# MIDWAY AIRPORT CTA CUSTOMER TRAVEL SURVEY

## **Executive Summary**

- 28% of all CTA riders to/from the Midway Airport rapid transit station, on the Orange Line, were air travelers, during an average week in April, 2001.
- This represents a relative increase of 56%, compared to the 18% who were air travelers in 1994, and an absolute increase of 131%, taking into account the overall ridership growth of 48% at the station since 1994.
- Most of the remaining Midway station customers were work commuters (41%). Other trip purposes included Recreation (8%), School (7%) and Social (4%). An additional 5% were going to the Midway Airport to work or were accompanying air travelers.
- The average weekday total riders boarding at the Midway station was about 7,500 in April 2001, with 3,000 boarding on Saturday and 2,350 boarding on Sunday.
- The average daily volume of weekday air travelers at Midway station was consequently about 4,200; 2,100 boarding at the station and an estimated 2,100 also alighting.
- The maximum hourly rates of air travelers <u>from</u> Midway to the city were 250 customers per hour (Monday 7-9am), while the maximums <u>to</u> Midway from the city were 430 customers per hour (Friday 3-6pm).
- The proportion of air travelers was highest on Sunday evenings among riders going <u>from</u> Midway Airport (76%) and also among riders going <u>to</u> Midway Airport (60%).
- The proportion of air travelers was lowest during the weekday evening rush, 3-6pm, among riders going <u>from</u> Midway Airport (19%), and lowest during the weekday morning rush, 6-9am, among riders going <u>to</u> Midway Airport (13%).
- Business was the primary travel purpose for air travelers, at 51% of all purposes, followed by travel for pleasure/vacation, at 42%.
- When asked to name their origin or destination, 38% of air travelers said Work, 31% said Home and 24% said a Hotel or other out-of-town accommodation.

#### INTRODUCTION & BACKGROUND

CTA rapid transit service to Midway Airport was introduced in 1993. On an average weekday about 15,000 riders now start or end their trip at the Midway rail station. Air travelers and downtown work commuters account for a majority of these riders. A 1994 study by the CTA estimated that air travelers represented 17.9% of all riders using the Midway station.

According to Chicago's Department of Aviation, only 7% of all Midway Airport air travelers use the CTA to make their trip to/from the airport. For those air travelers whose ground origins or destinations lie within the CTA service area, however, this figure increases to about 15%. These figures indicate there is a potential for growth in this travel market for the CTA. With that in mind, the CTA conducted a Midway Station Customer Survey in April 2001. The study looks to update what we know about the proportion of riders who are air travelers, and to learn more about their travel behavior. Non-air travelers were also studied.

A comparable study was done at CTA's O'Hare station in April 2000, which also compared findings with a previous O'Hare survey, conducted in 1988. See MR00-08 for those results. A paper was also written for the 2001 Metropolitan Conference on Public Transportation Research (MCPTR), which compared the general findings of the most recent Midway and O'Hare studies (MR01-13A).

### **OBJECTIVES & METHODOLOGY**

The main objective of the 2001 Midway station survey was to estimate the current proportion of CTA riders, by trip purpose, and to learn about their associated travel patterns. To do this, all riders were asked the origin or destination of their trip, the CTA station (other than Midway) they were using to make their trip, if they were transferring, and their home zip code. Air travelers were also asked the purpose of their flight and how they found out about CTA's Midway Airport service.

Interviews were conducted onboard trains entering and exiting Midway station. 1,900 weekday surveys were conducted, representing about 13% of Midway station's entering and exiting weekday riders. An additional 430 weekend surveys were conducted. Shifts of 3-6 hours in length covered twelve different time periods.

## TRIP PURPOSE OF AIRPORT STATION CUSTOMERS

The results of the 2001 Midway survey indicate that for a full 7-day week, 27.7% of all CTA riders using the Midway station were air travelers (see Table 1). The proportion of entering air travelers was basically the same as that exiting the station. On an average weekday there are about 15,000 entering and exiting riders equating to 4,155 air travelers on a single weekday.

These new figures update information from the last Midway station air traveler survey, performed in 1994, which estimated the share of air travelers over a full week to be 17.9%. In 1994 a total of 1,609,773 riders entered Midway station, resulting in 284,923 air travelers. In 2000 a total of 2,377,188 riders entered Midway station, resulting in 658,481 air travelers, yielding an increase of 47.7% in overall ridership at Midway station and a 131.1% increase in air

travelers. Air travelers represent 7.4% of the total number of customers entering the Orange Line in 2001, on an average weekday, up from 5.6% in 1994.

In addition to air travelers, another 5.2% of all Midway station users over a 7-day week were also going to/from the airport. Their trip purposes included accompanying friends or family members to/from their flight, working at the airport and working on a flight crew.

The remaining 67.0% of CTA riders using Midway station over a 7-day week were more typical of overall CTA rail travelers. As Table 2 shows, a majority of these trips were to/from work (61.7%), followed by shopping/recreation (11.3%), school (9.8%), and social purposes (7.2%).

#### **VOLUME AND FLIGHT PURPOSE OF AIR TRAVELERS**

Air travelers using the CTA to travel to and from Midway Airport were asked for their flight purpose. Table 3 shows the flight purpose of air travelers arriving/leaving Midway Airport via the Orange Line. Weekday CTA Midway air travelers were traveling on business (55.0%) more than pleasure (39.1%) or personal business (4.2%). On the weekend, however, the leading purpose for flights was pleasure (62.6%) followed by business (27.7%) and personal business (6.5%). The 7-day combined data show that 51.1% of flights were for business, 42.4% for pleasure and 4.5% for personal business.

Flight purpose was broken down by direction of travel. Air travelers using the CTA from the Midway station were slightly more likely to be traveling for business (53.5%) than those going to Midway (48.6%). Conversely, air travelers using the CTA from Midway were slightly less likely to be traveling for pleasure (41.0%) than those going to Midway (43.9%).

The "percentage of CTA customers" data, from Table 2, were matched against actual weekday and weekend ridership data, by time period. The highest rates of hourly air traveler flow match the time periods when overall ridership is highest. For CTA trips going from Midway station to the Loop, the highest hourly rate of air travelers is on weekdays from 6-9am, when about 180 air travelers use the CTA per hour. On Mondays from 7-9am there are about 250 air travelers per hour.

The maximum number of air travelers going to Midway was roughly 430 per hour on Friday afternoon, 3-6pm. 240 air travel customers per hour are typically carried during the 3-6pm afternoon peak on most other weekdays.

### VARIATION IN % OF AIR TRAVELERS BY DAY AND TIME

Figure 1 shows the unweighted proportions of air travelers in each direction during selected days and times. The figure can be used to identify the days and times when air traveler demand is highest, as a share of all Midway CTA customers at that time. There is a pattern of high proportions of air traveler demand going to Midway station during the PM peak and from the station during the AM peak and late morning times. At Midway, air traveler proportions are also high during weekday evenings.

For Midway-bound riders, the percentage of air travelers is highest on Sunday between 6-9pm (59.5%). During weekdays the percentage of air travelers exceeds 30% during all times except 3-6pm and 9pm-midnight (the 6-9am rate is 28.7%). On Saturdays the rate exceeds 30% from 9am-3pm.

For Loop-bound riders, the percentage of air travelers is highest on Sunday between 6-9pm (75.5%). During weekdays the percentage of air travelers is below 20% from 6-9am but then stays above 30% for the remainder of the day, until midnight. The rate rises above 40% from 12-3pm (41.0%) and 6-9pm (48.5%). On Saturday the rate exceeds 30% only from 12-3pm.

### HOW AIR TRAVELERS FOUND OUT ABOUT CTA'S MIDWAY AIRPORT SERVICE

Air travelers were asked how they found out about CTA's rail service to Midway. Table 4 shows the responses. "Common knowledge", answered mostly by Chicago residents, was the leading response (49.1%). "Word-of-mouth", a common answer for out-of-town business travelers, was second (19.9%). "Past Experiences" was third (10.3%). "Airport Signs" (6.4%), "the Internet" (4.6%), "On the Airplane" (4.5%) and the "Airport's Information Desk" (2.7%) ranked fourth through seventh. These last four, summing to 18.2%, represent new riders.

### ORIGIN AND DESTINATION OF AIRPORT STATION CUSTOMERS

Riders using the CTA to travel <u>to</u> Midway station were asked for the place their trip originated, while riders traveling <u>from</u> Midway were asked for their destination. Work was the leading answer for Midway customers. Air traveler's responses indicate they were more likely than other riders to be going to or coming from places other than home.

Table 5 shows the origins and destinations for all Midway station customers. Respones indicate Work was the primary place of origin (49.1%) and destination (51.5%). Home was second as an origin (26.6%) and destination (20.9%). This reflects the station's primary role in serving CBD work commuters.

Air travelers' responses were again separated. Work was reported most often as an origin (38.7%) and destination (36.7%). Home was second as an origin and destination (both 31.0%). An out of town accommodation (friend's or hotel) was third among air travelers as an origin (21.0%) and destination (27.5%). These results suggest that Midway Airport serves as a business-oriented "commuter" airport.

### GEOGRAPHIC ANALYSIS OF HOME ZIP CODES

Surprisingly, a majority of air travelers using the CTA were out-of-towners. 58.1% of all air travelers lived outside of the Chicago area. Among business travelers 71.1% were out-of-towners, while 29.9% were Chicago residents. Among pleasure travelers 51.8% were out-of-towners compared to 48.2% Chicago residents. This split among pleasure travelers could be different in the winter when more Chicago residents go on warm weather vacations. Figure 2 is a home zip code map of the air travelers who live in the Chicago area. It shows that most live on the Near North Side of Chicago.

Home zip codes were also mapped for non-air travelers. Figure 3 shows that non-air travelers, mostly work commuters, using the Midway station reside primarily in the residential areas lying to the South and Southwest of the station, including Oak Lawn, Chicago Ridge, Bedford Park, Burbank, and Palos Heights. This reflects typical "commuter sheds" extending away from end-of-the-line rail stations.

### CONNECTING STATIONS USED

All Midway station users were asked what other station they used to make their trip. Table 6 shows that among air travelers the top four answers were State/Lake (24.5%), Clark/Lake (22.6%), Washington/Wells (11.3%) and Library/VanBuren (10.4%). Table 7 shows that among non-air travelers the same top four stations were chosen but in a different order: Clark/Lake (14.1%), Washington/Wells (12.5%), State/Lake (11.3%) and Library/Van Buren (9.7%).

### **TRANSFERS**

Riders were asked if their trip involved a transfer to another transit service. For non-air travelers this included transfers to or from Midway station as well as transfers to or from the other Orange Line station they were using to make their trip. Air travelers, of course, were arriving or departing Midway by plane so the only transfer they could make was at the other Orange Line station they were using to make their trip.

The responses of air travelers were separated from non-air travelers. They indicated that 39.0% of air travelers transfer, almost all downtown (Table 8). Most transfers involved CTA rail (84.0%), 9.5% CTA bus, 5.3% Metra and 1.2% AMTRAK. The Red Line (33.7%), Brown Line (22.3%) and Blue Line (21.8%) were used most often, usually by Chicago residents to access their homes (see zip code map).

30.3% of non-air travelers transferred to/from the Orange Line station they were using other than Midway (Table 9). The Red Line (16.0%), Brown Line (12.1%), Blue Line (11.7%) and Green Line (7.6%) were the top four responses. The #8 Halsted, #49 Western, # 9 Ashland and #52 Kedzie were the leading bus routes.

43.5% of non-air travelers transferred to or from Midway station (Table 10). All responses involved bus transfers . CTA bus routes #63  $63^{rd}$  Street, #54 Cicero, # 62 Archer and #44 Garfield were the top four and were each above 10%. The top PACE routes were the #383 Cicero, #379  $79^{th}$  Street and the #386 Harlem.

#### **GENDER**

Table 11 shows the gender of Midway station customers. Among air travelers the male/female split was 63.1% to 36.9%. Among air travelers the male/female split was reversed at 40.4% to 59.7%. For all riders the combined male/female split was 46.7% to 53.3%.

#### **CONCLUSIONS**

- 28% of all CTA riders to/from the Midway Airport rapid transit station, on the Orange Line, were air travelers, during an average week in April, 2001.
- This represents a relative increase of 56%, compared to the 18% who were air travelers in 1994, and an absolute increase of 131%, taking into account the overall ridership growth of 48% at the station since 1994.
- Most of the remaining Midway station customers were work commuters (41%). Other trip purposes included Recreation (8%), School (7%) and Social (4%). An additional 5% were going to the Midway Airport to work or were accompanying air travelers.
- The average weekday total riders boarding at the Midway station was about 7,500 in April 2001, with 3,000 boarding on Saturday and 2,350 boarding on Sunday.
- The average daily volume of weekday air travelers at Midway station was consequently about 4,200; 2,100 boarding at the station and an estimated 2,100 also alighting.
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- Business was the primary travel purpose for air travelers, at 51% of all purposes, followed by travel for pleasure/vacation, at 42%.
- When asked to name their origin or destination, 38% of air travelers said Work, 31% said Home and 24% said a Hotel or other out-of-town accommodation.
- When asked how they found out about CTA's Midway Airport Service most air travelers said it was Common Knowledge (49.1%), followed by Word of Mouth (19.9%) and Past Experiences (10.3%)
- 58.1% of surveyed air travelers using the CTA were out-of-towners, while 41.9% were Chicago residents.

**Table 1 - CTA Midway Station Customer Trip Purpose** 

Weighted Totals	Air Travelers	Other Airport Users*	Riders NOT going to/from Airport
Avg. Weekday	26.5%	4.3%	69.2%
Avg. Weekend Day	35.8%	12.7%	51.5%
7-Day (Combined Weekday and Weekend)	27.7%	5.2%	67.0%

<sup>\*</sup> Includes airport workers, flight crew members & individuals accompanying others to or from airport

Table 2 - Trip Purpose for Midway Riders NOT going to/from the Airport

Weighted Totals	Work	Social	School	Shopping/ Recreation	Personal Business	Other
Avg. Weekday	66.6%	5.5%	9.8%	8.8%	6.1%	3.1%
Avg. Weekend Day	20.6%	21.4%	8.7%	32.7%	8.8%	7.9%
7-Day (Combined Weekday and Weekend)	61.7%	7.2%	9.8%	11.3%	6.5%	3.6%

**Table 3 - Purpose of Flight for CTA Midway Air Travelers** 

Weighted Totals	Business	Pleasure	Personal Business	Other
Avg. Weekday	55.0%	39.1%	4.2%	1.3%
Avg. Weekend Day	27.7%	62.6%	6.5%	3.2%
7-Day (Combined Weekday and Weekend)	51.1%	42.4%	4.5%	1.7%

Table 4 - How did you find out about CTA's Midway Airport Service?

Common Knowledge	49.1%	On Airplane	4.5%
Word of Mouth	19.9%	Airport Desk	2.7%
Past Experiences	10.3%	Book/Map/Hotel	1.9%
Airport Signs	6.4%	CTA/RTA	0.6%
Internet	4.6%		

**Table 5 - Origins and Destination for All Midway Station Customers** 

	Destination for Riders Traveling FROM Midway Station	Origin for Riders Traveling TO Midway Station
Home	20.9%	26.6%
Work	51.5%	49.1%
Hotel/Non-Residence	10.5%	7.4%
Recreation	4.8%	6.5%
School	7.0%	5.4%
Personal Business	3.9%	2.3%
Other	1.4%	2.7%

Figure 1 - Percent Air Travelers by Day and Time: Midway Station

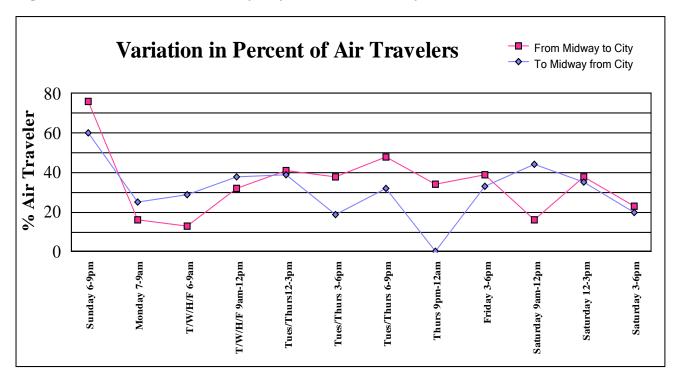


Table 6 Station (other than Midway) used by Air Travelers

State/Lake	24.5%
Clark/Lake	22.6%
Washington/Wells	11.3%
Library/Van Buren	10.4%
Roosevelt	6.1%
Quincy/Wells	5.3%
Adams/Wabash	5.3%
Madison/Wabash	5.0%
Randolph/Wabash	4.6%
Halsted	1.6%

Table 7 Station (other than Midway) used by Non-Air Travelers

Clark/Lake	14.1%	
Washington/Wells	12.5%	
State/Lake	11.3%	
Library/Van Buren	9.7%	
Quincy/Wells	7.8%	
Roosevelt	7.7%	
Kedzie	4.9%	
Randolph/Wabash	4.5%	
Adams/Wabash	4.4%	
Madison/Wabash	4.3%	

Table 8
Air Travelers transferring to Orange Line going to/coming from Midway Station

Transfer to/from	% of Transfers	
Red Line	33.7%	
Brown Line	22.3%	
Blue Line	21.8%	
CTA Buses	9.5%	
Metra	5.3%	
Purple Line	3.3%	
Green Line	2.9%	
AMTRAK	1.2%	

<u>Table 9 - Non-Air Travelers: Transfers to/from an Orange Line station besides Midway</u>

Transfer to/from	% of Transfers	
Red Line	16.0%	
Brown Line	12.1%	
Blue Line	11.7%	
Green Line	7.6%	
#8 - Halsted	5.6%	
# 49 - Western	4.3%	
#9 - Ashland	3.8%	
# 52 - Kedzie	3.6%	
# 151 - Sheridan	2.6%	
# 35 - 35th Street	2.5%	

Table 10 - Non Air Travelers: Transfers to/from Midway station.

Transfer to/from	% of Transfers
# 63 - 63rd Street	30.1%
# 54 - Cicero	18.9%
# 62 - Archer	11.3%
# 55 - Garfield	11.2%
# 59 - 59th/61st	4.6%
PACE 383 - Cicero	3.6%
PACE 379 - 79th Street	2.9%
PACE 386 - Harlem	2.2%
# 53 - Pulaski	1.9%
PACE 384 - Narraganset/Ridgeland	1.5%

Table 11 - Gender

	Male	Female
Air Travelers	63.1%	36.9%
Non-Air Travelers	40.3%	59.7%
All Customers	46.7%	53.3%

Figure 2
Home Zip Code Distribution of Air Travelers Living in the CTA Service Area and using CTA's Midway Rail Service

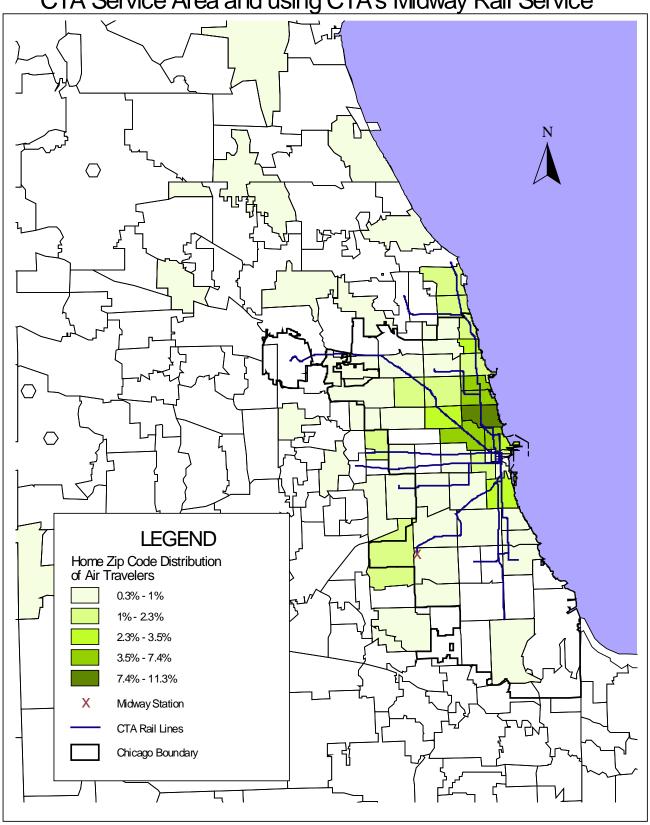


Figure 3
Home Zip Code Distribution of Non-Air Travelers using CTA's Midway Rail Service

