

Ticketing and Booking Fundamentals

Jordan Kayloe

Senior Vice President, Diio

January 13, 2016



Overview

➤ Objectives

- The Ticketing Process
- Three Types of Ticketing Data
 - MIDT
 - BSP
 - ASP
- Examples of Ticket Data Analysis
- Summary

Objectives

- **Understand the ticketing process**
- **Discuss the origins of MIDT, BSP, and ASP**
- **Learn what comprises each data source**
- **Understand the pros and cons of each data source**
- **Discuss uses of the data for airports**
- **Understand how data can support you**

Overview

- Objectives

- The Ticketing Process

- Three Types of Ticketing Data

- MIDT
- BSP
- ASP

- Examples of Ticket Data Analysis

- Summary

Who Remembers the 60s, 70s, or 80s?

- Raise your hand if you've flown these defunct airlines!
- They went away in 1979, 1986 and 1987



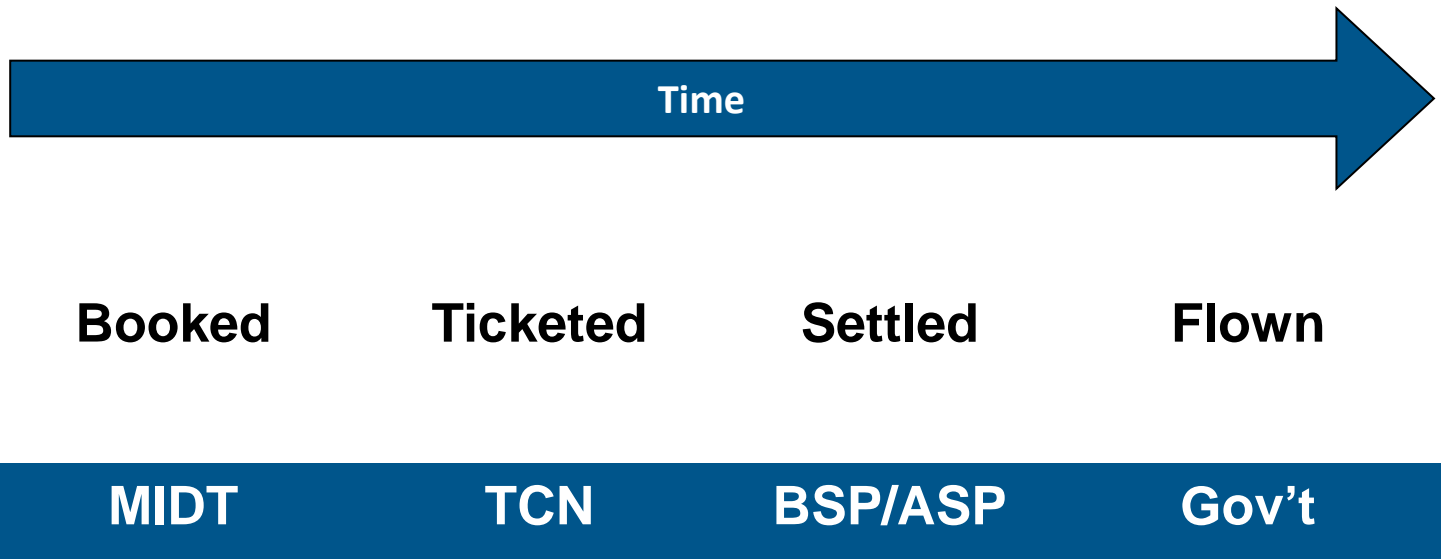
How did you buy tickets back then?

- If you never personally used this device below, shhh!



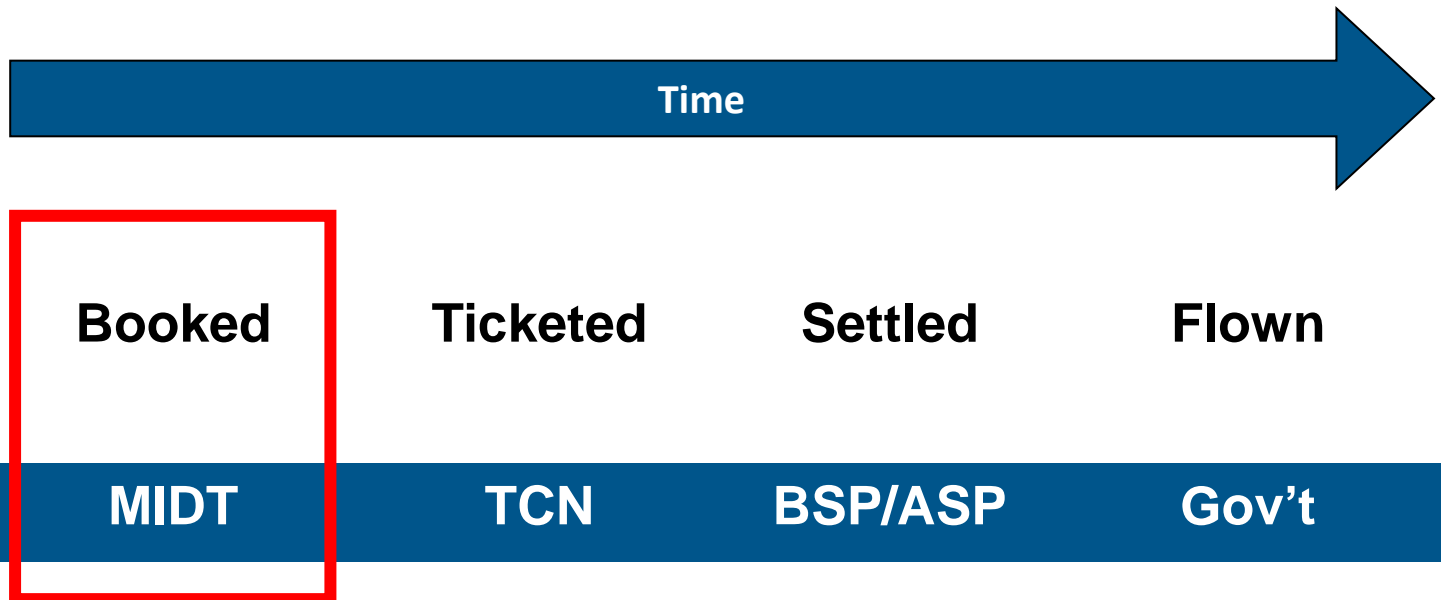
The Travel Data Life Cycle

- The traditional ticketing process flows according to the life cycle steps from the reservation to the actual flight



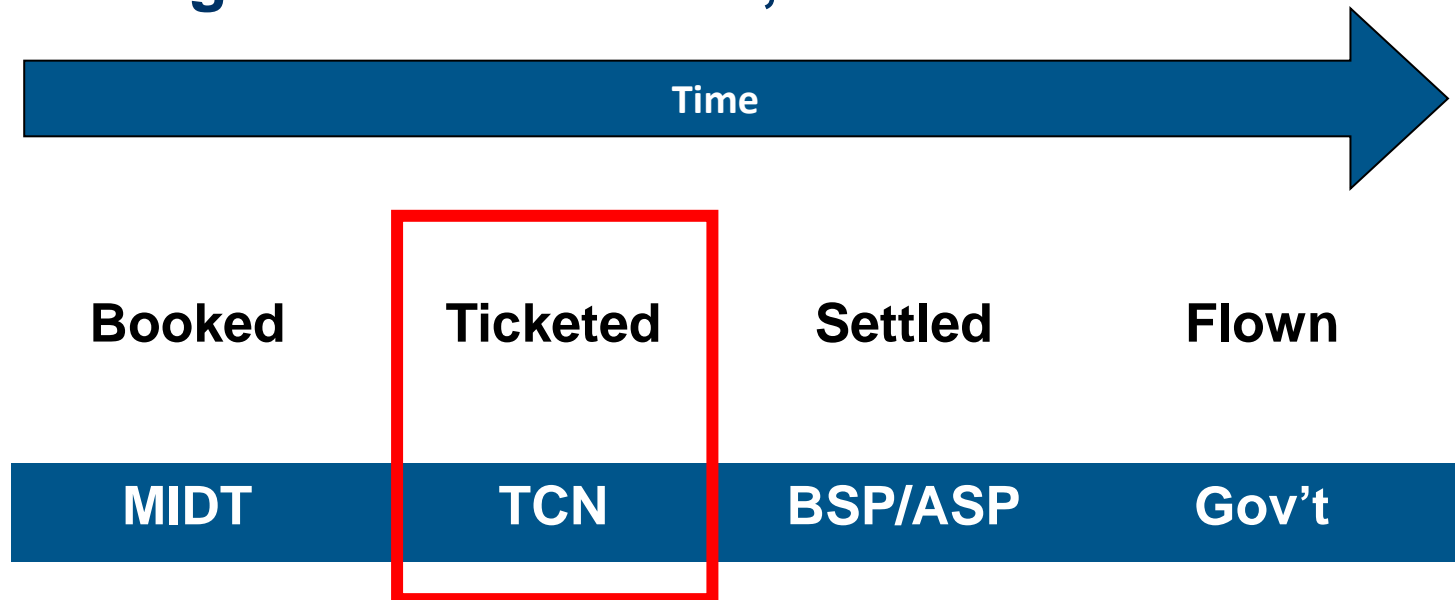
Booking is the First Step

- Airline passengers have many options in making their travel reservations
- If they use a Global Distribution System (“GDS”), the system captures the booking



Ticketing is the Second Step

- When the reservation is purchased, a ticket is issued using an assigned fare
- Booking and ticketing are often done together
- Travel agents issue tickets, as do airlines



Ticket Coupons Contain Many Data Points

Itinerary Detail Reports,
Passenger volumes by
carrier

True O&D or
Segment O&D
Reports

Booking
Class
Reports

Sales trends over time,
Purchases by lead time

Point of Origin
Sales reports

Travel by Day-of-Week
and Time of Day

Agent
Sales

Sales by
Country

ISSUED BY MALAYSIA AIRLINES		CONJUNCTION TICKET(S)																																																								
ENDORSEMENTS/RESTRICTIONS *AJF/FLEXSAVER-MH OP FLT/MH000 ON-NO-SHW OB/CHNG FEE		Passenger ticket and baggage check Subsequent conditions or contract apply to ticket																																																								
PASSENGER NAME (NOT TRANSFERABLE) SAMPLE TRAVELER		DATE OF ISSUE 30 OCT 2008	ORIGIN/DESTINATION PEN/PEN BOOKING REF. 1B/MBEEUF ISSUED IN EXCHANGE FOR																																																							
		20300394 HOLIDAY TOURS & TRAVEL KUALA LUMPUR MALAYSIA 50450																																																								
		MY																																																								
<table border="1"> <thead> <tr> <th>X/O</th> <th>NOT GOOD FOR PASSAGE FROM</th> <th>CARRIER</th> <th>FLIGHT</th> <th>CLASS</th> <th>DATE</th> <th>TIME</th> <th>STATUS</th> <th>FARE BASIS</th> <th>NOT VALID BEFORE-NOT VALID AFTER</th> <th>ALLOW</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>PENANG</td> <td>MH</td> <td>1167</td> <td>Y</td> <td>31OCT</td> <td>2145</td> <td>OK</td> <td>QL3MMYF</td> <td></td> <td></td> </tr> <tr> <td>O</td> <td>KUALA LUMPUR</td> <td>MH</td> <td>2355</td> <td>Q</td> <td>31OCT</td> <td>2355</td> <td>OK</td> <td>QL3MMYF</td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>LONDON HEATHROW</td> <td>MH</td> <td>1050</td> <td>Q</td> <td>16NOV</td> <td>1050</td> <td>OK</td> <td>QL3MMYF</td> <td></td> <td></td> </tr> <tr> <td></td> <td>KUALA LUMPUR</td> <td>MH</td> <td>1138</td> <td>Y</td> <td>17NOV</td> <td>0915</td> <td>OK</td> <td>QL3MMYF</td> <td></td> <td></td> </tr> </tbody> </table>				X/O	NOT GOOD FOR PASSAGE FROM	CARRIER	FLIGHT	CLASS	DATE	TIME	STATUS	FARE BASIS	NOT VALID BEFORE-NOT VALID AFTER	ALLOW	X	PENANG	MH	1167	Y	31OCT	2145	OK	QL3MMYF			O	KUALA LUMPUR	MH	2355	Q	31OCT	2355	OK	QL3MMYF			X	LONDON HEATHROW	MH	1050	Q	16NOV	1050	OK	QL3MMYF				KUALA LUMPUR	MH	1138	Y	17NOV	0915	OK	QL3MMYF		
X/O	NOT GOOD FOR PASSAGE FROM	CARRIER	FLIGHT	CLASS	DATE	TIME	STATUS	FARE BASIS	NOT VALID BEFORE-NOT VALID AFTER	ALLOW																																																
X	PENANG	MH	1167	Y	31OCT	2145	OK	QL3MMYF																																																		
O	KUALA LUMPUR	MH	2355	Q	31OCT	2355	OK	QL3MMYF																																																		
X	LONDON HEATHROW	MH	1050	Q	16NOV	1050	OK	QL3MMYF																																																		
	KUALA LUMPUR	MH	1138	Y	17NOV	0915	OK	QL3MMYF																																																		
FARE PENANG INTL PEN BAGGAGE CHECKED UNCHECKED PCS. WT. UNCHECKED PCS. WT. UNCHECKED PCS. WT. UNCHECKED PCS. WT. UNCHECKED																																																										
FARE CALCULATION EQUIV. FARE PD. MYR 3102 30OCT08 PEN MH LHR MH PEN 3102.00 COAM 0.00 SPAM 0.00 END ROE 1.000000																																																										
TAX/FEE/CHARGE MYR 3102																																																										
TAX/FEE/CHARGE MY 51																																																										
TAX/FEE/CHARGE GB 225																																																										
TAX/FEE/CHARGE XT 1875																																																										
TOTAL MYR 5253																																																										
FORM OF PAYMENT CASH																																																										
Payment method (including exchanges)																																																										
CPN 232		FORM AND SERIAL NUMBER 2598636444																																																								
A/I/ AGENT INFO		ORIGINAL ISSUE 7766/ABAC MYAXON08																																																								
CONTROL NO.		A 0 0 0 0 2 5 9 8 6 3 6 4 4 4 E																																																								

Fare Detail Reports:
• Net Fare
• Commissions
• Taxes and Fees
• Total Amount Paid

Ticketing Carrier
Performance Reports

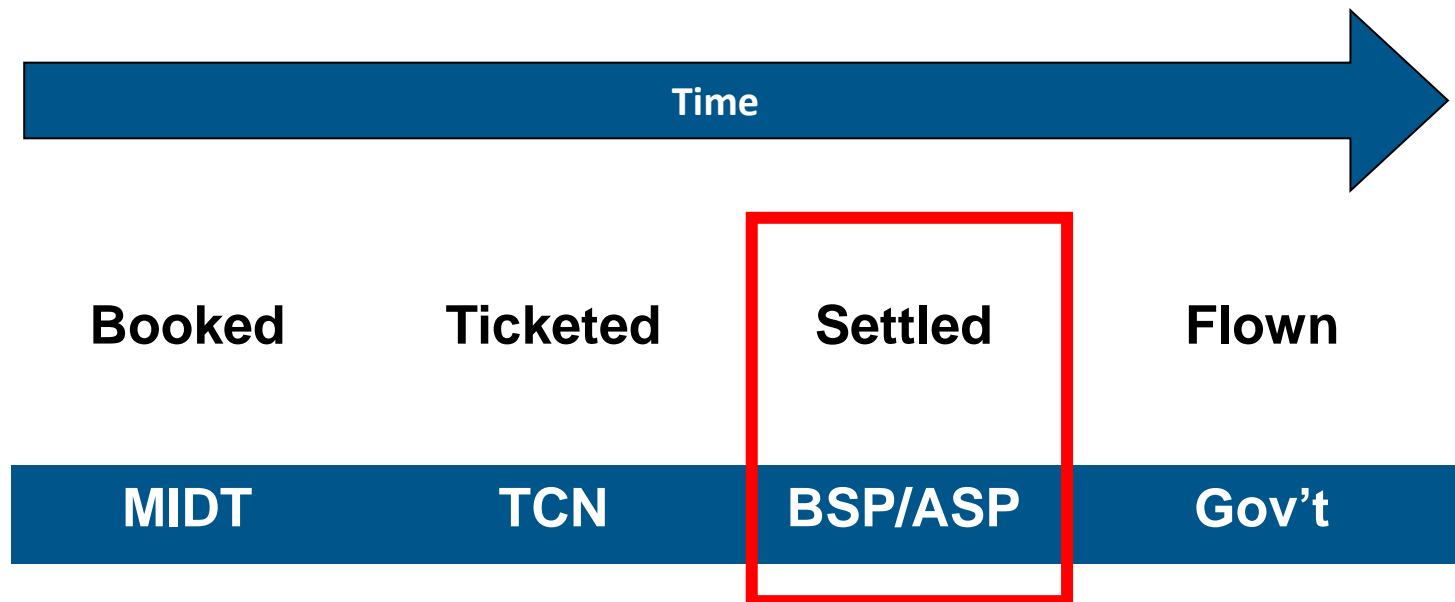
Single Ticket Lookup

Sales by
GDS/CRS

Query sales by
specific fares
and agency
tours

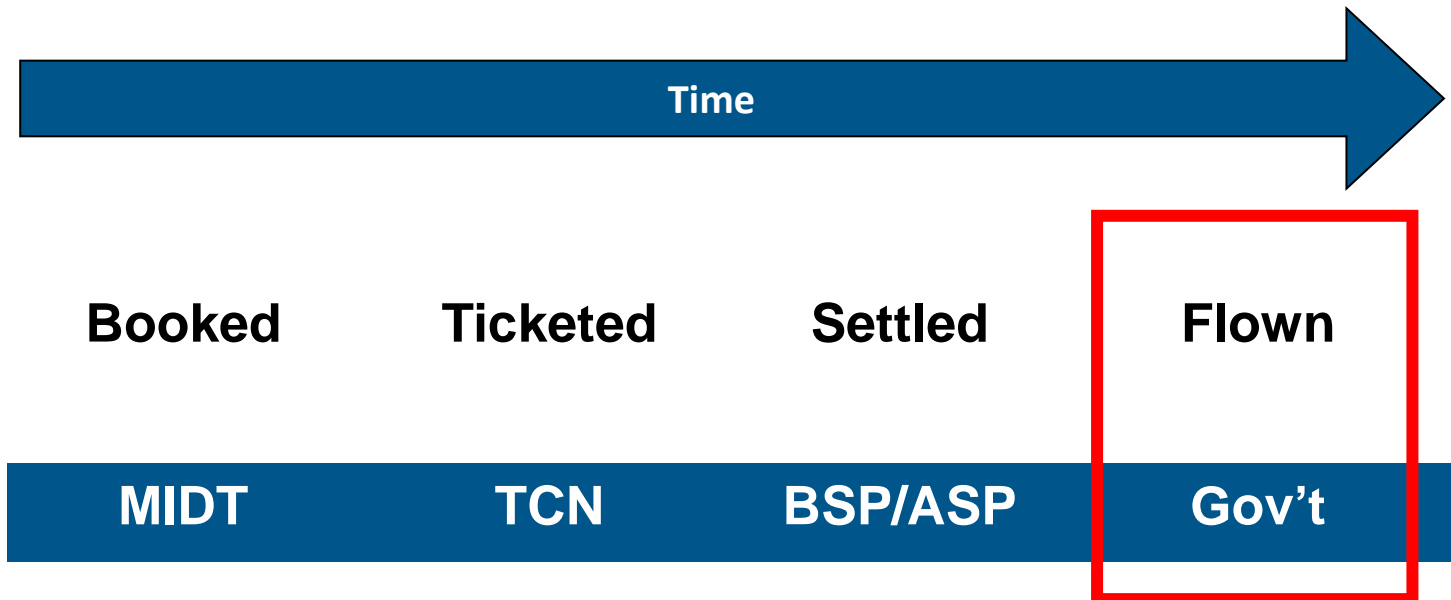
Settling is the Third Step

- Clearinghouses exist to pass funds collected at travel agencies to the airlines who carry the passengers
- Clearinghouses also handle refunds and exchanges



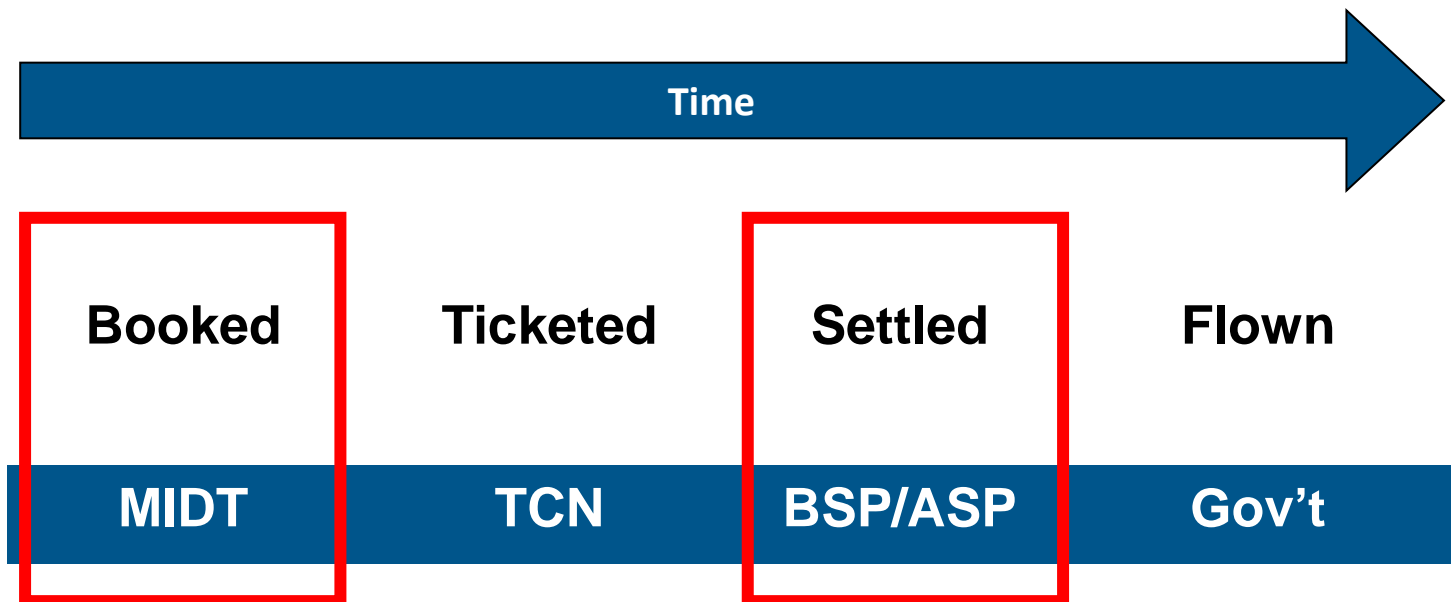
Flying is the Final Step

- Airlines collect flight coupons from travelers
- This process is becoming more electronic
- Airports and governments often require airlines to submit their flown ticket data



Today We'll Look at Steps 1 and 3

- Bookings data yields MIDT data
- Settlement data yields BSP and ASP data

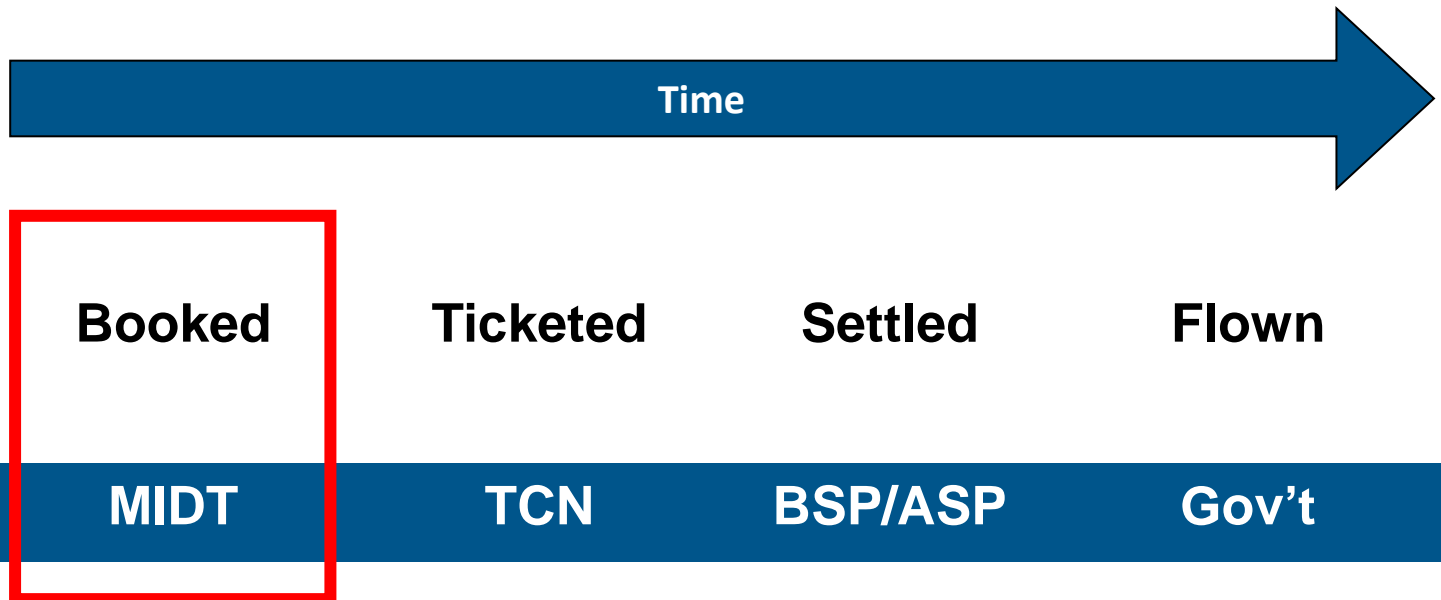


Overview

- Objectives
- The Ticketing Process
- Three Types of Ticketing Data
 - MIDT
 - BSP
 - ASP
- Examples of Ticket Data Analysis
- Summary

MIDT is the First Type of Ticketing Data

- Bookings data yields MIDT data
- Settlement data yields BSP and ASP data



What is MIDT data?

- MIDT stands for

Marketing **I**nformation **D**ata **T**ransfer/**T**apes

- MIDT are the bookings made in GDSs:

<u>GDS</u>	<u>Main Region</u>
Sabre	North America
Amadeus	Europe
Worldspan	North America
Galileo	North America
Abacus	Asia Pacific
TravelSky	Asia Pacific
Many Others	

What is MIDT data?

- **A booking is a reservation of a passenger's intention to fly at some point in the future**
- **A booking occurs before a ticket is sold**
- **Bookings can be held, changed, or cancelled**
- **Most websites require purchase at the time of booking these days, however:**
 - **Corporate Travel Agencies still make plenty of bookings**
 - **Airline websites are now offering to hold for a fee**

What Data Comes with MIDT?

- **These MIDT data elements are available:**
 - True itineraries: origin, destination, connect points
 - Booking and travel month—future data available
 - Marketing and operating airline
 - Passenger counts
 - Booking class of service
 - Point of Origin airport
 - Travel agency postal codes
- **MIDT data becomes available a few weeks after the close of each month**

What Does MIDT Data Cover?

- **Internet booking engines generally ARE included**
 - For example: Orbitz, Travelocity, Expedia
- **Airline direct ticket sales do NOT flow through BSP**
 - Airline websites
 - Airline telephone reservations centers
 - City or airport ticket offices
- **Additionally, some airlines have “direct connect” relationships with online sites that MIDT does not capture**
 - For example: American Airlines is vigorously pursuing Direct Connect with travel agents to reduce its GDS costs

Where Can I Get MIDT Data?

- **MIDT data is available from many vendors**
- **Some vendors estimate fare data based on fare classes**
- **Some vendors calibrate the data**
 - **Estimate the pieces missing from direct sales**
 - **Attempt to reflect the true market size**
- **Historical data availability varies by vendor**

What are the Strengths of MIDT?

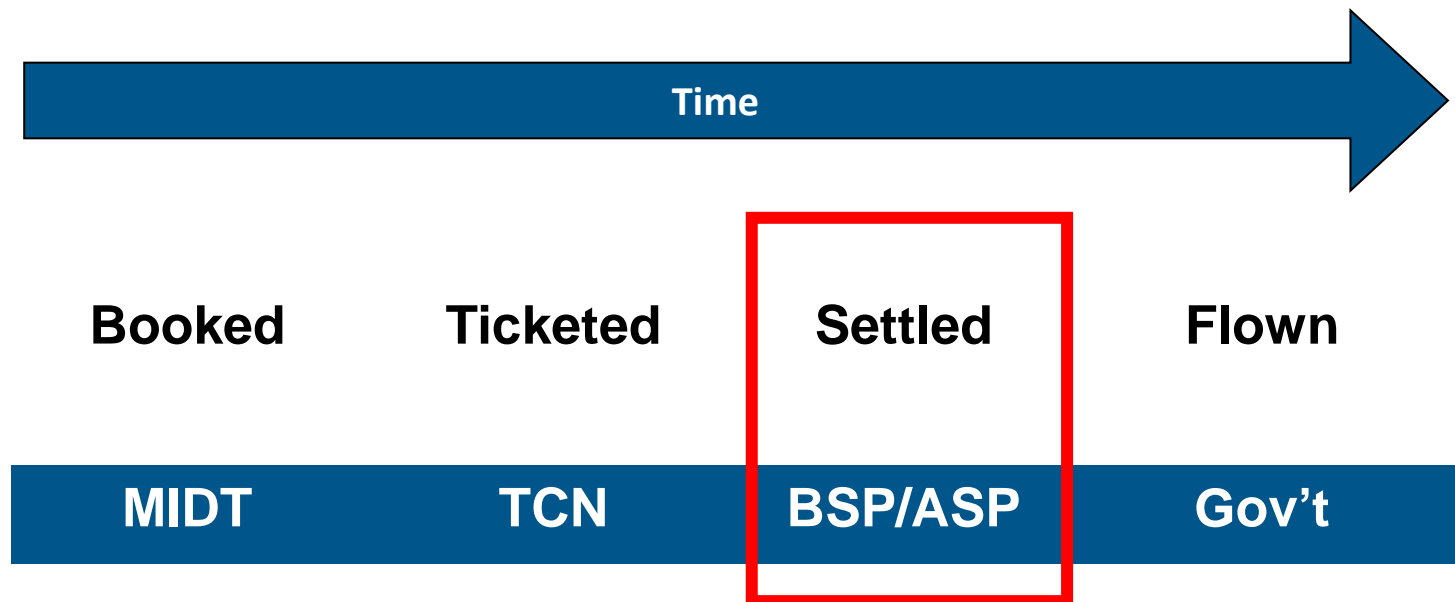
- Available from several vendors
- Near global coverage
- Publishes data within weeks of the monthly close
- Breaks tickets down by travel month
- Some vendors offer future travel data
- Classifies bookings into fare class categories
- Unrestricted use of international O&D data

What are the Weaknesses of MIDT?

- **Costs can be high, depending on needs**
- **Fare data is not actual, and limited to fare class categories**
- **Actual MIDT data does not reflect market size**
 - **Direct sales data not included**
 - **Bookings data includes “phantom” passengers whose bookings are never ticketed or flown**
- **Different vendors source different GDSs**
 - **Vendors do offer estimates of total market sizes**
 - **However, these vendors generally do not show the percentage of reported versus estimated data**

BSP is the Second Type of Ticketing Data

- Bookings data yields MIDT data
- Settlement data yields BSP and ASP data



What is BSP data?

- BSP stands for
Billing and **S**ettlement **P**lan
- BSP is run by IATA
International **A**ir **T**ransport **A**ssociation



What is BSP data?

- **BSP is a system designed to facilitate and simplify the selling, reporting, and remitting procedures of IATA Accredited Passenger Sales Agents**
- **BSP is a clearinghouse system through which data and funds flow between travel agents and airlines**
- **Agents remit a single payment to BSP, covering sales made on all BSP-participating airlines**
- **BSP makes a single payment to each airline, covering sales made by all agents within a country/region**

What Does BSP Data Cover?

- **BSP operates in more than 160 countries**
 - Over 65,000 travel agencies
 - Almost 400 airlines—IATA membership not required
 - Tickets issued through 30+ reservations systems
- **Airline direct ticket sales do NOT flow through BSP**
 - Airline websites
 - Airline telephone reservations centers
 - City or airport ticket offices
- **The majority of worldwide airline revenues are ticketed via IATA travel agencies and settled with the BSP system**

What Data Comes with BSP?

- **Airports can access these BSP data elements :**
 - True itineraries: origin, destination, connect points
 - Travel month
 - Marketing airline
 - Passenger counts, both reported and estimated
 - Fare class categories
 - Average fares, subject to IATA masking rules
 - Point of Sale data down to city name / postal codes
- **BSP data becomes available a few weeks after the close of each month**
- **IATA maintains BSP data back to January 2005**

What are the Strengths of BSP?

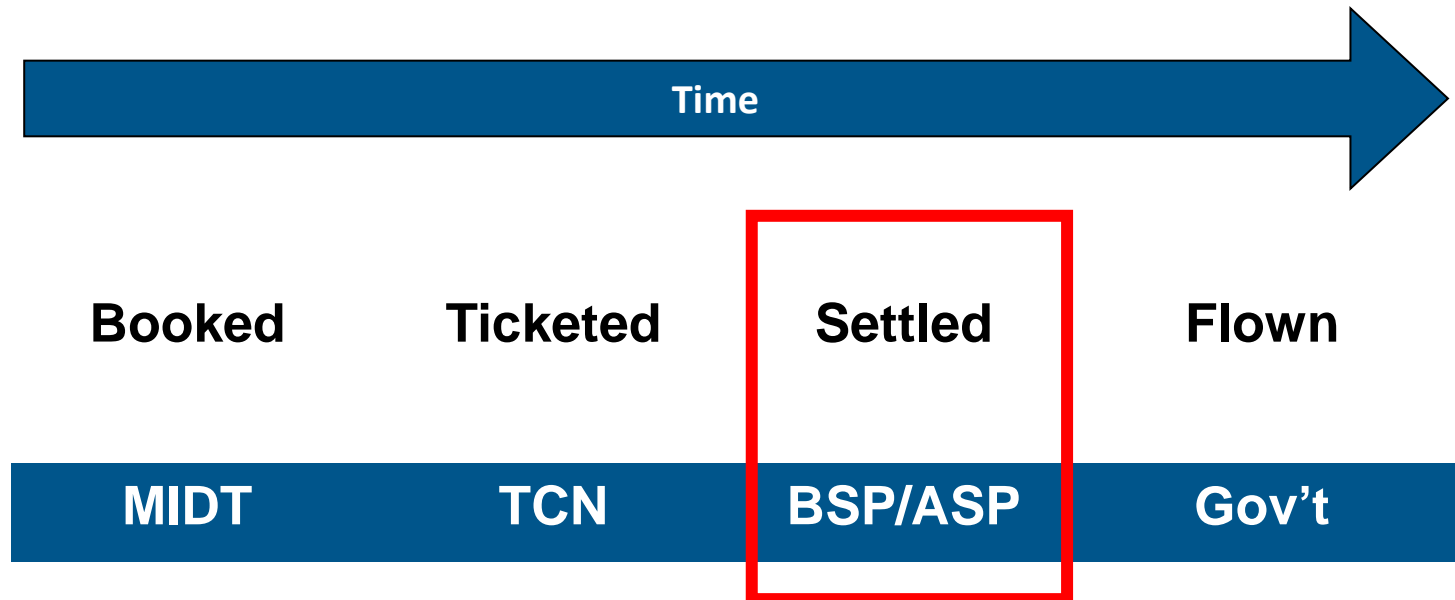
- **Includes tickets SOLD, not just booked**
 - Accounts for refunds and exchanges
- **Contains ACTUAL fare information**
 - Lifted from sold tickets
 - Lack of competition may require fare masking
- **Publishes data within weeks of the monthly close**
- **Breaks tickets down by travel month**
- **Classifies fares into fare class categories**
- **Unrestricted use of international O&D data**

What are the Weaknesses of BSP?


- **Only available from IATA and its partners**
- **Actual BSP data does not reflect market size**
 - Direct sales data not included
 - IATA does offer adjusted data, however, and clearly states the reported versus estimated amounts
- **Biggest hole is world's largest market: U.S.**
 - IATA does offer adjusted data, however
 - IATA and ARC work together to combine data
- **IATA cannot include data from the Amadeus GDS**
 - IATA also adjusts data to account for this issue

ASP is the Third Type of Ticketing Data

- Bookings data yields MIDT data
- Settlement data yields BSP and ASP data



What is ASP data?

- ASP stands for
Area **S**ettlement **P**lan
 - ASP is run by ARC, which is
Airline **R**eporting **C**orporation
- 
- ARC's ASP clearinghouse is similar to IATA's BSP, but ARC handles the U.S.
 - ARC began as part of Airlines for America (A4A, nee ATA)
 - Since deregulation, U.S. carriers have owned ARC

What Data Comes with ASP?

- **Airports can access these ASP data elements :**
 - True itineraries: origin, destination, connect points
 - Purchase and travel month—future data available
 - Marketing airline
 - Passenger counts, both reported and estimated
 - Fare class categories
 - Average fares, subject to ARC masking rules
 - Point of Sale data down to city name / postal codes
- **ASP data is updated daily, and some products provide data in five business days**
- **IATA maintains ASP data back to January 2008**

What Does ASP Data Cover?

- **Every major U.S. carrier and railroad processes tickets through ASP**
 - Almost 200 participating carriers in all
 - Nearly 16,000 travel agencies use ASP...
 - ...including Orbitz, Travelocity, and Expedia
 - Also over 150 corporate travel departments
- **Airline direct ticket sales do NOT flow through ASP**
 - Airline websites
 - Airline telephone reservations centers
 - City or airport ticket offices
- **ASP processes over 50% of airline tickets in the U.S., which is 20% of tickets worldwide**

What are the Strengths of ASP?

- Publishes data extremely quickly, within a week
- Breaks tickets down by travel day
- Includes tickets **SOLD**, not just booked
 - Accounts for refunds and exchanges
- Contains **ACTUAL** fare information
 - Lifted from sold tickets
 - Lack of competition may require fare masking
- Classifies fares into different class categories
- Unrestricted use of international O&D data
- Offers standard file specification for BSP data merging
- ARC's Market Locator shows where travelers live

What are the Weaknesses of ASP?

- **Only available from ARC and its partners**
- **Only includes data sold in the U.S.**
 - ARC and IATA work together to combine data
- **Actual ASP data does not reflect market size**
 - Direct sales data not included
 - ARC and IATA together offer adjusted data, however, and clearly state the reported versus estimated amounts

A Note about DDS

- **DDS stands for**

Direct Data Service

- **ARC and IATA are collecting ticket data from airlines**
 - **DDS is a voluntary program, like airlines submit schedules**
- **DDS data includes airlines' direct sales**
- **DDS only available for participating airlines now...**
- **...But look for airport products in the future...**

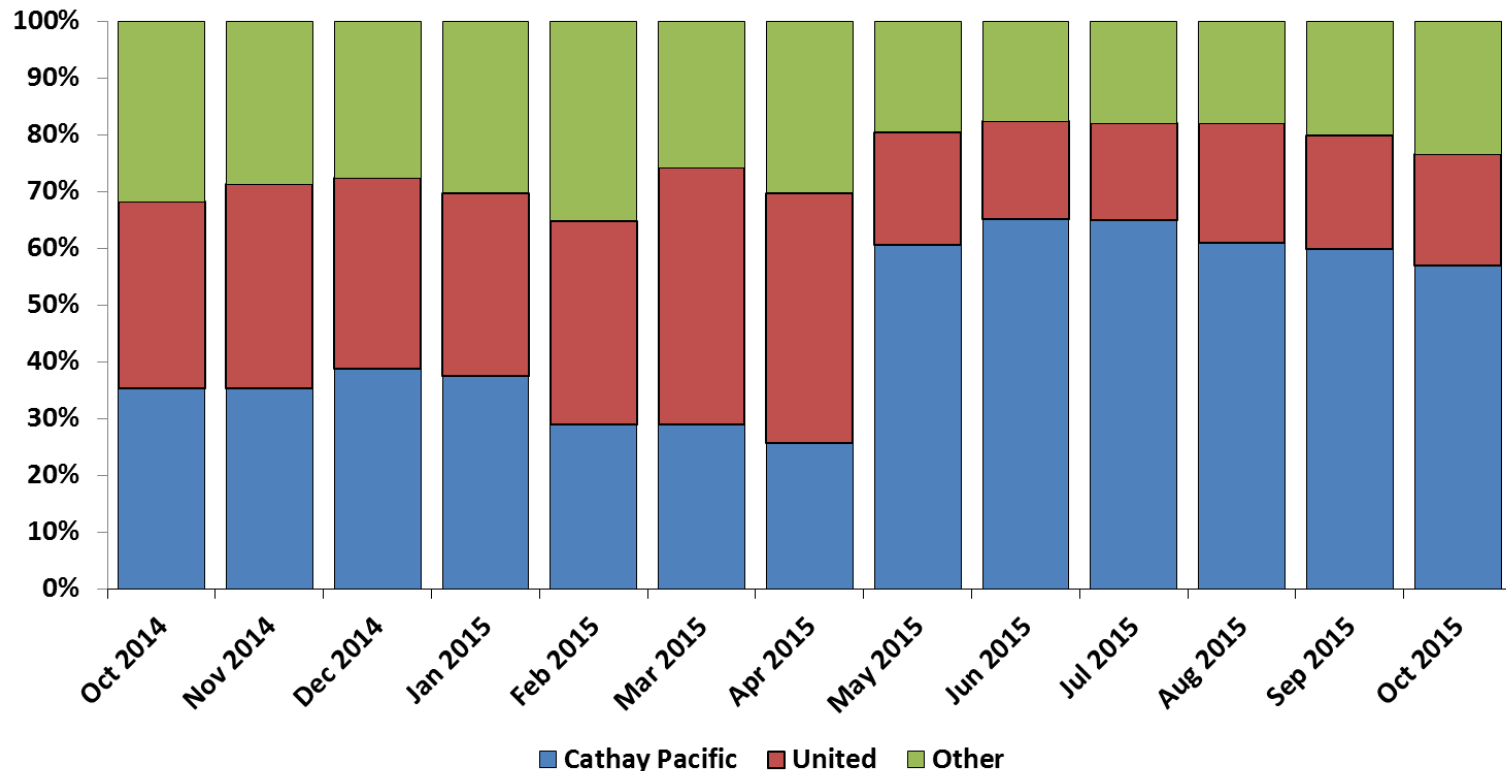
Overview

- Objectives
- The Ticketing Process
- Three Types of Ticketing Data
 - MIDT
 - BSP
 - ASP
- Examples of Ticket Data Analysis
- Summary

Market Share Analysis

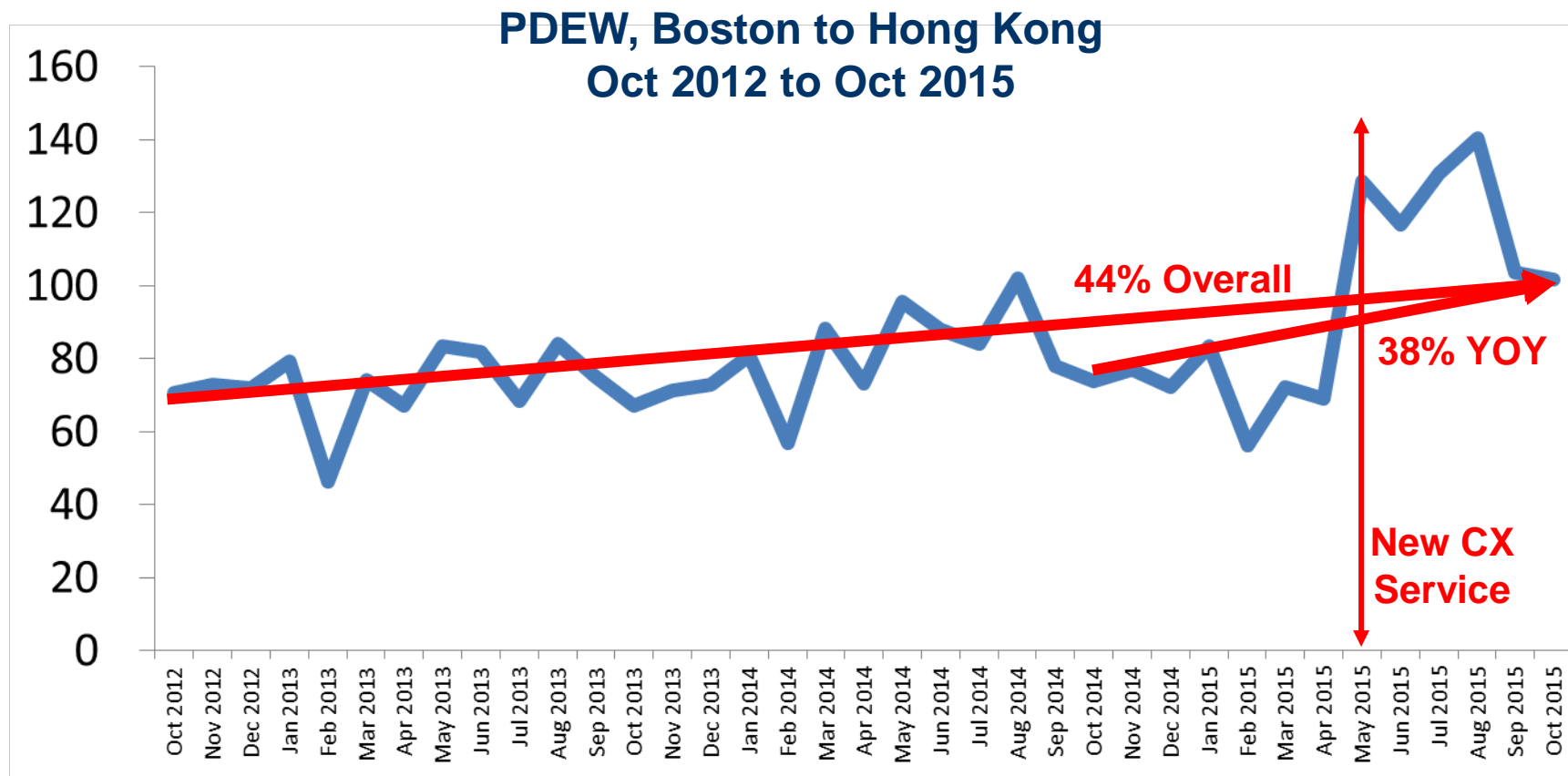
- Trends help airports follow competition among airlines
- Cathay's share has gone from 35% to 57% YOY!

Market Share, Boston to Hong Kong
October 2014 to October 2015



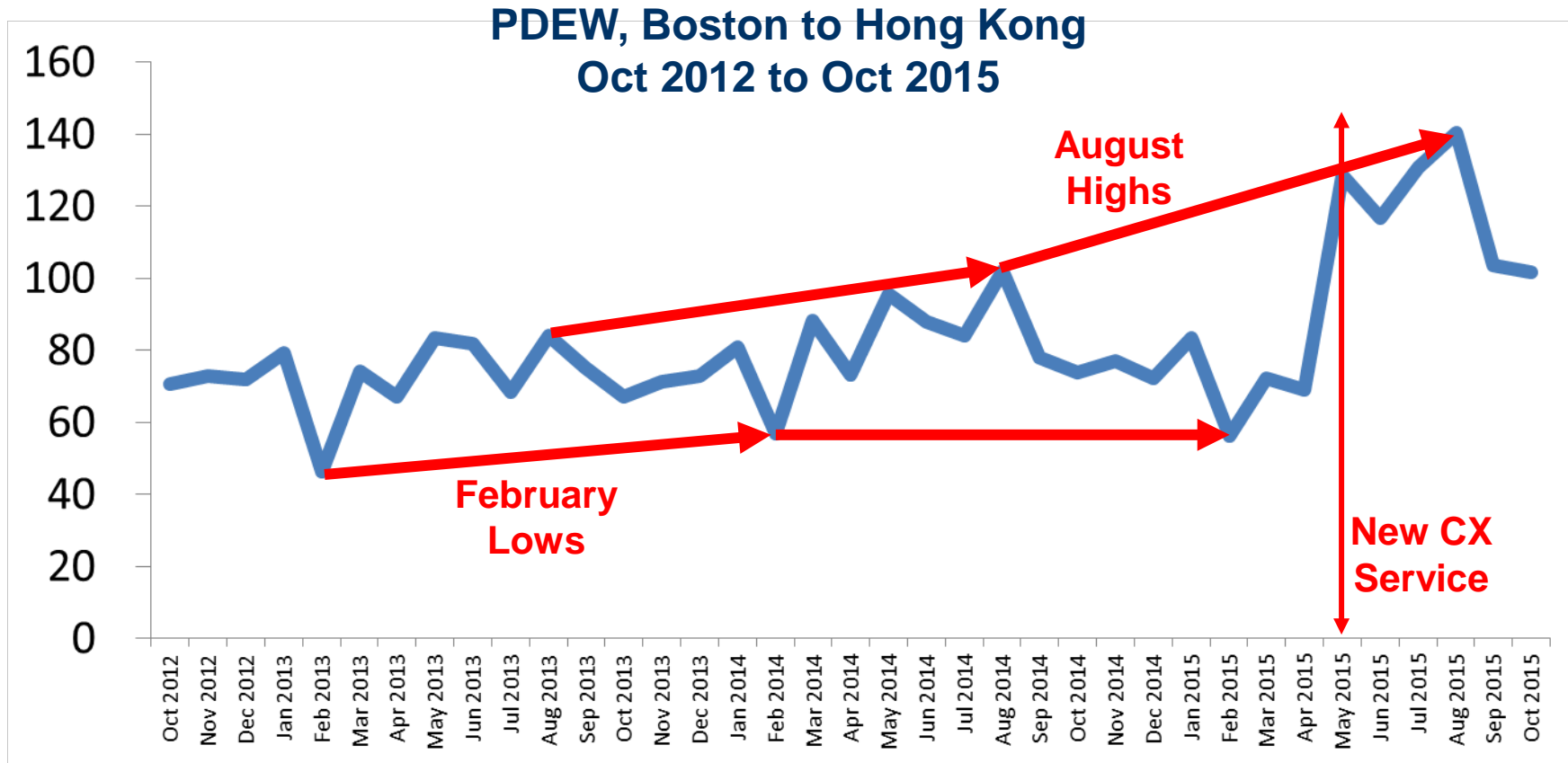
Traffic Trend Analysis

- Looking at monthly historical traffic, BOS-HKG is up...
- ...Year-over-year is 38% for Oct, and 44% in 3 years



Traffic Trend Analysis

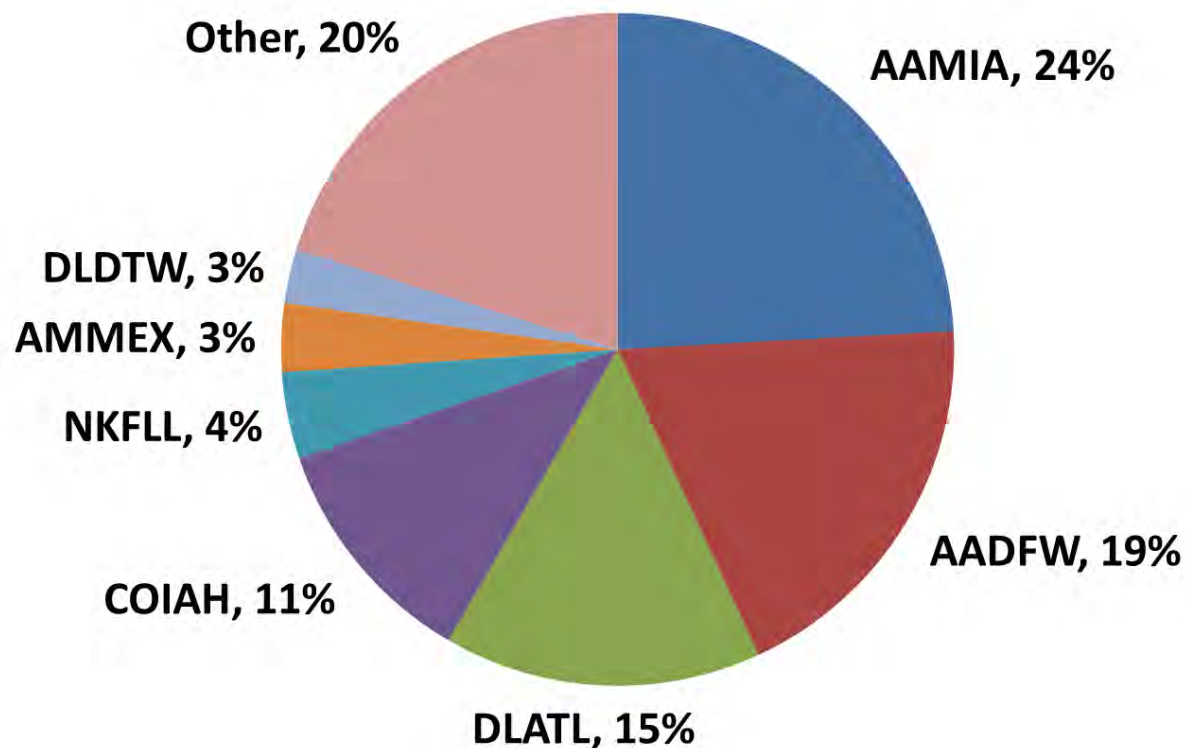
- Monthly traffic figures also show market seasonality
- Comparing the same month shows positive trends



Itinerary Share Analysis

- Passenger routings can lead to targeting a new airline
- Las Vegas showed opportunity to Copa

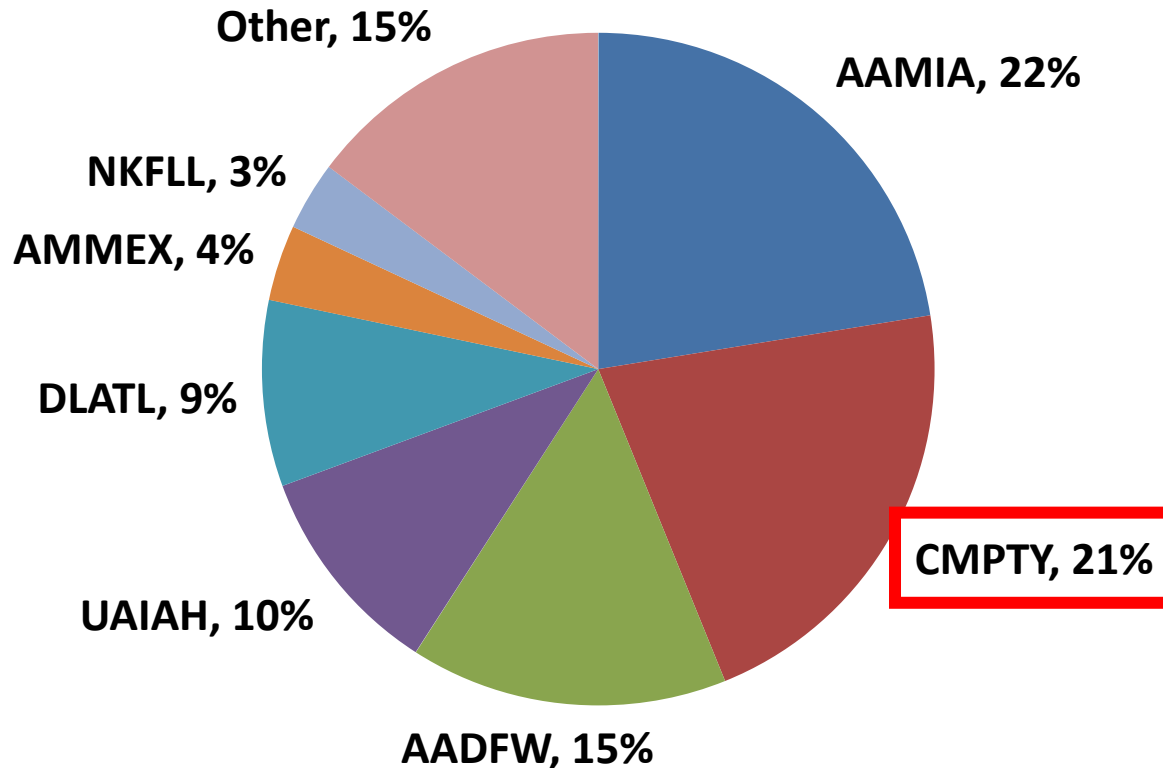
Itinerary Share, Las Vegas to South America
YE Nov 2011, Total PDEW = 248



Itinerary Share Analysis

- Two years later, Copa has grabbed 21% share
- The market size has also increased 51%

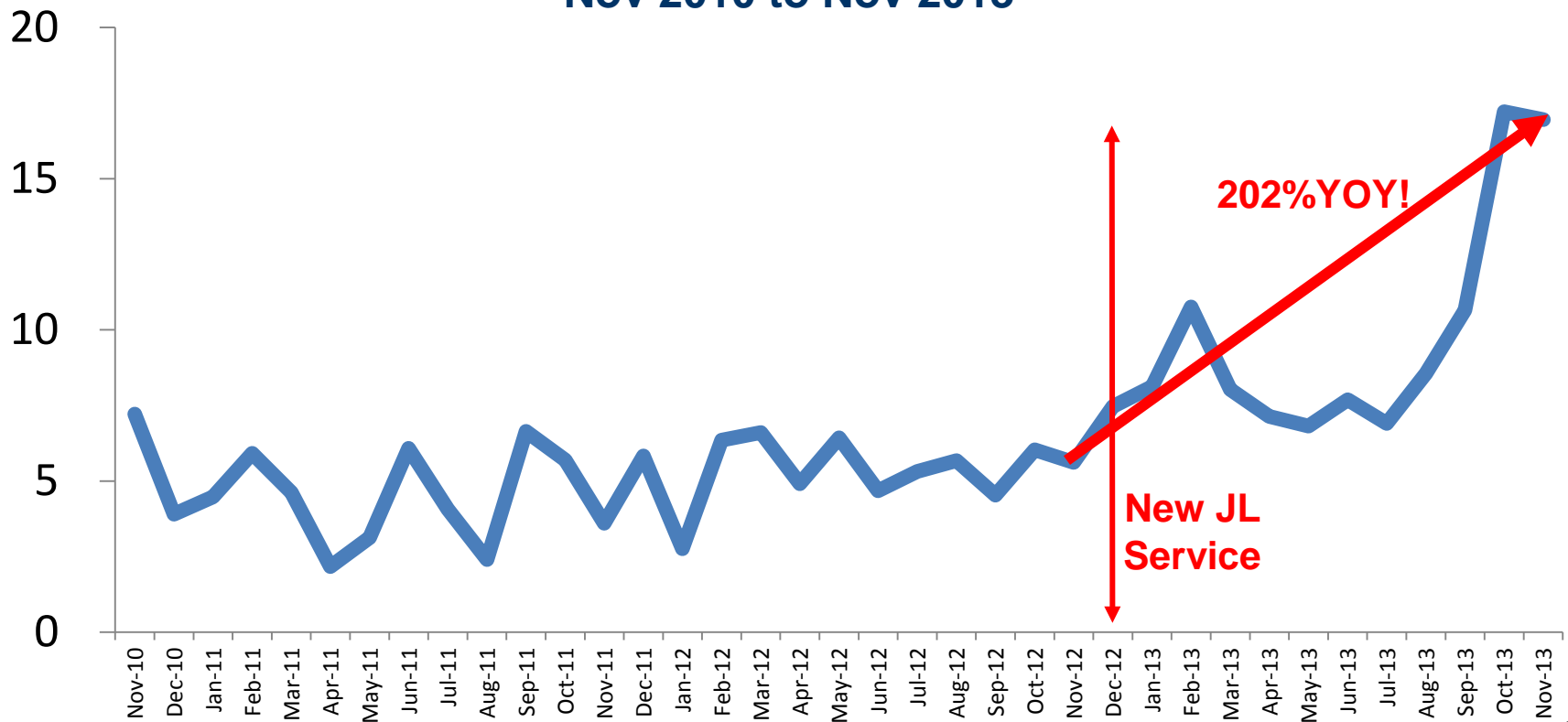
Itinerary Share, Las Vegas to South America
YE Nov 2013, Total PDEW = 373



Analysis of Premium Traffic

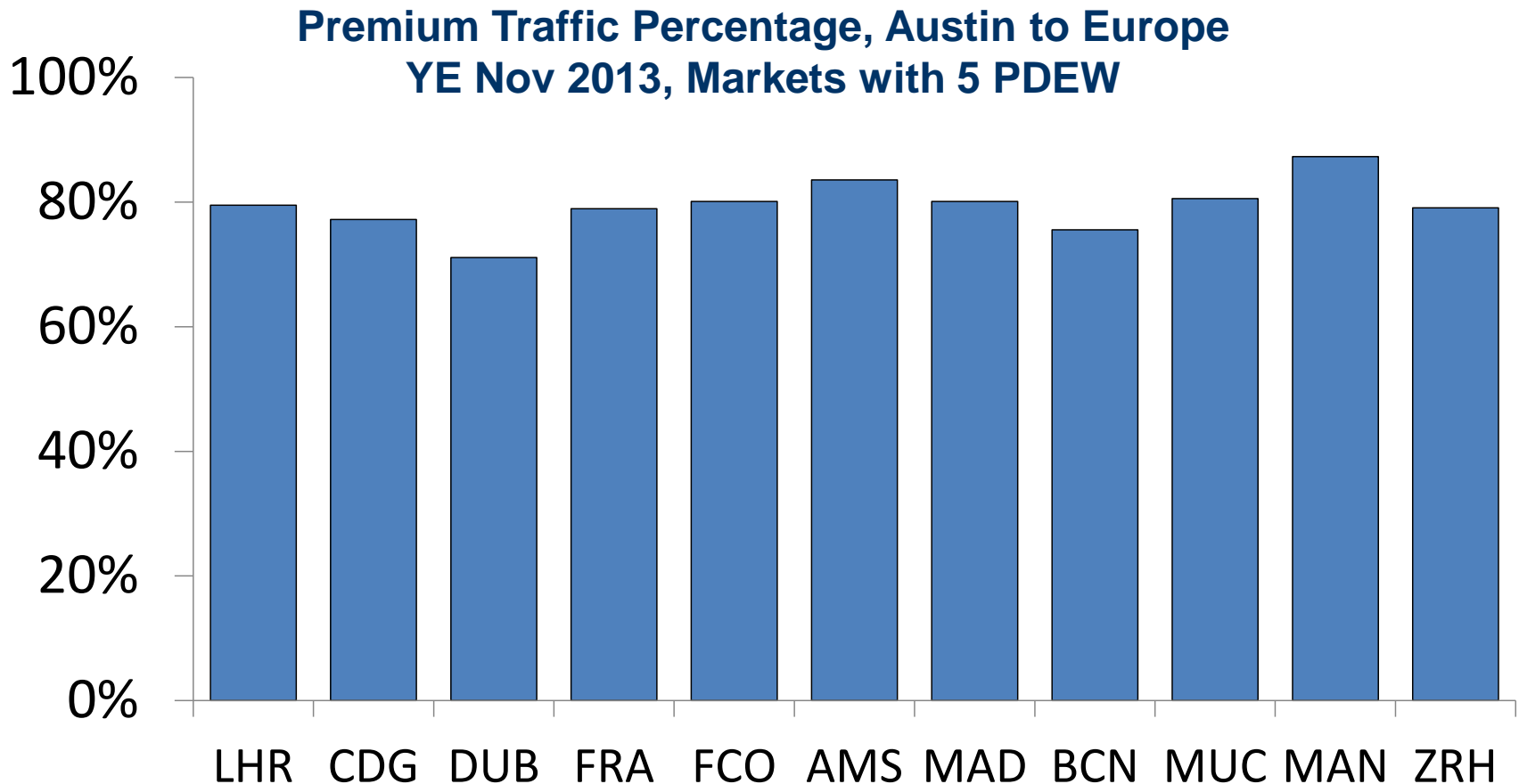
- Since JAL has added SAN flights...
- ...business class traffic to NRT has increased greatly

**Business Class PDEW, San Diego to Tokyo Narita
Nov 2010 to Nov 2013**



Analysis of Premium Traffic

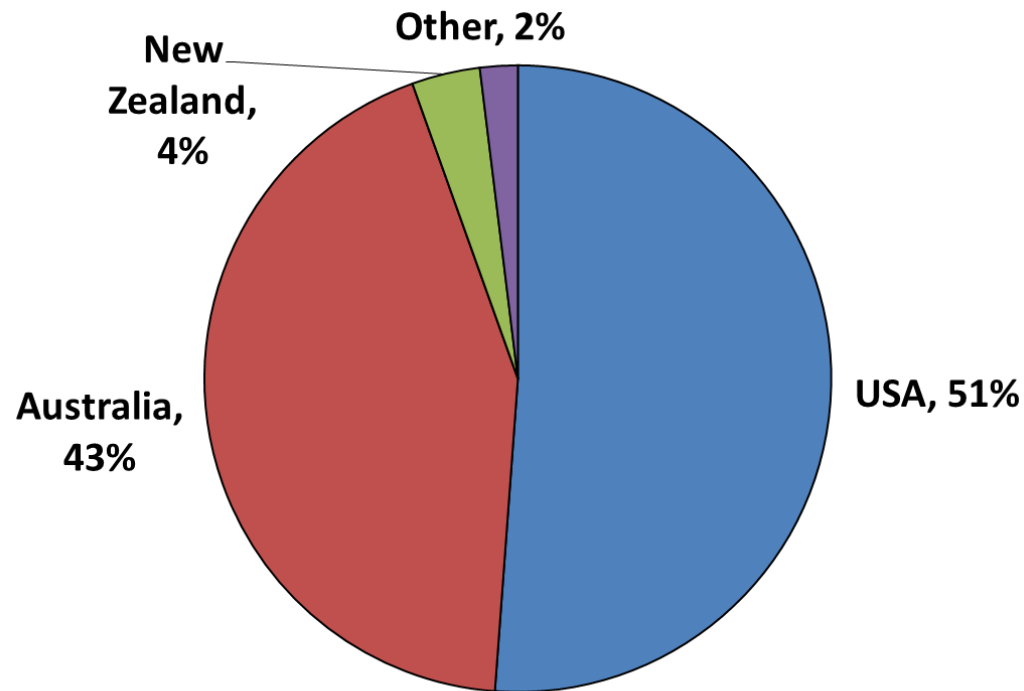
- With 80% premium class traffic to LHR and beyond...
- ...no wonder the market was attractive to BA!



Point of Sale Split Analysis

- **Airports and communities can improve marketing spend by analyzing where travelers buy tickets**

**Point of Sale Country Splits, Texas to Australia and New Zealand
YE Oct 2015**



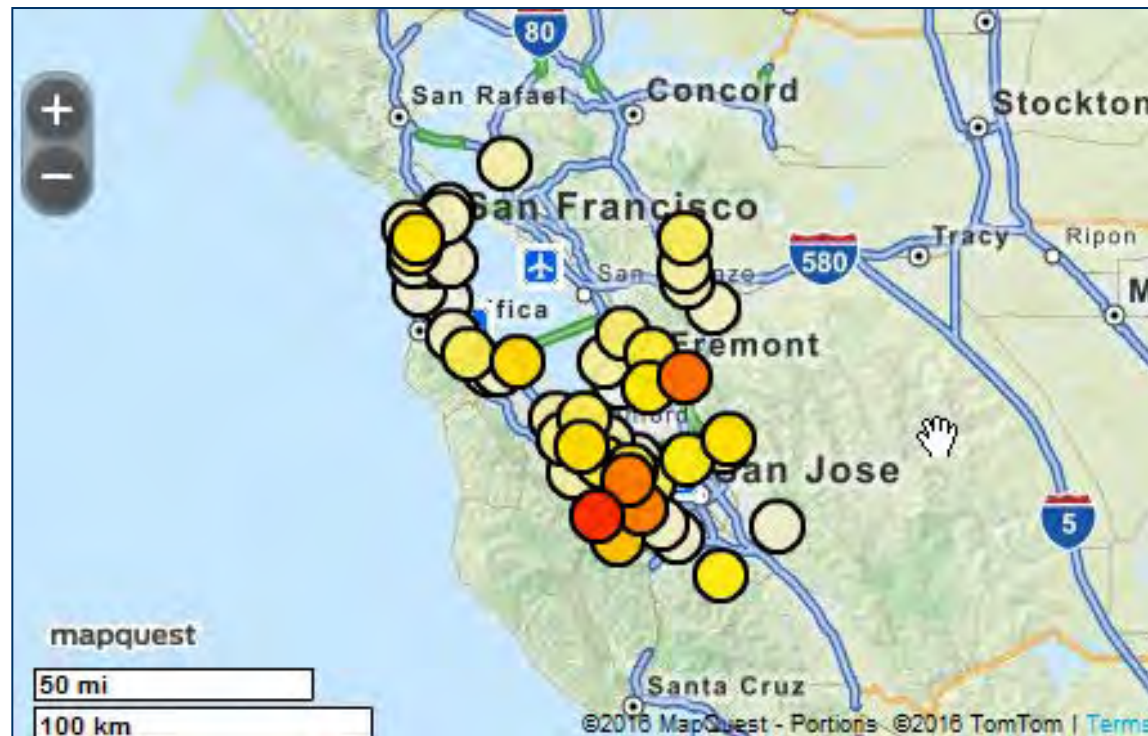
Leakage Analysis

- **“Leakage” occurs when passengers opt to use airports farther than their local airport**
 - Low fares often attract passengers from far away
 - Passengers also drive to get better service options, like a non-stop that doesn’t operate locally
- **Smaller airports work to keep passengers in their catchment area from “leaking” to larger airports within driving distance**
- **Leakage analyses can persuade airlines to add service to recapture these leaking pax**
- **Airports generally target carriers that compete with the hub carrier at the nearby airport**

Leakage Analysis

- San Jose landed Hainan Airlines using ARC data
- Darker dots below show where more passengers live
- 96% were flying out of SFO, on Air China and United

Zip Codes of Travelers to Beijing
75-mile radius from SFO, Full-Year 2014



Overview

- Objectives
- The Ticketing Process
- Three Types of Ticketing Data
 - MIDT
 - BSP
 - ASP
- Examples of Ticket Data Analysis
- Summary

How Do These Sources Compare?

	MIDT	BSP	ASP	U.S. DOT O&D
Contents	Bookings	Ticket Settlement	Ticket Settlement	Flown Data
GDS Coverage	By Vendor	35 GDSs	U.S. GDSs	N/A
Direct Sales?	Some Estimates, Usually Hidden	Estimates Clearly Displayed	Estimates Clearly Displayed	10% Sample, Unbiased
Coverage	Worldwide	Non-U.S Sales	U.S. Sales	U.S. Carriers
Data Delay	3 Weeks	5 Weeks	5 Weeks	4-6 Months
Fare Detail	Vendors Estimate by Fare Class	Yes, with Masking Rules	Yes, with Masking Rules	Yes
Fare Classes?	Yes	Yes	Yes	Actual Fares
Refunds?	No	Yes	Yes	Yes
Restricted?	No	No	No	Yes

Why Should Airports Use Ticketing Data?

- **Ticketing data has key advantages over U.S. DOT data**
 - Available months before U.S. DOT O&D data
 - Covers non-U.S. carriers that do not file U.S. DOT O&D data
- **ASP, BSP, and MIDT all come with limitations**
 - Samples are more biased than U.S. DOT data
 - Direct data sales not included
 - ARC and IATA alone exclude the other's region
- **Yet these sources remain extremely valuable**
 - All are widely accepted and used by airlines
 - All are valuable in helping to analyze trends
- **Ticketing data allows airports to build strong business cases to persuade airlines to act, using the same data sources as the airlines themselves**