



Better connectivity:

Investments in public transit and sustained growth in passenger air traffic bolster connectivity in Miami-Dade

Transit is a critical component of Miami-Dade's dynamism for use by commuting residents and tourists. Miami-Dade is the Gateway to Latin America for people as well as cargo, receiving more international flights from Latin America than any other U.S. city. Increasingly, visitors are becoming permanent residents, straining its transportation system. Although Miami-Dade offers significant and varied means of transportation, a challenge for the county has become managing operational costs, which can be as high as \$1.5 million daily, according to the Miami Herald, while facilitating growth and addressing the costly traffic congestion. With transit as a top priority for all stakeholders, local leaders and business community members have continued to invest and collaborate on solutions to keep Miami-Dade moving, whether its cargo arriving at PortMiami or visitors on the upcoming Brightline train system.

■ **Improving public transit**

To ease highway congestion, a \$70-million Tri-Rail expansion to downtown Miami is scheduled for April 2016. With funding from various sources—including the county, the City of Miami and the Downtown Development Authority (DDA)—it is part of several projects improving Miami-Dade's ease of transportation. Alternatively, the

proposed Bus Rapid Transit (BRT) system along four primary Miami corridors garnered support from county officials and local leaders based on successes in Cleveland, Ohio and Bogota, Colombia, and would be a fractional cost compared to train system expansion. Whereas the Orange Line Metrorail expansion to Miami International Airport (MIA) cost \$506 million, a BRT system covering the same 2.4-mile route would be \$150 million.

Advocates have also pointed to the success of the shuttle bus and circulator routes, which, according to Miami Commissioner Francis Suarez, averaged over 360,000 monthly riders with service in 27 of the county's municipalities in November 2015. Suarez noted this success led to the decision to double the program's size in 2016. Metrorail added a pilot express route in December 2015, providing service between Dadeland South and Palmetto to Brickell and downtown. Despite concerns over raised tolls and development cost overages, Miami-Dade approved expansion of circulator routes and Metrorail stations in November 2015 and is promoting more transit-oriented development (TOD) to incentivize residents and tourists to utilize public transit.

■ **Goals for local transportation**

The Miami-Dade Transit (MDT) 10 Ahead Transportation

TRANSPORTATION OVERVIEW

Development Plan, published in August 2015, outlined short-term and long-term goals for improving the reliability, safety and convenience of Miami-Dade's Metro-rail, Metromover and Metrobus services, serving almost 1.5 million monthly riders. According to the report, \$1.12 billion worth of fully funded projects, as well as \$87 million in partially funded projects, will start or finish before 2025. These projects add an estimated annual operating cost of \$15.24 million. With over \$1 billion in funded projects, MDT is seeking financing for over \$750 million in unfunded projects between 2016 and 2025. Funded projects include a \$22-million bus route linking Dolphin Station to Downtown via an intermodal terminal, \$37 million worth of bus upgrades with new stations, WiFi and GPS tracking and a \$51-million Golden Glades intermodal terminal in northern Miami-Dade. Changes to the Miami-Dade government organization are aimed at easing investment and promoting TOD.

■ **New director, new direction**

In 2015, Miami-Dade County Mayor Carlos Gimenez combined public works and transportation under a new Transportation and Public Works Department and appointed Alice Bravo as its director. The department is tasked with maintaining roads and operating public transit with the hope that a holistic approach will allow for collaboration between transit route operators and transportation providers, both public and private. Part of this new direction was unveiled at the 2015 Transportation Summit held by the Citizens' Independent Transportation Trust (CITT), which highlighted four themes, including demand for greater public-private partnerships (PPPs) to fund improvements. An emphasis on TOD, securing project investment and diversifying transportation options were other conference themes. Addressing short-term development goals feeds into longer-term goals of reducing congestion and promoting greater ridership across the county's public transportation resources.

■ **Reflecting state strategies**

Miami-Dade's emphasis on intermodal stations and stronger inter-regional connection, such as the Brightline rail system connecting Central and South Florida, fits into a state-level strategy. In early 2016, speaking with the Jacksonville Business Journal, Florida Department of Transportation (FDOT) Secretary Jim Boxold highlighted the need for agency collaboration and the effective use of technology, instead of just increasing access, as key to reducing congestion. Florida's government has committed to a \$10-billion-per-year transportation budget—supplemented by billions provided by a federal highway bill approved in December 2015. As of August 2015, Brightline



America's love affair with the car grew from important societal developments. For baby boomers, the automobile represented access and social mobility. Getting a license meant freedom. Today, the car is increasingly becoming a hindrance to freedom.

What sets Brightline apart is that we are heavily invested not only in the idea of transit-oriented development but also in owning and operating a major component of the transportation resource as well. Almost everywhere else, the real estate component is the purview of the private sector entity, and transportation the purview of a public sector entity; we are invested in both. Individually, they represent robust businesses, but combined, one leverages the other, giving us a position nobody else has replicated. Our approach is decidedly private sector, different for example, from New York's subway, which is necessarily public. This allows us to focus on profitability and serving clients, rather than maximizing ridership by keeping prices low at a profit loss.

South Florida is ideal for the Brightline train service. Historically, city development in Florida occurred along rail lines that have been maintained for the past 120 years, creating distances too long to drive comfortably and too short to fly efficiently. We want riders to be able to tap into existing and emerging modes of transportation to increase accessibility throughout South Florida. When we started, services like Uber and city bike-share programs were not around, but since then, have grown immensely and we are finding ways to connect with these. Meanwhile, in developing our stations, we focus on variety, which means diverse uses of space—whether office, retail or entertainment. Looking ahead, multi-modal transportation development will continue to present more growth opportunities.

Michael Reininger
President, Brightline,
 Brought to you by All Aboard Florida.

■ TRANSPORTATION OVERVIEW

was authorized to receive \$1.75 billion in state funding, signaling a state commitment to multi-modal transportation and intrastate connectivity.

Tourism, an essential economic driver to the state and Miami-Dade, exceeded records with over 105 million tourists in 2015. Increasingly, tourists prefer to drive due to the sub-\$2-a-gallon gas prices, stressing Florida's congested roads. Brightline President Michael Reininger tells Invest: Miami that tourists seeking easier access between Orlando and South Florida present a major market for the train.

■ Handling inner-city traffic woes

Miami-Dade is also improving transportation by diversifying modes of transportation—be they bus, rail, car or even biking—as well as increasing access points via multi-modal development to promote alternative and non-driving transportation. In Miami-Dade, according to driving intelligence firm INRIX, average time spent in traffic increased from 28 hours in 2012 to 37 hours in 2014. Traffic is an inconvenience, causing employee tardiness and dissuading consumers from going out; a May 2015 Miami Herald survey found 70 percent of surveyed business people believed traffic hurt local business.

With a growing population and a tourism boom, the state and county are ensuring transportation access. Though the county operates 800 buses with more than 95 routes, a Miami Herald examination of 27,000 complaints found an unreliable schedule accounted for 44.5 percent of them. Residents have cited long travel times as incentives to drive. At a November 2015 government event—during which local transportation officials introduced improvement plans—Miami Commissioner Francis Suarez said daily work commute ridership on public transit is 12 percent, approximately 80 percent of city residents preferring their personal vehicles.

■ MDX initiatives

Joining citywide efforts to reduce traffic congestion, the user-funded Miami-Dade Expressway (MDX) announced on August 3, 2015, it was seeking community input for its Strategic Master Plan. In partnership with the Miami-Dade Metropolitan Planning Organization, MDX has proposed development for multi-modal park-and-ride facilities serving as rail platforms and offering rail services. Other options explored by MDX include express bus routes to support metro bus services.

Local politicians are backing a plan to use 25 percent of MDX revenues, combined with auto tag renewals, to fund public transportation. The idea, originally proposed by County Commissioner Xavier Suarez, would issue \$1.2 billion in bonds to address congested corridors including parts of Northwest 27th Avenue, U.S. 1, Baylink and State

Road 836. In 2015, MDX instituted open-road tolls and raised prices, contributing to an "A" rating from credit firm Fitch. MDX reported in December 2015 that revenue for the last quarter exceeded projections by 5.5 percent, but Executive Director Javier Rodriguez warned the monthly average of \$20 million may not be sustainable.

■ Expansions and updates to rail systems

To relieve inter-county congestion, the Tri-Rail is expanding to downtown, connecting Broward and Miami-Dade. Slated to begin operation in early 2017, the expansion is expected to cost \$70 million—of which the state is expected to provide \$20 million. Following local and state development strategies, the expanded stops, such as slated Brightline hub MiamiCentral, are being built as multi-modal and TOD sites. This expansion is part of a larger set of developments, including service to MIA, which began April 2015. In July 2015, County Commissioner Esteban Bovo indicated the expansion will cost \$102 million and could be operated by either Tri-Rail or Metrorail pending usage negotiations with rail owners CSX.

Baylink, a proposed light-rail connecting downtown to Miami Beach, has lingered in the development phase since the 1980s, but garnered renewed interest when French firm Alstom offered to pay for a \$148-million 5-mile portion of the total \$532-million 15-mile system in exchange for a 35-year operational contract. In December 2015, the Miami Beach Commission authorized the development and commenced development assessments. Alstom estimates a daily ridership of 23,000 along the 5-mile route, and officials have stated it could be linked later to a downtown system as originally proposed.

■ Expanding air networks

MIA serviced a record 44.3 million passengers in 2015, compared to almost 41 million in 2014. The 8.3-percent increase was most felt in the over 11-percent surge in domestic travelers. International travel grew approximately half of this rate at 5.5 percent—hindered by Latin America's economic downturn. Over 450 aviation companies in Miami-Dade provide about 21,500 jobs with an average wage of \$71,740, according to The Beacon Council. MIA data estimates a \$33.7-billion economic impact with related jobs accounting for almost 25 percent of county employment.

Following a strategic plan laid out in MIA's \$6.4-billion Capital Improvement Program, over \$1.6 billion, of a permitted \$1.9 billion, has been issued in bonds to pay for MIA infrastructure improvements, including a fourth runway, 4 million square feet of terminal space and 130 new gates. Another financial tool authorized in February 2016 allows for quick capital generation via a commer-

Invest:

Miami 2016

An in-depth review of the key issues facing Miami-Dade's economy featuring the exclusive insights of prominent industry leaders

cial paper program authorized for up to \$200 million in short-term notes for a five-year period. Approved infrastructure enhancements include a \$32-million contract with Florida Power and Light (FPL) Services to upgrade utilities and save over \$40 million in energy and water spending and a \$65-million expansion of Concourse E to accommodate American Airline's increased traffic. Concourse H is slated for a \$63-million renovation—using local, state and federal funds—to accommodate the world's largest passenger craft, the A380.

MIA's service by seasoned companies and newcomers has grown at MIA. In October 2015, Turkish Airlines started daily nonstop flights between Istanbul and Miami, and British Airways unveiled A380 flights and twice daily flights to London. Air France announced seasonal A380 flights set to last through March 2016. SWISS expanded weekly flights from seven to 11. Budget airline Frontier began flights to Las Vegas in October 2015 and newcomer VivaColombia began twice daily service to Medellin, Colombia in December 2015.

Historically a Latin America-focused hub, MIA is expanding its Asian travel market. Though MIA has a China Airlines cargo route, there is no nonstop passenger flight to East Asia. With total passenger growth between Asia and Miami at 3.6 percent since 2009, considerably below yearly total averages, creating growth is a challenge MIA hopes to address. As of early 2016, MIA officials were in talk with China Airlines to establish nonstop flights to Taiwan. Expanding its service to Latin America, MIA will likely offer commercial flights to Cuba as the island nation and the U.S. formally re-established air service on February 16, 2016. American Airlines, JetBlue, United Airlines and other airlines have expressed interest in submitting flight proposals to the U.S. Department of Transportation with American specifically mentioning MIA.

In 2014, the Federal Transportation Department ranked MIA as third for small business development due to added local business presence. Promoting local economic investment, MIA announced negotiations in early 2016 with Chef Creole and Jackson Soul Food to expand its restaurant selection and provide visitors a Miami-based culinary experience. Other user-focused improvements include adoption of the Global Entry kiosk entry customs program, expediting entry for U.S. citizens, and improved connectivity through the Tri-Rail. In addition, Tri-Rail is developing an app to provide instant train location updates using GPS.

■ **Funding new initiatives**

CITT oversees the 2002 People's Transportation Plan and manages the \$250 million generated annually by the half-penny tax. Created to fund local planning and



Marilyn DeVoe
Vice President,
American Airlines

Two years ago, American Airlines merged with US Airways, becoming the largest airline in the world. Since then, our efforts have been centered on becoming the greatest airline in the world for our customers, employees, stakeholders and partners.

Miami International Airport (MIA) is our third-busiest hub, following Dallas/Fort Worth and Charlotte, and our largest hub for international flights. We continued to pursue growth in this vibrant city. Just last year, we added six new destinations from MIA: San Antonio, Austin, Kansas City, Salt Lake City, Barranquilla, Colombia and Monterrey, Mexico. But our growth is not just measured by the number of flights and destinations we serve; it is also seen in the number of widebody aircraft—that is, double-aisled planes—we operate at MIA. Each widebody added to our hub has a significant economic impact, contributing, on average, 16 new pilots and 45 flight attendants.

As the largest airline operating at MIA, accounting for roughly 70 percent of traffic and servicing a high volume of international passengers, it is more

important than ever to ensure our processes are streamlined. Technology is playing a key role, from online check-in, to the free mobile passport app that allows U.S. and Canadian citizens to be granted clearance within four seconds of arriving at U.S. Customs. American's crewmembers are provided with Global Entry, which further eases the effect of our people on the Customs and Border Protection system. We are also working to create more exit lanes and recently began connecting international baggage, thus easing the flow for international customers arriving to or transiting through MIA.

MIA remains important to American's present and is key to our future success. Apart from its strategic location, what makes Miami unique is the supportive, collaborative spirit of the government and the business community. In the past couple of decades, American Airlines and the Greater Miami area have both experienced incredible growth. And, looking ahead, we see a promising future for both.

■ TRANSPORTATION OVERVIEW

development transportation initiatives, it is intended to funnel transit taxes to local municipalities. Instead, the tax has struggled to cover operational transit costs due to a cost-service deficit wherein the \$1 million generated in fares every three days fails to cover the daily \$1.5-million operational cost in 2015, raising criticism of the tax. Local leaders have recommended charging for the Metromover—free since 2002—siphoning MDX revenues and returning \$81 million commandeered by Miami-Dade in 2008 to address deficits and allow the Transportation Trust to alleviate transit woes. Another 2015 proposal includes allowing public services like the Metromover to be privately operated, with the hope of saving money and perhaps generating profitability.

Local leaders also want to expand PPP projects, allocating \$250,000 in the county's 2016 budget for PPP consultants to help fund infrastructure development and maintenance. Although the county relies on federal, state and local revenue to fund transportation developments, it is embracing private sector collaboration. An example is the \$34-million 7th Avenue Transit Village—located on 7th Avenue and 62nd Street—a multi-modal, mixed-use development providing I-95 and bus route access as well as apartments and community spaces. Brightline, a largely private endeavor with limited government funding, is an example of multi-modal, mixed-use spaces that create small neighborhoods with retailers, residences and offices near transportation hubs—Tri-Rail and Metrorail—promoting city services, thus increasing ridership and reducing congestion.

Another major change in which PPPs can play a major role is in the bottom-up design of projects. Rather than relying on FDOT to bring project proposals to Miami-Dade, allowing local firms to design and recommend advancements would increase private-sector innovation, community involvement and government responsiveness. To control future project costs, Mayor Gimenez has considered expanding PPP funding by allowing developers access to property taxes along new routes.

■ Looking ahead

Miami-Dade's strength as a trade hub and tourist destination comes with a cost. Local leadership and residents are reluctant to accept new taxes in light of controversies surrounding the half-penny tax. Instead, leaders want to expand the role of PPPs and attract industry experts while pursuing inter-agency planning and operational collaboration—changes likely to create investment opportunities in real estate, technology and project financing. Miami-Dade's congestion is deleterious to its economy, but with proposals like the BRT, light-rail and regional rail connections, its transit situation is poised for change. ■



In 2015, Embraer celebrated its 36th year in South Florida. Embraer's arrival in Florida was our first step toward globalization by establishing our U.S. presence. The U.S. was the most important aviation market at the time, and North America continues to be the strongest global market for Embraer aircraft. We arrived with a vision to become a major player in global aerospace and are now the highest aggregate value exporter in Brazil, a traditional commodities exporter.

For us, 2015 was filled with milestone achievements, notably a record sales order book value of \$22.9 billion and the highest delivery volume of business and commercial aircraft in five years. Last year, Florida was key to the 10th anniversary of our executive jets business, launched in 2005 as a pillar of our diversification strategy. Since 2011, we have produced over 130 executive jets, valued at over \$1 billion, in Florida. Most of these jets operate in the U.S., but we have also exported aircraft from Florida to 12 other countries. In 2013, we established a production facility for our defense and security business in Florida, and last year, it achieved its primary goal of delivering the first light-attack aircraft to the U.S. Air Force for Afghanistan.

To sustain global competitiveness, investment in innovation, research and development, new technologies and process enhancements.

Our corporate presence in South Florida is critical to our business development activities across the world. Over the last three decades we have witnessed Miami's evolution from a hub of the Americas to a global platform for international business. As more businesses, industries and aviation companies recognize Miami's key role in the global market, we will see more customers for commercial and business aircraft in our community.

Gary J. Spulak
President, Embraer Aircraft Holding, Inc.