



National Aeronautics
and Space Administration

NASA/Industry Airport Planning Workshop

Workshop 1

Airside Capacity Challenges and Concerns

Recap



Workshop 1 Recap

- Updated Airport Master Planning AC
 - Preplanning is key
 - Plan must be realistic
 - Study what matters
 - Need to use a commonsense approach to Forecasting and Alternatives
- LAS Vegas McCarran International Airport – Lessons Learned
 - Unique Forecasting Method – Rooms Equal Passengers
 - 4 Corner Post /LAS RNAV Development (V1 to V4)
 - Include all stakeholders from outset
 - Formed Las Vegas Airspace User's Council
 - Modeling early on would have saved \$



Workshop 1 Recap

- We need to focus on efficiencies of the system as a whole
 - Our largest Gateway Airports are constrained (Landlocked) and face major challenges to meet future demand.
 - If these problems are not fixed/no gains in airspace capacity will be realized
 - A380 Challenges – Airports can not accommodate them today.
 - Short haul market lost to roadways. This is not a solution
 - To date technology has delivered little gains to airside capacity
- Air Traffic Control system is not broken
 - Limitations to capacity include runways and weather, not controllers
 - Separation should be based on wake vortex, not set standards
 - Having the ability to put two aircraft on a runway at the same time without jeopardizing safety would be a benefit
 - Airline schedules needs to be realistic
 - Any future vision should focus on technologies that provide benefit today and are cost effective to implement



Workshop 1 Recap

- Experience and Insight Remain the Most Effective Tool
 - Environmental Process is the most costly phase of planning
 - Sponsors should begin with the end in mind and plan for litigation
 - Projects become costly due to the need to prove result with expensive visualization to decision makers
 - Limit modeling to situations that yield the most benefits.
 - “It’s fun but is it necessary?”
- O’ Hare Modernization Plan
 - Operations at ORD Effect the entire NAS
 - New airfield is a flexible design, controllers original ideas on how to manage traffic changed as modeling started.
 - Example of how effective planning can reduce delays, add jobs to the economy -
 - New design is expected to reduce costs of 750 Million each year.

