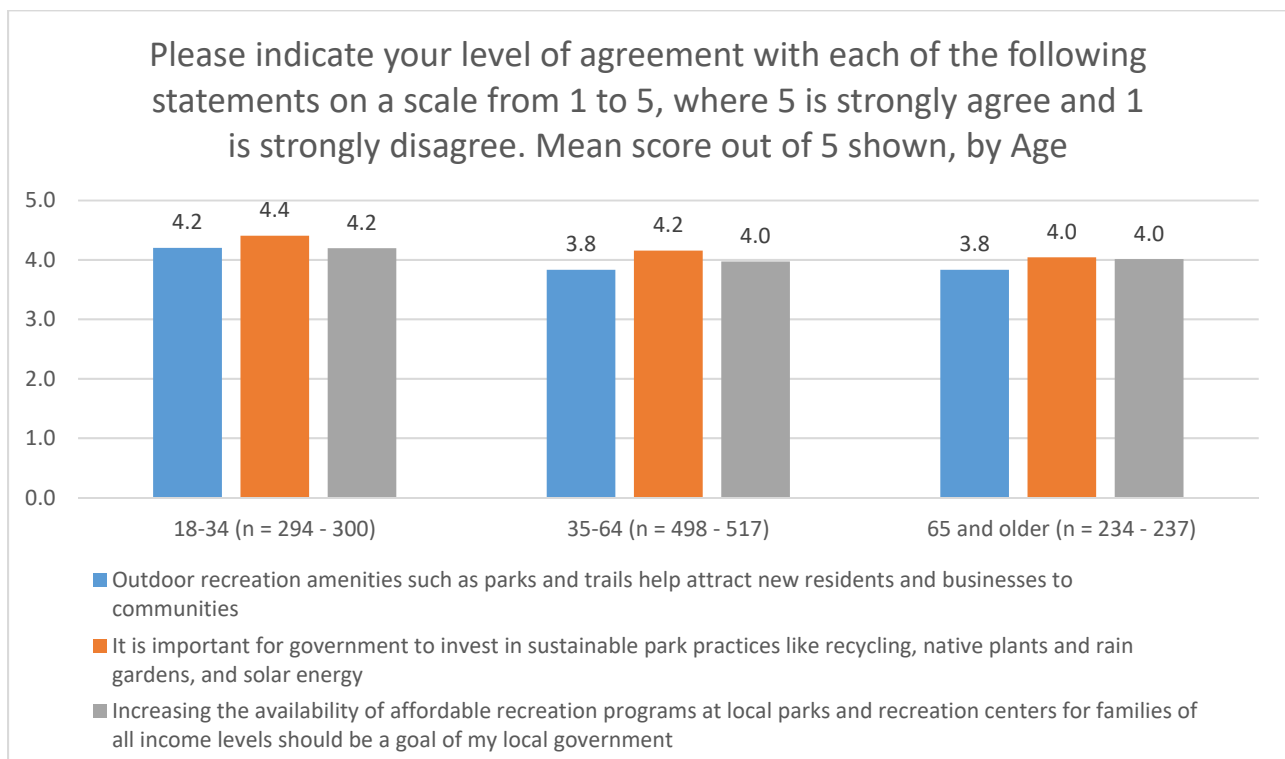


Please indicate your level of agreement with each of the following statements on a scale from 1 to 5, where 5 is strongly agree and 1 is strongly disagree.



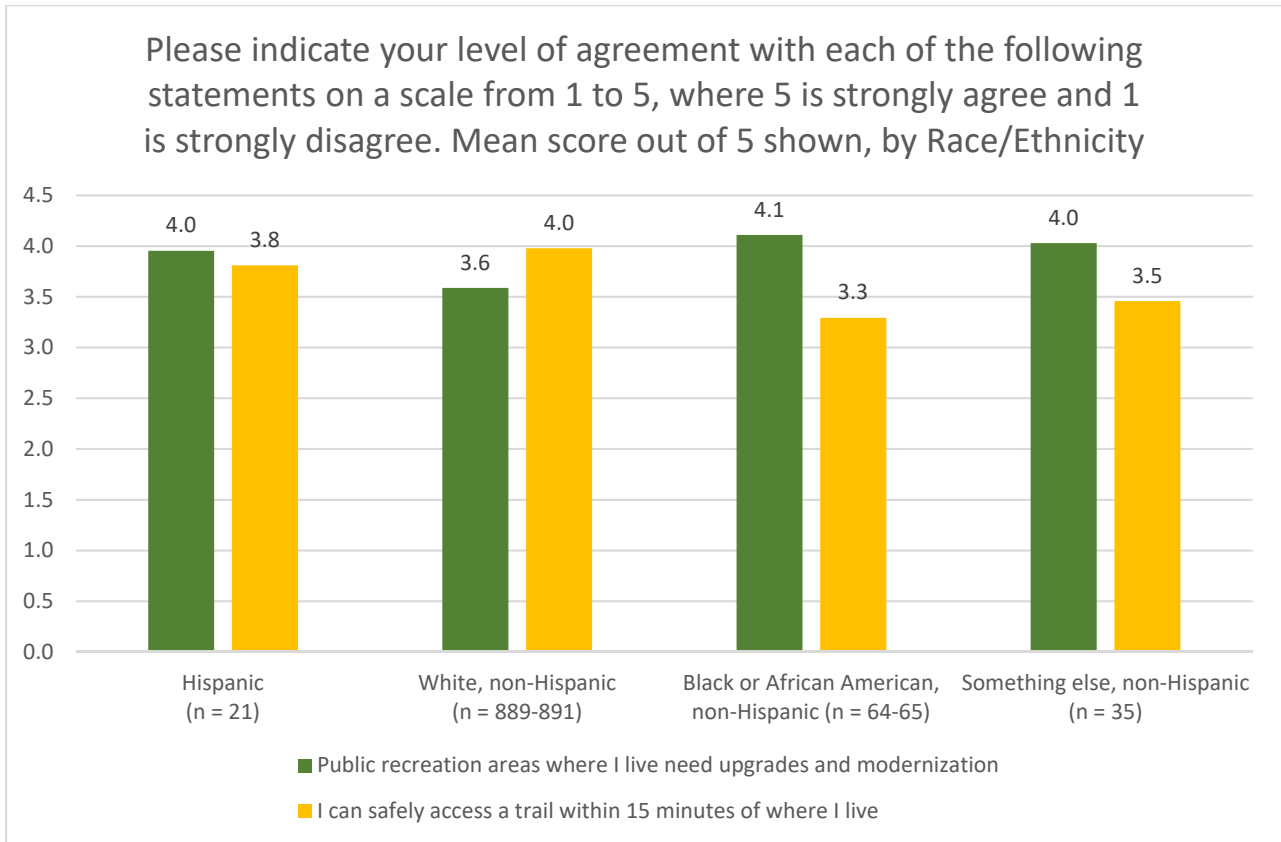
Analysis of Variance (ANOVA) was utilized to determine which mean scores differed by demographic sub-groups. As with regression analysis, ANOVA evaluates all demographic groups at the same time, ensuring that differences are actually explained by a specific demographic, eliminating the chance that the difference shows up in one demographic because it is correlated to another demographic. **For the statement that Outdoor recreation should be used as a prescription or recommendation by doctors as a means of dealing with current or potential health issues in patients, there were no significant differences by any demographic sub-group**, indicating universal agreement among respondents, regardless of gender, age, race/ethnicity, household composition, educational attainment, annual household income, population density of county of residence, region, political party affiliation, or political ideology.

**Age was a significant factor in explaining differences among respondents for three of the statements.** Respondents between the ages of 18 and 34 were more likely to say that outdoor recreation amenities help attract new residents and businesses to communities (Mean = 4.2;  $n = 298$ ) than those between the ages of 35 and 64 (Mean = 3.8;  $n = 506$ ) and those 65 and older (Mean = 3.8;  $n = 234$ ). Similarly, 18 to 34-year-olds were also more likely to say that it is important for government to invest in sustainable park practices like recycling, native plants and rain gardens, and solar energy (Mean = 4.4;  $n = 300$ ) than both 35 to 64-year-olds (Mean = 4.2;  $n = 517$ ) and those 65 and older (Mean = 4.0;  $n = 237$ ). Younger respondents were also more likely to agree that increasing the availability of affordable recreation programs at local parks and recreation centers for families of all income levels should be a goal of their local governments (Mean = 4.2;  $n = 294$ ) than those between the ages of 35 and 64 (Mean = 4.0;  $n = 515$ ), as seen in the next figure.

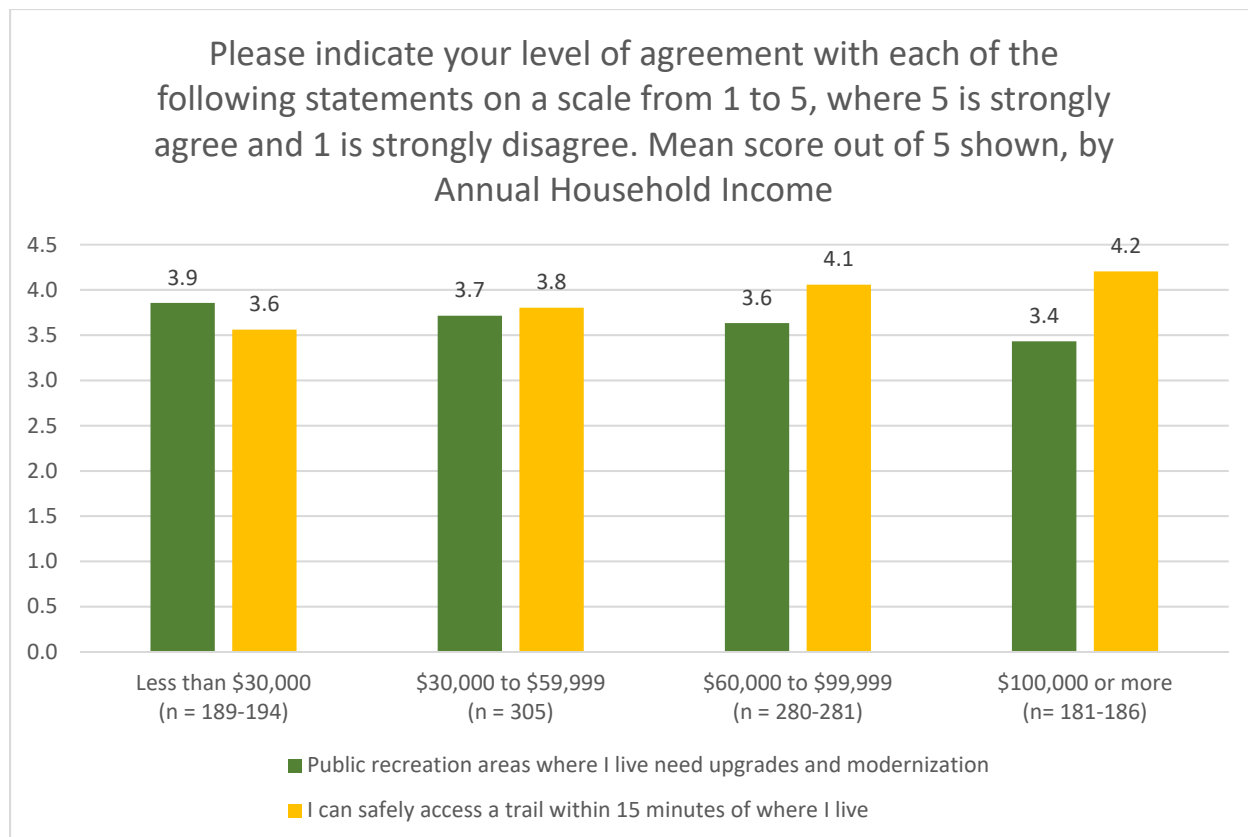




**Agreement with two of the statements also differed by race and ethnicity.** Non-Hispanic, white respondents were less likely to say that public recreation areas where they live need upgrades and modernization (Mean = 3.6;  $n = 891$ ) than black/African American respondents (Mean = 4.1;  $n = 64$ ). In addition, white respondents were more likely to say that they could safely access a trail within 15 minutes of where they live (Mean = 4.0;  $n = 889$ ) than black/African American respondents (Mean = 3.3;  $n = 65$ ) and respondents indicating some other non-Hispanic race (Mean = 3.5;  $n = 35$ ), as seen in the next figure.

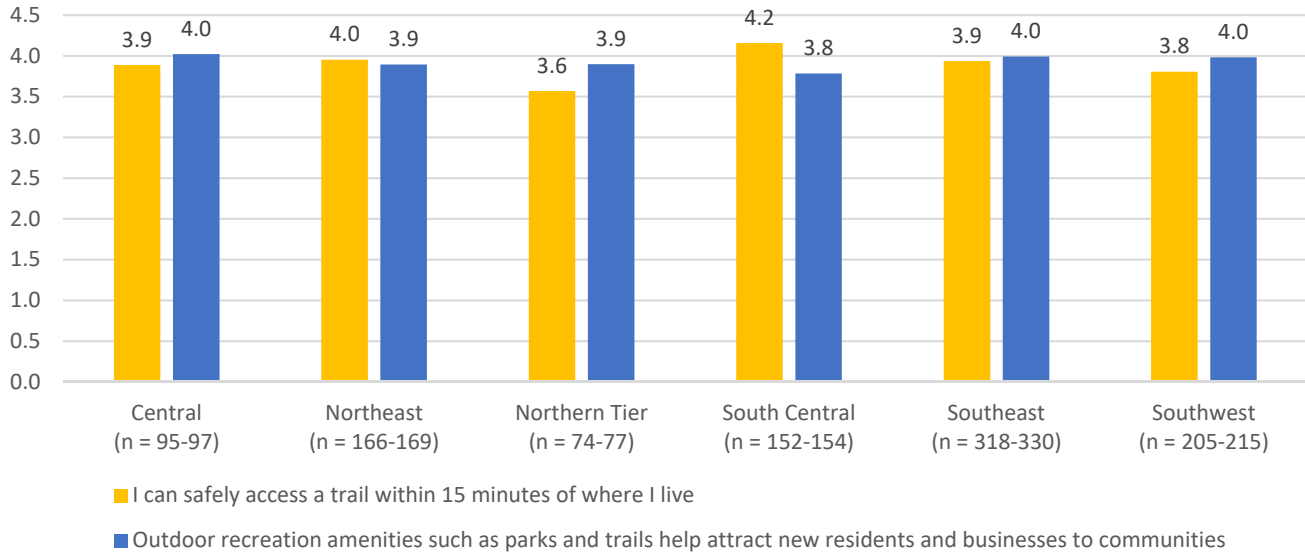


**ANOVA analysis also revealed differences in responses to these two statements by the respondents' annual household incomes.** Those living in households with annual incomes of \$100,000 or more were less likely to say that their public recreation areas needed upgrades and modernization (Mean = 3.4;  $n = 181$ ) than those in households with incomes of \$30,000 to \$59,999 (Mean = 3.7;  $n = 305$ ) and less than \$30,000 (Mean = 3.9;  $n = 194$ ). The same trends were seen when respondents were asked whether they could safely access a trail within 15 minutes of where they live. Those living in households with annual incomes of \$100,000 or more (Mean = 4.2;  $n = 186$ ) and \$60,000 to \$99,999 (Mean = 4.1;  $n = 280$ ) were more likely to agree with this statement than those living in households with incomes of between \$30,000 and \$59,999 (Mean = 3.8;  $n = 305$ ) and below \$30,000 (Mean = 3.6;  $n = 189$ ), as seen in the next figure.



**Responses also differed by region.** Specifically, respondents in the South Central (Mean = 4.2;  $n = 154$ ) and Southeast (Mean = 3.9;  $n = 318$ ) regions were more likely to say that they can safely access a trail within 15 minutes of where they live than those in the Northern Tier region (Mean = 3.6;  $n = 74$ ). Respondents in the South Central region were less likely to say that outdoor recreation amenities help attract new residents and businesses to communities (Mean = 3.8;  $n = 152$ ) than those in the Southeast and Southwest regions (Mean = 4.0;  $n = 330$  and  $215$ , respectively), as seen in the next figure.

Please indicate your level of agreement with each of the following statements on a scale from 1 to 5, where 5 is strongly agree and 1 is strongly disagree. Mean score out of 5 shown, by Region

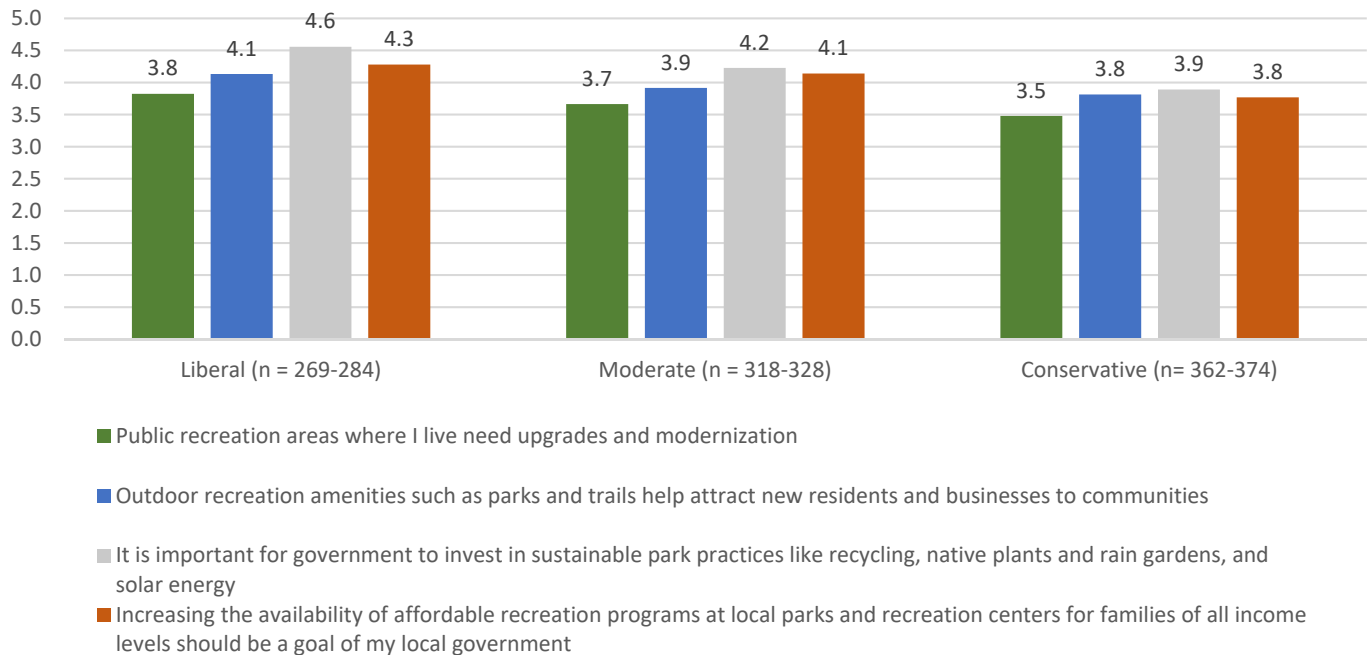


**A number of the statements significantly differed by political ideology and registered party affiliation after controlling for other factors in ANOVA analysis. There were no other significant differences by demographic sub-groups found in ANOVA analysis.** Liberals were more likely than conservatives to say that:

- Public recreation areas where they live need upgrades and modernization (Liberal: Mean = 3.8,  $n = 269$ ; Conservative: Mean = 3.5,  $n = 362$ ).
- Outdoor recreation amenities such as parks and trails help attract new residents and businesses to communities (Liberal: Mean = 4.1,  $n = 281$ ; Conservative: Mean = 3.8,  $n = 366$ ). Liberals were also more likely to agree with this statement than moderates (Mean = 3.9;  $n = 325$ ).
- It is important for government to invest in sustainable park practices like recycling, native plants and rain gardens, and solar energy (Liberal: Mean = 4.6,  $n = 284$ ; Conservative: Mean = 3.9,  $n = 374$ ). Liberals were also more likely to agree with this statement than moderates (Mean = 4.2;  $n = 328$ ), who were, in turn, also more likely to agree with the statement than conservatives. Even after accounting for political ideology, Democrats were also more likely to agree with this statement (Mean = 4.4;  $n = 388$ ) than both Republicans (Mean = 3.9;  $n = 339$ ) and those with some other political affiliation (Mean = 4.1;  $n = 147$ ).
- Increasing the availability of affordable recreation programs at local parks and recreation centers for families of all income levels should be a goal of my local government (Liberal: Mean = 4.3,  $n = 282$ ; Conservative: Mean = 3.8,  $n = 369$ ). After accounting for political ideology, Democrats were also more likely to agree with this statement (Mean = 4.2;  $n = 387$ ) than Republicans (Mean = 3.8;  $n = 336$ ), as seen in the next figures.

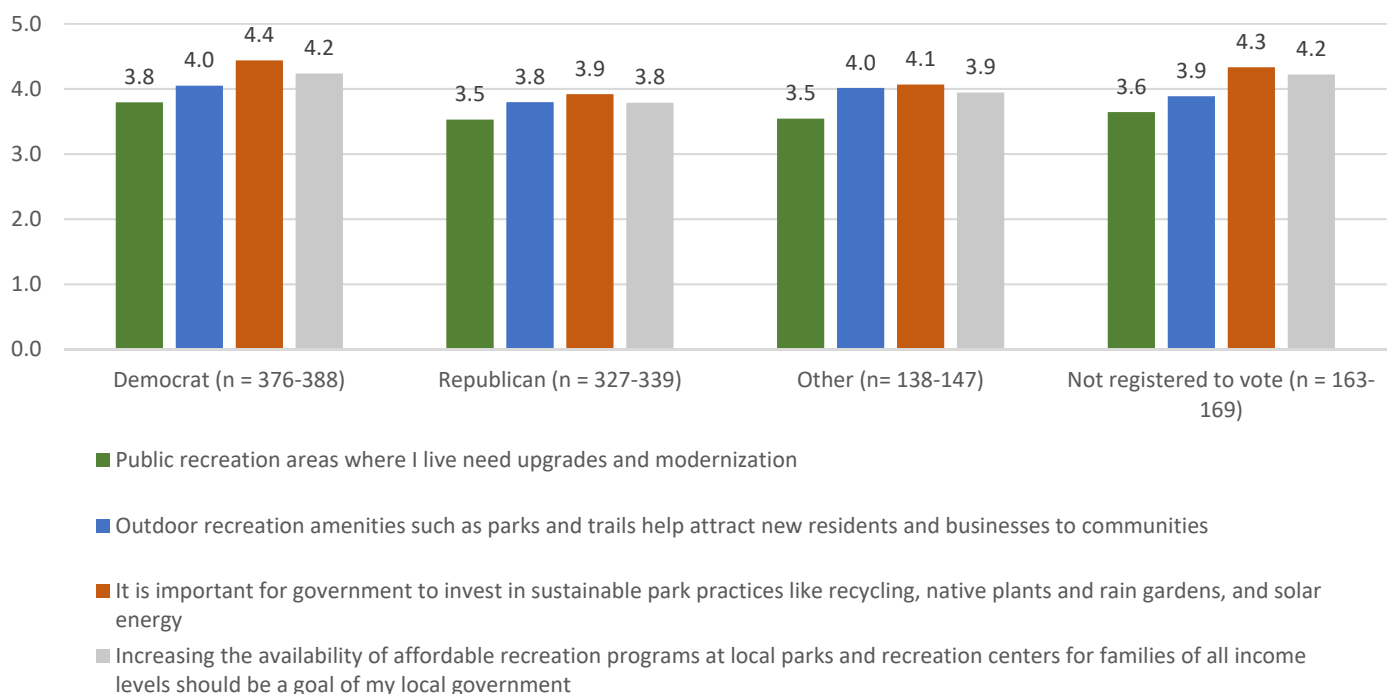
Please indicate your level of agreement with each of the following statements on a scale from 1 to 5, where 5 is strongly agree and 1 is strongly disagree.

Mean score out of 5 shown, by Political Ideology

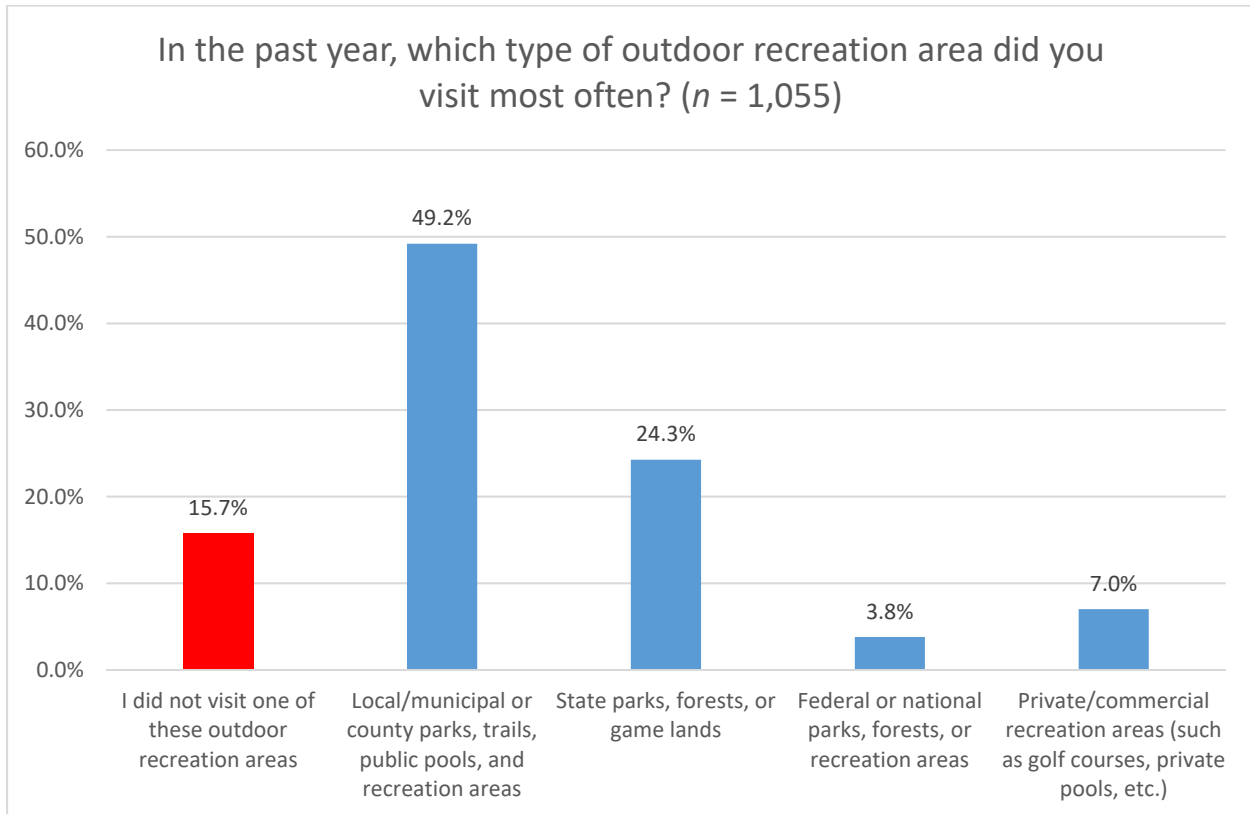


Please indicate your level of agreement with each of the following statements on a scale from 1 to 5, where 5 is strongly agree and 1 is strongly disagree.

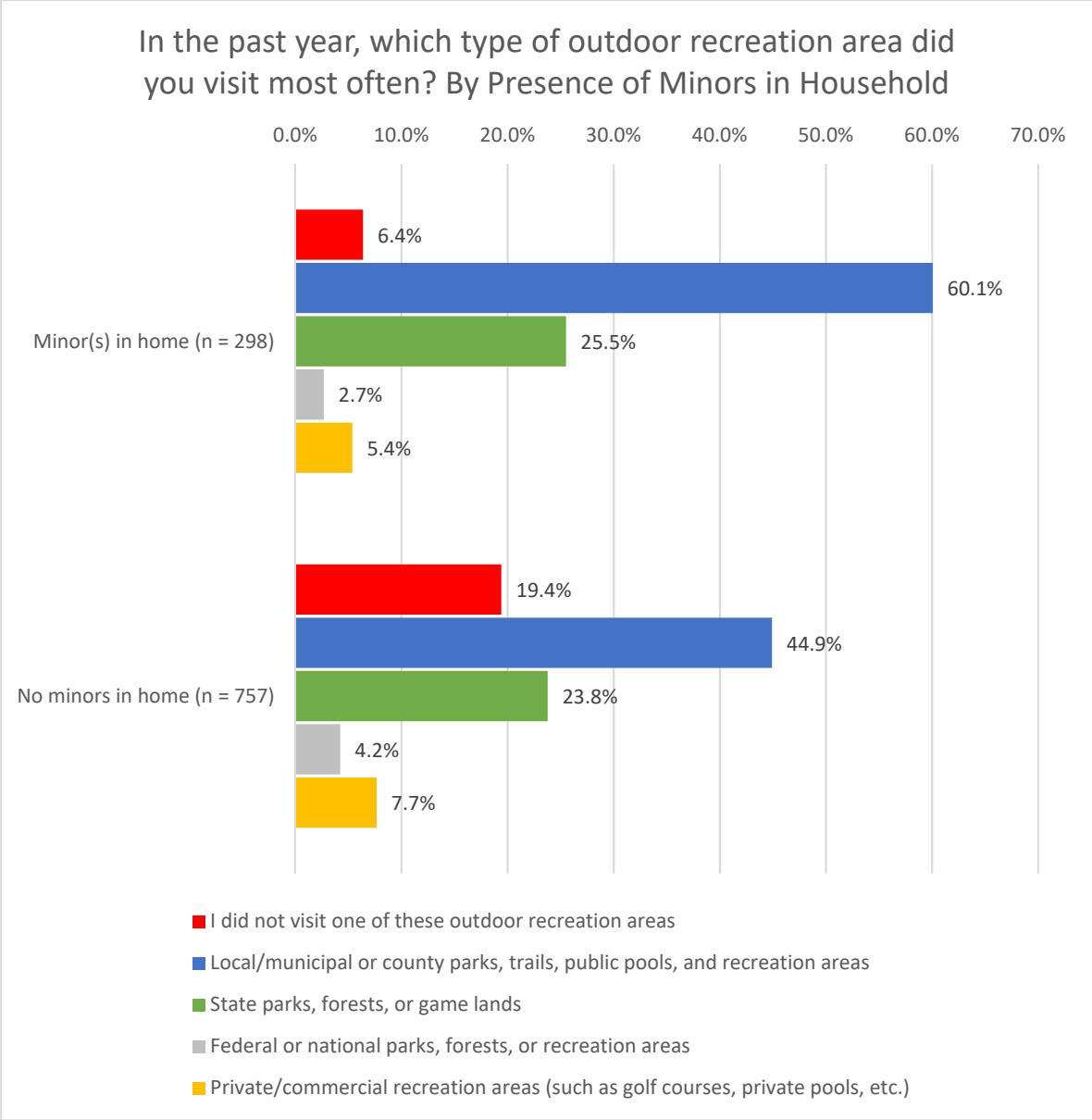
Mean score out of 5 shown, by Registered Party Affiliation



Respondents were then asked to indicate which type of outdoor recreation area they visited most often in the past year. **Nearly half (49.2%;  $n = 1,055$ ) said that they visited a local, municipal, or county park, trail, public pool, or recreation area most often, and about one-quarter (24.3%) visited state parks, forests, or game lands.** Just 7.0% visited private or commercial recreation areas most often, while 3.8% visited federal or national parks, forests, or recreation areas most frequently. The remaining 15.7% did not visit any of the listed types of outdoor recreation areas in the last year, as seen in the next figure.

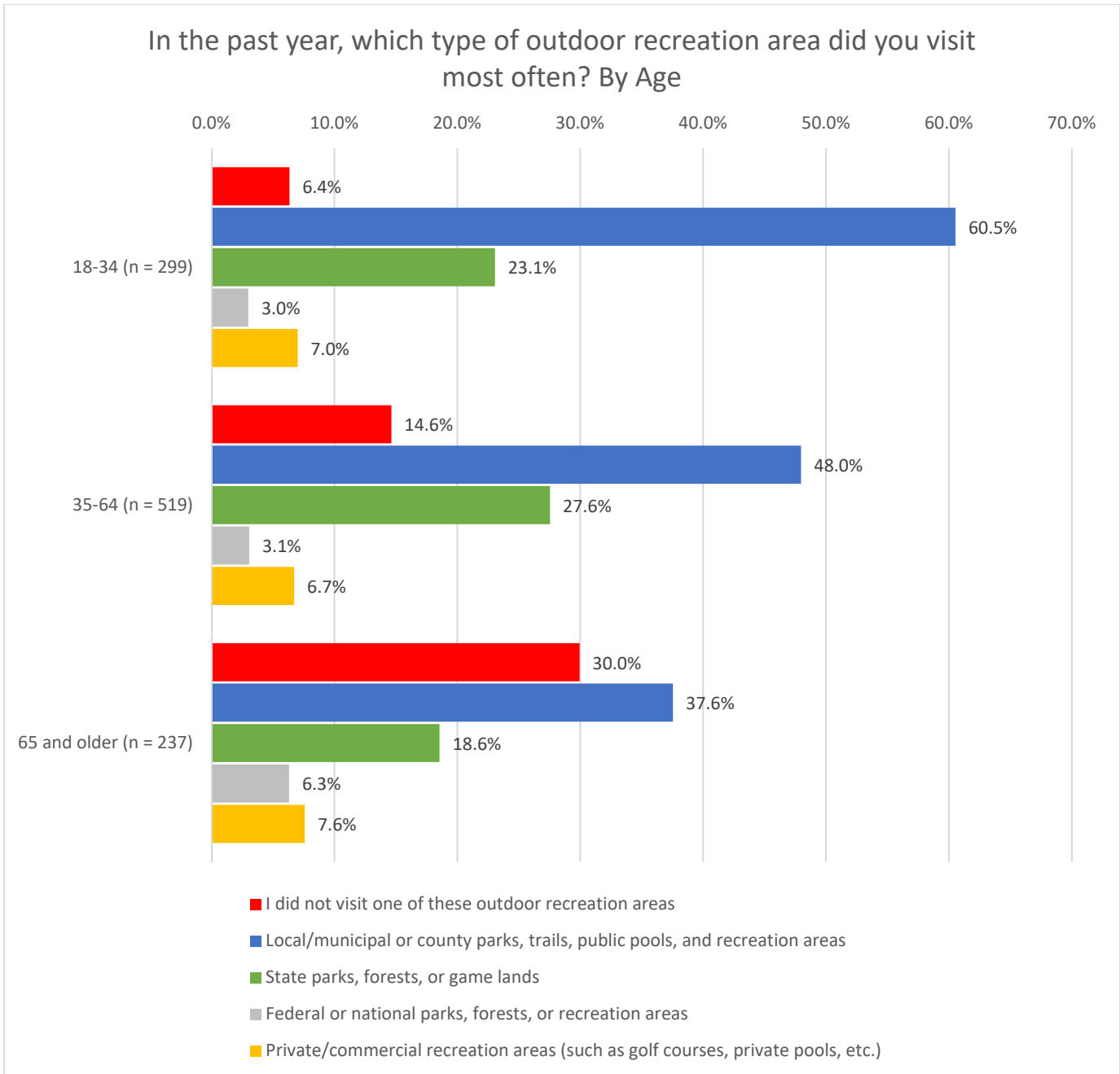


**Whether or not the respondent had minor children living in the household was the most significant predictor of whether the respondent indicated that they visited a local, municipal, or county park, trail, public pool, or recreation area most often in the past year.** Three-fifths of respondents who had minor children living in their household visited this type of recreation area most often in the past year (60.1%;  $n = 298$ ), as compared to just 44.9% ( $n = 757$ ) of those without minor children living in the household. Conversely, those without minor children living in the household were more likely to say that they did not visit any of the listed outdoor recreation areas in the last year (19.4%) than those with children in the household (6.4%), as seen in the next figure.

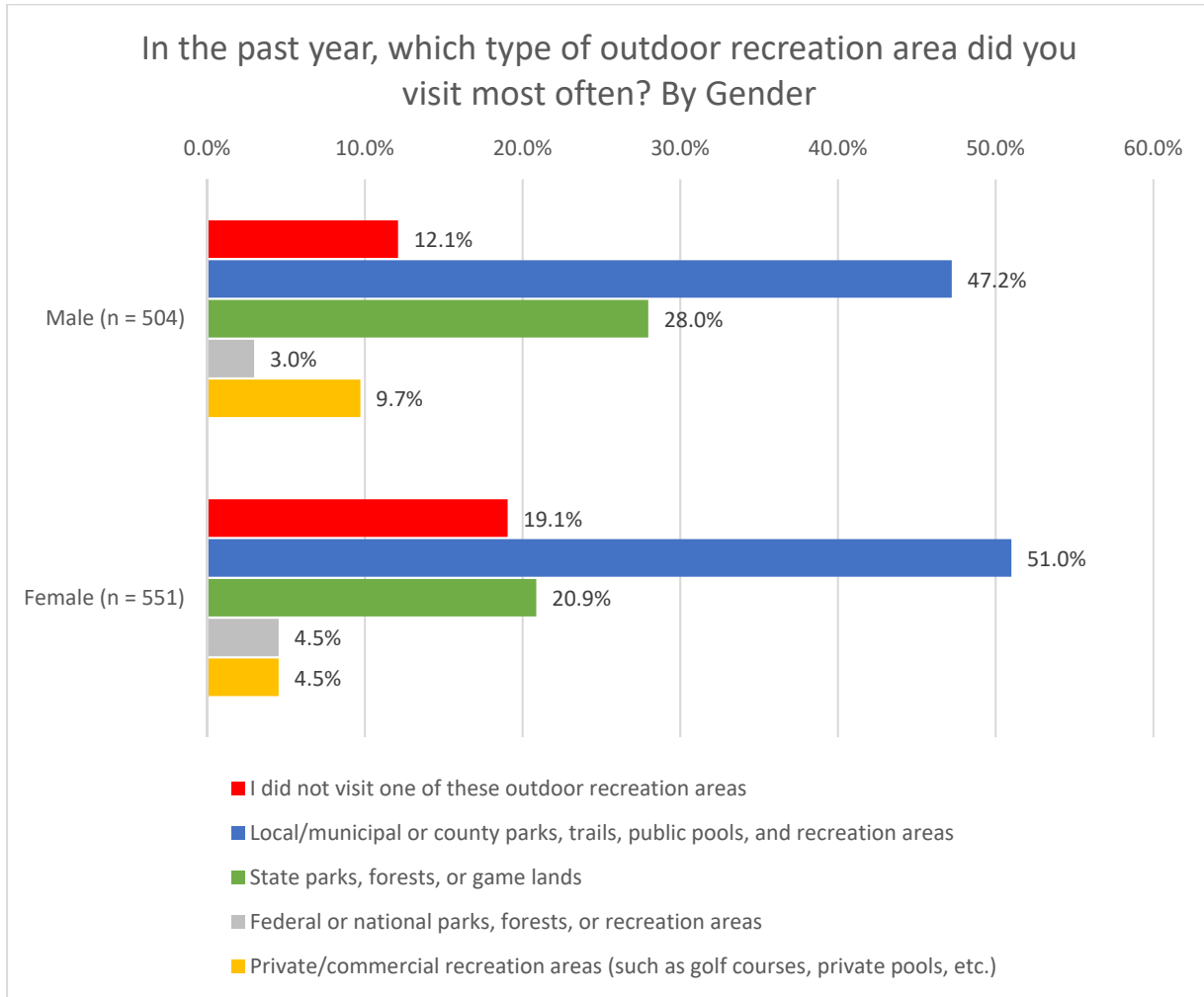


After accounting for the presence of children in the household in regression analysis, several other demographic factors served as significant predictors of outdoor recreation area usage. **One of the stronger predictors of outdoor recreation area usage was age. In fact, 93.6% of those between the ages of 18 and 34 had utilized some type of outdoor recreation area in the last year.** More specifically, respondents between the ages of 18 and 34 were more likely to have visited a local, municipal, or county park, trail, public pool, or recreation area most often in the past year (60.5%;  $n = 299$ ) than those between the ages of 35 and 64 (48.0%;  $n = 519$ ) who were, in turn, more likely to have visited such areas than those 65 and older (37.6%;  $n = 237$ ). On the other hand, respondents who were 65 or older were much more likely to say that they did not visit any of the listed outdoor recreation areas in the last year (30.0%) than those between the ages of 36 and 64

(14.6%), who, again, were more likely to say that they did not visit any of the areas than those between the ages of 18 and 34 (6.4%). Those between the ages of 36 and 64 were also more likely to say that they visited a state park, forest, or game land most often in the last year (27.6%) than those who were 65 or older (18.6%), as seen in the next figure.



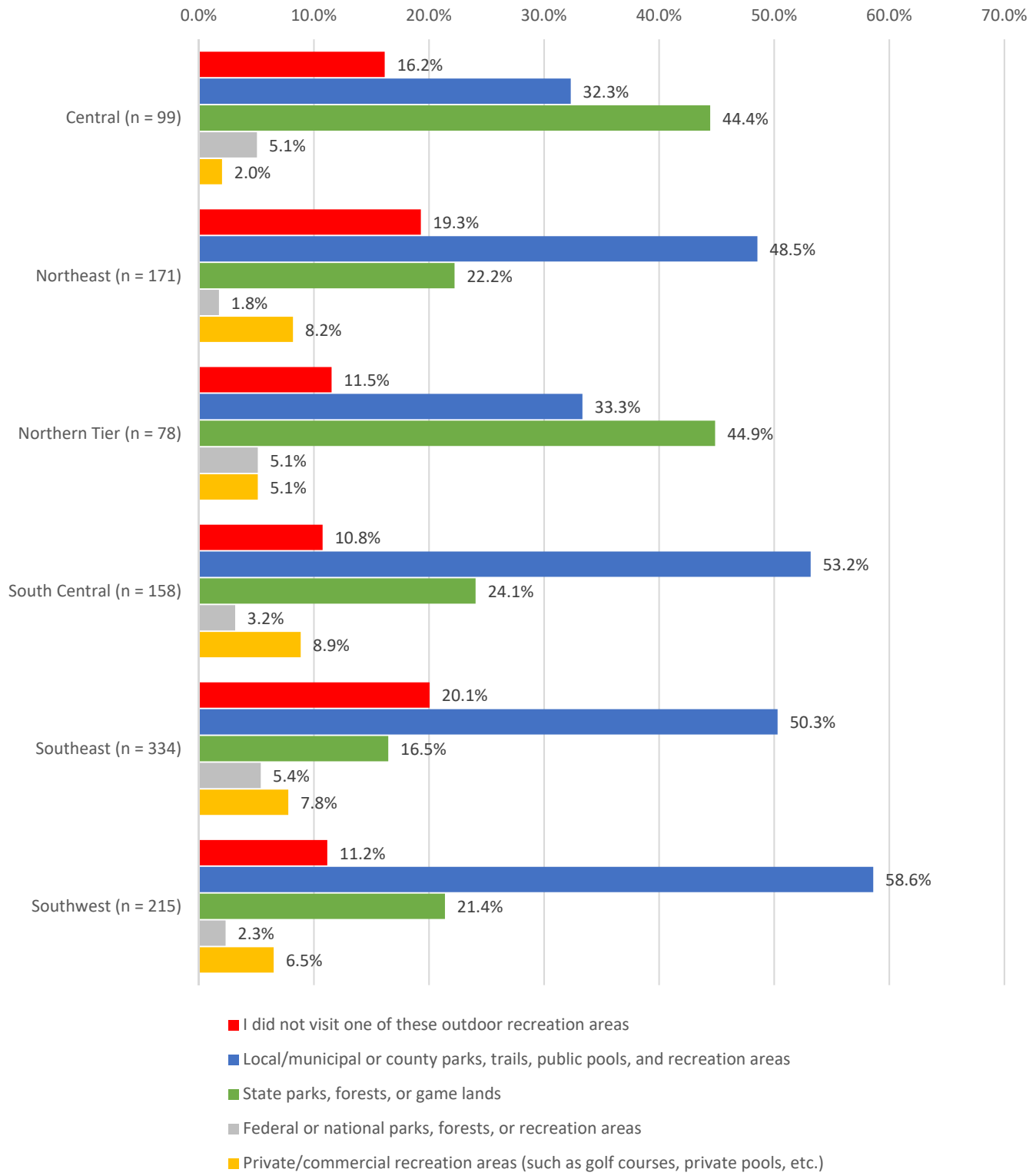
**Gender was also a significant predictor of outdoor recreation area usage.** Men were more likely than women to indicate that they had most-often used both state parks, forests, or game lands in the last year (28.0%,  $n = 504$ ; versus 20.9%,  $n = 551$ , respectively) and private or commercial recreation areas (9.7% versus 4.5%, respectively), as seen in the next figure.



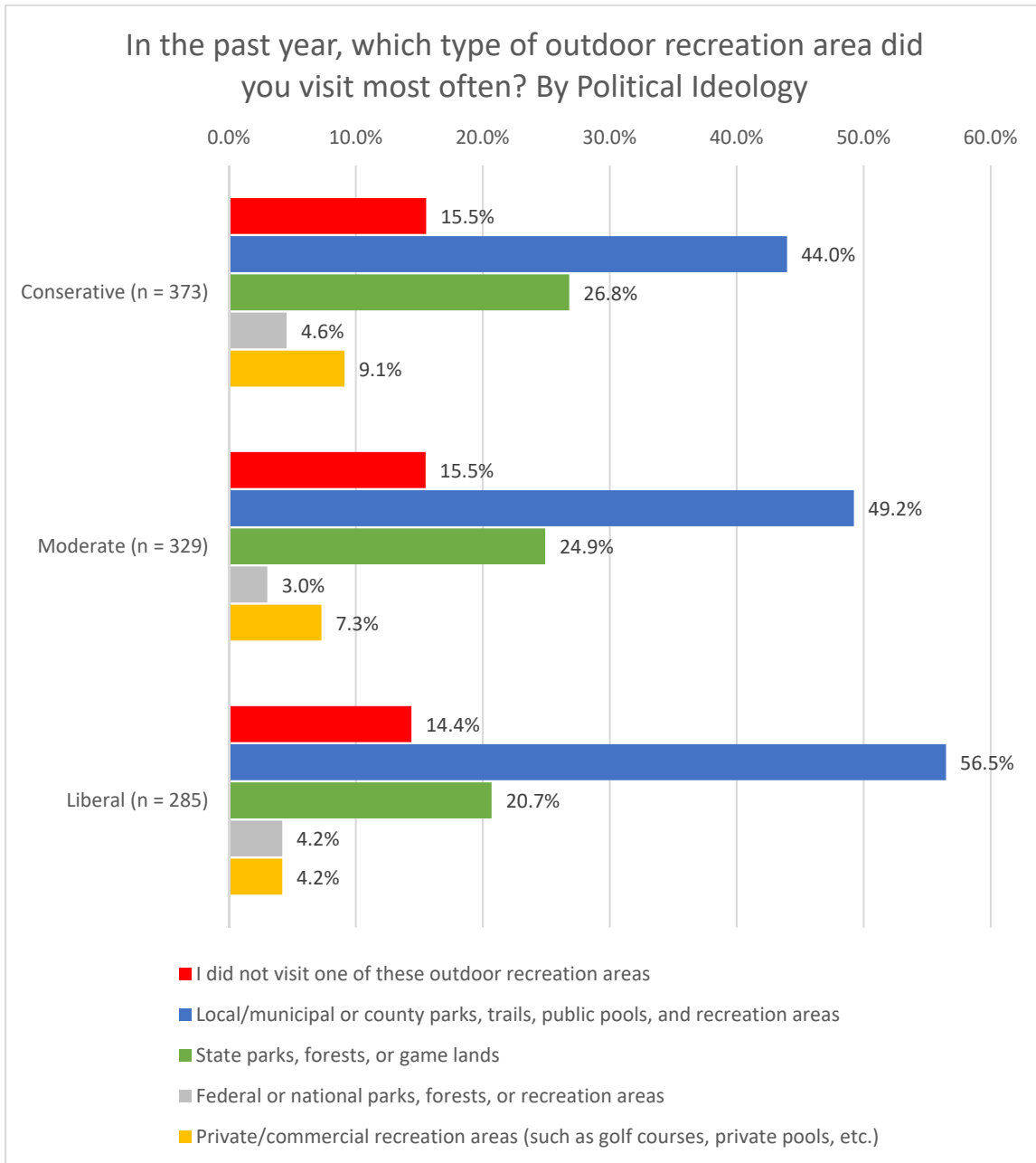
**Respondents in the Central (44.4%;  $n = 99$ ) and Northern Tier (44.9%;  $n = 78$ ) regions were more likely to say that they visited a state park, forest, or game land most often in the last year than all other regions in Pennsylvania,** which ranged from a low of 16.5% ( $n = 334$ ) in Southeast Pennsylvania to a relative high of 24.1% ( $n = 158$ ) in South Central Pennsylvania. Respondents in the South Central (53.2%), Southeast (50.3%), and Southwest (58.6%;  $n = 215$ ) regions were more likely to say that they had visited a local, municipal, or county park, trail, public pool, or recreation area most often in the last year than those in the Central (32.3%) and Northern Tier (33.3%) regions, as seen in the next figure.



### In the past year, which type of outdoor recreation area did you visit most often? By Region



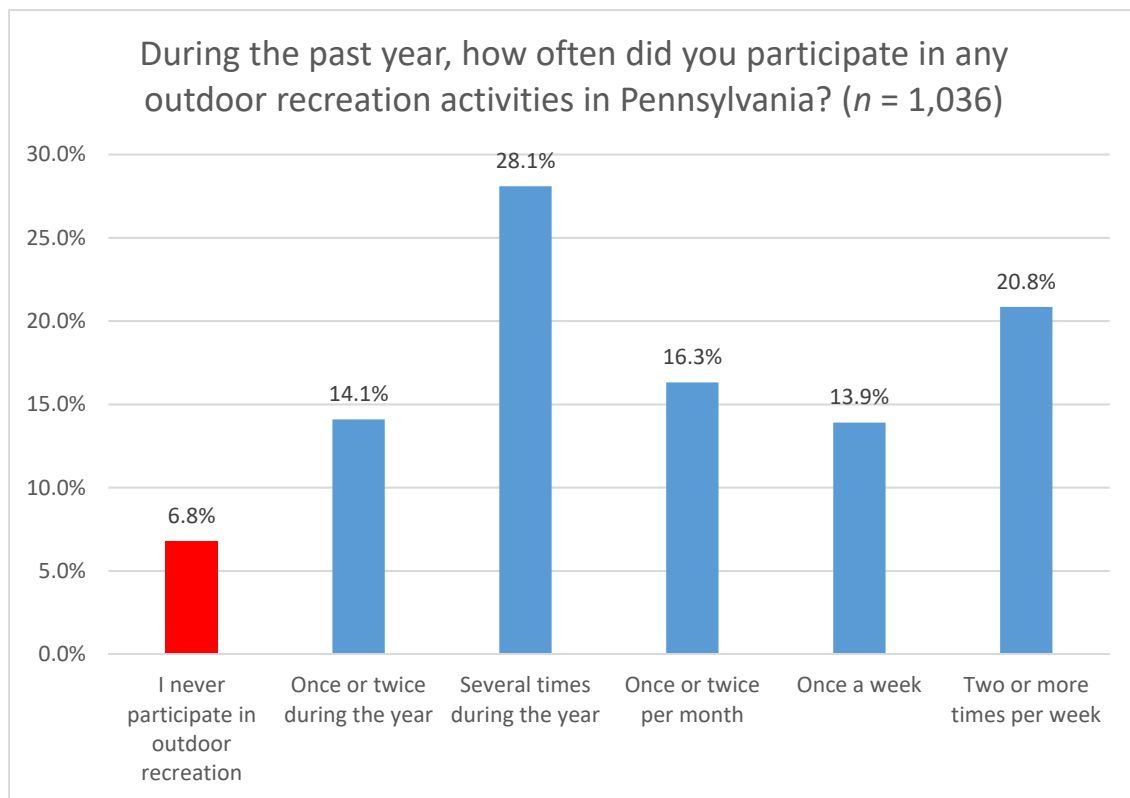
Liberal respondents were more likely to have visited a local, municipal, or county park, trail, public pool, or recreation area most often in the last year (56.5%;  $n = 285$ ) than conservative respondents (44.0%;  $n = 373$ ). Conversely, conservative respondents were more likely to have visited a private or commercial recreation area most often (9.1%) than liberals (4.2%), as seen in the next figure. In addition, Republicans were more likely to have visited a state park, forest, or game land most frequently (27.7%;  $n = 339$ ) than Democrats (19.1%;  $n = 388$ ).



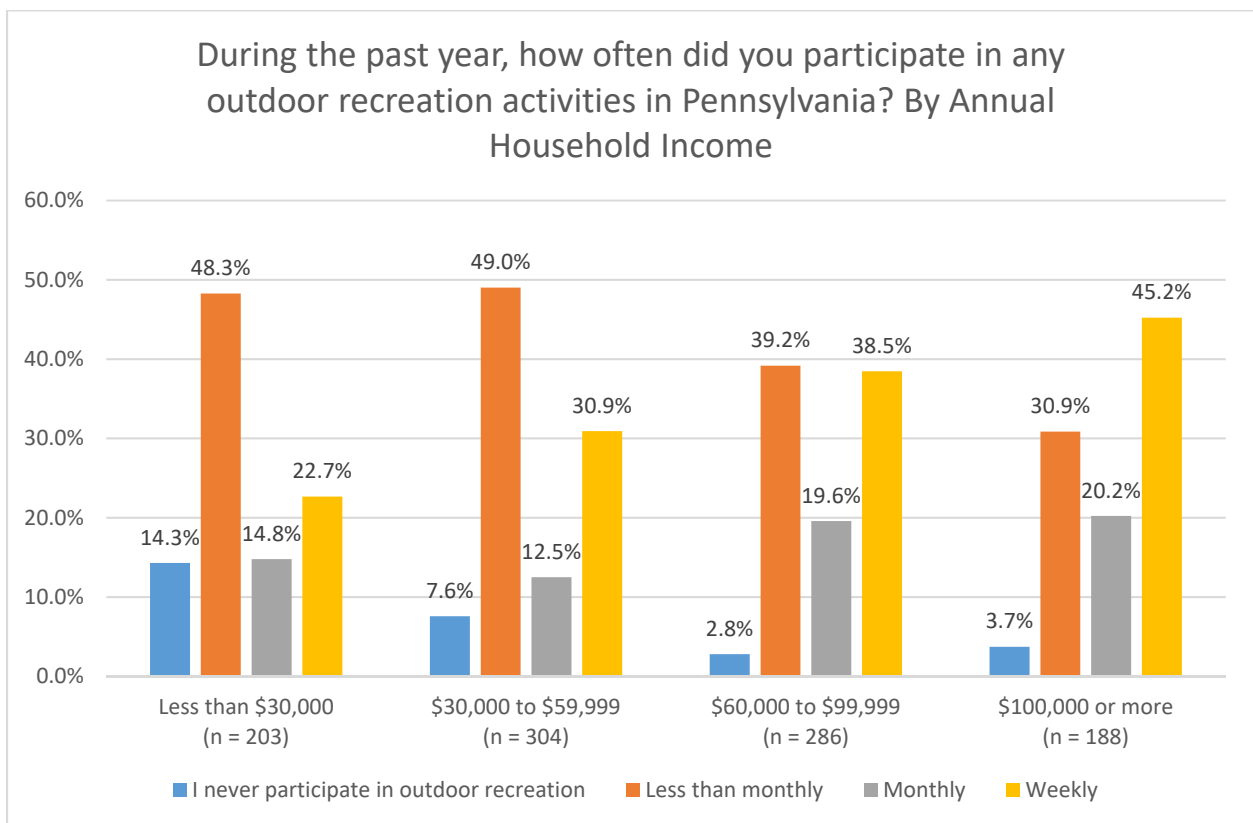
**Annual household income and county population density were also significant predictors of outdoor recreation area usage. There were no other significant differences by demographic sub-groups found in regression analysis.**

- Respondents who lived in households with annual incomes of less than \$30,000 were more likely to say that they did not visit an outdoor recreation area in the last year (30.5%;  $n = 210$ ) than those in households with incomes of \$30,000 or more (11.9%;  $n = 789$ ).
- Urban respondents were more likely to have visited a local, municipal, or county park, trail, public pool, or recreation area most often in the last year (53.4%;  $n = 761$ ) than rural respondents (38.4%;  $n = 294$ ).

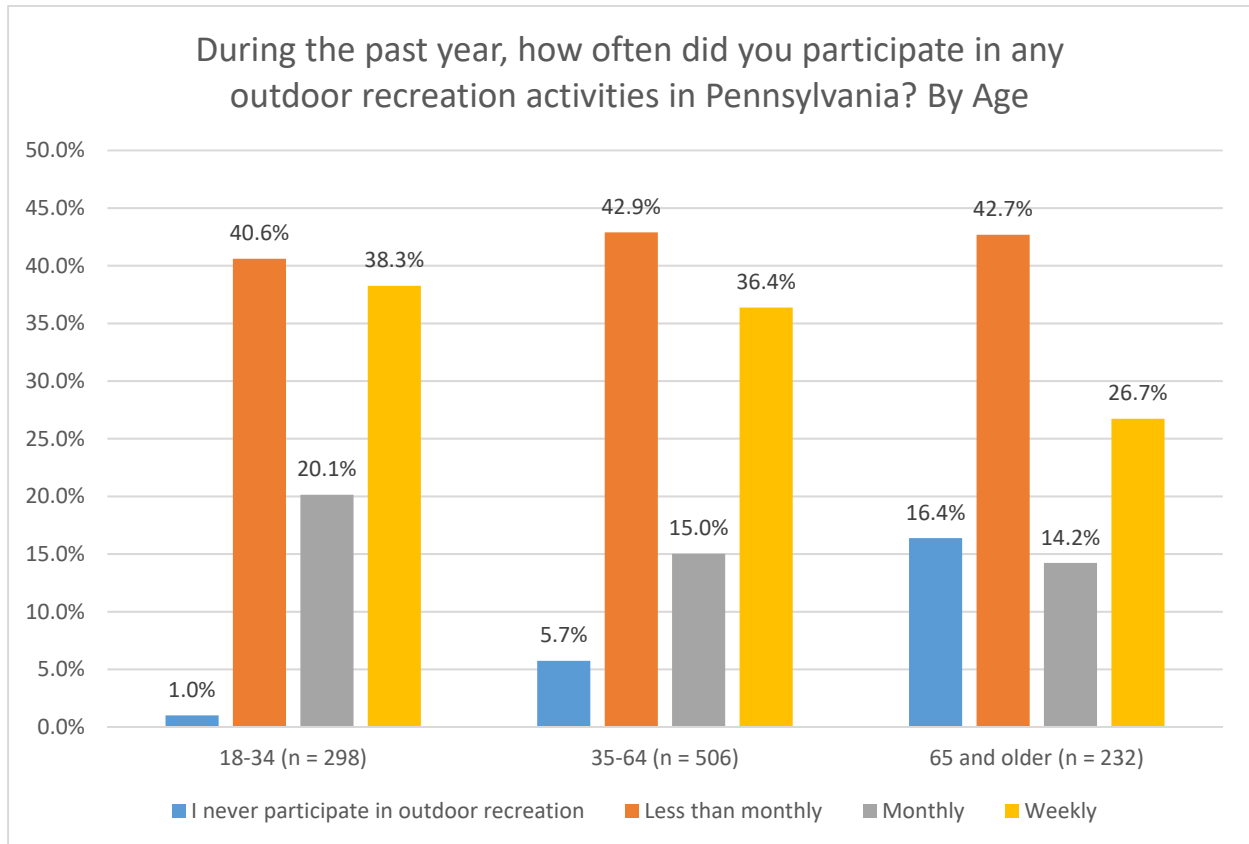
Respondents were then asked how often they participated in any outdoor recreation activities in Pennsylvania in the past year. More than nine out of 10 (93.2%;  $n = 1,036$ ) had participated in at least some outdoor recreation activity in the past year. One-fifth were very active (20.8%), indicating that they participated in outdoor recreation two or more times per week on average. Another 13.9% did so once per week, 16.3% participated one or twice per month, 28.1% did so several times during the year, and the remaining 14.1% did so once or twice during the year, as seen in the next figure.



**Respondents who lived in households with higher levels of annual income were strongly correlated with more frequent participation in outdoor recreation activities in Pennsylvania.** For example, respondents in households with annual incomes of \$100,000 or more were more likely to say that they participated in outdoor recreation activities in Pennsylvania on a weekly basis (45.2%;  $n = 188$ ) than those in households with incomes of \$30,000 to \$59,999 (30.9%;  $n = 304$ ) and incomes of less than \$30,000 (22.7%;  $n = 203$ ). Conversely, these lower-income respondents were more likely to say that they never participate in outdoor recreation (14.3%) than respondents in households with incomes of \$60,000 to \$99,999 (2.8%) and \$100,000 or more (3.7%). Similarly, respondents in households with incomes of less than \$30,000 (48.3%) and \$30,000 to \$59,999 (49.0%) were more likely to have participated in outdoor recreation activities less than monthly than those in households with incomes of \$60,000 to \$99,999 (39.2%) and \$100,000 or more (30.9%), as seen in the next figure.



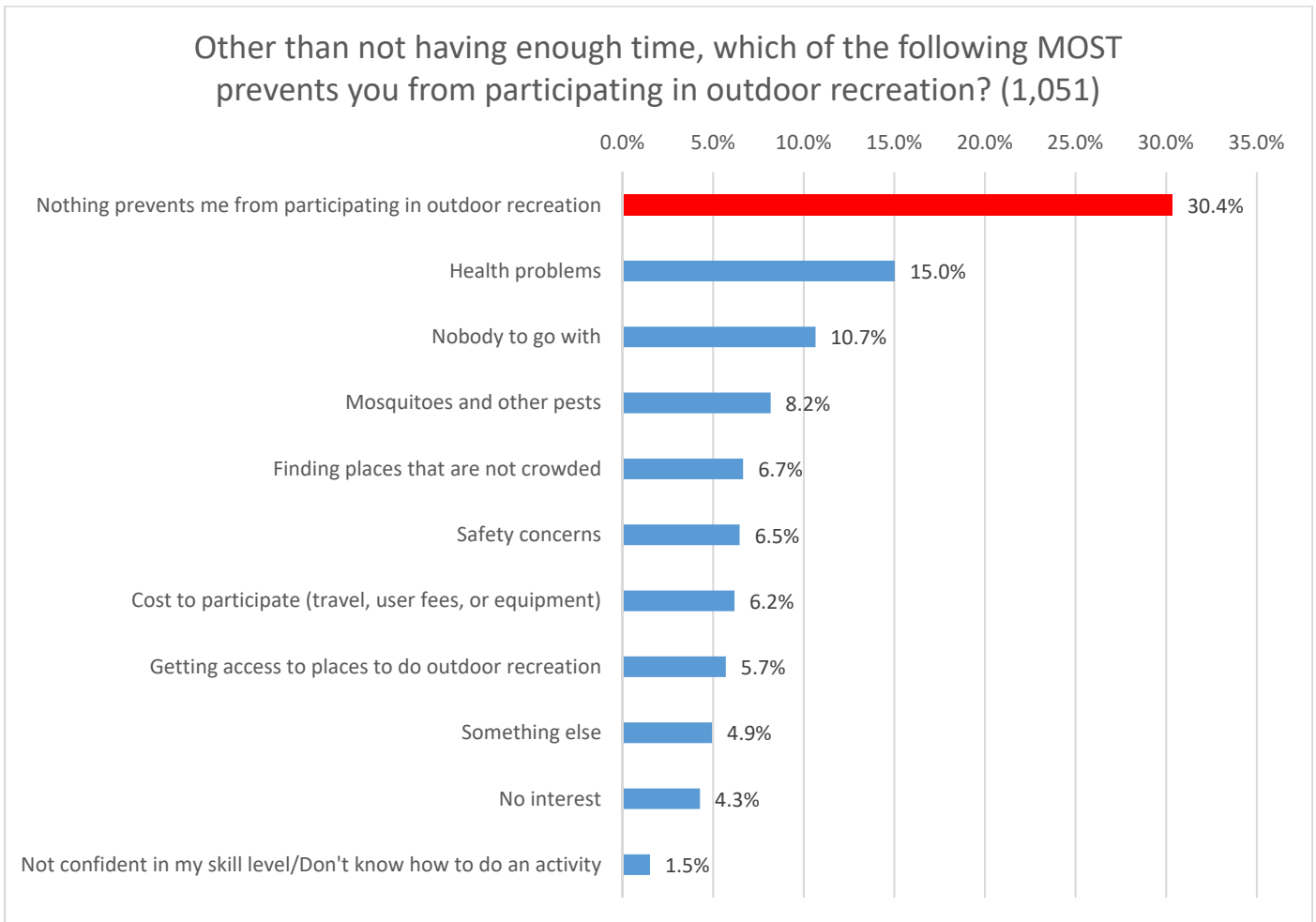
**Younger respondents were more likely to have participated in outdoor recreation in Pennsylvania in the past year.** In fact, only 1.0% of those between the ages of 18 and 34 ( $n = 298$ ) said that they never participate in outdoor recreation. In comparison, 16.4% ( $n = 232$ ) of those 65 and older said the same. Monthly activity was also significant by age, where respondents between the ages of 18 and 34 were more likely to have engaged in monthly outdoor recreation (20.1%) than those 65 and older (14.2%), as seen in the next figure. Although weekly activity appears to be significant, it was not significant after accounting for other demographic differences in regression analysis.



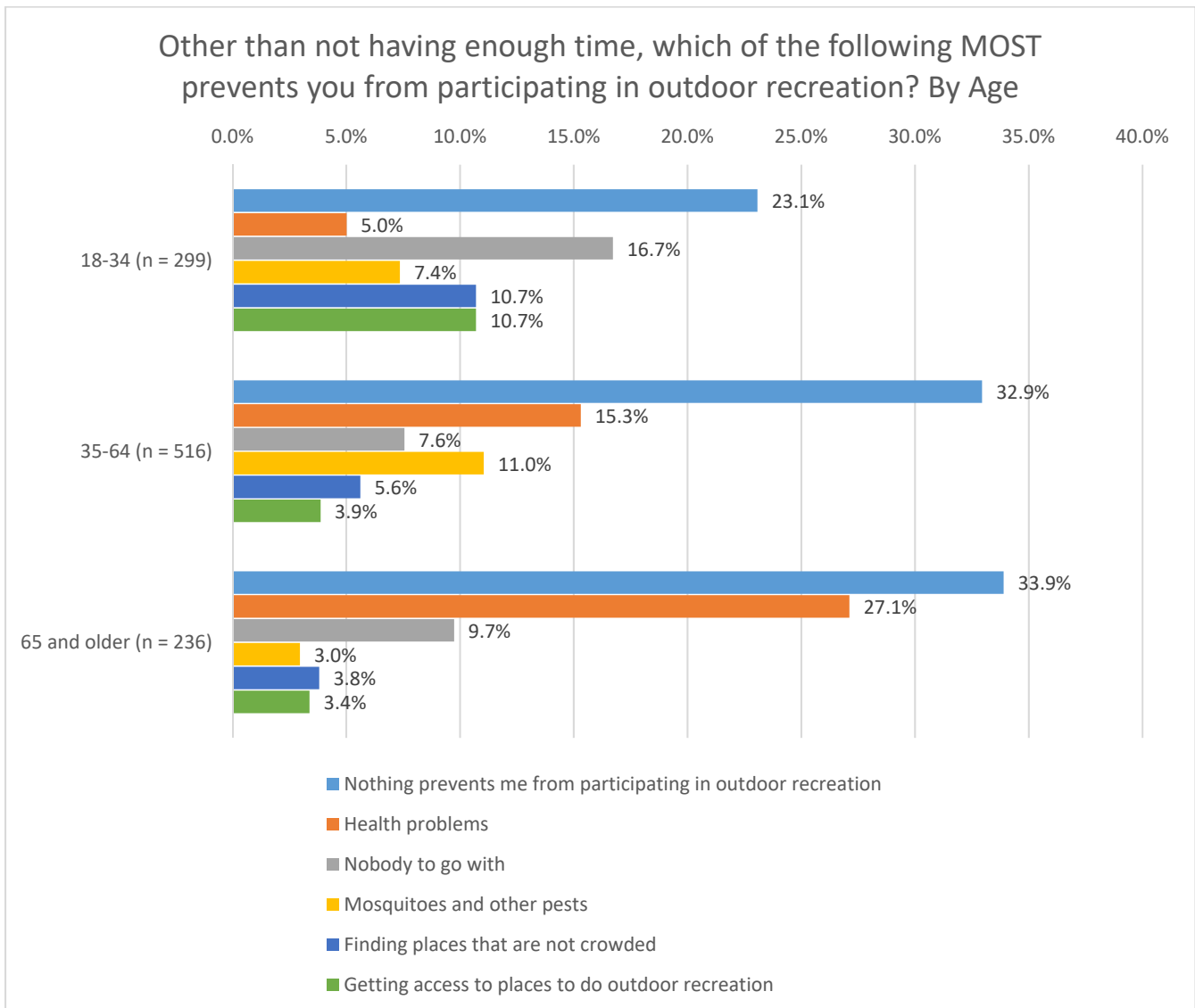
**Region was also a significant predictor of frequency of participation in outdoor recreation activities in Pennsylvania. There were no other significant differences by demographic sub-groups found in regression analysis.**

- Respondents in the Southeast region (29.4%;  $n = 327$ ) were less likely to have participated in weekly outdoor recreation than those in the Central (38.5%;  $n = 96$ ), South Central (41.2%;  $n = 153$ ), and Southwest (38.5%;  $n = 213$ ) regions.

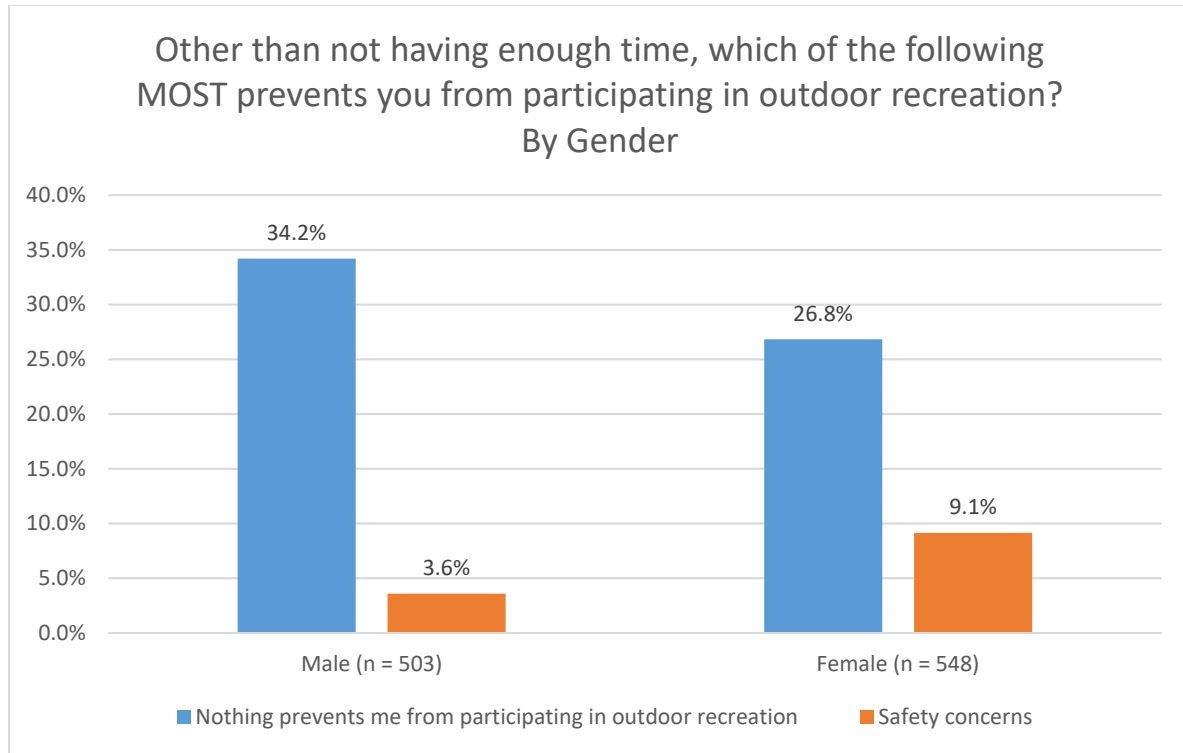
Finally, respondents were asked what most prevents them from participating in outdoor recreation, besides not having enough time. **Nearly one-third of respondents (30.4%: n = 1,051) said that nothing prevents them from participating in outdoor recreation. Health problems was the top preventative reason respondents cited, with 15.0% of respondents singling it out.** This was followed by having nobody to go with (10.7%) and mosquitoes and other pests (8.2%). The remaining respondents selected: finding places that are not crowded (6.7%), safety concerns (6.5%), cost to participate (6.2%), getting access to places to do outdoor recreation (5.7%), something else (4.9%), having no interest (4.3%), and not being confident in skill level or not knowing how to do an activity (1.5%), as seen in the next figure.



Age was a significant predictor of what prevents respondents from participating in outdoor recreation. Respondents who were between the ages of 35 and 64 (32.9%;  $n = 516$ ) and were 65 and older (33.9%;  $n = 236$ ) were more likely to say that nothing kept them from participating in outdoor recreation than those between the ages of 18 and 34 (23.1%;  $n = 299$ ). Those respondents between the ages of 18 and 34 were more likely to say that having no one to go with was a preventative factor (16.7%) than those between the ages of 35 and 64 (7.6%), whereas those between the ages of 35 and 64 were more likely to say that mosquitoes and other pests kept them from engaging in outdoor recreation (11.0%) than those 65 and older (3.0%). Health problems were a factor for both those ages 65 and older (27.1%) and those 35 to 64 (15.3%) as compared to just 5.0% of those aged 18 to 34. Younger respondents between the ages of 18 and 34 were more likely to say that finding places that weren't crowded (10.7%) and getting access to places to do outdoor recreation (10.7%) were deterrents than those between the ages of 35 and 64 (5.6% and 3.9%, respectively) and those 65 and older (3.8% and 3.4%, respectively), as seen in the next figure.

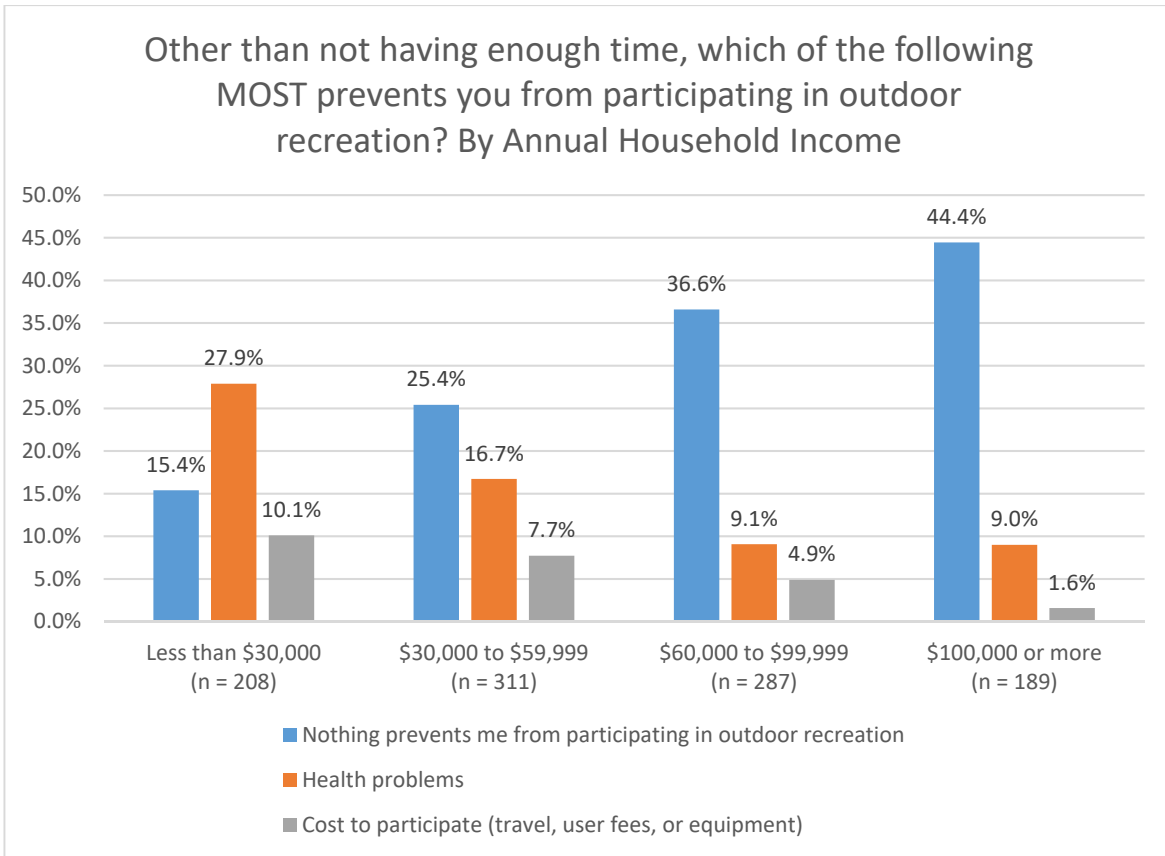


Male respondents were more likely to say that nothing prevents them from participating in outdoor recreation (34.2%;  $n = 503$ ) than female respondents (26.8%;  $n = 548$ ). Conversely, female respondents were more likely to say that safety concerns were a deterrent (9.1%) than male respondents (3.6%), as seen in the next figure.



Respondents living in households with annual incomes of less than \$30,000 were more likely to say that health problems kept them from participating in outdoor recreation (27.9%;  $n = 208$ ) than those living in households with annual incomes of \$30,000 or more (12.1%;  $n = 787$ ). Although age is already accounted for in regression analysis, this could also possibly relate to disability, which is not accounted for in the demographic data. Those living in households with annual incomes of less than \$30,000 (10.1%) were more likely to say that the cost to participate was a deterrent than those in households with annual incomes of \$60,000 to \$99,999 (4.9%;  $n = 287$ ) and \$100,000 or more (1.6%;  $n = 189$ ). Finally, respondents living in households with annual incomes of \$60,000 to \$99,999 (36.6%) and \$100,000 or more (44.4%) were more likely to say that nothing prevented them from participating in outdoor recreation than those in households with annual incomes of \$30,000 to \$59,999 (25.4%;  $n = 311$ ) and less than \$30,000 (15.4%;  $n = 208$ ), as seen in the next figure.





**Region and the presence of minors in the household were also found to be predictive of what prevents respondents from participating in outdoor recreation in regression analysis. There were no other significant differences by demographic sub-groups found in regression analysis.**

- Respondents in the Southeast region were more likely to say that safety concerns were a preventative factor (10.5%,  $n = 333$ ) than those in the Central region (4.0%;  $n = 100$ ).
- Respondents who had minors living in the household were more likely to say that the cost to participate was a deterrent (9.4%;  $n = 299$ ) than those without minors in the household (4.9%;  $n = 752$ ).