



Managing And Understand The Impact Of The Air Traffic System:
United Airline's Perspective

NEXTOR
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Moving Metrics: A Performance-Oriented View of the Aviation Infrastructure
January 30, 2004

Topics of Discussion

- **Balance Between Revenue And Reliability**
- **Building Scheduled Block Time For Reliability**
- **Revenue Environment and The Effect On Reliability**
- **The O'Hare Impact**
- **Summary**

The Key is Balancing Reliability with Revenue



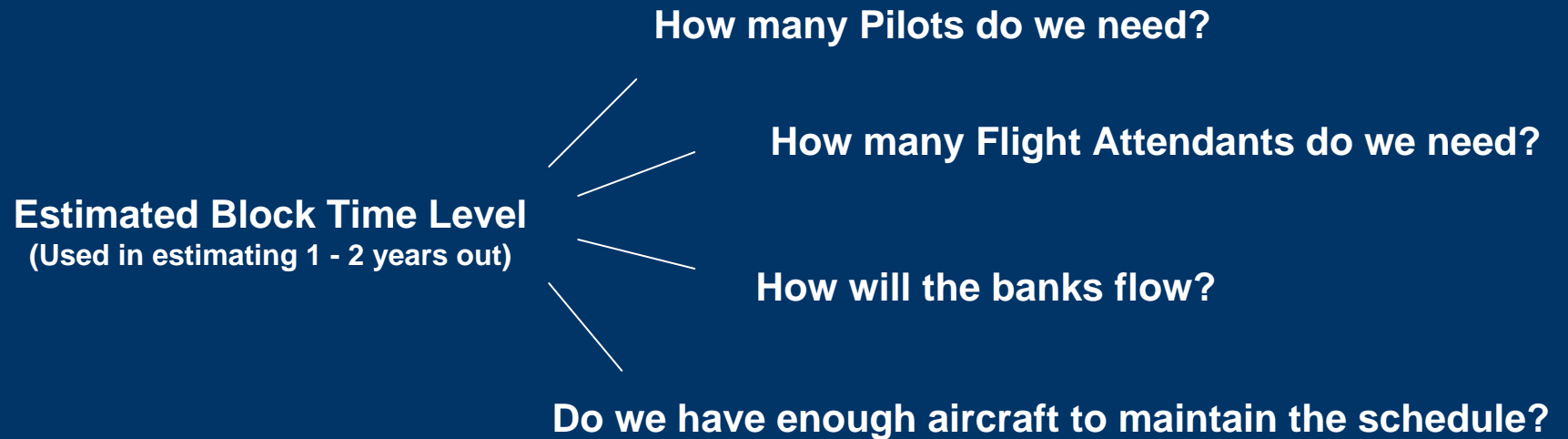
Building Block For Reliability

Development Of An Accurate Scheduled Block Time Is Critical For Maintaining An On-time Airline

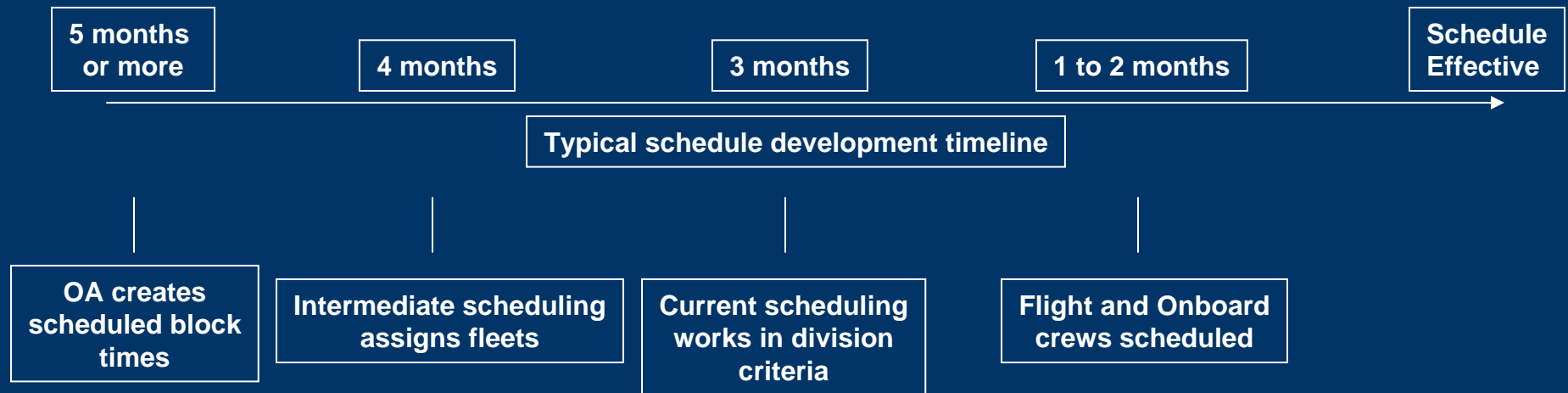
- **Block time is the time from gate departure (brake release) to gate arrival (brake set). It is composed of:**
 - Taxi-out time
 - Flight time
 - Taxi-in time
- **Scheduled block times are calculated to achieve a target block on-time :00 for a season. They are based on the historical performance of a segment when data is available.**

The Building “Block” of United’s Operation

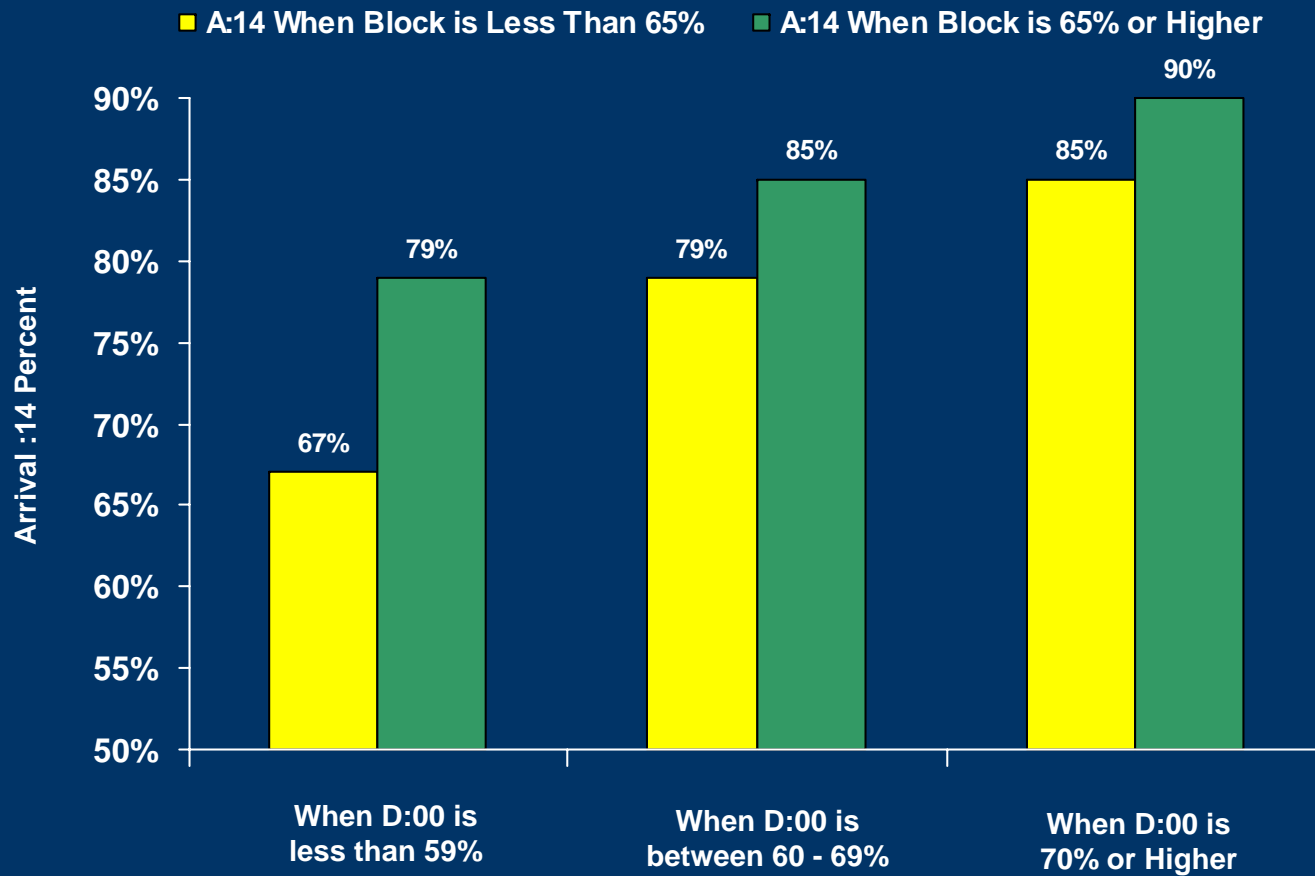
Begins the long term planning process ...



... Transitions into the schedule development process ...

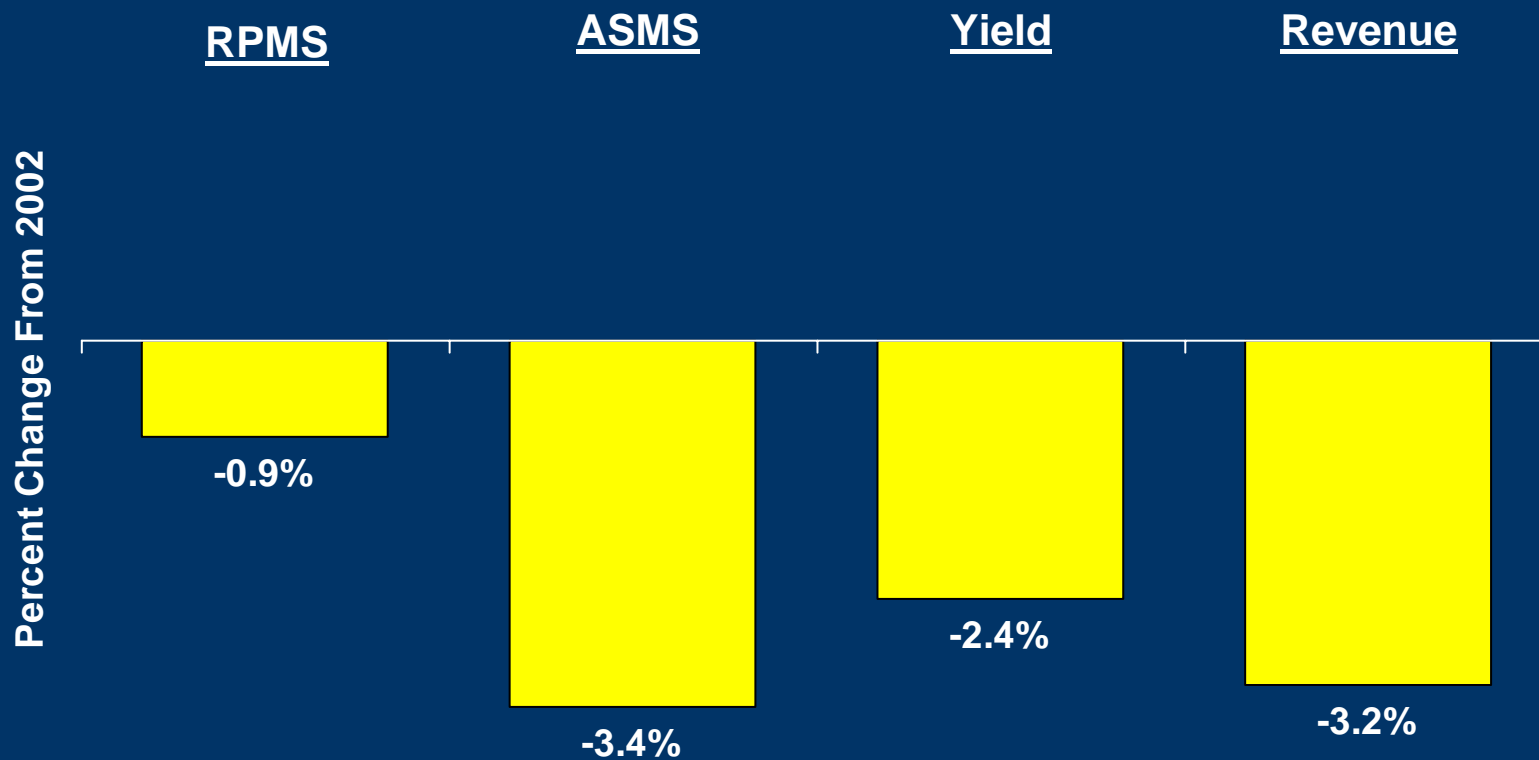


... And drives the results of our on-time performance

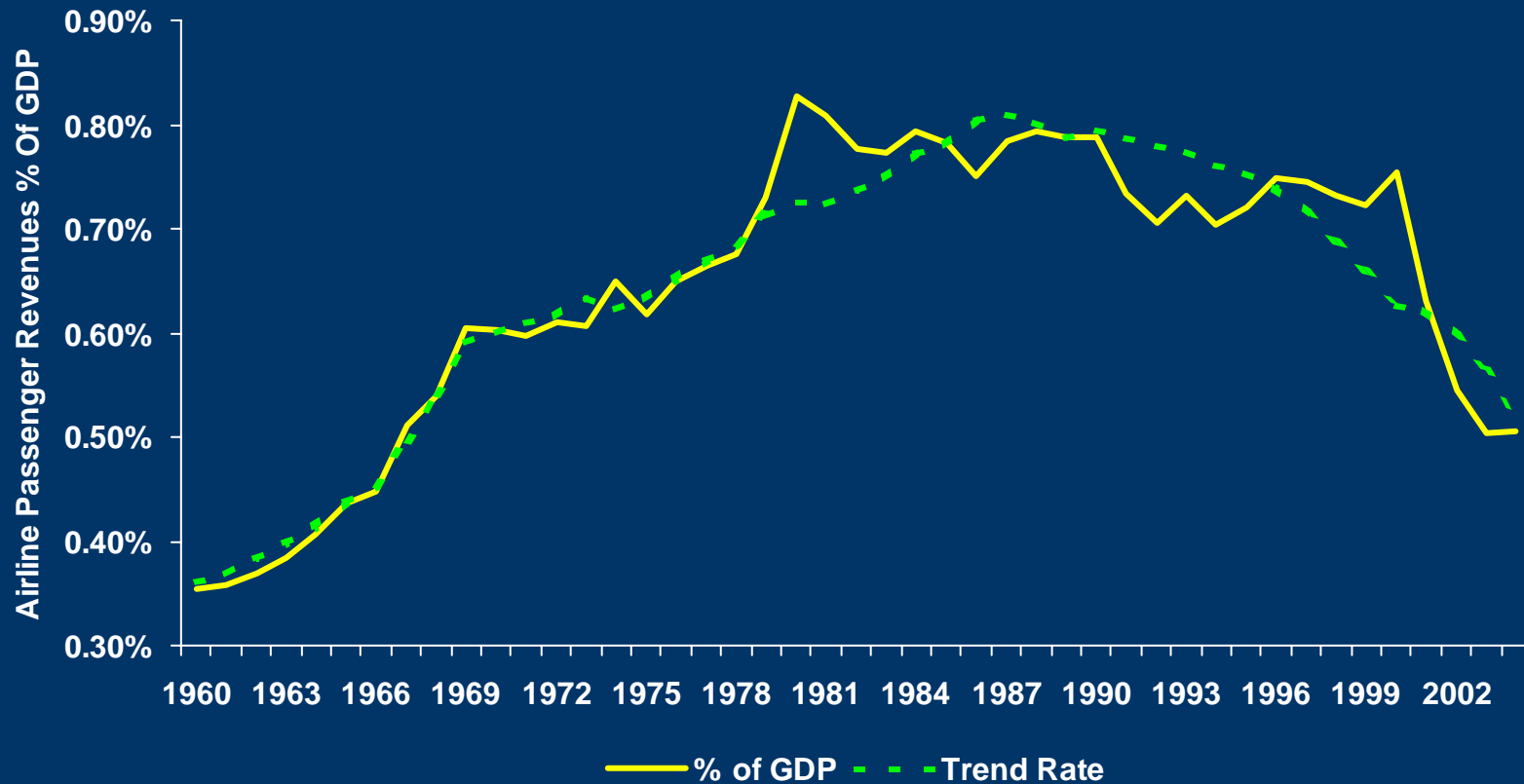


Revenue Environment And Impact On Reliability

U.S. Airline Passenger Revenues Declined 3.2% In 2003 Compared To 2002...

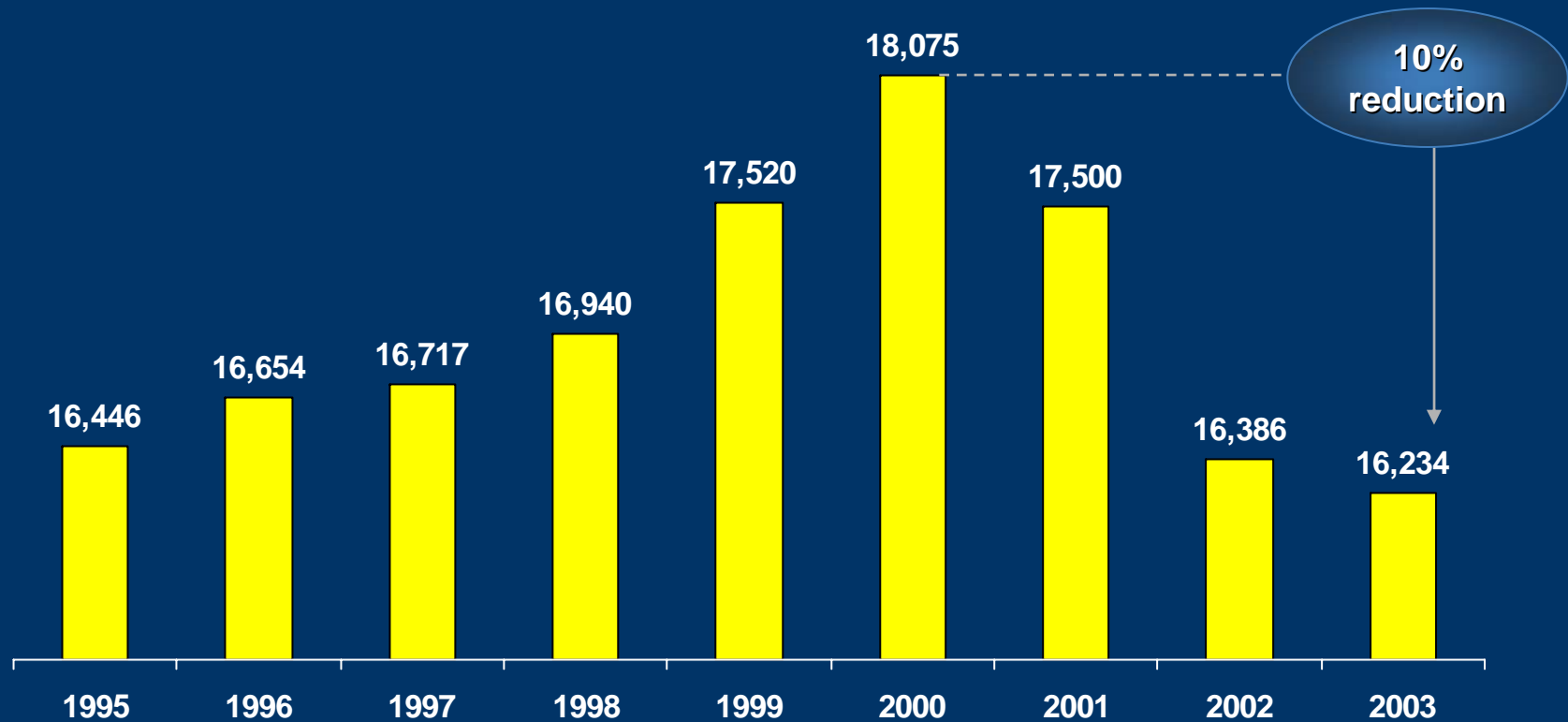


... And Airline Passenger Revenues Expressed As A Share Of The U.S. Economy Has Materially Declined And Is Expected To Continue To Erode



Consumer Spending Changes and Decline in Airlines Financial Condition Have Contributed to Declines in Industry Departures

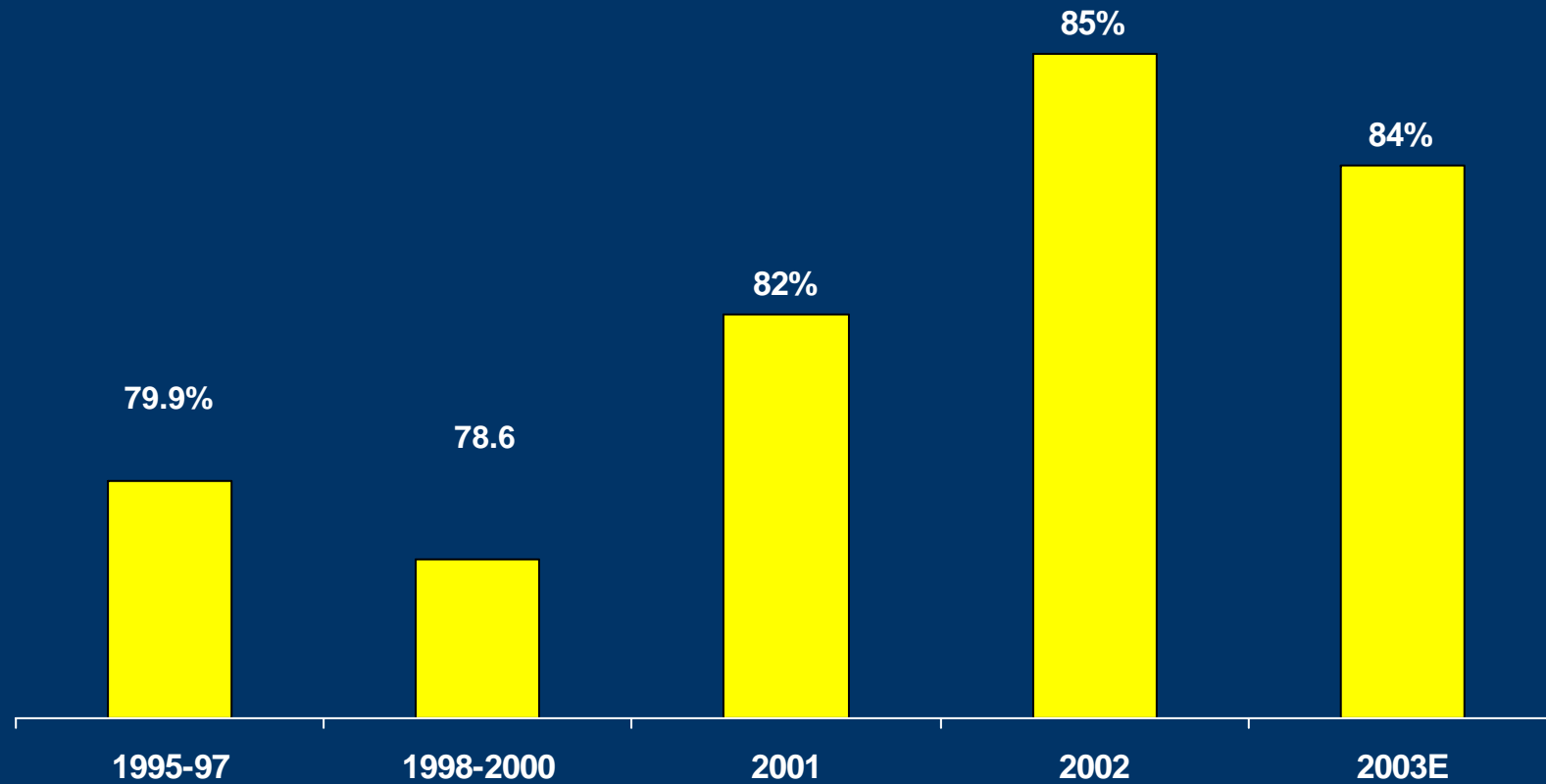
Airline Industry Average Daily Departures By Year



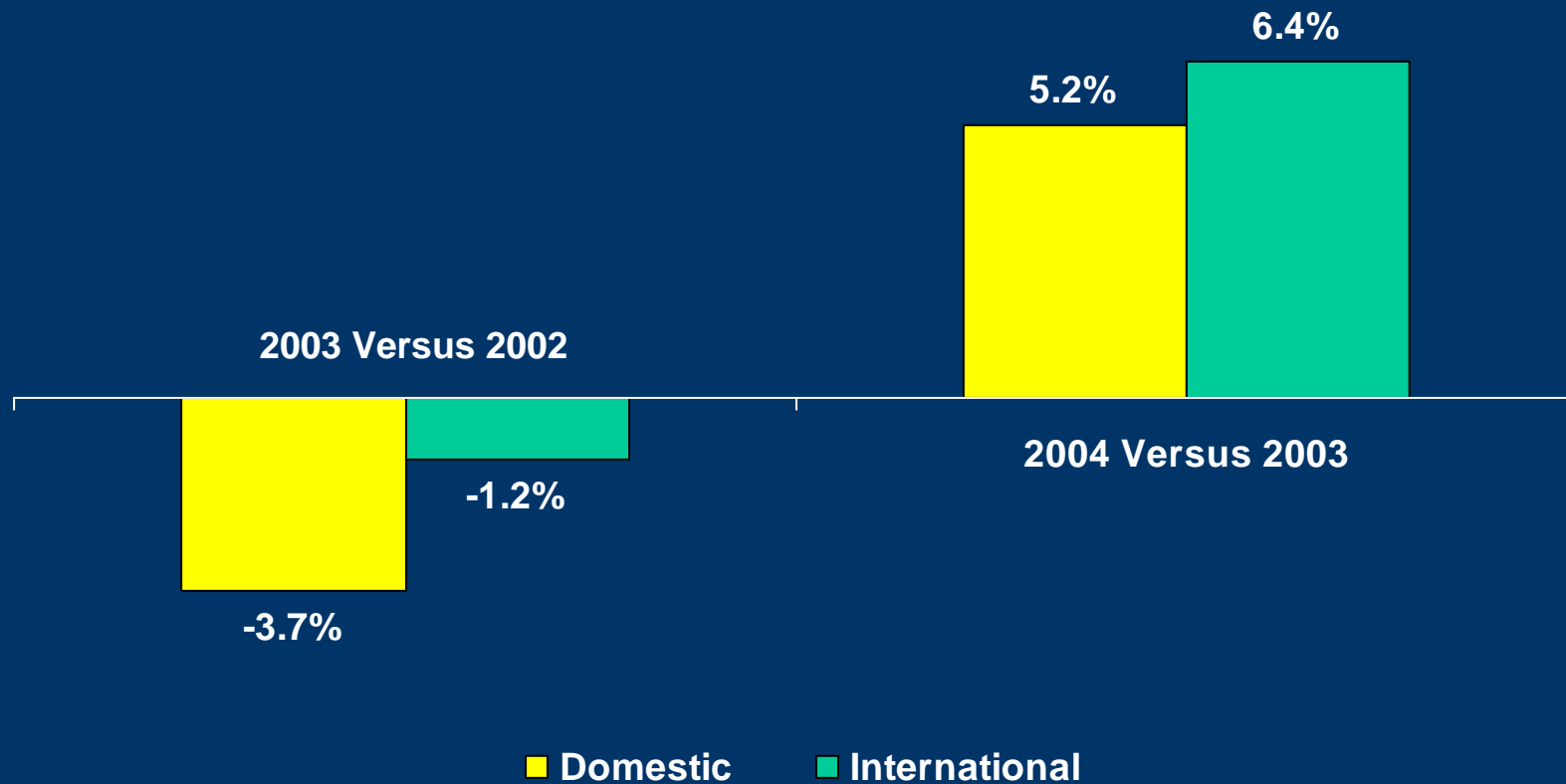
Note: Departures are from top 31 airports

The Reduction In Departures Has Helped The Airlines To Achieve Record Arrival :14 Results

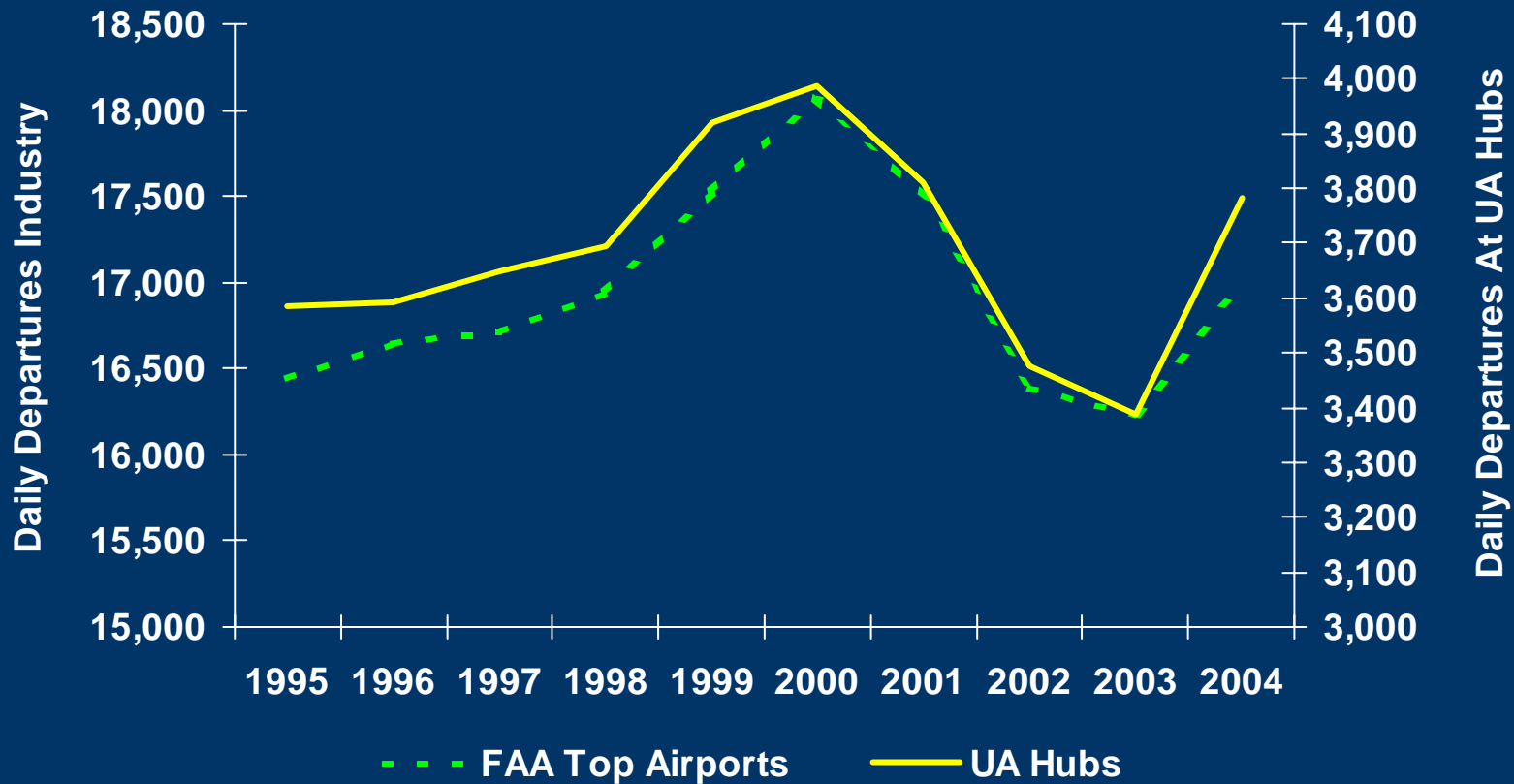
Airline Industry Average Daily Departures By Month



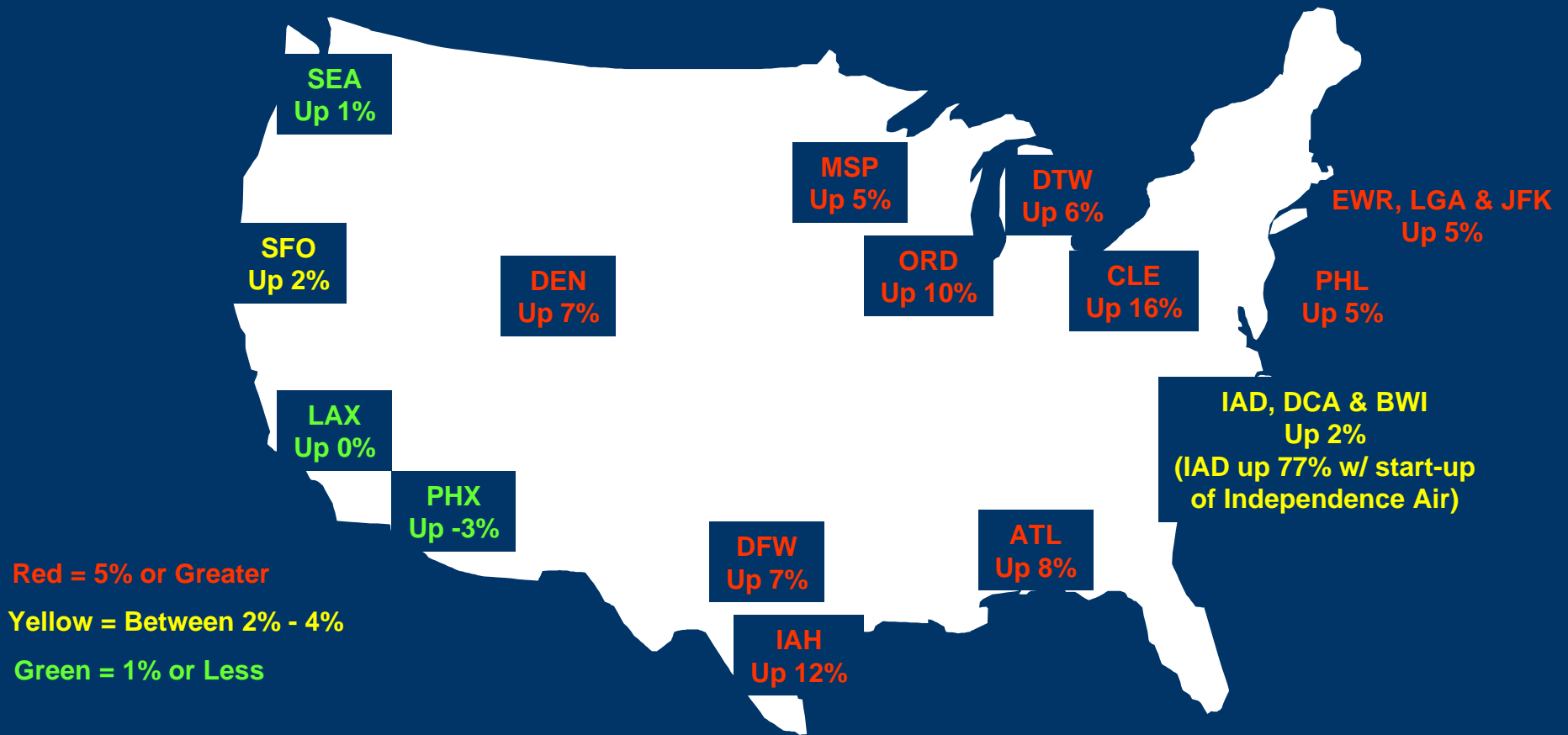
Nonetheless, Industry Capacity (ASM) Growth Will Resume In 2004...



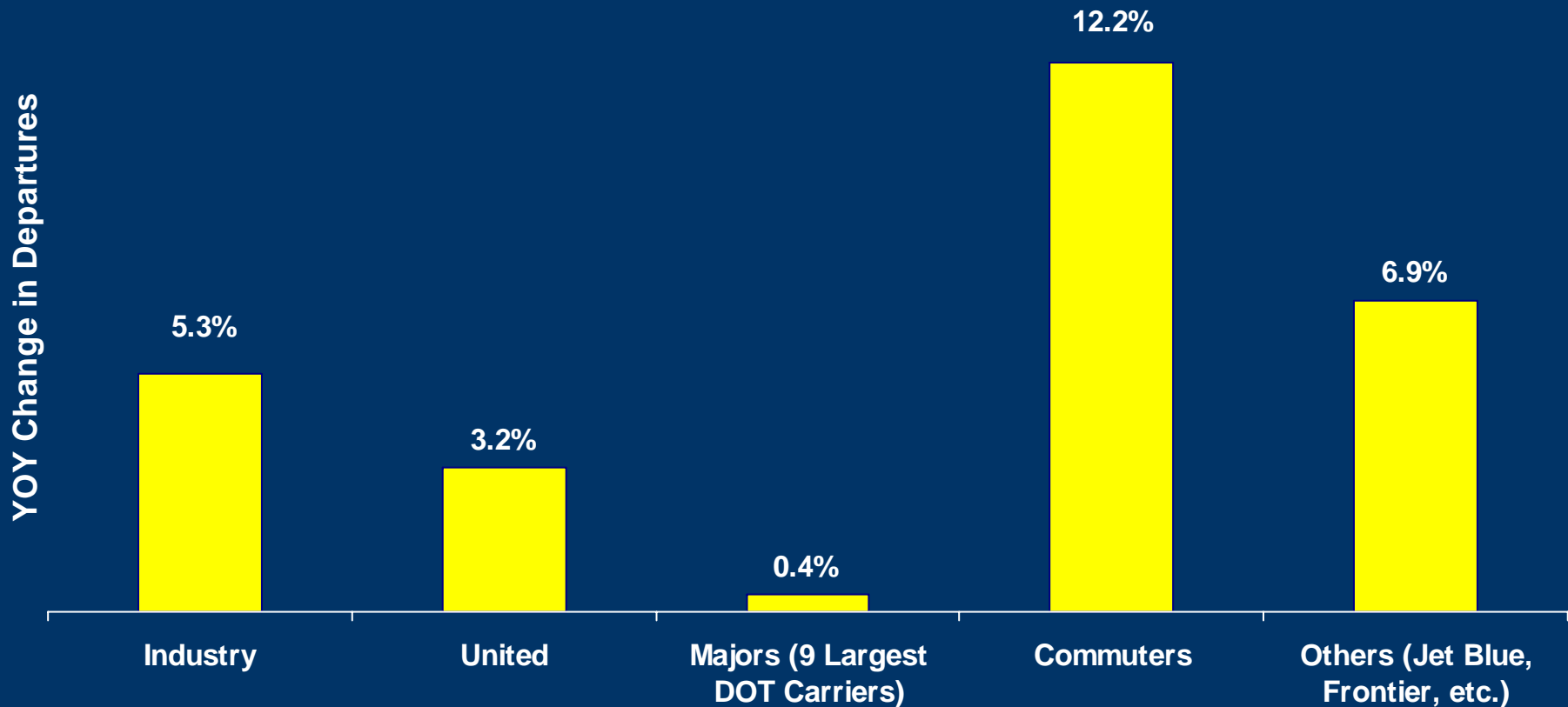
... And, Industry Departures At The Top 31 FAA Airports And United Hub Cities Will Grow In 2004 - 5% and 12% Respectively From 2003



Most Of The Growth Will Occur At Airports That Are Located In The Eastern Half Of The U.S., An Already Congested Area



Year Over Year (Jan-Apr), Domestic Departures Are Expected To Increase By 5 - 6% With The Largest Increase In Commuters



In November, We Began To Experience Congestion Related Delays At O'Hare Which Impacted Our System Net Block Minutes



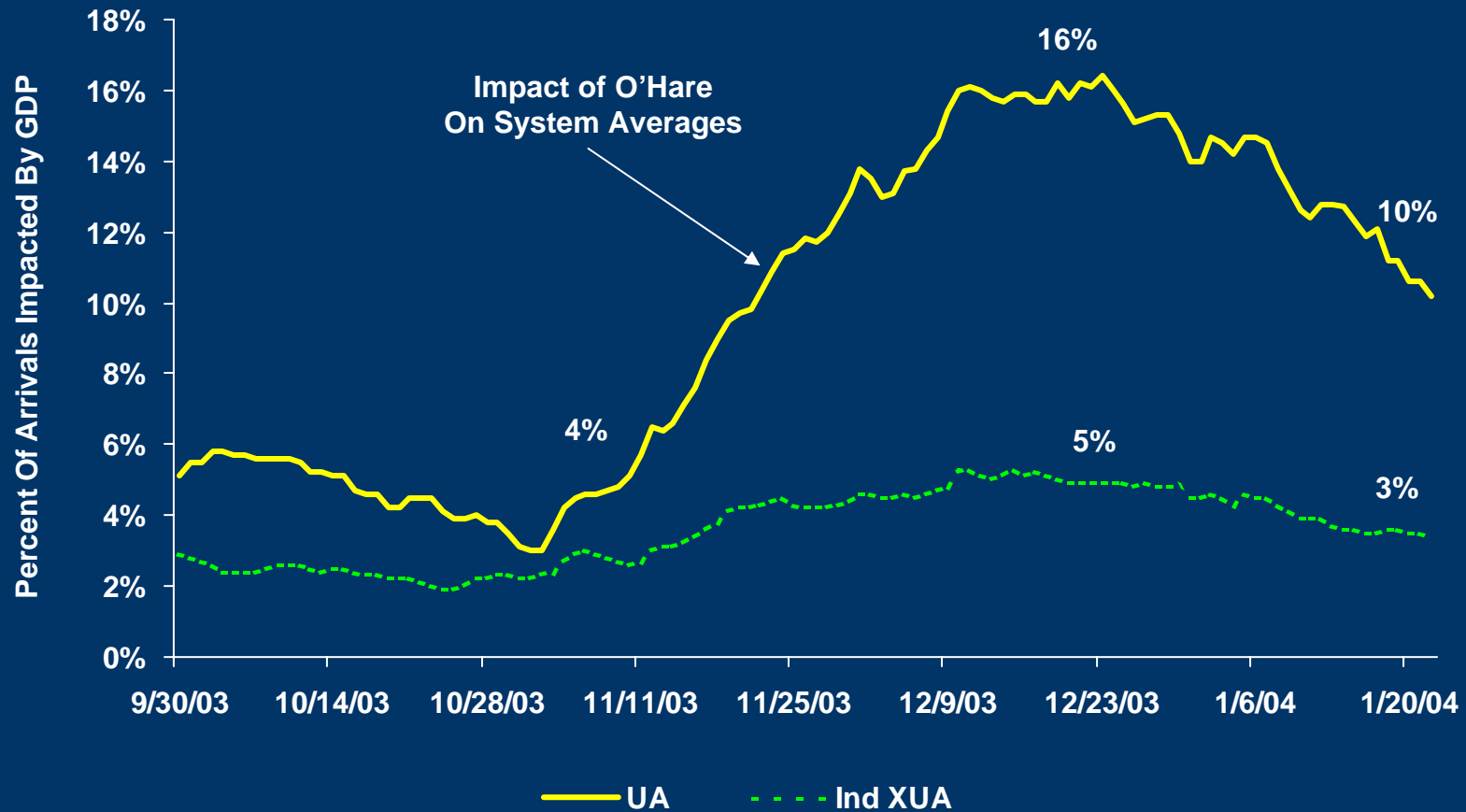
The O'Hare Impact

Industry Departures At O'Hare Are Expected To Set A Record Level In 2004

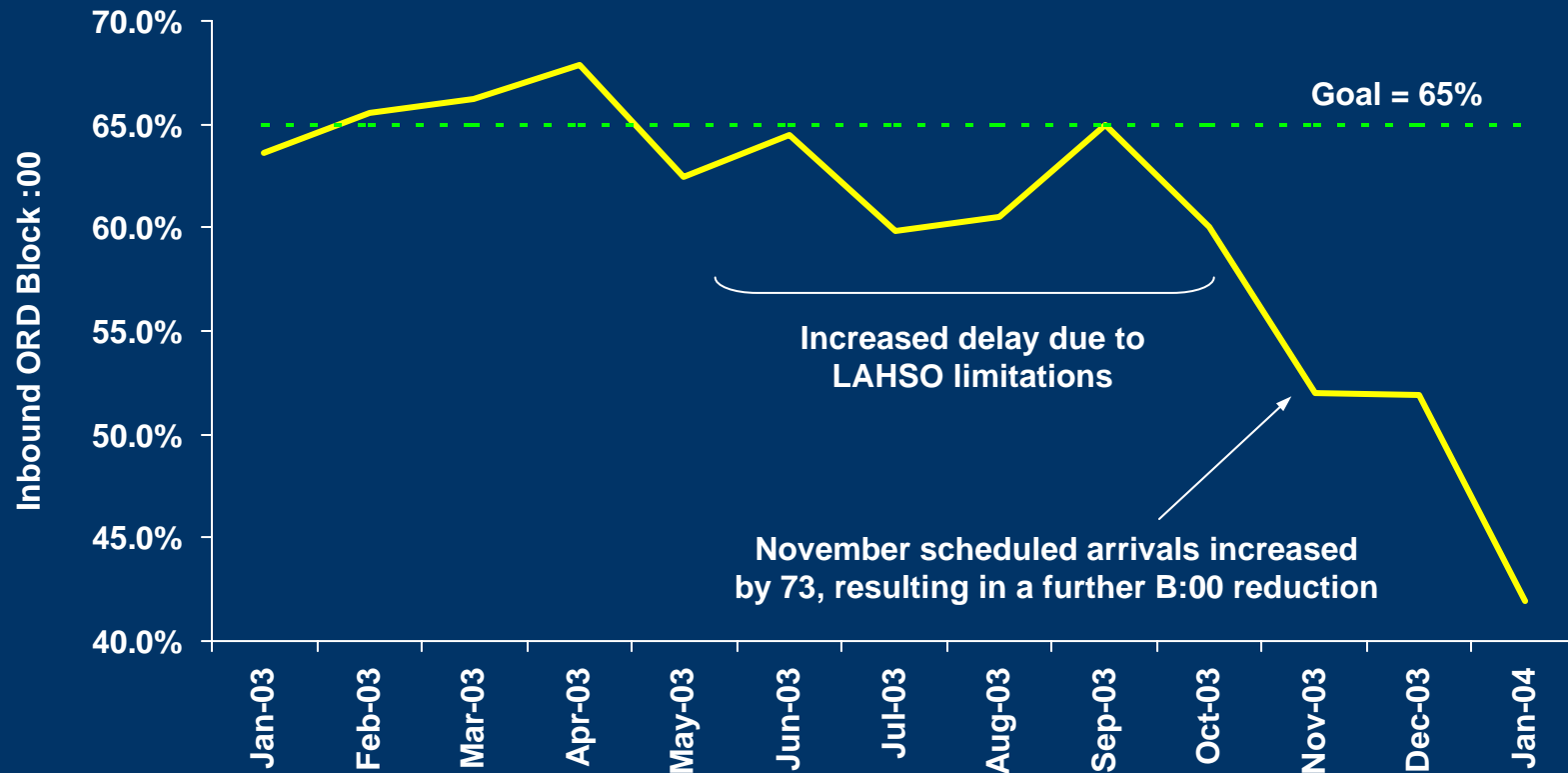


The Increase In Flights At O'Hare Has Dramatically Effectuated The Number Of Arrivals Impacted By A GDP

(30 Day Moving Average September 1, 2003 - January 22, 2004)

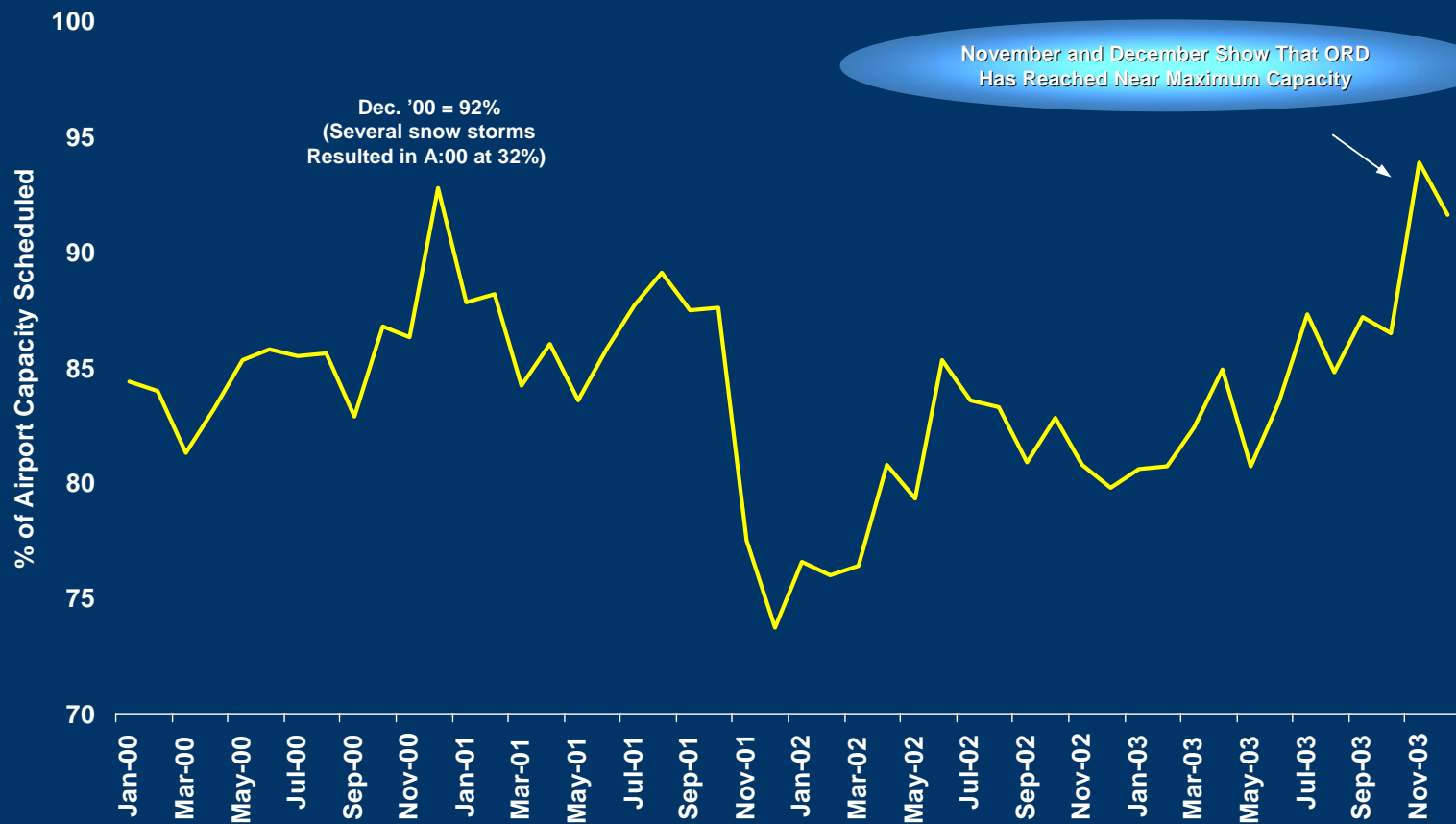


As A Result, The Block Performance Of Inbound Flights To Chicago Has Diminished, Resulting In Poor On-Time Performance For Both Arrivals And Outbound Departures

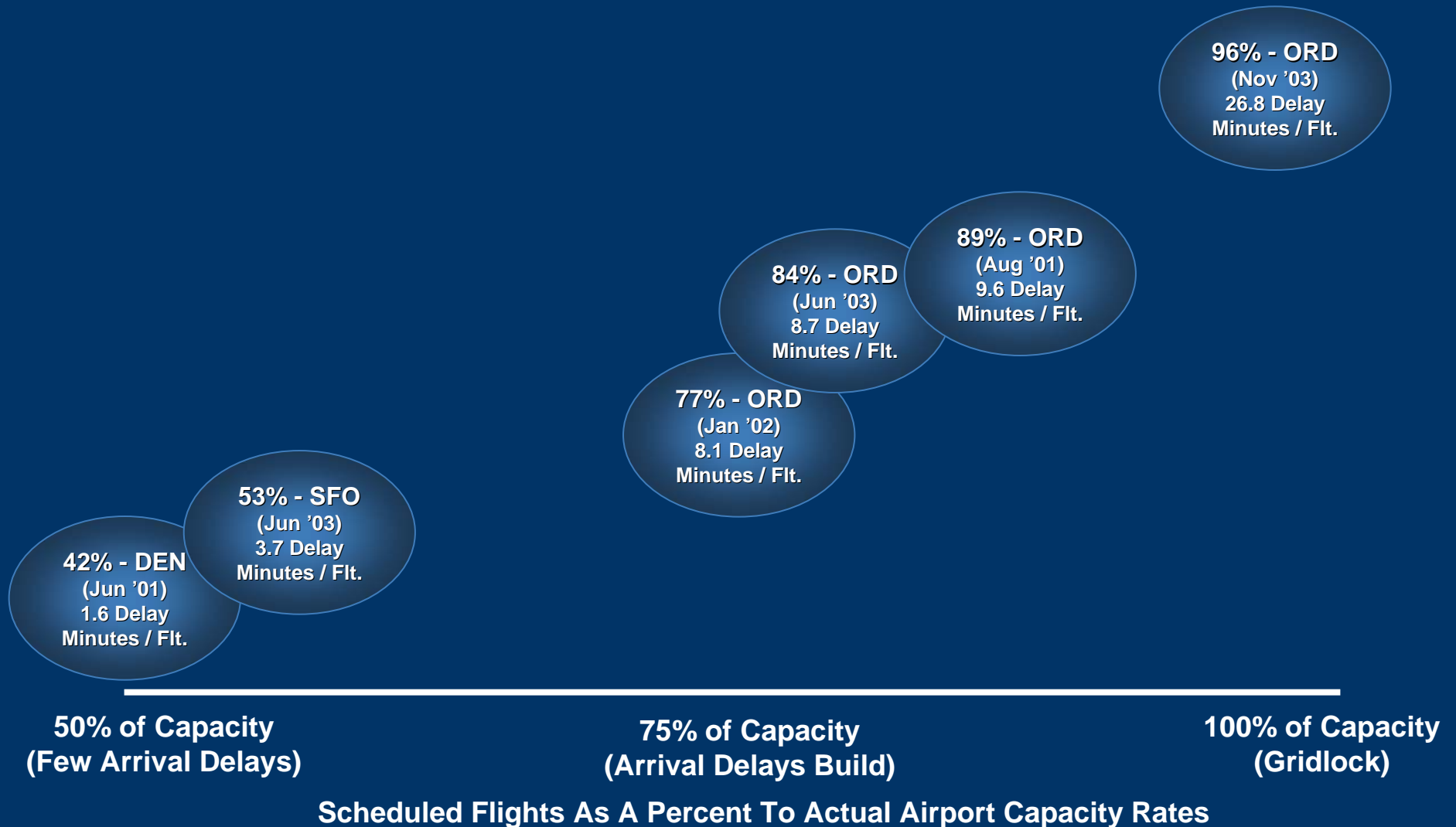


A Strong Correlation Exists Between An Airports Capacity And The Scheduled Demand. The Percent Of Airport Capacity At O'Hare Is Nearing 100%, Resulting In Significant ATC Delays

Percent of Scheduled O'Hare Flights Compared To Average Airport Capacity Rates (Based On Arrivals)

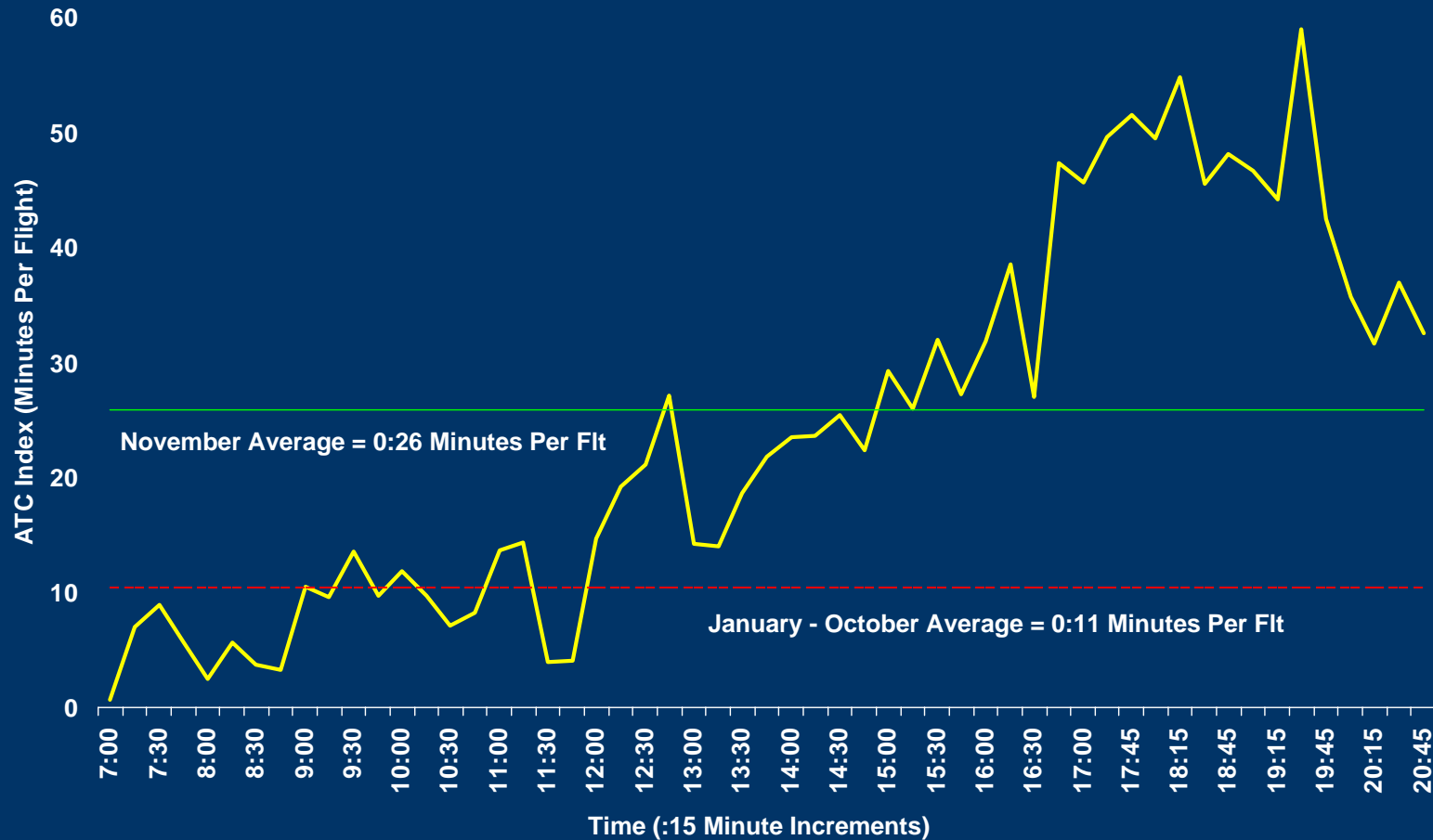


When An Airport's Scheduled Flights Are Near The Airports Posted Maximum Arrival Rate, Significant Delays Will Occur

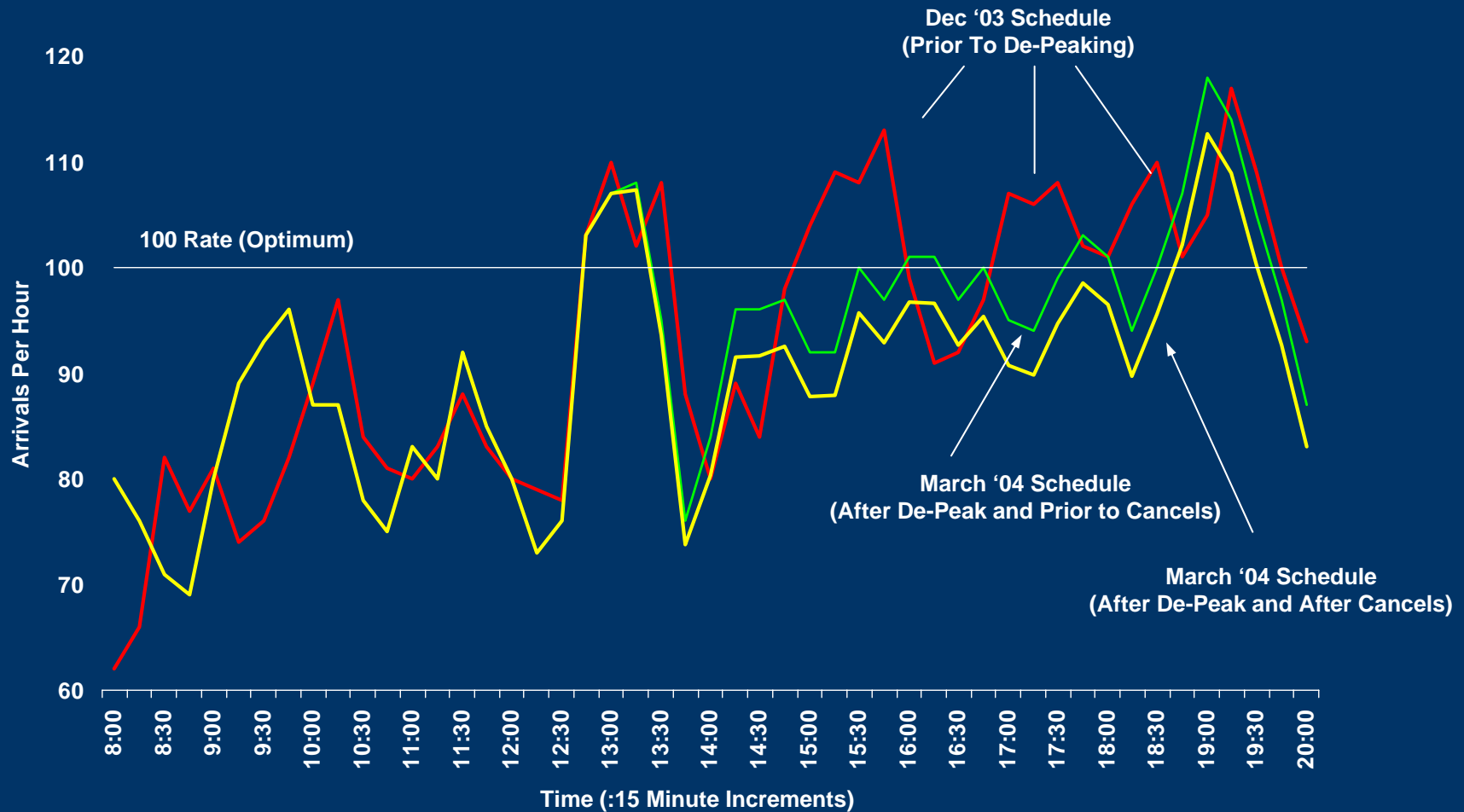


Air Traffic Delays Into O'Hare Are At A High. As The Day Continues, These Delays Grow Substantially

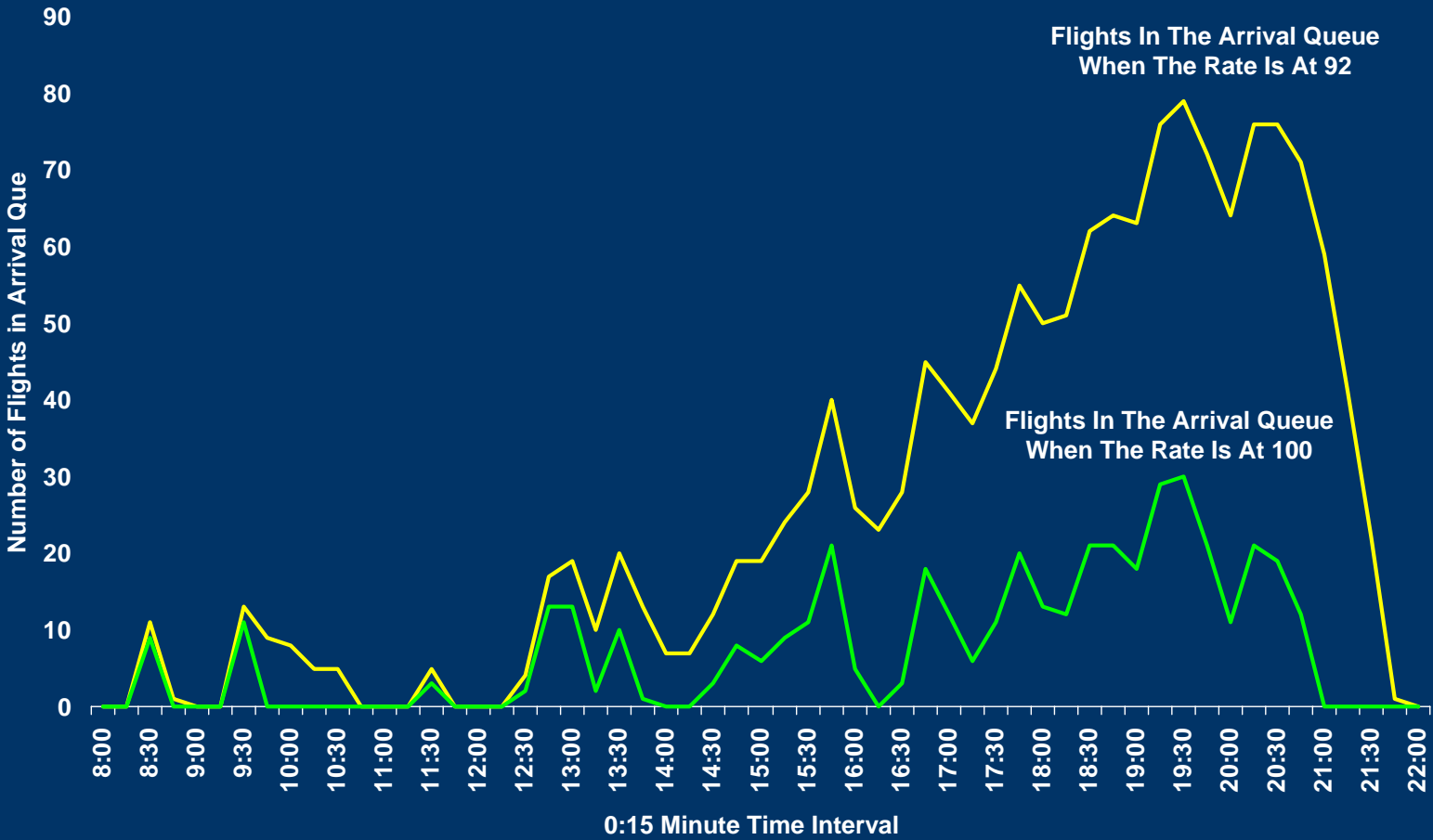
November Average Air Traffic Related Delay Per O'Hare Arrival
(Based on Upline FC Delays, Taxi-out and Hold)



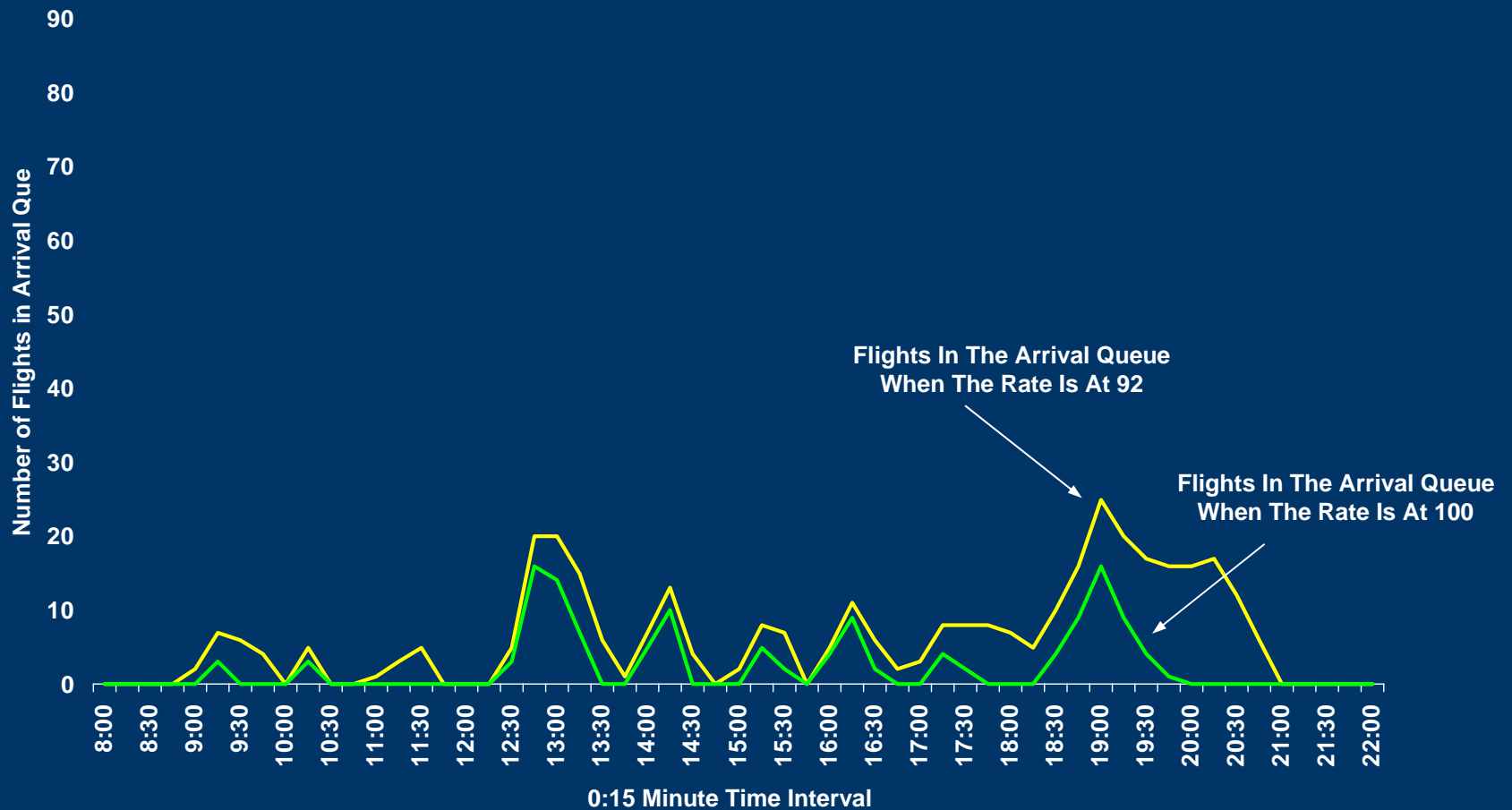
However, Significant Changes Have Been Made With The February/March Schedule Period



A Small Change In The Airport Arrival Rate Of 8 Flights Per Hour Can Have A Significant Impact On Flights In The Airport Arrival Queue (O'Hare Arrivals During December '03)



In The March Schedule, Just The De-Peaking Effort Has Resulted In Dramatic Improvements (O'Hare Arrivals During March '04 - Does Not Include Cancellations)



To Summarize...

- **Industry Must “Learn” to Operate Profitably Given New Economic and Operating Environment**
 - **Reduced Passenger Demand Has Helped Airlines Build An Operationally Strong Schedule Over The Past Two Years**
 - **However, Small Changes To A Hub Airport Can Easily Result In Congestion Which Ripples Across The System**
 - **The Collaborative Approach Between The FAA, United And American Regarding O’Hare Operations Will Result In Reduced Delay Minutes**

To Accommodate Future Air Travel Requirements, Both Airlines and Government Need To Work Collaboratively To Economically and Efficiently Expand Capacity