

# Commitment to Environmental Responsibility

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# Flying Together – Merging Two Leading Airlines



- **CO and UA will operate as separate airlines until FAA awards us a single operating certificate**
- **Majority of integration will take 12 - 18 months**
- **Currently, Continental and United are subsidiaries of United Continental Holdings, Inc.**
- **“Customer Day One” expected in Spring 2011 – for now, customers should expect to see each airline operate separately**

## → **New airline will have:**

- World’s most comprehensive global route network
- Optimal hub locations in 10 cities, including hubs in 4 largest cities in U.S.
- Industry-leading frequent flyer program
- Most modern and fuel-efficient fleet, and best new aircraft order book, among U.S. network carriers (adjusted for cabin size)

# Environmental Responsibility – A Significant Focus for the new United

- **Both CO and UA made significant environmental progress leading up to merger and received accolades for their efforts**
- **Green business = Good business**
  - Fuel costs are our largest single operating expense
  - The price of jet fuel reached an all-time high in 2008 at \$4.21/gallon
- **Going forward, we are committed to promoting environmental responsibility inside our operations, with our customers, and within the industry, focusing on several key areas:**
  - Our fleet
  - Ground equipment
  - Operations and procedures
  - Facilities and Recycling
  - Alternative fuels

# Our Fleet

## → Significant increases in fuel efficiency

- Together, Continental and United together have improved fuel efficiency on a Revenue Passenger Mile (RPM) basis by more than 30% over the last 15 years
- The combined carrier will be among the most fuel-efficient major U.S. carriers

## → Investing in new aircraft and related equipment

- Retiring our older, least fuel-efficient aircraft
- Committing to invest in new, fuel-efficient aircraft – including orders for Boeing 787s, Airbus A350s, and Boeing 737s
- Retro-fitting existing aircraft with winglets that result in up to a 5% reduction in emissions and noise
  - 100% of CO narrowbody fleet has winglets
  - 100% of UA Airbus fleet and Boeing 747s has winglets
- Installed advanced-technology GE90 3D Aero Blades (more efficient blades) on the engines of CO's fleet B777s



# Ground Service Equipment

## → **Transitioning to Alternative Fuel Vehicles (AFV)**

- Currently, we use over 4 million gallons of fuel to operate our GSE
- Combined, we have almost 15,000 GSE in the U.S., with approximately 25% of our fleet using alternative fuel or electric-power
- Switching to alternative fuel equipment will reduce our ground equipment fuel use significantly
- Both our airlines continue to proactively incorporate electric ground equipment throughout our operating system as opportunities arise

## → **California – a focus for GSE fleet management**

- Approximately 50% of our combined GSE fleet in California is comprised of alternative fuel vehicles
- UA is part of the airline consortium in LAX committed to purchase renewable diesel from municipal waste biomass for our GSE from a commercial-scale facility that is under construction in Rialto, CA

# Operations and Procedures

## → NextGen Air Traffic Control Modernization

- Satellite-based technology enhancements and procedural improvements could reduce fuel burn and emissions 10-15%

## → NowGen

- ASPIRE (2008) and Green Corridor (2010) demonstration flights
- Optimized runway arrivals
- Continuous descent approaches (CDA)
- Ground surveillance systems

## → Other Key Actions:

- Single-engine taxi where possible
- More direct routing, e.g. polar routes
- Speed/altitude adjustments
- Gate power for parked aircraft
- EcoPower engine wash



# Facilities and Recycling



- **Both our Chicago headquarters facilities meet the U.S. Green Building Council's LEED Silver standards**
- **Our newest Houston hub Terminal, Terminal E, is up to 15% more energy efficient than a traditional terminal**
- **We use energy-efficient lighting systems at many of our facilities and continue to evaluate new opportunities**
  
- **Both CO and UA have expanded recycling at our facilities as well as onboard our aircraft on domestic routes**
  - Through 2010, CO recycled enough aluminum to build 32 Boeing 777's
  - UA expanded its onboard recycling program to all our eligible domestic routes, and has enhanced recycling programs in many of our hubs and stations

# Alternative Fuels



## → Significant potential to reduce greenhouse gases

## → Test Flights

- CO was the first North American carrier to perform sustainable biofuel test flight – recognizing a reduction in environmental footprint and increased fuel efficiency (January 2009)
- UA was the first U.S. commercial airline to fly a synthetic fuel flight – resulting in lower particulate and sulfur emissions (April 2010)

## → Supply Agreements

- AltAir Fuels – fuel derived from camelina, a next-generation biofuel feedstock
- Rentech – synthetic fuel from biomass, sewage sludge, natural gas and coal
- GEVO – retrofitting ethanol plants to produce biobutanol, a biofuel feedstock



## → Industry Partnerships

- Boeing and GE Aviation/CFM International
- Commercial Aviation Alternative Fuels Initiative (CAAFI)
- ATA/Defense Energy Support Center Strategic Alliance
- U.S. Dept. of Agriculture - Farm to Fly Initiative

# Conclusion

- **Both UA and CO are making good progress in environmental responsibility**
- **Success in improving environmental performance in aviation depends on many stakeholders taking action collectively**
- **Looking forward, we are committed to further improving our environmental performance with a commitment to environmental responsibility:**
  - **Continuing to modernize our fleet**
  - **Improving operational procedures in flight and on the ground that reduce emissions and noise**
  - **Committing to reducing waste and improving reuse and recycling opportunities**
  - **Further promoting and supporting alternative fuels to become a viable option for our company**

Thank You

