

MIAMI BEACH

COMMITTEE MEMORANDUM

TO: Members of the Neighborhood and Quality of Life Committee
FROM: Alina T. Hudak, City Manager
DATE: September 20, 2021

SUBJECT: **DISCUSSION REGARDING THE FEASIBILITY OF UNDERGROUND TUNNELS TO ALLEVIATE SURFACE LEVEL TRAFFIC CONGESTION.**

HISTORY

This item, sponsored by Commissioner Steven Meiner, was referred at the July 28, 2021 City Commission meeting to the Neighborhood and Quality of Life Committee for discussion.

ANALYSIS

Road tunnels are defined by the American Association of State Highway and Transportation Officials (AASHTO) as enclosed roadways with vehicle access that is restricted to portals regardless of type of the structure or method of construction. Road tunnels are feasible alternatives to cross a water body or traverse through physical barriers such as mountains, existing roadways, railroads, or facilities; or to satisfy environmental or ecological requirements. In addition, road tunnels are viable means to minimize potential environmental impact such as traffic congestion, pedestrian movement, air quality, noise pollution, or visual intrusion; to protect areas of special cultural or historical value such as conservation of districts, buildings or private properties; or for other sustainability reasons such as to avoid the impact on natural habit or reduce disturbance to surface land.

Given the challenges with constructing or expanding roadway and transit facilities in an urbanized environment and the increasing complexity and constraints of constructing and maintaining above-ground transportation infrastructure, there has been an increase in the use of tunnels for transportation systems in countries all over the world. The City of Fort Lauderdale, for example, has recently accepted an unsolicited bid from Elon Musk's Boring Company to build an underground transportation system under Las Olas Boulevard from its downtown Brightline Station to Las Olas Oceanside Park.

At its July 22, 2021 meeting, the Miami-Dade Transportation Planning Organization (TPO) adopted a resolution, sponsored by City of Miami Mayor Francis Suarez, authorizing the TPO to prepare a comprehensive study to evaluate advancements in tunneling technology that may provide accelerated project delivery and/or lower cost mobility options in Miami-Dade County. Pursuant to this resolution, the TPO is currently undertaking a feasibility study that will research current and emerging innovative technologies in the tunnel industry that could be applicable to future transportation projects in Miami-Dade County. The study will research tunnel construction costs per mile and operating and maintenance costs and requirements. According to the TPO staff, the results of this study could also provide useful information and alternatives to advance the implementation of projects in the Strategic Miami Area Rapid Transit (SMART) Plan. The

proposed Beach Corridor linking Miami Beach and Downtown Miami via the MacArthur Causeway is one of six rapid transit corridors in the County's SMART Plan. The TPO expects to receive a draft feasibility report from its consultant in approximately six months.

City of Miami Beach Transportation and Mobility Department staff is tracking the progress of the TPO's ongoing Tunnel Feasibility Study and will provide an update to the Neighborhood and Quality of Life Committee once the draft report is completed and staff has had an opportunity to review.

CONCLUSION

This information is being presented to the Neighborhood and Quality of Life Committee for discussion.

DS
JRG

ATH/LS/JRG

Applicable Area

Citywide

Is this a Resident Right to Know item?

No

Does this item utilize G.O. Bond Funds?

No

Strategic Connection

Mobility – Address Traffic Congestion

Attachments:

N/A

Legislative Tracking

Referral C4A from July 28, 2021 Commission Meeting

Sponsored (If Applicable)

Commissioner Steven Meiner