Tracking the Impacts of COVID-19

Updated November 25, 2020
Aviation Is in the Early Innings of a Multiyear, Multistage Recovery

- Contain the Virus → Stabilize the Economy → Increase Efficiency
- Aviation-Government Collaboration on Health/Facilitation/Safety/Technology
- Traffic Recovery → Revenue Recovery → Financial Recovery
- Cost-Reduction Initiatives + Business Model Adaptation + Debt Reduction
- Reduce Cash Burn → Restore Profitability & Rebuild Margins → Repair Balance Sheets
Airlines Are Making an Unprecedented Level of Investment in the Safety and Wellbeing of Their Customers and Workers, Instituting Multiple Layers of Protection Throughout the Experience

- Requiring face coverings
- Offering touchless check-in
- Using HEPA filtration systems
- Sterilizing w/electrostatic sprayers & foggers
- Partnering With Premier Medical Institutions
- Sanitizing counters, kiosks & gate areas
- Disinfecting surfaces (e.g., tables, buckles)
- Adjusting security screening
- Reducing touchpoints (e.g., beverage service)

Source: AirlinesTakeAction.com
“When the use of masks is implemented in combination with other measures built into aircraft operations, such as increased ventilation…and disinfection of surfaces, these layered NPIs offer significant protection from acquiring COVID-19 through air travel.”

“The use of face masks is critically important throughout the air travel process, from entering the airport for departure to leaving the destination airport…”

COVID-19 and transmission

COVID-19 is an infectious disease caused by a new type of coronavirus called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). It was first identified in China in late 2019 and has spread around the world, resulting in millions of illnesses and severe economic hardship. It has also understandably resulted in a reluctance to engage in activities that involve proximity to other people.

Transmission of SARS-CoV-2 is similar to influenza (“flu”) and other respiratory viruses: It may be spread directly through contact with respiratory particles from an infected individual or indirectly by touching highly contaminated surfaces and then touching one’s face. The virus generally enters through the nose and mouth and then deposits on the lining of the nasal passages or throat. It can also enter through the mucous membranes surrounding the eye.

If the immune system does not counteract SARS-CoV-2 during this initial phase, the virus moves down the trachea to attack the lungs and cause inflammation. Symptoms include fever, cough, persistent extreme fatigue, difficulty breathing, congestion, nausea and vomiting, and new loss of smell or taste. In most cases people are either asymptomatic or have mild symptoms (>50% of the infected population), but others develop more severe disease that can be fatal. However, there are several actions that the air travel industry and passengers can take to significantly reduce the risk of infection during air travel, including the use of face masks.

Face masks: An essential protective measure while traveling

Face masks are an essential part of a comprehensive set of measures to reduce transmission of COVID-19 throughout air travel. Passengers and airport/airline employees should be required to wear face masks throughout their air travel journey—including time spent in the airport, boarding, in-flight, and deplaning. Since different masks offer different protection and understanding of proper use may vary, it is of critical importance that consistent requirements of proper mask selection and use are applied and clearly communicated for everyone throughout air travel.

The role of face masks in preventing COVID-19 infection during air travel

During air travel, passengers and crew are in a very well-ventilated space but in close proximity to one another for an extended period of time. SARS-CoV-2 infections can occur through the emission of virus-containing respiratory particles that are aerosols (<5 μm in diameter) and droplets (>5 μm in diameter) inhaled by infected people when coughing, sneezing, speaking, and even through normal breathing. While big particles fall quickly to the ground, smaller particles are lightweight and remain suspended in the air. Face masks help block respiratory particles, yielding added protection in the aircraft environment.

If symptomatic individuals are coughing or sneezing, other people frequently try to distance themselves to avoid transmission. However, individuals who are infected but do not develop symptoms (asymptomatic) and those who are early in disease course and have not yet developed symptoms (pre-symptomatic) can still spread the virus by normal breathing and speaking, and they may be unaware that they are infected and contagious. Pre-symptomatic or asymptomatic individuals cause an estimated 50% of the
This study is the **first comprehensive research looking at the entire inflight experience**.

The multiple layers of protection against COVID-19 make **being on an airplane as safe as if not substantially safer than other routine activities**, such as grocery shopping or going to a restaurant.

The research found that there is a **very low risk of virus transmission on airplanes**.

The scientists concluded that the ventilation on airplanes is so good that it **effectively counters the proximity travelers are subject to during flights**.
New U.S. Cases of COVID-19 Are Surging, With Most Recent Week Exceeding 171K per Day
New Cases Also Rising in Some Large Economies Outside the United States

Source: World Health Organization and U.S. Centers for Disease Control and Prevention
COVID-Related U.S. Hospitalizations Have Surpassed 88K
More Than 17,100 COVID-19 Patients Currently in Intensive Care

COVID-19 Hospitalizations* in the United States: April 2020-Present

* Confirmed or probable COVID-19 cases per the expanded Council of State and Territorial Epidemiologists definition of April 5, 2020 approved by CDC

Source: The COVID Tracking Project and Centers for Disease Control
National Polling Reveals an Uptick in Share of Americans Likely to Get Vaccinated

“The fall coronavirus surge we feared is here, and it’s close to home for a huge number of Americans: Almost three-quarters now know someone who has tested positive, the highest ever recorded in the Axios-Ipsos Coronavirus Index. While Americans are moving back toward isolation, they’re still less cautious than the spring. 71% now see in-person gatherings as a large or moderate risk – the highest since April, but below the peak of 81%. But with promising news on two vaccines, people are hopeful. New Ipsos data shows that if a vaccine was taken by everyone, majorities of Americans would feel safer doing almost every activity we asked them about. 64% would feel safer eating in a restaurant at full capacity, 62% would feel safer at indoor entertainment, and 73% would feel safer going to an elderly relative’s home. And after a concerning summer decline, the number of people who say they’re willing to take a vaccine is increasing again: 48% now say they’re likely to get the vaccine as soon as it’s available, up from 39% in mid-September.”
"The most important driver of this variable speed recovery is also the most unpredictable one and that, of course, is the virus itself. When it comes to key developments and medical advances, we leave the forecasting of the precise timing to epidemiologists and experts best suited to the task. Our baseline expectations reflected in our latest forecast are predicated upon the rough framework that we get a reasonably effective vaccine within the next year and that enough people are willing to take it that the virus case counts decline over time."

Wells Fargo Forecasts for 2021 Real GDP Growth (%)
In Most Recent Week, U.S. Airline Passenger Volumes Were 62% Below Year-Ago Levels
Domestic Air Travel Down 61%, International Air Travel Down 69%

7-Day Rolling Year-Over-Year Change (%) in Onboard Passengers*

Source: A4A member passenger airlines as reported to A4A on a consolidated company basis (including branded code share partners)

* Onboard ("segment") passengers

airlines.org
In Most Recent Week, U.S. Passenger Airline Departures Were 43% Below 2019 Levels
Domestic Flights Operated Down 42%, International Flights Operated Down 53%

Source: A4A member passenger airlines as reported to A4A on a consolidated company basis (including branded code share partners)
In November, DC/NY/HA/MA/NJ Seeing Largest Air Service Reductions; MT Flights Up YOY

% Change in Scheduled Passenger Flights: November 2020 vs. 2019 – All Airlines and Destinations

Source: Diio by Cirium published schedules (Oct. 23, 2020) for all airlines providing scheduled service to all destinations

Source: Airlines for America - We Connect the World
Domestic U.S. Load Factor Averaged 53% in Most Recent Week, Versus 79% a Year Earlier

Weekly Average Domestic U.S. Load Factor* (%)

Source: A4A member passenger airlines as reported to A4A on a consolidated company basis (including branded code share partners)

* Revenue passenger miles divided by available seat miles
In Most Recent Week, Domestic U.S. Flights Averaged 63 Passengers
Domestic Flights Averaged ~99 Passengers per Departure Over the Course of 2019

Source: A4A member passenger airlines as reported to A4A on a consolidated company basis (including branded code share partners)

* Onboard (“segment”) passengers
U.S. Airline Capacity Cuts Have Not Caught Up With the Severe Drop in Demand

7-Day Rolling Year-Over-Year Change (%) in Systemwide Traffic and Capacity*

Traffic (RPMs) and Capacity (ASMs)

Source: A4A member passenger airlines as reported to A4A on a consolidated company basis (including branded code share partners)

*RPM = revenue passenger mile; ASM = available seat mile
Since June 1, Flight Completion Factor Has Averaged 99%, Consistently Outperforming 2019

U.S. Passenger Airline Flight Completion Factor* (7-Day Moving Average)

Source: Global Eagle's masFlight Aviation Platform

* Departures performed as a percent of those scheduled.
TSA Checkpoint Traveler Throughput Is Running 59% Below Year-Ago Levels
Daily Average Bottomed Out at 95K in April 11-17

TSA Traveler Throughput* (7-Day Moving Average, in Thousands)

Source: Transportation Security Administration

* U.S. and foreign carrier customers traversing TSA checkpoints; 2019 is year-ago same weekday
October: TSA Checkpoint Volumes Declined Most in HA/NY/MA/VT/DC; Least in VI/WY/MT/SD/ID

% Change in Traveler Throughput by U.S. State – October 2020 vs. October 2019

Source: Transportation Security Administration

airlines.org
Hawaii’s Testing-Based Exemption From Quarantine Continues to Boost Air Travel
Recent Week Is 69% Below Year-Ago Levels, Materially Improved From 94% in First Half of October

On 3/26/2020, the State of Hawai’i initiated a mandatory 14-day self-quarantine for all passengers arriving from out of state. Beginning 10/15/2020, subject to specific COVID-19 negative test results, passengers can avoid quarantining.
In October, U.S.-International Air Travel* Fell 84% From Year-Ago Levels
Non-U.S. Citizen Arrivals Fell 88%; U.S. Citizen Departures Fell 79%

% Change YOY in Total* U.S.-International Air Passengers: 2020 vs. 2019

Source: U.S. Department of Commerce National Travel and Tourism Office using DHS I-92 / APIS data
* Gateway-to-gateway passengers on U.S. and foreign scheduled and charter airlines and general aviation
Of the 20 Largest U.S.-Country Pairs in October 2019, 14 Saw YOY Declines Exceeding 90%
U.S.-Mexico and U.S.-Dominican Republic Fell the Least

Top-20 U.S. Country Pairs: % Change in Passengers* From October 2019 to October 2020
Sorted left to right by highest volume in October 2019

Source: U.S. Department of Commerce National Travel and Tourism Office using DHS I-92 / APIS data * Gateway-to-gateway passengers on U.S. and foreign scheduled and charter airlines and general aviation
In October 2020, Mexico Was the Clear Leader for U.S.-International Air Travel
Top Five U.S. Country Pairs Propelled by Beach Seekers and Those Visiting Friends/Relatives

October 2020: Top-20 U.S. Country Pairs by Total Nonstop Air Passengers* (000)

<table>
<thead>
<tr>
<th>Country Pair</th>
<th>Total Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>1,282</td>
</tr>
<tr>
<td>D.R.</td>
<td>285</td>
</tr>
<tr>
<td>Canada</td>
<td>117</td>
</tr>
<tr>
<td>Colombia</td>
<td>111</td>
</tr>
<tr>
<td>Jamaica</td>
<td>94</td>
</tr>
<tr>
<td>Turkey</td>
<td>84</td>
</tr>
<tr>
<td>UK</td>
<td>76</td>
</tr>
<tr>
<td>Germany</td>
<td>72</td>
</tr>
<tr>
<td>El Salvador</td>
<td>61</td>
</tr>
<tr>
<td>India</td>
<td>60</td>
</tr>
<tr>
<td>Haiti</td>
<td>58</td>
</tr>
<tr>
<td>Netherlands</td>
<td>56</td>
</tr>
<tr>
<td>Qatar</td>
<td>54</td>
</tr>
<tr>
<td>Korea</td>
<td>53</td>
</tr>
<tr>
<td>Ecuador</td>
<td>48</td>
</tr>
<tr>
<td>Panama</td>
<td>44</td>
</tr>
<tr>
<td>Aruba</td>
<td>44</td>
</tr>
<tr>
<td>France</td>
<td>42</td>
</tr>
<tr>
<td>Guatemala</td>
<td>40</td>
</tr>
<tr>
<td>Brazil</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce National Travel and Tourism Office using DHS I-92 / APIS data

* Gateway-to-gateway passengers on U.S. and foreign scheduled and charter airlines and general aviation
Latin American and Caribbean Airports Are the Most Popular Foreign Gateways to/from USA

October 2020: Top-30 Foreign Gateways to/from USA by Total Nonstop Air Passengers* (000)

Source: U.S. Department of Commerce National Travel and Tourism Office using DHS I-92 / APIS data
* Gateway-to.gateway passengers on U.S. and foreign scheduled and charter airlines and general aviation
Corporate Air Travel Has Yet to Recover From the Steep Declines That Began in March

Source: Airlines Reporting Corporation (ARC)

* Results do not include sales of tickets purchased directly from airlines and are not net of refunds or exchanges.
“Business Travel” Takes Many Forms
Some Are Less Vulnerable to Substitution Than Others

- Business Development
- Client Consultations
- Field Work / Site Visits
- Product Demos / Sales

- Industry Meetings
- Conferences / Conventions
- Networking

- Company Meetings or Training
- Team-Building / Retreats

- Commuting to/from Work
The Rapid Decline of Demand – Especially Business Travel – Has Pummeled Airline Revenues

YOY Change (%) in Operating Revenues

<table>
<thead>
<tr>
<th>Quarter</th>
<th>1Q20</th>
<th>2Q20</th>
<th>3Q20</th>
<th>4Q20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>17</td>
<td>86</td>
<td>74</td>
<td></td>
</tr>
</tbody>
</table>

Total Operating Revenues (Cents) per ASM

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q20</td>
<td>14.71</td>
<td></td>
</tr>
<tr>
<td>2Q20</td>
<td>12.82</td>
<td></td>
</tr>
<tr>
<td>3Q20</td>
<td>9.96</td>
<td>9.25</td>
</tr>
<tr>
<td>4Q20</td>
<td>15.06</td>
<td>15.30</td>
</tr>
</tbody>
</table>

Source: A4A analysis of reports by Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United on a consolidated company basis for systemwide operations
First Nine Months of 2020: U.S. Passenger Airline Operating Revenues Down 61.5% YOY
Pre-Tax Losses Exceeding $36 Billion Through September

Change (%) in Operating Revenues and Expenses
YTD 3Q20 vs. YTD 3Q19

<table>
<thead>
<tr>
<th>Change (%)</th>
<th>Psgr. (1)</th>
<th>Cargo</th>
<th>Other (2)</th>
<th>Total OpRev</th>
<th>Labor (47.2)</th>
<th>Fuel (61.1)</th>
<th>Maintenance (39.3)</th>
<th>Airports (17.7)</th>
<th>Aircraft (10.0)</th>
<th>Other (3) (32.2)</th>
<th>Total OpExp</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD 3Q20</td>
<td>(65.3)</td>
<td>(6.4)</td>
<td>(21.1)</td>
<td>(61.5)</td>
<td>(61.5)</td>
<td>(51.1)</td>
<td>(48.3)</td>
<td>(32.2)</td>
<td>(39.3)</td>
<td>(47.2)</td>
<td>(61.1)</td>
</tr>
<tr>
<td>YTD 3Q19</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
</tr>
</tbody>
</table>

Quarterly Pretax Income/Losses ($Billions)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>1Q20</th>
<th>2Q20</th>
<th>3Q20</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretax Income/Losses</td>
<td>($6.8)</td>
<td>($14.2)</td>
<td>($15.3)</td>
<td>($36.3)</td>
</tr>
</tbody>
</table>

1. Traffic = revenue passenger miles (down 63.5%); yield = revenue per passenger-mile flown (down 5.0%)
2. Sale of frequent flyer award miles to airline business partners, transportation of pets, in-sourced aircraft and engine repair, flight simulator rentals, inflight sales, etc.
3. Aircraft rents, professional fees, food/beverage, insurance, commissions, GDS fees, communications, advertising, utilities, office supplies, crew hotels, payments to regionals

Source: A4A analysis of reports by Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United on a consolidated company basis for systemwide operations
Domestic U.S. Air Cargo Demand Continues to Outperform U.S.-International Trade With Asia Continues to Lead the Recovery for U.S.-International Air Cargo

% Change YOY in Air Cargo* Between the United States and World Areas – U.S. and Foreign Airlines

Source: Bureau of Transportation Statistics, T1 (U.S. carriers) and T-100 International Market (U.S. and foreign flag carriers)

* Pounds of freight and mail enplaned in scheduled and nonscheduled services
Airlines Are Taking a Wide Variety of Self-Help Actions to Reduce Cash Burn
Selected Examples of Actions to Improve Cash Flow From Operations, Investing and Financing

» Making historic capacity cuts, parking and/or retiring older aircraft (and, in some cases, entire fleet types)
» Utilizing passenger planes on cargo-only missions, either belly-only or belly and main cabin
» Cutting executive compensation and implementing voluntary leave and early retirement programs
» Freezing hiring and non-essential spending (e.g., employee travel, consultants, events, marketing, training)
» Consolidating footprint at airport facilities (e.g., concourses); shuttering lounges; halting real estate projects
» Simplifying onboard product (e.g., food and beverage)
» Negotiating with vendors: cobranded credit cards, airports (i.e., zero-interest rent deferrals), regional airline partners (i.e., reduced block hours), fuelers, caterers, etc. to achieve relief on payment terms/timing
» Deferring aircraft deliveries and reducing non-aircraft (e.g., ground equipment, IT) capital expenditures
» Raising funds via capital markets: borrowing funds via unsecured or secured loans and/or selling stock
» Selling/mortgaging aircraft/engines/other assets
» Suspending capital return programs, including share repurchases and the payment of future dividends

Source: A4A and member companies
The Pandemic Has Taken a Material Toll on U.S. Airline Employment
Voluntary Reductions, Retirements, Job Changes, Employer Shutdowns and Other Factors at Play

<table>
<thead>
<tr>
<th>Carrier Universe</th>
<th>Scheduled U.S. Passenger Airlines</th>
<th>All U.S. Passenger and Cargo Airlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>FTEs* (000)</td>
<td>Headcount (000)</td>
</tr>
<tr>
<td>All-Time High</td>
<td>Jun-2001: 545.9</td>
<td>May-2001: 760.8</td>
</tr>
<tr>
<td>Post-2000 Low Point</td>
<td>Apr-2010: 376.7</td>
<td>Apr-2010: 562.3</td>
</tr>
<tr>
<td>Pre-COVID Peak</td>
<td>Mar-2020: 461.6</td>
<td>Feb-2020: 757.0</td>
</tr>
<tr>
<td>Latest Available Data Point</td>
<td>Sep-2020: 404.9</td>
<td>Sep-2020: 702.1</td>
</tr>
<tr>
<td>Change vs. Pre-COVID</td>
<td>(56.7)</td>
<td>(54.9)</td>
</tr>
</tbody>
</table>

Source: Bureau of Transportation Statistics based on payroll near the 15th of the month

* Full-time equivalents (FTE) = full-time workers plus 0.5 * part-time workers
CARES Act PSP was a pass-through to airline workers – a combination of grants and loans (to be repaid with interest to U.S. Treasury) – for the period April 1-Sept. 30, 2020.

The law required that airlines: 1) not conduct involuntary furloughs or reduce benefits or rates of pay, 2) comply with minimum air service obligations 3) abide by restrictions on executive compensation, 4) repay ~29% of the funds (plus interest) to Treasury and 5) issue warrants to Treasury.

For the nine largest passenger airlines – after deducting the amount repayable to U.S. Treasury – PSP awards covered just 82% of payroll expenses, leaving them with a $3.7B shortfall for the applicable six-month period.

Economic consulting firm Compass Lexecon estimated that, by keeping their workers employed through Sept. 30, PSP awards to U.S. passenger carriers saved U.S. Treasury $6.0-10.2B and state treasuries $3.2-5.5B.
U.S. Passenger Carriers Have Drawn ~$19 Billion in CARES Act Loans
Funds Intended to Help Airlines Continue Operations While Demand Remains Impaired

CARES Act Secured Loans (Millions)

- American: $7,500
- United: $5,170
- JetBlue: $1,948
- Alaska: $1,928
- SkyWest: $725
- Hawaiian: $622
- Frontier: $574
- Mesa: $201
- Republic: $77
- Sun Country: $45
- Other: $34
- TOTAL: $18,824

“The loan proceeds will be used to provide liquidity to continue the Company’s operations... Treasury will receive warrants to purchase common stock equal to 10% of the total loan amount drawn.” (U.S. Treasury)

Source: U.S. Treasury

* For AAL/ALK/HA/JBLU/UAL, interest rates range from LIBOR + 2.5% to LIBOR + 3.5% and maturities range from 6/30/2024 to 9/29/2025
From March-December, U.S. Passenger Airline Employment Will Have Fallen by ~90,000 FTEs

Over the Past Two Decades, Job Growth Has Closely Tracked the Industry’s Financial Health

Source: Bureau of Transportation Statistics for scheduled U.S. passenger airlines (i.e., all that report scheduled passenger revenue)

U.S. Scheduled Passenger Airline Full-Time Equivalent Employees (000s)

Source: Bureau of Transportation Statistics for scheduled U.S. passenger airlines (i.e., all that report scheduled passenger revenue)
One-Fourth of the U.S. Passenger Airline Fleet Has Been Inactive for at Least 30 Days
Approximately 400 Aircraft Have Been or Will Be Permanently Retired in 2020

% of Fleet Inactive by Duration

<table>
<thead>
<tr>
<th>Duration</th>
<th>% of Fleet Inactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>7+</td>
<td>28</td>
</tr>
<tr>
<td>30+</td>
<td>25</td>
</tr>
<tr>
<td>60+</td>
<td>22</td>
</tr>
<tr>
<td>90+</td>
<td>20</td>
</tr>
<tr>
<td>180+</td>
<td>19</td>
</tr>
</tbody>
</table>

Consecutive Days Inactive as of 11/1/2020

Number of Active Aircraft*

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of Active Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/2019</td>
<td>5,856</td>
</tr>
<tr>
<td>11/1/2020</td>
<td>4,449</td>
</tr>
</tbody>
</table>

Source: Global Eagle's masFlight Aviation Platform, based on tail numbers that were active at any point in 1Q 2020.

* Active defined as operated in any of the previous seven days
Lower Jet-Fuel Prices Have Provided Some Cost Relief, But Rising Again With More Flying

Price of Jet Fuel (U.S. Gulf Coast, $ per Gallon)

Source: Energy Information Administration (EIA) Weekly Petroleum Status Report
Decline in Air-Transport Demand Has Translated to Sharply Reduced Jet-Fuel Consumption
Fewer Operations (Especially Long-Haul) and Smaller Payloads + Retirement of Older Aircraft

% Change YOY in U.S. Airline Industry Fuel Consumption*

<table>
<thead>
<tr>
<th>Month</th>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>2.4</td>
<td>(22.4)</td>
</tr>
<tr>
<td>Feb</td>
<td>2.5</td>
<td>(65.4)</td>
</tr>
<tr>
<td>Mar</td>
<td></td>
<td>(66.3)</td>
</tr>
<tr>
<td>Apr</td>
<td></td>
<td>(60.7)</td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>(50.8)</td>
</tr>
<tr>
<td>Jun</td>
<td></td>
<td>(47.6)</td>
</tr>
<tr>
<td>Jul</td>
<td></td>
<td>(45.6)</td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bureau of Transportation Statistics F41 Schedule P12A

* Scheduled and nonscheduled passenger and cargo services
U.S. Airlines Have Faced a Highly Elevated Breakeven Load Factor in 2020
Expected to Remain Elevated Through First Quarter of 2021 on Low Yield and High Unit Cost

Breakeven Load Factor* (%)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q</td>
<td>77</td>
<td>79</td>
<td>Estimate 89</td>
</tr>
<tr>
<td>2Q</td>
<td>75</td>
<td>74</td>
<td>89</td>
</tr>
<tr>
<td>3Q</td>
<td>75</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>4Q</td>
<td>76</td>
<td>93</td>
<td>Estimate 93</td>
</tr>
</tbody>
</table>

Source: Analyst estimates for publicly traded U.S. passenger airlines

* Includes interest expense and non-operating costs but excludes special items (e.g., CARES Act Payroll Support Program receipts) and cargo revenue
Collectively, U.S. Airlines Expect Cash Burn to Persist Through Winter 2020/2021
Given the Dearth of Demand (Especially Business Travel), Cost Reduction Is Paramount

U.S. Passenger Airlines: Estimated Average Daily Cash Burn* (in Millions)

<table>
<thead>
<tr>
<th>Month</th>
<th>Cash Burn (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov</td>
<td>($184)</td>
</tr>
<tr>
<td>Dec</td>
<td>($178)</td>
</tr>
<tr>
<td>Jan</td>
<td>($142)</td>
</tr>
<tr>
<td>Feb</td>
<td>($134)</td>
</tr>
<tr>
<td>Mar</td>
<td>($130)</td>
</tr>
</tbody>
</table>

* Ticket and cargo sales - cash operating expenses - cash refunds - capital expenditures - interest expense – repayment of debt

Source: A4A and various airline equity analysts
Airlines Are Coping by Taking on Billions in Debt – Up ~63% From YE2019 to YE2020
Net Interest Expense Doubled From 2019 to 2020 and Will Approach $14.7B in 2021-2023

“For 2021 and beyond, we anticipate a major deleveraging cycle as the industry will have no choice but to address its significant debt load.” (Deutsche Bank, “Airline Industry Update,” July 1, 2020)

**Year-End Total Debt ($ Billions)**

<table>
<thead>
<tr>
<th>Year-End Total Debt</th>
<th>2018</th>
<th>2019</th>
<th>2020E</th>
<th>2021F</th>
<th>2022F</th>
<th>2023F</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>108.1</td>
<td>105.4</td>
<td>172.1</td>
<td>167.2</td>
<td>161.2</td>
<td>155.3</td>
</tr>
<tr>
<td>2023F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+$67B</td>
</tr>
</tbody>
</table>

**Interest Expense, Net ($ Billions)**

<table>
<thead>
<tr>
<th>Interest Expense, Net</th>
<th>2018</th>
<th>2019</th>
<th>2020E</th>
<th>2021F</th>
<th>2022F</th>
<th>2023F</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2.0</td>
<td>1.9</td>
<td>3.8</td>
<td>5.2</td>
<td>4.9</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Source: A4A, equity analysts and filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United
In 2020, S&P Has Lowered Its Credit Ratings on Eleven U.S. and Canadian Airlines*
Ratings Actions Taken to Reflect Weakened Financial Condition and Heightened Risk

* Publicly traded U.S. carriers in S&P Global coverage universe
After 9/11 and the Global Financial Crisis, it took years for air-travel demand to recover. Passenger volumes took more than seven years to recover from the Financial Crisis/Oil Spike.

Source: A4A Passenger Airline Cost Index and Bureau of Transportation Statistics (Form 41 Schedule T1)

* Passengers enplaned systemwide on U.S. airlines in scheduled and nonscheduled services.

Source: Airlines for America

www.airlines.org
We Are Unlikely to See a Return to 2019 Passenger Volumes Before 2023-2024

2021-2022 Clouded by Uncertainty re: State of Pandemic, Vaccination/Therapeutics, Economy

Estimated U.S. Airline Industry Passenger Traffic Change (%) vs. 2019 Levels

Source: A4A and various airline equity analysts
After 9/11 and the Global Financial Crisis, It Took Years for Air-Cargo Demand to Recover
Cargo Volumes Took 10 Years to Recover From the Financial Crisis/Oil Spike

Source: Bureau of Transportation Statistics (Form 41 Schedule T1)

Four-Quarter Rolling Air Cargo Revenue Ton Miles* (Billions)

* Cargo revenue ton miles (RTMs) flown on U.S. passenger and cargo-only airlines in scheduled and nonscheduled services
Developments in the Marketplace Are Driving Important Changes in Airline Strategy

- Enhanced cleaning measures and PPE
- Widespread elimination of change fees
- Expansion of mobile app self-service functionality
- Map-based flight searches (simultaneous comparisons across multiple destinations)
- Efforts to deploy preflight COVID testing in key transoceanic corridors (incl. Lower 48-Hawaii)
- Rethinking of fleets (gauge, range, types) and routes (points, timings, frequencies, connections)
- Initiatives to capitalize on air-cargo opportunities amid reduced capacity but newer technology
- Acceleration of selected airport projects
- Focus on retaining talent, boosting morale

- Evaporation of corporate travel
- Growing interest in getaways and VFR
- “WFH” affording leisure travelers more flexibility
- Most bookings within 30 days of departure
- Aversion to connecting / layovers
- Stockpiling of travel credits (e.g., e-wallets)
- International restrictions/quarantines/recession

- Domestic leisure fares down > 10% YOY
- Materially higher breakeven load factor
- Higher-than-historical Thurs/Mon share of travel
- Non-U.S. point of sale down ~90% YOY
- U.S.-Mexico/Caribbean/C. America faring better

- International restrictions/quarantines/recession
“COVID-19 has brought about an acceleration of digital competency across demographic cohorts. We have a lot of different people who fly through the airport. We are constantly thinking about the experience we present to them. And **if people have become more technology savvy, more digitally competent**, that means **we can accelerate and roll out the contactless passenger journey across many platforms**—and there will be an acceptance of and a desire for them.”

“**Airports and airplanes are cleaner than they’ve ever been** and will continue to be that way because it’s important for restoring confidence in air travel. We expect the new hygiene and enhanced-cleaning protocols we’ve implemented to continue. **Passengers can expect that from airports and airlines going forward.**”

Source: McKinsey & Company interview with Massachusetts Port Authority CEO Lisa Wieland (Nov. 20, 2020)
Key Points

» In the first two months of 2020, operating revenues grew more than 5% – we were on our way to another record.

» U.S. passenger airlines will likely experience a high rate of cash burn into the second half of 2020.

» Air travel took 3 years to recover from 9/11 and 7+ years from the global financial crisis. Air cargo took 10 years post-GFC.

» When traffic returns, low-yield (VFR, then vacationers) is likely to return faster than high-yield (corporate) and international, with implications for the pace of revenue recovery, the need for cost reduction/containment, and the return to profitability.
  - Businesses first cut back hiring and travel and entertainment; in a recovery, those are the last things they restore. These travelers are essential due to how often they fly and the cabins/fares they purchase, among other reasons.

» People will be reluctant to travel – or even to book travel – until there is a strong degree of confidence that the health crisis and associated risks are behind us. The COVID-19 global pandemic constitutes a black-swan public health crisis that will only be solved once an effective vaccine is developed, but vaccines usually take a year or longer to develop.

» In addition to concerns about the spread of the virus and the associated restrictions on the movements of citizens, businesses and consumers are facing a sharp global economic downturn of unknown duration.
  - The economic and consumer psychology effects of COVID-19 are deep and global.
  - High unemployment and reduced HHNW worth + strained government coffers = curtailed travel budgets for households and organizations.

» Once demand has recovered, it will take years for airlines to retire the newly accumulated billions of dollars of debt and to address the sizable associated interest expense, limiting their wherewithal to rehire and reinvest.