

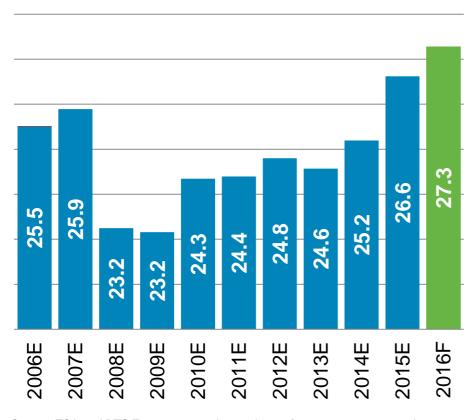
U.S. Airline Industry Thanksgiving Period Air Travel Forecast and YTD (January-September) 2016 Review

John P. Heimlich Vice President & Chief Economist A4A Media Briefing November 2, 2016

A4A Projects U.S. Airlines to Carry 27.3M Thanksgiving-Period Passengers in 2016

Up ~55,000 Passengers per Day, or 2.5 Percent, from *Estimated* 2015 Volumes

U.S. Airline Onboard Passengers (Millions) – Scheduled Service, 12-Day Thanksgiving Period



- → In 2016, Thanksgiving air travel period encompasses Fri., Nov. 18-Tues., Nov. 29
- → U.S. airlines will carry 2.27M passengers per day, up approximately 55K (2.5%) from 2015
- → U.S. airlines will **offer** 2.58M **seats** per day, up approximately 74K (2.9%) from 2015
- → Daily volumes to range from 1.51M to 2.81M
 - Sunday return was 10th busiest day of 2015
 - T-giving Day was 2nd lightest day of 2015
- → 10 busiest U.S. airports by seats: ATL, LAX, ORD, DFW, JFK, DEN, SFO, LAS, CLT, PHX

Source: TSA and BTS T100 segment data; volumes from past years are estimates

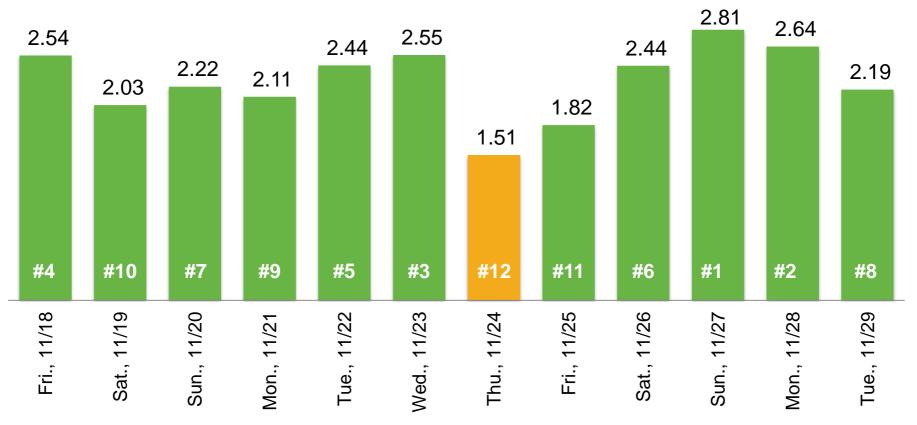
Note: E=estimate: F=forecast



A4A Projects Daily Thanksgiving Passenger Volumes to Range from 1.51M to 2.81M

Expected Busiest Days: Sunday Return, Monday Return and Wednesday Preceding

U.S. Airline Projected Onboard Passengers (Millions) – Scheduled Systemwide Service

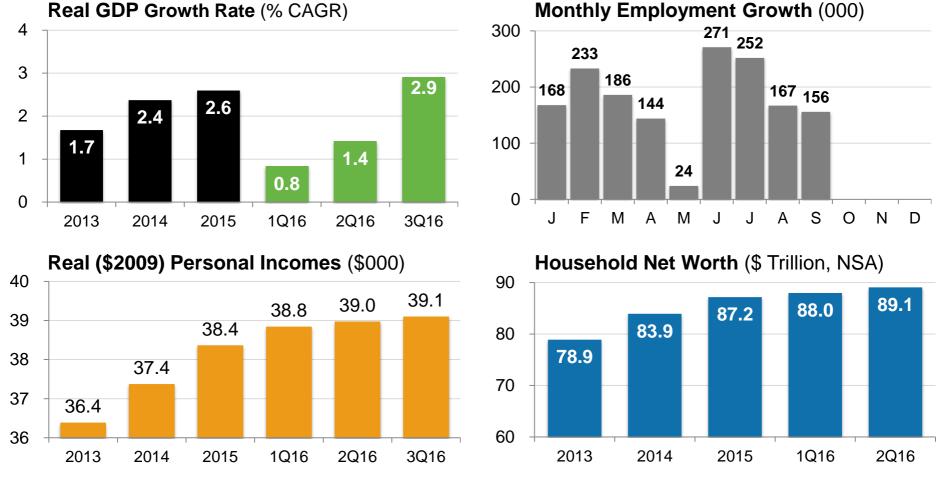


Source: A4A, selected sample carriers and DOT T100 segment data



^{*} Friday, Nov. 18 through Tuesday, Nov. 29

U.S. Economy Showing Signs of Life; Job Growth Volatile

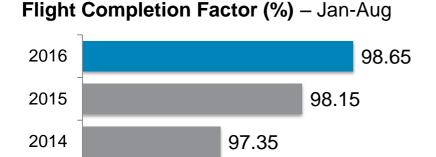


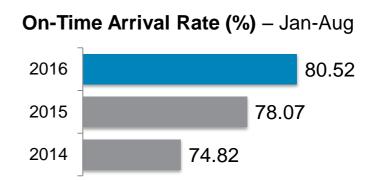
Sources: BEA, BLS, Federal Reserve and IHS Economics; U.S. GDP real annual average growth rate (%), U.S. nonfarm payroll employment growth (month-over-month, in 000s, seasonally adjusted), U.S. disposable personal income per capita (chained 2009 dollars, SAAR); U.S. household net worth in current dollars, not seasonally adjusted



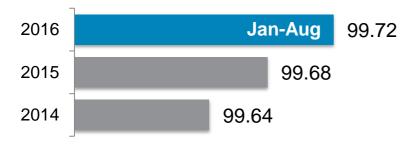
U.S. Airlines Seeing Continued Improvements in DOT Operational Metrics in 2016

Gains Driven by More Benign Weather and Investments in Systems, Procedures, Staffing

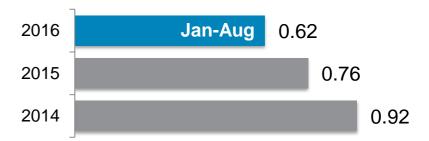




Properly Handled Bag Rate (%)



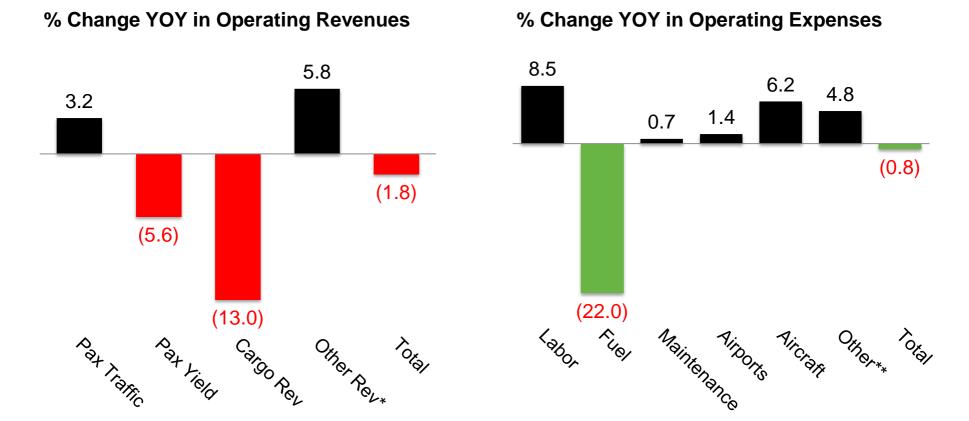
Oversales per 10,000 Customers



Sources: BTS and DOT Air Travel Consumer Report (http://www.dot.gov/airconsumer/air-travel-consumer-reports)



First Nine Months of 2016: Revenues Down 1.8% on 5.6% Lower Fares (3.2% More Traffic); Expenses Down 0.8% on 22% Lower Fuel; Labor, Other Expenses Rising



^{*} Professional fees, food/beverage, insurance, commissions, GDS fees, communications, advertising, utilities, office supplies, crew hotels, nonfuel payments to regionals

Source: A4A analysis of reports by Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United

Yield = fare per mile (cents per RPM)



^{**} Sale of frequent flyer award miles to airline business partners, pet transportation, in-sourced aircraft and engine repair, flight simulator rentals, inflight sales, etc.

Faster-Falling Revenues Drove Modest Reduction in U.S. Airline Profitability

Pre-Tax Profit Margin of 15.5 Percent Remains in Line with Average for U.S. Companies





Operating Expenses (Billions) – Jan-Sep



Pre-Tax Income (Billions) – Jan-Sep



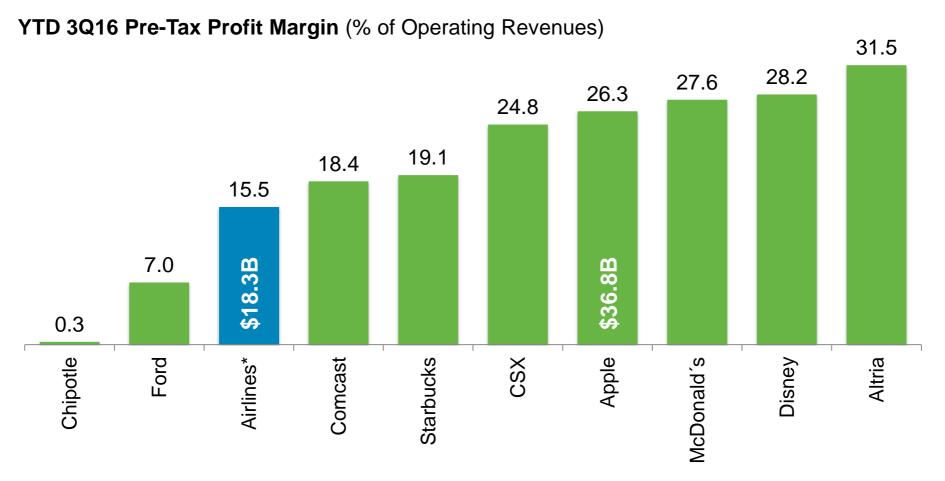
Pre-Tax Profit Margin (%) - Jan-Sep



Source: A4A analysis of reports by Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United



In YTD 3Q, U.S. Airlines* Posted Respectable Margins, Averaging 15.5% Before Taxes U.S. Passenger Airline* Profitability Was Substantially Below Starbucks/McDonald's/Apple



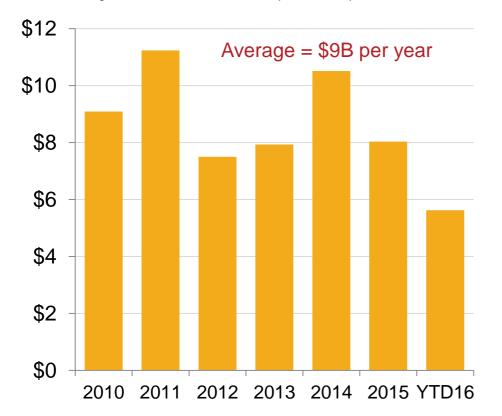
* A4A analysis of reports by Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United



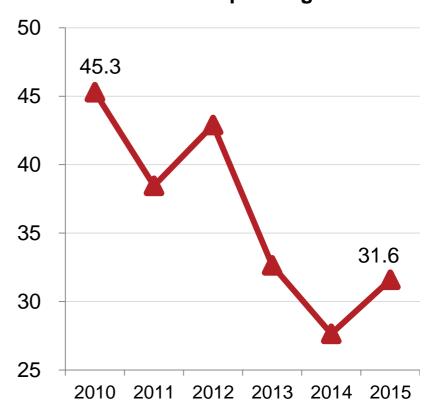
Following Enormous Losses of 2001-2009, U.S. Airlines Have Retired \$59.9B in Debt

Adjusted Net Debt Now Just 32% of Operating Revenues, Down from 45% in 2010

Payments on Debt* (Billions)



Debt** as % of Operating Revenues



^{*} Payments on long-term debt and capital lease obligations

Source: SEC filings of AAL/ALGT/AAL/DAL/HA/JBLU/LUV/SAVE/UAL/VA



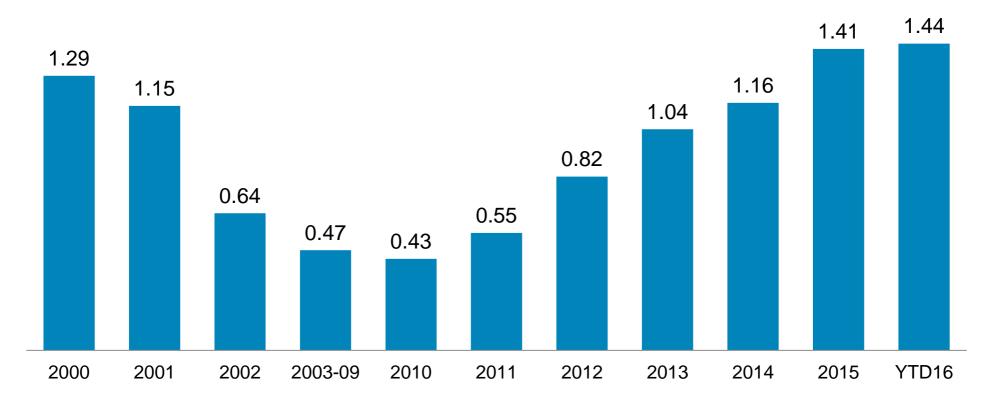
airlines.org

^{**} Includes 7x annual aircraft rents (capitalized operating leases)

Improving Finances Enabling Significant Reinvestment in Customer Experience

YTD 3Q 2016 Capital Outlays Averaged \$1.44B per Month, Exceeding 2015 Rate

U.S. Passenger Airline* Capital Expenditures (\$ Billions per Month)



^{*} SEC filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit, United and Virgin America



Improving Finances Enabling Significant Reinvestment in Customer Experience



- » New or refurbished aircraft, larger overhead bins for luggage
- » Availability of lie-flat seating with AC power and USB, proliferation of Wi-Fi and inflight entertainment
- » Expanded route networks (scope and frequency) and schedules (seat growth)
- » Improved airport check-in areas, lounges, gate amenities, baggage systems, ground equipment
- » Continued development and roll-out of mobile technology and website/kiosk functionality
- » Increasing operational reliability (controlled for weather conditions)
- » Enhanced tools (computers, tablets, software) and training for customer-contact employees



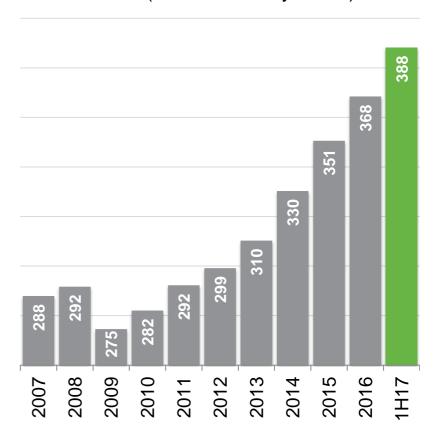
As Airlines See Higher Returns on Capital, Customers Are Seeing More Seats

Domestic Supply Approaching Pre-Recession Levels; International Supply at All-Time High

Domestic USA (Thousand Daily Seats)

2,546 2,502 2,454 2,451 2,366 2,294 2,292 2,289 2,285 2,274 2,259 2012 2014 2008 2009 2010 2013 2007

International (Thousand Daily Seats)



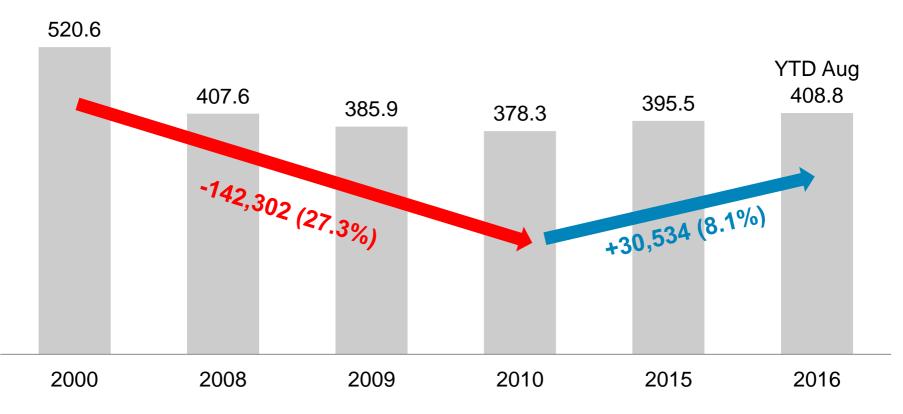
Source: Innovata (via Diio Mi) published schedules as of Oct. 28, 2016, for all airlines providing scheduled passenger service from U.S. airports to all destinations



U.S. Airline Jobs Are Exceeding 400,000 for First Time Since 2008

August 2016 Was 34th Consecutive Month of YOY Gains

Employment at U.S. Passenger Airlines (Thousand FTEs)



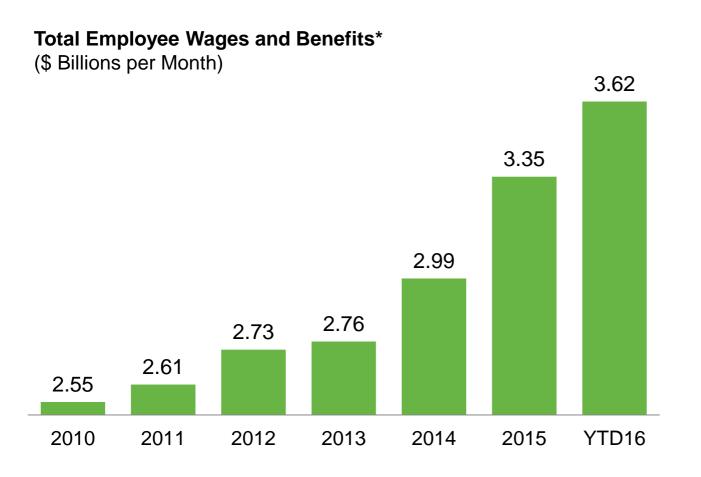
13

Source: Bureau of Transportation Statistics for scheduled U.S. passenger airlines



U.S. Airlines* Continue to Pump More Wages and Benefits into the Economy

Airlines* Spending \$3.6 Billion per Month on the Workforce – Up 42 Percent from 2010





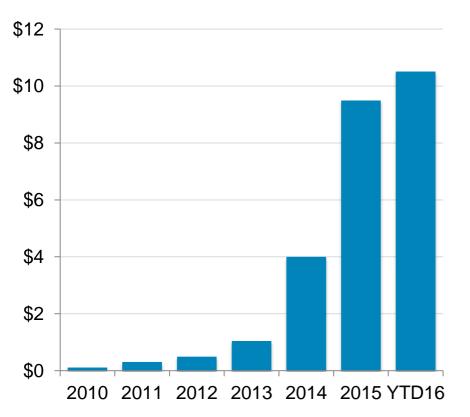


^{*} SEC filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit, United and Virgin America

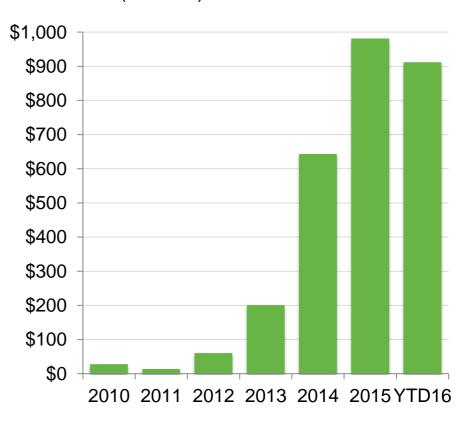


In YTD 2016, U.S. Airlines Continued Efforts to Retain and Lure New Equity Investors, Returning \$11.4B to Shareholders Via Stock Buybacks (\$10.5B) and Dividends (\$912M)

Stock Repurchases (Billions)



Dividends (Millions)



* SEC filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit, United and Virgin America



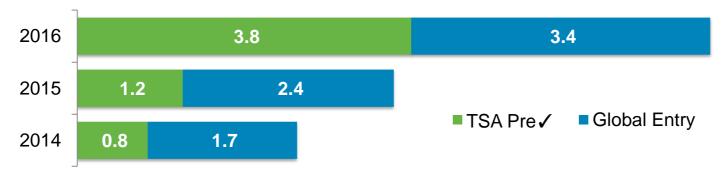
Flyer Satisfaction Rises Markedly With Enrollment in Expedited Screening Programs

Accordingly, Airlines and USG Have Collaborated to Double Enrollment Over Past Year

% of 2015 Flyers Indicating "Very Satisfied" With Overall Air Travel Experience



Enrollment (Millions of Persons) in Expedited Air Traveler Screening Programs



Sources: http://ipsos-na.com/news-polls/pressrelease.aspx?id=7208, Transportation Security Administration, Customs and Border Protection



2016 Operational and Financial Recap: U.S. Passenger Airlines

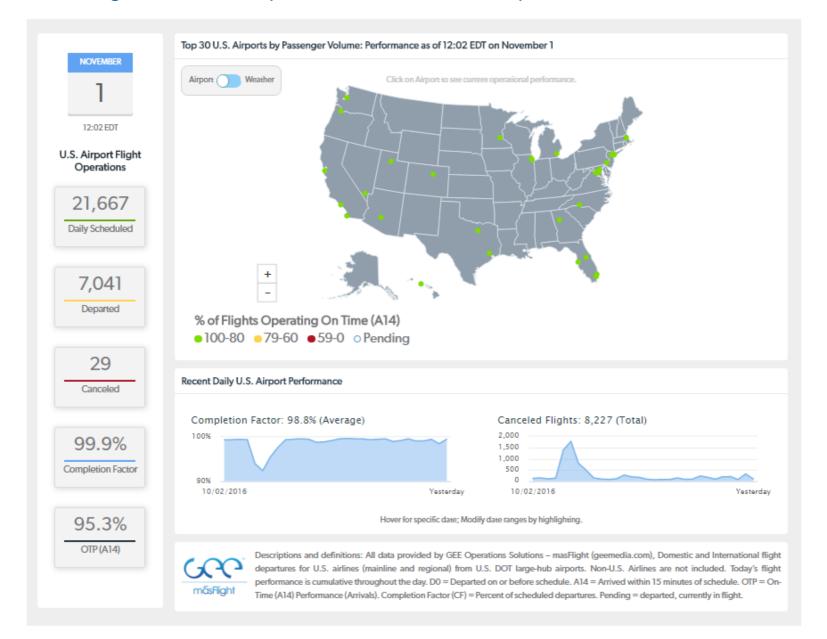
- YTD 3Q16 saw continuation of consummate airline safety performance, as well as significant year-over-year improvements in operational reliability
- Declining fares exceeded traffic gains to drive operating revenues lower, but reduced fuel costs more than offset increases in labor, airport, aircraft and other expenses to drive modestly improved profitability, with airlines realizing a pre-tax margin of 15.5%
 - Airline profitability continued to lag that of Starbucks, McDonald's and Apple
- » Among other uses beneficial to stakeholders, cash flow generated during this period allowed U.S. airlines to retire expensive debt; acquire new, larger aircraft; deploy more seats in the marketplace; boost staffing and wages; and reward investors
- » Sharp airfare declines and U.S. job growth are fueling record passenger volumes, including 2.5 percent projected growth for the 12-day Thanksgiving air travel period
- Market research affirms that participation in expedited screening programs markedly improves the air travel experience

17



How's the Weather Affecting U.S. Airport Operations?

http://airlines.org/data/current-operation-status-for-us-airports/



www.airlines.org



Aviation Has a Strong Fuel Efficiency/GHG Record But We Are Committed to Further Action

» Aviation Is a Relatively Small Contributor . . .

- Domestic U.S. commercial aviation = 2% GHGs (source: EPA)
- Worldwide aviation = 2% man-made CO₂ (source: IPCC)
- We Have a Strong Record . . .e.g., U.S. Airlines:
 - Improved fuel efficiency ~120% between 1978 and 2015; 31% between 2000 and 2015
 - 6% less CO₂ in 2015 v. 2000, but 24% more passengers & cargo
- » And We Are Committed to Further Action as Part of a Global Aviation Industry Coalition



Global Aviation Climate Action

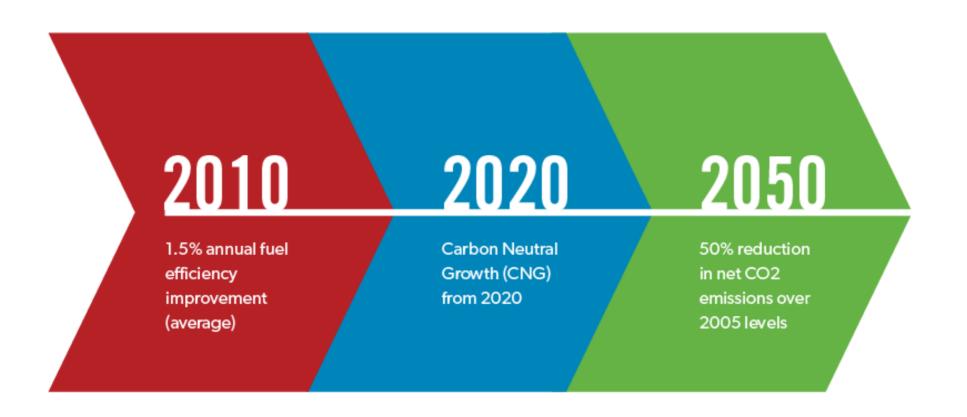
Supported by International Governmental Agreement

- 1. Aviation-Specific Emissions Targets
- 2. Key Focus on Technology (Including Sustainable Fuels), Operations & Infrastructure Measures
- 3. Historic 2016 Agreement of International Framework at the International Civil Aviation Organization (ICAO) 191 ICAO Member States
 - February 2016: ICAO CO₂ certification standard for future aircraft
 - October 2016: ICAO global market-based measure (GMBM) to serve as a "gap-filler"



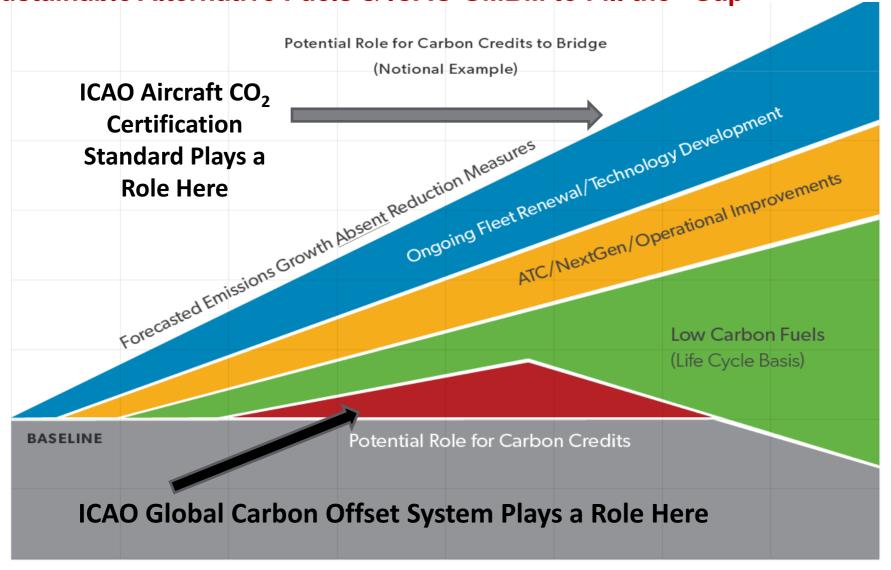
The Industry's Goals Are Aggressive

And Address the Key Concern: Potential Growth in Emissions





Aviation & Climate Change: Technology, Operations, Infrastructure, Sustainable Alternative Fuels & ICAO GMBM to Fill the "Gap"



CO₂ EMISSIONS

New ICAO Aircraft CO₂ Certification Standard

ICAO Work: 2010-2016

- » Approved in Feb. 2016 by ICAO's Committee on Aviation Environmental Protection (CAEP)
- » Applicability (applies to manufacturers)
 - New Type aircraft & newly manufactured (i.e., "In-Production") aircraft
 - New Types beginning in 2020
 - In-Production aircraft beginning in 2023; but all in-production types must comply by 2028 (production cutoff)
- » ICAO Council Is Codifying the Standard Now



U.S. Adoption of the ICAO CO₂ Standard EPA/FAA

Section 231 of the Clean Air Act

- EPA/FAA may adopt aircraft engine emissions standards for "pollutants" that cause or contribute to "endangerment" (e.g., climate change) – EPA recently made this finding for aircraft GHG emissions
- EPA & FAA were deeply involved in developing the ICAO standard & the White House and FAA Administrator endorsed it, so it is expected that the U.S. will adopt the ICAO standard
- Expect Proposed Rule in early 2017



ICAO "Carbon Offsetting & Reduction Scheme for International Aviation" (CORSIA)

- » Global Carbon Offsetting Scheme, 2021-2035
- » Application to Aircraft Operators, International
- Supports Achieving CNG2020 Goal
- » Emissions Monitoring, Reporting & Verification and Carbon Offset Quality Requirements
- » First Six Years of Coverage: Country Opt-In Basis (66 Countries Have Signed Up so Far)
- » Mutual Exemption on Exempt Routes
- » Preempts Proliferation of Unilateral Measures

