

October 5, 2010  
Agenda Item No. 12B1

MIAMI INTERNATIONAL AIRPORT

# SMP 2015-2050

GENERAL TAMPA EXECUTIVE AIRPORT • ORLA LOCKE EXECUTIVE AIRPORT • HOMESTEAD GENERAL AVIATION AIRPORT • DADE COLLIER TRAINING AND TRANSITION AIRPORT

## STRATEGIC AIRPORT MASTER PLANNING STUDY

FOR MIAMI-DADE COUNTY'S SYSTEM OF AIRPORTS

MIA BASELINE ACTIVITY FORECASTS, DERIVATIVE DATA AND  
FLEET MIX PROJECTIONS - RESULTS SUMMARY  
ACCEPTANCE REPORT FOR THE BOARD OF COUNTY  
COMMISSIONERS

OCTOBER 5, 2010



MIAMI-DADE AVIATION DEPARTMENT



MIAMI INTERNATIONAL AIRPORT



## Background

The current Master Plan for MIA resulted in the CIP currently underway. The Master Plan was initiated in 1991 and adopted in 1994. It focused on airport needs for the 1990-2010 timeframe.

An Aviation System Plan Update was commissioned in 1996 and completed in 1998, but was never adopted.

A Strategic Terminal Planning Study was requested by the BCC. The Study was initiated in 1995 and completed in 1997. It focused on airfield and terminal development strategies for the 2010-2040 timeframe.

## Background

Statewide Master Plan for Airports and Airports Master Plan for the State of Florida

- In late 2005, the need for a strategic airport master plan study, focusing primarily on MIA but also considering the complementing and reliever roles of the County's general aviation airports was identified. Pursuant to this identification of need, the following events transpired:
- May 2006 – Notice to Professional Consultants was issued through the Office of Capital Improvements (OCI)
  - September 2006 – recommended Consultant was identified by OCI and the appointed Selection Committee
  - March 2007 – contract with the recommended Consultant was approved by the BCC
  - September 2007 – funding commitment from the FDOT for 50 percent of the study cost was secured
  - July 2008 – first Joint Participation Agreement (JPA) from the FDOT for funding the initial study phase was received



Metropolitan Area  
Airport System  
Strategic Master Plan  
2010-2014

The Strategic Master Plan (SMP) will focus on the following:

- A strategic plan for MIA and the County's general aviation system of airports, focusing on airport roles and positioning to capture existing or anticipated opportunities in the market
- Identify and assess strategies for responding to the needs of MIA from 2015 through 2050, while also providing guidance to address the immediate needs within the 2010-2014 time frame
- Positioning the County's airport system to serve:
  - Projected growth in demand
  - Airline service and industry trends
  - Continued enhancements in customer service
- Balancing capital expenditures for asset expansion and modernization needs within the County's financial framework and meeting performance targets



## Desired Study Outcomes

The Strategic Master Plan (SMP) will produce the following:

- A Strategic Plan for MIA and the General Aviation Airports that considers various demand and growth scenarios through the 2050 timeframe. The Strategic Plan will outline airport roles and present concept plans for the airport system that represent long-range options for the optimization of each airport
- A Master Plan and ALP Update for MIA that outlines facility or operational needs and responsive solutions for the planning horizon (defined by the 2015-2035 timeframe) based on the activity forecasts and alternate demand scenarios considered
- Revisions (if necessary) to the recently approved Airport Layout Plans for the general aviation airports to reflect facility or operational improvements that may be needed within the planning horizon



# Study Approach

Baseline forecasts form the basis for analyses undertaken in Phases 2, 3 and 4.

Multi-phase approach aligning with FDOT funding disbursements:

<p><b>PHASE 1A</b></p> <ul style="list-style-type: none"> <li>Study Design</li> <li>Stakeholder Surveys</li> <li>Baseline Forecasting Analysis</li> </ul>		<p><b>PHASE 1B</b></p> <p><b>Initiation of MIA Master Plan Update</b></p> <ul style="list-style-type: none"> <li>Inventory/Data Collection</li> <li>Identification of Immediate Needs</li> <li>Market Assessment</li> <li>Demand Scenario Analysis</li> </ul>		<p><b>PHASE 2</b></p> <p><b>MIA Master Plan Update:</b></p> <ul style="list-style-type: none"> <li>Capacity Assessment</li> <li>Identification of Facility and Operational Needs</li> <li>Non-airline revenue sources</li> </ul> <p><b>Initiation of Long-Range Strategic Plan:</b></p> <ul style="list-style-type: none"> <li>Initial Airport Asset Optimization Analysis</li> </ul>		<p><b>PHASE 3</b></p> <p><b>MIA Master Plan Update:</b></p> <ul style="list-style-type: none"> <li>Airport and System Improvement Alternatives</li> <li>Environmental Screening: Preliminary Financial Feasibility Screening</li> </ul> <p><b>Long-Range Strategic Plan:</b></p> <ul style="list-style-type: none"> <li>Strategic Positioning and Demand Allocation Strategies</li> <li>Long-Range Airport Concept Plans</li> </ul>		<p><b>PHASE 4</b></p> <p><b>Implementation Planning</b></p> <ul style="list-style-type: none"> <li>CIP Programming</li> <li>Preliminary Plan of Finance</li> <li>Airport Layout Plans Set</li> </ul>	
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## Goals (preliminary)

Provide a structure as well as policy and decision process to guide long-term development and respond to air transportation needs in the region given a dynamic and uncertain industry and economic environment

Preserve and enhance MIA's role as an international gateway

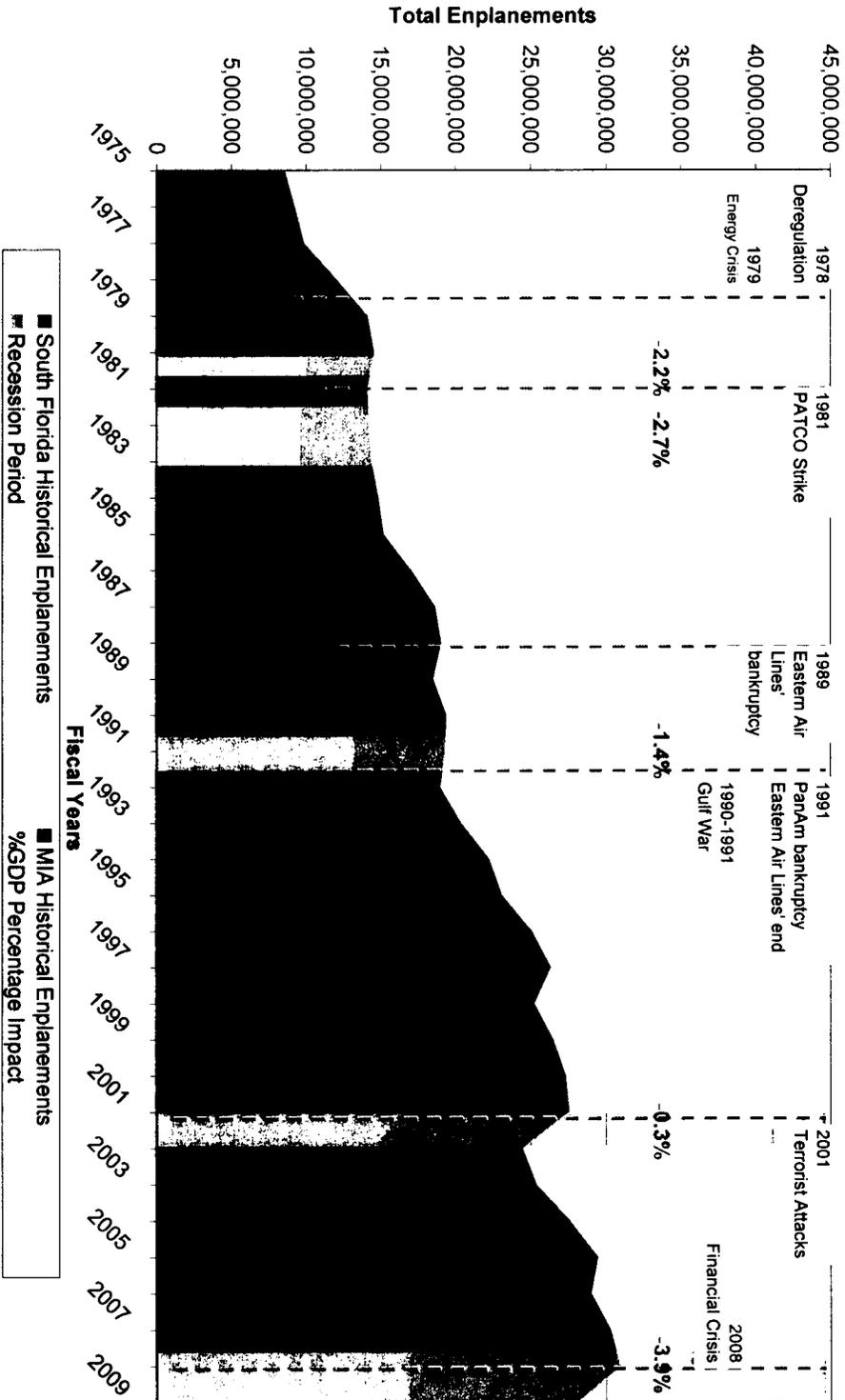
Seek opportunities that continue to enhance customer service, as well as the efficient and timely movement of passengers and goods through the airport system

Support growth in aviation and non-aeronautical services and revenues within the airport system



# Historical Traffic in South Florida and Recessions/Events History

Prepared by: Ricondo & Associates, Inc.  
 1989 Master Plan: FAA Terminal Area Forecast, December 2009.  
 Sources: MDAD, November 2010; PBI Website, June 2010.



AAGR SF: 3.5%

AAGR Miami: 3.1%

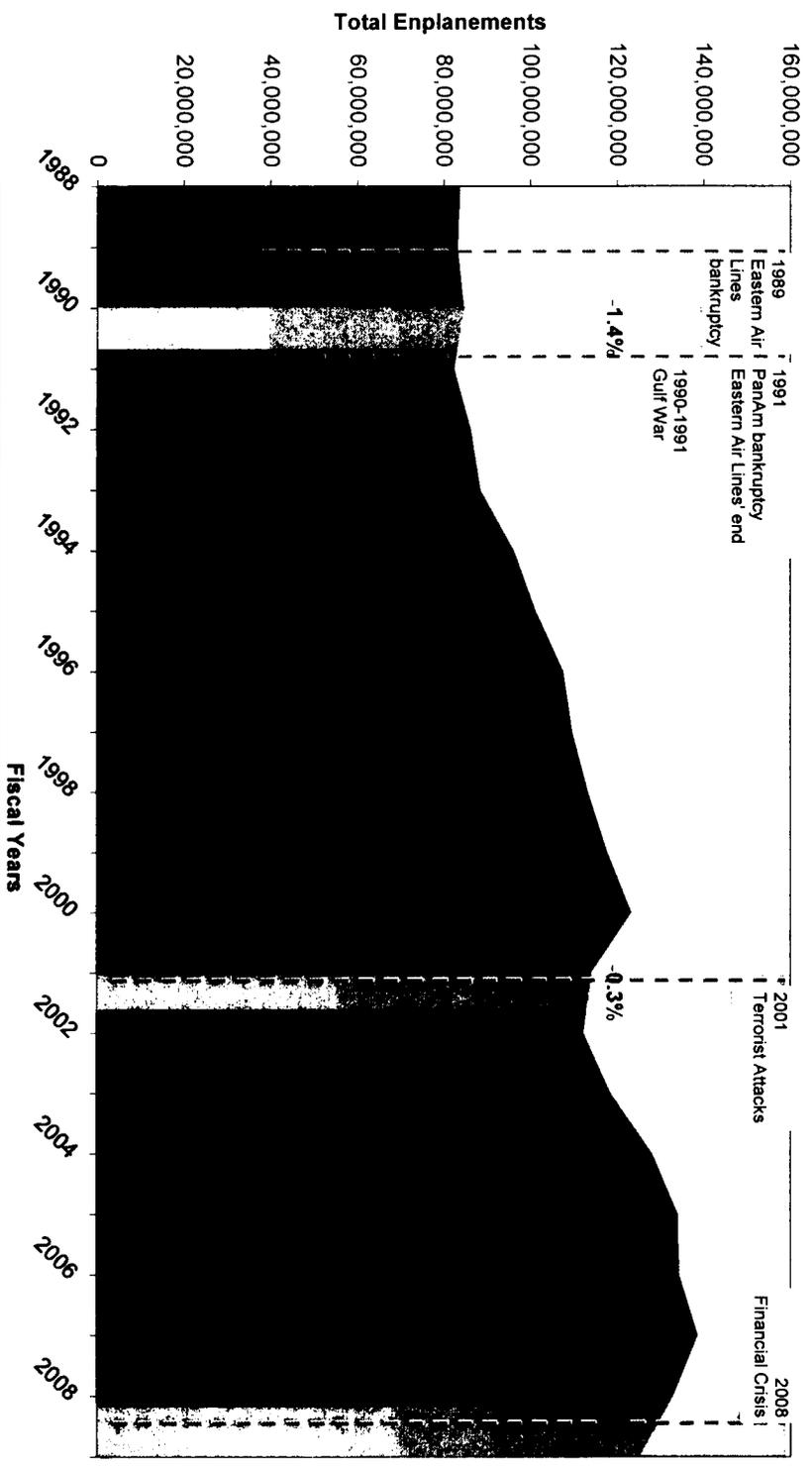
Notes: 1) South Florida includes FLL, PBI and MIA. 2) AAGR stands for Average Annual Growth Rate.  
 Sources: MDAD, November 2010; PBI Website, June 2010; PBI Website, June 2010; PBI Website, June 2010; PBI Website, June 2010.  
 1989 Master Plan: FAA Terminal Area Forecast, December 2009.  
 Prepared by: Ricondo & Associates, Inc., June 2010.

■ South Florida Historical Enplanements  
 ■ MIA Historical Enplanements  
 ■ Recession Period  
 ■ %GDP Percentage Impact



# Historical Traffic in the U.S. and Recessions/Events History

State of Florida Department of Transportation  
 Florida Department of Transportation  
 Bureau of Planning and Economic Development  
 1111 North West 17th Avenue, Room 300  
 Tallahassee, Florida 32304-3000  
 Phone: 904.487.3000  
 Fax: 904.487.3001  
 Email: [planning@fdot.com](mailto:planning@fdot.com)

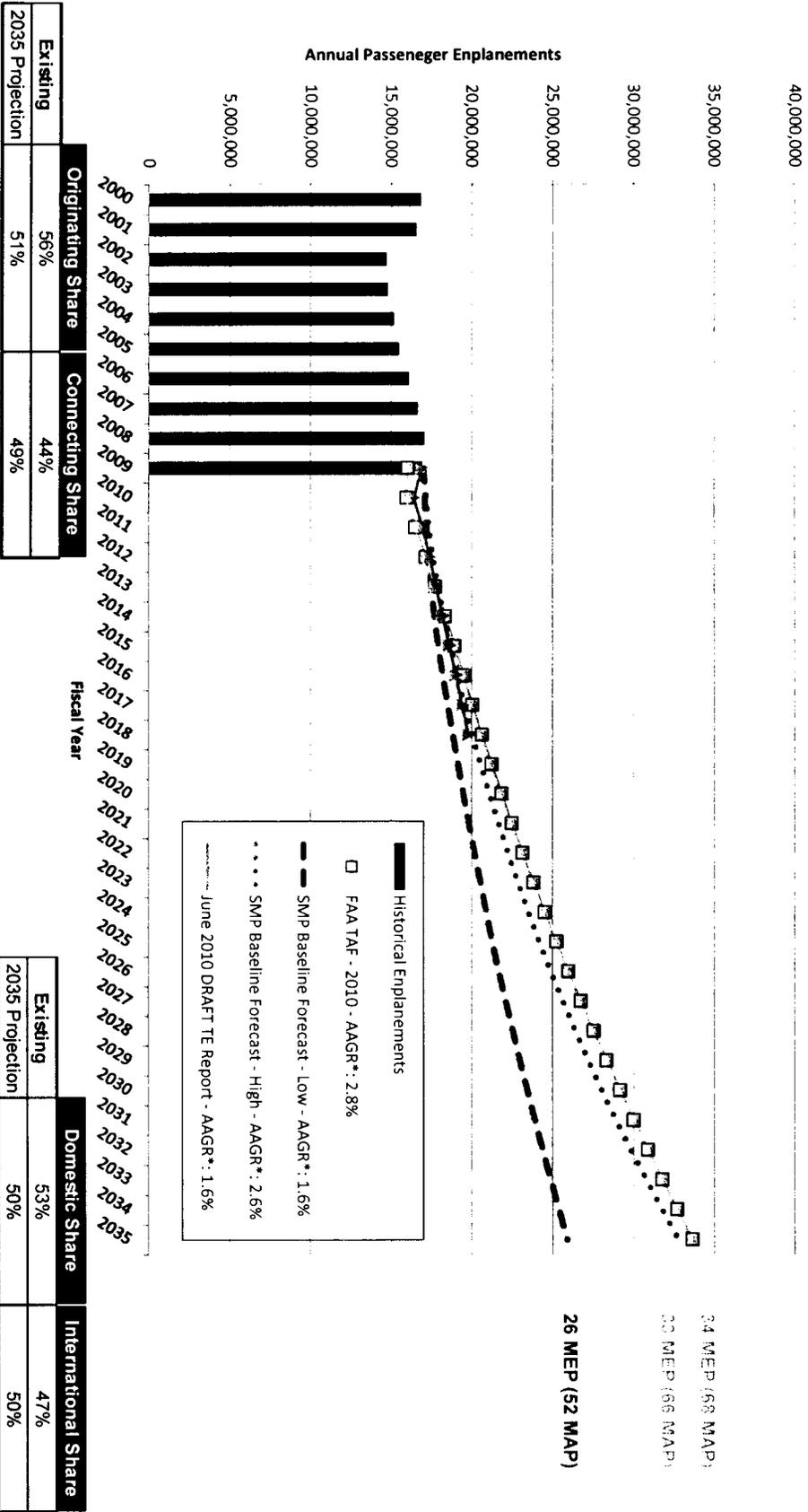


Note: 1) U.S. Historical Enplanements shown represent one fifth of total revenue enplanements for graphical purposes.  
 Sources: MDAD, November 2010; FDOT Website, Data and Forecast, June 2010; Air Transport Association and U.S. DOT for National Statistics, June 2010.  
 Prepared by: Ricordo & Associates, Inc., June 2010.



# Summary of SMP Air Carrier Enplanements (Departing Passengers) Forecast

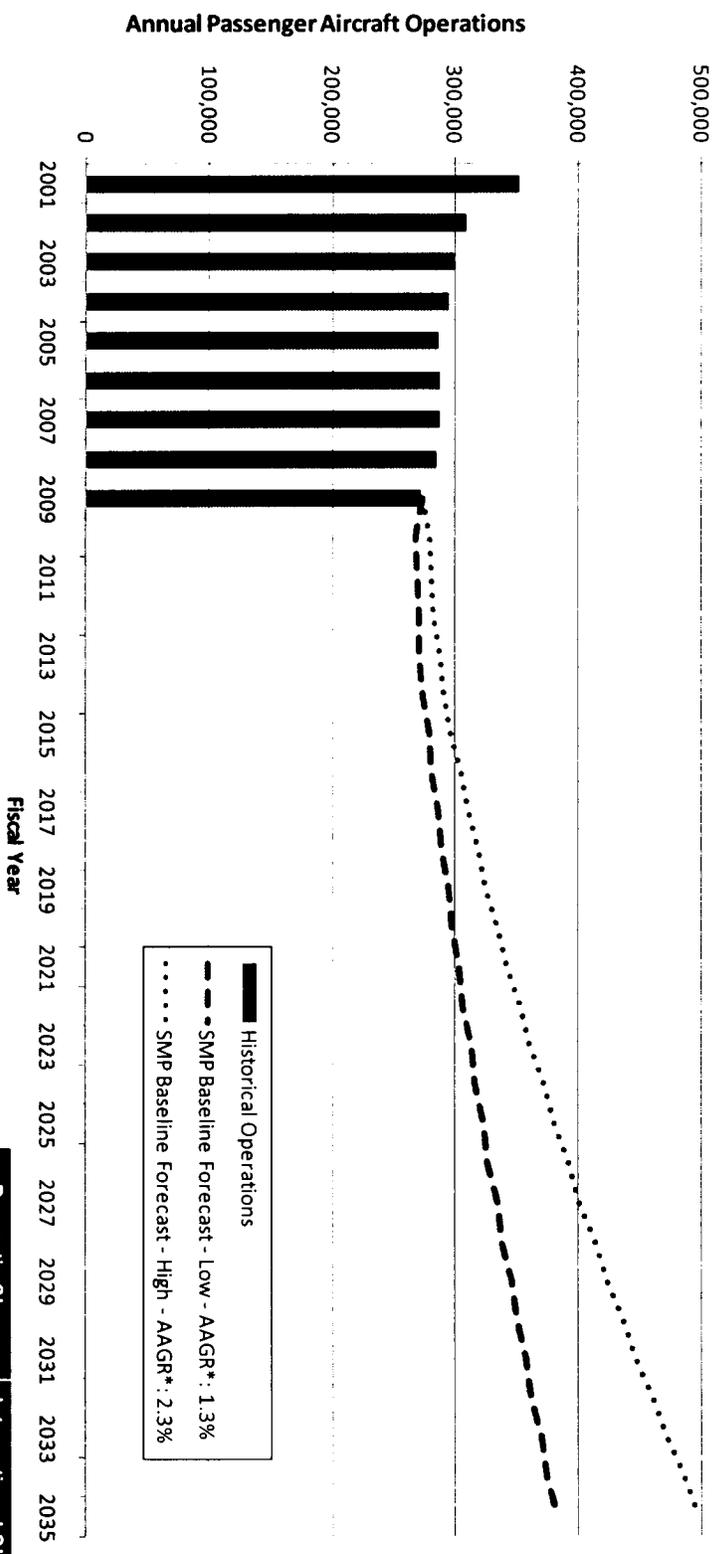
MEMPHIS INTERNATIONAL AIRPORT  
 2400 AIRPORT BLVD  
 MEMPHIS, TN 38112  
 TEL: 901.475.3000  
 FAX: 901.475.3001  
 WWW.MIAA.TN.GOV



# Summary of SMP Air Carrier Annual Operations Forecast

FOR THE YEAR ENDING 2035  
 SOURCE: FAA, SMP, AND  
 OTHER AVAILABLE DATA  
 AS OF 10/15/2010

ONLY INCLUDES AIR CARRIER (PASSENGER) OPERATIONS



Notes \*: AAGR stands for Average Annual Growth Rate.  
 FAA FY2009 Terminal Area Forecast is not presented as it does not provide operations forecast for passenger aircraft specifically.  
 Source: Ricondo & Associates, Inc., February 2010.

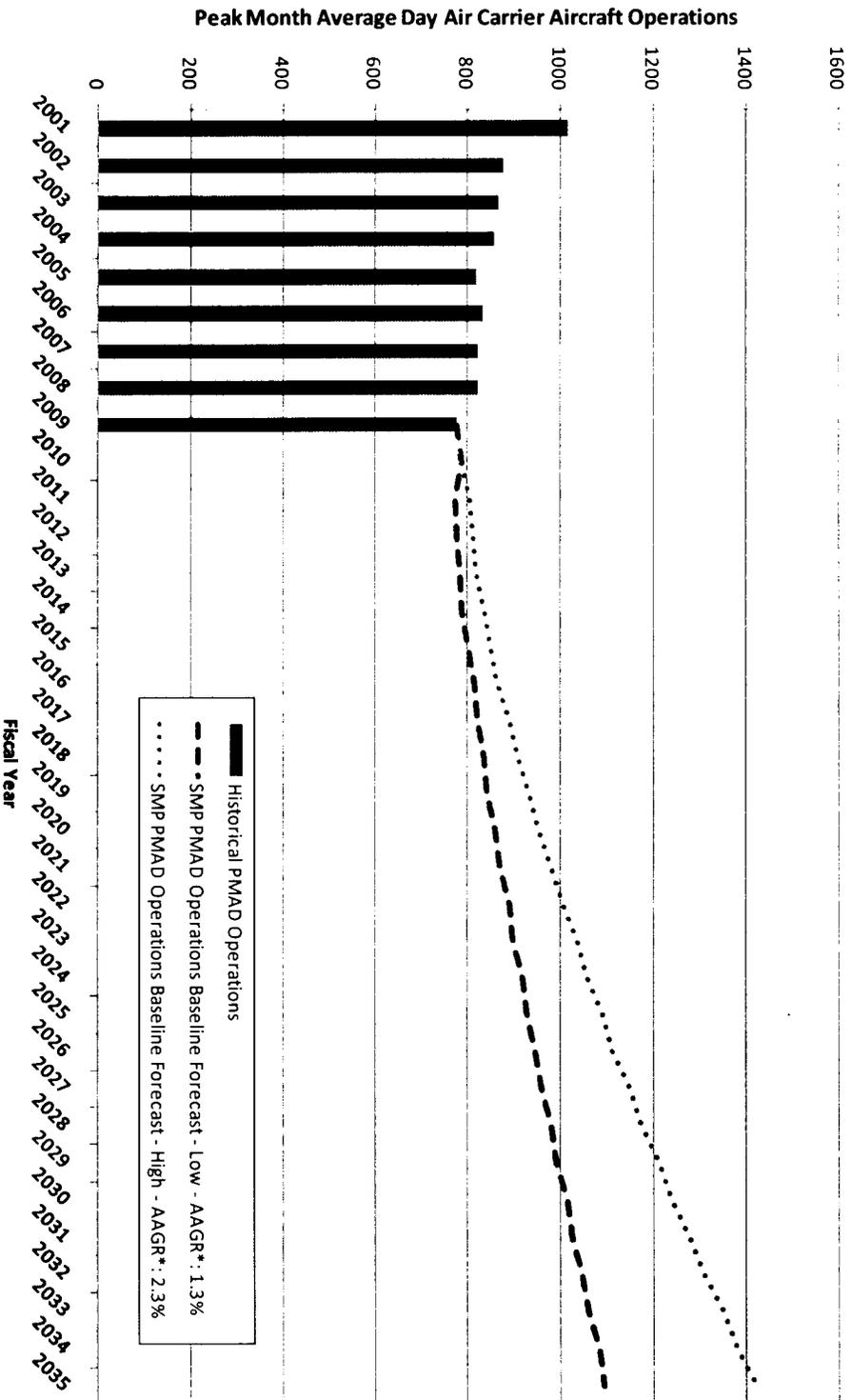
	Domestic Share	International Share
Existing	42%	58%
2035 Projection	41%	59%



SMP

# Summary of SMP Air Carrier Peak Month Average Day Operations Forecast

Source: SMP Air Carrier Report  
Prepared by: SMP Air Carrier  
Date: February 2010

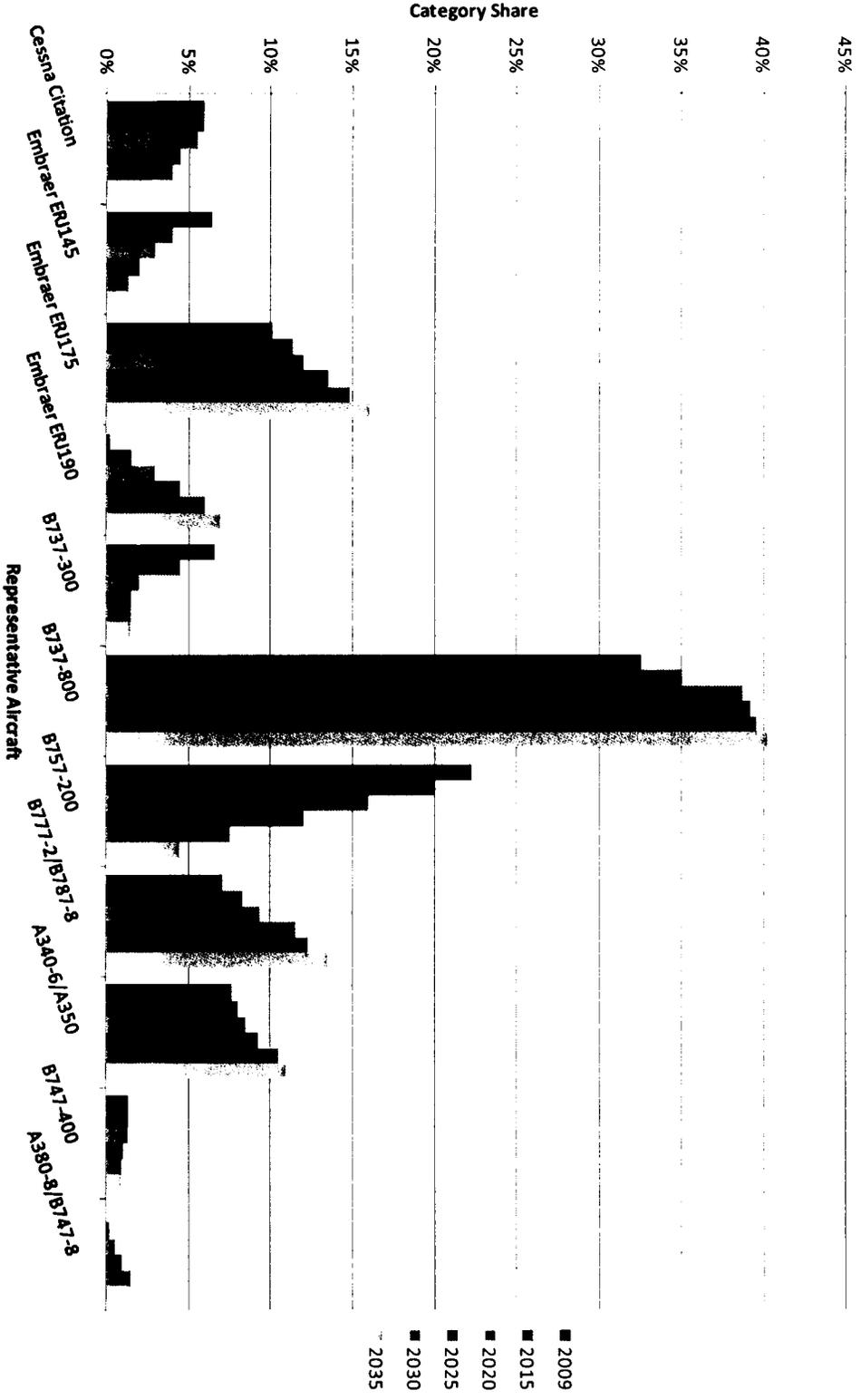


Note \*: AAGR stands for Average Annual Growth Rate.  
Source: Ricondo & Associates, Inc., February 2010.



# Summary of SMP Air Carrier Fleet Mix Assumptions

Report prepared for the Airport Authority of the City of San Francisco  
 1000 Market Street, Suite 1000  
 San Francisco, CA 94102  
 Telephone: (415) 376-3000  
 Fax: (415) 376-3001

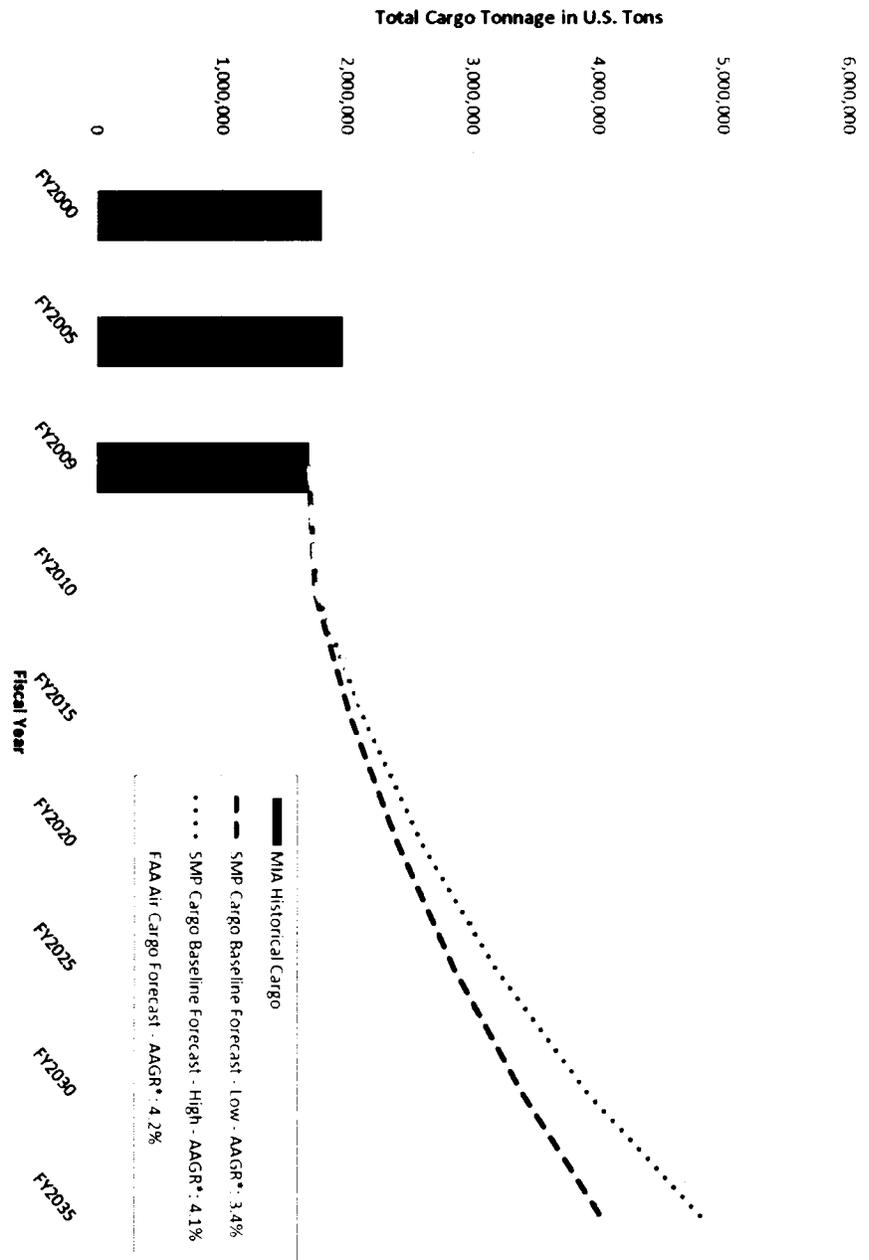


Source: Ricordo & Associates, Inc., February 2010.



# Comparative Cargo Tonnage Forecasts (in U.S. Tons)

Prepared by: MIA  
 Date: 10/15/2009  
 Version: 1.0  
 Author: MIA  
 Reviewer: MIA  
 Approved: MIA  
 Distribution: MIA



Note \*: AAGR stands for Average Annual Growth Rate.  
 Sources: Webber Air Cargo, March 2010; FAA Aerospace Forecast FY2009-2025; World Air Cargo Forecast 2008-2009, The Boeing Company; Ricondo & Associates, Inc., February 2010.

	Existing	2035 Projection
<b>Domestic Share</b>	13%	8%
<b>International Share</b>	87%	92%

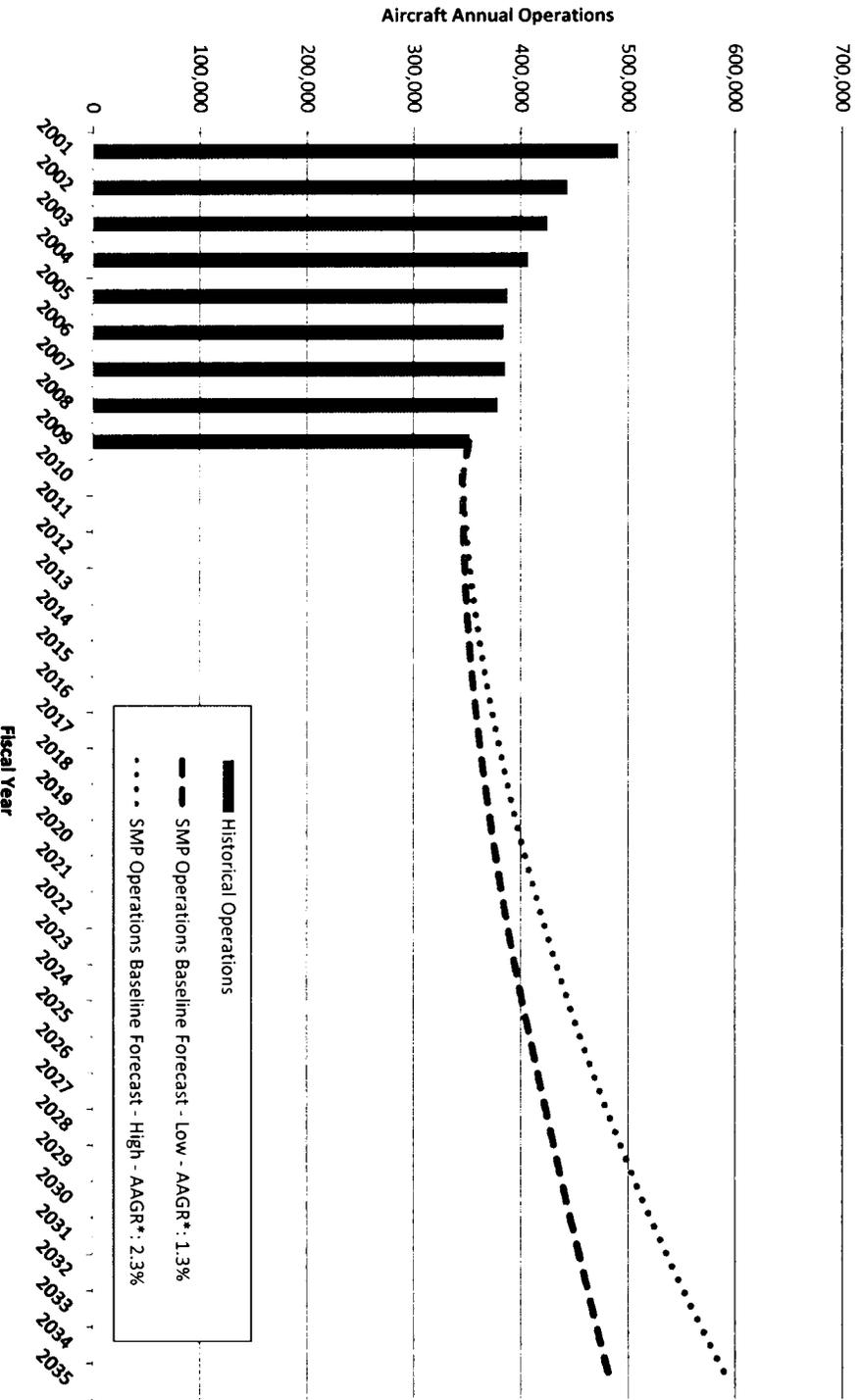
	Boeing 2008-2027	
	To	From
<b>North America</b>	2.70%	
North America (Intra)		
Asia	6.70%	6.60%
PRC (China)	8.20%	8.80%
Europe	4.90%	5.40%
<b>South America</b>		
North America	5.70%	6.00%
Europe	6.10%	5.80%
<b>Central America</b>		
North America	5.80%	5.60%
Europe	4.70%	5.70%
<b>Caribbean</b>		
North America	1.20%	1.80%
Europe	3.70%	2.80%

Percentages shown represent AAGR.



# Summary of SMP TOTAL Annual Aircraft Operations Forecast

2007-2010: FAA TAF for MIA, January 2010;  
2011-2013: FAA TAF for MIA, January 2010;  
2014-2015: FAA TAF for MIA, January 2010;  
2016-2035: SMP Operations Baseline Forecast - Low - AAGR\*: 1.3%  
2016-2035: SMP Operations Baseline Forecast - High - AAGR\*: 2.3%



Note: Includes a flat general aviation forecast based on the January 2010 DRAFT until an actual forecast is provided by the SMP during Phase 3.

Sources: Webber Air Cargo, March 2010; FAA TAF for MIA, January 2010; Ricondo & Associates, Inc., February 2010.

