



Tree Canopy and Environmental Distribution Justice in Los Angeles: A Look Into Tree Planting Groups

Natalie Menicucci
Mentor: Dr. M. Romolini
Center For Urban Resilience | Loyola Marymount University | Spring 2018



Abstract

The distribution and maintenance of urban tree coverage in Los Angeles is an issue of environmental justice. Researchers have found that there is a direct relationship between tree coverage and income and race in the city. Los Angeles has a tree planting initiative, called “City Plants,” with a goal that people in every neighborhood have equal access to trees and their benefits. Yet it is not clear how or whether tree planting organizations embody this in their practices. To address this problem, the purpose of this study is to examine how decisions on planting locations are made by planting groups, the challenges barriers these groups face, and whether these barriers led them to plant trees in certain neighborhoods rather than others. The data will be collected through interviewing different groups (both nonprofit and city agencies) involved in planting trees around Los Angeles. Tree planting groups will be able to use findings to help them become more aware of how they approach environmental justice in their practices, and their role in the equitable distribution of urban trees. This information may prompt changes to tree planting approaches, funding, and policy making.

Introduction

Background

- Researchers have discovered that “Los Angeles’s existing tree canopy cover was 21%, and ranged from 7 to 37% by council district. There was potential to add 2.5 million additional trees to the existing population of approximately 10.8 million” (McPherson, et al., 2011).
- The problem is that the areas that have the least amount of tree coverage, compared to those areas that are covered, are districts and neighborhoods with particularly lower income and are comprised of minorities (McPherson, et al., 2011; Figure 1).
- This demonstrates how the placement of urban forests and trees in LA is an issue of environmental racism, in particular *distributive justice*.

Research Question

What are the challenges tree planting groups and programs face, and how are these challenges affecting the unequal distribution of urban trees in Los Angeles?”

Methods

Data Collection Approach

- The research involves qualitative semi-structured interviews with five different groups involved in City Plants. The groups include both nonprofit and city agency programs. 10 interview questions are asked regarding the relationship between tree coverage and environmental justice in their respective tree planting group.
- Data is collected during interviews through audio recording and then transcribed into written dialogue.

Analyses Performed

Analyses of the data will occur through a process of thematic coding (Creswell, 2018). The interviews will be conducted in a systematic way that allows themes to emerge as responses are given.

Additional Research Information



Council District	Existing TCC (%)	Existing Trees ^a	Tree density (tree/ha) ^a	Potential trees			Potential Total	Potential TCC (%)
				Small	Medium	Large		
1	15.9	261,106	81.2	23,821	18,320	7,087	49,228	9.0
2	26.6	1,112,597	135.5	109,200	78,161	16,590	203,950	12.1
3	26.0	1,308,371	132.7	144,751	89,421	18,905	253,078	11.9
4	28.8	913,276	146.5	70,179	45,282	12,265	127,726	10.2
5	37.2	1,865,642	189.6	107,119	52,056	8,465	167,640	6.8
6	15.0	525,922	76.2	66,538	64,545	15,175	146,258	11.7
7	16.3	530,302	83.0	116,529	86,463	29,355	232,347	20.3
8	10.7	245,831	54.4	84,116	61,943	17,577	163,637	19.1
9	7.5	148,242	38.3	40,970	31,665	7,481	80,115	10.6
10	11.9	210,003	60.8	47,971	27,641	8,037	83,649	11.8
11	23.5	1,256,654	119.8	132,350	84,742	22,527	239,619	11.3
12	19.8	1,195,275	101.0	180,791	127,648	34,104	342,543	14.9
13	13.7	221,038	69.6	37,459	24,539	6,150	68,148	10.5
14	22.4	644,639	114.0	39,821	29,272	7,244	76,337	6.9
15	8.9	385,730	45.4	90,963	116,363	27,585	234,912	16.7

Figure 1. A tree-lined street in Los Angeles (top). The Tree Canopy Coverage Assessment (TCC) showing the distribution of TCC across Los Angeles council districts (bottom, from McPherson et al., 2011).

Alongside the TCC data from Figure 1, Census data allows us to describe the demographics of the council districts with highest and lowest canopy coverage: The disparities clearly highlight the inequitable distribution of trees, which is the motivation for this research:

Lowest TCC:

- District 9: runs from the Staples Center to some of the poorest neighborhoods in LA; predominantly Latinx area
- District 15: includes the neighborhoods of San Pedro, Wilmington, Harbor City, Harbor Gateway and Watts-- another challenged community; mostly comprised of Latinx residents

Highest:

- District 5: communities on Westside of Los Angeles from Hollywood to Bel air-- some of the wealthiest neighborhoods
- District 4: situated in [Central Los Angeles](#), the southern [San Fernando Valley](#), and eastern [Santa Monica Mountains](#)-- almost half of residents are Caucasian

Anticipated Results and Impacts

Expected Interviewee Groups:

Tree People
Northeast Trees
Korea-town Youth & Community Center
Los Angeles Beautification Team
LA Conservation Corps

Sample Interview Questions:

- Where have you planted trees in the past and where are you currently planting them?
- What are the biggest challenges of planting trees that your group faces?
- What are you doing besides planting trees to ensure that these neighborhoods see longevity in their trees?

Expected Results

- Based on preliminary interview responses, I suspect that the biggest challenge these planting groups are facing has to do with getting residents to sign up for tree planting on their property.
- Results will most likely show the lack of public education or campaign push to promote trees, thus residents are unaware of the importance of urban trees in their neighborhoods.
- In order to plant trees on residential streets, tree planting groups have to talk one on one with residents and because of that, people in lower income areas could be too busy with several jobs to take the time to talk to these groups, resulting in lower tree canopy coverage.

Significance of Study

A report of the completed research will be sent back to the participating organizations. The results intend to inform future management and tree planting practices in Los Angeles. If the public has more awareness of the challenges that tree planting groups are facing, the groups may receive more credibility for the work that they have done and continue to do around the county. Tree planting groups will be able to use the information to help mitigate the problem of unequal distribution of urban trees in Los Angeles.

Literature Cited

- Adams, Amanda, et al. *Tree Canopy Assessment: Los Angeles Coastal Zone*. Michael Galvin, 18 Nov. 2015. cures.lmu.edu/wp-content/uploads/2015/12/Tree-Canopy-Report-Los-Angeles.pdf.
- McPherson, E., and James Simpson. “Million Trees Los Angeles Canopy Cover and Benefit Assessment.” *Landscape and Urban Planning*, vol. 99, no. 1, 30 Jan. 2011, pp. 40–50.
- Creswell, J.W. & Creswell, J.D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Fifth Edition. Los Angeles, CA: Sage Publications, Inc.

Acknowledgements

I would like to thank my mentor Michele Romolini for all her insights and guidance during this project. Her knowledge of the material as well as her connections to different tree planting groups has made this research project possible. We will continue to work together this semester collecting more data and compiling results.