



AIRHELP AIRPORTS SCORE METHODOLOGY

To assess airports, AirHelp examined data from **December 22, 2017 to March 20, 2018**. We factored in delayed and canceled flights, public reviews from trustworthy sources and social media sentiment analysis. Here are the specific data points we measured:



On-time performance - 45% of AirHelp Airport Score

AirHelp collects data from multiple commercial vendors in order to create one of the most reliable and accurate collection of flight data in the world. This database then cross references these figures with a variety of reliable sources such as government agencies, airport databanks, flight-tracking vendors, historical resources, etc.

When different sources disagree, AirHelp ranks them in order of authority, but the data is not manipulated to estimate the 'actual' arrival and departure times. Minimal delays of less than 15 minutes are interpreted as being on-time.

To measure airport on-time performance, we first calculate daily on-time percentages of non-disrupted flights out of all flights departing that day from an airport. Given the daily punctuality rates, a median is computed for the whole analysis period.

We then use the median rather than the average, because it is more resilient against outliers. As a result, the Score is forgiving towards airports that suffer an occasional performance dip due to severe weather or other extraordinary situations, since it takes into account their typical performance.



Quality of Service - 45% of AirHelp Airport Score

In order to constantly improve the accuracy of our ranking, this year the Quality of Service score includes a larger diversification of the data sources used, including a combination of public reviews from some of the most reliable sites in the world.



Social media sentiment analysis - 10% of AirHelp Airport Score

We analyzed Twitter to gain a deeper understanding of how passengers feel about airports. In total, 184,703 English-language tweets were collected.

Using machine learning and natural language processing techniques, we have developed a statistical model that estimates the odds of a tweet being positive. If the odds are high (80% and higher), we interpret the tweet as positive. If the odds of a tweet being positive are low (39% and lower), we assume the sentiment is negative. The middle values (40-60%) can be interpreted as neutral.

In addition, tweets have been ranked according to their relevance to ensure that tweets carrying no significant sentiment (such as airport weather reports, news feeds and car rental ads) are excluded from the analysis. Finally, we have calculated the average sentiment scores per airport and rescaled them on a scale from 1 to 10 (from highly negative to highly positive).