

Green Space and Environmental Gentrification

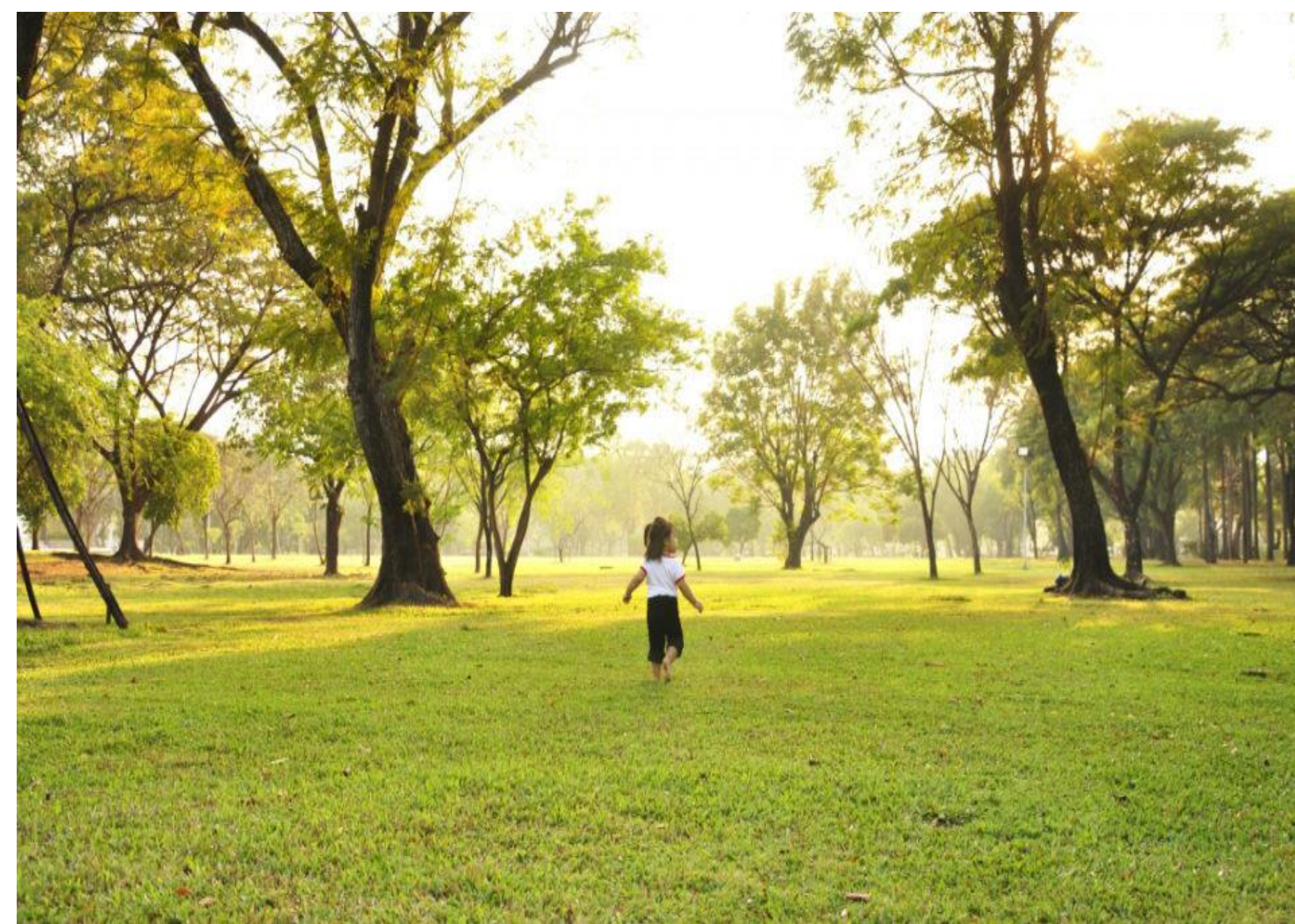
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Geography 450

INTRODUCTION

Green space and its effects on health and green space inequity, especially in large cities.

PURPOSE OF RESEARCH

Benefits of green spaces on physical and mental health.
Green space inequity through environmental gentrification.



RESEARCH QUESTIONS

Who does and does not benefit from green space? How or in what ways?
How do we balance increasing green space with environmental and social issues that intersect?



SOURCE OF DATA/INFORMATION

Health: We found our information in government websites like the National Institute of Environmental Health Sciences and the Earth Observatory by NASA.

-https://www.niehs.nih.gov/research/supported/centers/core/spotlight/green_space/index.cfm

"Adolescents living in areas surrounded by trees and other green vegetation have better mental health than those exposed to less greenery at home, according to new research supported in part by the Environmental Health Sciences Core Center at Harvard University" (National Institute of Environmental Health Sciences, 2019).

-<https://earthobservatory.nasa.gov/images/145305/green-space-is-good-for-mental-health>

"In a sweeping nationwide study, researchers from Denmark's University of Aarhus found that childhood exposure to green space—parks, forests, rural lands, etc.—reduces the risk for developing an array of psychiatric disorders during adolescence and adulthood" (NASA Earth Observatory "Green Space is Good for Mental Health")

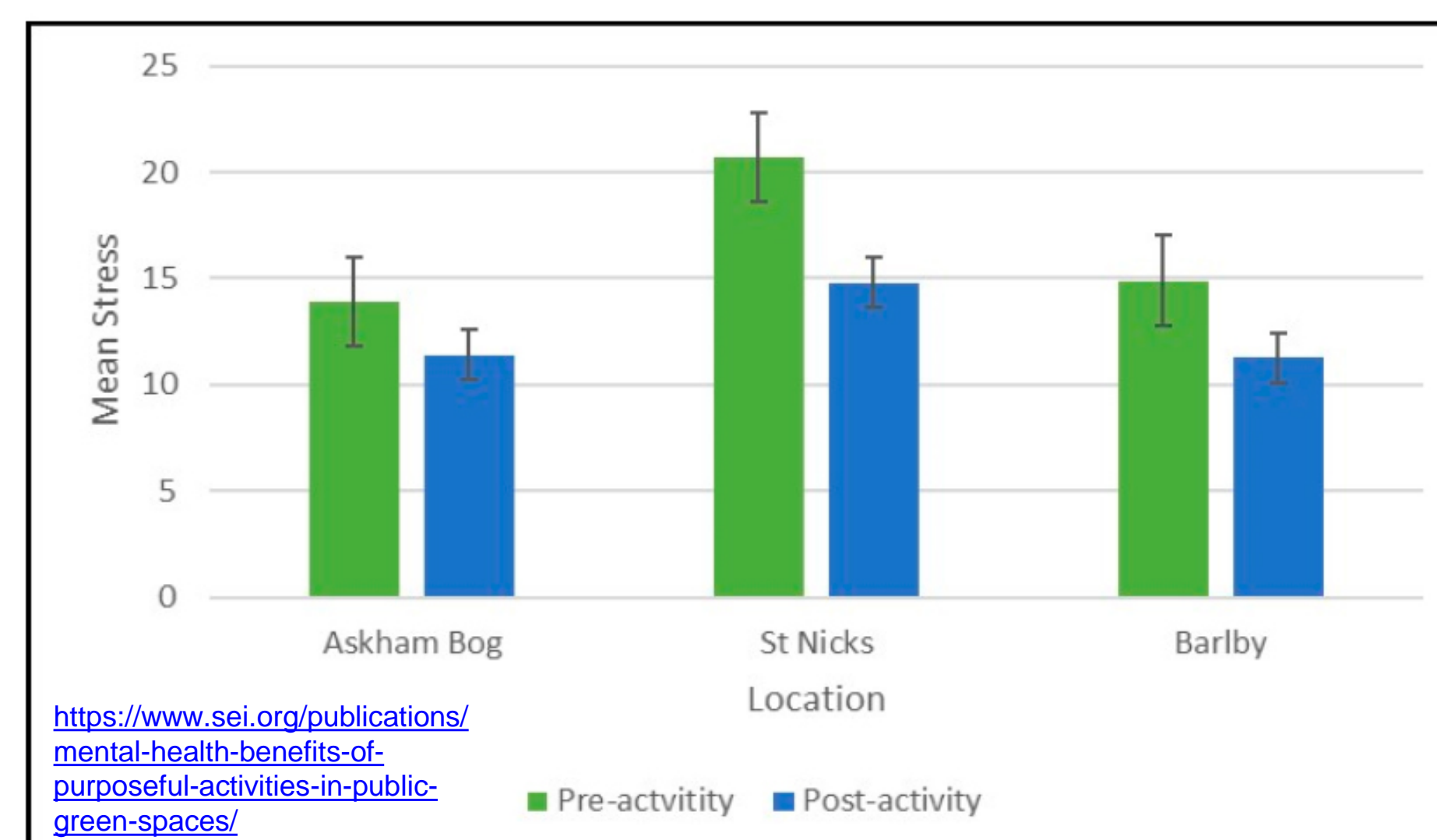
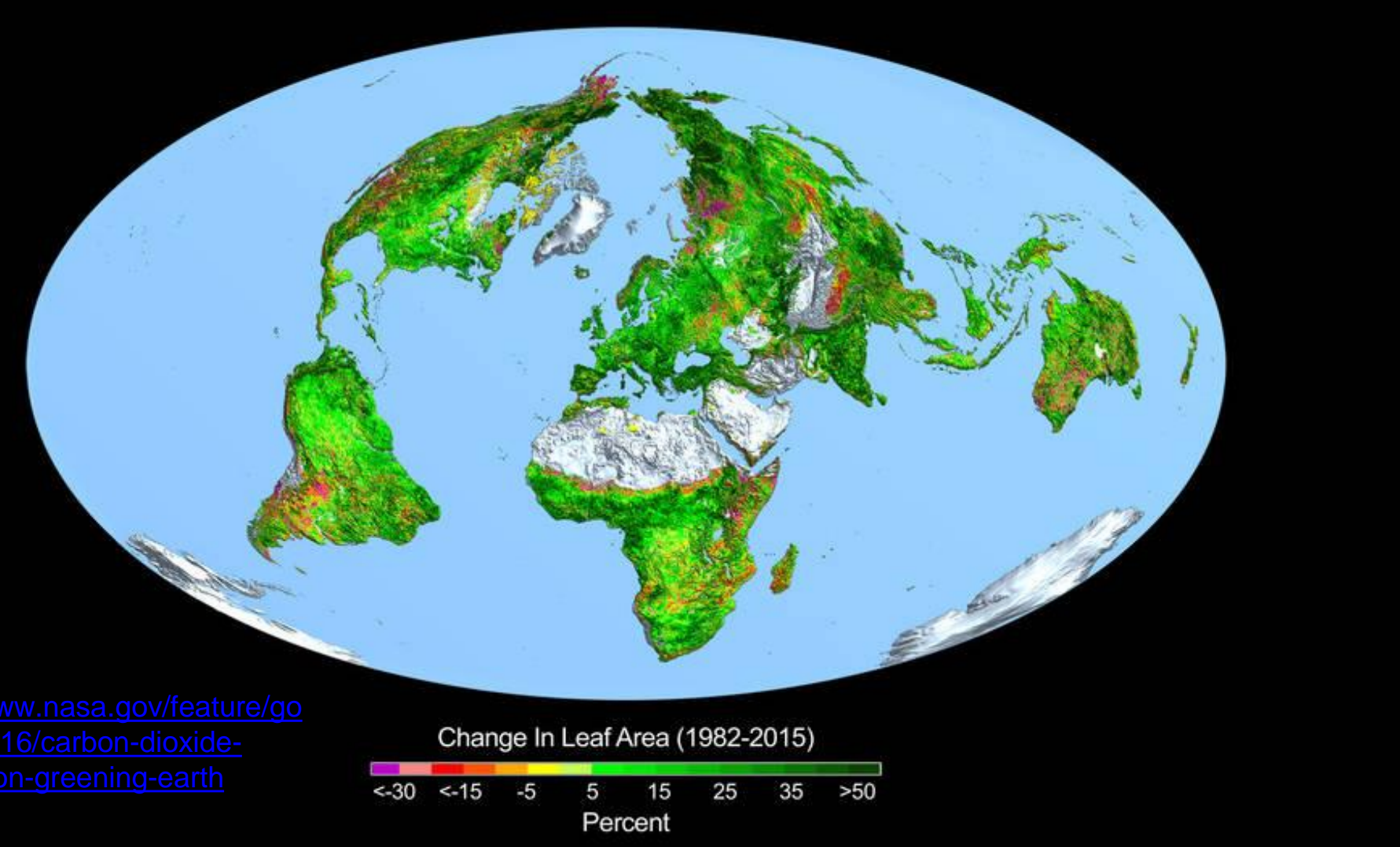
Inequity: We found our information in trustworthy and reliable news resources and websites like Vox and Science Direct.

-<https://www.vox.com/2020/1/20/21070883/central-park-seneca-village>

"[Central Park] is a piece of hidden history that goes back to the 1820s, when this land was largely the open countryside of New York. The expanse became home to about 1,600 people — many of whom were escaping the crowded and increasingly dangerous conditions of lower Manhattan...it was an integrated community...[but] in order to facilitate the park's development, [Manhattan's] newspapers started to downplay who really lived there" (Chakraborty, 2020).

-<https://www.sciencedirect.com/science/article/abs/pii/S0264837716301557>

"Results show that relationships between neighborhood socioeconomic disadvantage index (NSDI) and urban public green spaces (UPGSs) availability indicators present significant spatial non-stationarity. In general, UPGSs abundance and accessibility are lower in districts characterized by higher NSDI. However, converse trend is found in districts on the southwestern urban edge. UPGSs quality is poorer in districts with higher socioeconomic disadvantage within the central city, while UPGSs in the socioeconomically disadvantaged exhibit better quality within the outskirts" (Li and Lui, 2016).



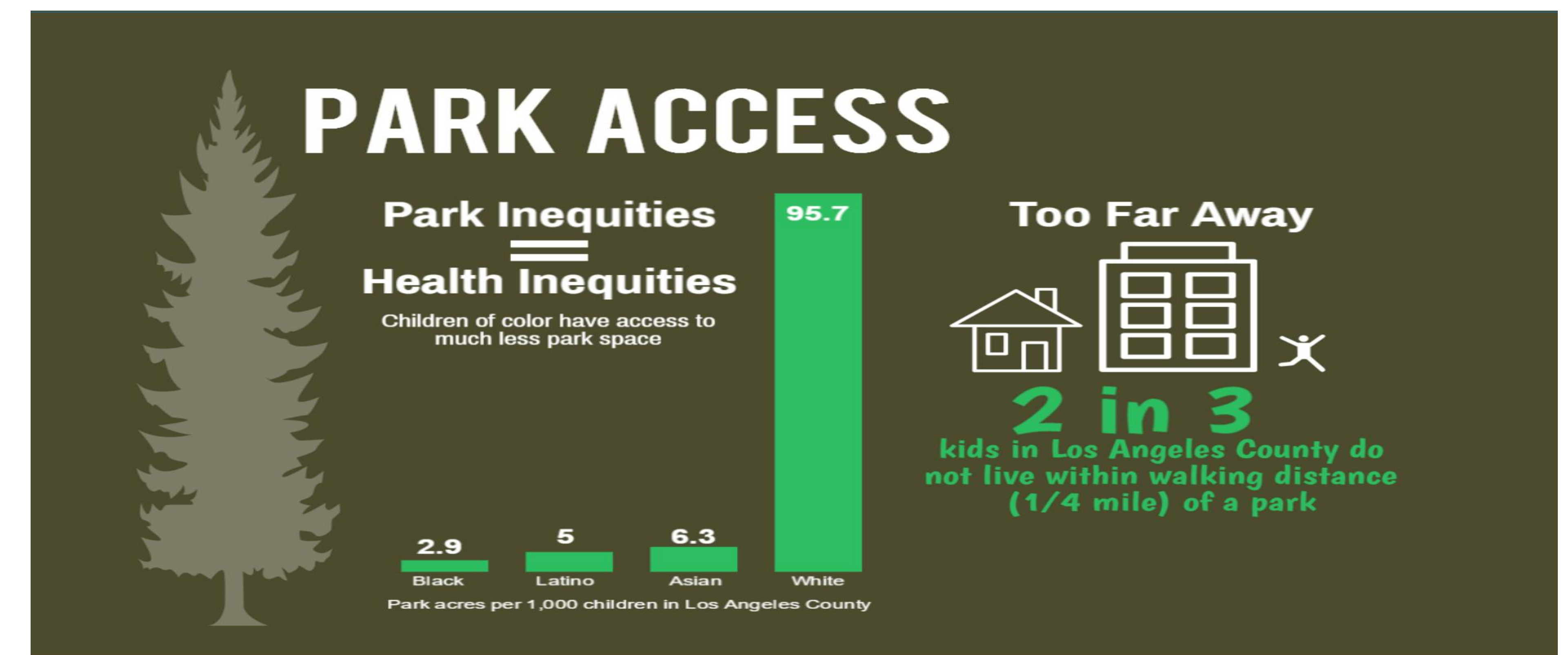
FINDINGS

Health:

Overall, park access leads to better emotional well-being, increased physical activity, and a decrease in obesity, heart disease, and stress. Research has also show that the risk of having a mental disorder decreases the longer a child is exposed to green space from birth and up to the age of 10. Another study found that adolescents who grew up in neighborhoods with 21 to 40 percent of land use being green space had healthier mental health than peers in less green neighborhoods.

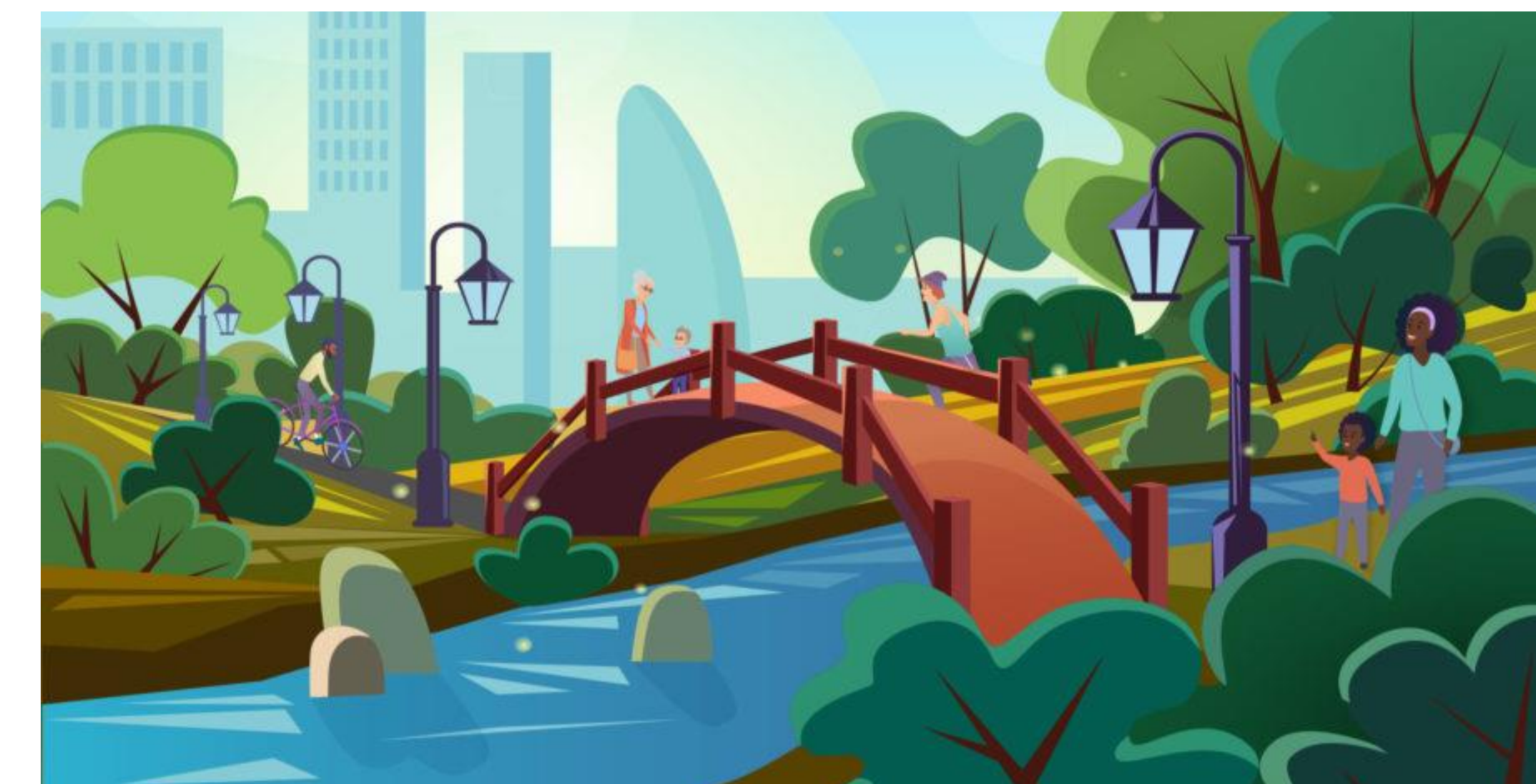
Inequity:

There is also intersectionality between access to green space and environmental injustice. Green space can drive up property value and displace low-income residents. Since green space can improve air quality, moderate local temperatures, and contribute to a better living quality overall, it should be accessible to everyone regardless of race or socioeconomic status.



CONCLUSIONS

- While the benefits of green space is evident, the issue of inequity is something that should not go unnoticed. "Our results highlight the importance of considering the locality-specific neighborhood socioeconomic profiles of urban public green spaces availability" (Li and Lui, 2016).
- Those who are at greater risk of poor health are often the ones who will be displaced by the building of green space/ not the ones who benefit from green spaces.
- There is direct evidence that points to lack of green spaces and health issues such as heart disease and obesity, as well as mental health issues. To balance green space, there must be political leadership that prioritizes underserved communities and creating equitable neighborhoods. This must be considered when placing new green spaces or else this cycle will continue. "Making green space-focused urban planning an early intervention tool for reducing mental health problems" (NASA Earth Observatory "Green Space is Good for Mental Health")



BIBLIOGRAPHY/SOURCES

- Chakraborty, Ranjani, and Melissa Hirsch. "The Lost Neighborhood under New York's Central Park." Vox, Vox, 20 Jan. 2020, www.vox.com/2020/1/20/21070883/central-park-seneca-village.
- "Green Space Is Good for Mental Health." NASA, NASA, [www.earthobservatory.nasa.gov/images/145305/green-space-is-good-for-mental-health](https://earthobservatory.nasa.gov/images/145305/green-space-is-good-for-mental-health).
- "Green Space May Lead to Less Depressed Teens." National Institute of Environmental Health Sciences, U.S. Department of Health and Human Services, www.niehs.nih.gov/research/supported/centers/core/spotlight/green_space/index.cfm.
- Li, Hongbo, and Yali Liu. "Neighborhood Socioeconomic Disadvantage and Urban Public Green Spaces Availability: A Localized Modeling Approach to Inform Land Use Policy." Land Use Policy, Pergamon, 21 June 2016, www.sciencedirect.com/science/article/abs/pii/S0264837716301557.