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Airline Quality Rating 2000

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The Airline Quality Rating 2000

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April, 2000

ABOUT THE AUTHORS

Brent Bowen is Director and Professor, Aviation Institute, University of Nebraska at Omaha. He has been appointed as a Graduate Faculty Fellow of the University of Nebraska System-wide Graduate College. Bowen attained his Doctorate in Higher Education and Aviation from Oklahoma State University and a Master of Business Administration degree from Oklahoma City University. His Federal Aviation Administration certifications include Airline Transport Pilot, Certified Flight Instructor, Advanced-Instrument Ground Instructor, Aviation Safety Counselor, and Aerospace Education Counselor. Dr. Bowen's research interests focus on aviation applications of public productivity enhancement and marketing in the areas of service quality evaluation, forecasting, and student recruitment in collegiate aviation programs. He is also well published in areas related to effective teaching. His professional affiliations include the University Aviation Association, Council on Aviation Accreditation, World Aerospace Education Association, International Air Transportation Research Group, Aerospace Education Association, Alpha Eta Rho International Aviation Fraternity, and the Nebraska Academy of Science. He also serves as program director and principal investigator of the National Aeronautics and Space Administration funded Nebraska Space Grant Consortium.

Dean Headley is Associate Professor of Marketing, W. Frank Barton School of Business, and Faculty Associate of the National Institute for Aviation Research at Wichita State University. He holds a Doctorate in Marketing and Statistics from Oklahoma State University, a Master of Business Administration Degree from Wichita State University, and a Master of Public Health Degree from the University of Oklahoma. Dr. Headley's research interests include methodology development for measurement of service quality, the connection between service quality and consumer behavior, consumer choice processes in service settings, and the effects of marketing activities on consumers and providers of services.

Collectively, Dr. Bowen's and Dr. Headley's research on the Airline Quality Rating (AQR) has met with national and international acceptance and acknowledgment. The Airline Quality Rating has been featured on *ABC's Good Morning America, The Cable News Network, The Today Show, C-Span,* on network news, in *USA Today,* in *Aviation Week and Space Technology,* and in numerous other national and international media. Bowen and Headley have served as invited expert witnesses before the U.S. House of Representatives Committee on Government Operations and have served on multiple occasions as invited speakers and panelists for such groups as the National Academy of Sciences/Transportation Research Board. Resulting from work with the Airline Quality Rating, Bowen and Headley have been recognized with awards from the American Marketing Association, the American Institute of Aeronautics and Astronautics, Embry-Riddle Aeronautical University, the Travel and Transportation Research Association, W. Frank Barton School of Business, and others. The AQR research has been published in the Journal of Aviation/Aerospace Education and Research, Journal of Air Transportation World Wide, Advances in Marketing, Business Research Methods, as well as other journals, proceedings, text books, and research monographs.

AIRLINE QUALITY RATING 2000

Brent D. Bowen, University of Nebraska at Omaha
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Abstract

The Airline Quality Rating (AQR) was developed and first announced in early 1991 as an objective method of comparing airline quality on combined multiple performance criteria. This current report, Airline Quality Rating 2000, reflects monthly Airline Quality Rating scores for 1999. AQR scores for the calendar year 1999 are based on 14 elements that focus on airline performance areas important to air travel consumers.

The Airline Quality Rating 2000 is a summary of month-by-month quality ratings for the ten major U.S. airlines operating during 1999. 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 11 customer complaint categories, major airlines comparative performance for the calendar year of 1999 is reported. This research monograph contains a brief summary of the AQR methodology, detailed data and charts that track comparative quality for major airlines domestic operations for the 12 month period of 1999, and industry average results. Also, comparative Airline Quality Rating data for 1998, are included for each airline to provide historical perspective regarding performance quality in the industry.

The Airline Quality Rating (AQR) System

The majority of quality ratings available rely on subjective surveys of consumer opinion that are infrequently done. This subjective approach yields a quality rating that is essentially noncomparable from survey to survey for any specific airline. Timeliness of survey-based results can be a problem in the fast paced airline industry as well. Before the Airline Quality Rating, there was effectively no consistent method for monitoring the quality of airlines on a timely, objective and comparable basis. With the introduction of the AQR, a multi-factor, weighted average approach became available that had not been used before in the airline industry. The method relies on taking published, publicly available data that reports actual airline performance on critical quality criteria important to consumers and combines them into a rating system. The final result is a rating for individual airlines with interval scale properties that is comparable across airlines and across time.

The Airline Quality Rating (AQR) is a weighted average of 14 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 14 elements used in calculating the ratings represent performance aspects (on-time arrival, mishandled baggage, denied boardings, and 11 customer complaint areas) of airlines that are important to consumers. All of the 14 elements are reported in the *Air Travel Consumer Report* maintained by the U.S. Department of Transportation.

Weights were established by surveying 65 airline industry experts regarding their opinion as to what consumers would rate as important (on a scale of 0 to 10) in judging airline quality. Also, each weight and element were 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 on-time arrival performance is included as a positive element because it is reported in terms of on-time successes, suggesting that a higher number is favorable to consumers. The weight for this criteria 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 because it is reported in terms of mishandled bags per 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 criteria 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 and averaged over the year, a single interval scaled value is obtained. This value is comparable across airlines and across time periods.

The Airline Quality Rating criteria and the weighted average methodology allows a very focused comparison of major airline domestic performance. Unlike other consumer opinion approaches which rely on consumer surveys and subjective opinion, the AQR continues to use a mathematical formula that takes multiple weighted objective criteria into account in arriving at a single, fully comparable rating for the airline industry. The Airline Quality Rating provides both consumers and industry watchers a means for looking at comparative quality for each major 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. 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

	CRITERIA	WEIGHT	IMPACT (+/-)
OT	On-Time	8.63	+
DB	Denied Boardings	8.03	-
MB	Mishandled Baggage	7.92	-
CC	Customer Complaints	7.17	-

Flight Problems (-8.05)
Oversales
Reservations, Ticketing, and Boarding (-7.08)
Fares (-7.60)
Refunds (-7.32)
Baggage
Customer Service (-7.20)
Disability Note: appeared as a separate category 7/99
Advertising (-6.82)
Tours
Other (-7.34) Note: as of 9/99 also includes Smoking and Credit (-5.94).

Data for all criteria is drawn from the U.S. Department of Transportation's monthly *Air Travel Consumer Report*.

The formula for calculating the AQR score is:

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

What the Airline Quality Rating Tells Us About 1999

Since the Airline Quality Rating is comparable across airlines and across time, monthly rating results can be examined both individually and collectively. The pages following these summary comments outline the AQR scores by airline, by month for 1999. For comparison purposes, results for individual airlines are also displayed for 1998. A composite industry average chart that combines the ten airlines tracked is shown. With the performance-based elements, we saw some changes in the order of the AQR scores for 1999.

The Airline Quality Rating industry average score shows an industry that is declining in quality relative to customer performance criteria. Northwest, Alaska, and Southwest were the only airlines to show improvement in the overall AQR scores for 1999. TWA was most constant from 1998 to 1999, with only a slight decrease in their AQR score. US Airways and American registered the largest decline in AQR scores. America West, Continental, Delta, and United all declined as well, but at more moderate levels. In all, seven of the ten airlines rated posted lower AQR scores in 1999 than in 1998. The AQR results for 1999 indicate that:

- Southwest Airlines' performance for 1999 took them from the middle of the pack in 1998 to the top in 1999. They recorded the third largest margin of improvement in AQR score of the ten airlines. Involuntary denied boarding rates and mishandled baggage rates were better in 1999, while on-time arrival percentage and customer complaint rates grew worse in 1999. In a time when industry customer complaint rates are multiplying rapidly, Southwest has, by far, the lowest rate of any of the ten major carriers (0.40 per 100,000 passengers).
- Continental Airlines showed a drop in performance quality in 1999 in all of the four areas of the AQR. Even though their scores declined, they maintained the second ranked position of the ten airlines rated. Better than industry average performance in the areas of on-time arrivals, mishandled baggage, and involuntary denied boardings helped Continental maintain their rank order from 1998.
- Delta Airlines' AQR score for 1999 reflects a decline in performance for on-time arrivals, denied boardings, mishandled bags, and customer complaints. With most of the other airlines also showing a performance decline, Delta posted the third smallest decline and actually moved up to third in the ranking positions for 1999.
- Northwest Airlines posted the most improved overall AQR score of all airlines rated in 1999. Improvements in on-time arrival performance, denied boardings (industry best), and mishandled baggage all contributed to their improved score and moved them well up in the ranking order.
- Alaska Airlines had bright spots in 1999 in the areas of fewer denied boardings and fewer mishandled bags per passenger flown. On the down side, Alaska Airlines had a lower on-time performance in 1999 than in 1998 and a higher consumer complaint rate. This combination contributed to Alaska Airlines having the second most improvement in AQR score for all of the major airlines.

- US Airways had the most decline in AQR score from 1998 to 1999 of all the major airlines. Looking at some of the details reveals that US Airways performed more poorly in all of the four major areas monitored by the Airline Quality Rating. On-time arrival performance, mishandled baggage rates, involuntary denied boarding rates, and customer complaint rates all became worse for US Airways in 1999, moving the airline down in the rankings.

- American Airlines' AQR score for 1999 reflects their declining performance in on-time arrivals, mishandled bags, and customer complaints compared to 1998. An improvement in involuntary denied boarding rates was not enough to offset declines in other performance areas and reduced their overall score. American registered the second largest decline in AQR score of the ten major airlines.

- America West improved their on-time performance for 1999, but still posted the worst on-time performance rate (69.5%) of all the major airlines in 1999. Denied boardings and mishandled baggage were also a source of performance decline. America West was the only major carrier to have the rate of consumer complaints per passenger served decline for 1999.

- Trans World Airlines improved performance in 1999 over 1998 in two areas, on-time arrivals and involuntary denied boardings. On-time performance (80.9%) was the best in the industry for the year. Mishandled baggage rates stayed the same and customer complaint rates increased in 1999. These improvements helped TWA show the smallest decline in AQR score of all the seven airlines posting declines.

- United Airlines had a better on-time arrival percentage for 1999, but the airline posted declining performance in denied boardings and number of complaints per passenger served. Although United improved their mishandled baggage rate for 1999, it was still the worst among the ten major carriers. All of these elements combined to keep United as the lowest performing carrier in the Airline Quality Ratings.

- For 1999 the overall industry average AQR score was lower than in 1998. As an industry, the AQR criteria shows that on-time arrival percentage declined slightly (76.1% in 1999 compared to 77.2% in 1998), involuntary denied boardings per passenger served increased slightly (0.88 per 10,000 passengers in 1999 compared to 0.87 per 10,000 passengers in 1998), mishandled baggage rates improved (5.08 per 1,000 passengers in 1999 versus 5.16 per 1,000 passengers in 1998), and consumer complaint rates increased (2.48 per 100,000 passengers in 1999 compared to 1.08 per 100,000 passengers in 1998) by over 130%. This continued decline in performance in all areas is a disturbing trend. The nature of customer complaints reflect consumer frustration with the policies and practices of the industry and, to some extent, with the government agencies that regulate the industry. Continued performance decline and consumer dissatisfaction expressed by year after year of increases in the volume of complaints seems to indicate that airline consumers have reached the limits of tolerance and are expecting that the industry and government respond in a more coordinated and considerate manner in addressing their concerns.

Observations About the Industry

As measured by the Airline Quality Rating, quality for the airline industry decreased in 1999. Consumer dissatisfaction with airline service was a dominant theme regarding the airline industry over the past two years. There are many other issues which face the industry as we look to the future. Looking ahead we suggest that:

- Continued declining industry performance quality in 1999 gives cause for Congress to again seriously consider the passage of an Airline Passengers' Bill of Rights. An assessment, due to Congress in June, 2000, of how the airlines delivered on their self-policed promise to do better in customer service areas will be examined with great interest. Even though the plan was only deployed toward year-end, the airlines were under high scrutiny all of 1999 regarding performance and the data shows continuing failure on their part. Many consumers believe that the airlines have not delivered on promises to improve. In the coming months, industry observers should monitor and hold the major airlines increasingly accountable for implementing the service tenets advocated, which include the provision of lowest fare information at time of booking, full disclosure of information regarding service difficulties and delays, better responsiveness to customer complaints, provision for basic needs of passengers, and enhanced baggage liability limits. Generally, the consumer wants to be treated with more respect and receive more reliable service, and many think it may take an act of Congress to exact this from the airlines.

- Profitability in the industry remains good due to increasing demand, cost efficient on-line reservation systems, and higher fare prices. Higher fuel costs have seriously hampered profit growth as in past years. Labor issues will undoubtedly be a noticeable issue in 2000 as labor negotiations come due for nearly all of the major domestic airlines. This can have major implications for the airlines' attempts to achieve higher profits and higher levels of customer satisfaction. When employees are in disagreement with management it is difficult to expect that employees will not express their negative attitudes in ways that affect consumers and the bottom line.

- The industry financial performance has begun to reflect a changing demographic that results from fare disparity. While more passengers are being attracted to fly as a transportation alternative, this growth is primarily from leisure travelers, whereas business travel may be in a period of decline. Since airlines have historically inflated business fares and under-priced leisure fares, this change is having immediate fiscal impact. Business travelers are finding reasons not to travel in an unfriendly environment and are turning in record numbers to private air charter options.

- The FAA must accept some blame in failing to meet the traveling public's needs. Not effectively modernizing the National Airspace System with up to date technology, not expediting the implementation of GPS navigation and approaches, free-flight, ground incursion management, data-link and other enhancements to handling increased capacity in a constrained system will soon have a direct and noticeable deteriorating effect on consumers' attitudes and confidence in the use of airline services. The $10 billion reserves in the Aviation and Airways Trust Fund must be used for something other than budget balancing .

- The FAA/DOT reports that air travel passenger volume will continue to expand at a moderate pace both domestically (3% to 4% per year thru 2010) and internationally (5% per year thru 2010). The continuing growth will hasten the point of saturation for the hub and spoke system during the first decade of the next century. With only limited airport capacity expansion being available until 2006 or 2007, congestion will get worse before it gets better. Factoring this unavoidable congestion into an increasingly delayed and dissatisfied consumer base will lead to a continued increase in consumer complaints. Many of the problems consumers face with the airline industry result from competitive and airline policy choices. These problems range from unfair business practices targeting new start-up airlines, temporary route structure changes, gate-lock practices, select incentives to travel agents, ability to tie up landing slots and book them as assets, rapid expansion of code sharing practices which in effect may reduce competition on many routes, and flight scheduling competition. Consumers are demanding point-to-point air service availability that new, smaller regional jet aircraft will enable. Opportunities for route structures that meet consumer needs in a changing airline environment hold promise.

- The many anti-consumer oriented rules developed recently to enhance perceived productivity at the expense of consumer comfort and convenience have resulted in consumer retaliation, as evidenced by increasing complaints to the Department of Transportation. Examples include limiting carry-on bags to unreasonable requirements, disallowing the carry-on of food and beverages, limiting pre-boarding with children and then requiring them to sit in the back of the aircraft, not allowing a consumer to take an earlier connection when a seat is available, increasing change of ticket fees, limiting use of child safety seats, blocking access to window and aisle seats based on ticket price and standing in a frequent flyer club, not providing accurate information on delays, and constantly changing frequent flyer programs to the consumer's disadvantage (such as basing awards on ticket price rather than miles, reflecting the airline's own disparity in pricing). Soon, consumers will become driven by price and schedule only and regard airline loyalty as having no tangible value.

- Electronic access to the airlines is a benefit to many consumers. By using this fast growing delivery channel, the airlines are successfully circumventing costs associated with travel agent and phone reservation systems. Internet ticketing and ticketless bookings are areas that both consumers and airlines are finding useful. At present, this provides a mechanism for greater access and greater disparity in pricing which fills last-minute seats cheaply, thus seemingly benefitting both parties. Technology applications are being used to de-personalize service to the point that consumer travel preferences are not recognized and not met. This continuing alienation generally affects the most valued customer groups. Furthermore it is disrupting and distancing the travel agent component of the distribution chain on the faulty assumption that all travelers are technology literate.

Previous Airline Quality Reports

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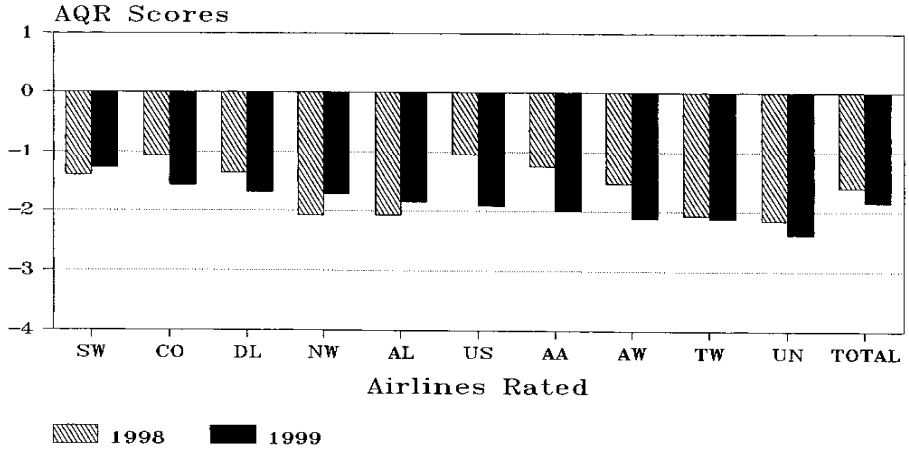
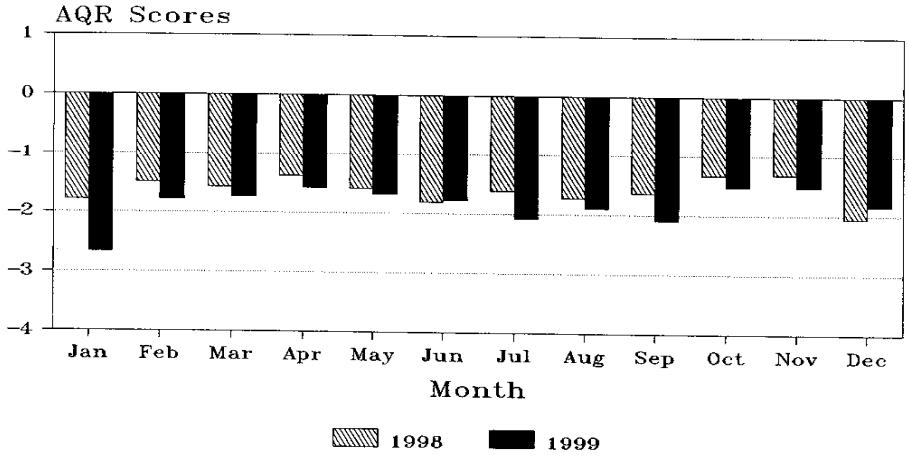
AIRLINE QUALITY RATING
AVERAGE AQR SCORES



All Major U. S. Airlines
Average AQR Scores

	1998	**1999**
Southwest	-1.408	**-1.279**
Continental	-1.068	**-1.575**
Delta	-1.366	**-1.689**
Northwest	-2.079	**-1.720**
Alaska	-2.077	**-1.853**
US Airways	-1.053	**-1.912**
American	-1.256	**-1.991**
America West	-1.540	**-2.123**
Trans World	-2.076	**-2.126**
United	-2.155	**-2.387**
Industry Average	-1.609	**-1.850**

AIRLINE QUALITY RATING
ALL MAJOR U.S. AIRLINES

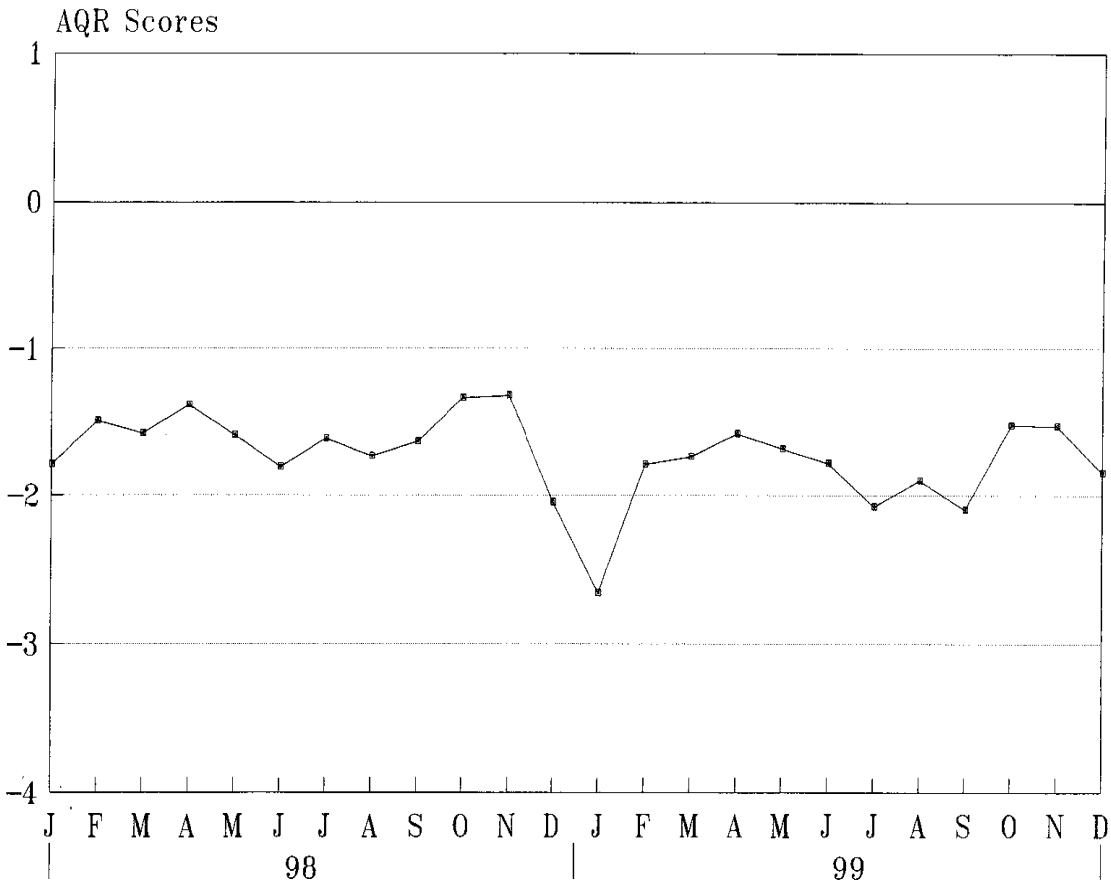


All Major U.S. Airlines
Average Monthly AQR Scores

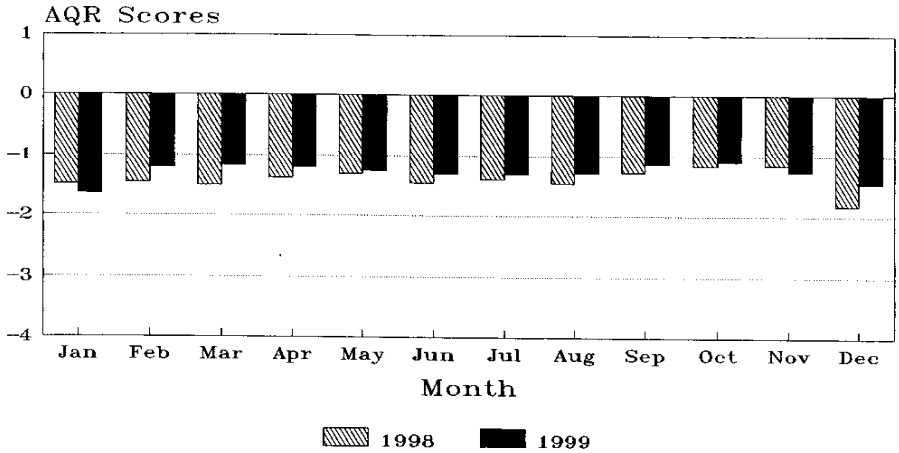
	1998	1999
January	-1.789	-2.663
February	-1.494	-1.787
March	-1.579	-1.735
April	-1.383	-1.582
May	-1.589	-1.683
June	-1.805	-1.779
July	-1.614	-2.077
August	-1.732	-1.899
September	-1.636	-2.094
October	-1.335	-1.525
November	-1.317	-1.527
December	-2.049	-1.845
Industry Average	-1.609	-1.850

AIRLINE QUALITY RATING

ALL MAJOR AIRLINES 1998 - 1999



AIRLINE QUALITY RATING
SOUTHWEST

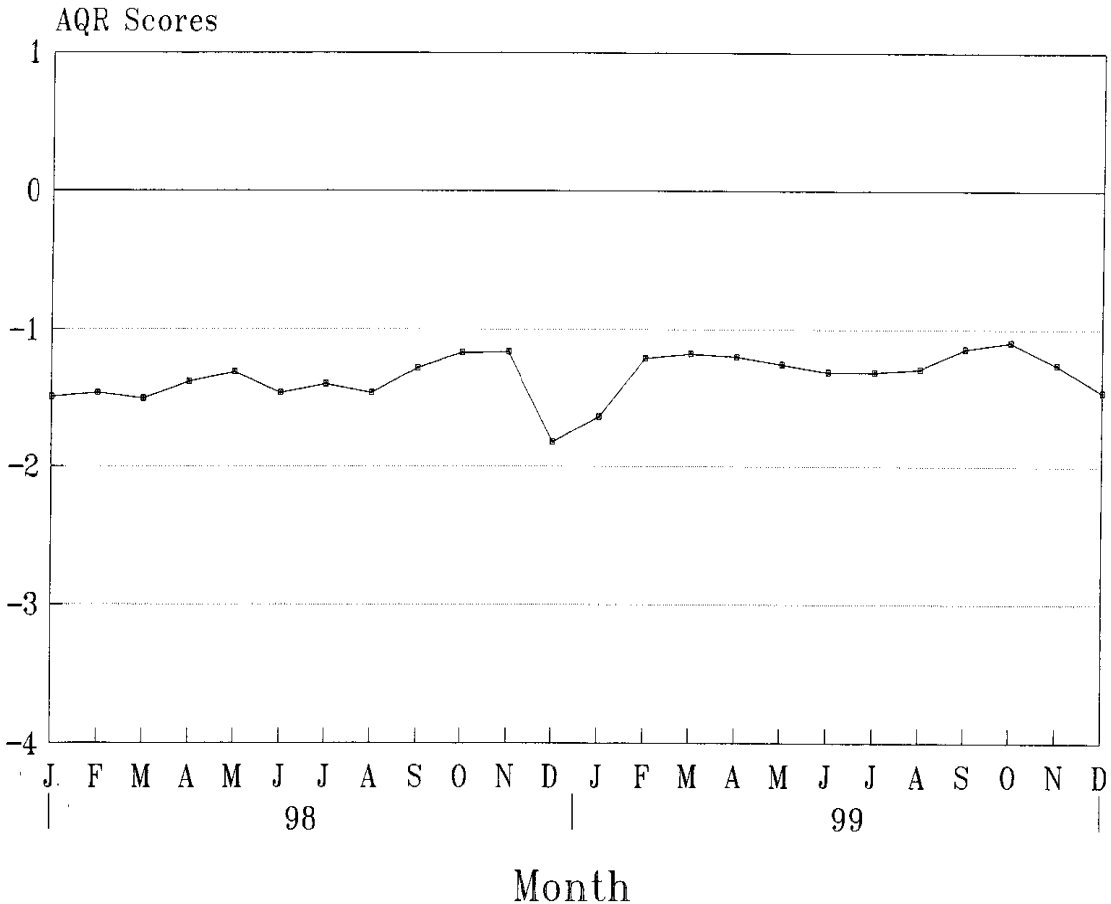


Southwest Airlines
Monthly AQR Scores

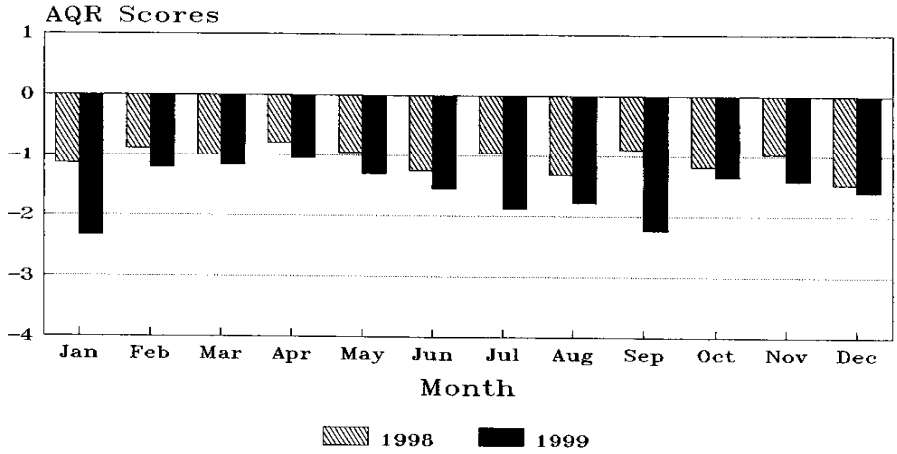
	1998	1999
Jan	-1.490	-1.640
Feb	-1.461	-1.213
Mar	-1.506	-1.174
Apr	-1.378	-1.199
May	-1.312	-1.256
Jun	-1.460	-1.308
Jul	-1.398	-1.311
Aug	-1.460	-1.290
Sep	-1.279	-1.140
Oct	-1.168	-1.093
Nov	-1.164	-1.260
Dec	-1.823	-1.459
Airline AQR Score	-1.408	-1.279
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

SOUTHWEST 1998 - 1999



AIRLINE QUALITY RATING
CONTINENTAL

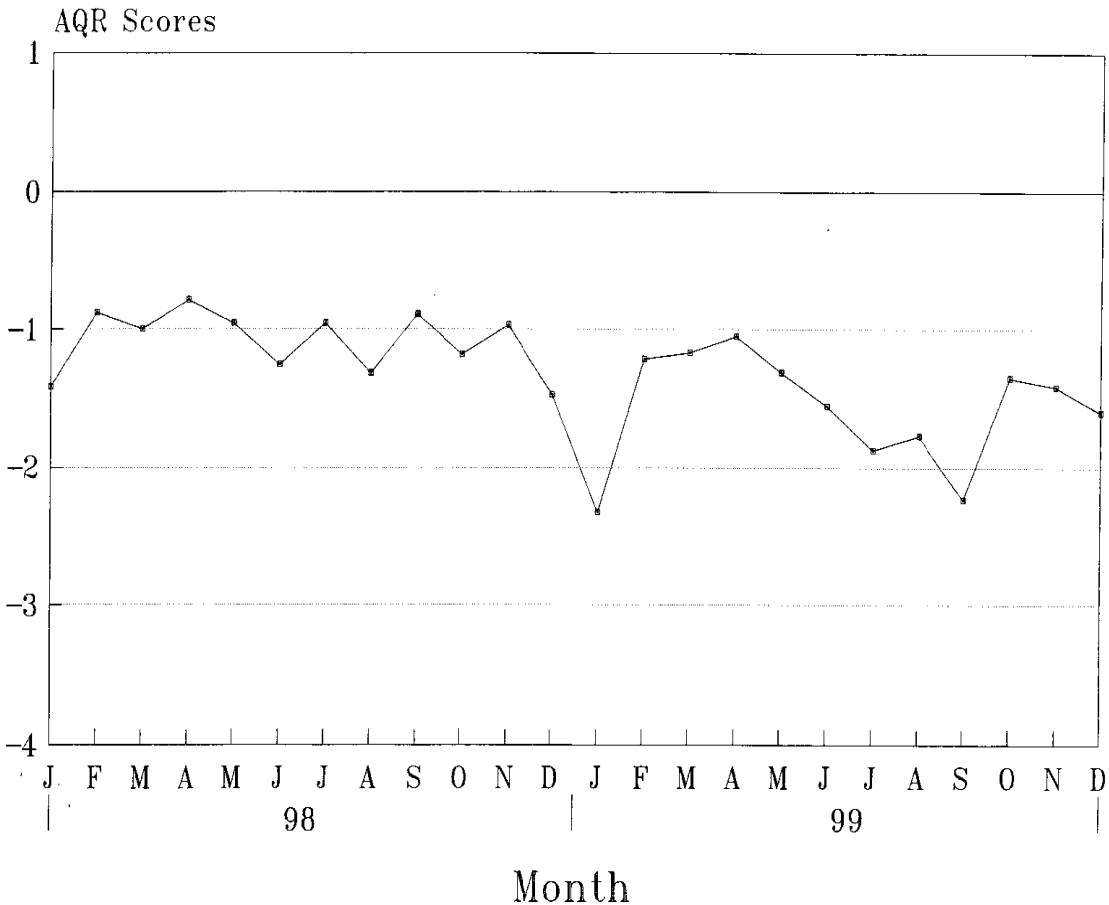


Continental Airlines
Monthly AQR Scores

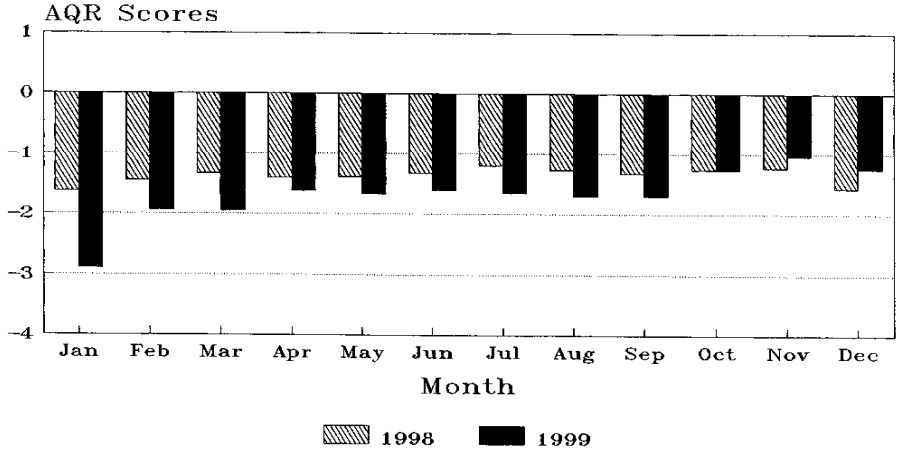
	1998	1999
Jan	-1.147	-2.330
Feb	-0.880	-1.214
Mar	-1.001	-1.172
Apr	-0.787	-1.050
May	-0.957	-1.314
Jun	-1.257	-1.558
Jul	-0.956	-1.876
Aug	-1.317	-1.775
Sep	-0.891	-2.234
Oct	-1.184	-1.355
Nov	-0.970	-1.420
Dec	-1.473	-1.603
Airline AQR Score	-1.068	-1.575
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

CONTINENTAL 1998 - 1999



AIRLINE QUALITY RATING
DELTA

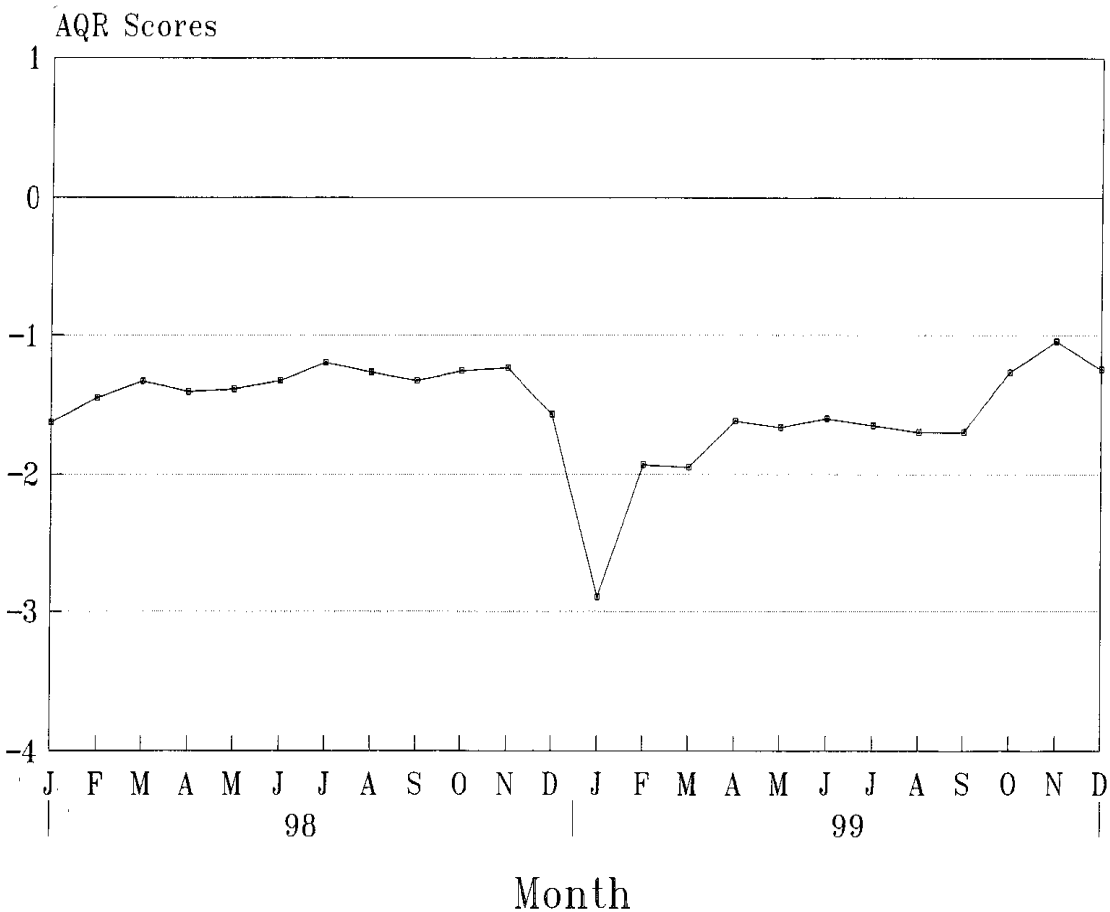


Delta Airlines
Monthly AQR Scores

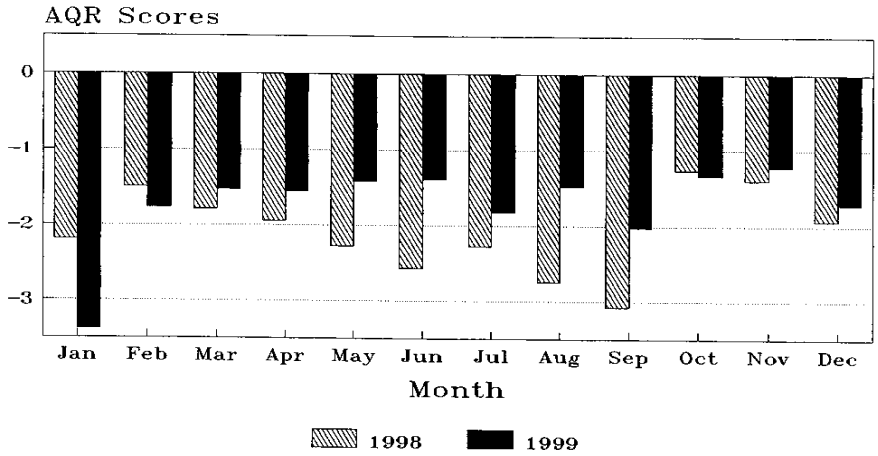
	1998	1999
Jan	-1.625	-2.895
Feb	-1.450	-1.931
Mar	-1.332	-1.948
Apr	-1.407	-1.616
May	-1.389	-1.663
Jun	-1.328	-1.600
Jul	-1.197	-1.654
Aug	-1.269	-1.699
Sep	-1.327	-1.700
Oct	-1.259	-1.270
Nov	-1.235	-1.045
Dec	-1.570	-1.250
Airline AQR Score	-1.366	-1.689
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

DELTA 1998 - 1999



AIRLINE QUALITY RATING
NORTHWEST

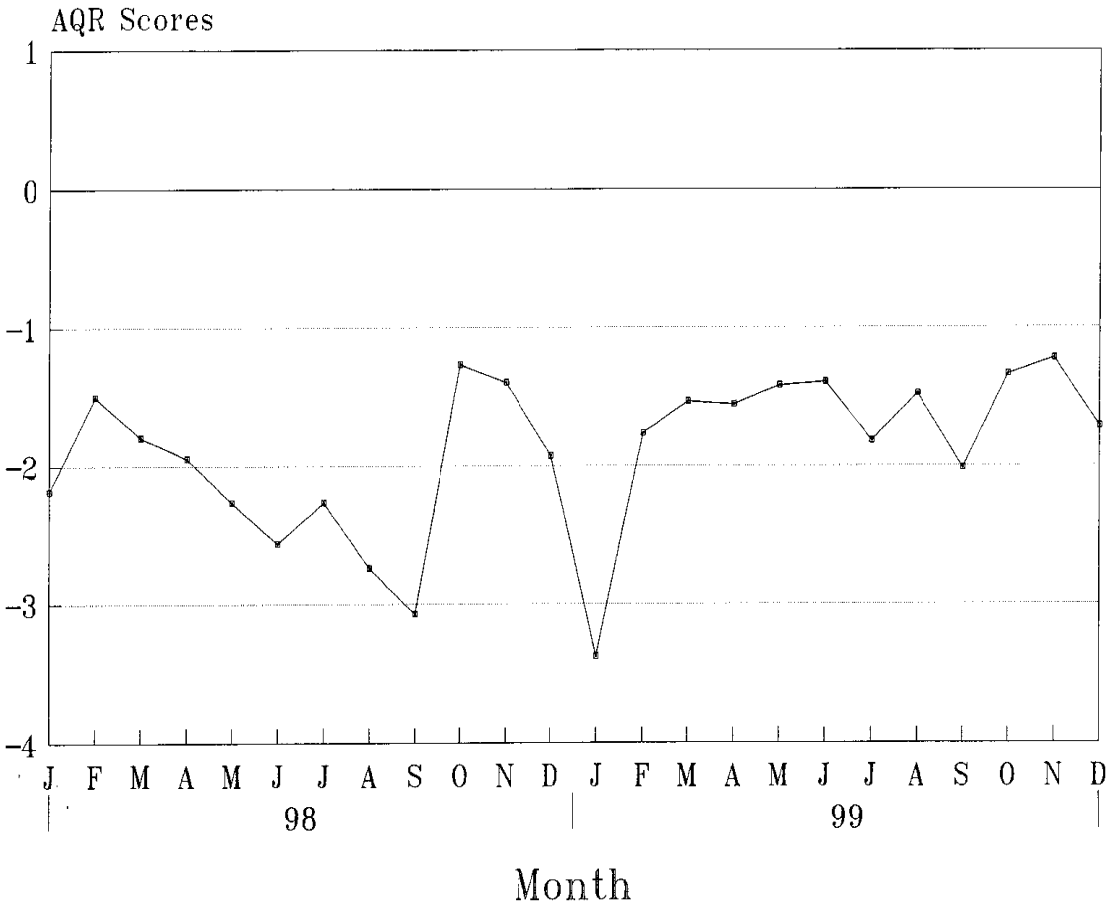


Northwest Airlines
Monthly AQR Scores

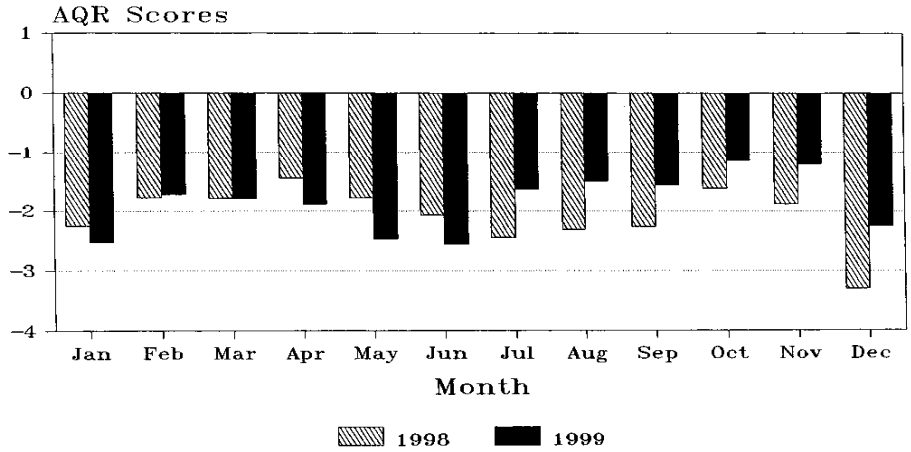
	1998	1999
Jan	-2.189	-3.376
Feb	-1.500	-1.767
Mar	-1.794	-1.534
Apr	-1.945	-1.558
May	-2.271	-1.417
Jun	-2.568	-1.391
Jul	-2.269	-1.822
Aug	-2.744	-1.478
Sep	-3.073	-2.021
Oct	-1.267	-1.338
Nov	-1.396	-1.223
Dec	-1.930	-1.715
Airline AQR Score	-2.079	-1.720
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

NORTHWEST 1998 - 1999



AIRLINE QUALITY RATING
ALASKA AIRLINES

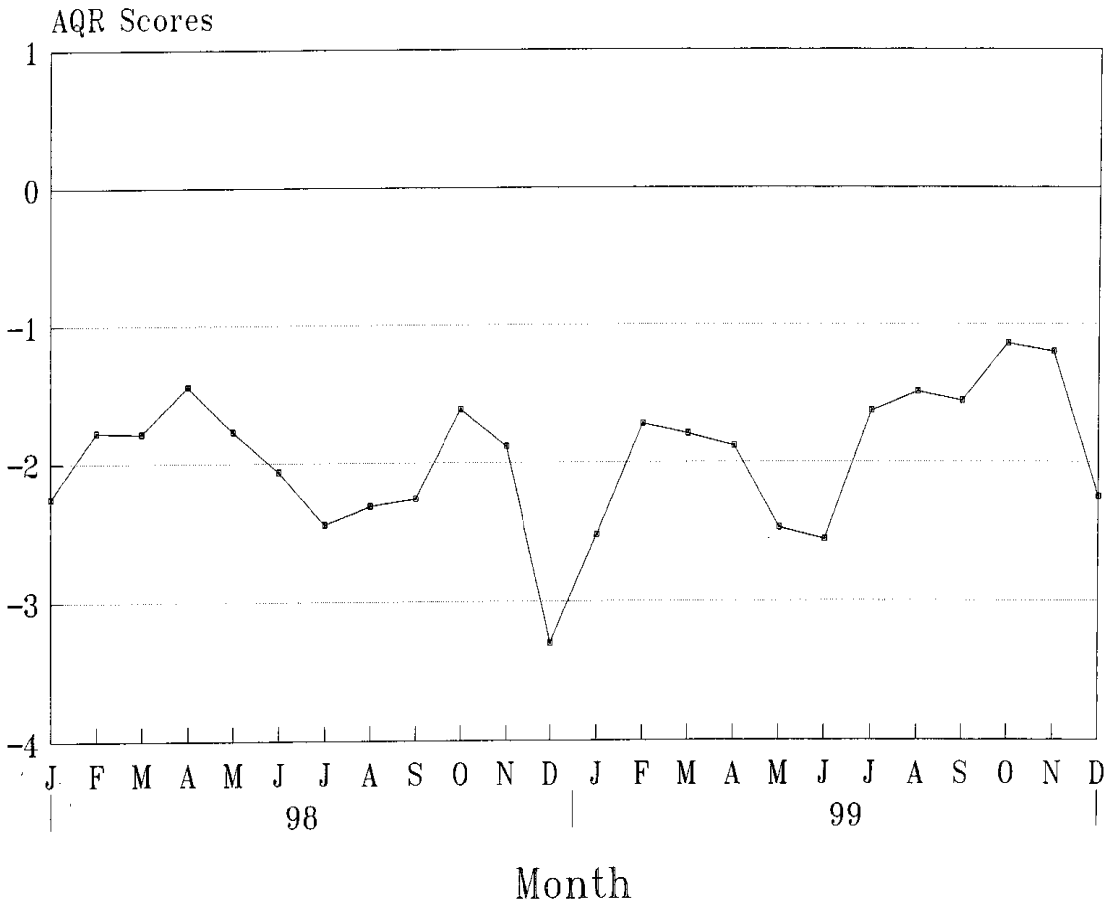


Alaska Airlines
Monthly AQR Scores

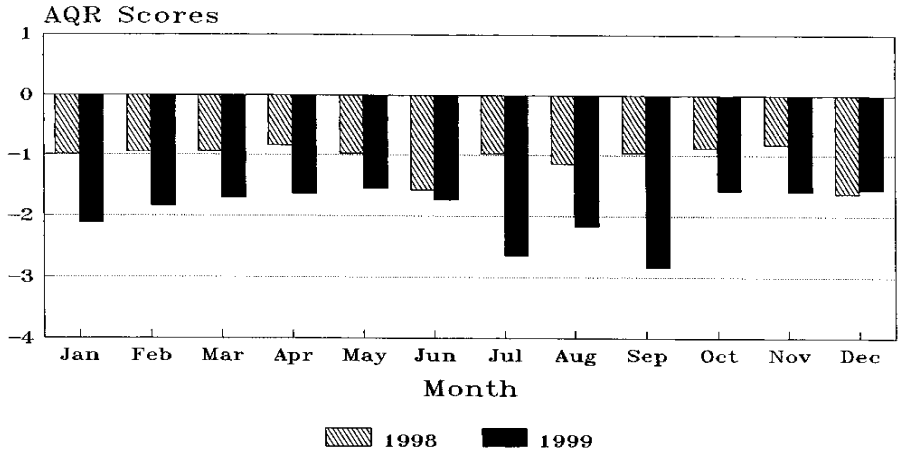
	1998	1999
Jan	-2.252	-2.527
Feb	-1.778	-1.721
Mar	-1.786	-1.796
Apr	-1.443	-1.887
May	-1.775	-2.472
Jun	-2.068	-2.562
Jul	-2.446	-1.630
Aug	-2.312	-1.493
Sep	-2.263	-1.555
Oct	-1.613	-1.141
Nov	-1.883	-1.201
Dec	-3.301	-2.251
Airline AQR Score	-2.077	-1.853
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

ALASKA AIRLINES 1998 - 1999



AIRLINE QUALITY RATING
US AIRWAYS

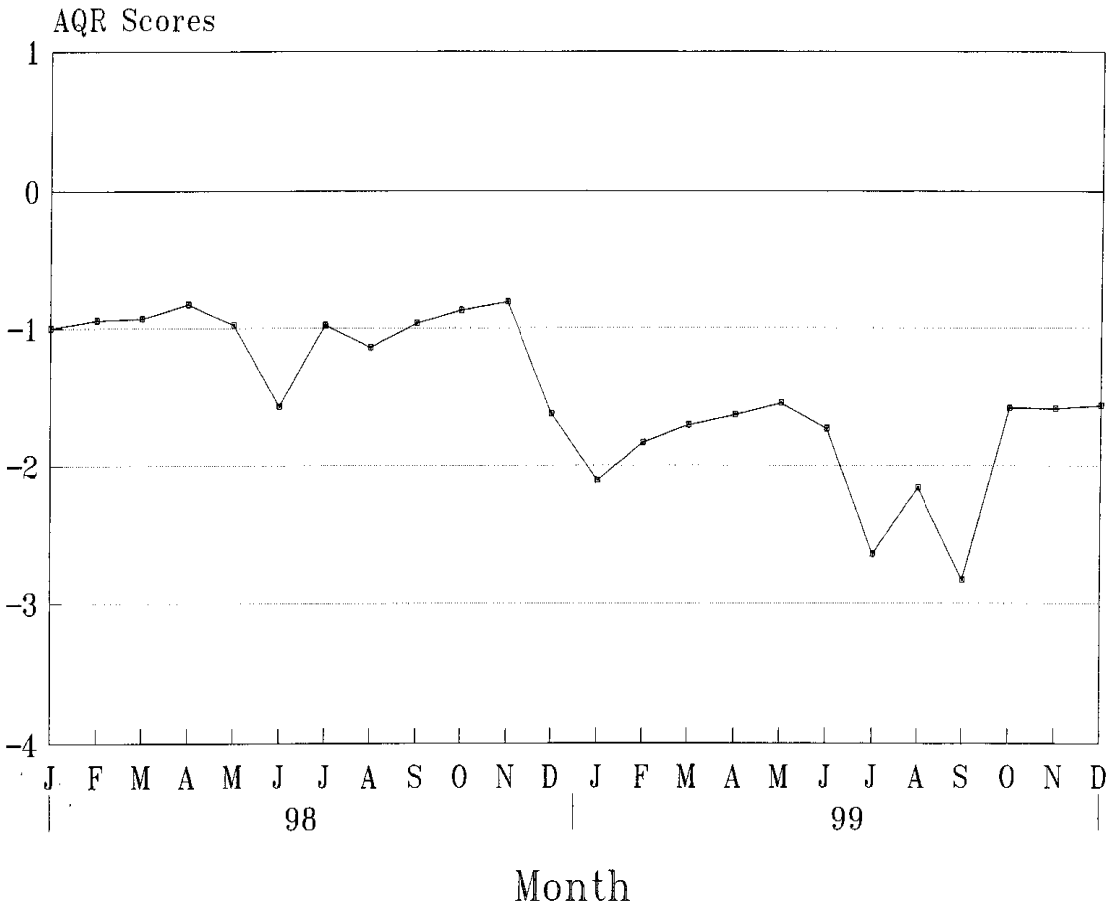


US Airways
Monthly AQR Scores

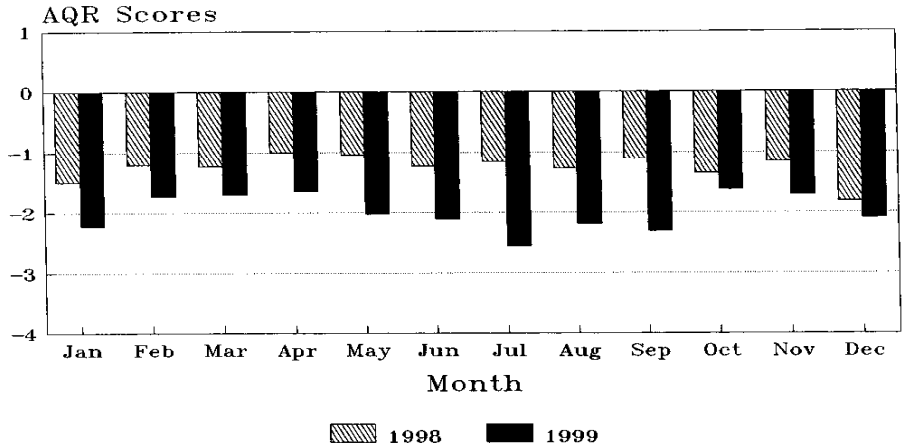
	1998	1999
Jan	-0.998	-2.110
Feb	-0.945	-1.834
Mar	-0.930	-1.709
Apr	-0.828	-1.635
May	-0.979	-1.546
Jun	-1.570	-1.733
Jul	-0.977	-2.647
Aug	-1.144	-2.162
Sep	-0.964	-2.834
Oct	-0.871	-1.582
Nov	-0.810	-1.589
Dec	-1.624	-1.565
Airline AQR Score	-1.053	-1.912
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

US AIRWAYS 1998 - 1999



AIRLINE QUALITY RATING
AMERICAN AIRLINES

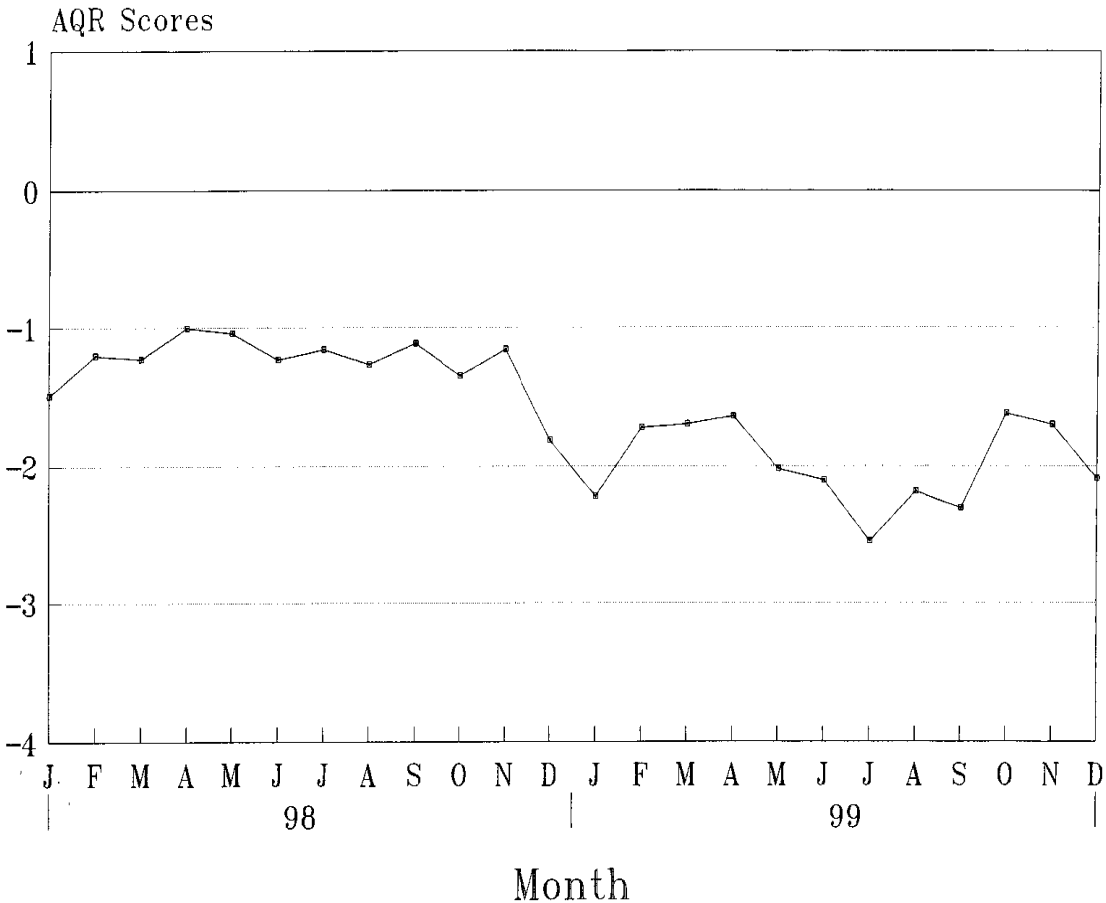


American Airlines
Monthly AQR Scores

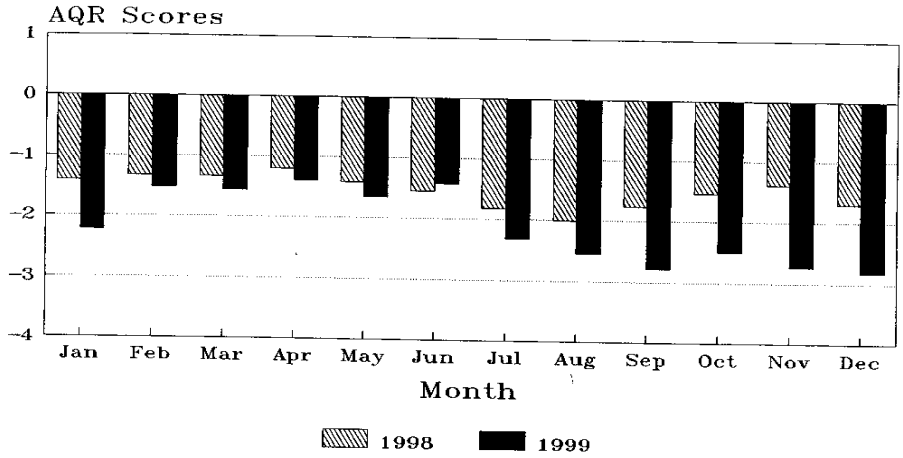
	1998	1999
Jan	-1.490	-2.221
Feb	-1.204	-1.727
Mar	-1.230	-1.700
Apr	-1.005	-1.643
May	-1.043	-2.024
Jun	-1.234	-2.105
Jul	-1.157	-2.554
Aug	-1.267	-2.190
Sep	-1.116	-2.308
Oct	-1.351	-1.620
Nov	-1.159	-1.702
Dec	-1.814	-2.094
Airline AQR Score	-1.256	-1.991
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

AMERICAN 1998 - 1999



AIRLINE QUALITY RATING
AMERICA WEST

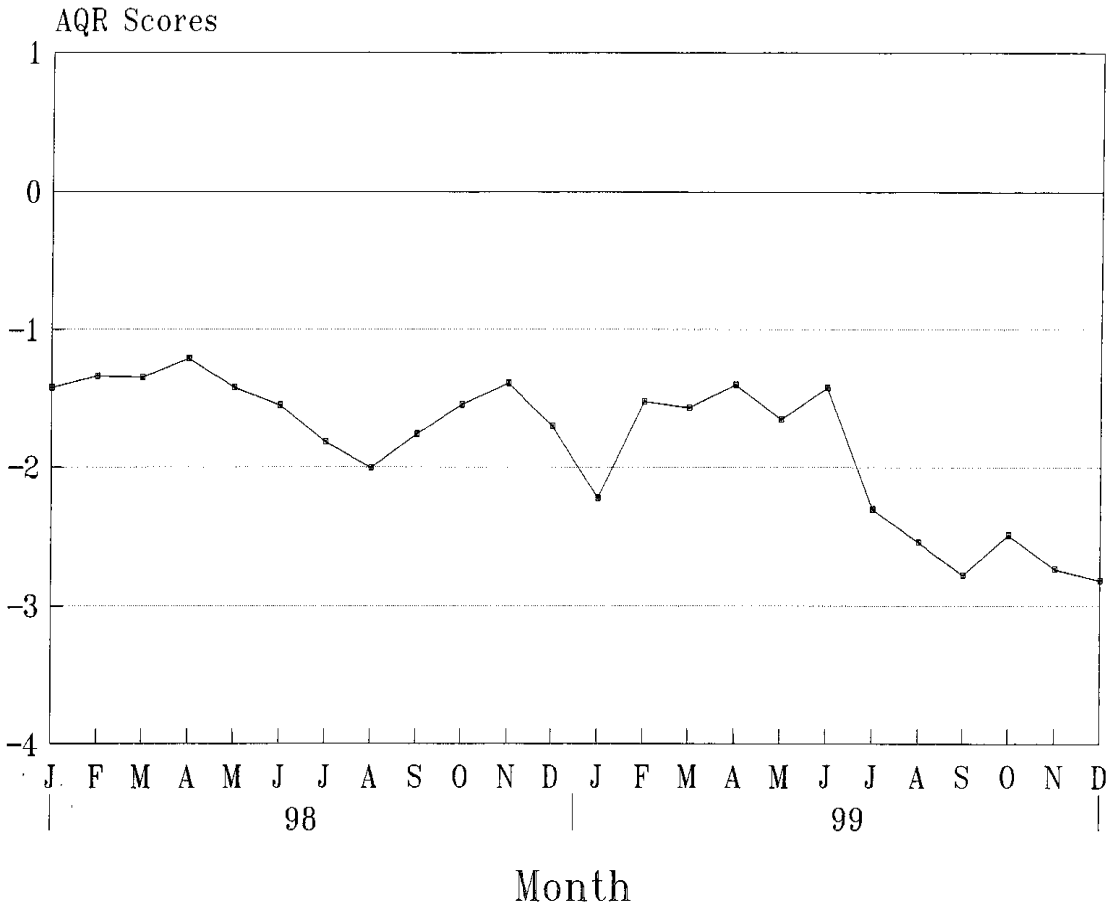


America West Airlines
Monthly AQR Scores

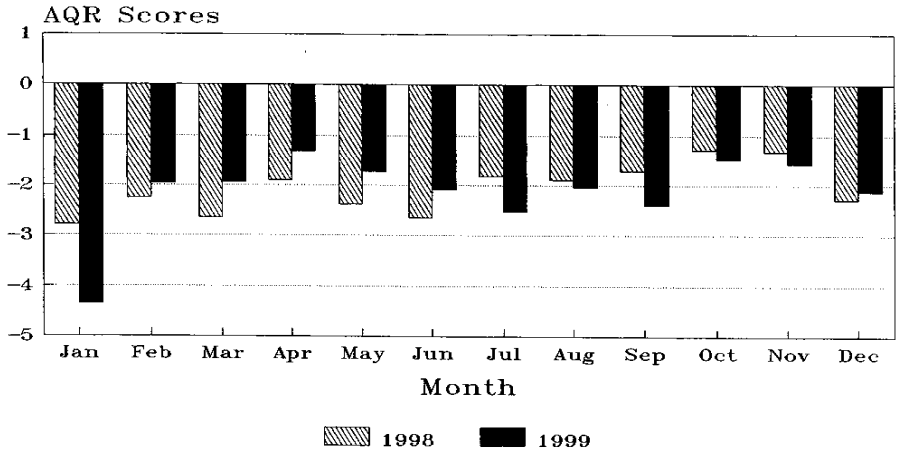
	1998	1999
Jan	-1.418	-2.226
Feb	-1.337	-1.521
Mar	-1.344	-1.564
Apr	-1.210	-1.400
May	-1.417	-1.652
Jun	-1.546	-1.423
Jul	-1.817	-2.311
Aug	-2.005	-2.546
Sep	-1.758	-2.781
Oct	-1.543	-2.497
Nov	-1.389	-2.737
Dec	-1.699	-2.818
Airline AQR Score	-1.540	-2.123
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

AMERICA WEST 1998 - 1999



AIRLINE QUALITY RATING
TRANS WORLD AIRLINES

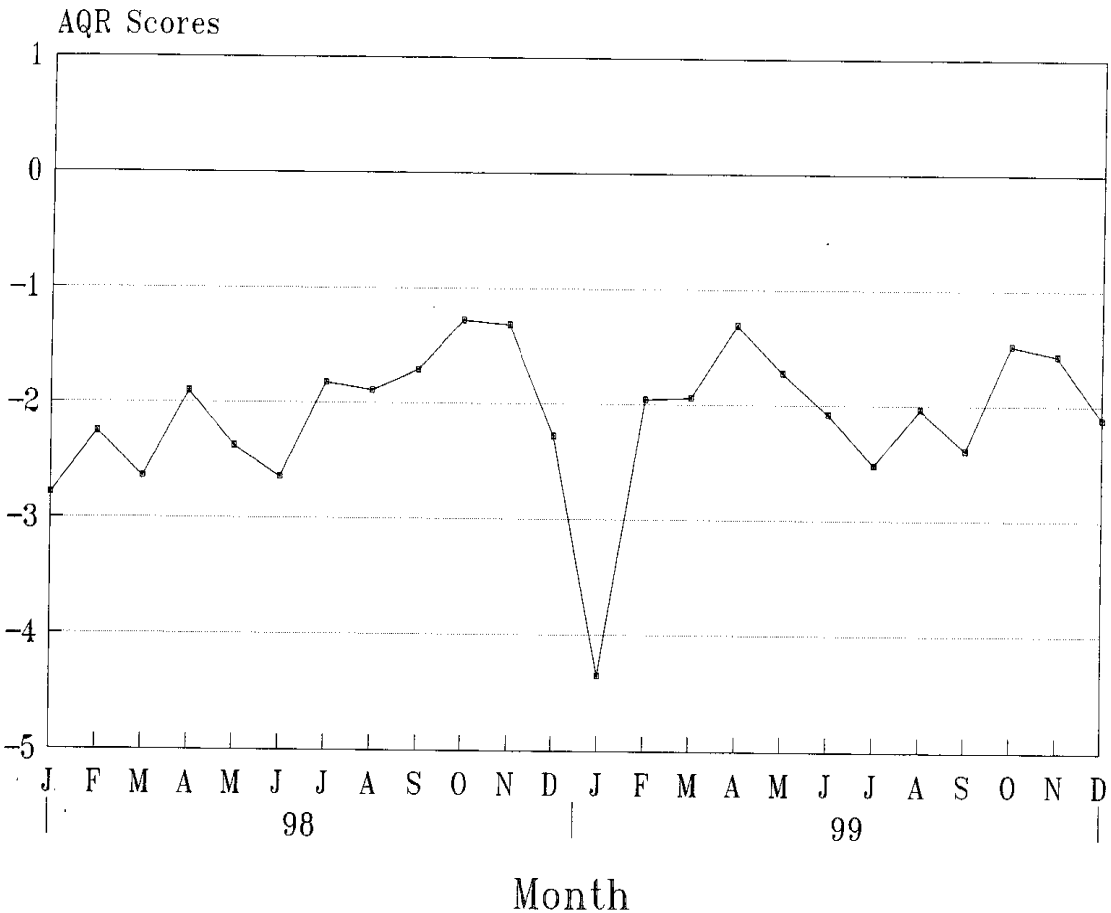


Trans World Airlines
Monthly AQR Scores

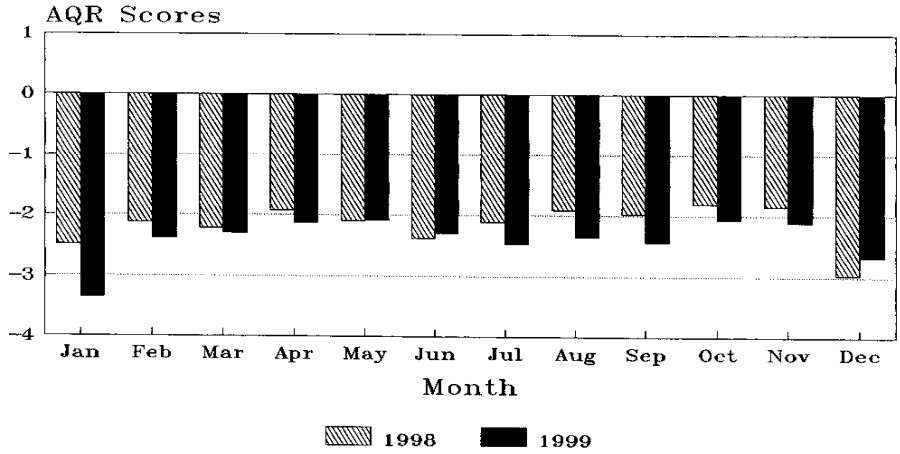
	1998	1999
Jan	-2.791	-4.352
Feb	-2.256	-1.961
Mar	-2.644	-1.946
Apr	-1.901	-1.312
May	-2.378	-1.728
Jun	-2.644	-2.084
Jul	-1.822	-2.524
Aug	-1.893	-2.035
Sep	-1.711	-2.394
Oct	-1.278	-1.482
Nov	-1.314	-1.571
Dec	-2.283	-2.122
Airline AQR Score	-2.076	-2.126
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING

TRANS WORLD AIRLINES 1998 - 1999



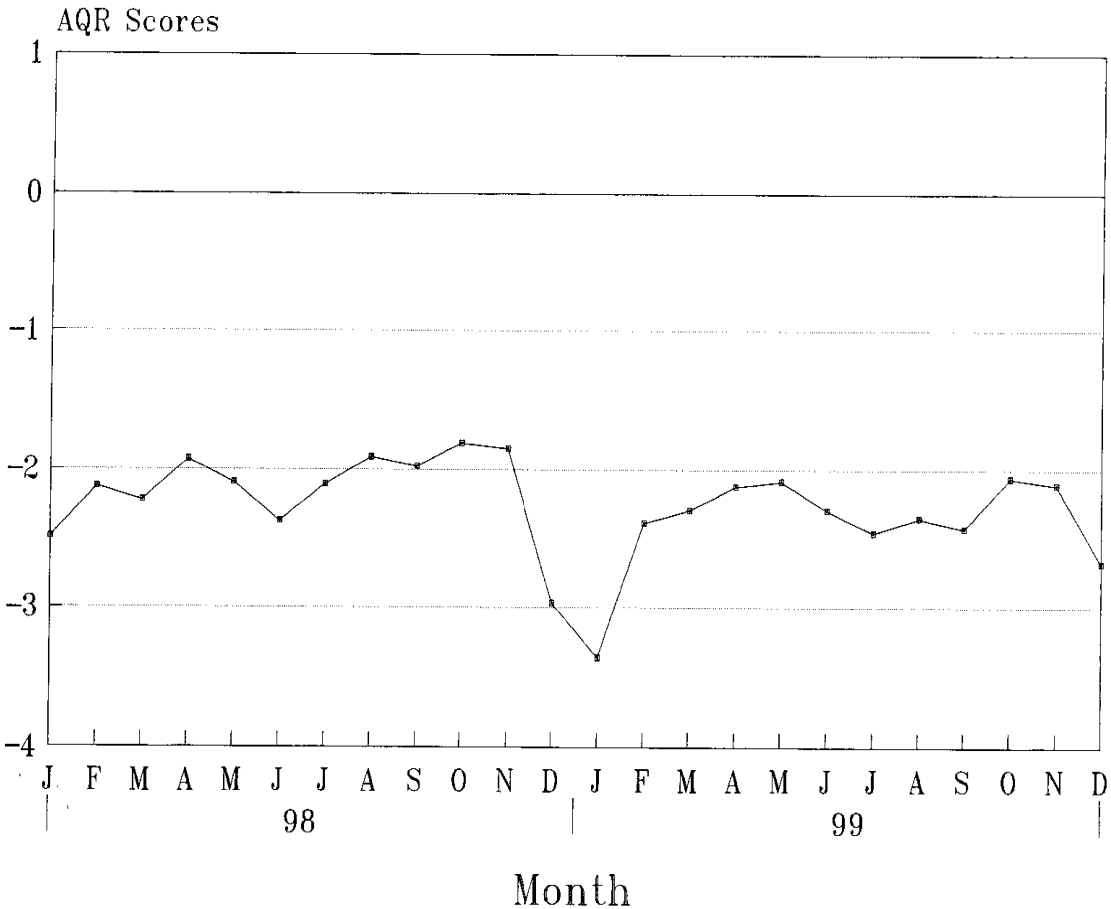
AIRLINE QUALITY RATING
UNITED



United Airlines
Monthly AQR Scores

	1998	1999
Jan	-2.490	-3.360
Feb	-2.128	-2.387
Mar	-2.223	-2.297
Apr	-1.929	-2.124
May	-2.095	-2.086
Jun	-2.374	-2.294
Jul	-2.105	-2.462
Aug	-1.912	-2.351
Sep	-1.977	-2.429
Oct	-1.811	-2.064
Nov	-1.850	-2.110
Dec	-2.971	-2.681
Airline AQR Score	-2.155	-2.387
Industry AQR Score	-1.609	-1.850

AIRLINE QUALITY RATING
UNITED 1998 - 1999



APPENDIX

Detail of Frequently Cited Airline Performance Criteria

Consumer interest remains high regarding such issues as on-time performance, mishandled baggage, involuntary denied boardings (bumping), and treatment of customers. Since these criteria are central to the AQR calculations, it is important to provide more complete data for individual airlines in these areas. The following data tables and charts provide a detailed look at the performance of each of the ten major U.S. airlines for the 12 months of 1999 and 1998 regarding on-time arrivals, mishandled baggage, involuntary denied boardings, and consumer complaints. Data were drawn from the U.S. Department of Transportation monthly *Air Travel Consumer Report*.

We offer some observations in areas of concern to most consumers (on-time, mishandled bags, denied boardings, consumer complaints, and safety). This information can be useful in helping the less familiar consumer gain a perspective on issues of interest in the airline industry. Additional tables are included that give an overview of consumer complaints by type for 1999, and on-time arrival and departure information for the busiest airports.

The final pages of this appendix outline the Airline Quality Rating criteria definitions for reference and clarity in fully understanding the nature of the data reported.

1999 On-Time Arrival Percentage by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Average
Alaska	.665	.709	.715	.726	.708	.742	.726	.644	.794	.780	.692	.615	.710
American	.671	.715	.728	.697	.652	.647	.707	.784	.775	.812	.832	.778	.735
America West	.683	.780	.764	.716	.745	.708	.595	.629	.658	.668	.691	.718	.695
Continental	.720	.830	.803	.792	.746	.688	.679	.756	.788	.801	.814	.781	.766
Delta	.714	.808	.793	.787	.797	.723	.741	.780	.809	.781	.837	.802	.780
Northwest	.627	.824	.810	.806	.823	.751	.738	.813	.856	.852	.881	.815	.799
Southwest	.767	.828	.811	.781	.797	.769	.784	.817	.853	.834	.789	.770	.800
Trans World	.600	.832	.846	.803	.824	.682	.765	.849	.894	.895	.897	.824	.809
United	.665	.786	.788	.711	.737	.689	.695	.718	.760	.795	.812	.779	.744
US Airways	.582	.745	.730	.743	.761	.681	.612	.690	.715	.749	.782	.777	.714
Monthly Avg.	.677	.789	.781	.757	.762	.709	.711	.761	.793	.801	.814	.780	.761

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 On-Time Arrival Ranking by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Ranking
Alaska	6	10	10	7	9	3	5	9	5	8	9	10	9
American	5	9	9	10	10	10	6	4	7	4	4	6	7
America West	4	7	7	8	7	5	10	10	10	10	10	9	10
Continental	2	2	4	3	6	7	8	6	6	5	5	4	5
Delta	3	5	5	4	4	4	3	5	4	7	3	3	4
Northwest	8	4	3	1	2	2	4	3	2	2	2	2	3
Southwest	1	3	2	5	3	1	1	2	3	3	7	8	2
Trans World	9	1	1	2	1	8	2	1	1	1	1	1	1
United	7	6	6	9	8	6	7	7	8	6	6	5	6
US Airways	10	8	8	6	5	9	9	8	9	9	8	7	8

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 On-Time Arrival Percentage by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Average
Alaska	.693	.665	.756	.807	.731	.721	.723	.740	.782	.765	.707	.542	.719
American	.786	.819	.786	.848	.831	.750	.809	.769	.823	.774	.838	.783	.801
America West	.731	.620	.679	.749	.731	.663	.649	.655	.692	.694	.733	.618	.685
Continental	.722	.699	.737	.760	.757	.696	.807	.767	.859	.841	.822	.802	.773
Delta	.755	.737	.756	.770	.795	.754	.819	.827	.862	.865	.848	.766	.796
Northwest	.691	.793	.729	.713	.715	.587	.745	.639	.361	.859	.860	.781	.706
Southwest	.794	.748	.767	.826	.834	.814	.839	.826	.853	.815	.836	.746	.808
Trans World	.733	.784	.705	.783	.754	.649	.775	.835	.877	.879	.877	.757	.783
United	.694	.715	.740	.787	.690	.646	.739	.750	.793	.769	.807	.727	.738
US Airways	.808	.811	.825	.820	.800	.653	.810	.773	.862	.832	.857	.617	.789
Monthly Avg.	.751	.754	.759	.791	.775	.704	.789	.770	.789	.817	.833	.732	.772

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 On-Time Arrival Ranking by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Ranking
Alaska	9	9	5	4	8	4	9	8	8	9	10	10	8
American	3	1	2	1	2	3	4	5	6	7	5	2	2
America West	6	10	10	9	7	6	10	9	9	10	9	8	10
Continental	7	8	7	8	5	5	5	6	4	4	7	1	6
Delta	4	6	4	7	4	2	2	2	2	2	4	4	3
Northwest	10	3	8	10	9	10	7	10	10	3	2	3	9
Southwest	2	5	3	2	1	1	1	3	5	6	6	6	1
Trans World	5	4	9	6	6	8	6	1	1	1	1	5	5
United	8	7	6	5	10	9	8	7	7	8	8	7	7
US Airways	1	2	1	3	3	7	3	4	3	5	3	9	4

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

On-Time Performance for Selected* U.S. Airports
January - June, 1999

	JAN % On-Time		FEB % On-Time		MAR % On- Time		APR % On- Time		MAY % On- Time		JUN % On- Time	
	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
ATL	67.7	72.5	78.7	82.3	76.8	79.0	74.0	79.0	77.7	80.4	68.1	73.0
BWI	68.5	69.9	81.6	83.0	77.5	78.9	79.6	77.7	75.9	78.7	70.2	73.5
BOS	61.4	68.0	70.4	76.9	63.1	73.8	72.6	74.4	67.9	79.8	69.0	77.5
CLT	68.0	68.8	79.7	77.8	79.9	79.5	80.8	80.5	82.1	81.2	74.4	73.3
ORD	54.8	58.0	73.5	77.6	75.3	77.3	64.6	73.6	65.9	73.6	64.6	68.8
CVG	70.3	73.7	84.9	88.4	82.9	86.6	79.1	85.1	80.3	85.4	76.6	81.5
DFW	75.5	73.6	81.7	78.8	78.2	77.4	74.9	76.9	69.9	70.8	71.9	72.8
DEN	73.5	77.6	84.2	86.0	84.9	86.4	77.0	82.5	81.7	85.3	72.7	76.9
DTW	61.0	57.8	83.4	81.4	80.4	78.7	81.0	80.7	82.3	82.4	78.5	77.9
IAH	78.7	80.5	86.7	87.8	83.2	85.6	80.9	84.8	77.0	80.7	68.3	73.1
MCI	68.2	73.4	80.7	85.2	81.1	84.4	76.9	83.0	77.7	84.9	70.4	77.1
LAS	72.5	75.5	78.5	79.8	78.8	78.9	74.5	76.8	80.3	81.4	74.5	75.4
LAX	71.8	78.2	75.1	79.4	76.1	80.2	70.3	77.7	76.5	81.4	69.2	78.3
MIA	70.8	74.2	75.0	76.3	78.0	82.0	76.0	81.0	71.5	79.8	59.8	69.1
MSP	68.7	68.5	84.4	85.1	83.9	84.0	83.1	86.1	83.2	85.4	74.6	76.1
LGA	62.6	69.0	70.4	77.0	70.8	79.0	73.9	82.7	65.1	78.6	65.0	76.0
EWR	61.1	66.0	872.3	78.1	70.0	77.5	69.9	80.6	65.8	77.6	64.7	74.7
MCO	67.9	74.5	82.6	85.9	80.4	84.0	78.8	83.7	78.9	84.6	70.3	78.8
PHL	57.9	55.9	72.5	72.5	70.4	71.0	71.0	74.7	67.8	74.4	65.2	69.7
PHX	73.4	74.7	78.9	80.1	77.8	77.6	72.1	74.1	81.5	80.2	74.9	74.8
PIT	58.7	58.6	80.2	81.3	78.7	80.2	77.1	81.1	80.6	81.8	73.9	72.9
SLC	75.4	81.9	81.2	85.4	82.8	86.9	81.9	86.6	84.7	87.4	78.5	83.9
SAN	69.2	77.1	76.8	81.5	74.3	80.5	72.2	80.0	78.1	82.2	73.1	81.9
SFO	61.0	72.5	66.6	75.1	70.4	78.7	70.2	79.7	71.1	80.2	69.3	79.9
SJC	72.7	81.0	75.2	80.4	78.6	83.9	76.3	80.7	81.5	85.5	77.1	84.4
SEA	63.8	75.1	72.0	81.0	78.0	82.8	74.6	80.1	71.3	77.8	68.5	76.7
STL	79.9	60.5	83.0	83.5	84.1	83.6	79.0	80.5	83.3	82.5	71.3	68.7
TPA	64.7	72.7	79.6	82.9	78.3	82.1	75.8	82.6	76.5	82.6	67.0	76.5
DCA	65.7	72.4	78.4	82.4	76.4	80.4	79.2	85.1	75.1	83.1	70.9	80.3
IAD	67.8	71.5	74.9	79.4	68.0	72.9	72.5	77.6	71.5	79.8	64.8	73.4

*Selected based on average number of reported operations exceeding 5000 per month.

ATL Atlanta	**DFW** Dallas	**LAX** Los Angeles	**PHL** Philadelphia	**SJC** San Jose
BWI Baltimore	**DEN** Denver	**MIA** Miami	**PHX** Phoenix	**SEA** Seattle
BOS Boston	**DTW** Detroit	**MSP** Minn./St.Paul	**PIT** Pittsburgh	**STL** St. Louis
CLT Charlotte	**IAH** Houston	**LGA** LaGuardia	**SLC** Salt Lake City	**TPA** Tampa
ORD Chicago	**MCI** Kansas City	**EWR** Newark	**SAN** San Diego	**DCA** Regan Nat'l
CVG Cincinnati	**LAS** Las Vegas	**MCO** Orlando	**SFO** SanFrancisco	**IAD** Washington, Dulles

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

On-Time Performance for Selected* U.S. Airports
July - December, 1999

	JUL % On-Time		AUG % On-Time		SEP % On- Time		OCT % On- Time		NOV % On- Time		DEC % On- Time	
	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
ATL	69.1	73.2	75.2	78.1	77.4	82.0	68.2	75.7	80.5	85.3	74.1	80.4
BWI	67.0	70.6	74.3	75.7	77.3	80.0	79.6	79.6	75.3	77.4	79.1	80.2
BOS	62.3	70.7	72.6	79.2	67.8	75.9	72.6	78.4	75.8	83.7	78.7	84.4
CLT	68.9	66.7	76.2	74.2	80.5	79.8	82.2	80.2	85.6	84.4	83.0	85.1
ORD	66.4	70.1	74.0	77.9	79.9	82.7	78.2	82.2	82.2	85.2	68.9	73.5
CVG	78.2	82.2	81.7	85.8	88.1	90.1	87.3	90.0	87.8	90.3	84.9	88.4
DFW	78.3	76.3	84.0	83.6	85.8	86.3	87.1	87.5	89.6	88.6	82.7	83.4
DEN	74.5	78.4	77.5	81.0	83.1	87.2	84.3	87.6	88.4	89.8	82.4	85.6
DTW	75.4	73.7	82.9	81.0	86.8	84.8	86.1	83.9	87.1	85.9	84.1	81.1
IAH	71.2	75.4	80.5	82.6	85.0	88.1	85.6	82.9	87.5	89.0	76.7	74.3
MCI	74.9	81.7	81.3	86.2	85.1	90.1	82.8	87.4	84.3	86.7	77.5	80.7
LAS	73.7	71.8	75.1	73.3	76.2	76.0	77.2	76.3	76.8	75.3	76.8	76.1
LAX	73.9	79.2	73.6	77.1	69.3	75.2	77.1	80.6	77.0	78.2	81.0	81.3
MIA	66.8	75.4	67.4	73.2	70.6	75.6	74.5	79.0	82.4	84.9	75.2	83.1
MSP	74.8	75.3	81.4	82.6	88.4	87.9	87.3	88.0	89.8	89.5	81.7	79.7
LGA	59.9	71.1	71.0	78.5	66.2	76.3	71.3	78.9	71.2	80.4	75.2	83.0
EWR	83.5	85.9	80.5	82.9	80.1	83.7	72.8	79.0	67.1	78.4	69.3	78.6
MCO	73.0	81.4	75.4	82.8	76.7	82.7	77.3	83.3	83.8	88.4	78.2	86.5
PHL	59.6	62.1	67.5	71.5	68.5	73.0	75.8	77.7	72.0	77.1	73.5	78.1
PHX	70.4	69.2	72.8	72.2	77.1	77.1	79.4	77.2	80.8	76.3	80.7	78.0
PIT	66.7	63.9	75.2	76.2	79.6	79.1	81.6	80.5	82.5	83.2	80.9	83.0
SLC	81.9	84.0	81.6	83.8	85.9	89.0	88.2	90.4	86.7	88.0	80.9	82.4
SAN	75.9	81.5	76.4	79.5	80.1	84.4	82.3	84.8	78.1	78.8	81.2	82.1
SFO	67.9	78.5	61.3	72.4	69.2	77.5	76.0	83.0	70.9	76.8	83.0	85.9
SJC	78.1	85.1	78.0	83.9	76.0	79.8	81.4	84.0	76.4	78.0	79.9	81.1
SEA	69.5	76.1	67.5	71.0	76.9	82.1	72.2	79.8	74.5	79.5	60.9	68.4
STL	78.0	74.1	85.4	83.8	90.1	89.9	87.9	88.1	88.6	87.7	80.0	81.0
TPA	67.7	77.9	72.9	82.0	75.8	82.8	74.7	83.6	81.6	86.9	74.5	84.4
DCA	67.3	75.8	76.3	83.4	74.8	82.4	81.2	86.4	83.2	88.9	81.3	87.2
IAD	63.6	70.1	69.8	75.3	69.9	76.0	76.2	81.5	79.7	84.8	79.8	84.4

*Selected based on average number of reported operations exceeding 5000 per month.

ATL Atlanta	**DFW** Dallas	**LAX** Los Angeles	**PHL** Philadelphia	**SJC** San Jose
BWI Baltimore	**DEN** Denver	**MIA** Miami	**PHX** Phoenix	**SEA** Seattle
BOS Boston	**DTW** Detroit	**MSP** Minn./St.Paul	**PIT** Pittsburgh	**STL** St. Louis
CLT Charlotte	**IAH** Houston	**LGA** LaGuardia	**SLC** Salt Lake City	**TPA** Tampa
ORD Chicago	**MCI** Kansas City	**EWR** Newark	**SAN** San Diego	**DCA** Regan Nat'l
CVG Cincinnati	**LAS** Las Vegas	**MCO** Orlando	**SFO** SanFrancisco	**IAD** Washington, Dulles

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 Involuntary Denied Boardings by Quarter for U.S. Major Airlines
(per 10,000 passengers)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1999 Average
Alaska	0.76	1.27	0.92	0.67	0.91
American	0.51	0.39	0.37	0.45	0.43
America West	1.53	1.13	1.48	1.44	1.39
Continental	0.31	0.26	0.28	0.50	0.34
Delta	3.33	2.07	0.61	0.15	1.53
Northwest	0.39	0.13	0.12	0.12	0.18
Southwest	1.33	1.48	1.39	1.30	1.38
Trans World	2.56	0.27	0.10	0.25	0.73
United	1.17*	0.41*	0.55*	1.54*	0.90*
US Airways	0.94	0.53	0.26	0.39	0.52
Industry Average	1.44	0.89	0.57	0.67	0.88

* Figures may reflect an inaccurate rate of passengers involuntarily denied boardings as reported to DOT by United Airlines.

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 Involuntary Denied Boardings by Quarter for U.S. Major Airlines
(per 10,000 passengers)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1998 Average
Alaska	1.82	1.58	1.14	1.13	1.30
American	0.41	0.47	0.37	0.60	0.46
America West	1.23	1.22	0.91	1.22	1.14
Continental	0.16	0.12	0.11	0.21	0.14
Delta	1.14	1.59	0.99	1.54	1.31
Northwest	0.22	0.45	0.30	0.23	0.30
Southwest	1.83	1.94	1.75	1.41	1.73
Trans World	4.37	2.96	1.86	1.28	2.61
United	0.64*	0.62*	0.53*	0.51*	0.57*
US Airways	0.27	0.28	0.15	0.20	0.22
Industry Average	0.95	1.01	0.74	0.82	0.87

* Figures may reflect an inaccurate rate of passengers involuntarily denied boardings as reported to DOT by United Airlines.

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 Mishandled Baggage by Month for U.S. Major Airlines

(per 1,000 passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Average
Alaska	8.87	6.23	6.34	6.66	7.24	7.89	5.19	4.18	2.97	3.55	3.74	6.86	5.75
American	7.20	4.64	5.09	4.77	5.08	5.84	5.87	5.13	4.29	4.38	4.32	5.86	5.21
America West	5.21	3.52	4.05	3.97	3.41	4.30	5.38	5.12	3.93	4.38	4.57	6.31	4.52
Continental	8.49	4.28	4.11	3.55	3.69	5.20	5.15	4.25	3.31	3.47	3.04	4.78	4.42
Delta	7.63	4.25	4.29	3.97	3.79	3.87	4.99	4.67	3.81	4.35	3.11	4.21	4.39
Northwest	10.30	5.04	5.36	4.54	3.54	4.48	4.97	4.11	3.39	3.70	3.65	5.82	4.81
Southwest	5.70	4.20	4.08	4.02	3.95	4.32	4.32	4.12	3.33	3.70	4.13	5.10	4.22
Trans World	11.99	4.48	4.67	4.35	4.39	6.18	6.54	4.79	3.85	4.03	3.97	6.57	5.38
United	11.27	7.71	7.72	7.08	6.35	7.54	7.09	6.50	5.11	5.26	5.33	7.89	7.01
US Airways	5.37	5.29	5.12	4.49	4.72	5.24	7.72	5.27	4.37	4.32	4.13	4.86	5.08
Monthly Avg.	8.08	5.05	5.12	4.70	4.53	5.29	5.75	4.94	3.99	4.25	4.01	5.63	5.08

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 Mishandled Baggage Rankings by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Ranking
Alaska	7	9	9	9	10	10	5	3	1	2	4	9	9
American	4	6	6	8	8	7	7	8	8	8	8	6	7
America West	1	1	1	2	1	2	6	7	7	9	9	7	4
Continental	6	4	3	1	3	5	4	4	2	1	1	2	3
Delta	5	3	4	3	4	1	3	5	5	7	2	1	2
Northwest	8	7	8	7	2	4	2	1	4	3	3	5	5
Southwest	3	2	2	4	5	3	1	2	3	4	7	4	1
Trans World	10	5	5	5	6	8	8	6	6	5	5	8	8
United	9	10	10	10	9	9	9	10	10	10	10	10	10
US Airways	2	8	7	6	7	6	10	9	9	6	6	3	6

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 Mishandled Baggage by Month for U.S. Major Airlines

(per 1,000 passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Average
Alaska	7.63	5.50	5.72	4.81	5.73	7.32	8.64	8.51	8.09	5.54	6.33	12.27	7.27
American	5.49	4.11	4.61	3.56	3.55	4.50	4.22	4.49	3.72	4.32	3.89	6.34	4.40
America West	4.04	3.80	3.56	3.00	3.53	4.27	4.48	4.56	3.81	3.44	3.03	4.99	3.88
Continental	4.56	3.45	4.00	3.51	3.88	4.57	3.50	4.22	3.21	4.01	3.83	5.96	4.06
Delta	5.62	4.96	4.39	4.16	4.00	3.99	4.07	4.08	3.96	3.72	3.50	5.06	4.27
Northwest	8.01	5.47	6.83	6.55	6.89	8.36	6.76	7.70	4.25	4.56	4.66	7.73	6.63
Southwest	4.71	4.60	4.69	4.22	4.03	4.62	4.58	4.57	4.03	4.05	3.93	6.43	4.53
Trans World	6.68	4.58	6.14	4.53	6.24	6.91	5.12	4.81	3.99	3.58	4.04	7.82	5.39
United	9.04	7.25	8.12	6.84	7.29	8.56	7.63	7.59	6.84	6.46	6.35	11.55	7.79
US Airways	4.10	3.90	3.82	3.42	3.68	5.99	3.95	4.18	3.14	3.58	3.08	6.31	4.09
Monthly Avg.	6.04	4.91	5.26	4.56	4.79	5.76	5.09	5.28	4.41	4.39	4.21	7.19	5.16

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 Mishandled Baggage Rankings by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Ranking
Alaska	8	9	7	8	7	8	10	10	10	9	9	10	9
American	5	4	5	4	2	3	4	4	3	7	7	5	5
America West	1	2	2	1	1	2	5	5	4	1	1	1	1
Continental	3	1	3	3	4	4	1	3	2	5	4	3	2
Delta	6	7	4	5	5	1	3	1	5	4	3	2	4
Northwest	9	8	9	9	9	9	8	9	8	8	8	7	8
Southwest	4	6	6	6	6	5	6	6	7	6	6	6	6
Trans World	7	5	8	7	8	7	7	7	6	3	7	8	7
United	10	10	10	10	10	10	9	8	9	10	10	9	10
US Airways	2	3	1	2	3	6	2	2	1	2	2	4	3

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 Total Complaints to Department of Transportation by Month for U.S. Major Airlines

(per 100,000 passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Average
Alaska	1.34	0.74	0.96	0.45	2.38	2.10	1.33	1.74	3.53	1.32	1.27	2.38	1.64
American	2.21	2.81	2.21	2.41	3.70	3.21	5.26	4.56	6.00	2.81	3.26	3.23	3.50
America West	3.21	2.07	1.66	1.41	3.18	1.14	3.35	4.72	7.11	5.41	6.29	4.76	3.73
Continental	1.46	1.30	1.27	1.39	2.35	1.69	3.12	3.76	6.87	2.57	3.35	2.20	2.62
Delta	1.52	1.10	1.11	1.40	1.82	1.36	2.02	2.62	3.61	1.59	2.03	1.68	1.82
Northwest	3.89	2.81	1.51	2.71	3.21	1.97	3.33	2.85	6.10	2.73	2.31	2.01	2.93
Southwest	0.40	0.24	0.18	0.15	0.50	0.29	0.42	0.59	0.84	0.30	0.51	0.30	0.40
Trans World	3.88	1.87	1.61	1.67	3.49	2.92	4.76	4.63	7.31	2.91	3.37	2.85	3.45
United	1.92	1.69	1.28	1.98	2.65	2.20	3.29	3.48	5.41	2.56	2.71	2.37	2.66
US Airways	3.06	2.12	1.74	2.58	2.74	2.11	3.64	4.29	8.29	2.70	2.98	2.06	3.15
Monthly Avg.	2.07	1.67	1.35	1.73	2.47	1.89	3.06	3.23	5.18	2.27	2.56	2.14	2.48

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 Total Complaints to Department of Transportation Rankings by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Ranking
Alaska	2	2	2	2	4	6	2	2	2	2	2	7	2
American	6	9	10	8	10	10	10	8	5	8	7	9	9
America West	8	7	8	5	7	2	7	10	8	10	10	10	10
Continental	3	4	4	3	3	4	4	6	7	5	8	5	4
Delta	4	3	3	4	2	3	3	3	3	3	3	2	3
Northwest	10	10	6	10	8	5	6	4	6	7	4	3	6
Southwest	1	1	1	1	1	1	1	1	1	1	1	1	1
Trans World	9	6	7	6	9	9	9	9	9	9	9	8	8
United	5	5	5	7	5	8	5	5	4	4	5	6	5
US Airways	7	8	9	9	6	7	8	7	10	6	6	4	7

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

Overview of Complaints Received by Department of Transportation 1998 and 1999

	Complaints Received for All Airlines*		Complaints Received for U.S. Airlines		Complaints Received for 10 Major Airlines		Top Four Categories** of Complaints to All U.S. Airlines, 1999			
	1998	1999	1998	1999	1998	1999	1	2	3	4
Jan	629	1175	521	1028	336	829	FP	CS	BG	TB
Feb	731	1018	567	849	354	651	FP	CS	BG	TB
Mar	767	1154	627	969	368	647	FP	BG	CS	TB
Apr	705	1314	590	1122	408	804	FP	CS	BG	TB
May	914	1704	774	1436	531	1151	FP	CS	BG	TB
Jun	709	1332	637	1142	473	925	FP	CS	BG	TB
Jul	920	2485	779	2111	582	1584	FP	CS	BG	TB
Aug	1129	2347	973	1983	768	1634	FP	CS	BG	TB
Sep	1026	3161	872	2732	695	2265	FP	CS	BG	TB
Oct	805	1616	644	1325	485	1086	FP	CS	BG	TB
Nov	722	1700	602	1385	481	1179	FP	CS	BG	TB
Dec	550	1477	445	1231	327	952	FP	CS	BG	TB
Total	**9606**	**20495**	**7994**	**17381**	**5808**	**13709**	**FP**	**CS**	**BG**	**TB**
Percent (%) of All Complaints for U.S. Carriers in these Categories for 1999							**37.2**	**21.1**	**13.5**	**7.6**

* Total number includes complaints for all U.S. airlines + foreign airlines + cargo companies + travel agents + tour operators + miscellaneous sources.

** FP = Flight Problems; CS = Customer Service; BG = Baggage; TB = Reservations, Ticketing, and Boarding. Details of categories and definitions are listed in the appendix.

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 Total Complaints to Department of Transportation by Month for U.S. Major Airlines

(per 100,000 passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Average
Alaska	0.34	0.56	0.46	0.28	0.64	0.17	0.88	0.45	0.75	0.68	0.93	0.45	0.54
American	1.02	1.32	0.84	1.01	1.17	0.87	1.02	1.16	1.41	1.47	1.17	1.30	1.14
America West	1.32	1.09	1.46	1.58	1.89	1.56	2.86	3.61	3.39	2.50	2.32	1.39	2.11
Continental	0.73	0.75	0.72	0.39	0.73	1.22	1.17	1.97	1.31	1.59	0.82	0.67	1.02
Delta	0.62	0.55	0.68	0.78	0.91	0.60	0.68	1.00	1.43	0.78	0.90	0.56	0.79
Northwest	1.43	1.31	1.03	1.73	2.80	2.34	3.15	4.08	9.01	1.35	1.81	0.69	2.21
Southwest	0.30	0.24	0.36	0.26	0.19	0.17	0.18	0.45	0.28	0.10	0.24	0.29	0.25
Trans World	0.97	0.98	0.88	1.04	1.23	1.54	1.26	1.99	2.14	1.33	0.98	0.95	1.29
United	1.16	1.56	1.05	1.24	1.36	1.14	1.19	1.58	1.56	1.24	1.58	0.70	1.28
US Airways	0.56	0.55	0.59	0.56	0.92	0.81	0.77	1.21	1.67	0.68	0.99	0.74	0.84
Monthly Avg.	0.85	0.92	0.79	0.89	1.15	0.98	1.16	1.56	1.69	1.07	1.12	0.74	1.08

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1998 Total Complaints to Department of Transportation Rankings by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Airline Ranking
Alaska	2	4	2	2	2	2	4	1	2	3	4	2	2
American	7	9	6	6	6	5	5	4	4	8	7	9	6
America West	9	7	10	9	9	9	9	9	9	10	10	10	9
Continental	5	5	5	3	3	7	6	7	3	9	2	4	5
Delta	4	2	4	5	4	3	2	3	5	4	3	3	3
Northwest	10	8	8	10	10	10	10	10	10	7	9	5	10
Southwest	1	1	1	1	1	1	1	2	1	1	1	1	1
Trans World	6	6	7	7	7	8	8	8	8	6	5	8	8
United	8	10	9	8	8	6	7	6	6	5	8	6	7
US Airways	3	3	3	4	5	4	3	5	7	2	6	7	4

Source: *Air Travel Consumer Report*, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

Some Interesting Facts About U.S. Airlines

Approximately 499 million people boarded one of the ten major U.S. carriers to fly somewhere inside the U.S. in 1999. This does not consider the almost 55 million people that boarded a flight in the U.S. and went to an international destination. Regional and commuter carriers accounted for an additional approximately 57 million passengers flying domestic routes as well. This totals to approximately 611 million people boarding a plane in the U.S. in 1999. Looking to the future, the Federal Aviation Administration forecasts that domestic passenger enplanements will increase, on average, between 3% and 4% each year for the next 12 years. That would mean domestic enplanements could reach 1 billion passengers by the year 2011.

Mishandled Baggage:

Your chance of having a bag mishandled or lost depends to some extent on how you use the baggage system, but about 1 out of every 200 bags that are checked are reported mishandled. Most bags are returned to the traveler within 48 hours. Only a very few are completely lost and not returned. For 1999:

- Most baggage was reported mishandled in January, July, and December.
- Fewest bags were reported mishandled in September, October, and November.
- Airline that mishandled bags most often per 1,000 passengers was United (7.01).
- The ten major U.S. airlines averaged 5.08 mishandled bags per 1,000 passengers.
- Airline that mishandled the fewest bags per 1,000 passengers was Southwest (4.22).

On-Time Arrival:

On-time arrivals are affected by many uncontrollable factors. When just the more controllable elements are considered, the ten major U.S. carriers maintained a 76.1% on-time arrival record for 1999. This was slightly worse than the 77.2% on-time arrival record for the industry in 1998.

- Worst on-time arrival performer for 1999 was America West (69.5%).
- Best on-time arrival performer for 1999 was Trans World (80.9%).
- The most troublesome months to fly in 1999 (lowest on-time arrival performance for the industry) were January (67.7%), June (70.9%) and July (71.1%).
- The most successful on-time arrival months for the industry in 1999 were November (81.4%) and October (80.1%).
- Performance regarding industry wide average on-time *departure* for the major U.S. airlines at the largest airports was 76.9% in 1999.

Being Bumped From a Flight (Involuntary Denied Boardings):

Across the industry, 0.88 passengers per 10,000 boardings were bumped from their flight involuntarily in 1999. This is slightly worse than the industry rate of 0.87 denied boardings per 10,000 passengers in 1998.

- The airline most likely to involuntarily bump a passenger in 1999: Delta (1.53).
- The airline least likely to involuntarily bump a passenger in 1999: Northwest (0.18).
- The first quarter of 1999 (January - March) was the worst at 1.44 per 10,000.
- The third quarter of 1999 (July - September) was the best at 0.57 per 10,000.

Consumer Complaints:

On average, the Department of Transportation received 2.48 consumer complaints per 100,000 passengers for the ten major carriers in1999. The volume of complaints in 1999 represents a 130% increase in the rate of complaints over 1998. These complaints represent a wide range of areas such as cancellations, delays, oversales, reservation and ticketing problems, fares, refunds, customer treatment, unfair advertising, and other general problems. For 1999:

- ✈ Airline with the most complaints per 100,000 passengers was America West (3.73).
- ✈ Airline with the fewest complaints per 100,000 passengers was Southwest (0.40).
- ✈ September was the month with the highest complaint rate (5.18) per100,000 passengers and March (1.35) had the lowest rate for the ten major carriers.

Airline Safety:

In 1999, there were 228 passenger deaths for the major (Part 121) airlines. These airlines experienced 35 accidents in 1999, compared to 41 accidents in 1998. In 1998 and 1997, one ground crew member was killed in each year during passenger operations, but no passenger deaths were recorded in either year. In 1996, the major airlines experienced 22 accidents and 232 deaths (this does not reflect the 110 fatalities in the Valuejet accident since it is not considered a major carrier). For 1995, major airlines experienced 19 accidents and 3 deaths. In 1994, these airlines experienced 20 accidents and 239 deaths. As can be seen the year to year statistics vary greatly.

National and Regional carriers (Part 135) registered 12 fatalities in 1999 with 18 accidents being reported. No fatalities were recorded in 1998, with eight accidents being reported. In 1997 these carriers experienced 46 fatalities, with 29 of these occurring on the Comair Airlines accident in January, 1997. In 1996 this group of carriers experienced only one fatal crash with 14 victims.

General aviation accident numbers were higher in 1999 (2,055) than in 1998 (1,907). With the slightly higher overall number of accidents, the number of fatalities were also higher in 1999 (670) than in 1998 (621). In 1999, about 1 in 6 (355 of the 2,055) general aviation accidents involved a fatality.

Airline Quality Rating Criteria Overview

Since the original publication of the Airline Quality Rating in 1991, the number of criteria, definitions, and weights were held constant until the 1999 AQR report (reflecting1998 data). With a changing industry, an assessment of criteria relevance was needed. After statistical review and discussion, the number of criteria used to calculate the Airline Quality Rating, 1999 (1998 data) were reduced to 14 customer relevant performance criteria. These 14 criteria are summed up in four basic areas that reflect customer oriented areas of airline performance. Definitions of the four areas used in this AQR 2000 (1999 data) are outlined below.

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 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.

DB INVOLUNTARY DENIED BOARDINGS (-8.03)

This criteria includes involuntary denied boardings. Data regarding denied boardings can be obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. Data includes the number of passengers who are involuntarily denied boarding and the total number of passengers boarded by month. The AQR uses the ratio of involuntary denied boardings per 10,000 passengers.

MB MISHANDLED BAGGAGE REPORTS (-7.92)

Regularly published data regarding consumer reports to the carriers of mishandled baggage can be obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. According to 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.

CC CONSUMER COMPLAINTS (-7.17)

The criteria of consumer complaints is made up of 11 specific complaint categories (outlined below) monitored by the U. S. Department of Transportation and reported monthly in the *Air Travel Consumer Report*. The AQR uses the complaints about the various categories as part of the larger customer complaint criteria and bases the number on the number of complaints received per 100,000 passengers flown.

FLIGHT PROBLEMS

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

OVERSALES
This complaint category includes "all bumping problems, whether or not the airline complied with DOT oversale regulations". Data is available by the total number of consumer complaints pertaining to oversales for each airline each month.

RESERVATIONS, TICKETING, AND BOARDING
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 boarding the aircraft (except oversales)". Data is available by the total number of consumer complaints pertaining to ticketing and boarding for each airline each month.

FARES
As defined by 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 is available for the total number of consumer complaints pertaining to fares for each airline each month.

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

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

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

DISABILITY
Previously included as part of Reservations, Ticketing and Boarding category (thru 6/99), this category includes complaints about "civil rights complaints by air travelers with disabilities". Data is available by the total number of consumer complaints pertaining to disabilities for each airline each month.

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

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

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. The smoking and credit elements were added to this general category as of 9/99. Data is available by the total number of consumer complaints regarding other problems for each airline each month.