

NB 11. REFERRAL TO THE FINANCE AND ECONOMIC RESILIENCY COMMITTEE TO DISCUSS THE APPROPRIATE MECHANISM TO FUND A TRANSFORMATIVE TREE CANOPY PROJECT IN TARGETED AREAS THROUGHOUT MIAMI BEACH.

Applicable Area:

# MIAMI BEACH

## COMMITTEE MEMORANDUM

TO: Finance and Economic Resiliency Committee Members

FROM: Eric Carpenter, City Manager

DATE: March 26, 2025

TITLE: REFERRAL TO 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 C4 I (Attachment A) was referred to the Finance and Economic Resilience Committee to discuss funding for a transformative tree canopy project throughout Miami Beach.

At the November 8, 2024 Finance and Economic Resilience Committee (FERC) meeting, the item was not heard.

At the December 20, 2024 Finance and Economic Resilience Committee (FERC) meeting, the item was not heard.

At the January 24, 2024 Finance and Economic Resilience Committee (FERC) meeting, the item was not heard.

At the February 21, 2024 Finance and Economic Resilience Committee (FERC) meeting, the item was not heard.

### **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, for example, 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 ingress 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 be 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) EN



COMMISSION MEMORANDUM

TO:	Honorable Mayor and Members of the City Commission
FROM:	Commissioner Kristen Rosen Gonzalez
DATE:	July 24, 2024
TITLE:	REFERRAL TO 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**

**BACKGROUND/HISTORY**

**ANALYSIS**

Please place on the July 24, 2024 agenda a referral to the and the Finance and Economic Resiliency Committee (the "Committee") to discuss the creation the appropriate mechanism to fund a transformative tree canopy project in targeted areas throughout Miami Beach.

The North Beach tree-planting pilot approved by the Mayor and City Commission 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 Satin Leaf trees were planted in the triangular areas. The work was led and completed internally by the Public Works Department in coordination with Environment and Sustainability. However, staff has been clear that these trees have a lower probability of thriving due to the small root zone.

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 planting methods (sound arboricultural practices) with adequate soil volume and suspended pavement systems allow trees the opportunity to thrive over time and grow into mature canopy that will offer shade. By improperly planting trees or planting in areas not suited for these additions, our return on investment will slowly diminish until the tree ultimately dies and the City spends additional resources removing 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.

I would like the Administration to be prepared to discuss the implementation of a tree canopy program to feature hybrid tree pit/plantings with suspended pavements, including the likely costs and a reasonable timeframe for deployment. In addition, the Chief Financial Officer and other members of his staff should be prepared to make recommendations as to the appropriate mechanism to be used to fund this transformative program.

## **FISCAL IMPACT STATEMENT**

NA

## **Does this Ordinance require a Business Impact Estimate?**

(FOR ORDINANCES ONLY)

If applicable, the Business Impact Estimate (BIE) was published on .

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

## **FINANCIAL INFORMATION**

## **CONCLUSION**

### **Applicable Area**

Citywide

**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?**

No

**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**

Office of Commissioner Kristen Rosen Gonzalez

### **Sponsor(s)**

Commissioner Kristen Rosen Gonzalez

### **Co-sponsor(s)**

### **Condensed Title**

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