# Moving Beyond Skin Colour and Race: Strengthening Ottawa's Tree Score Methodology

## A Proposal to the Environment and Climate Change Committee

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On June 18th 2024, the Environment and Climate Change Committee directed staff to implement the American Forests' Tree Equity Score methodology. At the time, the committee seems not to have been aware of a critical detail: the methodology explicitly uses residents' skin colour and racial classification as one of seven equally-weighted factors in determining where trees should be planted.

Specifically, the current implementation plan will use Statistics Canada's "visible minority" data from the 2021 Census—where Ottawa residents were asked to categorize themselves as "White," "Black," "Arab," and other racial/skin colour options—as a direct input into tree planting decisions.

This report proposes improving the Tree Equity Score methodology by focusing on our shared environmental needs rather than immutable characteristics. By removing the skin colour and race factor while retaining the six socioeconomic and environmental factors, we can create a more effective approach that recognizes each resident's unique circumstances while emphasizing our common aspirations for a healthier urban environment.

## Why the Current Approach Needs Refinement

Ottawa's commitment to effective environmental stewardship deserves an implementation that matches our city's values and unique context. The current scoring methodology presents several challenges:

### Individual Residents Reduced to Categories
The current approach inadvertently suggests that environmental needs are determined by skin colour rather than individual circumstances. When two neighbours with identical incomes, housing situations, and health vulnerabilities receive different prioritization solely based on skin colour or racial classification, we've moved away from seeing the whole person. Ottawa deserves an approach that recognizes the complex, multifaceted nature of each resident's environmental needs.

### Community Division Instead of Collaboration
Environmental challenges like urban heat islands affect entire neighbourhoods regardless of demographic composition. When we embed skin colour and racial categories into environmental decision-making, we risk framing civic improvements as a competition between groups rather than investments in our shared spaces. Ottawa's history shows that our most successful environmental initiatives have been those uniting citizens in collaborative stewardship across all backgrounds.

### Imported Solution for a Canadian Context
The current methodology represents a significant departure from Ottawa's established Urban Forest Management Plan, which has guided our city's forestry decisions effectively without reference to skin colour or race. Before adopting an American methodology designed for cities with different historical contexts, we should consider whether it truly serves Ottawa's unique character and environmental needs.

# Benefits of a Refined Approach

By modifying the tree distribution score to focus solely on environmental and socioeconomic factors, Ottawa can achieve several meaningful benefits:

### Precision in Meeting Environmental Needs
A refined approach responds to actual circumstances rather than demographic assumptions. Factors like income, age, health vulnerability, and heat exposure provide more accurate indicators of where trees will have the greatest positive impact. This ensures resources flow to those with genuine environmental vulnerability, creating more effective outcomes based on verifiable needs rather than proxy categories.

### Environmental Leadership with a Canadian Perspective
Ottawa has an opportunity to demonstrate environmental leadership by developing solutions tailored to our Canadian context. Rather than uncritically importing American methodologies, we can build on our past successes with an approach that respects our city's unique character and environmental priorities. This maintains consistency in our environmental governance while positioning Ottawa as a thoughtful leader in urban forestry.

### Uniting Residents Through Shared Stewardship
Trees and green spaces are community assets that naturally bring residents together across differences. When our environmental initiatives focus on shared benefits rather than group categories, they create opportunities for residents to cooperate on neighbourhood improvement projects. This approach builds a civic identity around our collective responsibility for Ottawa's urban forest, framing environmental improvements as something we achieve together as Ottawans.

### More Effective Use of Limited Resources
The six remaining factors in the Tree Equity Score provide robust, sufficient data to identify high-priority planting areas without introducing potentially divisive elements. This focused approach directs our limited forestry resources where they will have the greatest impact on reducing urban heat islands and air pollution, achieving measurable improvements in our urban forest and climate resilience.

# Implementation Steps

1. Direct staff to modify the Tree Equity Score by removing the skin colour/race variable from the Priority Index.
2. Maintain current data collection and analysis for the remaining variables.
3. Apply the adjusted formula using six factors instead of seven (see appendix for details).
4. Require staff to report back to the committee on implementation progress and outcomes.
5. Develop a communication plan to inform the public about the change, emphasizing transparency and the rationale behind it, highlighting the benefits of a unified approach to urban forestry.

# Recommendation and Path Forward

The Tree Equity Score can be strengthened by removing references to skin colour and race while maintaining its core purpose of identifying high-priority planting areas. This modification aligns with Ottawa's values of community unity and environmental stewardship. By focusing on socioeconomic and environmental factors, we can create a more effective and unifying approach to urban forest management that brings citizens together.

# Appendix: Technical Details and additional considerations

## Technical Implementation

The Tree Equity Score can be modified by adjusting the Priority Index calculation. The current formula, as presented in the American Forests methodology[1], is:

$$E = 0.1 + (1 - 0.1) \cdot \frac{N_1 + N_2 + N_3 + N_4 + N_5 + N_6 + N_7}{7}$$

where $N_1$ through $N_7$ are normalized indicators including the skin colour and race variable. The indicators are:

1. Age: Dependency ratio
2. Employment: Unemployment rate
3. Health: Health burden index
4. Heat Severity: Heat disparity
5. Income: People in poverty
6. Language: Linguistic isolation
7. Race: People of colour

The modified formula would be:

$$E = 0.1 + (1 - 0.1) \cdot \frac{N_1 + N_2 + N_3 + N_4 + N_5 + N_6}{6}$$

This simple adjustment maintains the mathematical integrity of the index while removing the skin colour and race variable.

## Skin colour and race are used in the Tree Equity Score

The Tree Equity Score directly incorporates skin colour and race through its Priority Index. One of the seven equally-weighted variables is the percentage of "people of color" in each neighborhood.

For Ottawa's implementation, staff will use Statistics Canada's "visible minority" data from the 2021 Census. Statistics Canada defines "visible minority" as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour."[2] This definition comes directly from the Employment Equity Act. The Census question explicitly asked Ottawa residents to categorize themselves by skin colour and race:

"Is this person:"

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- Chinese
- Black
- Filipino
- Arab
- Latin American
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
- West Asian (e.g., Iranian, Afghan)
- Korean
- Japanese
- Other group—specify

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[1] American Forests. (2023). Tree Equity Score Methodology. Retrieved November 20, 2024, from https://www.treeequityscore.org/methodology

[2] Statistics Canada. (2022). Visible Minority and Population Group Reference Guide, Census of Population, 2021. Retrieved November 20, 2024, from https://www12.statcan.gc.ca/census-recensement/2021/ref/98-500/006/98-500-x2021006-eng.cfm

This explicit use of skin colour and race-based data in the Tree Equity Score raises important considerations about using immutable characteristics in municipal decision-making.

## Communication with city staff

Over the summer of 2024, I engaged in detailed correspondence with several city staff members regarding the Tree Equity Score implementation. Staff were responsive and helpful in addressing questions and providing additional information. Through these exchanges, we had a productive discussion about the technical and policy considerations.

Staff clarified that while the Tree Equity Score uses Statistics Canada's "visible minority" data, they view this as distinct from directly using skin colour in calculations. Staff indicated they had reviewed the literature and were satisfied that the American Forests Methodology represents best practices. They also emphasized that Council has directed implementation of the American Forests methodology as approved at a public committee meeting. Staff provided academic studies related to neighborhood microclimates and vulnerability to heat stress, and noted their focus is now on implementation rather than methodology revision, given Council's direction.

In response, I provided detailed analysis of the Census "visible minority" question and suggested a straightforward mathematical adjustment that would maintain the core objectives while removing the race and skin colour variable.

## Studies on race and heat vulnerability

Staff provided studies to support the inclusion of "visible minority" data, arguing this population is more vulnerable to extreme heat:

1. Neighborhood microclimates and vulnerability to heat stress: https://keep-dev.lib.asu.edu/system/files/2022-05/microclimates_0_0.pdf

2. Assessing Vulnerability to Urban Heat: A Study of Disproportionate Heat Exposure and Access to Refuge by Socio-Demographic Status in Portland, Oregon: https://www.mdpi.com/1660-4601/15/4/640

3. The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas: https://www.mdpi.com/2225-1154/8/1/12#B21-climate-08-00012

4. Residential housing segregation and urban tree canopy in 37 US Cities: https://www.nature.com/articles/s42949-021-00022-0#Abs1

### Evaluating evidence of causation

To justify using skin colour or race in tree planting decisions, evidence would need to demonstrate a causal mechanism:

1. **Biological mechanism:** Evidence that skin colour directly affects heat stress susceptibility.
2. **Discriminatory practices:** Evidence of race-based housing discrimination in *Ottawa* leading to unequal environmental conditions.

### Analysis of the provided studies

The evidence falls into two categories:

1. **Correlation studies** (Studies 1 and 2): Show statistical relationships but do *not* establish causation.
2. **Historical discrimination studies** (Studies 3 and 4): Demonstrate how discriminatory housing policies in the *United States* created environmental disparities.

While the historical discrimination studies identify valid causal mechanisms, no comparable data has been presented for Ottawa demonstrating a causal relationship between race and heat vulnerability that would justify its inclusion in the Tree Equity Score. Furthermore, other factors, such as socioeconomic status and historical development patterns unrelated to race, could explain any observed correlations.

## Democratic Governance and Local Authority in Policy Implementation

Staff indicated they had reviewed the literature and were satisfied that the American Forests Methodology represents best practices for incorporating equity into tree planting programs.

This appeal to "best practices" raises concerns about democratic governance. In our system, elected officials, not administrative staff, hold the authority to determine how municipal resources are allocated. While staff expertise is valuable, core decisions about resource distribution must remain with Council. Different communities have varying priorities. What works in one jurisdiction may not align with Ottawa's needs and values. By deferring to external "best practices," we risk undermining the principle that citizens, through their elected representatives, should determine how their collective resources are used.

## Americanization of Ottawa, our nation's capital

Recent political rhetoric from American leaders has, at times, suggested a blurring of national identities by implying that Canada could one day be relegated to the status of a 51st state. Each time we uncritically adopt American methodologies—particularly for our national capital—we inadvertently provide ammunition to those who fail to recognize Canada's distinct identity and sovereignty.

The wholesale importation of the American Forests' Tree Equity Score represents more than just a technical decision—it symbolizes a missed opportunity to demonstrate Canadian policy independence. As the seat of our federal government, Ottawa holds special significance in showcasing distinctly Canadian approaches to common challenges. When we directly transplant American methodologies without substantial adaptation to our local context, we reinforce the harmful narrative that Canadian solutions are merely derivatives of American ones.

Ottawa can demonstrate meaningful policy independence by: - Developing a tree planting strategy that builds upon our existing, successful Urban Forest Management Plan - Adapting the useful elements of various approaches while discarding components that conflict with our local values - Creating a methodology that reflects our unique urban landscape, climate considerations, and community patterns

A thoughtfully modified tree planting strategy would stand as a small but significant assertion of Ottawa's determination to chart its own course, making decisions based on local needs and values rather than imported frameworks. This sends a clear message that we value our autonomy in even the most practical aspects of governance, from Parliament Hill's highest offices to the placement of trees in our neighbourhoods.