



Boston Logan International Airport's Peak Period Surcharge Regulation - Overview

Mr. Flavio Leo

Manager Of Aviation Planning

NEXTOR Workshop – June 6-8, 2007



Logan Has Been One of the Most Delayed Airports in the U.S.

DOT Delayed Arrival Rankings

*Air Travel
Consumer Report*

1991	3rd
1992	3rd
1993	2nd
1994	2nd
1995	4th
1996	6th
1997	5th
1998	2nd
1999	4th
2000	4th
2001	6th
2006	7th

Numerous Studies Have Been Conducted to Address Logan's Delay Problem

- ⊕ Program for Airfield Capacity Efficiency (PACE), Massport (1988)
- ⊕ Second Major Airport Site Selection Study, MAC (1991)
- ⊕ Boston Logan International Airport, Airport Capacity Enhancement Plan, FAA (1992)
- ⊕ Strategic Assessment Report, MAC (1993)
- ⊕ New England Regional Airports, Air Passenger Service Study, Phase 1, NEC/FAA (1994)
- ⊕ Logan Airside Improvements Feasibility Study, Massport (1995)
- ⊕ New England Regional Airports, Air Passenger Service Study, Phase 2 NEC/FAA (1997)
- ⊕ Logan Airside Improvements Planning Project EIS/EIR, FAA/Massport (1996-2002)
- ⊕ New England Regional Airport System Plan – Phase 1 & 2, FAA/MAC/Massport (2002-ongoing)

In 1988, Massport Instituted the Program for Airfield Capacity Efficiency (PACE)

⊕ **Changed Logan's Landing Fee Structure:**

- Previously aircraft were charged based on weight (with a \$25 minimum fee)
- PACE added a \$91.00 charge per landing with a lower weight-based fee
- The PACE fee structure applied across the full day – not just during peak periods
- Total landing fee revenues were unchanged (revenue neutral)

⊕ **Significantly increased landing fees for small commuter and GA aircraft, and lowered landing fees for jet carriers**

⊕ **Challenged by small aircraft users in U.S. District Court and before the U.S. Department of Transportation**

⊕ **Implemented in July 1988 and was in effect for six months prior to being overturned**

While PACE was in Effect, Flight Activity at Logan Declined

➡ Overall Flight Volume at Logan was down by 5.5% during the six month period with PACE:

- General Aviation flights dropped by 34% from prior year
- Regional Carrier Flights declined by 6 % from prior year

➡ While PACE coincided with a drop in Logan flights, the causality is less clear:

- GA also declined at other Boston area facilities (Hanscom, Beverly, and Norwood)
- Logan GA traffic did not recover after PACE was rescinded
- Regional carrier flight levels were impacted by carrier consolidation

PACE was Overturned by the U.S. Department of Transportation

- **The U.S. DOT Found that PACE was:**
 - Unjustly discriminatory to small aircraft users;
 - Based on an inappropriate cost allocation methodology; and
 - The higher fees for small aircraft were unrelated to actual periods of congestion

- **In the PACE decision, the DOT did protect the airport's right to change the landing fee structure:**
 - The DOT Order stated that “there is nothing inherently sacrosanct about weight-based fees, and nothing in the law that precludes Massport from changing its method of cost allocation.”

- **The PACE decision guided Massport's efforts to design a peak period pricing program in 1992-1993**

In Response, Massport Developed a Comprehensive Program to Reduce Delays at Logan Airport

Physical Improvements



Demand Management



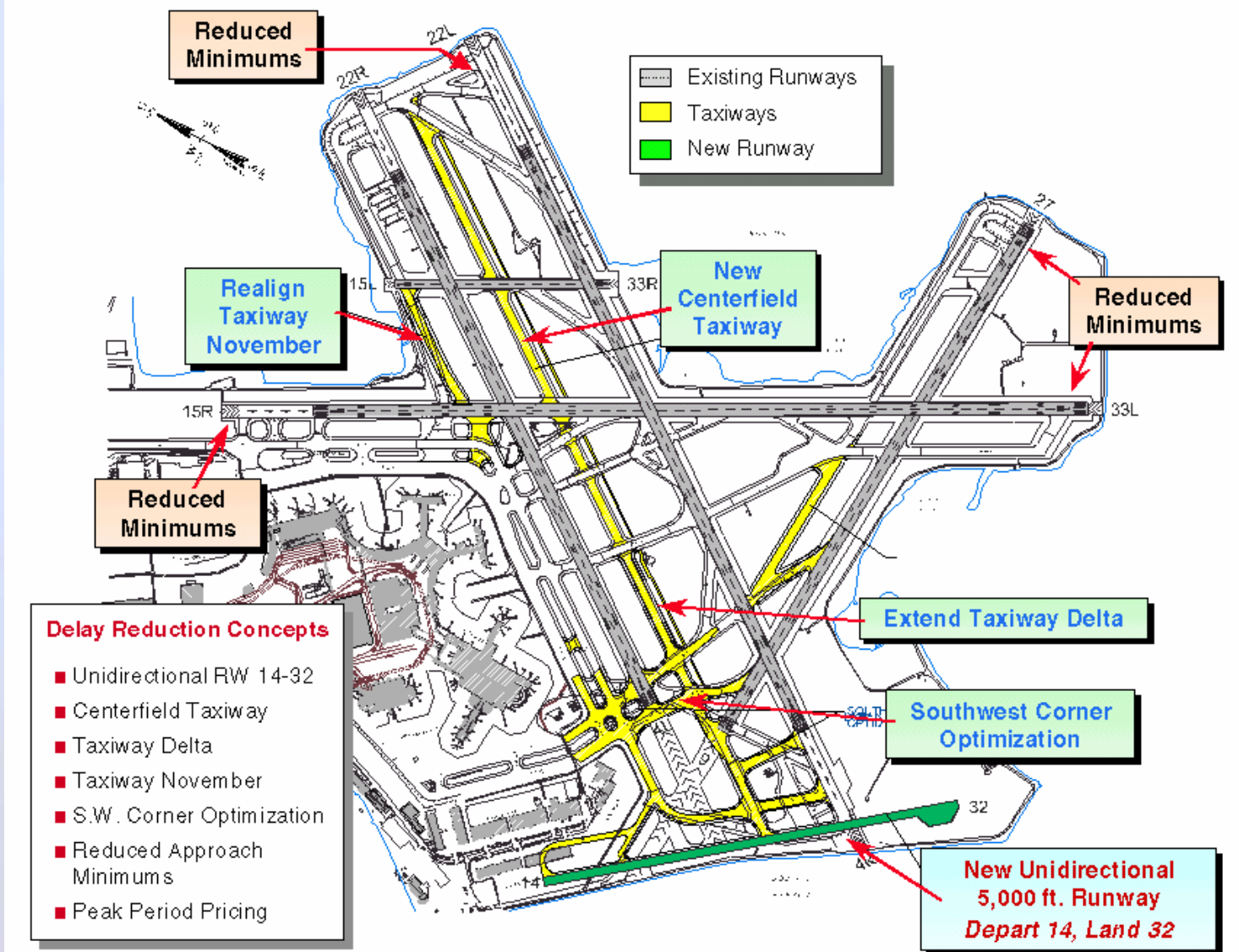
Increase use of Regional Airports



**High Speed Rail to Top O&D Markets
(NYC and WAS)**



The Airside Study Identified a Package of Physical Improvements and Administrative Options for Minimizing Delays

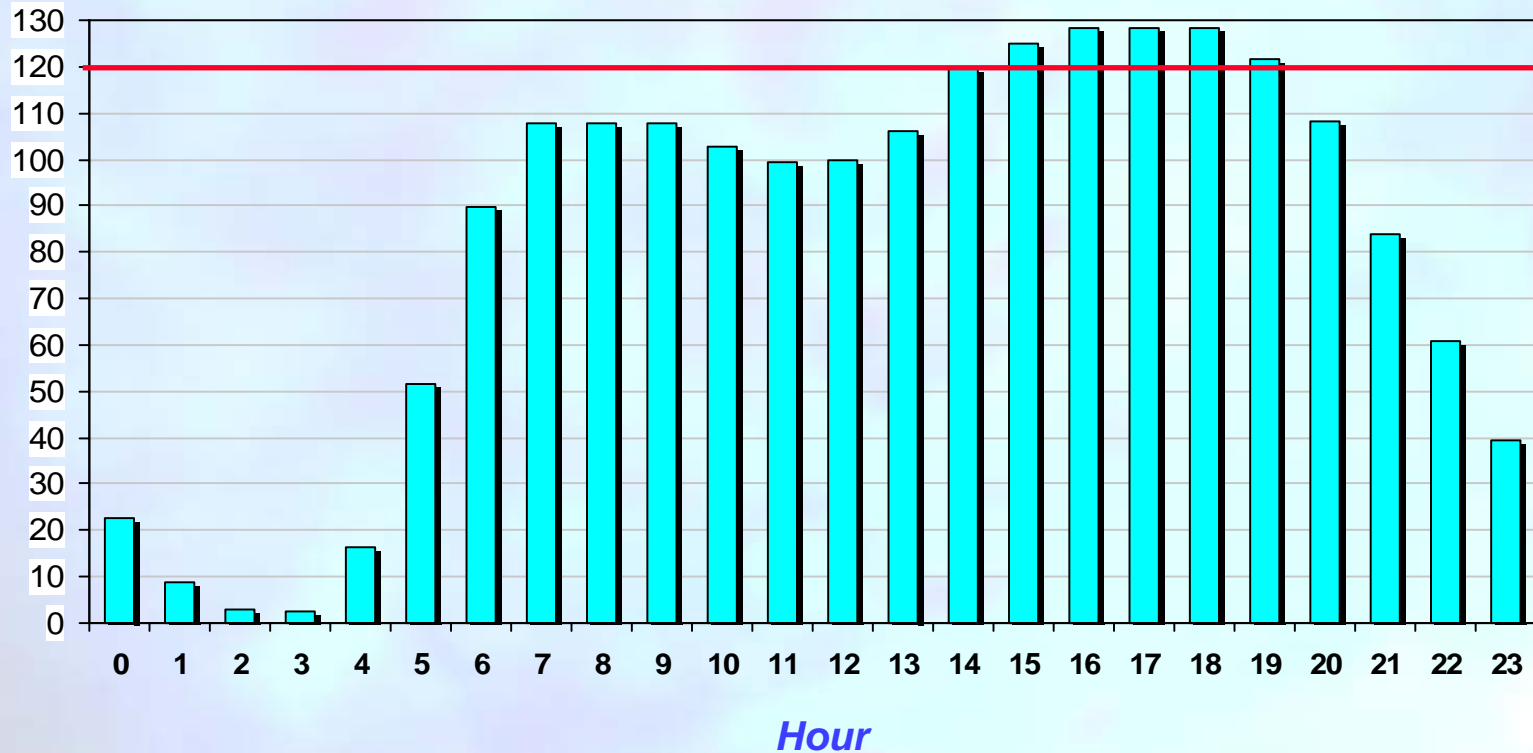


In 1993 Overscheduling was a Concern

1993 (3 Hour Average)

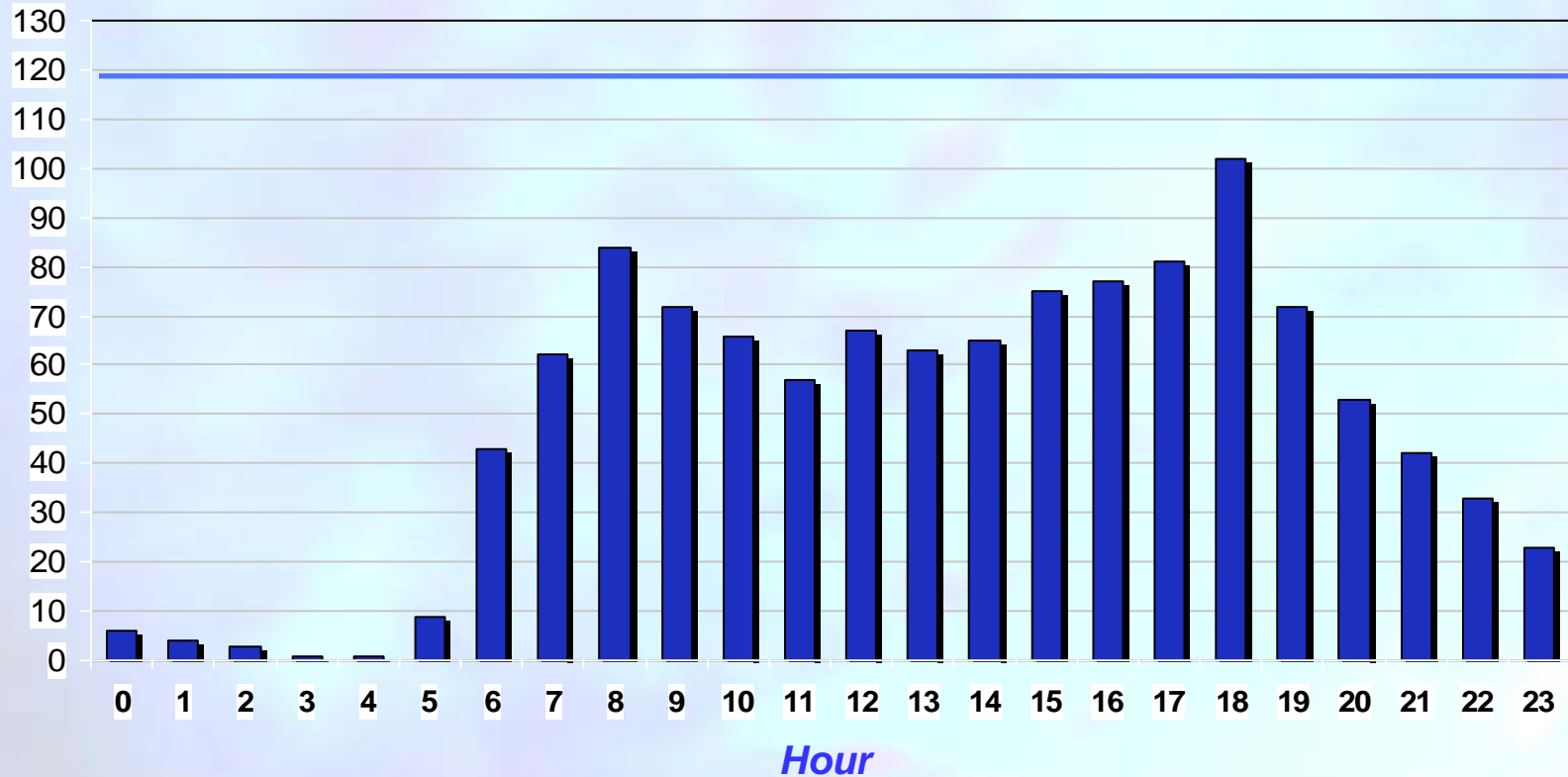
August Weekday

**Logan
Operations**



Post 9/11 Logan Flight Activity Dropped to Well Below the Levels Present in 1993 (Logan's Historical High)

Logan Operations



While Peak Period Pricing was Ineffective in the Near-Term, Analysis Showed that It Offered Delay Reduction Benefits at Higher Activity Levels

Delay Reduction Attributable to Peak Period Pricing

Logan at
510,000 Annual
Operations

4%
Lower

Logan Flights in
2006 = 410,000

Logan at
552,000 Annual
Operations

19%
Lower

The Peak Period Surcharge Program is a Condition of the Administrative and Judicial Approvals for Runway 14-32

FAA Record of Decision

- “FAA is directing Massport to develop and submit a detailed plan or draft proposal for Peak Period Pricing, or other comparable Demand Management Program, before commencing construction of Runway 14-32”

Final Judgment in Suffolk Superior Court (Business Litigation Section)

- Massport will begin a rulemaking process prior to beginning construction of Runway 14-32
- Massport is not to operate Runway 14-32 until a demand management program has been enacted by the Board

Goals of Massport's Peak Period Surcharge Program

- **Early Identification of Overscheduling and Potential Delays**
- **Provide a Signal to All Airport Users Regarding Future Operating Environment at Logan**
- **Reduce Delays by Aligning Flight Demand with Logan's VFR Capacity**
- **Maintain Access from Small Communities Dependent on Logan**
- **Build on Lessons Learned from PACE:**
 - Established a methodology to define the peak period
 - Used a cost allocation model to establish the peak period fee level
 - Trigger the Peak Fee based on Airfield Delays

Elements of Massport's Peak Period Surcharge Program

Monitor Schedules to Identify
Overscheduling Conditions
6 Months in Advance

Provide Early-Warning to Users
and FAA for Voluntary Response

Trigger Program When Projected VFR
Delays Reach 15 Minutes per Operation

Impose Peak Period Surcharges (\$150 near-term) for
Arrivals and Departures (*Revenue Neutral*)

Small Community Exemptions at August 2003 Service
Levels

All Key Levers
Are Adjustable to
Address Future
Conditions

The Monitoring Program is Designed to Provide Advanced Notification to Airport Users

- **The program will forecast Logan activity, up to six months in advance, to identify the emergence of overscheduling conditions**
- **A simulation model, identified in consultation with FAA, will estimate the levels of runway-related delays during VFR conditions based on:**
- **Advance notice will be given to airport users and FAA to provide an opportunity for voluntary schedule adjustments and/or FAA intervention**

The \$150 Fee Level is a Starting Point, Intended to Affect Demand in Small Increments

- **The peak period fee is designed to stimulate a shift of some operations from peak to off peak periods, to better align demand with capacity**
- **The regulation specifically allows for adjustment to the peak period fee, if required, to balance flight demand with Logan's available capacity**
- **The rate structure will be revenue neutral to the extent required by Federal law**
 - Increased revenues from peak period surcharges will be offset through a reduction in off peak landing fees

An Exemption Program Protects Small Community Air Service

Small Community Exemptions



Community	Logan Flights (Aug. 2003)		
	Daily	4:00pm-7:59pm	Illustrative Exemptions
Nantucket	64	17	17
Augusta	4	0	4
Bangor	22	4	4
Bar Harbor	9	3	4
Hyannis	14	4	4
Martha's Vineyard	47	13	13
Presque Isle	6	2	4
Provincetown	30	9	9
Portland	14	4	4
Rockland	7	1	4
Rutland	6	1	4
Total	223	58	71

* Special circumstances exemption for Provincetown

Massport's Peak Period Surcharge Program is Consistent with Federal Law

DOT/FAA Rates and Charges Policy:

Properly Structured

“A properly structured peak pricing system that allocates limited resources using price during periods of congestion will not be considered to be unjustly discriminatory.”

Revenue Neutral

“These provisions do not exempt airport proprietors from the requirement that total airfield revenues not exceed total airfield costs as determined in accordance with the Final Policy.”

Airport Noise and Capacity Act of 1990:

Exempt from Part 161

“Noise or access restrictions...do[es] not include peak-period pricing programs where the objective is to align the number aircraft operations with airport capacity.”

Massport's Peak Period Surcharge Program Is Designed to fit Logan's Operating Profile

- ➡ **Peak periods during discrete periods of the day/year**
- ➡ **Only need to shift a limited number of flights outside of peak period**
- ➡ **Program is launched well in advance of the delay condition so that air carriers have substantial advance notice and opportunity adjust Logan schedules and aircraft fleet mix**
 - Monitoring program provides further opportunity for users to adjust their schedules

What is the Airport Role in the Demand Management Process?

- ➔ **USDOT/FAA have recognized the right of airports to address airfield congestion through a tailored pricing program**
- ➔ **Airports can and should be *proactive*, not *reactive*, in addressing congestion management**
- ➔ **Airports need to design a program that fits their unique operating profile and circumstances.**
- ➔ ***One size does not fit all.***



In 2000, Congestion and Delay Were the Watch Words in the U.S. Aviation Industry. Today, Demand is Recovering and Flight Delays are Also Growing Again...

Percentage of Arrivals Delayed by 15 Minutes or More

Ten U.S. Airports in 2000 and 2006

