





777X Overview

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Wide-body market demand drivers









Replacement

Business model shifts

Air cargo

New product capabilities



Wide-body passenger deliveries by units



Airlines will need 8,590 new wide-body airplanes valued at \$2.5 trillion







Twin-aisle market share



Introducing the new 777X

More efficient than the competition More revenue and network coverage All-new passenger experience Highest reliability in its class

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Boeing product line-up

Superior value, efficient market coverage



777X and 787 are right-sized and optimized

Two optimized families for the lowest fleet fuel use





777 is preferred by customers

Delivers unrivaled performance and reliability Provides unmatched revenue capability

Inspires passenger loyalty



777 is preferred by passengers Named "Best Aircraft" by frequent travelers



Why the 777X?

Introducing the latest technology to a proven winner



- 12% improvement in fuel efficiency over A350-1000
- 10% improvement in operating economics over A350-1000
- More payload-range for market coverage and network flexibility



777X provides growth opportunity from current 777



Range

Twin-engine, twin-aisle success, redefined



All-new composite wing is lighter, stronger, longer

Increasing wingspan improves aerodynamics

Proven composite wing enables long span and efficient airfoil

Folding wingtip for airport compatibility

Wingspan optimized for efficiency

Longer wingspan results in lower fuel use

Better aerodynamics enabled with exclusive Boeing technologies

Natural laminar flow nacelles reduce drag







All-new advanced GE9X engines

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5% more efficient than any other engine

- Newer, exclusive technology
- Composite fan blades
- High bypass ratio
- Equivalent maintenance cost to GE90

GE9X advantage ... powering the 777X



EXCLUSIVE GE TECHNOLOGIES



- Thinner, stronger, fewer
- **150+** million flight hour experience by 2020
- 4th generation

imagination at work

Compressor



- ~61:1 overall pressure ratio
- 3rd generation

Lean combustion



- Reduced cooling
- CMC liner
- 3rd generation

Ceramic-matrix composites (CMCs)



- 1/3 weight, 2X strength
- 20+ yrs. development
- 3rd generation

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GE9X timeline ... underway since 2010





GE9X overview 11/18/2013

A new level of passenger experience Exploring new technologies and architectures



777X delivers lowest impact on environment

12% lower CO_2 emissions than the A350-1000

777-9)

Better than LHR QC 0.5 and future ICAO stage NO_x levels 29% below CAEP/8 limits

777X timeline



787-8 210 to 250 passengers 14,200-15,200 km In service

787-9 250 to 290 passengers 14,800-15,750 km EIS 2014 787-10 300 to 330 passengers 12,590 -12,964 km EIS 2018

787 innovation delivers the most value

Breakthrough business opportunities for airlines Unrivaled comfort and spaciousness for passengers Cleaner, quieter and more efficient for the environment

787-9 on track

Disciplined execution paying benefits







Strong progress in assembly

182 hours on 61 flights flown in test

On schedule to deliver in mid-2014



The New 787-10 Dreamliner

- Unprecedented fuel efficiency
- Optimized for 787-9 commonality
- Strong market response
- On track for firm configuration in 2014

747-8 improvements since EIS

3.5% fuel consumption improvement2% operating cost reduction7,200 lbs OEW reduction

A complete lineup for the complex twin-aisle marketplace

- 747-8: Great airplane just keeps getting better
- 777X: Unmatched capability and efficiency
- 787-10: Optimized for 787-9 commonality
- 787-9: On schedule to deliver mid-2014
- 787-8: More than 100 deliveries



