

Racial Equity and Social Justice (RESJ) Impact Statement

Office of Legislative Oversight

BILL 40-23: TREE CANOPY AND ROADSIDE TREE REQUIREMENTS – FEE REVISIONS

SUMMARY

The Office of Legislative Oversight (OLO) finds the racial equity and social justice (RESJ) impact of Bill 40-23 is indeterminate as there are unknown factors related to the primary beneficiaries for each program affected by the Bill. OLO offers one policy option for Council consideration.

PURPOSE OF RESJ IMPACT STATEMENTS

The purpose of RESJ impact statements (RESJIS) is to evaluate the anticipated impact of legislation on racial equity and social justice in the County. Racial equity and social justice refer to a **process** that focuses on centering the needs, leadership, and power of communities of color and low-income communities with a **goal** of eliminating racial and social inequities.¹ Achieving racial equity and social justice usually requires seeing, thinking, and working differently to address the racial and social harms that have caused racial and social inequities.²

PURPOSE OF BILL 40-23

The County charges permittees a fee for the removal of a tree in the County's right-of-way or for development requiring a sediment control permit.

Under the County's roadside tree law, permittees who remove a roadside tree – a tree located in the County's right-of-way – must pay a fee to the Street Tree Planting Fund, which is maintained by the Department of Transportation (DOT).³ Further, under the County's sediment control laws, any development activity that requires a property owner to acquire a sediment control permit must either plant new shade trees or pay a fee to the Tree Canopy Conservation Account.⁴ In general, a sediment control permit is required if an activity:⁵

- Disturbs more than 5,000 square feet of land including cutting trees;
- Constructs a new primary residential or commercial building; or
- Moves 100 cubic yards or more of earth on or off the property.

The purpose of Bill 40-23 is to change the fee structure for the Street Tree Planting Fund and the Tree Canopy Conservation Account, as the current fees do not adjust for inflation and have been insufficient to cover the actual costs of tree planting and maintenance. For the Street Tree Planting Fund, the proposed fee for removing a tree in the County's right-of-way is \$450 per tree, with a biannual increase based upon inflation. For the Tree Canopy Conservation Account, the proposed fee is \$470 per tree charged to applicants of the sediment control permit, with a biannual increase based upon inflation.⁶

Bill 40-23, Tree Canopy and Roadside Tree Requirements – Fee Revisions, was introduced by the Council on November 7, 2023.

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In October 2022, OLO published a RESJIS for Bill 25-22, Forest Conservation – Trees.⁷ This RESJIS builds on the analysis of the RESJIS for Bill 25-22. Please refer to the RESJIS for Bill 25-22 for more information on government policies and practices creating the climate gap and environmental risk of BIPOC and low-income communities.

TREE COVER AND RACIAL EQUITY

Climate change has far-reaching harmful consequences on public health, community assets, and the economy that will impact all community members in the County.⁸ However, as noted in the County’s Climate Action Plan, BIPOC community members, especially those who are low-income, are disproportionately harmed by climate change and have the fewest resources to respond and adapt to its consequences.⁹

The term “climate gap” refers to the unequal impact that climate change has on BIPOC and low-income communities. As noted by researchers at the University of Southern California, the climate gap means that BIPOC and low-income communities will experience more illness and deaths during extreme heat waves, breathe dirtier air, pay more for basic necessities, and likely have fewer job opportunities.¹⁰ Drivers of the climate gap include racial inequities in housing, education, employment, and healthcare.¹¹ As described in the RESJIS for Bill 25-22, racial inequities driving the climate gap originate from a legacy of government policies and practices – including land theft, slavery, and segregation – that structurally advantaged White people and structurally oppressed and disadvantaged BIPOC.¹²

In urban settings, tree cover plays an important role in mitigating and adapting to the effects of climate change.¹³ Trees also have proven benefits in many other areas, including health, economic development, and education.¹⁴ However research suggests that tree cover is not equitably distributed in BIPOC communities. For instance:

- A study published in 2017 analyzing 40 studies that considered the relationship between urban forest cover and race found evidence of significant race-based inequity in urban forest cover.¹⁵
- A study published in 2021 exploring the relationship between redlining and urban tree canopy in 37 metropolitan areas found that former “D” graded areas, which were mostly inhabited by BIPOC, had on average 23% tree canopy, half the amount of former “A” graded areas (43%), which were characterized by U.S.-born White residents.¹⁶

American Forests – a national non-profit focused on forest conservation – publishes Tree Equity Scores (TES) for 200,000 urban neighborhoods throughout the country.¹⁷ TES factor in the gap between existing tree canopy and the tree canopy goal in individual neighborhoods (Census block groups),¹⁸ and are weighted to prioritize the need for tree planting based on an index that includes the age dependency ratio, unemployment rate, health burden index, heat disparity, percent of people in poverty, linguistic isolation and percent of BIPOC community members in each neighborhood.¹⁹

As a part of the TES effort, American Forests produced data on tree canopy and the tree canopy gap for 166 of 657 neighborhoods in the County. Table 1 provides the average tree canopy and tree canopy gap by the percent of BIPOC community members in 158 of the neighborhoods that have a population greater than zero. The data suggests that, especially relative to neighborhoods where less than 25 percent of community members are BIPOC (or more than 75 percent are White), the majority of BIPOC communities have considerably less tree canopy. Further, in neighborhoods where more than 75 percent of community members are BIPOC, the tree canopy gap is more than two times the tree canopy gap in neighborhoods where more than 75 percent of community members are White.

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Table 1: Average Tree Canopy and Tree Canopy Gap by Percent of BIPOC Community Members in Neighborhoods

Percent BIPOC	Number of Neighborhoods	Average Tree Canopy	Average Tree Canopy Gap
Less than 25%	28	48%	6%
25 to 49%	60	40%	8%
50 to 74%	48	40%	9%
More than 75%	22	32%	14%

Source: OLO Analysis of TES Data, American Forests.

American Forests calculates there are 76 neighborhoods in the County where the TES is less than 80. Table A in the Appendix summarizes the communities in which the neighborhoods are located and the average percent of BIPOC. American Forests estimates that 47,171 trees would need to be planted to get the TES of all neighborhoods in the County to at least an 80.²⁰ The TES County Report provides estimates for the benefits this level of tree planting would generate for carbon sequestration, stormwater runoff, and air quality in the County.

One climate change phenomenon worsened by inadequate tree canopy is extreme heat. The Climate Action Plan recognizes extreme heat as among the County's four largest and growing climate hazards.²¹ Exposure to extreme heat can lead to potentially deadly heat-related illnesses such as heat exhaustion or heat stroke.²² Indeed, heat is the leading cause of weather-related deaths in the U.S.²³ With the support of over 100 volunteers, the County carried out a community heat mapping initiative in August 2022 in coordination with the National Oceanic and Atmospheric Administration (NOAA) to understand where urban heat islands are located in the County.^{24,25} The campaign found that neighborhoods with higher concentrations of impervious surfaces and less green infrastructure – such as green spaces and trees – experienced temperatures up to 10 degrees higher. The campaign further found that BIPOC and low-income communities experienced higher temperatures than other communities the County.²⁶

ANTICIPATED RESJ IMPACTS

Through increasing fees to the Tree Canopy Conservation Account and Street Tree Planting Fund, Bill 40-23 is expected to increase the capacity of County tree planting programs supported through these funds.²⁷

To consider the anticipated impact of Bill 40-23 on RESJ in the County, OLO recommends the consideration of two related questions:

- Who are the primary beneficiaries of this bill?
- What racial and social inequities could passage of this bill weaken or strengthen?

For the first question, OLO considered the various stakeholders that would be impacted by an increase in fees to the Tree Canopy Conservation Account and Street Tree Planting Fund:

- **Applicants to the Tree Montgomery Program,**²⁸ which is funded through the Tree Canopy Conservation Account, will benefit from increased capacity of the program to plant trees. The Tree Montgomery Program does not collect information on applicant race and ethnicity. However, the most recent annual report suggests homeowners are the primary beneficiaries of the program, with 87 percent of trees being planted at single family residences and homeowner's associations.²⁹ Compared to the County average of 66 percent, 75 percent of White households and 77 percent of Asian households are owner-occupied, compared to 52 percent of Latinx households and 46 percent of Black households.³⁰

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- **Community members living in neighborhoods where roadside trees are removed** will benefit from increased capacity for DOT to plant replacement trees within the neighborhood through the Street Tree Planting Fund. OLO was not able to obtain and analyze data on where replacement trees have been planted in the County to understand potential racial disproportionalities in neighborhood-level demographics in the timeframe required for this report.
- **Stakeholders obtaining a sediment control permit or a permit to remove trees in the County's right-of-way,** will face increased costs from higher fees to fund tree planting required in response to these activities. Developers will likely be among the primary stakeholders affected by higher fees. As approximated by business ownership in the construction sector, Census data in Table B (Appendix) suggests White people are largely overrepresented among developers in the DC metro region, while BIPOC are underrepresented.

For the second question, OLO considered the effect this Bill could have on addressing racial disparities in tree cover. Increasing tree canopy in BIPOC communities could help mitigate the disproportionate impact of climate change on BIPOC communities and generate benefits in many other areas for BIPOC community members, including health, economic development, and education. Neither the Tree Montgomery Program nor the DOT street tree planting program considers RESJ metrics – such as neighborhood-level racial, ethnic, and socioeconomic demographics – to prioritize tree planting. Specifically:

- The Tree Montgomery Program plants trees in response to applications from community members and prioritizes tree planting in areas of the County with high development.³¹ Further, according to Tree Montgomery staff, the program is mainly promoted through word-of-mouth as there is not sufficient capacity for more proactive outreach. This could be generating racial disparities among program applicants.
- DOT's street tree planting program prioritizes tree planting in the immediate neighborhood where roadside trees are removed.

OLO finds the anticipated RESJ impact of Bill 40-23 is indeterminate. Available data suggests White and Asian homeowners may disproportionately benefit from tree planting through the Tree Montgomery Program. However, it is unknown to what degree this benefit will be offset by increased costs to developers, who are disproportionately White. Further, potential neighborhood-level racial disproportionalities within DOT's street tree planting program is unknown. Nonetheless, increased capacity to plant trees through either program affected by this Bill is unlikely to meaningfully address racial disparities in tree cover as they do not consider RESJ metrics in prioritizing tree planting.

RECOMMENDED AMENDMENTS

The Racial Equity and Social Justice Act requires OLO to consider whether recommended amendments to bills aimed at narrowing racial and social inequities are warranted in developing RESJ impact statements.³² OLO finds the RESJ impact of Bill 40-23 is indeterminate. As such, OLO does not offer recommended amendments. However, should the Council seek to improve the RESJ impact of this Bill, OLO offers one policy option for discussion and consideration:

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- **Request comprehensive strategy for tree planting in BIPOC communities with regular progress report.** Existing tree planting programs in the County are siloed and their progress is not reported consistently. For instance, while the Tree Montgomery Program provides an annual report documenting their tree planting activity, the DOT street tree planting program does not. Further, there are several other tree planting initiatives outside of these programs that are funded by general operating and grant funds that are documented to varying degrees. To improve RESJ in tree planting programs, the Council could request County departments and offices that are operating tree planting programs to develop a comprehensive strategy and goals for tree planting in BIPOC communities that include consistent metrics and data collection. This could be accompanied by an on-going report demonstrating tree planting progress in BIPOC communities and how each program is contributing to overarching goals.

CAVEATS

Two caveats to this racial equity and social justice impact statement should be noted. First, predicting the impact of legislation on racial equity and social justice is a challenging analytical endeavor due to data limitations, uncertainty, and other factors. Second, this RESJ impact statement is intended to inform the legislative process rather than determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

CONTRIBUTIONS

OLO staffer Janmarie Peña, Performance Management and Data Analyst, drafted this RESJ impact statement.

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APPENDIX

Table A: County Communities containing Neighborhoods with Tree Equity Score of Less than 80

Community	Number of Neighborhoods	Average Percent BIPOC
White Oak	4	96.0%
Fairland	1	89.7%
Montgomery Village	2	83.6%
Germantown	3	83.2%
Aspen Hill	5	83.0%
Glenmont	4	81.5%
Wheaton	10	80.9%
Silver Spring	7	79.6%
Forest Glen	1	74.2%
Clarksburg	4	69.9%
Gaithersburg	12	69.4%
Redland	1	62.2%
Potomac	1	61.7%
No Census Designated Place	3	60.3%
North Bethesda	6	50.1%
Rockville	11	46.3%
Four Corners	1	43.6%
Grand Total	76	70.3%

Source: OLO Analysis of TES Data, American Forests.

Table B: Percent of Population and Construction Business Owners by Minority Business Status, Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area

Minority Business Status	Population	Construction Business Owners (NAICS 23)
Nonminority (White and non-Latinx)	42.3	73.4
Minority (any other race and ethnicity combination other than White and non-Latinx)	57.7	26.0

Source: 2020 Decennial Census (Table DP1) and 2020 American Business Survey (Table AB2000CSA01), Census Bureau.

¹ Definition of racial equity and social justice adopted from “Applying a Racial Equity Lens into Federal Nutrition Programs” by Marlysa Gamblin, et.al. Bread for the World, and from Racial Equity Tools. <https://www.racialequitytools.org/glossary>

² Ibid.

³ [Introduction Staff Report for Bill 40-23](#), Montgomery County Council, Introduced November 7, 2023.

⁴ [Montgomery County Tree Canopy Law FY22 Annual Report](#), Department of Permitting Services and Department of Environmental Protection.

⁵ [Tree Laws, Programs, and Committees](#), Department of Environmental Protection.

⁶ Introduction Staff Report for Bill 40-23

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⁷ [RESJ Impact Statement for Bill 25-22](#), Office of Legislative Oversight, October 4, 2022.

⁸ [Montgomery County Climate Action Plan](#), Department of Environmental Protection, June 2021.

⁹ Ibid.

¹⁰ Rachel Morello-Frosch, et. al., [The Climate Gap: Inequities in How Climate Change Hurts Americans and How to Close the Gap](#), Dornsife Center, University of Southern California, May 2009.

¹¹ Health Equity and Climate Change, [“Climate Change, Health, and Equity: A Guide for Local Health Departments,”](#) American Public Health Association, 2018.

¹² RESJ Impact Statement for Bill 25-22

¹³ Hannah Safford, et. al., [“Urban Forests and Climate Change,”](#) Climate Change Resource Center, U.S. Forest Service, United States Department of Agriculture, August 2013.

¹⁴ [Vibrant Cities Lab](#), USDA Forest Service, American Forests, and National Association of Regional Councils.

¹⁵ Shannon Lea Watkins and Ed Gerrish, [“The Relationship Between Urban Forests and Race: A Meta-Analysis,”](#) Journal of Environmental Management, February 2018.

¹⁶ Dexter H. Locke, et. al., [“Residential Housing Segregation and Urban Tree Canopy,”](#) NPJ Urban Sustainability, March 25, 2021.

¹⁷ [About Tree Equity Score](#), Tree Equity Score, American Forests.

¹⁸ *Tree canopy* refers to the footprint of existing tree canopy when viewed from above—the bird's eye view of tree crowns (leaves, branches and stems). *Tree canopy goal* refers to the minimum percentage of tree canopy required to deliver the requisite benefits of trees to a block group (neighborhood), based on natural biome and building density. *Tree canopy gap* refers to the percent area of a block group that could be planted to reach the neighborhood tree canopy goal. *Block group*, colloquially referred to as a neighborhood, refers to a small geographic area used in the United States Census. From Data Glossary, [Methods & Data](#), Tree Equity Score, American Forests.

¹⁹ Methods, Priority Index, [Methods & Data](#), Tree Equity Score, American Forests.

²⁰ [Tree Equity Score County Report: Montgomery County, MD](#), Tree Equity Score, American Forests.

²¹ Montgomery County Climate Action Plan

²² [Climate Change Indicators: Health Related Deaths](#), U.S. Environmental Protection Agency, Last Updated November 1, 2023.

²³ Nambi Ndugga and Samantha Artiga, [“Continued Rises in Extreme Heat and Implications for Health Disparities,”](#) KFF, August 24, 2023.

²⁴ [Community Heat Mapping in Montgomery County](#), Montgomery County, MD.

²⁵ *Urban heat islands* occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. From [Reduce Urban Heat Island Effect](#), U.S. Environmental Protection Agency, Last Updated October 31, 2023.

²⁶ [“Results of 2022 Montgomery County ‘Urban Heat Island Mapping Campaign’ Document Extreme Heat Impacts on Areas with Less Green Infrastructure,”](#) Press Release, Montgomery County, MD, March 22, 2023.

²⁷ [Climate Assessment for Bill 40-23](#), Office of Legislative Oversight.

²⁸ [Tree Montgomery](#), Department of Environmental Protection.

²⁹ [Montgomery County Tree Canopy Law FY22 Annual Report](#), Department of Environmental Protection and Department of Permitting Services.

³⁰ Housing Tenure, [Table S0201](#), 2022 American Community Survey 1-Year Estimates, Census Bureau.

³¹ Montgomery County Tree Canopy Law FY22 Annual Report

³² Bill 27-19, Administration – Human Rights – Office of Racial Equity and Social Justice – Racial Equity and Social Justice Advisory Committee – Established, Montgomery County Council