

Beach Corridor Rapid Transit Project Evaluation

January 15, 2020

City of Miami Beach

Summary of Analysis and Findings



Agenda

- July 2019 – City Council Resolution
- Analysis Process
- Findings and Recommendations



July 2019 City Council Resolution

- Key Elements
 - Direct, seamless, one seat ride to Miami Beach from an integrated mobility hub in the City of Miami such as the Miami Central Station/Overtown Transit Village
 - The construction of multi-modal hub within the City of Miami Beach
 - A flexible, non-intrusive technology that can operate at-grade within Miami Beach and above-grade on the MacArthur Causeway
 - Prohibits gambling establishments in connection with the Beach Corridor Project
 - Accommodates the proposed Miami Beach 5th Street Pedestrian Bridge



Analysis Process

- Reviewed County's Draft RFP for Beach Corridor Trunk Line
- Evaluated environmental documents and presentations
 - Capital Cost Memo – November 4, 2019
 - Existing and Future Traffic – November 5, 2019
 - Alton Road Tech Memo – November 7, 2019
 - Sustainability Memo – November 7, 2019
 - Operations and Maintenance Memo – November 19, 2019
 - Executive Summary – November 26, 2019
 - Ridership Report – December 2019
- Analyzed Project Costs
- Ridership for Each Alternative



Findings

- Options did not have comparable connectivity
 - Monorail – serves only the trunk line with other modes serving north-south
 - APM - Transfer at proposed Herald Plaza station
 - BRT - connects to a regional multimodal hub and the Miami Beach Convention Center
 - LRT – connects Wynwood/Design District to Miami Beach Convention Center as a one-seat ride but does not connect to regional hub in Miami
- Passenger Capacity at 5-minute headways (passengers/hour/each direction)
 - LRT: 2,880 passengers
 - APM: 2,400 passengers
 - Monorail: 2,140 passengers
 - BRT: 1,200 passengers
- Resilience – all technologies can be designed and constructed to the appropriate elevation for the life of the asset



Findings

- Ideally, LRT with an extension to Overtown Transit Village connects to the Miami Beach Convention Center and a regional hub in Miami
 - According to the County, this does not appear to be viable given policy and technical constraints
- BRT offers a more complete system and opportunity for one seat ride to serve more residents of Miami Beach
 - This alternative provides slowest travel times and the fewest riders
- Express APM provides a 13 minute one-seat ride from/to Government Center and 5th/Washington
 - Other service options are being developed with transfers at different locations
 - Requires bus or trolley investment in Miami Beach at 5th/Washington
- Monorail did not meet many of the City's needs
 - It only connects Herald Plaza to 5th/Washington



Recommendations

- Recommend LRT with an Extension to OTV/Virgin MiamiCentral
 - Extension to Overtown Transit Village/Virgin MiamiCentral would greatly increase ridership while providing a one seat ride to Miami Beach
 - This has higher passenger capacity than the other technologies, and no transfers if connected to OTV/Virgin MiamiCentral
 - Flexible technology that can operate at-grade and above grade and be expanded within Miami Beach
- However, if LRT is not technically feasible as proposed above,
- Recommend Express APM since it connects hub-to-hub between Government Center and 5th/Washington – with the following commitments from the County:
 - The Miami Beach bus service will be robust, meeting the needs of both workers and visitors in frequency, connections, fare transfers, fares, and service area, and operated by Miami-Dade County
 - Hours of operation for the entire system will meet the shift changes of hospitality work force as well as needs of residents and visitors



