

Park Equity, Life Expectancy, and Power Building: An Overview

September 2020

Los Angeles County voters recently enacted two countywide parcel tax measures (Measure A, the Safe, Clean Neighborhood Parks and Beaches Measure of 2016, and Measure W, the Safe, Clean Water Act of 2018) and a statewide bond (Proposition 68, the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018) that will generate hundreds of millions of dollars for parks, open space, and stormwater-related green infrastructure. These measures, now in their implementation phases, hold the potential to build or revitalize parks and green space in the LA region's highest need communities. Strategically spent, the revenue from these measures could set us on a path to eliminate the region's deplorable park inequities while reducing associated health inequities and gaps in life expectancy.

What do parks have to do with health and health equity?

Urban parks and green spaces are essential community infrastructure that protect public health by providing opportunities for physical activity, time in nature, social connection and respite. Parks filter air, remove pollution, buffer noise, cool temperatures, filter stormwater and replenish groundwater.^{1,2} Exposure to green spaces can confer improvements to mental health as well.³ Exposure to nature has been associated with mental and psychological wellbeing and social cohesion.⁴

A study by LA County Department of Public Health found that on average, LA County cities and unincorporated areas with less park space per capita have higher rates of premature mortality from cardiovascular disease and diabetes, higher prevalence of eating- and activity-related chronic illness among children, and greater economic hardship compared with cities and communities with more park space per capita. It also found that Blacks and Latinos are more likely than Asian Americans and whites to live in cities and communities with less park space.⁵

Parks are not distributed equitably

All communities do not have access to safe, well-maintained, and programmed parks and green spaces. Many studies across multiple geographic areas, including the LA region, show that Blacks, Latinos, and people who live in low-income neighborhoods have less access to parks and green spaces than people who live in more affluent or predominately white communities.⁶

Park and green space inequities reflect the systematic production of inequities through historical and current day policies, practices, and procedures throughout the United States.⁷ Factors contributing to park inequities include racial segregation, biased planning decisions, discriminatory post-WWII home loan practices, exclusionary zoning, racial covenants, and redlining, among others.⁸

Present day drivers of park inequities include shifting responsibility for public services and reduced ability of cities with limited tax-bases and large low-income populations to provide parks and recreation services.⁹ Tax and fiscal restructuring, like California's Proposition 13,

Half of LA County residents live in “high park need” or “very high park need” communities

The groundbreaking [Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment \(PNA\)](#) found vast need for park infrastructure in LA County, with an astounding 52.6% of the region’s more than 10 million residents living in either ‘high park need’ or ‘very high park need’ areas as shown in Figure 1. Most of these high and very high need areas are concentrated in low-income communities of color.¹¹

The PNA found that while the County average is 3.3 acres of parkland per 1,000 residents, 32% of LA

County residents live in ‘high park need’ communities with an average of 1.6 acres per 1,000 residents and 20.4% live in ‘very high park need’ areas with an average of 0.7 acres per 1,000.

The PNA also found that 15.1% of park amenities in LA County are in poor condition, 42.7% are in fair condition, and 42.2% are in good condition. With regard to park infrastructure, 28.6% of parks in LA County are in poor condition, 51.1% are in fair conditions, and 18.1% are in good condition.

worsened these conditions and devastated the budgets of local park agencies in the years following its 1978 enactment. Unable to keep pace with acquisition of park land post-Prop 13, Los Angeles became one of largest park-poor cities in the US.¹⁰

New research shows that adding parks could increase life expectancy

Results from recent research by UCLA, in partnership with Prevention Institute and informed by a community advisory board comprised of seven base-building LA nonprofits and a representative of the LA County Department of Public Health found that increasing park acreage has the potential to increase life expectancy for LA County residents in areas that have less tree cover or lower vegetation levels than the county median. Life expectancy is the average number of years a person can expect to live calculated by averaging across the population. LA County census tracts with less tree cover are typically park poor, disproportionately low income, and home to primarily people of color.

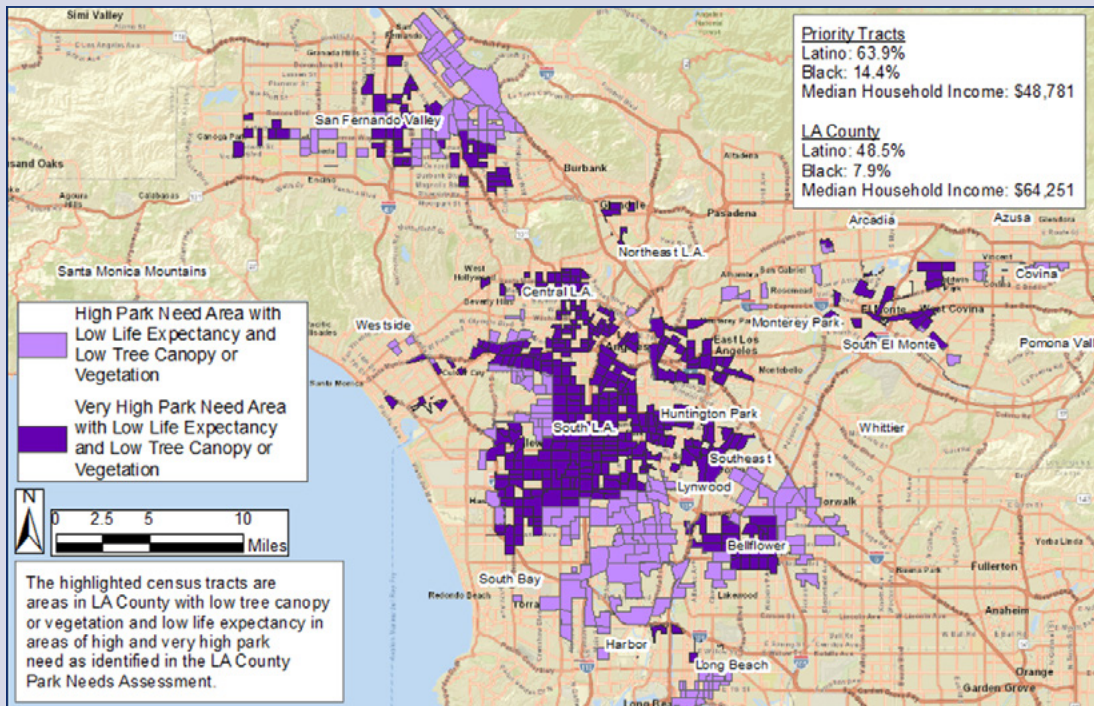
- If all of the census tracts in LA County with park deficits and low tree canopy levels had an increase in park acreage up to the median for LA County tracts (about 54 acres within a two-mile radius of each census tract), LA County would likely see considerable life expectancy gains for each resident living in those tracts.^{i,ii,12}
- Increasing park acreage accessible to residents of these census tracts has the potential for considerable life expectancy gains. Approximately 164,700 years in life expectancy could be gained across the population of all people living in census tracts in LA County with park deficits and low tree canopy levels.ⁱⁱⁱ
- Targeted investments in park infrastructure would significantly benefit the health of Latino and Black residents. Calculating gains specifically for these two groups, such investments would result in an increase of almost 118,000 years of life expectancy.

ⁱ Low tree canopy refers to below the median level - in this case, half of the census tracts in LA County have tree canopy coverage above 15.7%, and half have below 15.7%. (TreePeople and Loyola Marymount Center for Urban Resilience 2016 Tree Canopy Coverage [2019]).

ⁱⁱ Park deficit refers to a level of park acres that is below the median level. In this case, half of the census tracts in LA County have above 53.8 available park acres on average throughout the tract, and half have an average of below 53.8 available acres.

ⁱⁱⁱ This value represents years of life expectancy added for individuals living in tracts with both low park acreage and low tree canopy. An average of two-thirds of one month for each person, multiplied by the total population in these specific tracts equates to a total gain of 164,700 years.

Reduced Life Expectancy in High and Very High Park Need Areas with Low Tree Canopy or Vegetation



Data sources: Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment (2016), USALEEP Life Expectancy 2010-2015 Estimates (2018), TreePeople and Loyola Marymount Center for Urban Resilience 2016 Tree Canopy Coverage (2019), National Agriculture Imagery Program (NAIP) Aerial Imagery (2016), United States Census Bureau American Community Survey 5-Year Estimates (2018)

Policy recommendations

While these policy recommendations are based on data and context in the Los Angeles region, they are likely pertinent across the United States.

1. Agencies responsible for implementing Measure A, Measure W, and Prop 68 should expend the revenue they generate to reverse park and green space deficits, prioritizing Black and Latino communities burdened with significant park need and low life expectancy.
2. Park agencies, elected officials, non-profit park developers, and advocates should utilize data-informed maps and tools to identify priority neighborhoods and engage local residents and organizations to plan new parks or improve existing parks.
3. Elected officials in LA County's park-poor jurisdictions should act to increase general fund allocations for their park agencies and establish initiatives to address this primary driver of built environment inequities and reverse park and green space deficits.
4. Future public finance measures for parks and green space should involve groups representing low-income Black and Latino communities from the outset to craft needs-based and evidence-informed expenditure plans that explicitly address park and green space deficits.
5. Elected and appointed officials in park-poor jurisdictions should allocate resources for independent equity analyses of park systems to investigate local drivers of distributional, procedural, and structural park inequities.
6. Funders should support community-based organizations to advocate for increased public investments in parks and green space in areas with significant park need and low life expectancy to reverse inequities.
7. Funders should support community-based organizations to conduct independent community oversight of revenue allocations and expenditures for transparency and accountability in management of public funds.

8. Funders should support community-based organizations to participate in future park and green space public finance measures using unrestricted grant resources.
9. Park agencies and/or funders should contract with independent researchers or academic institutions to conduct periodic, formal evaluations of public finance measures for parks and green space to assess their effectiveness in meeting stated goals and objectives.
10. Park agencies should develop and maintain a publicly accessible data dashboard that integrates all relevant revenue allocation information to facilitate expenditure monitoring and evaluation of efforts to close equity gaps.
11. Park developers should require contractors who build or retrofit parks in high-need areas to engage in local, targeted hiring practices and work with non-traditional employment agencies to employ disadvantaged residents.
12. Park agencies and/or funders should support the formation of a task force comprised of researchers, housing and park policy specialists, and representatives of community-based organizations to examine evidence of green displacement, understand causes and solutions, and develop a model displacement-avoidance policy that can be adapted to jurisdictions in Los Angeles County and elsewhere.

Consistent with shifting public opinion about structural inequities and institutional racism, people living in communities that have been historically excluded from park-related decision-making must be included and heard. History and more recent events demonstrate that practices governing the status quo won't change without pressure. Intentional and strategic power building among an expanded network of base-building organizations is the key to reversing biased policies, procedures, practices, and norms and distributing parks and their associated benefits more equitably.

¹ Wolch, J.R., Byrne, J. & Newell, J.P. (2014). *Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough.'* *Landscape and Urban Planning*, 125, 234-244.

² Jennings, V., et al. (2017). *Emerging issues in urban ecology: Implications for research, social justice, human health and well-being.* *Population and Environment*, 39, (1), 69-86.

³ Jerrett, M. & van den Bosch, M. (2018). *Nature Exposure Gets a Boost From a Cluster Randomized Trial on the Mental Health Benefits of Greening Vacant Lots*, *JAMA Network Open* 1(3). Retrieved from <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2688340>

⁴ Jennings, V., et al. (2017). *Emerging issues in urban ecology: Implications for research, social justice, human health and well-being.* *Population and Environment*, 39, (1), 69-86.

⁵ Los Angeles County Department of Public Health. (2016). *Parks and Public Health in Los Angeles County: A Cities and Communities Report*. Retrieved from http://www.publichealth.lacounty.gov/chronic/docs/Parks%20Report%202016-rev_051816.pdf

⁶ Los Angeles County Department of Public Health. (2016).

⁷ Prevention Institute. (2018). *Countering the production of inequities: Ensuring the opportunity for health for all*. Retrieved from <https://www.preventioninstitute.org/node/2354>

⁸ Boone, C.G., Buckley, G.L., Grove, J.M. & Sister, C. (2009). *Parks and people: An environmental justice inquiry in Baltimore, Maryland*. *Annals of the Association of American Geographers*, 99(4), 767-787.

⁹ Joassart-Marcelli, P. et al. (2011). *Building the healthy city: The role of non-profits in creating active urban parks*, *Urban Geography*, 32, 5, pp.682-711.

¹⁰ Wolch, J. R., Wilson, J. P., & Fehrenbach, J. (2002). *Parks and park funding in Los Angeles: An equity-mapping analysis*. University of Southern California, Sustainable Cities Program.

¹¹ Los Angeles County Department of Parks and Recreation. (2016). *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment*. <https://lacountyparkneeds.org/>

¹² TreePeople and Loyola Marymount Center for Urban Resilience. (2019). *2016 Tree Canopy Coverage Dataset*. <https://www.treepeople.org/latreecanopydata>. Data provided by authors

Acknowledgements

Written by Prevention Institute in collaboration with the UCLA Fielding School of Public Health, Department of Environmental Health Sciences, and the Powering Healthy Lives through Parks Community Advisory Board. This project is supported by the Urban Institute through funds provided by the Robert Wood Johnson Foundation. We thank them for their support and acknowledge that the findings and conclusions presented are those of the authors alone.