
Brent D. Bowen
bowenb6@erau.edu

Dean E. Headley
Wichita State University, dean.headley@wichita.edu

Follow this and additional works at: https://docs.lib.purdue.edu/atpubs

Part of the Business Administration, Management, and Operations Commons

https://docs.lib.purdue.edu/atpubs/7

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

Brent D. Bowen*a, Dean E. Headley*b

*aCollege of Technology, Purdue University, West Lafayette, Indiana, 47906, USA
*bW. Frank Barton School of Business, Wichita State University, Wichita, Kansas, 67201, USA

Abstract

The Airline Quality Rating (AQR) was developed and first announced in early 1991 as an objective method for assessing airline quality on combined multiple performance criteria. This current report, the Airline Quality Rating 2012, reflects monthly Airline Quality Rating scores for calendar year 2011. AQR scores for 2011 are based on 15 elements in four major areas that focus on airline performance aspects important to air travel consumers.

The Airline Quality Rating 2012 is a summary of month-by-month quality ratings for U.S. airlines that are required to report performance by virtue of having at least 1% of domestic scheduled-service passenger revenue during 2011. Using the Airline Quality Rating system of weighted averages and monthly performance data in the areas of on-time arrivals, involuntary denied boardings, mishandled baggage, and a combination of 12 customer complaint categories, airlines’ comparative performance for the calendar year of 2011 is reported. This research monograph contains a brief summary of the AQR methodology, detailed data and charts that track comparative quality for domestic airline operations for the 12-month period of 2011, and industry results. Also, comparative Airline Quality Rating data for 2010 are included, where available, to provide historical perspective regarding performance quality in the industry.

Keywords: Airline Quality Rating, customer complaints, performance measures, DOT, airline improvement

1. Introduction

Being recognized as a provider of quality services produces opportunities for a business to flourish. Airlines are no exception. As a highly competitive business, being known as a provider of good customer outcomes (i.e. quality) offers a better chance to succeed. Historical Federal Aviation Administration (FAA) business forecast data affirm that globalization, economic circumstances, and a trend toward aviation alliances have forced U.S. airlines to boost service quality in order to increase competitiveness and survive (Bowen, B. D., Headley, D. E., & Lu, C-t, 2002). Airlines as a group are historically not the most proactive at keeping pace with the air travel consumer needs and expectations.

In 1999 in the wake of customer dissatisfaction and popular pressure, efforts by the Department of Transportation (DOT) and the FAA regarding the protection of airline passengers, the idea of mandating better customer service came to a head. As a result, 14 air carriers voluntarily pledged to better treat their customers. This commitment to improve passenger service included: honestly notifying customers of a flight delay, better addressing passengers’ needs due to a delay, allowing passengers a refund on airfare for a changed flight schedule, and, in general, being more responsive to passengers’ complaints. To realize this commitment, large airlines launched the Customer First Plan. Although slightly different from airline to airline, the aspects of the Customer First Plan do address the basics of better customer service. As of June 27, 2008, the DOT website provides links to nine major airlines’ Customer Service Plans. More recently, the Air Transport Association’s (ATA’s) Customers First 12-Point Customer Service Commitment plan commits member airlines to an expanded list of customer service practices. The only consistently available source for tracking performance on customer outcomes is the Air Travel Consumer Report (DOT, 2011). This monthly report offers great detail, but is not widely read by the flying public.
Since 1991, the Airline Quality Rating (AQR) reports have been compiled and made widely available through the popular press and via the internet. The AQR offers measurement of the airline industry performance and is seen as insightful and influential in the aviation world (Goodman, 1992; Mann, 2000). The initial objective of the AQR was to develop a method for accurately measuring airline performance quality. Preliminary research indicated that many air carriers were seeking to better control their service quality via quantitative methods (Bowen, Headley, & Luedtke, 1992). Results of the annual AQR have given the airline industry a better, coherent approach to meeting this goal of better customer service. The AQR reports are widely utilized by the airlines in order to promote service quality and attract potential passengers (Spencer, 1999).

2. AQR Methodology

The Airline Quality Rating is a weighted average of multiple elements (see Table 1) important to consumers when judging the quality of airline services. Elements considered for inclusion in the rating scale were screened to meet two basic criteria; 1) an element must be obtainable from published data sources for each airline; and 2) an element must have relevance to consumer concerns regarding airline quality. Data for the elements used in calculating the ratings represent performance aspects (ontime arrival, mishandled baggage, involuntary denied boardings, and 12 customer complaint areas) of airlines that are important to consumers (Bowen, Bowen, & Headley, 2011). Factors included in the rating scale were taken from an initial list of over 80 potential factors (Bowen, Headley, Kane, & Lutte, 1999). All of the elements are reported in the Air Travel Consumer Report maintained by the U.S. Department of Transportation.

Weights were originally established by surveying 65 airline industry experts regarding their opinion as to what consumers would rate as important (on a Likert scale of 0 [lowest] to 10 [highest]) in judging airline quality. These experts were objectively selected as key informants and included airport executives, airline managers, members of aviation interest groups and organizations, academia, customers, aviation authority figures and aircraft manufacturers (Bowen, Headley, & Lu, 2002). Each weight and element was assigned a plus or minus sign to reflect the nature of impact for that criterion on a consumer's perception of quality. For instance, the criteria of ontime arrival performance are included as a positive element because it is reported in terms of ontime successes, suggesting that a higher number is favorable to consumers. The weight for this criterion is high due to the importance most consumers place on this aspect of airline service. Conversely, the criteria that includes mishandled baggage is included as a negative element, and is reported in terms of mishandled bags per 1000 passengers served, suggesting that a higher number is unfavorable to consumers. Because having baggage arrive with passengers is important to consumers the weight for this criterion is also high. Weights and positive/negative signs are independent of each other.

Weights reflect importance of the criteria in consumer decision-making, while signs reflect the direction of impact that the criteria should have on the consumer's rating of airline quality. When all criteria, weights and impacts are combined for an airline over the year, a single interval scaled value is obtained. This value is comparable across airlines and across time periods. In the spring of 2002, a nationwide survey of frequent flyers was conducted that allowed a revisiting of the weighting for the AQR elements. Analysis of the sample of 766 opinions showed no appreciable difference in the relative weights for the AQR elements. To maintain comparability across the years, the weights have been held constant. The reliability of the rating scale was tested through determination of a Cronbach’s Alpha calculation. Cronbach’s Alpha measures how closely related a set of items are as a group and serves as a measure of internal consistency (UCLA, 2011). The Airline Quality Rating reliability coefficient measured 0.87 (where 1.0 is perfect). This suggests that the AQR is very reliable and that factor determination results would be similar for other comparable samples (Bowen, Headley, & Luedtke, 1992).

The Airline Quality Rating criteria and the weighted average methodology allow a focused comparison of domestic airline performance. Unlike other consumer opinion approaches that have relied on consumer surveys and subjective opinion, the AQR continues to use a mathematical formula that considers multiple weighted objective criteria to arrive at a single, fully comparable rating for airline industry performance. The Airline Quality Rating provides both consumers and industry watchers a means for monitoring comparative quality for each airline on a timely basis, using objective, performance based data. Over the years, the Airline Quality Rating has often been cited as an industry standard for comparing airline
performance. Currently the AQR stands as the only regularly published rating available for airline performance. With the continued global trend in airline operations alliances, the argument becomes even stronger for the Airline Quality Rating to be used as a standard method for comparing the quality of airline performance for international operations as well.

Table 1: Airline Quality Rating Criteria, Weights and Impact

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>WEIGHT</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT On-Time</td>
<td>8.63</td>
<td>+</td>
</tr>
<tr>
<td>DB Denied Boardings</td>
<td>8.03</td>
<td>—</td>
</tr>
<tr>
<td>MB Mishandled Baggage</td>
<td>7.92</td>
<td>—</td>
</tr>
<tr>
<td>CC Customer Complaints</td>
<td>7.17</td>
<td>—</td>
</tr>
</tbody>
</table>

Flight Problems  
Oversales  
Reservations, Ticketing, and Boarding  
Fares  
Refunds  
Baggage  
Customer Service  
Disability  
Advertising  
Discrimination  
Animals  
Other

Note. Data for all criteria is drawn from the U.S. Department of Transportation's monthly Air Travel Consumer Report. (DOT, 2011)

The formula for calculating the AQR score is:

\[
AQR = \frac{(+8.63 \times OT) + (-8.03 \times DB) + (-7.92 \times MB) + (-7.17 \times CC)}{8.63 + 8.03 + 7.92 + 7.17}
\]

3. Airline Quality Rating Criteria Overview

The individual criteria used to calculate the AQR scores are summed up in four basic categories that reflect customer-oriented areas of airline performance. Details of the categories included in the customer complaints criteria are also outlined below.

3.1 OT: On-Time Performance (+8.63)

Regularly published data regarding on-time arrival performance is obtained from the U.S. Department of Transportation's Air Travel Consumer Report. According to the DOT, a flight is counted on-time if it is operated within 15 minutes of the scheduled time shown in the carriers' Computerized Reservations Systems. Delays caused by mechanical problems are counted as of January 1, 1995. Canceled and diverted operations are counted as late. The AQR calculations use the percentage of flights arriving on time for each airline for each month.

3.2 DB: Involuntary Denied Boardings (-8.03)

This factor includes involuntary denied boardings. Data regarding denied boardings is obtained from the U.S. Department of Transportation's Air Travel Consumer Report. The data include the number of passengers who hold confirmed reservations and are involuntarily denied boardings on a flight that is oversold. These figures include only passengers whose oversold flight departs without them onboard. The AQR uses the ratio of involuntary denied boardings per 10,000 passengers boarded by month.
3.3 MB: Mishandled Baggage Reports (-7.92)

Regularly published data regarding consumer reports to the carriers of mishandled baggage is obtained from the U.S. Department of Transportation's Air Travel Consumer Report. According to the DOT, a mishandled bag includes claims for lost, damaged, delayed, or pilfered baggage. Data is reported by carriers as to the rate of mishandled baggage reports per 1,000 passengers and for the industry. The AQR ratio is based on the total number of reports each major carrier received from passengers concerning lost, damaged, delayed, or pilfered baggage per 1,000 passengers served.

3.4 CC: Consumer Complaints (-7.17)

The criteria of consumer complaints is made up of 12 specific complaint categories (outlined below) monitored by the U.S. Department of Transportation and reported monthly in the Air Travel Consumer Report. Consumers can file complaints with the DOT in writing, by telephone, via e-mail, or in person. The AQR uses complaints about the various categories as part of the larger customer complaint criteria and calculates the consumer complaint ratio on the number of complaints received per 100,000 passengers flown.

3.4.1 Flight Problems

Data are available by the total number of consumer complaints pertaining to cancellations, delays, or any other deviations from schedule, whether planned or unplanned for each airline each month.

3.4.2 Oversales

This complaint category includes all bumping problems, irrespective of whether the airline complied with DOT oversale regulations. Data are available by the total number of consumer complaints pertaining to oversales for each airline each month.

3.4.3 Reservations, Ticketing, and Boardings

This category includes airline or travel agent mistakes in reservations and ticketing; problems in making reservations and obtaining tickets due to busy telephone lines or waiting in line or delays in mailing tickets; and problems with boardings the aircraft (except oversales). Data are available by the total number of consumer complaints pertaining to ticketing and boardings for each airline each month.

3.4.4 Fares

As defined by the DOT, consumer complaints about fares include incorrect or incomplete information about fares, discount fare conditions and availability, overcharges, fare increases, and level of fares in general. Data are available by the total number of consumer complaints pertaining to fares for each airline each month.

3.4.5 Refunds

This category includes customer complaints about problems in obtaining refunds for unused or lost tickets, fare adjustments, or bankruptcies. Data are available by the total number of consumer complaints pertaining to refunds for each airline each month.

3.4.6 Baggage

Claims for lost, damaged, or delayed baggage, charges for excess baggage, carry-on problems, and difficulties with airline claim procedures are included in this category. Data are available by the total number of consumer complaints pertaining to baggage for each airline each month.
3.4.7 Customer Service

This category includes complaints about rude or unhelpful employees, inadequate meals or cabin service, and treatment of delayed passengers. Data are available by the total number of consumer complaints pertaining to customer service for each airline each month.

3.4.8 Disability

Previously included as part of the Reservations, Ticketing and Boardings Category (through June 1999), this category includes complaints about civil rights violations from air travelers with disabilities. Data are available by the total number of consumer complaints pertaining to disabilities for each airline each month.

3.4.9 Advertising

These are complaints concerning advertising that is unfair, misleading, or offensive to consumers. Data are available by the total number of consumer complaints regarding advertising for each airline each month.

3.4.10 Tours

This category includes complaints about problems with scheduled or charter tour packages. Data are available by the total number of consumer complaints pertaining to tours for each airline each month.

3.4.11 Animals

This category, added in October 2000, tracks customer complaints about loss, injury, or death of an animal during air transport by an air carrier. Data are available by the total number of customer complaints regarding animals for each airline each month.

3.4.12 Other

Data regarding consumer complaints about frequent flyer programs, smoking, credit, cargo problems, security, airport facilities, claims for bodily injury, and other problems not classified above are included in this category. Smoking and credit, previously separate elements, were added to this general category as of September 1999. Data are available by the total number of consumer complaints regarding other problems for each airline each month.

4. Results of the Airline Quality Rating for 2011

The Airline Quality Rating industry score for 2011 shows an industry that has again improved in overall quality over the previous year. As an industry, performance in 2011 was the best in the 21 year history of the Airline Quality Rating. Of the 15 carriers rated in both 2010 and 2011, ten carriers improved in Airline Quality Rating scores. Frontier had the largest improvement in overall score, while Continental and Mesa had the largest decline in AQR score for 2011.

The overall industry AQR score was better in 2011 than in 2010, due to continued improvement in industry performance in all four areas tracked. As an industry, the AQR criteria shows that on-time arrival percentage was better (80.0% in 2011 compared to 79.8% in 2010), mishandled baggage rates improved to 3.35 per 1,000 passengers in 2011 from 3.49 per 1,000 passengers in 2010, involuntary denied boardings per passenger served decreased to 0.78 per 10,000 passengers in 2011 from 1.08 per 10,000 passengers in 2010, and consumer complaint rates decreased to 1.19 per 100,000 passengers in 2011 from 1.22 per 100,000 passengers in 2010. Of the 9,425 complaints registered with DOT regarding all U.S. domestic carriers, 49.2% were for either flight problems or baggage handling problems. Taking all 15 rated airlines together, the AQR score for the industry improved from a level of -1.20 in 2010 to -1.08 in 2011. With a mixed bag of gains and losses across the 15 carriers rated, the gain in AQR score for the industry is a positive sign. The improvement trend in AQR scores since 2007 speaks well of the industry maintaining in difficult times.
Since the Airline Quality Rating is comparable across airlines and across time, monthly rating results can be examined both individually and collectively. The following chart outlines the AQR scores for the industry by month from 2010-2011. For comparison purposes, results are displayed for 2010 as well. This composite industry chart, illustrated in Table 2 below, combines the airlines tracked (Bowen & Headley, 2012).

The top three performing airlines in 2011 were Air Tran, Hawaiian and JetBlue. Airlines struggling at the bottom of the performance chart were Mesa, Atlantic Southeast and American Eagle. “Unbundled services available a la carte are the new reality. That separation creates an interesting first price look that darkens to a higher, some would say nasty, bottom line once fees are totaled in” (McGinn, 2011, p. 1).

There is speculation regarding the source of the industry’s marginal higher performance in 2010. During that time, new avenues for reporting complaints to the Department of Transportation were made available (Delaney, 2011, p. 1). For example, consumers may now file a complaint on the Aviation Consumer Protection and Enforcement website: http://airconsumer.ost.dot.gov/CP_AirlineService.htm

Table 2: Airline Quality Rating: U.S. Airline Industry 2010-2011

<table>
<thead>
<tr>
<th>Month</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>-1.50</td>
<td>-0.86</td>
</tr>
<tr>
<td>Feb</td>
<td>-1.49</td>
<td>-0.88</td>
</tr>
<tr>
<td>Mar</td>
<td>-1.75</td>
<td>-1.13</td>
</tr>
<tr>
<td>Apr</td>
<td>-1.42</td>
<td>-1.04</td>
</tr>
<tr>
<td>May</td>
<td>-1.08</td>
<td>-0.95</td>
</tr>
<tr>
<td>Jun</td>
<td>-0.93</td>
<td>-0.93</td>
</tr>
<tr>
<td>Jul</td>
<td>-0.83</td>
<td>-0.83</td>
</tr>
<tr>
<td>Aug</td>
<td>-1.49</td>
<td>-1.22</td>
</tr>
<tr>
<td>Sep</td>
<td>-1.17</td>
<td>-1.22</td>
</tr>
<tr>
<td>Oct</td>
<td>-1.32</td>
<td>-1.14</td>
</tr>
<tr>
<td>Nov</td>
<td>-1.37</td>
<td>-1.16</td>
</tr>
<tr>
<td>Dec</td>
<td>-1.22</td>
<td>-1.18</td>
</tr>
</tbody>
</table>

4.1 AirTran Airways (FL)

On-time performance improved in 2011 (82.8% in 2010 compared to 84.4% in 2011). AirTran’s denied boardings performance (0.57 per 10,000 passengers in 2011 compared to 0.39 in 2010) was worse. A decrease in customer complaint rate to 0.72 complaints per 100,000 passengers in 2011 was better than their 2010 rate of 0.90. The mishandled baggage rate of 1.63 per 1,000 passengers in 2011 was the same as 2010. For the third year in a row, this was the lowest mishandled baggage rate of all airlines rated.
4.2 Alaska Airlines (AS)

Alaska Airlines had performance improvement in three of four areas tracked. Better on-time arrival performance (88.2% in 2011 compared to 87.6% in 2010), fewer mishandled bags per 1,000 passengers (2.87 in 2011 compared to 3.13 in 2010), and fewer involuntary denied boardings (0.82 in 2011 compared to 1.18 per 10,000 passengers in 2010). Even with a slightly higher rate of customer complaints (0.48 per 100,000 passengers in 2011 compared to 0.44 in 2010), Alaska Airlines’ overall AQR score improved for 2011. With three of four areas showing gains, the AQR score of -0.94 for Alaska Airlines for 2010 was improved to -0.79 for 2011.

4.3 American Airlines (AA)

American Airlines’ AQR score for 2011 improved slightly. The slight improvement in AQR score (-1.24 in 2011 compared to -1.28 for 2010) reflects a combination of poorer performance for on-time arrivals (79.8% in 2010 compared to 77.8% in 2011), denied boardings (0.86 in 2010 compared to 0.92 in 2011), and customer complaints per 100,000 passengers (1.44 in 2010 compared to 1.46 in 2011). Improved mishandled baggage performance (3.55 in 2011 compared to 3.82 in 2010) was the only area of gain for 2011. The combination of performance outcome gains and losses produced a slight improvement in the AQR score for 2011.

4.4 American Eagle (MQ)

American Eagle had a denied boarding rate of 2.24 for 2011, much improved from 4.02 per 10,000 passengers in 2010. The airline had an increase in the rate of customer complaints (1.03 in 2010 up to 1.45 per 100,000 passengers in 2011). On-time performance was 76.3% in 2011 compared to 77.1% for 2010. Their mishandled baggage rate (7.32 per 1,000 passengers in 2011, higher than in 2010 at 7.15) was again well above the industry rate of 3.35. This combination of performance on the criteria produced an improved AQR score for 2011 (-2.82 in 2010 and -2.51 for 2011). Even with an improved AQR score, American Eagle has the worst AQR score of all airlines rated for 2011.

4.5 Atlantic Southeast Airlines (EV)

ASA’s on-time performance was 75.2% in 2011, a decline over their 79.2% performance for 2010. Atlantic Southeast’s denied boarding performance also decline for 2011 (0.91 per 10,000 passengers in 2011 compared to 0.56 in 2010). Their mishandled baggage rate of 5.52 per 1,000 passengers in 2011 was improved over their 6.71 rate in 2010. Atlantic Southeast’s 2011 customer complaint rate of 0.88 complaints per 100,000 passengers was worse than their 2010 rate of 0.54. For 2011, Atlantic Southeast showed improvement in their AQR score (-1.60 in 2011 compared to -1.72 in 2010).

4.6 Continental Airlines (CO)

Continental posted gains in performance for one of the four AQR criteria. Their customer complaint rate was worse (1.81 in 2011 versus 1.48 in 2010), their mishandled baggage per 1,000 passengers increased (3.35 in 2011 compared to 2.65 in 2010), and on-time performance declined (77.1% in 2011 compared to 81.4% in 2010). A denied boardings rate decrease (1.49 in 2011 compared to 1.82 in 2010) was the only criteria posting a positive gain. This combination of performance pushed Continental’s AQR score lower to -1.41 in 2011 (from -1.23 in 2010).

4.7 Delta Air Lines (DL)

Delta’s on-time percentage for 2011 shows an improvement over 2010 (82.3% in 2011 and 77.4% in 2010). Their rate of mishandled baggage (2.66 in 2011 improved from 3.49 in 2010) was below the industry average of 3.35 mishandled bags per 1,000 passengers. A decrease in denied boardings (2011 rate of 0.31 per 10,000 passengers compared to 0.41 for 2010) and a reduced rate of customer complaints (1.23 in 2011 compared to 2.00 in 2010) combined to move Delta’s AQR score to -0.80 in 2011 from -1.22 in 2010. With gains in all four criteria, Delta’s overall AQR score improved by the second biggest margin of the airlines rated.
4.8 Frontier Airlines (F9)

Frontier’s on-time performance in 2011 (79.2%) was the only criteria posting a decline over 2010 (81.4%). Frontier’s denied boarding performance (0.97 per 10,000 passengers in 2011 compared to 2.26 in 2010) was much better than last year. A customer complaint rate of 0.76 complaints per 100,000 passengers for 2011 was also improved over their 2010 rate of 1.23. Their mishandled baggage rate of 2.21 per 1,000 passengers was improved over the 2010 rate of 2.58.

Frontier’s 2011 AQR score of -0.75 compared to -1.27 for 2010 was the largest gain in AQR score of all the airlines rated.

4.9 Hawaiian Airlines (HA)

Hawaiian’s on-time performance (92.5% in 2010 and 92.8% for 2011) is the best of all airlines rated for 2011 and 2010. Hawaiian’s denied boarding performance (0.11 per 10,000 passengers in 2011 and 0.04 in 2010) is again the second best of the airlines rated and compares very favorably to the industry average of 0.78. A customer complaint rate of 0.70 complaints per 100,000 passengers is well below last year’s rate of 1.16. Their mishandled baggage rate of 2.63 per 1,000 passengers is worse than their 2010 rate of 2.23. Hawaiian had the second best AQR score for 2011 at -0.59.

4.10 JetBlue Airways (B6)

JetBlue’s on-time performance in 2011 dropped to 73.3% from 75.7% in 2010. JetBlue’s denied boarding performance (0.01 per 10,000 passengers in 2011 and 0.00 in 2010) is the lowest of the airlines rated. A customer complaint rate of 1.08 complaints per 100,000 passengers was lower in 2011 (1.25 in 2010) and it was below the industry average for 2011. Their mishandled baggage rate of 2.21 per 1,000 passengers in 2011 was tied for second best among airlines rated and it was less than their 2010 rate of 2.48. JetBlue had the third best AQR score (-0.60) of the airlines rated for 2011.

4.11 Mesa Airlines (YV)

Mesa’s on-time performance of 83.7% in 2011 is slightly better than their rate of 83.3% in 2010. Mesa’s denied boarding performance in 2011 (2.27 per 10,000 passengers) was better than their rate of 2.55 in 2010. A customer complaint rate of 0.62 complaints per 100,000 passengers shows an increase over the 2010 rate of 0.53. Their mishandled baggage rate of 4.84 per 1,000 passengers is above the industry rate of 3.35 and is higher than their 2010 rate of 3.97. Overall, Mesa’s AQR score was -1.70 for 2011, a decline from the -1.53 score for 2010.

4.12 SkyWest Airlines (OO)

SkyWest’s on-time performance of 79.3% in 2011, was improved slightly from 79.1% for 2010. SkyWest’s denied boarding performance (0.68 per 10,000 passengers in 2011 compared to 0.70 in 2010) was improved and better than the industry average for 2011. A customer complaint rate of 0.73 complaints per 100,000 passengers in 2011 compared to the 2010 rate of 0.61 had a negative impact on their 2011 AQR score. Their mishandled baggage rate of 4.13 per 1,000 passengers in 2011 is improved from the 2010 rate of 4.72 bags per 1,000 passengers. SkyWest’s AQR score improved in 2011 to -1.15 from -1.28 in 2010.

4.13 Southwest Airlines (WN)

Southwest’s on-time arrival percentages of 81.3% in 2011 was improved from 79.5% in 2010. A customer complaint rate of 0.32 per 100,000 passengers in 2011 and 0.27 in 2010 are the industry’s best. Southwest Airlines is consistently the airline with the lowest customer complaint rate in the industry. An involuntary denied boarding rate of 0.65 per 10,000 passengers in 2011, dropped from 1.24 per 10,000 passengers in 2010. Their mishandled baggage rate of 3.65 per 1,000 passengers in 2011 is higher than their rate of 3.43 per 1,000 passengers for 2010. Overall, Southwest shows an improved AQR score of -0.93 for 2011 over their score of -1.01 in 2010.

4.14 United Airlines (UA)

United’s on-time arrival performance declined (from 85.2% in 2010 to 80.2% in 2011) during 2011. Their mishandled baggage rate increased (3.66 per 1,000 passengers in 2011 from 3.40 in 2010) for 2011. Performance regarding denied
boarding rate (1.01 per 10,000 passengers in 2011 compared to 1.27 in 2010) improved. A higher customer complaint rate (2.21 in 2011 compared to 1.64 per 100,000 passengers in 2010) combined with other declines in performance to move United’s 2011 AQR score to -1.45 from -1.31 in 2010.

4.15 US Airways (US)

US Airways showed improvement in three of the four performance areas tracked for 2011. A closer look reveals that US Airways performed worse in on-time performance (79.8% in 2011 compared to 83.0% in 2010), mishandled baggage (2.70 per 1,000 passengers in 2011 compared to 2.56 in 2010), and in customer complaint rate (1.91 per 100,000 passengers in 2011 compared to 1.53 in 2010). A denied boarding rate of 0.94 per 10,000 passengers in 2011 compared to 1.61 in 2010 was the only area of performance gain for US Airways. Their overall 2011 AQR score (-1.13) reflects slight improvement (-1.17 in 2010) for the year.

5. Future Outlook

The outlook for airline performance is mixed. The impact of new mega-carriers such as United/Continental and Southwest/Air Tran remain to be seen. An examination of past AQR reports reveal that improved airline performance is not a given. “Look back to the Delta/Northwest and U.S. Air/America West mergers, and you will find that these mergers brought performance problems for the new carriers” (Headley, 2011, p. 1).

Data for the first half of 2011, however, indicate the potential for improvement. According to AQR co-author Dean Headley, “We are settling into a new reduced capacity system that challenges travelers to be more savvy. . . even the more difficult winter months hold hope for a better travel experience” (2011, p. 1).

Acknowledgements

We would like to express our gratitude to all those who gave us the possibility to complete this report. We also want to acknowledge the invaluable assistance of the Applied Human Factors Research Laboratory and the Advanced Aviation Analytics Institute for Research—A Center of Research Excellence (A³IR-CORE); without these vital research groups, this paper would not have been possible. We would also like to thank Mr. Clay Wildt, Graduate Research Assistant/A³IR-CORE Team Leader, for his assistance in compiling research material and contributing to the construction of the paper’s final draft.

References


Headley (2011, October, 5). Airline Quality Rating holiday travel forecast. [On-line]. Available: http://newswise.com/articles/airline-quality-rating-holiday-travel-forecast?ret=/articles/list&category=life&page=1&search%5Bstatus%5D=3&search%5Bsort%5D=date+desc&search%5Bsection%5D=30&search%5Bhas_multimedia%5D=


Contact Information

Want to learn more about the Airline Quality Rating (AQR)? Find the entire collection of reports, from 1991 to present, at http://docs.lib.purdue.edu/aqr/. Feel free to contact the A3IR-CORE research lab with any questions at A3IR@purdue.edu or call us at (765) 494-7027.