

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS OF AMERICAN AIRLINES GROUP INC.

The balance of the loyalty program liability fluctuates based on seasonal patterns, which impact the volume of mileage credits issued through travel or sold to co-branded credit card and other partners (deferral of revenue) and mileage credits redeemed (recognition of revenue). Changes in loyalty program liability are as follows (in millions):

Balance at December 31, 2017	\$	8,822
Deferral of revenue		3,083
Recognition of revenue ⁽¹⁾		(3,366)
Balance at December 31, 2018 ⁽²⁾	\$	8,539

⁽¹⁾ Principally relates to revenue recognized from the redemption of mileage credits for both air and non-air travel awards. Mileage credits are combined in one homogenous pool and are not separately identifiable. As such, the revenue is comprised of miles that were part of the loyalty program deferred revenue balance at the beginning of the period, as well as miles that were issued during the period.

⁽²⁾ Mileage credits can be redeemed at any time and do not expire as long as that AAdvantage member has any type of qualifying activity at least every 18 months. As of December 31, 2018, our current loyalty program liability was \$3.3 billion and represents our current estimate of revenue expected to be recognized in the next twelve months based on historical trends, with the balance reflected in long-term loyalty program liability expected to be recognized as revenue in periods thereafter.

The air traffic liability principally represents tickets sold for future travel on American and partner airlines, as well as estimated future refunds and exchanges of tickets sold for past travel. The balance in our air traffic liability also fluctuates with seasonal travel patterns. The contract duration of passenger tickets is one year. Accordingly, any revenue associated with tickets sold for future travel will be recognized within twelve months. For 2018, \$3.1 billion of revenue was recognized in passenger revenue that was included in our air traffic liability at December 31, 2017.

With respect to contract receivables, reflected as accounts receivable, net on the accompanying consolidated balance sheet, these primarily include receivables for tickets sold to individual passengers through the use of major credit cards. These receivables are short-term, mostly settled within seven days after sale. Bad debt losses, which have been minimal in the past, have been considered in establishing allowances for doubtful accounts.

(l) Maintenance, Materials and Repairs

Maintenance and repair costs for owned and leased flight equipment are charged to operating expense as incurred, except costs incurred for maintenance and repair under flight hour maintenance contract agreements, which are accrued based on contractual terms when an obligation exists.

(m) Selling Expenses

Selling expenses include credit card fees, commissions, computerized reservations systems fees and advertising. Advertising costs are expensed as incurred. Advertising expense was \$128 million, \$135 million and \$116 million for the years ended December 31, 2018, 2017 and 2016, respectively.

(n) Share-based Compensation

We account for our share-based compensation expense based on the fair value of the stock award at the time of grant, which is recognized ratably over the vesting period of the stock award. Certain awards have performance conditions that must be achieved prior to vesting and are expensed based on the expected achievement at each reporting period. The fair value of stock appreciation rights is estimated using a Black-Scholes option pricing model. The fair value of restricted stock units is based on the market price of the underlying shares of AAG common stock on the date of grant. See Note 15 for further discussion of share-based compensation.

(o) Foreign Currency Gains and Losses

Foreign currency gains and losses are recorded as part of other income, net within total nonoperating expense, net in our consolidated statements of operations. Foreign currency losses for 2018 and 2017 were \$55 million and \$4 million, respectively, and for 2016, foreign currency gains were \$1 million.