

MIAMI BEACH

COMMITTEE MEMORANDUM

TO: Finance and Economic Resiliency Committee Members

FROM: Eric Carpenter, City Manager

DATE: November 8, 2024

TITLE: THE FINANCE AND ECONOMIC RESILIENCY COMMITTEE TO DISCUSS THE APPROPRIATE MECHANISM TO FUND A TRANSFORMATIVE TREE CANOPY PROJECT IN TARGETED AREAS THROUGHOUT MIAMI BEACH.

RECOMMENDATION

The Administration recommends the Finance and Economic Resilience Committee discuss the options presented to fund a transformational tree canopy in targeted areas and specifically North Beach.

The Administration also recommends the Committee consider the broader infrastructure plans and critical needs in North Beach, noting the Request for Qualifications for the North Shore D Neighborhood Improvement Project was issued in September 2024. North Shore D is a significant infrastructure project that will include increasing the tree canopy and associated underground infrastructure for tree survivability within its boundaries. It will require major funding resources and be a priority from the staffing capacity perspective. The construction will have some disruption for the community at large and additional projects would need to be carefully coordinated.

BACKGROUND/HISTORY

At the July 24, 2024 Commission meeting this item was referred to the Finance and Economic Resilience Committee to discuss funding for a transformative tree canopy project throughout Miami Beach.

ANALYSIS

A transformative tree planting program for areas in the City that are severely lacking in tree canopy coverage will require an investment in underground systems to allow tree roots to survive. Trees require sound arboricultural planting methods, adequate soil volume, and suspended pavement systems to allow trees the opportunity to thrive over time and grow into mature canopy that will offer shade.

Since the North Shore D Neighborhood Improvement Project will include trees and infrastructure, for the purpose of this agenda item, the North Beach areas of 73rd Street to 87th Terrace were explored. Some North Beach streets and avenues are wide, whereby large significant planter beds could be appropriately designed. However, the vast majority of streets and avenues are narrower requiring the elimination of every third parking space in order to create large planter beds for new trees that support more continuous canopy coverage. Suspended pavement systems would be further required in parking spaces immediately adjacent to the created planter bed. An estimated 600 trees could be planted, but may also require the elimination of more than 350 parking space to make room for the new trees. Note that this estimate did not consider any infrastructure conflicts and pedestrian/traffic lines of sight from private property ingresses and egresses.

Another consideration is the high groundwater table, which is a similar level to the surrounding Biscayne Bay and ocean. Sea level rise may impact the health of trees over time and it will important to utilize innovative techniques and species with saltwater inundation tolerance. The majority of the streets in this area are between 2 ft and 3.2 ft NAVD elevation. By improperly planting trees, the investment may slowly diminish over time and the City would need to spend additional resources on the tree. Trees planted improperly may not grow with vigor, appearing somewhat stunted for the remainder of their lives, as well as being more susceptible to pests and pathogens.

An estimated 600 trees with the appropriate adaptive infrastructure could cost \$15 million at a cost of \$25,000 per tree. Additional options could include planting fewer trees, and/or selecting some areas without the associated infrastructure.

FISCAL IMPACT STATEMENT

\$25,000/tree planter x 600 trees= \$15,000,000. The actual trees planted as a result of this project could be funded by the G.O. Bond program, however the capital project(s) associated with the construction will require a different funding source.

Does this Ordinance require a Business Impact Estimate? (FOR ORDINANCES ONLY)

The Business Impact Estimate (BIE) was published on .

See BIE at: <https://www.miamibeachfl.gov/city-hall/city-clerk/meeting-notices/>

FINANCIAL INFORMATION

CONCLUSION

The Administration recommends a discussion of funding mechanisms available for a program of this magnitude and cost, including the potential for another General Obligation Bond or an increase to the City's PayGo millage rate to fund tree canopy.

Applicable Area

North Beach

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-17?

Yes

Is this item related to a G.O. Bond Project?

Yes

Was this Agenda Item initially requested by a lobbyist which, as defined in Code Sec. 2-481, includes a principal engaged in lobbying? No

If so, specify the name of lobbyist(s) and principal(s):

Department

Environment and Sustainability

Sponsor(s)

Commissioner Kristen Rosen Gonzalez

Co-sponsor(s)

Condensed Title

Ref: FERC - Fund Transformative Tree Canopy Project in Miami Beach. (Rosen Gonzalez)