

AIRLINE COMPETITION PLAN



LAMBERT - ST. LOUIS
INTERNATIONAL AIRPORT

AIRLINE COMPETITION PLAN

Submitted for the
Lambert-St. Louis International Airport

On behalf of the
City of St. Louis, Missouri

August 2, 2000

INTRODUCTION

Under recently enacted legislation (the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, or "AIR-21"), large and medium hub airports that meet a certain threshold of concentration are required to submit competition plans. Lambert-St. Louis International Airport ("STL" or "Airport") meets the standards set out in AIR-21, as it is a large hub airport with more than 50% of its traffic served by a single air carrier, Trans World Airlines, Inc. ("TWA").

This competition plan is filed with regard to the Airport on behalf of the airport sponsor, the City of St. Louis, Missouri ("City"). The City intends to seek both Airport Improvement Program grants and Passenger Facility Charge approval.

STL is located in St. Louis County, Missouri, and serves the aviation needs of the St. Louis metropolitan region, surrounding areas of Missouri and Illinois, and, through the TWA hub, the central midwestern area of the United States.

STL is the primary domestic hub for TWA and is also a major focus city for point-to-point service by low-fare carrier Southwest Airlines Co. ("SWA"). As a result, local travelers face a highly competitive market for air travel, which benefits them through low fares and high frequencies to a wide range of destinations.

A study performed by GRA, Incorporated ("GRA") for Chicago, included as Exhibit A, looked at the "hub premium" for a number of large-hub airports, including STL. In looking at STL, GRA found that the impact of SWA's low-fare service at the Airport is to limit the ability of TWA to extract a hub premium from the market. Thus, as contrasted to other Midwest hubs (except Chicago O'Hare, which benefits from Chicago Midway's low-fare carriers), GRA found a hub premium¹ of only 0.3% for STL. According to GRA, this "negligible hub premium" demonstrates that the St. Louis market "exhibits more of the benefits of competition" than most other Midwest hubs.²

While STL does have a highly competitive atmosphere for air travel, it is also important to point out that STL's two largest air carriers, SWA and TWA, have leases that include special provisions. TWA's lease for gates and related facilities includes usage-based recapture provisions, where SWA's lease for gates and related facilities includes preferential-use provisions.

¹ In order to determine hub premium, GRA calculated how much reduction in fares for an average passenger would result if every market at the airport were served by 3 or more competitors. St. Louis' predicted variation, at 0.3%, was the lowest; the range was up to 14% at PIT. *The Chicago Fare Study*, p. 9 (GRA, Inc.: June 18, 1998).

² *The Chicago Fare Study*, page 2.

CITY OF ST. LOUIS POLICY ON REASONABLE AIR CARRIER ACCESS

The City recognizes that, by having accepted Federal grants, it has undertaken a legal obligation to provide reasonable air carrier access at STL. As such, the City has made and will continue to make every effort to accommodate all air carriers at STL.

The City is also familiar with the guidelines set forth in the recent U.S. Department of Transportation report entitled "Airport Business Practices and Their Impact on Airline Competition" (September 1999). Based on those guidelines and the regional benefits of air carrier competition, the City will continue to be proactive in increasing air carrier competition at STL.

BACKGROUND: HISTORY OF LEASES AT THE AIRPORT

The basic agreement of the signatory air carriers at STL is the Airport Use Agreement (the "AUA"). The AUA gives the air carriers certain rights to operate an air transportation business at the Airport.

The original AUA at STL became effective on August 1, 1965, (the "1965 AUA") and has subsequently been amended several times: the Amendatory Agreement ("1965 AUA-1") in 1975; the Second Amendatory Agreement ("1965 AUA-2") in 1977; and the Third Amendatory Agreement ("1965 AUA-3") in 1982.

In addition to the above-mentioned amendments to the 1965 AUA, there have been amendments applicable only to TWA: the Fourth Amendatory Agreement ("1965 AUA-4") in 1983 with Ozark Air Lines, Inc., Ozark having been assumed by TWA; the Use Amendment 1993 in which the City bought TWA's long-term exclusive-use lease rights at the Airport (the "Asset Purchase Agreement"); and the Sixth Amendatory Agreement ("1965 AUA-6") in 1996.

For those air carriers that were not signatory or successors-in-interest to the 1965 AUA the City consolidated the 1965 AUA, the 1965 AUA-1, the 1965 AUA-2, and the 1965 AUA-3 into one agreement and then modernized and simplified the language. This "Modern AUA" has been used since 1982 without amendment. The one exception is SWA who's Modern AUA has been amended twice as follows: the First Southwest Airlines Co. Amendatory Agreement for East Terminal Expansion in 1995; and the Second Amendatory Agreement, East Terminal Expansion in 1998.

All of the AUAs in place at STL expire December 31, 2005.

The City is currently negotiating with the air carriers that are signatory to the AUA for an additional amendment (the "2000 Amendment"). The 2000 Amendment will not extend the term or impact the use of facilities.

Where it is necessary for the sake of accuracy to draw a distinction between the 1965 AUA as amended, TWA, and/or the Modern AUA, the text does so.

The following material presents the City's actions to enhance competition at the Airport in the format suggested by the Federal Aviation Administration ("FAA") Program Guidance Letter on this topic, PGL-00-03.

I. AVAILABILITY OF GATES AND RELATED FACILITIES

A. Number of gates available at the airport by lease arrangement, i.e., exclusive, preferential or common use

STL has two terminal buildings, the Main Terminal and the East Terminal.

The Main Terminal: The Main Terminal has 72 gates. Fifty-six are leased to TWA on a month to month basis. Of the remaining 16 gates, 10 are exclusive-use and 6 are preferential-use and are assigned as follows: America West, 1 preferential-use; American, 2 exclusive-use and 1 preferential-use; Continental, 1 exclusive-use; Delta, 3 exclusive-use; Northwest, 2 exclusive-use; United, 3 preferential-use; and US Airways, 2 exclusive-use and 1 preferential-use.

The East Terminal: The East Terminal has 15 gates. Of those gates, 12 are being leased by SWA on a preferential-use basis. The remaining 3 gates are common-use gates commonly referred to as the "City Gates".

A graphic depiction of the existing gate assignments is included as Exhibit B (Gate Assignments, July 25, 2000).

B. Gate-use monitoring policy

On a monthly basis, the City prepares the "Airline Scheduled Activity" report, showing the average daily departures of all passenger and air freight flights. The July 2000 report is included as Exhibit C. In addition, TWA provides specific gate use calculations on a monthly basis. This is required pursuant to the Use Amendment 1993. The Report filed by TWA for its June 2000 gate use is included as Exhibit D.

C. Differences, if any, between gate-use monitoring policy at PFC-financed facilities subject to PFC assurance #7 and other gates. Has PFC competitive assurance #7 operated to convert previously exclusive-use gates to preferential-use gates or has it caused such gates to become available to other users?

The City has not fully funded construction of gates with PFCs. PFCs were used as an initial financing instrument for the construction of the East Terminal, but the majority of those funds were later "backed out" of that project, which was subsequently financed primarily with General Airport Revenue Bonds ("GARBs"). Any lease of space to an air carrier at the East Terminal will be in accordance with PFC Assurance #7. Should PFCs be used in the future to finance the construction of gates, any leases for those gates will also be in accordance with PFC Assurance #7.

D. Gate utilization (departures/gate) per week and month

Based on data from the Airline Scheduled Activity report, an "Average Daily Gate Usage" report is developed showing the average daily gate utilization. The July 2000 Average Daily Gate Usage report is included as Exhibit E. This shows an average daily gate utilization of 7.6 departures per day including the 7 commuter gates (gates B6, B7, B8, B10, B12, B14 and B16) which simultaneously board multiple flights from a single gate. Excluding such commuter flights and gates, the Airport has an average daily gate utilization of 6.7 departures per day. In July 2000, the two largest air carriers, SWA and TWA, performed an average of 7.1 and 7.9 departures per gate per day, respectively.

E. Policy regarding "recapturing" gates that are not being fully used

When negotiations converted TWA's 56 gates from long-term exclusive-use leases to month to month leases, recapture provisions were also included for the first time. Those provisions permit (but do not require) the City to take back gates and related facilities from TWA when the air carrier's usage falls below 3.33 regularly-scheduled daily flight departures per gate. Currently, TWA's gate usage is far above that threshold.

In addition, 3 gates in the Main Terminal are on short-term (3 year) preferential-use leases, with 30-day termination provisions. The City can recapture any of these gates should the need exist.

F. Use/lose or use/share policies for gates and other facilities

Based on the Use Amendment 1993, TWA is required to maintain a minimum average of regularly-scheduled daily flight departures for their 56 gates or the City may exercise its recapture rights. Of the 31 other gates, 3 gates are the City Gates and 18 are leased on a preferential-use basis, which means that an incumbent air carrier may be required to share its gate with a new entrant or expanding air carrier so long as the sharing will not materially affect the incumbent air carrier's current operation.

G. Plans to make gates and related facilities available to new entrants or to air carriers that want to expand service at the airport; methods of accommodating new gate demand by air carriers at the airport (common-use, preferential-use, or exclusive-use gate); and length of time between when an air carrier initially contacts the airport and could begin serving it

Currently, the City does not have any gates available for lease at the Airport; however, with the availability of the three City Gates and the ability to require certain incumbent air carriers to share certain gates under the preferential-use agreements, the City is confident that any air carrier interested in starting or expanding service at STL can be accommodated. Air carrier support facilities (ticket counter, baggage make-up space, offices, etc.) are also available at both the Main Terminal and East Terminal.

The City has a history of responsiveness to the needs of new entrants and expanding air carriers. In 1991, the City and SWA determined that the three permanent and three temporary gates then used by SWA would not accommodate planned growth. In order to respond to the air carrier's plans, the City and SWA entered into agreements to expand the East Terminal. That expansion, completed in 1998, provided SWA with a 12-gate facility and allowed SWA to grow from 2000 monthly departures in 1994 to 2500 monthly departures in 2000.

If new entrants or existing air carriers need additional permanent facilities at STL, the City will take all reasonable steps to make such facilities available. This could involve the construction of additional gates at the Airport or, to the extent possible, the reassignment of any underutilized gates.

The City intends to take a proactive stance in identifying and encouraging additional air carriers and additional air service at STL. When a new entrant air carrier expresses interest in initiating service at STL, airport officials will assist the new entrant air carrier in obtaining acceptable facilities, by sublease or other methods.

There is no history of air carriers being refused adequate access at STL. The City is prepared to find accommodations for all air carriers requesting facilities without any unreasonable delay.

H. How are complaints of denial of reasonable access by a new entrant or an air carrier that wants to expand service resolved?

For those incumbent air carriers with preferential-use leases, the City has the right to direct that air carrier to accommodate a new entrant or expanding air carrier with respect to passenger holdrooms, passenger loading bridges, and other support space. The City also has the right to specify the terms and conditions, not otherwise resolved, of such accommodation.

I. Number of carriers in the past year that have requested access or sought to expand, how they were accommodated, and the length of time between any requests and access

No formal requests have been made in the past year. The City believes it has always accommodated all new entrant or expanding air carriers in an acceptable manner. In recognition of the City's efforts, no air carriers have complained about access to the Airport.

II. LEASING AND SUBLEASING ARRANGEMENTS (IDENTIFY OR DESCRIBE)

A. Whether a subleasing arrangement with an incumbent carrier is necessary to obtain access

No, a subleasing arrangement with an incumbent air carrier is not necessary to obtain access to the Airport. A new entrant or expanding air carrier always has the option to utilize the City Gates.

B. How the airport assists requesting airlines obtain a sublease

The City will assist a new entrant or expanding air carrier by identifying those incumbent air carriers whose schedules appear to be able to accommodate the additional activity. It will work with the new entrant or expanding air carriers and intervene on their behalf with incumbent air carriers. Also, the AUAs require City consent for all subleases. This will assist any new entrant or expanding air carrier in obtaining a fair sublease.

C. Airport oversight policies for sublease fees and groundhandling arrangements

The AUAs require City consent for all subleases. The City will not consent to any sublease that is not fair. In addition, under the contract in effect with the City's Agent having ground handling rights on the City Gates, the City retains the right to approve the handling fees of the Agent and requires the Agent to charge prices that are fair, reasonable and non-discriminatory. This assists in keeping the prices for ground handling services fair, reasonable and non-discriminatory.

D. Airport policies regarding sublease fees (e.g., no more than 15 percent above the standard airport-determined fee)

The City's consent is required for all subleases. The City will not consent to a sublease that has excessive fees and requirements. The current subleases have a markup of 10% to 15% above the rates that the incumbent air carriers pay the City.

E. How complaints by subtenants about excessive sublease fees or unneeded bundling of services are resolved

The City has not received any complaints from subtenants about excessive sublease fees or unneeded bundling of services. The AUAs require the City's consent for all subleases and the City will not consent to a sublease with excessive fees. The City's Agent, which has the ground handling rights on the City Gates, is required to receive approval by the Director of Airports on its charges for handling fees.

F. How independent contractors who want to provide ground handling, maintenance, fueling, catering or other support services, but have been unable to establish a presence at the airport, are accommodated

The City does not limit access to the Airport by parties providing services to the air carriers. The air carriers are able to contract with any company they choose for their services. The City fosters a pro-business environment for third-party ground-handling and support services. Currently, two independent contractors provide third-party ground-handling services: the Huntleigh Corporation provides services to Delta and Comair, and the City's Agent (Airport Terminal Services, Inc.) provides services to Big Sky and itinerates at the City Gates. The other major air carriers handle themselves and their affiliates/subtenants.

There is an air carrier fuel consortium that provides fueling to most of the air carriers. The City's Agent provides fuel to those air carriers using the City Gates.

G. Are formal arrangements in place to resolve disputes among air carriers regarding the use of airport facilities?

The AUAs make general reference to the type of use for certain areas. If an air carrier is not using its space according to the terms of the AUA, the City may direct the air carrier to correct the situation. The Airport Director is given considerable discretion in resolving conflicts concerning the use of airport facilities.

III. PATTERNS OF AIR SERVICE (IDENTIFY OR DESCRIBE)

A. Number of markets served

As a hub airport for TWA, a focus city for SWA, and a spoke for all the major air carriers, STL has air service to virtually every market in the world.

B. Number of markets served on a nonstop basis; average number of flights per day

The Official Airline Guide for August 2000 lists STL service to 106 airports serving 101 nonstop markets. As of July 2000, STL had 654 departing flights daily.

C. Number of small communities served

St. Louis is served nonstop to 32 cities with populations less than 500,000.

D. Number of markets served by low-fare carriers

On its website (<http://ostpxweb.ost.dot.gov/aviation/>) DOT defines low-fare carriers as Access Air, Air South, AirTran, American Trans Air, Carnival, Frontier, Kiwi, National Airlines, Pro Air, Reno, Southwest, Spirit, Sun Country, Vanguard, and Western Pacific. Using DOT's definitions, DOT's 1999 data show low-fare service from STL in 45 city-pair markets, 26 long-haul, and 19 short-haul. This service is provided by SWA which operates nonstop flights in 19 markets.

E. Number of markets served by one carrier

One air carrier serves seventy-five airports, serving 70 markets, non-stop.

F. Number of new markets added or previously served markets dropped in the past year

No new markets have been added nor have any previously served markets been dropped in the past year.

IV. GATE ASSIGNMENT POLICY (IDENTIFY OR DESCRIBE)

A. Gate assignment policy and method of informing existing carriers and new entrants of this policy (including standards and guidelines for gate usage and leasing, such as security deposits, minimum usage, if any, fees, terms, master agreements, signatory and nonsignatory requirements)

Gates are assigned based on the review of the various air carriers' requests, their intended use and the physical limitations of the gates. Consideration is also given to local and regional interest. The City plans to formalize its policies as to gate assignments within the next 12 months. The City plans ultimately to publish on its web site all relevant information that an air carrier may wish to know about serving STL (signatory status, security deposit requirements, etc.).

B. How announcements are made to tenant air carriers when gates become available. Do all tenant air carriers receive information on gate availability and terms and conditions by the same process at the same time?

When gates have become available at the Airport, all air carriers are simultaneously advised of gate availability and invited to request the gates if they so desire. On the most recent occasion of a gate becoming available, only US Airways submitted a request for the gate.

C. New policies that have been adopted or actions that have been taken to ensure that new entrant carriers have reasonable access to the airport and that incumbent carriers can expand their operations

The 1965 AUA does not include accommodation provisions. The Modern AUA does provide for accommodation, and it is the City's intention in the future to expand the scope of accommodation language to the degree negotiable at that time. In addition, with the construction of the new East Terminal the City was able to provide a 3rd City Gate and dedicated facilities.

V. FINANCIAL CONSTRAINTS (IDENTIFY OR DESCRIBE)

A. The major source of revenue at the airport for terminal projects

The major source of revenue for terminal projects is the rates and charges of the air carriers. Terminal projects are financed for the most part by GARBs. These GARBs are then repaid through air carrier rates and charges and concession revenues.

B. Rates and charges methodology (residual, compensatory or hybrid)

The rates and charges methodology in effect at STL is a hybrid method using the residual approach for airfield expenses and the compensatory approach for expenses in the multiple cost centers of the terminals and concourses.

C. Past use, if any, of PFCs for gates and related terminal projects

PFCs were used to finance the construction of a connector between concourses B, C and D. This project allowed concourse B to be linked to concourses C and D so passengers would not have to exit and reenter security to transition between these concourses.

As noted earlier, PFCs were used as an initial financing instrument for the construction of the East Terminal, but the majority of those funds were later "backed out" of that project, which was subsequently primarily financed with GARBs.

VI. AIRPORT CONTROLS OVER AIRSIDE AND GROUND SIDE CAPACITY (IDENTIFY OR DESCRIBE)

A. Majority-in-interest (MII) or "no further rates and charges" clauses covering groundside and airside projects

The 1965 AUA as amended includes both MII and "no further rates and charges" clauses.

Majority-in-Interest Clauses: The air carriers' MII rights have expanded over the course of lease amendments. Their MII rights are first established in the AUA-1.

AUA-1 defines Majority-in-Interest to mean: "those scheduled airlines (but in no event less than fifty percent (50%) of the number of scheduled airlines who have executed agreements similar to or substantially the same as this Agreement) who have, on the date in question, more than fifty percent (50%) of the aggregate revenue aircraft weight landed at the Airport during the immediately preceding calendar year. AUA-1 at ¶I.B.

In Section II of AUA-1, the City agrees to make certain elements of the planning, design and construction of certain terminal and concourse construction projects subject to MII approval. MII approval requirements apply to the specific projects that fall within the Concourse Improvement and Terminal Expansion Program ("Program"). For example, the planning on the project is to proceed according to the construction phasing and gate allocation agreed to by the scheduled air carriers, and the City is not to accept bids that exceed a certain dollar amount by more than 10% without first obtaining MII approval. Likewise, the air carriers received the right to approve change orders over a certain magnitude.

However, in addition to the specific limits the City accepted with regard to the specified projects falling within the Program, the City also accepted limits on other capital expenditures. In Section V of AUA-1, the City agreed that capital expenditures other than those in the Program "affecting the Terminal Building or Concourse Area rental rates" must be approved by an MII unless they are less than \$100,000/item or \$500,000/aggregate in any given year (subject to CPI adjustment), or required by the federal or state government, or needed for an emergency.

MII authority to approve expenditures not affecting terminal or concourse rents, but only affecting the landing fee, was conveyed in the AUA-3. In AUA-3, procedures were established for review and, in some cases, approval of capital expenditures in the airfield. AUA-3 provides that the City shall give the air carriers a budgetary forecast of airfield area expenses and landing fee computations not less than 30 days before the end of the calendar year, as well as a list of proposed capital expenditures to be made in the upcoming year. Similar to AUA-1, the language excludes projects required by federal or state government or of an emergency nature, but also those required by a court judgment or those that the City and an MII believe will be self-supporting (no increase in landing fees). Except for such projects, MII approval is required if the projects in the aggregate will increase landing fees by more than 2 cents/thousand.

These MII clauses have been consolidated into one section for the Modern AUA.

"No Further Rates and Charges" Clauses: The 1965 AUA provides, at Art. XX, that

Except as set forth herein, no other charges, fees, licenses, excise or operating taxes or tolls shall be charged or collected by the City directly or indirectly from Airline, its suppliers of materials or furnishers of services for the uses authorized under this agreement; however, the City may charge and collect for services rendered to the Airlines not authorized or included within the terms of this agreement, provided that the services so rendered were requested by the Airlines.

AUA-3 included a provision clarifying that Article XX did not limit the City's ability to impose Passenger Facility Charges as provided by law.

B. List any capital construction projects that have been delayed or prevented because an MII was invoked

Historically, the MII has never been used at the Airport to prevent or delay a capacity-related project. In the City's estimation, there has been no use of the MII at STL for anti-competitive reasons.

C. Plans, if any, to modify existing MII agreements

The MII language in effect at STL is contained in an agreement running until 2005. Currently the City is in the process of amending the AUA. This amendment addresses how an increase in the cost of an approved MII project will be handled. In addition, when the AUAs expire in 2005, the City will determine whether to push for modification of the MII language based on industry trends and experience with securing MII approval of key projects.

VII. WHETHER THE AIRPORT INTENDS TO BUILD OR ACQUIRE GATES THAT WOULD BE USED AS COMMON FACILITIES (IDENTIFY OR DESCRIBE)

There are currently three gates available on a common-use basis at the Airport. Although the City does not currently plan to build or acquire additional common-use gates, common use is one option that the City will consider should additional gates be built or any gates become available at the Airport.

A. The number of common-use gates available at the airport today

There are currently three gates available on a common-use basis at the Airport. The scheduling of those gates is coordinated by the City's Agent operating under an agency agreement with the City.

B. The number of common-use gates the airport intends to build or acquire, timeline, and intended financing arrangements for those common-use gates

Though STL's Master Plan allows for additional gates to be built, there are no immediate plans to build additional gates or plans to terminate any current agreements for the specific purpose of creating common-use gates. If additional gates are built or become available, the City will consider common use as one option for the use of those gates.

C. Are any air carriers that have been serving the airport for more than three years relying exclusively on common-use gates?

There are no air carriers currently operating at STL that have been relying exclusively on common-use gates for more than three years.

D. Whether common-use gates will be constructed in conjunction with gates leased through exclusive- or preferential-use arrangements

Though STL's Master Plan allows for additional gates to be built, there are no immediate plans to build additional gates or plans to terminate any current agreements for the specific purpose of creating common-use gates.

E. Whether gates being used for international service are available for domestic service

TWA has six gates available for use as both international and domestic gates. Two of the three City Gates are also available for use as both international and domestic gates. STL does not have any international use only gates.

F. Do carriers that only serve domestic markets now operate from international gates?

Domestic itinerate air carriers use the two international City Gates when they are not needed for international operations.

VIII. AIRFARE LEVELS COMPARED TO OTHER LARGE AIRPORTS

A. Summarized data for the airport showing each carrier's local passengers, average fares, market share (based on passengers), and average passenger trip length (Source: DOT Air Fare Data Table 1)

As the data in Table A show, in 1999 TWA carried half (50%) of the local passengers originating at and destined for the area served by STL. In addition, SWA, the largest low-fare carrier (as defined by DOT) has a significant share of the local passenger market, carrying 23% of local passengers in 1999.

Table A

Air carrier code	Local passengers	Average fare	Average trip length	Market share
99 (Interline transfers)	198,890	\$226.55	1,081	2%
AA (American)	437,280	\$180.57	785	4%
CO (Continental)	221,620	\$174.31	840	2%
DL (Delta)	508,660	\$184.04	765	5%
HP (America West)	164,210	\$165.21	1,497	2%
NW (Northwest)	482,710	\$162.47	688	5%
TW (TWA)	5,241,250	\$173.54	797	50%
UA (United)	414,190	\$177.58	854	4%
US (USAirways)	383,640	\$191.97	766	4%
WN (Southwest)	2,368,460	\$97.36	630	23%
Totals/averages	10,428,290	\$158.31	770	100%

B. Summarized data for the airport showing local passengers, average passenger trip length, average passenger yield, and number of city-pair markets served disaggregated by distance (markets under and over 750 miles) and depending on whether a low-fare competitor is present (Source: DOT Air Fare Data Table 2)

Summarized data for the airport showing local passengers, average passenger trip length, average passenger yield, and number of city-pair markets served disaggregated by distance (markets under and over 750 miles) and depending on whether a low-fare competitor is present (Source: DOT Air Fare Data Table 2)

DOT's 1999 data show low-fare service present in just under a third of the city-pair markets served out of STL (45 of 163), with the remaining city-pair markets served by only traditional air carriers (those not classified by DOT as "low-fare carriers"). Of the 91 identified short-haul city-pairs, 19 have service from low-fare carriers. Of the 72 identified long-haul city-pairs, 26 have service from low-fare carriers.

23% of STL local passengers were on a low-fare carrier. However, 53% of STL passengers (5,517,760 of 10,428,290) were identified as low-fare passengers in DOT Table 1.

Table B

Market Type	Short-Haul (<750 Miles)				Long-Haul (>750 Miles)				All Stage Lengths			
	City Pairs	Passengers	Stage Length	Yield	City Pairs	Passengers	Stage Length	Yield	City Pairs	Passengers	Stage Length	Yield
Non-Low-Fare	72	2,761,100	468	\$ 0.38	46	2,149,430	1,232	\$0.19	118	4,910,530	802	\$0.25
Low-Fare	19	3,124,500	426	\$ 0.20	26	2,393,260	1,213	\$0.13	45	5,517,760	768	\$0.15
Total	91	5,885,600	445	\$ 0.29	72	4,542,690	1,222	\$0.16	163	10,428,290	784	\$0.20

STL Yields compared to other airports that have similar average passenger trip lengths, for short-haul markets, long-haul markets, and overall: In short-haul markets, 30 airports have an average stage length within 50 miles (plus or minus) of STL's average stage length of 445 miles. STL's passenger yield of \$.29/RPM ties it for 19th in that group. In long-haul markets, 15 airports have an average stage length within 50 miles (plus or minus) of STL's average stage length of 1,222 miles. STL's passenger yield of \$.16/RPM ties it for 9th place in that group. Overall, 14 airports have an average stage length within 50 miles (plus or minus) of STL's average stage length of 784 miles. STL's passenger yield of \$.20/RPM places it 8th in that group. Supporting statistics for the above analyses are included as exhibits F through N.

C. Additional information pertinent to particular circumstances at individual airport.

As discussed above, Southwest's presence at STL provides low-fare competition that has been found to have virtually eliminated any "hub premium" from the fares paid by local travelers. *The Chicago Fare Study*, pages 2 and 9.

Exhibits:

- A. GRA study information showing lack of hub premium at STL
- B. Gate Assignments: July 25, 2000
- C. Airline Scheduled Activity (Passenger and Freight): July 2000
- D. TWA Monthly Gate Use Calculation: June 2000
- E. Average Daily Gate Usage: July 2000
- F. Comparison of Yields in Low-Fare Short-Haul Markets
- G. Comparison of Yields in Non-Low-Fare Short-Haul Markets
- H. Comparison of Yields in Total Short-Haul Markets
- I. Comparison of Yields in Low-Fare Long-Haul Markets
- J. Comparison of Yields in Non-Low-Fare Long-Haul Markets
- K. Comparison of Yields in Total Long-Haul Markets
- L. Comparison of Yields in Total Low-Fare Markets
- M. Comparison of Yields in Total Non-Low-Fare Markets
- N. Comparison of Yields in Total Markets

THE CHICAGO FARE STUDY*

by

Frank Berardino and William Spitz
GRA, Inc.

The purpose of this study was to evaluate airfares paid by Chicago passengers at O'Hare International Airport (ORD) versus those at seven other Midwestern hubs in the United States. A statistical analysis was undertaken to explain the variance in yields (cents per mile) paid by passengers originating at each of the eight hub airports flying non-stop to domestic points within the U.S. The eight hub airports evaluated were: Chicago O'Hare, Cincinnati, Dallas/Fort Worth, Detroit, Memphis, Minneapolis/St. Paul, Pittsburgh and St. Louis. Data were for the period year-end, third quarter 1997, the latest period for which yield data were available.

The analysis focused on these non-stop markets because fares paid by passengers originating at hub airports are more likely to be affected by hub-carrier dominance than others. Passengers originating at a hub may be susceptible to the city power (the cumulative effect of a high market share of airport enplanements and the reinforcing effects of CRS systems and frequent flyer programs), and are also more likely to fly in markets with only one or two non-stop competitors. In contrast, passengers originating at a non-hub point may be susceptible to the effects of having only one or two non-stop competitors but would not be directly affected by city power. Passengers who choose to connect are also less likely to pay high fares, all other things being the same, because there are far more competitive options for one-stop or multi-stop service than for non-stop service.

An advantage of a multivariate statistical analysis of yields is that it is possible to isolate the effects of individual factors that affect prices paid by air passengers. This is a particular advantage relative to other studies which make price comparisons across different markets; such comparisons are hampered by difficulties in making adjustments for market-specific and airport-specific factors:

- Airport-specific factors: city power, income, and population which may have an influence on fares

*This study was supported by the Chicago Airport System; the conclusions are those of the authors and do not necessarily represent the position of the Chicago Airport System. The authors gratefully acknowledge comments by Mary Rose Loney, Dennis Culloton of the Chicago Airport System; Ken Quinn of Winthrop Stimson Putnam and Roberts and Richard Golaszewski and Chris Frankel of GRA. All remaining errors are our responsibility.

Release Date: Oct 29, 1998

- Market-specific factors: industry structure (the number and type of competitors in a specific origin-destination pair), the composition of demand in the market (business versus leisure travel), the existence of slot controls at either the origin or destination airport, and the existence of service from a second airport.

The relative importance of these variables may help determine appropriate public policy regarding airline competition.

SUMMARY OF RESULTS

From a public policy perspective, the main questions to answer are whether fares at O'Hare are too high and whether there are likely to be policy changes that could improve economic welfare; following are the conclusions from the analysis:

- Taking into account both market- and airport-specific circumstances, the average originating passenger at O'Hare pays only 0.7% more than would be the case if every market had three or more non-stop competitors; only St. Louis (where Southwest has a strong presence) shows a similar negligible premium. Relative to other Midwest hubs, Chicago's (and St. Louis') performance exhibits more of the benefits of competition.
- Entry by low fare carriers at O'Hare is unlikely to dramatically affect average fares for originating passengers because such carriers are most likely to be viable in only a limited number of vacation markets. Under plausible assumptions, entry by low fare carriers would reduce average yields for all originating passengers at O'Hare by only one percent. This result is due in part to the fact that 67% of the passengers departing O'Hare to vacation destinations already enjoy access to competing service at Midway.
- O'Hare's performance is particularly noteworthy in view of the finding that the slot rule increases fares by about 16 percent above what they would be without the rule; the effects of the slot rule at O'Hare are at least four times greater than at any other Midwestern hub.

DESCRIPTION OF THE MODEL

Specific variables utilized in the analysis are summarized below. The dependent variable was: **Yield**,¹ or cents per mile flown, defined as average fare paid by a passenger originating at a hub in a non-stop, origin-destination market divided by distance.

The independent or explanatory variables are as follows:

- **Distance:**² Non-stop mileage between the origin hub airport and the destination
- **Herfindahl Index (HHI) for Enplanements at the Departure Airport:**³ Measure of concentration for enplanements at the airport calculated as the squared market shares of total airport enplanements of each carrier
- **Average Income:**⁴ A measure of the average household income in the Metropolitan Statistical Area (MSA) in which the hub airport resides
- **Population:**⁵ The population in the MSA in which the hub airport resides
- **Slot Control:**⁶ The existence of slot controls at either end of an origin-destination pair
- **Percent Turboprop Flights:** The percent of flights in a city-pair performed by turboprop aircraft⁷

¹U.S. DOT DB1A data year-end third quarter, 1997.

²Calculated great-circle distance in statute miles.

³Salomon Smith Barney: "Airline Competition at the 50 Largest U.S. Airports-Update," (March, 12, 1998).

⁴1994 estimate from City-County Databook.

⁵Ibid for 1995

⁶Slot controls exist at O'Hare, LaGuardia, JFK and Ronald Reagan National Airport.

⁷OAG, May, 1997.

- **Vacation Destination:** An indication that the destination city in a city-pair market is an attractive vacation place⁸
- **Percent Business Travel:** The percent of tickets sold in a city-pair market that are full fare (F, C or Y)¹; all low-fare carrier tickets are assumed to be less than full fare
- **Monopoly:** Only a single carrier (whether low fare or not) operating in the market⁷
- **Two Carriers:**⁹ An indication that there are two air carriers in the market, neither of which is a low fare carrier
- **Two Carriers/Low Fare:**⁹ An indication that there are two carriers in the market, at least one of which is a low-fare airline (including Southwest, America West and several smaller carriers)
- **Two Carriers, Both Hubbing at Origin:**¹⁰ A situation where two carriers operate hubs at the origin in a city-pair market; such a market structure only exists at O'Hare
- **Three Carriers:**⁷ Three or more carriers (low fare or otherwise) operating non-stop in the market
- **Second Airport Service:**¹¹ The existence of service in a city-pair from a second airport within the MSA

⁸ Albuquerque, Atlantic City, Aspen, Fort Lauderdale, Gulfport, Honolulu, Jackson Hole, Jacksonville, Las Vegas, Orlando, Miami, Myrtle Beach, Palm Beach, Panama City, Phoenix, Palm Springs, Reno, Fort Myers, San Diego, San Juan, Sarasota, Tampa, Tucson, Fort Walton Beach.

⁹ OAG, May, 1997; low fare competition participating: Southwest, America West, Reno Air, American Trans Air, ValuJet, Carnival, Midway, Frontier, Airtran, Spirit, Kiwi, Vanguard, Air South.

¹⁰ OAG, May, 1997: American and United hubs at ORD are the only instance of this market structure.

¹¹ Airports operating in the same city or region are: DAL/DFW; HOU/IAH; MIA/FLL; SFO/OAK; MDW/ORD; EWR/LGA/JFK; BWI/DCA/IAD; LAX/SNA/ONT.

SUMMARY OF RESULTS

The results can be separated into the two key categories described earlier: airport-specific and market specific factors. In what follows, we present indications of the sensitivity of average yields (evaluated at the mean for all hub airports) to changes in each variable individually.

Airport-Specific Factors

- Average household income in the MSA was found to have a significant and positive influence on yields. This suggests that individuals with higher incomes tend to pay higher fares, perhaps because of their inclination to buy premium tickets. A 10 percent increase in MSA income caused yields to increase by 16 percent.
- Population in the MSA was significant and had the opposite effect; the larger the population in the MSA, all other things being the same, the lower the yield, possibly indicating advantages of economies of density in airline markets. A 10 percent increase in MSA population caused a decrease of 0.35 percent in fares.
- The HHI index of enplanements for the airport was marginally significant indicating that city power increases yields but that market-specific industry structure variables (see below) may have a more important effect on observed yields in a particular market. A 10 percent increase in HHI caused yields to rise by one percent.

Market-Specific Factors

All of the market-specific factors were found to have a significant effect on observed yields in specific origin-destination pairs.

- Yields tended to decline with distance; a 10 percent increase in distance caused yields to fall by one percent.
- Yields were also lower when the destination was an attractive vacation place. If 10 percent more of the city-pairs were vacation markets, average yields would fall by two percent.
- Slot controls had a significant and positive effect on yields meaning that in those specific markets where slot controls were present on either end of the trip, average yields tended to be higher. If 10 percent more of the city-pairs examined were subject to the slot rule, average yields would be two percent higher.

- The higher the percentage of turboprop flights in a market, the higher yields will tend to be, all other things being the same. If 10 percent more of the flights (a tripling) were by turboprops, average yields would increase by one percent.
- Higher percentages of full fare travel (most likely by business travelers) also tended to elevate observed yields in specific markets. If 10 percent more (twice the average level) of passengers paid full fares, average yields would increase by 16 percent.
- The existence of service in a specific origin-destination pair from a second airport in an MSA had a significant and negative effect on observed yields. If 10 percent more of the markets had second airport services, average yields would decline by 1.3 percent.
- The industry structure variables (measures of the number of types of competitors in a market) were also all significant; the results reported in Table 1 suggest that yields are highest, all other things being equal, in two carrier markets when no low cost operator was present; yields were lowest in two carrier markets where at least one low cost operator was present.

Table 1

EFFECTS OF INDUSTRY STRUCTURE ON YIELDS
(Relative to Three Competitor Markets)

Industry Structure in Origin-Destination Pair	Change in Average Yield for all Passengers if 10 Percent More of the Markets Were in an Industry Structure Category
Two Carriers (no low cost operator)	2.1%
Monopoly	1.8%
Two Hubbing Carriers at Origin	1.3%
Two Carriers (at least one low cost operator)	(1.6%)

The model explains approximately 80 percent of the variation in yields and has other desirable statistical properties which suggest that it provides useful insights into the variation in yields across origin-destination pairs and between airports, as described below.

INTERPRETATION

Mean values per passenger for the entire sample and for each airport separately are shown in Table 2.

The data and the results of the model generally correspond to those earlier described by GRA. Simple comparisons of yields do not reveal very much about airline markets. For example, the average yield at O'Hare is higher than at DFW, but the data in Table 2 suggest that markets at ORD may be more competitive—for example, more passengers pay full fare at DFW than at ORD and more DFW markets (72%) are in single carrier markets or two carrier markets with no low cost carrier than is the case at O'Hare.

While yields at ORD are adversely affected by the existence of the slot rule, the average passenger benefits from the fact that there are two hubbing carriers at O'Hare and that there is service from Midway Airport. As a consequence, only approximately 10 percent of the passenger originations from O'Hare are in monopoly markets. In contrast, 67 percent of the passenger trips at Cincinnati are in monopoly markets. All of the other hub airports examined also have a higher incidence of monopoly routings:

- Dallas/Fort Worth: 13 percent
- Detroit: 36 percent
- Memphis: 65 percent
- Minneapolis/St. Paul: 43 percent
- Pittsburgh: 72 percent
- St. Louis: 34 percent

However, some observers have expressed concerns about the effects on airfares of the slot rule in the presence of the two hubbing carriers at O'Hare, and have also noted the lack of significant low-fare carriers operating at the airport. An important question is whether these concerns offset the competitive benefits described earlier for O'Hare.

Table 2
Mean Values Per Passenger

Variable	All Hub Airports	CVG	DFW	DTW	MEM	MSP	ORD	PIT	STL
Average yield	29.5¢	39.6	25.7	30.1	33.7	30.3	29.2	46.2	23.8¢
Average household income (000)	\$24.2	21.9	23.5	24.5	21.6	25.2	25.3	22.8	23.6
MSA population (000)	5,100	1,907	4,450	5,280	1,069	2,723	8,590	2,395	2,546
Airport HHI (enplanements)	5,360	8,860	4,810	6,510	6,310	7,180	3,420	8,001	5,220
Passenger one-way distance (miles)	831	785	875	827	634	893	875	671	720
Passenger trips to percent vacation destination	22%	24	17	33	17	20	22	21	18%
Percent passenger trips in city-pairs w/slot controls at either origin or destination	38%	16	10	12	15	11	100	13	10%
Percent passenger flights in turboprops	5%	6	10	3	11	3	4	8	3%
Percent full fare (F, C, Y) passenger tickets	9%	30	14	7	10	10	5	28	1%
Percent passenger trips where second airport service available	39%	25	33	31	9	27	63	20	30%
Percent of passenger trips occurring as markets with:									
Single carrier	28%	67	13	36	65	43	10	72	34%
Two carriers, neither low cost	22%	19	59	20	12	19	4	27	11%
Two carriers, both hubs	14%	0	0	0	0	0	47	0	0%
Two carriers, ≥ 1 low cost	11%	6	3	34	0	14	0	0	31%
Three carriers	25%	9	26	10	23	24	39	1	25%

To answer this important question, we have examined the effects of the variables which could conceivably be affected by public policy on observed yields at each of the airports.

One important question is how far from competitive conditions is the observed performance at each airport. That is, how much less would the average passenger departing from these hub airports pay if competitive circumstances existed in every city-pair market? The following is a discussion of the results summarized in Table 3.

Table 3

**PERCENT CHANGE FROM PREDICTED AVERAGE
PASSENGERS YIELD AT EACH AIRPORT**

Airport	Without Slots	All Markets with 3 Competitors	All Markets w/2 Carriers, ≥ 1 Low-Cost
CVG	-3.9%	-9.7%	-28.5%
DFW	-1.8%	-9.3%	-26.5%
DTW	-2.9%	-4.6%	-22.6%
MEM	-2.5%	-11.7%	-25.7%
MSP	-2.3%	-6.0%	-23.2%
ORD	-16.1%	-0.7%	-22.2%
PIT	-3.5%	-14.0%	-29.2%
STL	-2.2%	-0.3%	-18.2%

- **Slots:** Slots tend to have a relatively large effect at O'Hare where every origin-destination market is affected by restrictions on capacity; these are further compounded by the existence of EAS and exempt flights at O'Hare since such flights may not be economic on a standalone basis, but consume valuable slots which could be utilized by economically viable flights. In the absence of the slot rule at O'Hare, the average passenger would pay 16 percent less per mile flown.
- **Three Competitors in Each Market:** If there were three non-stop competitors in every market, average fares at each of the hub airports would be lower; it is significant to note, however, that the average reduction in fare at O'Hare (and St. Louis) would be negligible and less than at other hub airports; this suggests that typical markets at O'Hare are more competitive than at other airports.
- **Industry Structure Resulting in the Lowest Average Prices:** The results in the model suggest that the lowest prices exist in two carrier markets

where at least one is a low-cost entity; if every market at each of the airports had this industry structure, average yields would be lower.

Of course, in the real world not all markets will support three non-stop competitors. Low cost carriers in the sample generally serve dense markets, where point-to-point service (without hub support) is economic. Similarly, three network competitors can only be supported in dense markets where there is sufficient demand to justify a high level of activity. Therefore, the potential reduction in yields implied in the last two columns of Table 3 may not be realizable in every market.

With this caveat, we note that among the eight hubs examined, O'Hare's performance is superior to all of the others except St. Louis, where Southwest has a large and growing presence and where the hubbing carrier, TWA, has suffered for years from financial weakness. Putting the unique circumstances at St. Louis aside, the average passenger at O'Hare pays yields that are closer to very competitive conditions than at other hubs:

- The average passenger at O'Hare pays only 0.7% more than would be the case if all ORD markets had three competitors

O'Hare's actual yields reflect the fact that for 47% of the passenger originations, the competitors in the market are the two O'Hare hubbing carriers and their simultaneous presence creates a more competitive environment than would be the case at a single carrier hub. Furthermore, the majority of O'Hare originating passengers (63 percent) benefit from having competitive services available at Midway Airport.

EFFECT OF LOW FARE OPERATORS

Some observers note that yields would be lower if more low cost operators competed at O'Hare. This is true, but an important question is how much would average yields paid by originating passengers decline if an economically viable pattern of low cost service was available at O'Hare.

We have considered what would happen if a low fare carrier entered in markets most likely to support low fare service. To determine which kinds of markets low fare carriers enter, we note that there is a dichotomy in the marketplace:

- Southwest is able to serve both dense vacation markets and less dense, business-oriented markets

- Other low fare carriers tend to concentrate in dense vacation markets¹²

Since Southwest already has a large operation at Midway, it is unlikely that they would enter at O'Hare. Therefore, the most likely incursion by low fare carriers at O'Hare would be in vacation markets.

We have therefore assumed a change in the market structure in each vacation market served by O'Hare by adding a carrier where less than three carriers participated in the market. The results are shown in Table 4.

The results in Table 4 suggest that entry by an additional carrier in vacation markets would reduce average yields paid by all passengers by one percent and yields paid by passengers in vacation markets by nine percent. The former measure is more relevant for judging the overall impact of a policy designed to encourage low fare operations at O'Hare.

¹² An evaluation of the markets served by Air Tran, America West, America Trans Air, Carnival, Eastwind, Frontier, Kiwi, Reno, Spirit, Valujet, Vanguard, and Westpac in May 1997 shows that in 543 of the 761 city pairs served (71%) a leisure destination made up at least one of the two cities in the non-stop market.

Table 4

EFFECT OF PLAUSIBLE LOW FARE CARRIER ENTRY ON YIELDS AT O'HARE

Vacation Destination	Actual Market Structure	Alternative Market Structure ¹³
Albuquerque	One Carrier	Two Carriers, One Low Cost
Fort Lauderdale	Two Carriers, Both ORD Hub	Three Carriers
Honolulu	Two Carrier, Both ORD Hub	Three Carriers
Jacksonville	One Carrier	Two Carriers, One Low Cost
Las Vegas	Three Carriers	Three Carriers
Orlando	Three Carriers	Three Carriers
Miami	Two Carriers, Both ORD Hub	Three Carriers
Palm Beach	Two Carriers, Both ORD Hub	Three Carriers
Phoenix	Three Carriers	Three Carriers
Palm Springs	One Carrier	Two Carriers, One Low Cost
Reno	One Carrier	Two Carriers, One Low Cost
Fort Myers	One Carrier	Two Carriers, One Low Cost
San Diego	Two Carriers, Both ORD Hub	Three Carriers
San Juan	Two Carriers, Both ORD Hub	Three Carriers
Tampa	Two Carriers, Both ORD Hub	Three Carriers
Tucson	One Carrier	Two Carriers, One Low Cost

Change in Average Passenger Yield, All ORD Markets:	1.0%
Change in Passenger Yields, Vacation Markets Only:	9.1%

¹³The model does not distinguish between types of competitors (low cost or otherwise) when three airlines are in a market; nor does it distinguish between cases if there are three or more competitors.

[illegible]

RUNWAY 12R-30L 11,019' X 200'

TWA- "B" GATES

TWA- "C" GATES

TWA- "D" GATES

SOUTHWEST- "E" GATES

13

ENVIRONMENTAL

7/25/2000

SCALE: 1" = 400'

GATE ASSIGNMENTS

**LAMBERT - ST. LOUIS
INTERNATIONAL AIRPORT**
CITY OF ST. LOUIS AIRPORT AUTHORITY /

SHEET

AIRLINE SCHEDULED ACTIVITY

(PASSENGER)

JULY 2000

AIRLINE/GATES	FIRST DEPARTURE	FIRST ARRIVAL	LAST DEPARTURE	LAST ARRIVAL	Airline Departures Per Day	Total Departures Per Day Per Airline's Gate(s)	Change From Previous Month
Air Canada A18, A19, A21 (Handled by United)	10:20 AM	9:50 AM	7:20 PM	6:55 PM	3	-----	0
America West A16	8:31 AM	2:21 PM	4:38 PM	10:41 PM	2	2	0
American A10, A12, A14 E29, E31, E33 (Handled by ATS)	6:43 AM	8:36 AM	6:32 PM	11:14 PM	15	17	0
Big Sky A2, A4, A6 (Handled by Delta)	12:15 PM	11:30 AM	5:15 PM	4:30 PM	2	2	0
Comair d/b/a Delta Connection	5:40 AM	8:13 AM	7:50 PM	11:22 PM	7	-----	0
Continental A9 A9 (Handled by Continental)	6:45 AM	9:49 AM	5:41 PM	8:53 PM	4	11	0
Continental Express	9:00 AM	8:30 AM	7:50 PM	7:15 PM	7	-----	0
Delta A2, A4, A6	5:50 AM	9:02 AM	7:35 PM	11:55 PM	8	15	0
Northwest A3, A5 A3, A5 (Handled by Northwest)	6:30 AM	7:24 AM	7:00 PM	11:27 PM	12	18	0
Northwest Airlink (Mesaba Aviation, d/b/a)	10:50 AM	10:14 AM	7:30 PM	6:50 PM	6	-----	+1
Skyway A10, A12, A14 (Astral Aviation, d/b/a) (Handled by American)	11:20 AM	9:40 AM	5:20 PM	5:00 PM	2	-----	0
Southwest E2-E24	6:45 AM	7:25 AM	11:10 PM	12:25 AM	85	85	-1
Trans World Airlines (domestic) B2, B4, B6, C1-C38, D2-D36	6:05 AM	5:21 AM	11:00 PM	10:30 PM	348	348	+2
Trans World Airlines (international) * C30, C32, C34-C38	8:32 AM	6:45 AM	7:20 PM	6:56 PM	7	7	0
Trans World Express (Chautauqua Airlines, d/b/a)	7:23 AM	6:53 AM	9:29 PM	10:00 PM	19	19	0
Trans World Express (Corporate Airlines, d/b/a) (Handled by Trans States)	8:27 AM	6:47 AM	8:32 PM	6:06 PM	18	-----	0
Trans World Express (Trans States Airlines, d/b/a)	7:23 AM	6:43 AM	9:54 PM	9:02 PM	89	107	0
United A18, A19, A21	6:00 AM	9:01 AM	8:25 PM	11:45 PM	9	12	0
USAirways A8, A15, A17 A8, A15, A17 (Handled by US Airways)	7:28 AM	9:29 AM	6:55 PM	9:35 PM	9	11	0
US Airways Express (Mesa Airlines, d/b/a)	9:45 AM	9:18 AM	-----	-----	1	-----	0
US Airways Express (PSA Airlines, d/b/a)	10:35 AM	10:08 AM	-----	-----	1	-----	0
TOTAL					654	654	+2

* 2 Daily YYZ and YVR, 1 Daily CDG and LGW (TWA also operates 4 Weekly to CUN and 2 Weekly to MBJ)

AIRLINE SCHEDULED ACTIVITY (AIR FREIGHT) JULY 2000

Exhibit C
Page 2 of 2

AIRLINE	FIRST DEPARTURE	FIRST ARRIVAL	LAST DEPARTURE	LAST ARRIVAL	Airline Departures Per Day	SLACS Ramp	Sabreliner Ramp	Change From Previous Month
Air Transport International	11:28 PM	10:48 PM	8:02 AM	7:22 AM	2	2	----	0
Airborne Express	10:41 PM	3:22 AM	5:26 PM	4:46 AM	2	----	2	0
DHL Airways	11:00 PM	10:30 PM	6:20 AM	5:46 AM	2	----	2	0
Emery Air Freight	11:29 PM	5:56 AM	-----	-----	1	1	----	-1
Federal Express	11:03 PM	4:00 AM	11:20 PM	5:00 AM	3	3	----	0
United Parcel Service	10:45 PM	4:22 AM	11:05 PM	4:45 AM	2	2	----	0
TOTAL					12	8	4	-1

Airport Properties Dept., June 26, 2000

Regularly Scheduled TWA Departures				Other TWA Departures	
Gate	30 JUN	Month-To-Date Thru 30 JUN	Average Departures Per Day	30 JUN	Month-To-Date Thru 30 JUN
88	888888888888	888888888888	888888888888888888	888888888888	8888888888888888
B2	10	248	8.27	0	2
B3	0	0	0.00	0	0
B4	6	239	7.97	1	11
B6	0	0	0.00	0	0
B7	0	0	0.00	0	0
B8	0	0	0.00	0	0
B10	0	0	0.00	0	0
B12	0	0	0.00	0	0
B14	0	0	0.00	0	0
B16	0	0	0.00	0	0
888888	888888888888	8888888888888888	888888888888888888	888888888888	8888888888888888
"B" Total	16	487	16.23	1	13

Regularly Scheduled TWA Departures				Other TWA Departures	
Gate	30 JUN	Month-To-Date Thru 30 JUN	Average Departures Per Day	30 JUN	Month-To-Date Thru 30 JUN
88	888888888888	8888888888888888	888888888888888888	888888888888	8888888888888888
C1	7	235	7.83	0	0
C2	10	278	9.27	0	0
C3	11	287	9.57	0	0
C5	8	180	6.00	0	0
C6	11	258	8.60	0	1
C7	7	259	8.63	0	0
C8	9	267	8.90	0	0
C10	10	259	8.63	0	1
C12	10	265	8.83	0	0
C15	9	226	7.53	0	0
C16	9	270	9.00	0	1
C17	8	257	8.57	0	0
C18	8	254	8.47	0	3
C21	0	0	0.00	0	0
C23	10	257	8.57	0	1
C24	9	231	7.70	0	0
C25	9	260	8.67	0	1
C27	8	240	8.00	0	0
C28	8	231	7.70	0	0
C29	9	262	8.73	0	2
C30	7	219	7.30	0	2
C31	9	251	8.37	0	0
C32	6	171	5.70	0	2
C33	10	248	8.27	0	0
C34	7	205	6.83	0	8
C35	9	261	8.70	0	1
C36	5	161	5.37	0	0
C38	8	207	6.90	0	2
888888	888888888888	8888888888888888	888888888888888888	888888888888	8888888888888888
"C" Total	231	6499	216.63	0	17

Regularly Scheduled TWA Departures				Other TWA Departures	
Gate	30 JUN	Month-To-Date Thru 30 JUN	Average Departures Per Day	30 JUN	Month-To-Date Thru 30 JUN
88	888888888888	8888888888888888	888888888888888888	888888888888	8888888888888888
D2	9	248	8.27	0	1
D4	9	273	9.10	0	1
D6	7	276	9.20	0	0
D8	0	0	0.00	0	0
D10	0	0	0.00	0	0
D12	9	265	8.83	0	0
D14	10	265	8.83	0	1
D16	7	257	8.57	0	1
D18	9	232	7.73	0	1
D20	6	224	7.47	0	1
D22	8	228	7.60	0	0
D24	6	217	7.23	0	3
D26	9	222	7.40	0	3
D30	6	167	5.57	0	0
D32	4	147	4.90	0	0
D34	3	85	2.83	0	0
D36	2	91	3.03	0	0
D38	0	0	0.00	0	0
D40	0	0	0.00	0	0
888888	888888888888	8888888888888888	888888888888888888	888888888888	8888888888888888
"D" Total	104	3197	106.57	0	12

Total Month-To-Date
(thru 30 JUN)

10183

42

AVERAGE DAILY GATE USAGE JULY 2000

AIRLINE/GATES	Number of Gates per Airline	Airline Departures Per Day	Total Departures Per Day Per Airline's Gate(s)	Average Daily Departures Per Gate
Air Canada (Handled by United)	----	3	----	----
American A10, A12, A14	3	15	17	5.7
City Gates* E29, E31, E33	3	6	6	2.0
Comair d/b/a Delta Connection (Handled by Delta)	----	7	----	----
Continental/America West** A9, A16	2	6	13	6.5
Continental Express (Handled by Continental)	----	7	----	----
Delta A2, A4, A6	3	8	15	5.0
Northwest A3, A5	2	12	18	9.0
Northwest Airlink (Mesaba Aviation, d/b/a) (Handled by Northwest)	----	6	----	----
Skyway (Astral Aviation, d/b/a) (Handled by American)	----	2	----	----
Southwest E2-E24	12	85	85	7.1
Trans World Airlines B2, B4, C1-C38, D2-D36	49	355	355	7.9
Trans World Express (Chautauqua Airlines, d/b/a) (TWA Gate) B6	1	19	19	19.0
Trans World Express (Corporate Airlines, d/b/a) (Handled by Trans States)	----	18	----	----
Trans World Express (Trans States Airlines, d/b/a) (TWA Gates) B7-B16	6	89	107	17.8
United A18, A19, A21	3	9	12	4.0
USAirways A8, A15, A17	3	9	11	3.7
US Airways Express (Mesa Airlines, d/b/a) (Handled by US Airways)	----	1	----	----
US Airways Express (PSA Airlines, d/b/a) (Handled by US Airways)	----	1	----	----
TOTAL 87 gates	87	658	658	7.6
TOTAL excluding commuter gates*** 80 gates	80	532	532	6.7

*City Gates include Big Sky Airlines and regular charter flights.

** Continental and America West each lease 1 gate, however with their synergy agreement they utilize the same facilities.

***This calculation excludes the three Trans World Express operators and the 7 gates (B6-B16) they operate from.

COMPARISON OF YIELDS IN LOW-FARE SHORT-HAUL MARKETS¹

Airport	City Pairs	Passengers	Stage Length	Yield
TUS	10	1,233,280	467	\$0.16
SMF	11	4,551,610	450	\$0.17
BWI	14	4,040,690	459	\$0.17
SAN	12	5,747,880	418	\$0.18
SJC	14	6,605,580	426	\$0.18
OAK	14	7,008,060	432	\$0.18
PHX	18	8,125,830	438	\$0.18
SFO	5	4,678,390	420	\$0.20
STL	19	3,124,500	426	\$0.20
SDF	19	1,348,240	465	\$0.20
CMH	7	641,220	393	\$0.22
MSY	26	2,778,330	464	\$0.22
CLE	16	1,973,760	410	\$0.23
OKC	22	961,590	412	\$0.24
TPA	14	2,200,360	414	\$0.24
ATL	27	7,773,380	468	\$0.24
TUL	20	1,006,040	394	\$0.25
IND	14	829,990	399	\$0.26
DTW	13	1,984,890	437	\$0.26
MEM	7	538,350	379	\$0.28
MSP	5	1,216,900	447	\$0.28

¹ Data from DOT Air Fare Data Table 2. Short-haul markets are defined as those of 750 nonstop miles or less. The comparison airports included in this chart are those with average stage lengths for these markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN NON-LOW-FARE SHORT-HAUL MARKETS²

Airport	City Pairs	Passengers	Stage Length	Yield
SFO	23	3,029,220	507	\$0.20
SEA	32	1,838,990	492	\$0.23
SJC	9	67,980	453	\$0.25
OAK	7	35,000	460	\$0.26
IAH	41	2,600,070	425	\$0.28
MCI	46	938,110	485	\$0.28
MSY	27	869,210	468	\$0.29
DFW	70	4,922,340	475	\$0.29
SMF	14	284,900	423	\$0.30
TPA	35	938,310	442	\$0.32
TUL	20	641,470	468	\$0.32
OKC	21	445,350	495	\$0.32
BWI	65	2,556,510	453	\$0.35
ORD	106	12,954,060	510	\$0.35
DTW	91	5,683,360	428	\$0.37
STL	72	2,761,100	468	\$0.38
MKE	60	2,043,590	498	\$0.38
BNA	78	1,816,320	506	\$0.38
MEM	53	1,510,240	517	\$0.39
PHL	84	5,626,420	469	\$0.40
SDF	48	949,770	499	\$0.40
OMA	13	403,410	442	\$0.41
IND	67	2,007,070	463	\$0.41
CMH	66	2,109,040	436	\$0.42
MSP	60	3,160,300	483	\$0.42
CLT	93	3,927,830	481	\$0.45
CVG	52	1,922,110	441	\$0.50

² Data from DOT Air Fare Data Table 2. Short-haul markets are defined as those of 750 nonstop miles or less. The comparison airports included in this chart are those with average stage lengths for these markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN TOTAL SHORT-HAUL MARKETS³

Airport	City Pairs	Passengers	Stage Length	Yield
SAN	24	5,960,060	414	\$0.18
SJC	23	6,673,560	426	\$0.18
OAK	21	7,043,060	432	\$0.18
SMF	25	4,836,510	448	\$0.18
TUS	21	1,420,120	476	\$0.18
PHX	30	8,585,900	436	\$0.19
PDX	36	3,468,910	457	\$0.19
SFO	28	7,707,610	454	\$0.20
BWI	79	6,597,200	456	\$0.24
MSY	53	3,647,540	465	\$0.24
MCI	72	4,699,480	486	\$0.24
IAD	54	3,549,130	456	\$0.26
TPA	49	3,138,670	423	\$0.27
OKC	43	1,406,940	438	\$0.27
IAH	46	3,096,810	406	\$0.28
TUL	40	1,647,510	423	\$0.28
OMA	28	1,159,600	467	\$0.28
DFW	75	6,174,930	494	\$0.28
STL	91	5,885,600	445	\$0.29
SDF	67	2,298,010	479	\$0.29
DTW	104	7,668,250	431	\$0.34
CLE	78	4,550,330	409	\$0.37
CMH	73	2,750,260	426	\$0.37
IND	81	2,837,060	444	\$0.37
MEM	60	2,048,590	480	\$0.37
MSP	65	4,377,200	473	\$0.38
PHL	86	5,759,070	473	\$0.40
LGA	66	9,100,780	401	\$0.41
CLT	93	3,927,830	481	\$0.45
CVG	56	2,216,640	448	\$0.48

³ Data from DOT Air Fare Data Table 2. Short-haul markets are defined as those of 750 nonstop miles or less. The comparison airports included in this chart are those with average stage lengths for these markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN LOW-FARE LONG-HAUL MARKETS⁴

Airport	City Pairs	Passengers	Stage Length	Yield
MKE	6	674,210	1,297	\$0.10
IND	21	2,056,230	1,193	\$0.11
TPA	39	3,526,490	1,202	\$0.11
OMA	19	816,630	1,151	\$0.12
ABQ	29	1,312,830	1,159	\$0.12
MCI	28	2,530,370	1,177	\$0.12
SEA	28	5,856,770	1,225	\$0.12
SAT	30	1,969,040	1,194	\$0.13
STL	26	2,393,260	1,213	\$0.13
OKC	23	903,660	1,124	\$0.14
PHL	3	55,060	1,140	\$0.14
TUL	22	728,750	1,144	\$0.14
MSP	13	1,533,660	1,283	\$0.14

⁴ Data from DOT Air Fare Data Table 2. Long-haul markets are defined as those of more than 750 nonstop miles. The comparison airports included in this chart are those with average stage lengths for these markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN NON-LOW-FARE LONG HAUL MARKETS⁵

Airport	City Pairs	Passengers	Stage Length	Yield
TPA	84	6,063,800	1,161	\$0.13
MKE	54	1,881,540	1,329	\$0.14
MSY	65	2,759,020	1,215	\$0.15
OMA	53	1,205,180	1,187	\$0.15
LGA	99	8,129,780	1,248	\$0.16
MCI	63	1,966,250	1,198	\$0.17
OKC	44	683,930	1,211	\$0.17
BNA	25	643,950	1,247	\$0.17
SAT	69	1,754,630	1,254	\$0.17
TUL	37	490,920	1,260	\$0.17
CVG	46	1,984,490	1,330	\$0.17
IAH	130	7,418,410	1,233	\$0.18
MEM	43	1,296,430	1,199	\$0.19
MSP	106	6,616,340	1,232	\$0.19
STL	46	2,149,430	1,232	\$0.19
DFW	136	12,371,240	1,199	\$0.21

⁵ Data from DOT Air Fare Data Table 2. Long-haul markets are defined as those of more than 750 nonstop miles. The comparison airports included in this chart are those with average stage lengths for these markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN TOTAL LONG-HAUL MARKETS⁶

Airport	City Pairs	Passengers	Stage Length	Yield
TPA	123	9,590,290	1,176	\$0.12
IND	60	3,515,940	1,281	\$0.12
MSY	90	4,190,050	1,263	\$0.13
MKE	60	2,555,750	1,320	\$0.13
OMA	72	2,021,810	1,172	\$0.14
MCI	91	4,496,620	1,186	\$0.14
OKC	67	1,587,590	1,162	\$0.15
TUL	59	1,219,670	1,191	\$0.15
SAT	99	3,723,670	1,222	\$0.15
STL	72	4,542,690	1,222	\$0.16
LGA	112	10,717,830	1,265	\$0.16
MSP	119	8,150,000	1,241	\$0.18
MEM	46	1,364,780	1,180	\$0.19
IAH	131	7,536,540	1,230	\$0.19
DFW	143	13,353,640	1,182	\$0.21

⁶ Data from DOT Air Fare Data Table 2. Long-haul markets are defined as those of more than 750 nonstop miles. The comparison airports included in this chart are those with average stage lengths for these markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN TOTAL LOW-FARE-MARKETS⁷

Airport	City Pairs	Passengers	Stage Length	Yield
CMH	15	1,650,340	785	\$0.13
PDX	29	5,219,490	800	\$0.13
PHX	56	13,974,720	862	\$0.13
SAN	43	8,314,840	759	\$0.14
SDF	35	1,879,330	739	\$0.15
CLE	36	2,884,160	763	\$0.15
STL	45	5,517,760	768	\$0.15
SAT	45	3,603,670	811	\$0.15
OMA	34	1,572,820	828	\$0.15
ABQ	50	3,616,280	734	\$0.16
MCI	54	6,291,740	764	\$0.16
MSY	51	4,209,360	767	\$0.16
TUL	42	1,734,790	709	\$0.17
OKC	45	1,865,250	757	\$0.17
PHL	5	187,710	777	\$0.17
DFW	12	2,234,990	744	\$0.21

⁷ Data from DOT Air Fare Data Table 2. The comparison airports included in this chart are those with average stage lengths for all markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN TOTAL NON-LOW-FARE MARKETS⁸

Airport	City Pairs	Passengers	Stage Length	Yield
DTW	153	8,951,030	853	\$0.21
MKE	114	3,925,130	896	\$0.21
TUL	57	1,132,390	811	\$0.22
IND	106	3,466,780	859	\$0.22
LGA	162	16,884,910	804	\$0.23
SDF	69	1,459,270	793	\$0.24
STL	118	4,910,530	802	\$0.25
PIT	137	5,896,000	832	\$0.25
MEM	96	2,806,670	832	\$0.25
CVG	98	3,906,600	893	\$0.25
CLT	138	5,442,350	803	\$0.28

⁸ Data from DOT Air Fare Data Table 2. The comparison airports included in this chart are those with average stage lengths for all markets of plus or minus 50 miles of STL's.

COMPARISON OF YIELDS IN TOTAL MARKETS⁹

Airport	City Pairs	Passengers	Stage Length	Yield
OAK	88	8,906,600	721	\$0.15
MCI	163	9,196,100	828	\$0.17
BNA	151	6,472,950	815	\$0.18
OKC	110	2,994,530	822	\$0.18
TUL	99	2,867,180	750	\$0.19
SDF	104	3,338,600	763	\$0.19
CLE	145	7,949,750	860	\$0.19
STL	163	10,428,290	784	\$0.20
ATL	213	25,605,850	796	\$0.21
LGA	178	19,818,610	868	\$0.22
PIT	141	6,229,750	820	\$0.25
MEM	106	3,413,370	760	\$0.26
CVG	102	4,201,130	865	\$0.26
CLT	138	5,442,350	803	\$0.28

⁹ Data from DOT Air Fare Data Table 2. The comparison airports included in this chart are those with average stage lengths for all markets of plus or minus 50 miles of STL's.