

4-6-2019

Quality Analysis of United States Commercial Air Carriers: Airline Quality Rating 2019

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Scholarly Commons Citation

Blocker, K., Bowen, B. D., Bowen, E., Holt, T. B., & Headley, D. E. (2019). Quality Analysis of United States Commercial Air Carriers: Airline Quality Rating 2019. . (). Retrieved from <https://commons.erau.edu/student-works/90>

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Quality Analysis of United States Commercial Air Carriers

Airline Quality Rating 2019

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History of the Airline Quality Rating

- The Airline Quality Rating (AQR) was created and first announced in 1991 by researchers Dr. Brent D. Bowen and Dr. Dean E. Headley
- Before the AQR there was no consistent method for monitoring airline quality in 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 previously in the airline industry
- AQR weighting was originally established by surveying 65 airline industry experts regarding their opinion as to what consumers would rate important (on a scale of 0-10) in judging airline quality
- In the spring of 2002, a nationwide survey of frequent flyers was conducted to revisit AQR weightings
 - Analysis of 766 opinions showed no appreciable difference in relative weights for AQR elements
 - To maintain comparability over the years, the weights have been held constant

Methodology

Multi-Factor Weighted Average Approach:

The Airline Quality Rating uses a mathematical formula that considers multiple weighted objective criteria to arrive at a single, fully comparable rating for airline industry performance. The AQR provides both consumers and industry watchers a means for monitoring comparative quality for each airline on a timely basis, using objective, performance-based data.

- Elements considered for inclusion needed to meet two basic criteria;
 - 1) an element must be obtainable from published data sources for each airlines
 - 2) an element must have relevance to consumer concerns regarding airline quality
- This report relies on published, publicly available data from the Department of Transportation's *Air Travel Consumer Report*

Airline Quality Rating Criteria

Criteria, Weights, and Impact

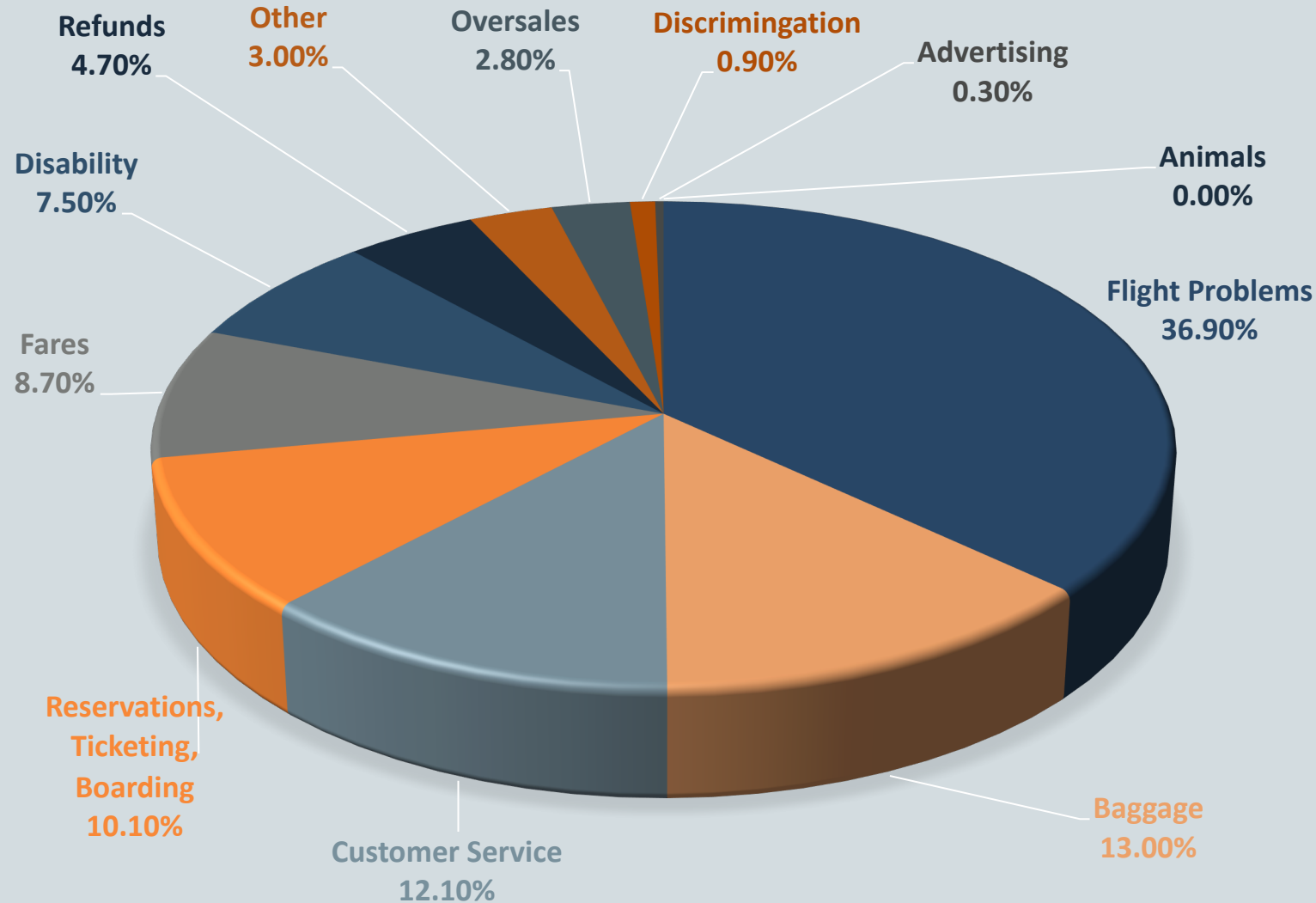
Criteria	Weight	Impact
OT On-Time Arrivals	8.63	+
DB Involuntary Denied Boardings	8.03	-
MB Mishandled Baggage	7.92	-
CC Consumer Complaints	7.17	-

Mathematical Formula for Calculation of AQR Scores

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

2018 Consumer Complaint Percentages by Category

Category	# Received
Flight Problems	3,271
Baggage	1,156
Customer Service	1,073
Res, Ticket, Board	895
Fares	773
Disability	665
Refunds	419
Other	270
Over sales	247
Discrimination	80
Advertising	26
Animals	1
TOTAL	8,876



2018 Airline Performance

Improved

Six Airlines improved their scores from the 2018 Report:

- Delta Air Lines
- Hawaiian Airlines
- JetBlue
- Southwest Airlines
- Spirit Airlines
- United Airlines

Declined

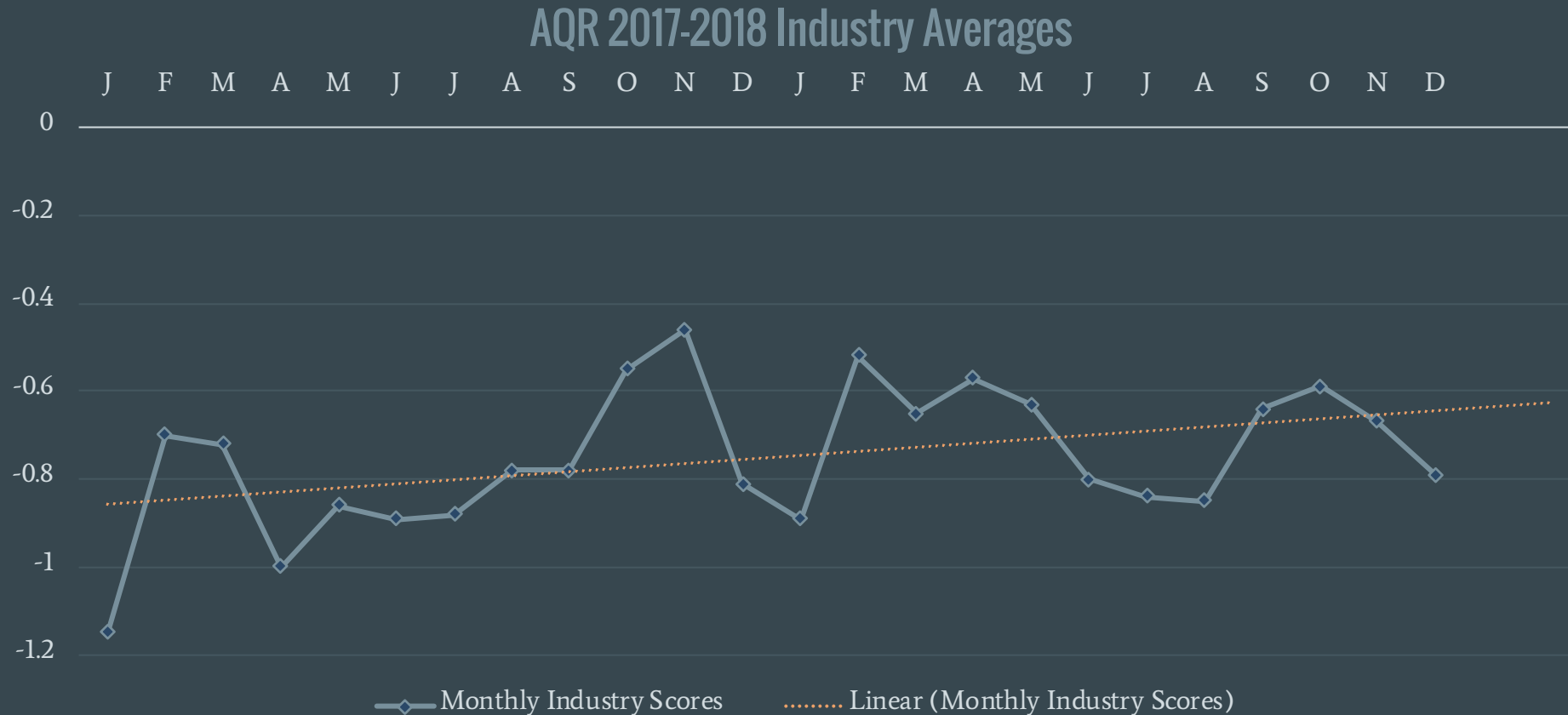
Three Airlines' scores declined from the 2018 Report:

- Alaska Airlines
- American Airlines
- Frontier Airlines

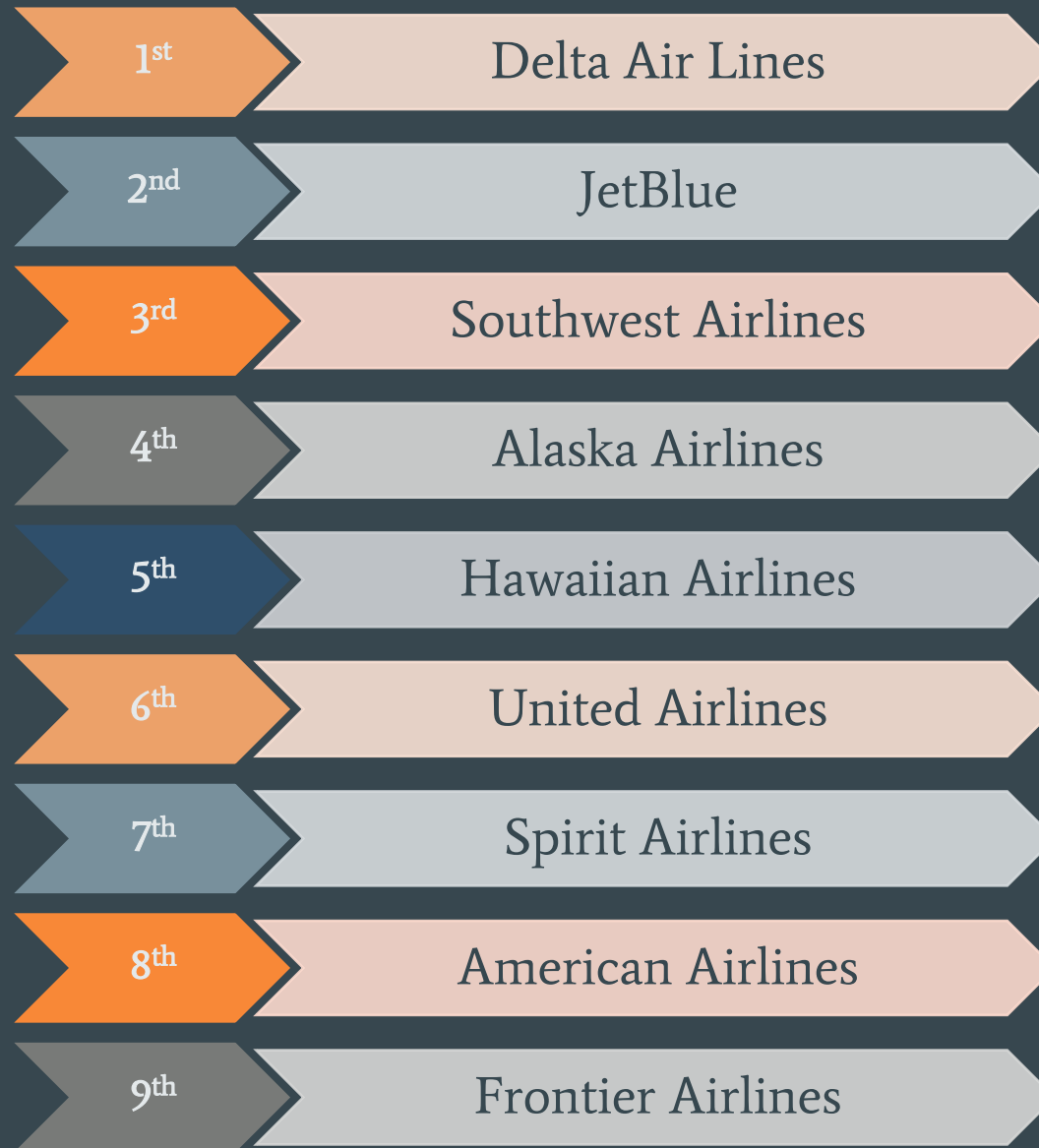
Overall Industry Performance improved from a score of -0.79 in 2017 to a score of -0.66 in 2018 and has improved each year for the past four years.

Trend analysis

Analysis of Airline Quality Rating monthly industry scores for 2017-2018 shows consistent, periodic declines in winter months January and December and peak periods just before and after in November and February. Trend analysis of 2017-2018 forecasts a positive upward trend that continues into the future



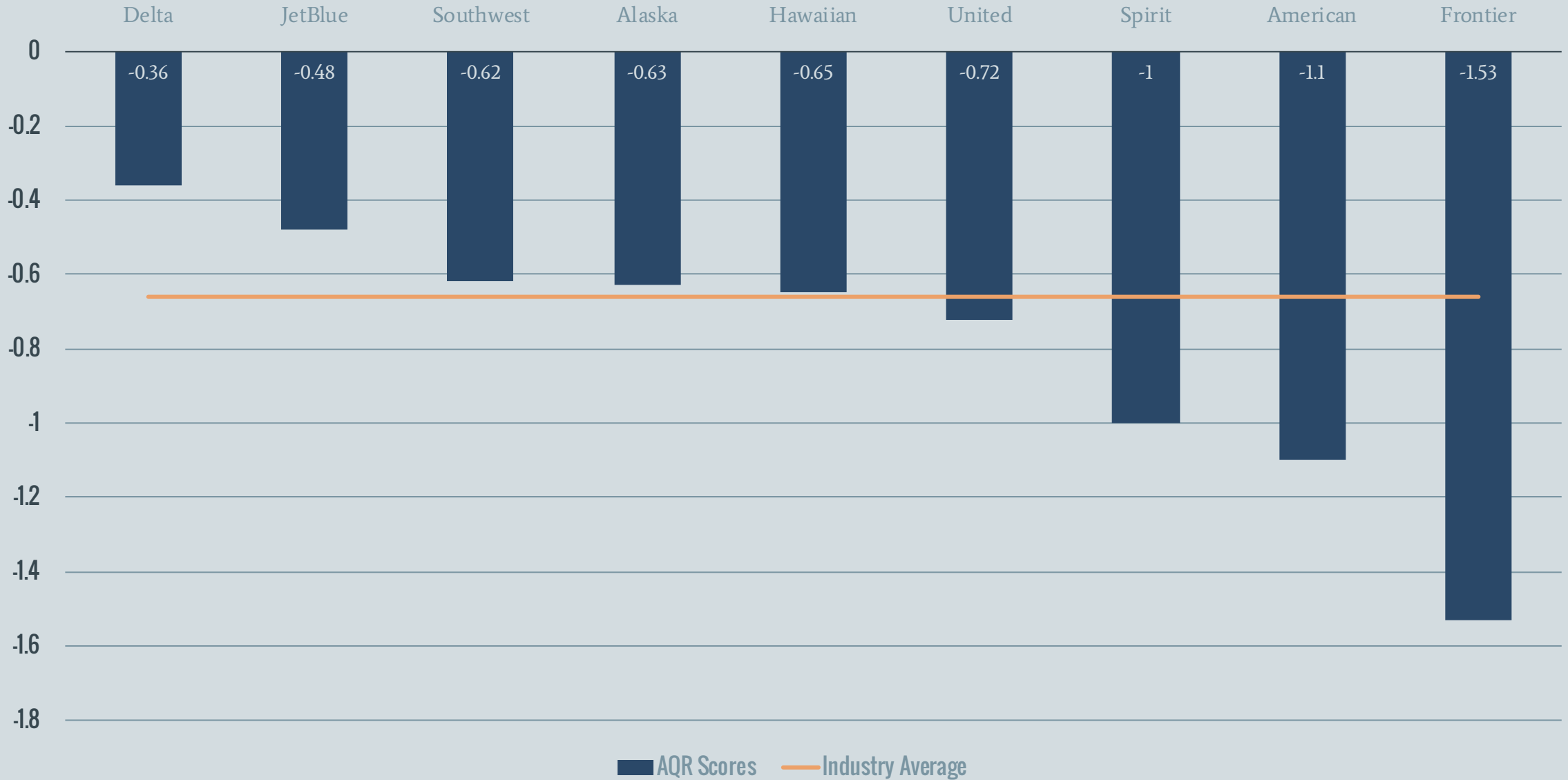
2019 AQR REPORT RANKINGS



2018 Annual Ratings by Category

Airline	On-Time Arrival (percentages)	Denied Boardings (per 10,000 passengers)	Mishandled Baggage (per 1,000 passengers)	Consumer Complaints (per 100,000 passengers)
Alaska Airlines	0.818	0.23	2.67	0.57
American Airlines	0.784	0.20	3.83 (9 th)	1.38
Delta Air Lines	0.857	0.00 (1 st)	1.80	0.65
Frontier Airlines	0.694 (9 th)	0.63 (9 th)	2.60	4.02 (9 th)
Hawaiian Airlines	0.893 (1 st)	0.01	2.59	1.10
JetBlue	0.710	0.01	1.79	0.99
Southwest Airlines	0.792	0.15	2.89	0.36 (1 st)
Spirit Airlines	0.811	0.56	1.76 (1 st)	2.83
United Airlines	0.779	0.01	2.56	1.28
Industry	0.796	0.14	2.43	1.04

Airline Comparison



The Researchers



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Previous Airline Quality Rating Reports

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