

MIAMI BEACH

COMMITTEE MEMORANDUM

TO: Public Safety and Neighborhood Quality of Life Committee Members

FROM: Rickelle Williams, Interim City Manager

DATE: June 5, 2024

SUBJECT: **DISCUSSION/UPDATE REGARDING THE TREE PLANTING PILOT PROGRAM IN NORTH BEACH.**

HISTORY:

At the March 20, 2024 Public Safety and Neighborhood Quality of Life Committee (the "PSNQLC" or "Committee") meeting, the Administration presented an update on the tree planting pilot program in North Beach. The Committee unanimously recommended that the Public Works and Environment and Sustainability Departments collaborate on presenting a cost estimate to expand tree planting in North Beach through the use of contractors in areas currently without tree canopy. It was recommended that the update should incorporate visual aids and explore potential collaborations in the form of Public Private Partnerships (PPP). The item is sponsored by Commissioner Kristen Rosen Gonzalez.

ANALYSIS

Tree canopy provides countless benefits that promote environmental health and stormwater management, improve quality of life, and beautify spaces. Lack of shade contributes to the urban heat island effect, which can greatly increase ambient temperatures, especially at night. The 2023 summer alone set many record-high temperatures and extreme heat warnings, and this is expected again in 2024. Unfortunately, certain areas of the City have low tree canopy coverage due to former planning and development approaches that include narrow or non-existent greenspaces in rights-of-way available for planting. Innovation is needed to introduce trees and their benefits to these more established areas of Miami Beach.

The North Beach tree-planting pilot project was approved by the Mayor and City Commission and is located on the northern side of 78 Street, between Byron and Carlyle Avenues. The pilot project included creating triangular tree pits within existing angled parking. This pilot was a new way to introduce much-needed shade without losing parking spaces and maintaining required sidewalk access. Six (6) Satin Leaf trees were planted in the triangular areas. The work was led and completed internally by the Public Works Department in coordination with the Environment and Sustainability Department.

Many lessons were learned that will be valuable for future projects. The following learnings are noted: there were some delays making sure that American Disabilities Action (ADA) space requirements were met for the sidewalk, local residents remain committed to keeping parking spaces, and old underground infrastructure may cause space and repair delays. Ultimately, adding additional greenspace and canopy introduces a broader vision that may include a careful redesign of streets such as reducing lane widths, one-way conversions, or exchanging parking spots for plantable space.

Identifying Additional Pilot Areas

The Administration was tasked with exploring expanding the pilot program and identifying additional locations to plant trees. Due to the dense and impermeable nature of the areas, additional tree pits could be created in the unused triangular space formed when an angled parking spot meets the curb. A scope of work with design specifications has been created, and a request for quotes has been issued in order to determine a cost of construction with a contractor.

As noted during the March 2024 Committee meeting, City staff does not have the capacity to perform this volume of work in-house, which includes: 1) identifying the locations of existing underground infrastructure components; 2) demolition and excavation of pavement and limerock debris to create the tree pits; 3) forming and pouring of D-curb borders around the perimeter of tree pits to prevent planting soil and mulch from washing away and to serve as a wheel-stop to ensure that parking cars don't make contact with the trees; 4) re-striping of the parking spots; 5) supplying and installing the trees; and 5) daily tree watering to establishment. These trees may not thrive over time given the restricted planting space, but can offer some vegetative relief in an otherwise very hot area of the city and maintain the existing streetscape and parking spots.

Planting Details

Additional locations for tree planting within angled parking spaces include the north side of 78th Street, south side of 79th Street, and north side of 80th Street for a total of 40 individual planters to allow for the installation of canopy trees. The angled parking spaces in North Beach were evaluated between 73rd Street and 80th Street and they do not have a constant parking aisle length; the initial pilot project site had some of the longest aisle lengths at 21' and all others are generally equal or much shorter.

The original prototype tree pits (13' x 9.5' x 9.5') were created for soil volume and rooting space to accommodate a medium sized tree. Small trees impede vehicle clearance requirements and create no sidewalk shade while large trees could not survive under the limited soil volume and may end up impacting critical infrastructure in the search for water. Measurements of 45-degree parking spaces between 73rd Street and 80th Street found that only three (3) additional sections were consistent with the original tree pit prototype design and minimum Code aisle length:

- 79th Street between Carlyle Avenue and Byron Avenue
- 79th Street between Byron Avenue and Abbott Avenue
- 79th Street between Abbott Avenue and Harding Avenue

Three additional blocks with the original prototype design is not sufficient to meet the North Beach Tree Planting Project goals. Therefore, the original prototype planter was minimized to a shorter length. The suggestion is a 13' x 8' x 8' planter area which meets the bare minimum planting space for both soil volume and rooting space and maintaining compliance with minimum Code aisle length.

The modified suggested planter size accommodates the following five (5) additional sections, in addition to the three (3) areas complying with the original pilot planter size:

- 78th Street between Dickens Avenue and Carlyle Avenue
- 78th Street between Byron Avenue and Abbott Avenue
- 79th Street between Dickens Avenue and Carlyle Avenue
- 79th Street between Harding Avenue and Collins Avenue
- 80th Street between Carlyle Avenue and Byron Avenue

All other sections cannot accommodate a bare minimum planting area and comply with Code parking aisle length minimum standards. Total street and sidewalk recalibration and construction is required to add trees to all other North Beach sites.

Public Private Partnerships

To increase the tree canopy, planting on private property is essential since 75% of the land on Miami Beach is privately owned. The overall goal to increase the tree canopy from 17% to 22% was adopted by the City Commission through the Urban Forestry Master Plan (the UFMP) in 2020. To engage the community, the Neighborhood Affairs Division can help to reach out to property owners to advise of the coming pilot projects, and also encourage private property owners to plant trees on private property. A tree palette specific to Miami Beach will be provided, and the Environment and Sustainability Department can host a free tree giveaway for the North Beach community using existing funding.

Illustrations

Additionally, the Committee requested illustrations for expanding the tree canopy through the pilot project. The map locations of the additional pilots, photos of the existing pilot, and graphics from the Urban Forestry Master Plan are included in Attachment A and offer descriptive visuals for expanding tree canopy in dense urban areas. They depict the necessary soil volume and dimensions needed for planting street trees considering parking and ADA access, also advise on how to plant trees in a way they are preserved during Neighborhood Improvement Projects that include new utilities and street elevation.

Fiscal Impact Statement

An estimated cost to expand the North Beach tree planting pilot program will be provided at Committee as the initial procurement did not result in any bids.

CONCLUSION:

The Administration is pleased to provide the research, procurement, and estimate to inform the discussion regarding implementation and funding for expanding the tree planting pilot. If the discussion item is approved, the item can be forwarded to the full City Commission for consideration with a potential referral to the Finance and Economic Resilience Committee.

Applicable Area

North Beach

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?

Yes

Does this item utilize G.O. Bond Funds?

No

Strategic Connection

Neighborhoods - Enhance the beautification, physical appearance and cleanliness of neighborhoods.

ATTACHMENTS:

Description	Type
■ Attachment A Tree Planting Pilot North Beach Program Map and Illustrations	Other
■ C4 H Ref PSNQLC Update on Tree Planting Pilot in NoBe	Memo