

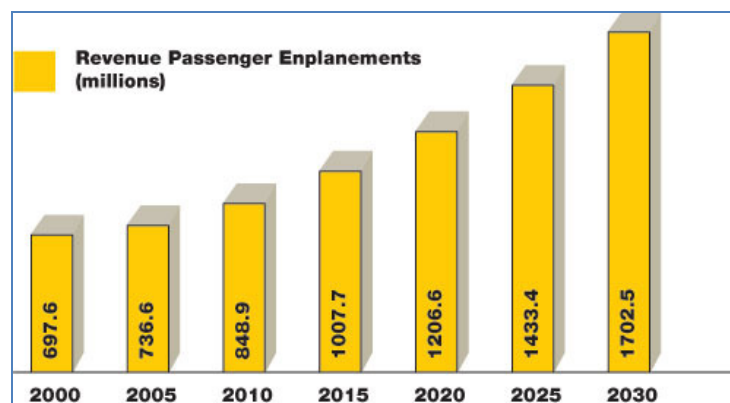
Providing Substantial Increases in Airport Capacity

The aviation sector's economic picture is currently flashing contradictory signals dependent on the time horizon under consideration. Barring sustained and unprecedented economic stagnation, the economic growth of the industry seems all but assured over the long term. On the other hand, the current economic slump is taking a toll on the industry's bottom line. For example, ratings agency Standard & Poor's has placed three major airline companies – AMR, United Airlines Inc. parent UAL Corp. and US Airways Group – on credit watch with negative implications and ratings downgrades possible.

Inevitably the cost structures of the carriers will evolve to match changing economic realities. Watts Antenna Company believes the cyclical slowdown should not be allowed to overshadow the secular trend for dramatically increased airline traffic in the medium and long term and the corresponding need for capacity growth. So far the industry appears to be keeping the long game in mind. According to the Airports Council International:

“Revenue data confirm that airports are focusing on controlling costs, while the rise in capital expenditure indicates that airports continue to prepare for future growth, which is forecast to double in the next 20 years. Capital expenditure commitments leapt from USD 40 billion in 2007 to USD 50 billion in 2008, the biggest annual increase ever, and the large capital programmes underway have pushed up annual spending for depreciation, amortisation and interest (over USD 20 billion in 2007) on top of operating expenses of nearly USD 50 billion.”

These large capital expenditures are good news. Out and beyond today's recessionary demand environment, huge infrastructure investments will be needed in preparation for the expected 25 percent growth in service the FAA predicts by 2015 when it is estimated over one billion people will take to the sky annually.



Source: U.S. DOT/Federal Aviation Administration

In 2003, the Federal Aviation Administration (FAA) convened a team called the Future Airport Capacity Task (FACT). Two reports FACT1 in 2004 and FACT2 in 2009 projected capacity needs out to 2020 and 2025, respectively. FACT2 also attempts to address and incorporate projected NextGen efficiency enhancements, to the extent those enhancements can be currently defined and quantified. Both reports considered planned capacity upgrades as well as a scenario where planned capacity upgrades were not completed. According to FACT2, by 2025 and even with currently planned improvements, the following eight metropolitan areas will still have significant capacity shortfalls:

- San Francisco
- Los Angeles
- San Diego
- Las Vegas
- Phoenix
- Atlanta
- Philadelphia
- New York

Should budgetary constraints intervene on planned capacity improvements, an additional seven metropolitan areas would join the list:

- Seattle
- Minneapolis
- Chicago
- Houston
- South Florida
- Charlotte
- Washington-Baltimore

While Watts Antenna has no direct influence over capacity build-outs, we can contribute to the FACT2 corollary objective of optimizing *existing* capacity, whatever that capacity turns out to be. Watts Antenna believes its advanced ILS product line works to maximize airport throughput. For example the [WATTS MODEL GP-5A DIRECTIONAL IMAGE GLIDE PATH ANTENNA](#) has been designed to increase the flow of aircraft traffic in the vicinity of the Glide Path tower. Similarly, the narrow course beam of the [WATTS MODEL 201 HIGHLY DIRECTIVE LOCALIZER SYSTEM](#) substantially reduces ILS critical and sensitive areas. By radically reducing the RF footprint, Watts' advanced ILS products remove themselves as encroachments on capacity. The FACT2 findings are clear. Capacity optimization will become an increasingly dominant theme as expanding air traffic imposes greater burdens on existing infrastructure. These advanced features are capacity enhancers that work to reduce Runway Occupancy Time (ROT), all to the benefit of optimized airport capacity utilization.

Watts is making NextGen happen *now*.