LABarometer

Shade Report

SHADE AND TREE PLANTING ATTITUDES IN L.A. COUNTY

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Overview

Extreme heat is among the most pressing climate challenges in Los Angeles County, shaping how residents live, work, and move through their daily lives. LABarometer, a population-representative survey of nearly 2,000 L.A. County residents run by the USC Dornsife Center for Economic and Social Research, has been tracking residents' experiences with heat and shade since 2019.

Earlier this year, our Mobility & Sustainability report revealed that over half of residents (53%) feel uncomfortably hot at home during heatwaves and 41% lose sleep on very hot nights. Low-income and Black residents appear especially vulnerable. Nearly 21% of workers, including 31% of low-income workers and 33% of Black workers, spend some of their workday outdoors, and 43% of residents, including 58% of outdoor workers, reported symptoms of heat-related illness this past year.

In this report, we turn our attention from heat to shade, focusing on tree shade questions developed in partnership with ShadeLA, USC Public Exchange, the L.A. County Chief Sustainability Office, the City of L.A. Office of Forest Management, and the U.S. Forest Service Pacific Southwest Research Station.

To contextualize our findings, we computed the percent tree canopy cover in respondents' neighborhoods (defined as census tracts) using data provided by Accelerate Resilience Los Angeles. According to L.A. County's Community Forest Management Plan, canopy cover refers to the "layer of leaves, branches, and stems that cover the ground when viewed from above." A canopy cover percentage is the percent of total land area covered by tree canopy.[1]

By this measure, about 84% of residents live in census tracts with low canopy cover (defined in this report as less than 15% canopy cover), 12% live in tracts with moderate canopy cover (15-24% coverage), and nearly 5% live in tracts with high canopy cover (25%+ coverage). Canopy cover is also lower among non-Hispanic Black and Hispanic residents than it is among non-Hispanic White residents.

Despite these low canopy percentages, nearly half of respondents (48%) believe their neighborhood has enough tree shade for walking on a hot day, with agreement highest among those who are homeowners, college-educated residents, older adults, or Republicans. Perceptions of shade decline sharply when it comes to transit shade, however: only 23% agree there is enough shade at local bus or Metro stops, and nearly half rate the level of transit stop shade as inadequate.

Encouragingly, most Angelenos view trees as a shade solution. When asked to identify the most important benefits of trees, respondents most frequently cited neighborhood beautification, improved air quality, and cooler temperatures. Moreover, 78% support increased government spending on tree planting and maintenance within their own city, and a similarly large share (82%) favor their city investing in tree canopy expansion in high-need areas with low coverage.

Intensity of support does vary across demographic groups. It is weaker, for example, among non-Hispanic Black residents and among those with lower levels of income or education. Support also weakens among college-educated residents who believe their own neighborhood is adequately shaded, approaching levels seen among non-college-educated respondents.

In sum, Angelenos broadly endorse expanding tree shade, but demographic differences in strength of support suggest a need for equity-focused investments and engagement efforts that make the benefits of trees visible and accessible to all communities.

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[1] *Room to Grow: A Community Forest Management Plan for Los Angeles County;* https://lacountycfmp.org/wp-content/uploads/documents/LA_County_CFMP.pdf?version=20241203.

Methodology

This report presents findings from the fifth wave of the LABarometer Mobility & Sustainability survey, with a focus on heat, shade, and support for tree planting and maintenance in Los Angeles County. The LABarometer Mobility & Sustainability survey monitors environmental sustainability, transportation behavior, and climate vulnerability in L.A. County. Since 2020, we have asked respondents to rate the level of shade in their neighborhood and at local transit shops and to report any symptoms of heat exposure. This year, we added questions on tree planting and maintenance developed in partnership with ShadeLA, USC Public Exchange, the L.A. County Chief Sustainability Office, the City of Los Angeles Office of Forest Management, and the U.S. Forest Service Pacific Southwest Research Station.

Survey Design

All LABarometer surveys are fielded to the LABarometer Panel, a probability-based Internet panel of adults living in households throughout Los Angeles County. From 2019 to 2022, LABarometer survey waves comprised four surveys, fielded three to six months apart. The surveys covered the following topics: Livability, Mobility, Sustainability & Resilience, and Affordability & Prosperity.

In 2022, LABarometer moved to a biannual survey frequency and the four surveys were combined and reduced in size to two surveys, one on Livability & Affordability and one on Mobility & Sustainability. The Mobility & Sustainability survey is fielded in January or February of each year, and the Livability & Affordability Survey is fielded in July or August of each year. Field periods range from 8-12 weeks

All LABarometer surveys are fielded in English and in Spanish. To participate in a survey, panel members can use any computer, cell phone, or tablet with Internet access. The majority of panel members have their own Internet access. Panel members who do not have access to Internet are provided with an Internet-enabled tablet to ensure their regular participation in surveys.

Sample Information

Wave 5 of the Mobility & Sustainability survey was fielded from February 19, 2025 – April 27, 2025, and a total of 1,347 Los Angeles County residents participated. Participants were recruited from the LABarometer Panel and the survey completion rate was 72%.

Survey Weights

The method for creating sample weights for the tracking survey follows the general procedure for UAS surveys described in CESR's online methodology documentation. Sample weights are constructed in two steps. First, we calculate a base weight that corrects for unequal probabilities of selection of different households into the UAS. Second, we generate post-stratification weights, which align sample distributions of key demographics, namely gender, race/ethnicity, age, and education, with their population counterparts. Population benchmarks are derived from the Basic Monthly Current Population Survey (CPS). The provided sample weights bring the sample in line with the L.A. County adult population.

About the Panel

The LABarometer Panel is a probability-based, Internet panel of approximately 2,000 adults living in households throughout Los Angeles County. It is a sub-panel of the Understanding America Study (UAS), a national Internet panel of ~15,000 Americans maintained by the USC Dornsife Center for Economic and Social Research. Following UAS procedures, LABarometer panel members are recruited in batches and refreshed through address-based sampling using postal codes. Eligible individuals are all non-institutionalized adults aged 18 and older living in a contacted household in Los Angeles County.

About LABarometer

LABarometer is a research center housed at the USC Dornsife Center for Economic and Social Research (CESR). We conduct basic and applied social science research on issues affecting Los Angeles County residents, with the aim of informing academic research, public discourse, and policy. At the heart of our research is the LABarometer Panel, a probability-based Internet survey panel of approximately 2,000 adults randomly selected from households throughout L.A. County.

LABarometer surveys are fielded to the LABarometer Panel on a biannual basis to monitor social and economic conditions in Los Angeles County. These longitudinal surveys focus on four dimensions of individual and community well-being: livability, affordability, mobility, and sustainability. LABarometer surveys include questions about residents' lives, their attitudes and behaviors, and the challenges they encounter in their communities, filling data gaps on topics ranging from housing insecurity and climate resilience to transportation behavior and the economy.

Tree Canopy Cover

Summary

To provide an objective assessment of respondents' shade conditions, we computed the percent tree canopy cover in respondents' neighborhoods (measured here as census tracts) using data provided by Accelerate Resilience Los Angeles. According to L.A. County's Community Forest Management Plan, canopy cover refers to the "layer of leaves, branches, and stems that cover the ground when viewed from above." A canopy cover percentage is the percent of total land area covered by tree canopy.

Below, we define a census tract with less than 15% canopy cover as a "low canopy" neighborhood; we define a census tract with 15-24.9% canopy cover as a "moderate canopy" neighborhood; and we define to a census tract with 25% or more canopy cover as a "high canopy" neighborhood.

Results: Most residents lack sufficient canopy cover in their neighborhoods. About 84% live in census tracts with low canopy cover, 12% live in tracts with moderate canopy cover, and nearly 5% live in tracts with high canopy cover. Canopy cover is also unequally distributed across the population – lowest among residents who are Non-Hispanic Black, Hispanic, lower educated (HS degree or less), or who live in Supervisor Districts 2 or 4. Race, ethnicity, and supervisorial district remain significant predictors of canopy cover in analyses with demographic controls (see p. 19).

Percent Tree Canopy Cover:

	All
Low	83.9
Medium	11.6
High	4.6
N	1,340

Percent Tree Canopy Cover, by Housing Tenure:

	Rent or lease	Own	Other
Low	84.0	82.6	84.6
Medium	10.6	13.5	15.4
High	5.3	3.9	0
N	701	731	26

Percent Tree Canopy Cover, by Household Income:

	<$30k	$30k-49,999	$50k-99,999	$100k+
Low	88.0	84.0	90.5	79.7
Medium	7.2	10.8	6.1	15.8
High	4.8	5.3	3.5	4.5
N	235	247	200	665

Percent Tree Canopy Cover, by Education:

	HS graduate or less	Some college	BA+
Low	91.8	87.6	73.6
Medium	4.9	8.1	20.4
High	3.3	4.3	5.9
N	226	442	682

Percent Tree Canopy Cover, by Race/Ethnicity:

	NH White	NH Black	NH Asian	NH Other	Hispanic/Latino
Low	72.6	91.7	80.3	80.8	91.6
Medium	20.9	2.2	15.2	15.5	5.3
High	6.5	6.2	4.5	3.8	3.0
N	439	97	206	59	548

Percent Tree Canopy Cover, by Age:

	18-35	36-49	50-64	65+
Low	86.3	85.8	82.8	85.2
Medium	10.2	9.3	14.7	10.6
High	3.5	4.9	2.6	4.2
N	290	313	248	244

Percent Tree Canopy Cover, by Supervisor District:

	1st District	2nd District	3rd District	4th District	5th District
Low	87.5	97.8	76.0	94.0	69.7
Medium	12.5	2.0	22.4	5.9	22.4
High	0	0.2	1.6	0.1	7.9
N	348	293	253	319	280

Percent Tree Canopy Cover, by Political Affiliation:

	Democrat	Republican	Independent	Other
Low	83.5	84.3	85.3	71.1
Medium	13.0	8.7	9.4	26.0
High	3.5	7.0	5.3	3.0
N	768	225	485	52

Perceptions of Shade in Neighborhood

Summary

Respondents were asked, "Please rate how strongly you agree or disagree with the following statement: There are enough trees in my neighborhood to provide adequate shade for walking on a hot sunny day." Response options included Agree Strongly, Agree, Agree Somewhat, Neither Agree Nor Disagree, Disagree Somewhat, Agree, Disagree Strongly. To generate the tables below, response options were collapsed into the following three categories: Agree (Agree Strongly, Agree, Agree Somewhat), Neither Agree Nor Disagree, Disagree (Disagree Strongly, Disagree, Disagree Somewhat).

Results: Nearly half of respondents (48%) agree to some degree that there are enough trees in their neighborhood to provide adequate shade for walking. Agreement is relatively higher among homeowners, residents with a Bachelor's degree or more, residents who are Non-Hispanic White, residents aged 65+, residents of Supervisor District 5, and Republicans. Notably, only age remains a significant predictor of these shade perceptions in analyses with demographic controls (see p. 21).

Enough Tree Shade in Neighborhood, Total Sample:

	All
% Agree	48.0
% Neither	15.4
% Disagree	36.5
N	1,334

Enough Tree Shade in Neighborhood, by Housing Tenure:

	Rent or lease	Own	Other
% Agree	44.7	54.8	23.4
% Neither	18.3	11.7	14.5
% Disagree	37	33.5	62.1
N	592	641	20

Enough Tree Shade in Neighborhood, by Household Income:

	<$25k	$25k-49,999	$50k-74,999	$75k+
% Agree	39.76	51.12	40.46	53.31
% Neither	19.78	19.74	17.57	10.51
% Disagree	40.47	29.15	41.97	36.18
N	233	244	194	662

Enough Tree Shade in Neighborhood, by Education:

	HS graduate or less	Some college	BA+

% Agree	42.5	48.5	53.2
% Neither	21.6	15.1	9.6
% Disagree	35.9	36.4	37.2
N	225	434	675

Enough Tree Shade in Neighborhood, by Race/Ethnicity:

	NH White	NH Black	NH Asian	NH Other	Hispanic/Latino
% Agree	55.4	38.4	44.6	49.4	45.5
% Neither	9.6	27.2	12.9	18.1	18.3
% Disagree	35.1	34.4	42.5	32.5	36.2
N	437	97	201	57	541

Enough Tree Shade in Neighborhood, by Age:

	18-35	36-49	50-64	65+
% Agree	43.4	46.8	48.6	56.7
% Neither	20.7	15.3	15.2	7.9
% Disagree	36	38	36.2	35.4
N	310	418	353	250

Enough Tree Shade in Neighborhood, by Supervisor District:

	1st District	2nd District	3rd District	4th District	5th District
% Agree	44.9	45	49.2	47.3	53.4
% Neither	17.5	18.3	12.9	13.4	15.6
% Disagree	37.6	36.8	37.8	39.3	31.1
N	297	254	211	279	246

Enough Tree Shade in Neighborhood, by Political Affiliation:

	Democrat	Republican	Independent	Other
% Agree	48.4	56.9	43.3	41.1
% Neither	13.5	12	19.9	15.9
% Disagree	38.1	31.1	36.7	43
N	671	200	407	44

Perceptions of Shade at Neighborhood Bus/Metro Stops

Summary

Respondents were asked, “Please rate how strongly you agree or disagree with the following statement: The bus and/or Metro tops in my neighborhood are well-shaded.” Response options included Agree Strongly, Agree, Agree Somewhat, Neither Agree Nor Disagree, Disagree Somewhat, Agree, Disagree Strongly. To generate the tables below, response options were collapsed into the following three categories: Agree (Agree Strongly, Agree, Agree Somewhat), Neither Agree Nor Disagree, Disagree (Disagree Strongly, Disagree, Disagree Somewhat).

Results: Perceptions of shade adequacy at public transit stops are considerably lower than perceptions of neighborhood shade adequacy, with only 23.3% of respondents agreeing and 47.5% disagreeing to some degree that there is sufficient shade at the bus or Metro stops in their neighborhood. Disagreement is especially pronounced among Democrats relative to other political groups and among residents of Supervisor District 3 relative to other residents.

Enough Shade at Nearest Bus/Metro Stops:

	All
% Agree	23.3
% Neither	21.2
% Disagree	47.6
% Not applicable	8
N	1,334

Enough Shade at Nearest Bus/Metro Stops, by Housing Tenure:

	Rent or lease	Own	Other
% Agree	25.4	21.9	8.6
% Neither	20.7	20.6	30.1
% Disagree	49.8	44.6	61.3
% Not applicable	4	12.8	0
N	593	640	20

Enough Shade at Nearest Bus/Metro Stops, by Household Income:

	<$30k	$30k-49,999	$50k-99,999	$100k+
% Agree	26.1	18.3	22.6	24.3
% Neither	21.1	27.4	21.2	17.9
% Disagree	47.9	46.7	50.2	45.5
% Not applicable	4.9	7.6	6	12.4
N	283	195	360	495

Enough Shade at Nearest Bus/Metro Stops, by Education:

	HS graduate or less	Some college	BA+
% Agree	22.5	24.8	23.2
% Neither	21.5	22.3	20.1
% Disagree	47.1	47.5	48.1
% Not applicable	8.9	5.4	8.7
N	224	435	675

Enough Shade at Nearest Bus/Metro Stops, by Race/Ethnicity:

	NH White	NH Black	NH Asian	NH Other	Hispanic/Latino
% Agree	18.6	26.3	26	19.9	25.4
% Neither	20.2	30.7	18.6	34.2	20.4
% Disagree	48	41.3	47.4	31.6	49.2
% Not applicable	13.2	1.7	8.1	14.3	5
N	437	97	201	58	540

Enough Shade at Nearest Bus/Metro Stops, by Age:

	18-35	36-49	50-64	65+
% Agree	22.6	21.7	25.2	24.1
% Neither	23.5	21.2	18.2	21.5
% Disagree	48.1	50.6	48.9	40.1
% Not applicable	5.8	6.6	7.7	14.2
N	310	418	353	250

Enough Shade at Nearest Bus/Metro Stops, by Supervisor District:

	1st District	2nd District	3rd District	4th District	5th District
% Agree	22.6	18.3	23	25.4	26.6
% Neither	22.1	23.7	13.3	17.6	30.1
% Disagree	48.1	51.7	56.2	48.9	32.6
% Not applicable	7.3	6.2	7.6	8.1	10.6
N	297	255	211	278	246

Enough Shade at Nearest Bus/Metro Stops, by Political Affiliation:

	Democrat	Republican	Independent	Other
% Agree	25	26.4	19.9	19.6
% Neither	18.3	22.3	26.1	12.2
% Disagree	50.1	38.4	46.1	67.3
% Not applicable	6.6	12.9	7.9	1
N	670	200	407	44

Support for Tree Planting in High-Need Neighborhoods

Summary

Respondents were presented with the following introductory text: “The general fund is the main budget used to run your city. It is funded by various sources, such as taxes and fees for licenses and permits. This fund supports a number of city services, including public safety, public works, community libraries, housing services, recreation centers, planning and transportation, and administration.” They were then asked, “How much do you support or oppose your local government spending more money from the general fund to increase the amount of tree planting and maintenance **in high-need neighborhoods with low tree cover**?” Response options included Strongly support, Somewhat support, Somewhat oppose, and Strongly oppose.

Results: There is significant support for planting more trees in high-need areas, with 82% of respondents expressing either strong or moderate support. Support is relatively strongest among higher-income residents, residents with a Bachelor’s degree or more, Non-Hispanic White and Asian residents, residents of Supervisor District 3, and Democrats.

Support for Tree Planting in High-Need Neighborhoods:

	All
% Strongly support	34.6
% Somewhat support	47.7
% Somewhat oppose	12.3
% Strongly oppose	5.5
N	1,334

Support for Tree Planting in High-Need Neighborhoods, by Housing Tenure:

	Rent or lease	Own	Other
% Strongly support	36	32.6	25.7
% Somewhat support	46.4	51.3	37.2
% Somewhat oppose	12	10.9	34.4
% Strongly oppose	5.6	5.2	2.6
N	591	641	20

Support for Tree Planting in High-Need Neighborhoods, by Household Income:

	<$30k	$30k-49,999	$50k-99,999	$100k+
% Strongly support	28.8	26.8	36.3	41.7
% Somewhat support	48.2	55.9	46.2	44.4
% Somewhat oppose	14.4	11.2	13.4	10.3
% Strongly oppose	8.6	6.2	4.2	3.7
N	282	195	361	494

Support for Tree Planting in High-Need Neighborhoods, by Education:

	HS graduate or less	Some college	BA+
% Strongly support	25.7	33.5	44.1
% Somewhat support	51.4	48.5	43.5
% Somewhat oppose	15.4	12.2	9.2
% Strongly oppose	7.5	5.8	3.3
N	226	434	674

Support for Tree Planting in High-Need Neighborhoods, by Race/Ethnicity:

	NH White	NH Black	NH Asian	NH Other	Hispanic/Latino
% Strongly support	39.7	13.9	40	32.4	32.8
% Somewhat support	44.4	62.7	48.5	52.2	47
% Somewhat oppose	9.8	14.6	10	9.7	14.4
% Strongly oppose	6.1	8.8	1.5	5.7	5.8
N	437	97	202	58	539

Support for Tree Planting in High-Need Neighborhoods, by Age:

	18-35	36-49	50-64	65+
% Strongly support	31.9	40.6	32.3	31.1
% Somewhat support	49.8	44.3	47.8	50.6
% Somewhat oppose	15.3	7.6	14.1	12.6
% Strongly oppose	3	7.5	5.8	5.8
N	309	419	352	250

Support for Tree Planting in High-Need Neighborhoods, by Supervisor District:

	1st District	2nd District	3rd District	4th District	5th District
% Strongly support	35.2	28.7	43.4	35.2	31.8
% Somewhat support	49.8	50.1	43.5	43.5	49.3
% Somewhat oppose	10.2	18	8	13.1	12.1
% Strongly oppose	4.8	3.2	5	8.2	6.9
N	296	255	211	279	246

Support for Tree Planting in High-Need Neighborhoods, by Political Affiliation:

	Democrat	Republican	Independent	Other
% Strongly support	43.5	21.3	27.2	40.4
% Somewhat support	46.3	47	51.3	37.1
% Somewhat oppose	8	16.3	15.9	20
% Strongly oppose	2.2	15.4	5.5	2.6
N	671	200	406	43

Support for Tree Planting in Own Neighborhood

Summary

Respondents were presented with the following introductory text: "The general fund is the main budget used to run your city. It is funded by various sources, such as taxes and fees for licenses and permits. This fund supports a number of city services, including public safety, public works, community libraries, housing services, recreation centers, planning and transportation, and administration." They were then asked, "How much do you support or oppose your local government spending more money from the general fund to increase the amount of tree planting and maintenance **in your neighborhood**?" Response options included Strongly support, Somewhat support, Somewhat oppose, and Strongly oppose.

Results: Respondents are supportive of spending more money on tree planting and maintenance in their own neighborhood, with 77.6% of respondents expressing either strong or moderate support. The demographic breakdown of support mirrors the breakdown of support for tree planting and maintenance in high-need neighborhoods. Support is relatively strongest among higher-income residents, residents with a Bachelor's degree or more, Non-Hispanic White and Asian residents, residents of Supervisor District 3, and Democrats.

Support for Tree Planting in Own Neighborhood:

	All
% Strongly support	34.1
% Somewhat support	43.5
% Somewhat oppose	17.2
% Strongly oppose	5.3
N	1,334

Support for Tree Planting in Own Neighborhood, by Housing Tenure:

	Rent or lease	Own	Other
% Strongly support	34.5	32.9	48.8
% Somewhat support	42.7	45.5	35
% Somewhat oppose	16.9	16.6	15.6
% Strongly oppose	5.8	5	0.7
N	592	641	20

Support for Tree Planting in Own Neighborhood, by Household Income:

	<$30k	$30k-49,999	$50k-99,999	$100k+
% Strongly support	28.4	29.4	34.6	40.8
% Somewhat support	46.6	49.8	42.2	38.5
% Somewhat oppose	16.5	17.6	17.7	17.1
% Strongly oppose	8.4	3.2	5.5	3.6

N	282	195	361	495

Support for Tree Planting in Own Neighborhood, by Education:

	HS graduate or less	Some college	BA+
% Strongly support	25.9	30.2	44.7
% Somewhat support	46.8	47.4	37.6
% Somewhat oppose	20.7	16.6	14.1
% Strongly oppose	6.6	5.9	3.5
N	225	434	675

Support for Tree Planting in Own Neighborhood, by Race/Ethnicity:

	NH White	NH Black	NH Asian	NH Other	Hispanic/Latino
% Strongly support	36	15.7	42.8	33.1	33
% Somewhat support	38.3	53.5	44.5	41.2	45.2
% Somewhat oppose	19.8	19.7	11.3	11.6	17.1
% Strongly oppose	5.9	11.1	1.4	14.1	4.6
N	437	97	201	58	540

Support for Tree Planting in Own Neighborhood, by Age:

	18-35	36-49	50-64	65+
% Strongly support	32.1	39.8	32.9	29.3
% Somewhat support	44.6	43.3	40.3	46.7
% Somewhat oppose	20.3	11	21.5	16.3
% Strongly oppose	3	5.9	5.3	7.8
N	310	419	352	250

Support for Tree Planting in Own Neighborhood, by Supervisor District:

	1st District	2nd District	3rd District	4th District	5th District
% Strongly support	37.8	27.6	45.9	34.2	26.8
% Somewhat support	45.7	46.8	36.5	42.4	42
% Somewhat oppose	12.1	20.3	14	17.1	24
% Strongly oppose	4.4	5.3	3.7	6.3	7.1
N	297	255	211	278	246

Support for Tree Planting in Own Neighborhood, by Political Affiliation:

	Democrat	Republican	Independent	Other
% Strongly support	41.8	21.9	28.3	35.7
% Somewhat support	41.8	42.4	47	39.8
% Somewhat oppose	14.3	23.4	18.3	22.5
% Strongly oppose	2.1	12.3	6.4	2
N	671	200	406	44

Perceived Benefits of Trees

Summary

Respondents were provided with the following question: “Trees provide a variety of benefits. Understanding which benefits are most important to your community helps the City and its partners know where trees should be planted. In thinking about priorities you have for your neighborhood, which benefits of trees are most important to you? Select up to three answers.” Response options included: Beautify my neighborhood, Encourage outdoor activities, Improve air quality, Reduce noise, Prevent flooding, Provide habitat for wildlife, Reduce crime, Reduce temperatures when it’s hot out.

Results: The three benefits most frequently cited by respondents are neighborhood beautification, improved air quality, and reduced temperatures. These are followed in frequency by wildlife habitat and outdoor activities. Demographic differences are relatively small. Lower-educated and lower-income residents are more likely than higher-educated and higher-income residents to identify crime reduction as an important benefit. Non-Hispanic White residents are more likely than other racial/ethnic groups to cite wildlife habitat as an important benefit. Younger adults aged 18-35 are less likely than older adults to cite neighborhood beautification and more likely to cite outdoor activities as important benefits. Lastly, renters are more likely than homeowners to cite outdoor activity opportunities and crime reduction as important benefits.

Top 3 Benefits of Trees:

	All
% Beautify	54.9
% Outdoor activity	18.5
% Improve air quality	67.8
% Reduce noise	10.1
% Prevent flooding	6.7
% Wildlife habitat	27.4
% Reduce crime	9.1
% Reduce temperature	65.7
N	1,324

Top 3 Benefits of Trees, by Housing Tenure:

	Rent	Own	Other
% Beautify	50.3	62	45.9
% Outdoor activity	18.5	15.6	40.5
% Improve air quality	69.1	68.5	50.8
% Reduce noise	9.3	12.5	0
% Prevent flooding	6.6	6.4	11
% Wildlife habitat	24.4	30.6	24.2

% Reduce crime	10.7	8.1	0
% Reduce temperature	62.4	69	74.4
N	591	641	20

Top 3 Benefits of Trees, by Household Income:

	<$30k	**$30k-49,999**	**$50k-99,999**	**$100k+**
% Beautify	41.8	51.2	55.1	67.3
% Outdoor activity	19.8	20.7	18.3	16.5
% Improve air quality	59.5	64.6	71.9	72.8
% Reduce noise	6.2	8.8	10	13.9
% Prevent flooding	7	6.8	8.5	5.1
% Wildlife habitat	27.2	23.7	26.2	30.5
% Reduce crime	11.7	11.7	10	4.8
% Reduce temperature	59.5	63.9	65.7	71.8
N	281	195	361	495

Top 3 Benefits of Trees, by Education:

	HS graduate or less	**Some college**	**BA+**
% Beautify	46.7	53.6	63.8
% Outdoor activity	19.4	16.2	19.1
% Improve air quality	60.2	71.5	73
% Reduce noise	7.2	9.8	13
% Prevent flooding	5.8	8.5	6.5
% Wildlife habitat	28.5	24	28.5
% Reduce crime	12.4	10.4	4.9
% Reduce temperature	60.2	61.8	73.6
N	225	433	675

Top 3 Benefits of Trees, by Race/Ethnicity:

	NH White	**NH Black**	**NH Asian**	**NH Other**	**Hispanic/Latino**
% Beautify	61.3	59.1	54.5	64.2	49.5
% Outdoor activity	14.3	15.2	16.6	19.2	22.5
% Improve air quality	63	64.9	77.7	60	68.9
% Reduce noise	14.7	3.8	11	3.3	8
% Prevent flooding	4.1	3.6	15.5	5.7	6.3
% Wildlife habitat	35.2	17.8	19.9	28.1	25.8
% Reduce crime	5.5	17.4	8.3	7.2	10.5
% Reduce temperature	71.6	42.8	67.9	59.5	65
N	436	97	201	58	540

Top 3 Benefits of Trees, by Age:

	18-35	36-49	50-64	65+
% Beautify	44.8	56.1	60.5	61.1
% Outdoor activity	23.3	16.2	17.2	16.3
% Improve air quality	70	70.6	66.2	61.8
% Reduce noise	8.8	10	10.4	11.8
% Prevent flooding	8.7	5.2	6.4	6.5
% Wildlife habitat	24.2	25.9	30.4	30.7
% Reduce crime	10.2	9.5	7.9	8.2
% Reduce temperature	65.6	63.1	66.9	68.1
N	310	418	352	250

Top 3 Benefits of Trees, by Supervisor District:

	1st District	2nd District	3rd District	4th District	5th District
% Beautify	50.6	54.8	49	62.1	55.7
% Outdoor activity	19.1	21.7	14.2	15.3	19.2
% Improve air quality	68.1	66.4	75.1	66.9	63.6
% Reduce noise	9.5	8.3	13.9	11	7.3
% Prevent flooding	7.2	8.8	9	3.1	6.8
% Wildlife habitat	23.6	22.6	34.5	22.1	39.1
% Reduce crime	10.5	13.6	4.8	8.3	6.3
% Reduce temperature	71.1	56.8	73.7	66.4	63.2
N	296	255	211	278	246

Top 3 Benefits of Trees, by Political Affiliation:

	Democrat	Republican	Independent	Other
% Beautify	56.4	56.5	51.8	50.2
% Outdoor activity	17.6	13.5	21.5	22.1
% Improve air quality	71.7	66.3	62.9	69.2
% Reduce noise	10.1	11.6	9.4	5.9
% Prevent flooding	7.3	6.4	6.9	0
% Wildlife habitat	28.3	29.7	26.2	21.4
% Reduce crime	7.7	10.4	10.5	7.6
% Reduce temperature	65.2	65.3	64.5	82.4
N	670	199	407	44

Regression Analyses

Tree Canopy Coverage

Summary of Results:

In Table 1 on the following page, we regress percent canopy cover (i.e. the percent of a given census tract covered by tree canopy) on respondent demographic characteristics to identify the demographic predictors of residing in a census tract with relatively higher levels of tree canopy cover.

We use an Ordinary Least Squares (OLS) regression model to estimate the relationship between percent tree canopy cover and respondent characteristics. Coefficients reflect the difference in percent canopy cover between the group in the lefthand column and its comparison, or reference (ref), group, holding all other variables constant. For example, homeowners are compared to renters and non-Hispanic Black residents are compared to non-Hispanic White residents. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Results suggest canopy cover is unequally distributed across racial/ethnic groups and supervisor districts. Non-Hispanic Black and Hispanic residents tend to live in neighborhoods with significantly lower levels of tree canopy cover than non-Hispanic White residents. Meanwhile, residents of Supervisor Districts 3 and 5 tend to live in neighborhoods with significantly higher levels of tree canopy cover than residents of Supervisor District 1.

Table 1: OLS Regression of % Tree Canopy Cover on Respondent Characteristics

This model estimate the relationship between percent tree canopy cover and respondent characteristics. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Respondent Characteristics	**% Tree Canopy**	
Race/Ethnicity (*ref: Non-Hispanic White*)		
Non-Hispanic Black	-1.84**	(0.62)
Non-Hispanic Asian	-0.63	(0.45)
Non-Hispanic Other	-0.81	(0.73)
Hispanic/Latino	-1.28***	(0.38)
Age *(ref: 18-34 years)*		
35-44 years	-0.28	(0.43)
45-54 years	0.08	(0.45)
55-64 years	-0.28	(0.47)
65+ years	0.79	(0.49)
Education *(ref: HS or Less)*		
Some College	0.14	(0.43)
BA+	0.49	(0.45)
Household Income *(ref: <$30,000)*		
$30,000-49,999	0.57	(0.48)
$50,000-99,999	-0.00	(0.43)
$100,000+	0.62	(0.45)
Housing Tenure *(ref: Renter)*		
Homeowner	-0.04	(0.32)
Other	-1.03	(1.11)
Supervisor District *(ref: District 1)*		
District 2	-0.56	(0.44)
District 3	1.90***	(0.46)
District 4	-0.80	(0.42)
District 5	3.43***	(0.45)
Political Affiliation *(ref: Democrat)*		
Republican	-0.55	(0.41)
Independent	-0.38	(0.33)
Other	0.81	(0.80)
Constant	10.00***	(0.66)
Observations		1205
R-squared		0.16

*p<0.05, **p<0.01, ***p<0.001.

Perceptions of Neighborhood Shade

Summary of Results:

In Table 2 on the following page, we regress perceptions of neighborhood shade adequacy (where 0=Disagree Strongly, 1=Disagree, 2=Disagree Somewhat, 3=Neither Agree Nor Disagree, 4=Agree Somewhat, 5=Agree, 6=Agree Strongly, in response to the statement "There are enough trees in my neighborhood to provide adequate shade for walking on a hot sunny day") on respondents' demographic characteristics and neighborhood canopy coverage to identify the demographic and contextual predictors of perceived neighborhood shade adequacy.

We use an Ordinary Least Squares (OLS) regression model to estimate the relationship between perceptions of neighborhood shade adequacy and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 includes respondent demographic characteristics along with percent tree canopy cover as predictors.

For categorial predictors, coefficients reflect the difference in perceived shade adequacy between the group in the lefthand column and its reference (ref) group, holding all other variables constant. For continuous variables (i.e. percent tree canopy cover), coefficients reflect the expected change in perceived shade adequacy associated with a one-unit increase in that variable. A positive coefficient, for example, means an increase in canopy cover is associated an increase in perceptions of shade adequacy. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Results show that across supervisor districts, age is a statistically significant predictor of perceived shade adequacy. Residents age 65+ are significantly more likely than residents age 18-34 to perceive their neighborhood as sufficiently shaded by trees. Neighborhood tree canopy coverage is also positively correlated with perceptions of neighborhood shade adequacy. This confirms that subjective perceptions of tree shade are at least partially related to objective tree shade conditions. That said, Black and Hispanic residents do not differ from non-Hispanic White residents in their perceptions of neighborhood shade adequacy despite living in neighborhoods with objectively lower levels of canopy cover.

Table 2: OLS Regression of Perceived Adequacy of Neighborhood Shade on Respondent Characteristics

The models below estimate the relationship between perceptions of neighborhood shade adequacy and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 includes respondent demographic characteristics and percent tree canopy cover as predictors. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Respondent Characteristics	**Enough Tree Shade in Neighborhood**			
	Model 1		Model 2	
Race/Ethnicity (*ref: Non-Hispanic White*)				
Non-Hispanic Black	-0.12	(0.23)	-0.03	(0.23)
Non-Hispanic Asian	-0.10	(0.17)	-0.07	(0.17)
Non-Hispanic Other	-0.37	(0.27)	-0.33	(0.27)
Hispanic/Latino	-0.20	(0.14)	-0.14	(0.14)
Age *(ref: 18-34 years)*				
35-44 years	0.23	(0.16)	0.25	(0.16)
45-54 years	0.26	(0.17)	0.26	(0.17)
55-64 years	0.16	(0.18)	0.18	(0.17)
65+ years	0.45*	(0.18)	0.41*	(0.18)
Education *(ref: HS or Less)*				
Some College	-0.13	(0.16)	-0.13	(0.16)
BA+	-0.16	(0.17)	-0.18	(0.17)
Household Income *(ref: <$30,000)*				
$30,000-49,999	0.46**	(0.18)	0.44*	(0.18)
$50,000-99,999	0.24	(0.16)	0.24	(0.16)
$100,000+	0.27	(0.17)	0.24	(0.17)
Housing Tenure *(ref: Rent)*				
Own	0.03	(0.12)	0.03	(0.12)
Other	-0.47	(0.41)	-0.42	(0.41)
Supervisor District *(ref: District 1)*				
District 2	-0.01	(0.16)	0.01	(0.16)
District 3	0.21	(0.17)	0.12	(0.17)
District 4	0.13	(0.16)	0.17	(0.16)
District 5	0.26	(0.17)	0.10	(0.17)
Political Affiliation *(ref: Democrat)*				
Republican	0.11	(0.15)	0.13	(0.15)
Independent	0.10	(0.12)	0.12	(0.12)
Other	-0.44	(0.29)	-0.48	(0.29)
% Tree Canopy Cover			0.05***	(0.01)
Constant	3.79***	(0.25)	3.32***	(0.27)
Observations		1,196		1,196
R-squared		0.03		0.04

*p<0.05, **p<0.01, ***p<0.001.

Symptoms of Heat Exposure

Summary of Results:

In Table 3 on the following page, we regress self-reported symptoms of heat exposure (where 0=no symptoms, 1= one or more symptoms) on respondent demographic characteristics and percent canopy cover to identify the demographic and contextual predictors of perceived heat exposure symptoms.

We use an Ordinary Least Squares (OLS) regression model to estimate the relationship between perceptions of any heat exposure symptoms and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 includes respondent demographic characteristics along with percent tree canopy cover as predictors.

For categorial predictors, coefficients reflect the difference in perceived heat exposure symptoms between the group in the lefthand column and its reference (ref) group, holding all other variables constant. For continuous variables (i.e. percent tree canopy cover), coefficients reflect the expected change in reports of heat exposure symptoms associated with a one-unit increase in that variable. A negative coefficient, for example, would mean an increase in tree canopy cover is associated a decrease in reports of heat exposure symptoms. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Results indicate that residents who are non-Hispanic Black, older, or higher income are significantly less likely to report symptoms of heat exposure than residents who are non-Hispanic white, younger, or low-income, respectively (Model 1). Notably, percent canopy coverage is *not* significantly correlated with self-reported symptoms of heat exposure (Model 2). This suggests factors other than neighborhood canopy coverage drive exposure to heat among residents. Alternatively, this result may be related to the timing of data collection, as the survey was fielded February, when temperatures are cooler and the cooling effects of tree shade may be less observable.

Table 3: OLS Regression of Heat Exposure Symptoms on Respondent Characteristics

The models below estimate the relationship between perceptions of any heat exposure symptoms and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 includes respondent demographic characteristics and percent tree canopy cover as predictors. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Respondent Characteristics	**Any Heat Exposure Symptoms**			
	Model 1		Model 2	
Race/Ethnicity (*ref: Non-Hispanic White*)				
Non-Hispanic Black	-0.16*	(0.06)	-0.15*	(0.06)
Non-Hispanic Asian	0.04	(0.05)	0.04	(0.05)
Non-Hispanic Other	0.08	(0.07)	0.08	(0.07)
Hispanic/Latino	0.01	(0.04)	0.01	(0.04)
Age *(ref: 18-34 years)*				
35-44 years	-0.03	(0.04)	-0.03	(0.04)
45-54 years	-0.06	(0.05)	-0.06	(0.05)
55-64 years	-0.09	(0.05)	-0.09	(0.05)
65+ years	-0.12*	(0.05)	-0.13*	(0.05)
Education *(ref: HS or Less)*				
Some College	0.06	(0.04)	0.06	(0.04)
BA+	0.02	(0.05)	0.02	(0.05)
Household Income *(ref: <$30,000)*				
$30,000-49,999	-0.11*	(0.05)	-0.11*	(0.05)
$50,000-99,999	-0.10*	(0.04)	-0.10*	(0.04)
$100,000+	-0.16***	(0.05)	-0.17***	(0.05)
Housing Tenure *(ref: Rent)*				
Own	-0.06	(0.03)	-0.06	(0.03)
Other	-0.01	(0.11)	-0.00	(0.11)
Supervisor District *(ref: District 1)*				
District 2	0.04	(0.04)	0.05	(0.04)
District 3	0.05	(0.05)	0.04	(0.05)
District 4	0.01	(0.04)	0.01	(0.04)
District 5	0.00	(0.05)	-0.01	(0.05)
Political Affiliation *(ref: Democrat)*				
Republican	-0.01	(0.04)	-0.01	(0.04)
Independent	-0.01	(0.03)	-0.01	(0.03)
Other	0.13	(0.08)	0.12	(0.08)
% Tree Canopy Cover			0.00	(0.00)
Constant	0.58***	(0.07)	0.55***	(0.07)
Observations		1,205		1,205
R-squared		0.05		0.05

Standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001

Support for Tree Planting in High-Need Neighborhoods

Summary of Results:

In Table 4 on the following page, we regress support for funding additional tree planting and maintenance in high-need neighborhoods (where 0=Strongly oppose, 1=Somewhat oppose, 2=Somewhat support, and 3=Strongly support) on respondent characteristics, percent tree canopy coverage, heat exposure symptoms, and perceptions of neighborhood shade adequacy to identify the demographic, perceptual, and contextual predictors of support.

We use an Ordinary Least Squares (OLS) regression model to estimate the relationship between support and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 includes respondent demographic characteristics along with percent tree canopy cover, heat exposure symptoms, and perceived neighborhood shade adequacy as predictors. Model 3 includes the same variables as Model 2 along with terms measuring the interaction of perceived neighborhood shade adequacy with respondent household income. Model 4 includes the same variables as Model 2 along with terms measuring the interaction of perceived neighborhood shade adequacy with respondent education.

For categorial predictors, coefficients reflect the difference in support between the group in the lefthand column and its reference (ref) group, holding all other variables constant. For continuous variables (i.e. percent tree canopy cover), coefficients reflect the expected change in support associated with a one-unit increase in that variable. A negative coefficient, for example, means an increase in tree canopy cover is associated a decrease in support for funding additional tree planting in high-need neighborhoods. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Results indicate that, across supervisor districts, residents who are non-Hispanic Black or have a political affiliation of Republican, Independent, or Other are significantly less likely to support additional funding for tree planting and maintenance than those who are non-Hispanic white or Democrats, respectively. College educated (Bachelor's degree or more) residents are significantly *more* likely to express policy support than non-college-educated residents (Model 1).

Once we account for differences in perceived neighborhood shade (Model 2), high household income (>$100,000+) emerges as positively correlated with support as well. Additionally, we find that perceptions of neighborhood shade adequacy are negatively correlated with policy support – meaning, the more satisfied respondents are with the amount of tree shade in their neighborhood, the less likely they are to support tree planting and maintenance in high-need neighborhoods. The effects of tree canopy coverage and self-reported heat exposure are non-significant.

In Model 3, the interaction of perceived shade adequacy with household income is not statistically significant – meaning, the relationship between household income and support for additional government investment in tree planting in high-need neighborhoods does not vary according to respondents' perceptions of neighborhood shade adequacy.

In Model 4, however, the interaction terms are statistically significant. Specifically, the interaction of perceived shade with a college education (Some College or Bachelor's degree or more) is statistically significant and negative, while the direct effect of a college education (Some College or Bachelor's degree or more) on policy support is statistically significant and positive.

This suggests that, among those who perceive inadequate shade in their own neighborhood, college-educated residents are more likely than non-college-educated residents to support additional tree planting and maintenance in high-need neighborhoods. Yet, their support for additional tree planting diminishes if they feel their own neighborhood has adequate shade. Meanwhile, among non-college-educated residents, levels of support remain relatively low regardless of how they perceive their own neighborhood shade environment.

Table 4: OLS Regression of Support for Tree Planting in High-Need Neighborhoods on Respondent Characteristics

These models estimate the relationship between support for additional tree planting and maintenance in high-need neighborhoods and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 adds canopy cover, heat exposure symptoms, and perceived neighborhood shade adequacy as predictors. Model 3 adds terms measuring the interaction of perceived neighborhood shade adequacy with respondent household income. Model 4 adds terms measuring the interaction of perceived neighborhood shade adequacy with respondent education.

Respondent Characteristics	**Support Tree Planting and Maintenance in High-Need Neighborhoods**							
	Model 1		Model 2		Model 3		Model 4	
Race/Ethnicity (*ref: Non-Hispanic White*)								
Non-Hispanic Black	-0.48***	(0.10)	-0.47***	(0.10)	-0.48***	(0.10)	-0.47***	(0.10)
Non-Hispanic Asian	-0.03	(0.07)	-0.03	(0.07)	-0.04	(0.07)	-0.03	(0.07)
Non-Hispanic Other	-0.10	(0.12)	-0.12	(0.12)	-0.13	(0.12)	-0.12	(0.12)
Hispanic	-0.07	(0.06)	-0.07	(0.06)	-0.08	(0.06)	-0.08	(0.06)
Age *(ref: 18-34 years)*								
35-44 years	0.03	(0.07)	0.05	(0.07)	0.05	(0.07)	0.04	(0.07)
45-54 years	-0.05	(0.07)	-0.03	(0.07)	-0.03	(0.07)	-0.03	(0.07)
55-64 years	-0.03	(0.08)	-0.01	(0.08)	-0.01	(0.08)	-0.02	(0.08)
65+ years	-0.05	(0.08)	-0.02	(0.08)	-0.02	(0.08)	-0.02	(0.08)
Education *(ref: HS or Less)*								
Some College	0.08	(0.07)	0.07	(0.07)	0.07	(0.07)	0.66***	(0.17)
BA+	0.21**	(0.07)	0.20**	(0.07)	0.20**	(0.07)	0.53**	(0.16)
Household Income *(ref: <$30,000)*								
$30,000-49,999	0.05	(0.08)	0.08	(0.08)	-0.08	(0.20)	0.07	(0.08)
$50,000-99,999	0.11	(0.07)	0.13	(0.07)	0.26	(0.16)	0.13	(0.07)
$100,000+	0.12	(0.07)	0.14*	(0.07)	0.21	(0.16)	0.15*	(0.07)
Housing Tenure *(ref: Rent).*								
Own	-0.08	(0.05)	-0.07	(0.05)	-0.07	(0.05)	-0.07	(0.05)
Other	-0.28	(0.18)	-0.30	(0.18)	-0.29	(0.18)	-0.29	(0.18)
Supervisor District *(ref: District 1)*								
District 2	-0.03	(0.07)	-0.03	(0.07)	-0.04	(0.07)	-0.03	(0.07)
District 3	-0.02	(0.07)	-0.03	(0.07)	-0.03	(0.07)	-0.01	(0.07)
District 4	-0.05	(0.07)	-0.04	(0.07)	-0.05	(0.07)	-0.03	(0.07)
District 5	-0.01	(0.07)	-0.02	(0.07)	-0.02	(0.07)	-0.00	(0.07)
Political Affiliation *(ref: Democrat)*								
Republican	-0.58***	(0.07)	-0.57***	(0.07)	-0.57***	(0.07)	-0.58***	(0.07)
Independent	-0.28***	(0.05)	-0.27***	(0.05)	-0.27***	(0.05)	-0.28***	(0.05)
Other	-0.12	(0.13)	-0.15	(0.13)	-0.15	(0.13)	-0.16	(0.13)
Percent Tree Canopy			0.01	(0.00)	0.01	(0.00)	0.01	(0.00)
Heat Symptoms			0.07	(0.05)	0.07	(0.05)	0.07	(0.05)
Perceived Shade Adequacy			-0.05***	(0.01)	-0.04	(0.03)	0.03	(0.03)
Perceived Shade X HH Income								
Shade Adequacy X $25,000-49,999					0.03	(0.04)		
Shade Adequacy X $50,000-74,999					-0.03	(0.04)		
Shade Adequacy X $75,000+					-0.02	(0.03)		
Perceived Shade X Education								
Shade Adequacy X Some College							-0.14***	(0.04)
Shade Adequacy X BA+							-0.08*	(0.04)
Constant	3.26***	(0.11)	3.37***	(0.13)	3.33***	(0.16)	3.00***	(0.17)
Observations	1,194		1,194		1,194		1,194	
R-squared	0.12		0.14		0.14		0.15	

Standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001

Support for Tree Planting in Own Neighborhood

Summary of Results:

In Table 5 on the following page, we regress support for funding additional tree planting and maintenance in one's own neighborhood (where 0=Strongly oppose, 1=Somewhat oppose, 2=Somewhat support, and 3=Strongly support) on respondent demographic characteristics, tree canopy coverage, heat exposure symptoms, and perceived neighborhood shade to identify the demographic, perceptual, and contextual predictors of support.

We use an Ordinary Least Squares (OLS) regression model to estimate the relationship between support and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 includes respondent demographic characteristics along with percent tree canopy cover, heat exposure symptoms, and perceived neighborhood shade adequacy as predictors. Model 3 includes the same variables as Model 2 along with terms measuring the interaction of perceived neighborhood shade adequacy with respondent household income. Model 4 includes the same variables as Model 2 along with terms measuring the interaction of perceived neighborhood shade adequacy with respondent education.

For categorial predictors, coefficients reflect the difference in support between the group in the lefthand column and its reference (ref) group, holding all other variables constant. For continuous variables (i.e. percent tree canopy cover), coefficients reflect the expected change in support associated with a one-unit increase in that variable. A negative coefficient, for example, would mean an increase in tree canopy cover is associated a decrease in support for funding additional tree planting in one's own neighborhood. Standard errors (in parentheses) indicate the precision of each estimate. Asterisks denote a statistically significant effect, or a result with a low probability (p) of being due to random chance, where * denotes a probability less than 0.05, ** denotes a probability less than 0.01, and *** denotes a probability less than 0.001.

Results of Model 1 indicate that residents who are non-Hispanic Black, located in Supervisor District 5, or have a political affiliation of Republican, Independent, or Other are significantly less likely to support increased spending on tree planting and maintenance in their own neighborhood than those who are non-Hispanic White, located in Supervisor District 1, or a Democrat, respectively. College educated (Bachelor's degree or more) residents are significantly *more* likely to express support than non-college-educated residents (Model 1).

Perceptions of neighborhood shade adequacy are, again, negatively correlated with policy support (Model 2) – meaning, the more respondents perceive their own neighborhood as adequately shaded, the less likely they are to support funding additional tree planting and maintenance in their neighborhood. The effects of percent canopy cover and self-reported heat exposure are non-significant.

In Model 3, the interaction of perceived shade adequacy with household income is not statistically significant – meaning, the relationship between household income and policy support does not vary according to perceptions of neighborhood shade.

In Model 4, the interaction of perceived shade with Some College is statistically significant and negative, while the direct effect of a college education (Some College or Bachelor's degree or more) on policy support is statistically significant and positive. This suggests that college-educated residents are generally more likely than non-college-educated residents to support additional tree planting and maintenance in their own neighborhood. Yet, among moderately educated residents, support diminishes if they feel the level of shade in their neighborhood is already adequate. Meanwhile, among non-college-educated residents, support remains relatively low regardless of how they perceive their own neighborhood shade environment.

Table 5: OLS Regression of Support for Tree Planting in Own Neighborhood on Respondent Characteristics

These models estimate the relationship between support for additional tree planting and maintenance in one's own neighborhoods and respondent characteristics. Model 1 includes respondent demographic characteristics as predictors. Model 2 adds canopy cover, heat exposure symptoms, and perceived neighborhood shade adequacy as predictors. Model 3 adds terms measuring the interaction of perceived neighborhood shade adequacy with respondent household income. Model 4 adds terms measuring the interaction of perceived neighborhood shade adequacy with respondent education.

Respondent Characteristics	**Support Tree Planting and Maintenance in Own Neighborhood**							
	Model 1		Model 2		Model 3		Model 4	
Race/Ethnicity (*ref: Non-Hispanic White*)								
Non-Hispanic Black	-0.40***	(0.10)	-0.41***	(0.10)	-0.42***	(0.10)	-0.41***	(0.10)
Non-Hispanic Asian	0.09	(0.08)	0.08	(0.08)	0.07	(0.08)	0.09	(0.07)
Non-Hispanic Other	-0.16	(0.12)	-0.20	(0.12)	-0.20	(0.12)	-0.20	(0.12)
Hispanic	0.01	(0.06)	-0.01	(0.06)	-0.02	(0.06)	-0.02	(0.06)
Age *(ref: 18-34 years)*								
35-44 years	0.12	(0.07)	0.14*	(0.07)	0.14	(0.07)	0.14	(0.07)
45-54 years	-0.07	(0.08)	-0.04	(0.08)	-0.04	(0.08)	-0.04	(0.08)
55-64 years	-0.08	(0.08)	-0.07	(0.08)	-0.07	(0.08)	-0.07	(0.08)
65+ years	-0.09	(0.08)	-0.05	(0.08)	-0.05	(0.08)	-0.05	(0.08)
Education *(ref: HS or Less)*								
Some College	0.05	(0.07)	0.04	(0.07)	0.04	(0.07)	0.41*	(0.18)
BA+	0.21**	(0.08)	0.20**	(0.08)	0.20**	(0.08)	0.42*	(0.17)
Household Income *(ref: <$30,000)*								
$30,000-49,999	0.08	(0.08)	0.13	(0.08)	-0.03	(0.21)	0.13	(0.08)
$50,000-99,999	0.07	(0.07)	0.10	(0.07)	0.19	(0.17)	0.10	(0.07)
$100,000+	0.10	(0.08)	0.13	(0.08)	0.27	(0.16)	0.13	(0.08)
Housing Tenure *(ref: Rent)*								
Own	0.00	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)
Other	0.07	(0.19)	0.02	(0.18)	0.04	(0.18)	0.03	(0.18)
Supervisor District *(ref: District 1)*								
District 2	-0.10	(0.07)	-0.10	(0.07)	-0.11	(0.07)	-0.10	(0.07)
District 3	-0.08	(0.08)	-0.06	(0.08)	-0.06	(0.08)	-0.05	(0.08)
District 4	-0.08	(0.07)	-0.07	(0.07)	-0.08	(0.07)	-0.07	(0.07)
District 5	-0.19*	(0.08)	-0.16*	(0.08)	-0.16*	(0.08)	-0.15*	(0.08)
Political Affiliation *(ref: Democrat)*								
Republican	-0.47***	(0.07)	-0.46***	(0.07)	-0.46***	(0.07)	-0.47***	(0.07)
Independent	-0.25***	(0.06)	-0.25***	(0.05)	-0.24***	(0.05)	-0.25***	(0.05)
Other	-0.15	(0.13)	-0.19	(0.13)	-0.19	(0.13)	-0.19	(0.13)
Percent Tree Canopy			-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Heat Symptoms			0.04	(0.05)	0.04	(0.05)	0.04	(0.05)
Perceived Shade Adequacy			-0.08***	(0.01)	-0.07*	(0.03)	-0.03	(0.03)
Perceived Shade X HH Income								
Shade Adequacy X $25,000-49,999					0.04	(0.05)		
Shade Adequacy X $50,000-74,999					-0.02	(0.04)		
Shade Adequacy X $75,000+					-0.04	(0.04)		
Perceived Shade X Education								
Shade Adequacy X Some College							-0.09*	(0.04)
Shade Adequacy X BA+							-0.05	(0.04)
Constant	3.17***	(0.11)	3.49***	(0.13)	3.44***	(0.17)	3.25***	(0.18)
Observations	1,195		1,195		1,195		1,195	
R-squared	0.10		0.14		0.14		0.14	

Standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001.