

# Understanding the Needs of Diverse Park Users

A Briefing Paper Summarizing Results of a Visitor Survey  
in the Largest U.S. National Urban Park:  
the Santa Monica Mountains National Recreation Area



# Authorship

This briefing paper was produced by the UCLA Luskin Center for Innovation (LCI):

Gregory Pierce, Associate Director  
Britta McOmber, Researcher  
Kyra Gmoser-Daskalakis, Researcher  
J.R. DeShazo, Director

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## Disclaimer

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## For More Information

Contact Dr. Gregory Pierce at [gpierce@luskin.ucla.edu](mailto:gpierce@luskin.ucla.edu) or (310) 267-5435.

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# Executive Summary

**LARGE URBAN REGIONS** require a network of parks and green spaces to serve all residents. This paper contains a case study of the nation's largest urban national park, the Santa Monica Mountains National Recreation Area (SMMNRA), located within the large and economically, culturally, and socially diverse Los Angeles region. Specifically, this paper examines the patterns and needs of a diverse array of SMMNRA park users to inform how to meet their needs.

Parks and green space provide numerous environmental and social benefits, including improvements in habitat provision, air quality, physical and mental health for visitors, and more. While Los Angeles County has myriad parks and open space resources, including the SMMNRA, the 2015 Los Angeles County Parks Needs Assessment identified many areas of high and very high park need in the county.

Following this assessment, the Los Angeles County Board of Supervisors voted to place a parks funding measure on the November 2016 ballot.<sup>1</sup> County voters overwhelmingly approved the Safe, Clean Neighborhood Parks and Beaches Measure (Measure A), signaling widespread public support for investment in local and regional parks and recreation. This funding stream provides a tremendous opportunity to strategically expand the depth and breadth of park opportunities in the region. This briefing paper highlights findings that can help inform part of that equation.

The National Park Service (NPS) operates the Santa Monica Mountains National Recreation Area, the largest natural and recreational resource in Los Angeles County. To accommodate a diversity of users and increase access, the UCLA Luskin Center for Innovation worked with the NPS to implement and analyze a visitor use survey of the SMMNRA in June 2018 (total number of complete responses [N = 4,381]).

This paper summarizes key findings of this survey, with a particular focus on park equity and access in Los Angeles County. We analyze equity and access along five key dimensions: visitor demographics and geographic characteristics of visitors; travel distance, time, and cost; modes of park access; activity engagement; and amenities used or desired.

For additional information about the survey findings, see the full technical report published by the UCLA Luskin Center for Innovation.<sup>2</sup>

<sup>1</sup> See <http://rposd.lacounty.gov/2016-ballot-measure/> for more information.

<sup>2</sup> See <https://innovation.luskin.ucla.edu/urban-greening/public-parks-2/>

# Major Findings

SMMNRA is an important local natural destination for Southern California residents:

**74%**

of all ZIP codes across Los Angeles and Ventura counties had at least one survey respondent, indicating that residents from nearly all parts of the region use the SMMNRA.

**34%**

of respondents traveled from ZIP codes with the highest park need (Very High) and almost 25% traveled from High-Need ZIP codes.

Visitor diversity has increased since the last SMMNRA survey in 2002:

**12% vs. 21%**

Increase in proportion of Hispanic or Latino survey takers from 2002 to 2018.

Yet users are still higher income and more White than the county average:

**63%**

of survey respondents were Non-Hispanic White, compared to 26.1% of Los Angeles County as a whole.

**\$75,000–  
\$100,000**

Median household income of respondents, compared to \$61,000 in Los Angeles County.

Travel cost and mode analysis highlights concerns for extending access equity:

- » The lowest-income households disproportionately expend more resources, both monetary and nonmonetary, in order to visit the SMMNRA.
- » The low percentage of public transit visitors indicates that this mode is either limited, inconvenient, or not preferred.

Given the location of the park, and the demographics of the surrounding neighborhood, improved access to the SMMNRA will not solve all issues of park equity in the region. Ensuring the SMMNRA can serve the diverse population of Los Angeles County will be vital, but must occur alongside other park provisions and access initiatives in the region, some of which may be funded by Measure A. Our survey could be used to identify areas of Los Angeles County less well served by the SMMNRA, where local parks may be particularly important.

At the same time, our survey results confirm that the SMMNRA is a valued environmental and recreational resource for wide array of residents across the Los Angeles region. This paper and related full report can support NPS and others in continuing to focus on park planning and improvements that will accommodate access and use by the diverse residents of the region.

Santa Monica Mountains rise above the clouds. | Photo credit: National Park Service



Hikers on a trail in the Santa Monica Mountains National Recreation Area. | Photo credit: National Park Service

## Introduction and Policy Motivation

**LOS ANGELES COUNTY**, as a highly populated and diverse metropolitan region, needs a strong network of parks and green space to adequately serve its more than 10 million residents. While the county has a wealth of parks and open space resources, many residents are still considered “park poor” — meaning they lack adequate access to parks or live in neighborhoods with few available park-acres or recreational facilities. The 2015 Los Angeles County Parks Needs Assessment identified areas of high and very high park need in the county, showing the inequitable distribution of these resources (Figure 1).

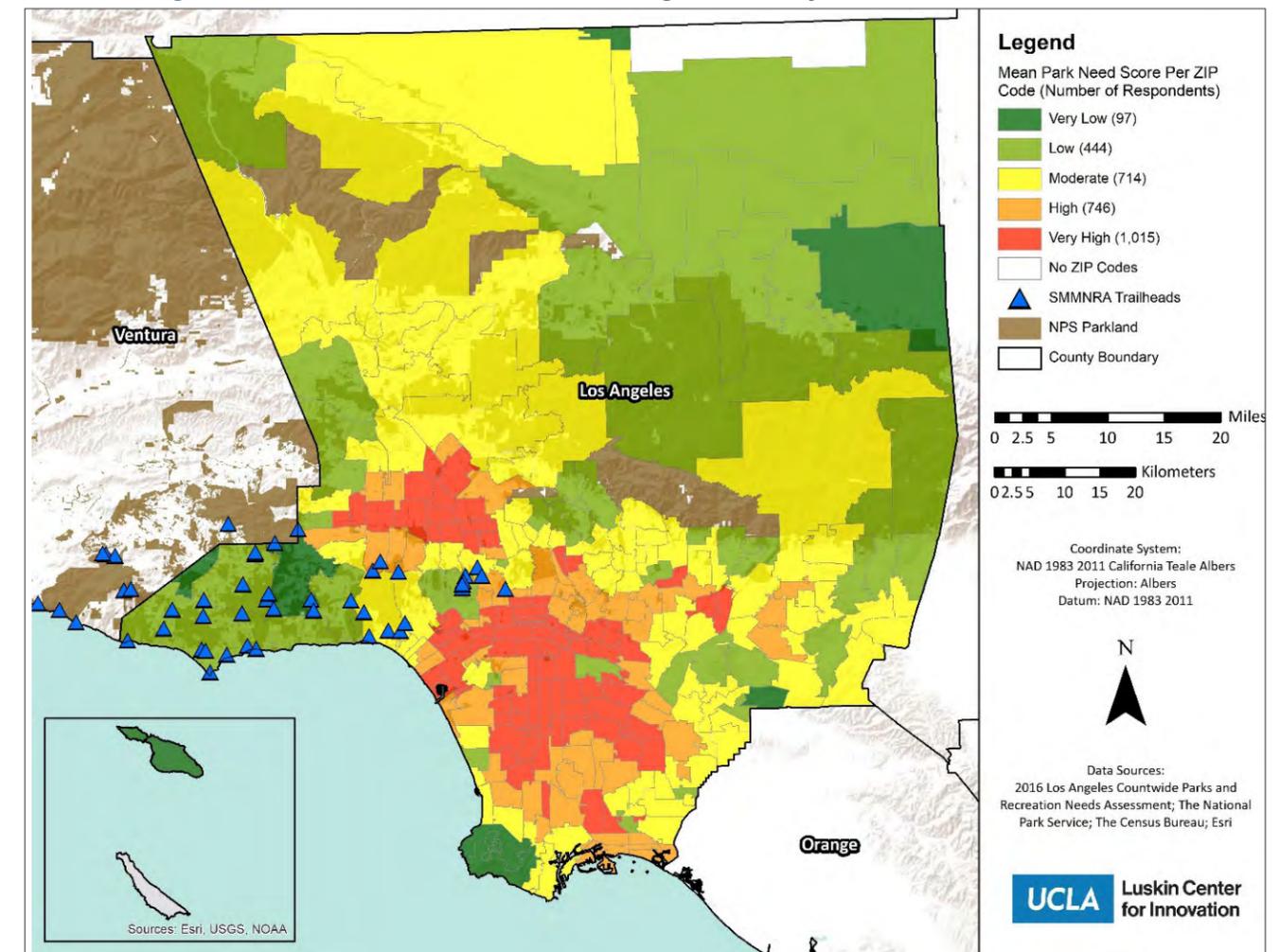
Following this assessment, the Los Angeles County Board of Supervisors voted to place a parks funding measure on the November 2016 ballot<sup>3</sup>. County voters overwhelmingly approved the Safe, Clean Neighborhood Parks and Beaches Measure (Measure A), signaling widespread public support for investment in local and regional parks and recreation.

Measure A authorizes an annual parcel tax of 1.5 cents per square foot and will provide consistent funding for the construction and maintenance of new and existing parks and facilities throughout the county. Measure A replaces Proposition A funding for parks, which was due to expire in 2019, to create a permanent funding source in the county. Alongside this increased focus on park access from county representatives and voters, agencies that operate existing parks and open spaces are seriously evaluating their current ability to provide equitable park access.

The National Park Service (NPS), which operates the Santa Monica Mountains National Recreation Area (SMMNRA), is committed to increasing access for a diversity of park users and, as such, is actively evaluating the equity and access of its resources in the county. The NPS System Plan (2017) outlines goals for the organization, including Goal #4: Bring Parks to the People. NPS aims for better engagement and integration of NPS resources with urban communities like those in Los Angeles.

<sup>3</sup> See <http://rposd.lacounty.gov/2016-ballot-measure/> for more information.

Figure 1: SMMNRA Trailheads and Los Angeles County Parks Needs Assessment



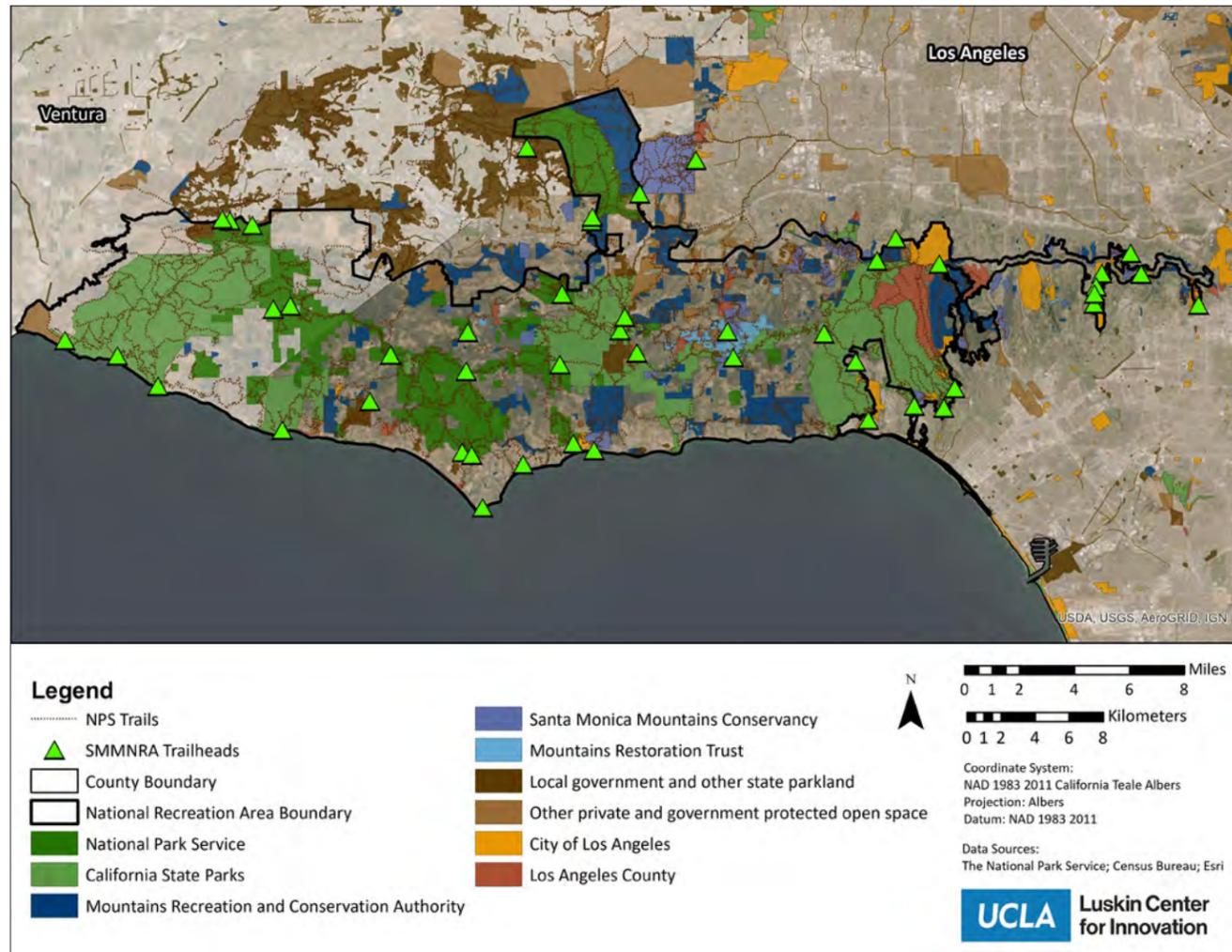
The Santa Monica Mountains National Recreation Area (SMMNRA) is a unit of the national park system. Approximately 60% of its 153,785-acre land area dedicated to public parks and protected open space. NPS, California State Parks, Santa Monica Mountains Conservancy, and Mountains Recreation Conservation Authority manage the majority of public lands within SMMNRA (Wolch et al. 2003, 3). NPS oversees the entirety but currently has direct responsibility for only about 15% of the land (Wolch et al. 2003, 28).

Congress established the SMMNRA in 1978 to protect the scenic natural and cultural resources of the coastal Mediterranean ecosystem and to preserve public health benefits offered by the natural setting. The SMMNRA offers nature and green space to one of the nation’s largest and most diverse metropolitan areas. Los Angeles County

was the most populous county in the United States in 2017 (U.S. Census Bureau 2018a). Moreover, according to U.S. Census data from 2013 to 2017, 34.4% of the population in Los Angeles County was foreign-born (U.S. Census Bureau 2018b).

To enhance the SMMNRA’s contribution to public recreation in the region, NPS periodically authorizes research regarding the public’s use of the SMMNRA. The purposes of the 2018 SMMNRA visitor survey and count were to evaluate changes in visitor use at park trailheads last surveyed in 2002, inform NPS’s strategic allocation of resources at park trailheads, and to provide a benchmark for additional trailheads NPS may construct in the future. The results also evaluate current inequities in resource access and provision, while providing a comparison to the previous 2002 survey regarding accessibility of the SMMNRA.

**Figure 2: SMMNRA Trailheads and Agencies Responsible for Park Management**



The UCLA Luskin Center for Innovation designed the SMMNRA Trailheads and Agencies Responsible for Park Management 2018 visitor use survey, and along with 200+ volunteers and NPS staff members, distributed it at 45 trailheads. The trailheads chosen included well-known, primary entrances into parks. The survey sought to capture information on the following broad categories:

visitor characteristics, visitor trip planning, visitor activities, trailhead use analysis, and visitor valuation of SMMNRA. We collected a total of 4,425 survey responses, of which 4,381 provided usable data for analysis. This survey was significantly more comprehensive than the last visitor survey; we surveyed at an additional 12 trailheads and distributed over 3,400 more surveys than in 2002.

## Evidence of Gaps in Park Access

**EXISTING STUDIES** on parks and equity confirm the persistence of a gap in park access and visitorship by race and ethnicity. Flores et al. (2018) found inequity and gaps in racial/ethnic minority utilization of U.S. Forest Service recreation areas, while Xiao et al. (2018) found substantial underrepresentation of racial/ethnic minorities in national park visitors.

Byrne et al. (2009) specifically studied equity in visitation to the SMMNRA using data from the 2002 survey and focus groups of residents. The study found that people of color do not use the SMMNRA<sup>4</sup> at the same rates as white residents of Los Angeles (Byrne et al. 2009). In fact, most SMMNRA visitors in the 2002 survey were white, male, affluent, college-educated, homeowners and lived near the park. People of color traveled farther to reach the park, were less likely to be repeat visitors, and were less inclined to use park resources (Byrne et al. 2009). The authors sought to identify any ethno-racial differences, or gaps, in SMMNRA use and if these differences were due to accessibility, sociodemographic characteristics, cultural preferences, or attitudes towards the park. The findings suggest socio-spatial characteristics might explain why disproportionately fewer people of color visited urban national parks, with people of color having to travel farther to visit the park than the more affluent white residents of nearby neighborhoods. Park planners and managers can take steps to increase accessibility and aim to reduce this gap in visitors.

To assess progress toward the goals of achieving a diversity of visitors to the SMMNRA and increasing access, the 2018 survey collected demographic information including gender, age, educational level, race and ethnicity, language(s) spoken at home, household income level, household and family structure, and geographic characteristics. The survey results section reviews salient findings regarding demographics of visitors and access to the SMMNRA.

Past research has also shown that different racial/ethnic



**Fourth-grade students from Los Angeles show off their Every Kid in a Park passes.** | Photo credit: National Park Service

groups prefer different park activities or use parks in different ways (Kaczynski et al. 2013; Baas et al. 1993; Floyd 1999; Byrne et al. 2009). Research also finds that different visitors based on ethnic group and age place importance on different park characteristics and have different perceptions of parks (Ho et al. 2005; Baas et al. 1993; Arnerberger and Eder 2011). Improving equity in park access and visitor rates will require park planners and managers to consider how to accommodate the diverse park uses and needs of different visitor types. Flores and Kuhn (2018) suggest customizing amenities to minority groups to reduce the prevalent gap in park use and visitation by race/ethnicity. The 2018 Visitor Survey assessed activities, amenities used, and the preferences for improvements in the SMMNRA; this information can help park managers to improve or alter parks and programming to accommodate desired uses and amenities.

<sup>4</sup> Issues of diversity persist beyond SMMNRA throughout the National Park System. There continues to be public criticism that between 2008 and 2009, of those who visited the national park system, only about 20% were non-White and 9% were Hispanic (Johnson 2013, Taylor et al. 2011). One in five park visitors is non-White, and only one in 10 is Hispanic.



Park rangers are on hand to share information with bird-watchers in the SMMNRA . | Photo credit: National Park Service

## Survey Results: Access to the SMMNRA

### Visitor Demographics

As in 2002, surveyed visitors in 2018 were still predominantly white, higher income, highly educated, childless, and repeat visitors who largely engaged in hiking. There was, however, a nearly even split in the proportion of male (51%) to female (49%) respondents, compared to 59% and 41% respectively in 2002. The median income bracket of visitors who disclosed their household income was between \$75,001 and \$100,000 per year, substantially more than the 2017 Los Angeles County median income of around \$61,000 (U.S. Census Bureau 2018b).

Figure 3 summarizes a comparison of the race of respondents in the 2018 and 2002 surveys, and Figure 4 shows the ethnicity of respondents between survey years. The majority of respondents were White (72%), followed by Hispanic or Latino (21%), and Asian (7%). Notably, the proportion of Hispanic or Latino survey takers increased from just 12% in 2002 to nearly 21% in 2018 (see Figure 4). This nine percentage point difference is statistically significant. There were also small but statistically significant increases in the racial diversity of respondents in the 2018 survey, particularly for those who self-identify as Asian or Multi-racial. However, White respondents

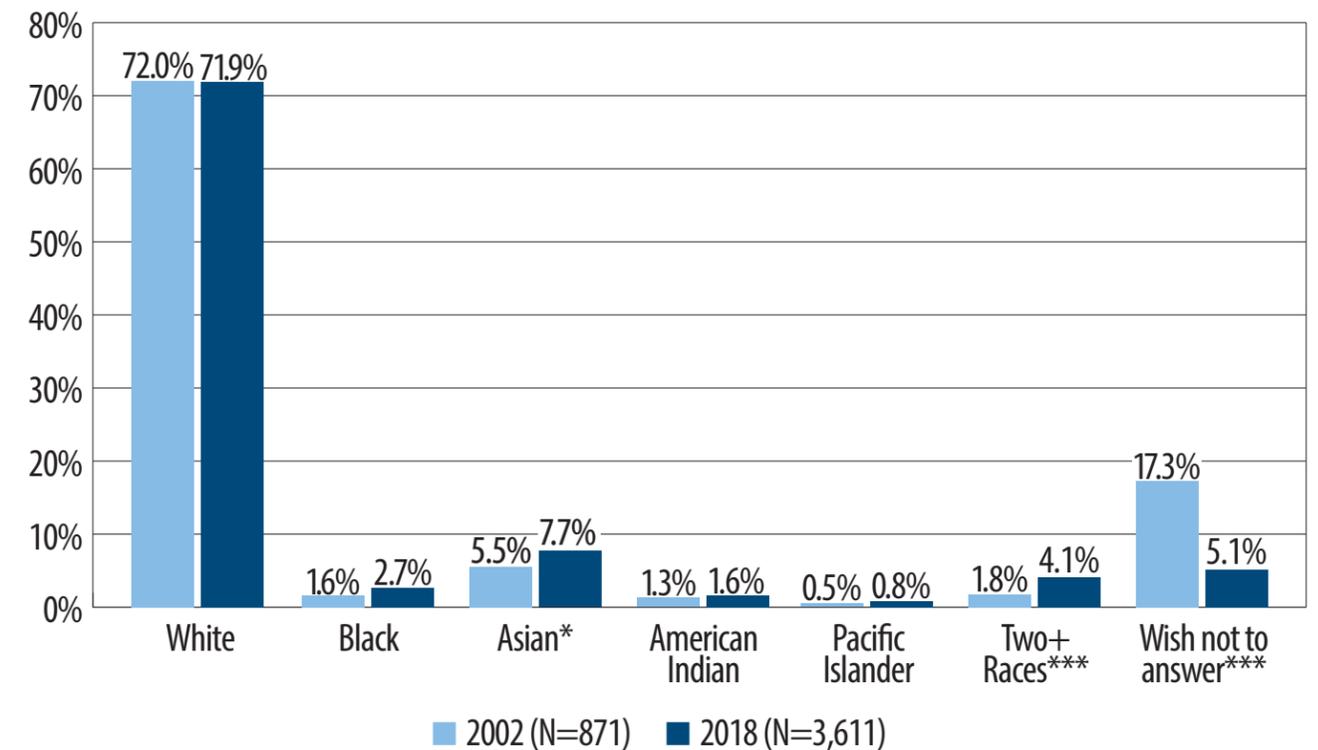
remained the most common, with a less than 0.1 percentage point difference between survey years.

Despite progress in increasing racial and ethnic diversity among visitors, a visible gap still exists between non-White and White visitor rates that does not reflect the makeup of the Los Angeles region. For instance, 63% of 2018 survey respondents were non-Hispanic White, compared to just 26.1% of Los Angeles County in 2018 (U.S. Census Bureau 2018b). Future efforts to accommodate and encourage a diversity of visitors to the SMMNRA will be vital for NPS to achieve their goals of increased access and better engagement with urban communities.

### Geographic Characteristics of Visitors

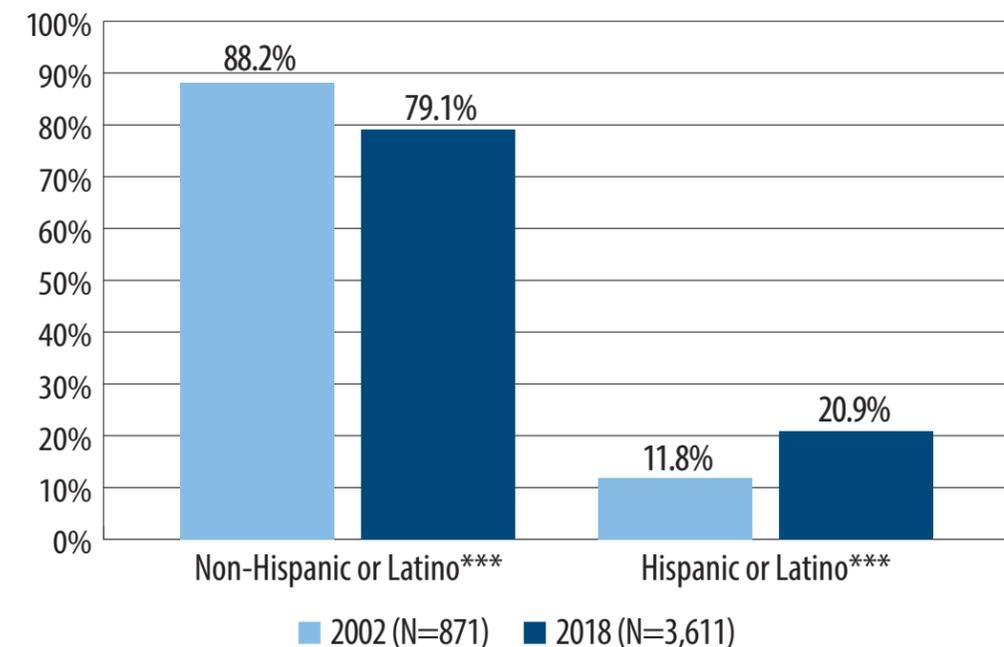
Studying where visitors traveled from can help to identify the geographic reach of the SMMNRA and evaluate the extent of park access. The vast majority of visitors came from Los Angeles County and Ventura County (78% and 19% of Southern California visitors respectively); the remaining 3% traveled from Orange, San Bernardino, and other counties. This highlights the importance of SMMNRA as a

Figure 3: Race of Respondents (2018 versus 2002)



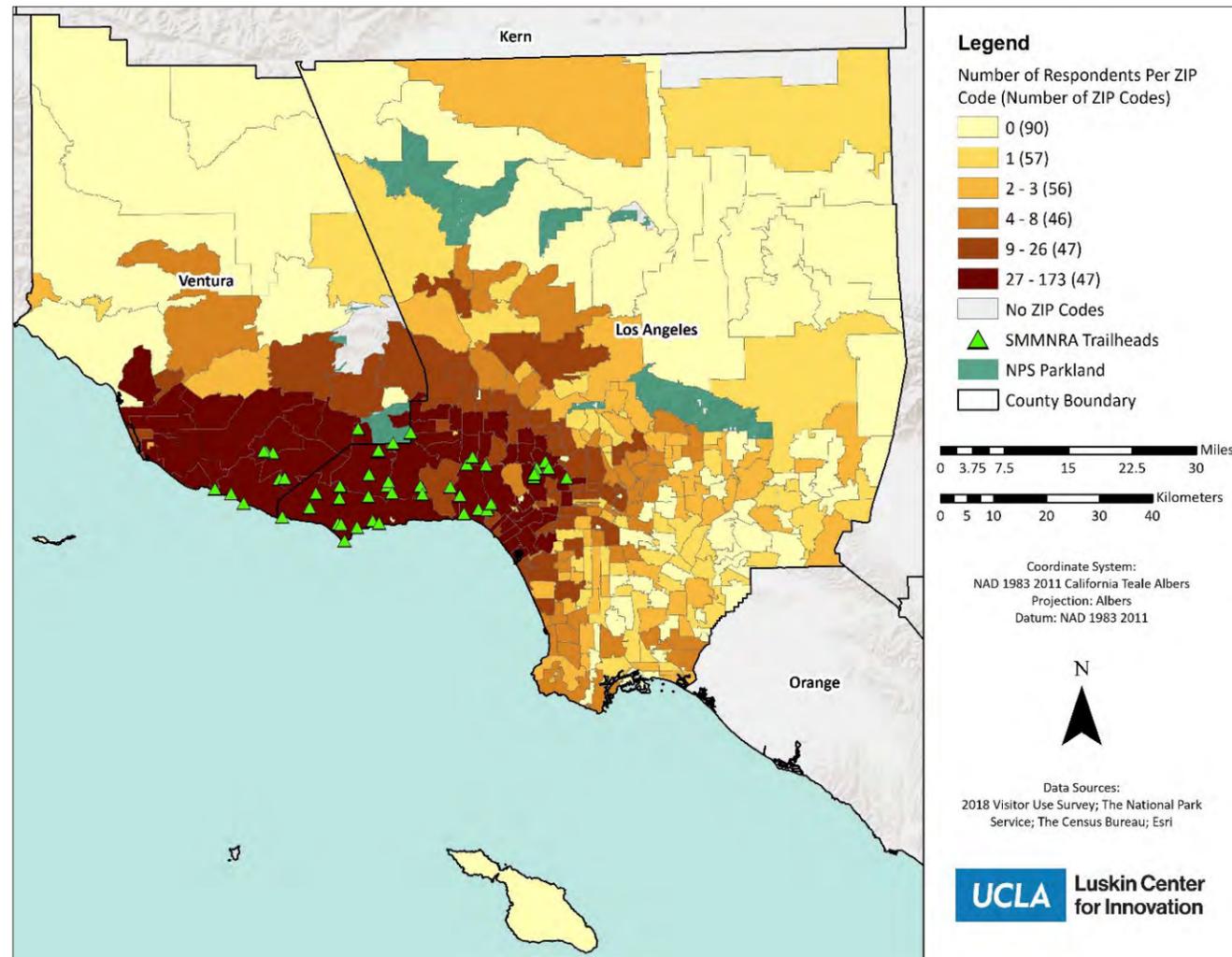
Two-sample difference in proportions test, \*P<0.05, \*\*P<0.01, \*\*\*P<0.001. Note that cell sizes approach 0.

Figure 4: Ethnicity of Respondents (2018 versus 2002)



Two-sample difference in proportions test, \*P<0.05, \*\*P<0.01, \*\*\*P<0.001. Note that cell sizes approach 0.

**Figure 5: Number of Respondents, by ZIP Code (Los Angeles and Ventura Counties)**



local natural destination for Southern California residents. Moreover, analysis finds that nearly 74% of all ZIP codes across Los Angeles County and Ventura County had at least one survey respondent, demonstrating the wide catchment of the SMMNRA. Figure 5 shows the number of respondents by ZIP Code; most respondents still come from those areas closest to the SMMNRA in West Los Angeles and Ventura counties.

Comparing visitor origins to disadvantaged census tracts and high park need areas of the county can assess the equity of access to the SMMNRA. Across all counties in Southern California, the average

survey respondent traveled from a ZIP code with an area made up of 17% disadvantaged census tracts (DACs, according to CalEnviroScreen designations<sup>5</sup>). The SMMNRA does serve a high proportion of respondents from park-poor ZIP codes in Los Angeles County, as defined by the 2015 Los Angeles County Parks Needs Assessment. 34% of respondents traveled from ZIP codes with the highest park need (Very High), and almost 25% traveled from High-Need ZIP codes.

**Travel Distance, Time, and Cost**

We analyzed the distance visitors traveled to and from the park to implicitly assess how visitors value access to

the SMMNRA. To protect respondent privacy, ZIP code centroids represented the home location of respondents. The results represent the estimated round-trip mileage that respondents traveled from their home ZIP code to their destination trailhead. Distance traveled, and therefore time and money expended, to visit the parks varied by race/ethnicity and income, highlighting the park access gap found in the literature.

Respondents traveled about 35 miles to and from the park, on average (total number of responses [N=3,897]). Non-White visitors traveled nearly 10 miles more on average than non-Hispanic Whites to get to and from the park. Non-White respondents also spent nearly 38% more time on average traveling to the trailheads (81 minutes) than non-Hispanic Whites (59 minutes).

There is also a clear, inverse relationship between distance traveled and income (see Figure 6). Respondents in the lowest-income category (less than \$50,000 per year) traveled nearly 15 miles more on average than those in the highest-income bracket (more than \$150,000 per year). Respondents in the lowest-income category had the highest costs associated with park access (\$24.30)

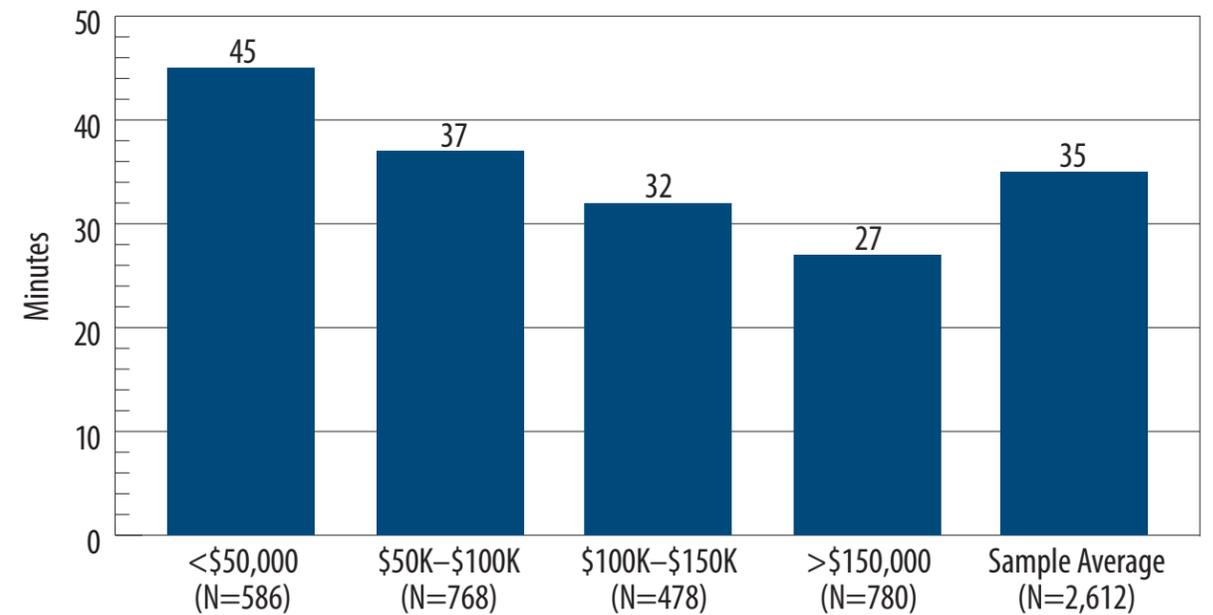
and spent the most time traveling to the trailheads (90 minutes). This demonstrates that low-income households disproportionately expend more resources, both monetary and nonmonetary (time), to visit the SMMNRA.

**Modes of Access**

Overwhelmingly, respondents reported driving to the trailhead (86%). Although the cell sizes are small, there appears to be a statistically significant difference in the proportion of visitors who took public transportation, with non-White respondents using it at higher rates than non-Hispanic Whites. The low percentage of public transit visitors across both survey years (0% and 0.5% in 2002 and 2018 respectively) indicates that accessibility via public transportation is either limited, inconvenient, or not a preferred travel mode.

The frequency of those who biked, walked, or jogged to the trailhead was higher among higher-income respondents. This may result from higher-income respondents living closer to the SMMNRA, where the shorter distance to the trailheads enables them to take active forms of transportation.

**Figure 6: Mean Travel Time to SMMNRA Trailhead(s), by Income**



The differences in mean travel time across all combinations of income groups are statistically significant at P<0.05.

<sup>5</sup> The California Environmental Protection Agency (CalEPA) uses the CalEnviroScreen 3.0 tool to identify disadvantaged communities as the top 25% most impacted census tracts based on exposure and vulnerabilities to multiple sources of pollution (OEHHA 2018).



A high proportion of non-White survey respondents would like to see better WiFi access. | Photo credit: National Park Service

## Survey Results: SMMNRA Activities and Amenities

### Activities

Overwhelmingly, survey participants indicated plans to hike (85%), followed by sightseeing (50%), and photography (24%). Despite some observed differences in individual activity patterns, overall 2018 activity uses and their demographics were similar to those found in 2002.

The most common answers regarding desired amenity enhancements included bathrooms (21%), drinking fountains (18%), maps of trailheads and trails (11%), and Wi-Fi connectivity (11%). Non-White participants were more likely to use almost every amenity as compared to non-Hispanic White respondents, at a statistically significant level. On the other hand, non-White respondents reported wanting certain additional amenities at higher rates than non-Hispanic White respondents.

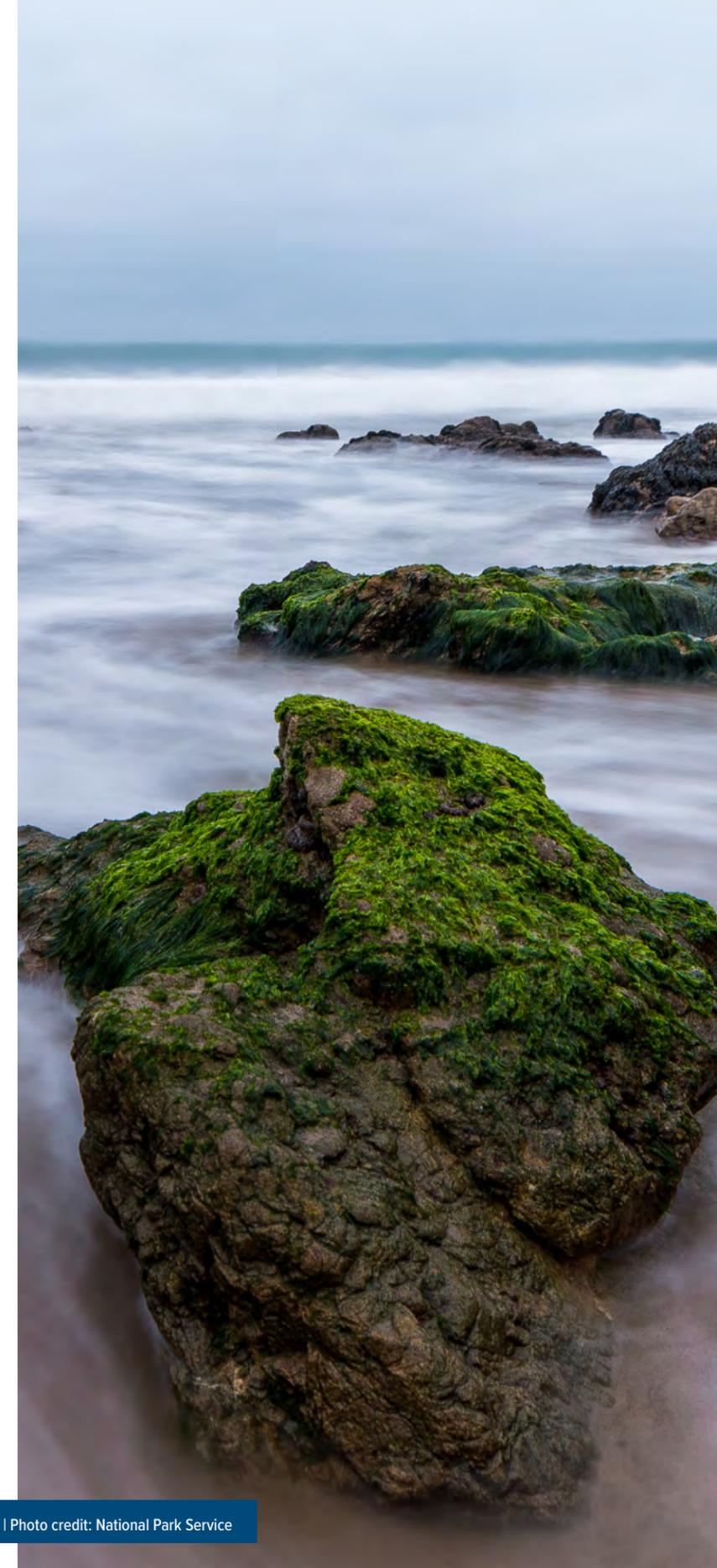
In particular, a higher proportion of non-White respondents requested Wi-Fi connectivity compared to non-Hispanic White respondents<sup>6</sup>. Given social gaps in Internet access among low-income and minority communities, which can have impacts such as on student achievement, public Wi-Fi access in park settings can be valuable (Saferstein 2018). Perhaps most relevant to the SMMNRA is the emergency, safety, and navigation benefits of the Internet, which may be more helpful to some visitors than English signage. The most popular reason to use the Internet was access to emergency medical services (57%), followed by communication with other members of their party (38%) and trail navigation (36%).

<sup>6</sup> Statistically significant at the 99.999% level (P<.001).

## Conclusions

The SMMNRA is a valuable resource to residents and visitors for both recreational and environmental reasons, which makes future planning to improve the recreation area extremely important. The largest proportion of respondents (38%) wanted to protect the Santa Monica Mountains in order to provide habitats for plants and wildlife, while 36% wanted to protect the area to provide both recreational opportunities and habitats for plants and wildlife. A notable proportion of surveyed visitors (22%) wanted to protect the SMMNRA only to provide recreational opportunities. NPS will need to balance these competing priorities into the future, as both provide significant value to the region. The survey results further highlight this value; over 62% of survey respondents said they would be willing to donate money to support the upkeep of the SMMNRA.

As Measure A and other park funding and provision efforts ramp up, it is important to consider existing park resources, such as the SMMNRA, from an equity and access lens. There have been improvements in access by different groups at the SMMNRA, but visitors are still predominantly white, higher-income, older, and college educated. Park visitors of different races, ethnicities, genders, ages, and incomes value and use the SMMNRA differently with different needs and desired amenities, as evidenced by our survey. Disparities in access remain, often driven by socio-spatial factors; low-income and minority visitors have to travel farther and expend more time and travel costs to visit the SMMNRA. Moving forward, NPS must plan for and accommodate these different user types, and identify ways to remove barriers to access to ensure that the SMMNRA represents a natural and recreational resource for all residents of the Los Angeles region. We outline the following recommendations, based on findings regarding the five dimensions of access and use detailed in this report.



Mossy rocks at El Matador State Beach near Malibu. | Photo credit: National Park Service

# Recommendations

## INCREASED ACCESS AND USE EQUITY IN SMMNRA:

### Visitor Demographics and Geographic Characteristics of Visitors

- » Despite progress in increasing visitor diversity, more work needs to be done to increase low-income visitors of color, to ensure the SMMNRA serves all residents of the Los Angeles region.
- » A focus on addressing access issues of travel cost and mode is needed (see below).

### Travel Distance/Time/Cost

- » Since, on average, low-income, non-White visitors have to spend more time and money to visit the park, NPS should consider programs to reduce these barriers.
- » Expanding on existing programs such as the Every Kid in a Park program, and addressing modes of access (see below) may lessen disparities.

### Modes of Access

- » Given that most areas of the SMMNRA are still poorly served or inconvenient to access via public transit, NPS should consider options or transportation links to serve visitors who cannot drive to the parks.
- » Previous programs such as the shuttle service, or new partnerships to expand bus routes, should continue to be evaluated for deployment.

## ACTIVITIES AND AMENITIES USED/DESIRED:

- » Future trailhead and park improvements should consider the diverse use patterns and desires of all the types of visitors to the SMMNRA. For example, inclusive park signage, tailored amenities, improved Wi-Fi connectivity, and new types of programming can address the varied needs and desires of different demographic types of visitors.

## BEYOND SMMNRA:

- » Ensuring that the SMMNRA can serve the diverse population of Los Angeles County will be vital, but must occur alongside other park provisions and access initiatives in the region, such as local parks in High-Need areas, some of which may be funded by Measure A.
- » Our survey findings could be used to identify areas of Los Angeles County less well served by the SMMNRA, where local parks may be particularly important.



An education volunteer takes a school group on a hike at Rancho Sierra Vista. | Photo credit: National Park Service

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Stony Mountain. | Photo credit: National Park Service

**For the full report, with additional analysis and survey results, please see <https://innovation.luskin.ucla.edu/urban-greening/public-parks-2/>**

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