



Session 2:

Ticketing Data

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Company Info



- ▶ Dio is Data in, Information out
- ▶ Dio specializes in projects taking massive amounts of DATA IN, processing and refining that data, and producing highly pertinent, easily actionable INFORMATION OUT.
- ▶ Dio's roots lie in the aviation sector, where it has produced industry-leading tools like apgDat, SRS Analyser, and AirportIS
- ▶ Dio webtools have over 200 subscribers around the world, including 17 of the Top 20 airlines in North America
- ▶ Dio is Technology that bridges the gap between data and information—between information and action
- ▶ Visit www.dio.net for more info



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Biography

- ▶ Jordan Kayloe is a Vice President at DIO, where he runs the sales efforts for the DIO aviation data webtools
- ▶ Previously, he worked as a consultant in Seabury APG's consulting practice, specializing in airport air service development
- ▶ From 2001-2005, Jordan held various positions at US Airways
 - ▶ Senior Analyst, Financial Analysis
 - ▶ Manager, International Planning
- ▶ Served ten years as an officer in the U.S. Air Force
- ▶ Education
 - ▶ MBA, Harvard Business School
 - ▶ BS, Computer Science, Stanford University



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Overview

- ▶ Objectives
- ▶ The Ticketing Process
- ▶ Three Types of Ticketing Data
 - ▶ MIDT
 - ▶ BSP
 - ▶ ARC
- ▶ Examples of Ticket Data Analyses
- ▶ Summary



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Objectives

- ▶ Understand the ticketing process
- ▶ Discuss the origins of MIDT, BSP, and ARC data
- ▶ Learn what comprises each data source
- ▶ Understand the pros and cons of each data source
- ▶ Discuss some uses of the data sources for airports
- ▶ Understand how the data can support your efforts







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The Ticketing Process



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The Travel Data Life Cycle

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

Time →			
Booked	Ticketed	Settled	Flown
MIDT	TCN	BSP/ARC	Gov't

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Booking is the First Travel Life Cycle Step

- ▶ Airline passengers can make a reservation in many ways
- ▶ If they go through a Global Distribution System (GDS), the system can capture these booking records

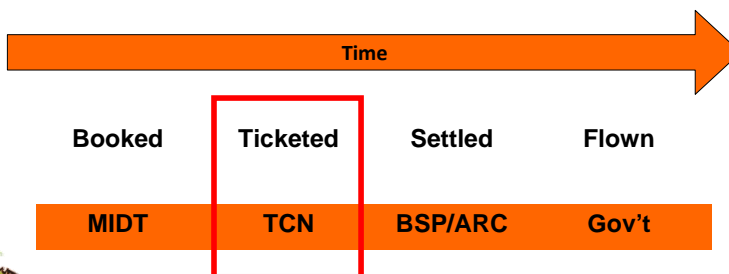
Time →			
Booked	Ticketed	Settled	Flown
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Ticketing is the Second Step

- ▶ When the reservation is purchased, a ticket is issued using an assigned fare
- ▶ Ticketing is sometimes done with booking, but not always
- ▶ Travel agents can issue tickets, as can airlines themselves



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Tickets Contain Many Useful 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

Payment method (including exchanges)

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

Ticketing Carrier Performance Reports





Single Ticket Lookup

Query sales by specific fares and agency tours

Sales by GDS/CRS

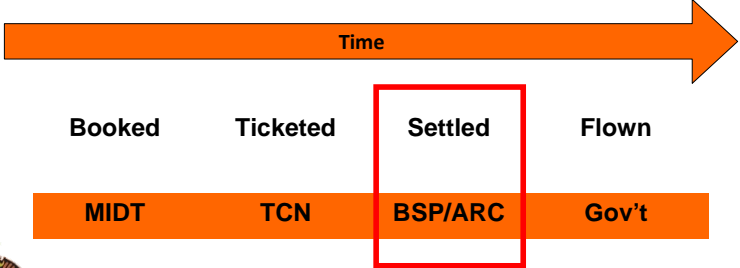


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Settling is the Third Travel Life Cycle Step





- ▶ Clearinghouses exist to pass funds collected at the travel agencies to the airlines providing the tickets
- ▶ The clearinghouses also handle refunds and exchanges



Time →

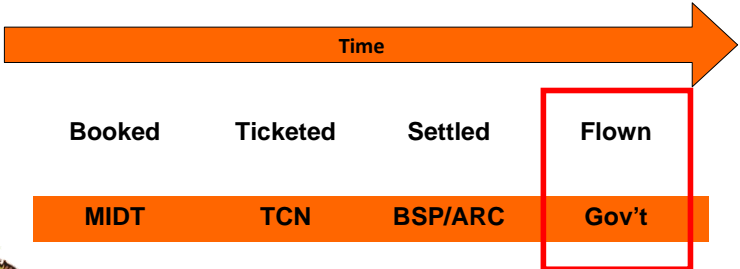
Booked	Ticketed	Settled	Flown
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Flying is the Final Travel Life Cycle Step

- ▶ Flight coupons can be collected from actual travelers
- ▶ This process is becoming more and more electronic
- ▶ Airports and governments often require airlines to submit their flown ticket data



Time →

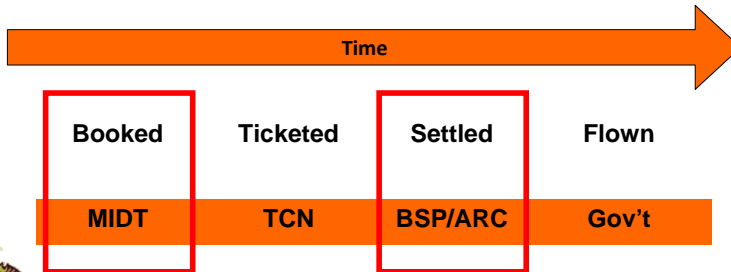
Booked	Ticketed	Settled	Flown
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This Presentation Covers Steps 1 and 3

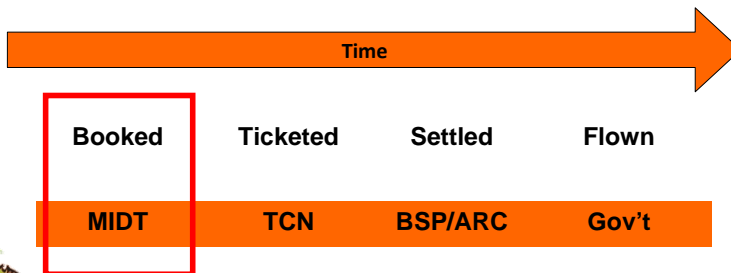
- ▶ MIDT comes from Bookings data
- ▶ BSP and ARC data come from Settlement data
- ▶ The previous presentation covered Flown data



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MIDT Data



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What is MIDT Data?

- ▶ MIDT stands for **M**arketing **I**nformation **D**ata **T**ransfer
- ▶ MIDT are the bookings made in the major GDSs including:
 - ▶ Sabre
 - ▶ Amadeus
 - ▶ Worldspan
 - ▶ Galileo
 - ▶ Abacus
 - ▶ TravelSky
 - ▶ Many others
- ▶ A booking is a reservation of a passenger's intent to fly
 - ▶ A booking occurs before a ticket is sold
 - ▶ Booking can be held, changed, or cancelled



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What Does MIDT Cover?

- ▶ MIDT GDS sources capture nearly 60% of global bookings
- ▶ Both IATA and non-IATA travel agencies are included
- ▶ While internet booking engines are generally included, some airlines have "direct connect" relationships with online sites that MIDT does not capture
- ▶ Bookings made directly through airlines do NOT hit MIDT:
 - ▶ City or airport ticket offices
 - ▶ Airline websites
 - ▶ Airline telephone reservation centers



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MIDT Data Availability

- ▶ These MIDT data elements are available to airports:
 - ▶ True itineraries: origin, destination, and connect points
 - ▶ Booking and travel month—future data available
 - ▶ Marketing and operating airlines
 - ▶ Passenger count
 - ▶ Booking class of service
 - ▶ Point of origin airport
 - ▶ Travel agency postal code
- ▶ MIDT is available from many vendors
 - ▶ Some vendors also estimate fare data based on classes
 - ▶ These vendors also calibrate the data to estimate the missing pieces and reflect the true market size
 - ▶ Historical data availability varies by vendor
- ▶ Data is available a few weeks after close of the month



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MIDT Strengths

- ▶ Available from several vendors
- ▶ Near GLOBAL coverage
- ▶ Publishes data within weeks of the close of each month
- ▶ Breaks tickets down by travel month
- ▶ Future travel data is available
- ▶ Classifies bookings into different fare class categories



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MIDT Weaknesses

- ▶ Costs can be high, depending on needs
- ▶ Fare data is not actual, and limited to fare class estimates
- ▶ Actual MIDT data does not reflect true market size
 - ▶ Tickets sold directly by airlines do not flow through GDSs
 - ▶ Additionally, bookings data contains “phantom” tickets that are never purchased or flown
- ▶ Different vendors’ products are sourced from different GDSs
 - ▶ Vendors do offer estimates to account for missing data
 - ▶ However, these vendors generally do not show the percentage of reported versus estimated data



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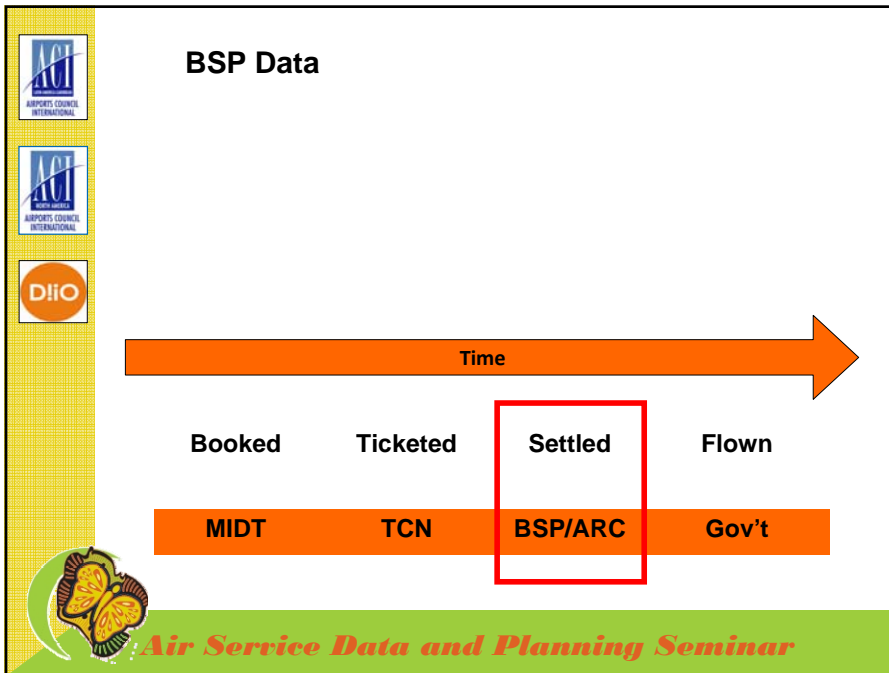


MIDT Uses

- ▶ Assessment of Market Demand
 - ▶ Market Shares
 - ▶ Itinerary Shares
 - ▶ Seasonality
 - ▶ Premium Traffic Splits
 - ▶ Point of Sale Splits
- ▶ Analysis of Leakage
- ▶ Analysis of Travel Agency Sales



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What is BSP Data?

- ▶ BSP stands for **B**illing and **S**ettlement **P**lan
- ▶ BSP is run by IATA, the International Air Transport Association
- ▶ BSP is a system designed to facilitate and simplify the selling, reporting, and remitting procedures of IATA Accredited Passenger Sales Agents
 - ▶ BSP is a clearing house 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 airlines
 - ▶ BSP makes a single payment to each airline, covering sales made by all agents within a country/region

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What Does BSP Cover?

- ▶ BSP operates in more than 160 countries, including:
 - ▶ Over 65,000 travel agencies
 - ▶ Almost 400 airlines, and IATA membership is not required
 - ▶ Tickets issued through 30 CRSs
- ▶ Tickets sold directly by airlines do NOT flow through BSP
 - ▶ City or airport ticket offices
 - ▶ Airline websites
 - ▶ Airline telephone reservation centers
- ▶ A vast majority of worldwide airline revenues are ticketed via IATA travel agencies in the BSP system



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BSP Data Availability

- ▶ These BSP data elements are available to airports*:
 - ▶ True itineraries: origin, destination, and connect points
 - ▶ Travel month
 - ▶ Marketing and operating airline
 - ▶ Passenger count, both reported and estimated
 - ▶ Fare class categories, using standard IATA mappings
 - ▶ Average fare information, subject to IATA masking rules
 - ▶ Point of sale data down to city name and postal code level
- ▶ BSP data is updated monthly, about 5 weeks after the month
- ▶ IATA maintains BSP data back to January 2005



*Member Airlines have access to more detailed data, including travel agency names, month of ticket sale, and more frequent data updates

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BSP Strengths

- ▶ Includes tickets SOLD, not just booked
- ▶ Contains ACTUAL fare information, lifted from sold ticket
 - ▶ Lack of competition on a route may require fare masking
- ▶ Classifies fares into different class categories
- ▶ Publishes data within weeks of the close of each month
- ▶ Breaks tickets down by travel month
- ▶ Offers standard file specification for merging with ARC data



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BSP Weaknesses

- ▶ Only available from IATA
- ▶ Actual BSP data does not reflect true market size
 - ▶ Tickets sold directly by airlines do not flow through BSP
 - ▶ IATA does offer adjusted data, however, and clearly states the reported versus estimated amounts
- ▶ Biggest hole is world's largest market: United States
 - ▶ IATA does offer adjusted data, however
 - ▶ ARC and IATA working together to combine data



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BSP Uses

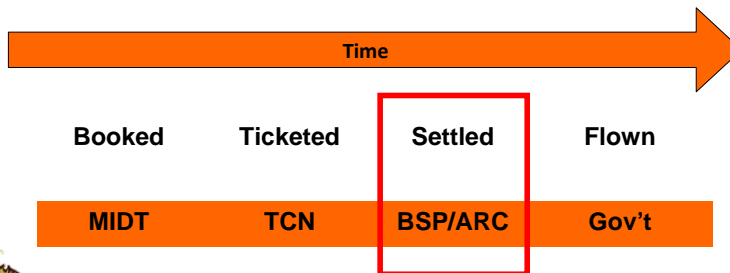
- ▶ Assessment of Market Demand
 - ▶ Market Shares
 - ▶ Itinerary Shares
 - ▶ Seasonality
 - ▶ Premium Traffic Splits
 - ▶ Point of Sale Splits
- ▶ Analysis of Fare Trends
- ▶ Analysis of Leakage
- ▶ Analysis of Travel Agency Sales



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ARC Data



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What is ARC Data?

- ▶ ARC stands for **A**irline **R**eporting **C**orporation
 - ▶ ARC began as part of the Air Transport Association (ATA)
 - ▶ Since deregulation, the U.S. airlines have owned ARC
- ▶ ARC performs tasks similar to IATA's BSP, but in the U.S.
 - ▶ Every major U.S. carrier and railroad process tickets through ARC, with about 170 participating carriers in all
 - ▶ Nearly 20,000 travel agencies in the U.S. use ARC
 - ▶ As do over 150 corporate travel departments
 - ▶ Tickets sold directly by airlines do NOT flow through ARC
- ▶ ARC processes over 50% of airline tickets in the U.S.
 - ▶ This amount equates to 20% of tickets worldwide
 - ▶ Per year, this represents about \$80 billion in tickets



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ARC Data Availability

- ▶ These ARC data elements are available to airports:
 - ▶ True itineraries: origin, destination, and connect points
 - ▶ Ticket issue and travel date
 - ▶ Marketing airline
 - ▶ Passenger count
 - ▶ Fare class categories, using standard IATA mappings
 - ▶ Average fare information, if three carriers are in a market
 - ▶ Point of sale data down to city name and postal code level
- ▶ ARC data is updated daily, and contains 39 months of data
 - ▶ Complete months are available three weeks after month
- ▶ Future data is also available, subject to restrictions



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ARC Strengths

- ▶ Publishes data within quickly after the close of each month
- ▶ Includes tickets SOLD, not just booked
- ▶ Breaks tickets down by travel DAY
- ▶ Contains ACTUAL fare information, assuming three carriers
- ▶ Classifies fares into different class categories
- ▶ Offers standard file specification for merging with BSP data



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ARC Weaknesses

- ▶ Only available from ARC
 - ▶ Partnership deals are in the works with IATA
- ▶ Only includes data sold in the United States
 - ▶ ARC and IATA working together to provide global data
- ▶ Actual ARC data does not reflect true market size
 - ▶ Tickets sold directly by airlines do not flow through ARC
 - ▶ Together, ARC and IATA will offer adjusted data, which will clearly state the reported versus estimated amounts



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ARC Uses

- ▶ Assessment of Market Demand
 - ▶ Market Shares
 - ▶ Itinerary Shares
 - ▶ Seasonality
 - ▶ Premium Traffic Splits
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- ▶ Analysis of Leakage
- ▶ Analysis of Travel Agency Sales



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Example analyses



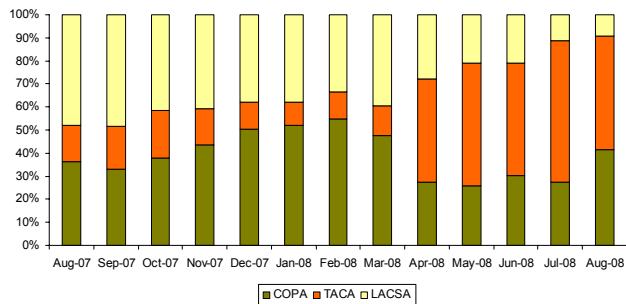
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Analysis of Market Share

- ▶ Looking at passenger numbers over time can help an airport follow competition among airlines on a route
- ▶ Below, TACA is grabbing share from COPA

Market Share, Panama City to San Salvador



Source: AirportIS internet-based aviation data portal



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Analysis of Itinerary Share

- ▶ Determining current passenger routings can determine if your airport should pursue a new route
- ▶ If Copa served London, they would get most of this traffic

Itinerary Share, Panama City to London
Year-Ending August 2008

American-Miami	29%
Continental-Newark	28%
Delta-Atlanta	14%
Iberia-Madrid	12%
Continental-Houston	5%
KLM-Amsterdam	3%
Delta-New York	3%
American-Dallas	3%
<u>Other</u>	<u>3%</u>
Total	100%

Source: AirportIS internet-based aviation data portal

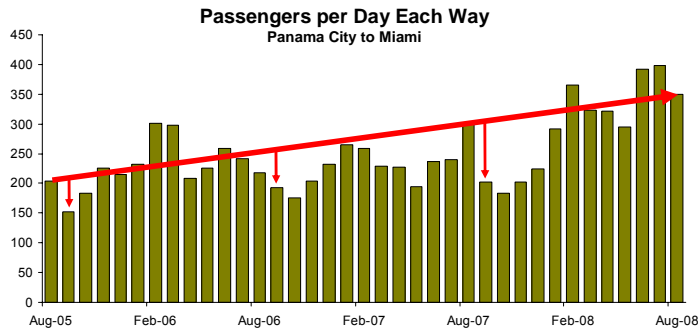


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Analysis of Seasonality

- ▶ Looking at traffic figures by month shows market seasonality
- ▶ While traffic between PTY and Miami (MIA) has grown over the last few years, it slows in the fall and rises in the spring



Source: AirportIS internet-based aviation data portal

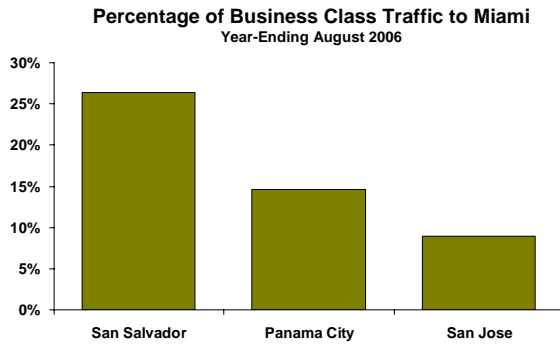


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Analysis of Premium Traffic

- ▶ Ticketing data allows an airport to calculate the premium mix of traffic, which is important to airlines
- ▶ PTY's premium percentage is less than SAL and SJO



Source: AirportIS internet-based aviation data portal

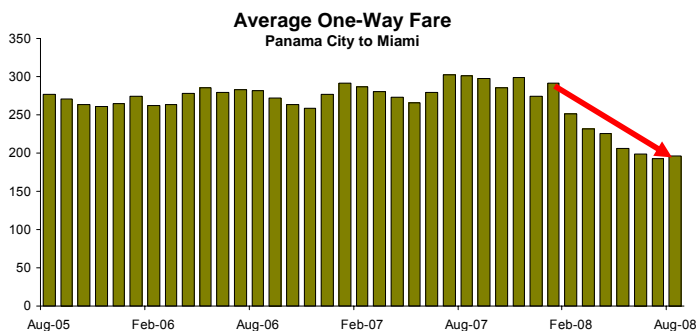


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Analysis of Fare Trends—Example

- ▶ Fare trends can give a picture of the state of a market
- ▶ American and COPA have operated in PTY-MIA for years
- ▶ What happened in 2008?



Source: AirportIS internet-based aviation data portal



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Analysis of Leakage—Overview

- ▶ “Leakage” occurs when travelers do not use their local airport
- ▶ Leakage can be caused by lower fares or more service at a neighboring airports
 - ▶ Low-cost carriers often attract passengers from far away
 - ▶ In a city where the airport is not a hub, passengers from nearby cities can drive or train to get non-stop service
- ▶ Smaller airports work hard to keep passengers from their catchment areas from “leaking” to nearby airports
- ▶ Leakage analyses can be used to persuade airlines to add service to recapture these leaking passengers
 - ▶ Airports succeed using leakage analysis results to target airlines that compete with the nearby hub carrier



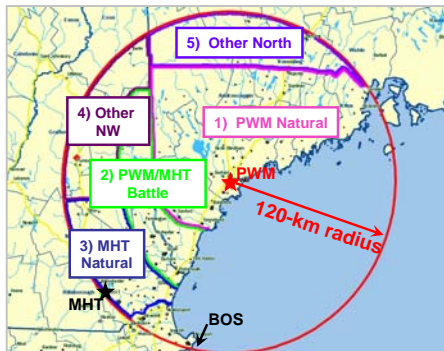
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Analysis of Leakage—Example

- ▶ Portland (PWM) loses local passengers to Manchester (MHT) due to fare and Boston (BOS) due to greater service options

PWM Area Divided into Catchment Areas



Source: appDat internet-based aviation data portal



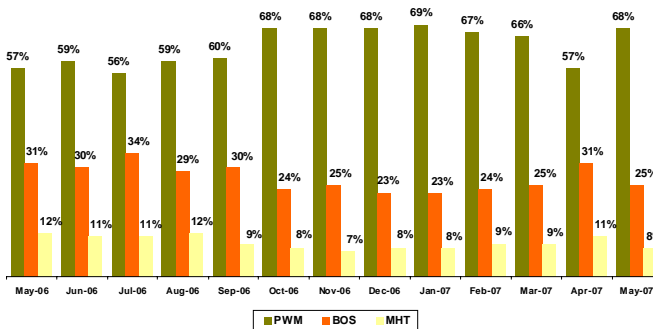
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Analysis of Leakage—Example

- ▶ Analysis of MIDT data by postal code near PWM shows that more than 30% of PWM's natural catchment area leaks
- ▶ PWM used this data to attract JetBlue and AirTran service

PWM Natural Catchment Area Bookings By Airport



Source: MIDT and Seabury APG analysis



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Summary



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Summary

	<u>MIDT</u>	<u>BSP</u>	<u>ARC</u>
Contents	Bookings	Ticket Settlement	Ticket Settlement
GDS Coverage	By Vendor	35 GDSs	U.S. GDSs
Direct Sales?	No	No	No
Coverage	Worldwide	All but USA	USA Only
Data Delay	3 Weeks	5 Weeks	3 Weeks
Traffic Estimates	Base not Shown	Base Shown	Soon, with BSP
Future/Daily Data?	Yes	For Airlines	Yes
Fare Categories?	Yes	Yes	Yes
Fare Detail	Estimated by Fare Category	Yes, with Masking Rules	Yes, with Masking Rules



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Summary

- ▶ ARC, BSP, and MIDT all come with limitations
 - ▶ Each source excludes tickets sold directly by airlines
 - ▶ ARC and BSP alone exclude the other's region
- ▶ These data sources are extremely valuable, however
 - ▶ All are used by airlines, and widely accepted by them
 - ▶ All are valuable in helping to analyze trends
 - ▶ Airlines are persuaded by facts, not anecdotes
- ▶ Using ARC, BSP, and MIDT data allows airports to build strong business cases to persuade airlines to act, using the same data sources as the airlines themselves



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