The Long Climb Out Is Underway

John P. Heimlich, Vice President & Chief Economist
Presentation to SEA Stakeholder Advisory Round Table

April 28, 2021
A4A advocates on behalf of its members to shape crucial policies and measures that promote safety, security and a healthy U.S. airline industry. We work collaboratively with airlines, labor, Congress, the Administration and other groups to improve aviation for the traveling and shipping public.
Airlines and airports have taken unprecedented steps to ensure the safety of our employees and customers.

Domestic and short-haul-international leisure / visiting-friends-and-relatives activity are leading the recovery.

Air cargo continues to build on records set in 2020 and has proven a critical source of income.

Bookings for future air travel remain depressed, particular to those traveling for business purposes.

Large losses in 2021 will compound the record losses incurred in 2020, resulting in massive amounts of debt.

Sea-Tac is closer than most of its peers to restoring pre-pandemic levels of scheduled air service.

2019 systemwide passenger totals won’t return until 2023-2024—but will arrive much sooner at some airports.

Most airlines are now operating smaller fleets, with one-third fewer twin-aisle aircraft.

Despite a nearly five-fold increase in passengers, commercial aviation reduced its U.S. noise footprint 94% from 1975-2019 and accounts for just 2% of U.S. GHG emissions—and is committed to further improvements.

Historically, every U.S. airline job helps support an estimated nine U.S. jobs outside the industry, so fewer (than otherwise) planes, passengers, pilots, etc. means fewer jobs across the supply chain.
Airlines and Airports Continue to Invest in the Safety and Wellbeing of Their Customers and Crewmembers, 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
- Adjusting security screening
- Disinfecting surfaces (e.g., tables, buckles)
- Reducing touchpoints (e.g., beverage service)

Source: AirlinesTakeAction.com
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**.
The Harvard research team surveyed 25 airports of various sizes, performed its own modeling of air quality in airport settings and applied the findings to a comprehensive assessment of research.

The report concludes that airports have been proactive in implementing multiple layers of measures to mitigate the risk of COVID-19 transmission, including face covering requirements, physical distancing, enhanced disinfection processes, enhanced ventilation and deployment of touchless technologies.

Researchers from the Harvard confirmed that this multi-layered approach “significantly mitigates risks” in airport settings.
In Most Recent Week, U.S. Airline Passenger Volumes Were 42% Below Pre-Pandemic Levels
Domestic Air Travel Down 39%, International Air Travel Down 59%

7-Day Rolling Change (%) vs. Pre-Pandemic in Onboard Passengers*

Source: A4A member passenger airlines and branded code share partners

* Onboard (“segment”) passengers; “pre-pandemic” precedes March 1, 2020
In February 2021, U.S. Air Carriers Transported 9% More Cargo Than in February 2019

Source: Bureau of Transportation Statistics, T-100 Market

% Change vs. 2019 in Air Cargo Transported by U.S. Passenger and Cargo Airlines*

* Pounds of freight and mail enplaned in scheduled and nonscheduled services

Source: Bureau of Transportation Statistics, T-100 Market

airlines.org
Corporate Air Travel Has Yet to Recover From the Steep Declines That Began in March 2020
But Overall Travel-Agency Bookings Are Showing Signs of Life

% Change vs. 2019 in Weekly Tickets Sold* by U.S. Travel Agencies

Source: Airlines Reporting Corporation (ARC)

* Results do not include sales of tickets purchased directly from airlines and are not net of refunds or exchanges.
Cumulative Pretax Losses for 2020-2021 Are Projected to Exceed $60 Billion

U.S. Passenger Airlines* – Pretax Earnings ($ Billions)

Source: Various equity analysts and filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United

* Publicly traded, independently branded carriers
Airlines Have Coped in Part by Taking on Billions in Debt

*Net Interest Expense Doubled From 2019 to 2020 and Will Exceed $15B 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</th>
<th>Total Debt ($B)</th>
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<tbody>
<tr>
<td>2018</td>
<td>108</td>
</tr>
<tr>
<td>2019</td>
<td>105</td>
</tr>
<tr>
<td>2020</td>
<td>163</td>
</tr>
<tr>
<td>2021F</td>
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<td>2022F</td>
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<tr>
<td>2023F</td>
<td>151</td>
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### Interest Expense, Net ($ Billions)

<table>
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<tr>
<th>Year</th>
<th>Interest Expense ($B)</th>
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<tr>
<td>2018</td>
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<tr>
<td>2019</td>
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<tr>
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<td>2022F</td>
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<td>2023F</td>
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Source: A4A, equity analysts and filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United
SEA Is Closer to Pre-Pandemic Scheduled Air Service Than Most of Its Peers
Nationwide, Large Airports Are Seeing a 29% Decline in Flights vs. Pre-Pandemic Levels

Source: Diio by Cirium published schedules (April 23, 2021) for all U.S. and non-U.S. airlines providing scheduled service to all U.S. and non-U.S. destinations

% Change in U.S. Outbound Scheduled Passenger Flights: May 2021 vs. May 2019

Source: Diio by Cirium published schedules (April 23, 2021) for all U.S. and non-U.S. airlines providing scheduled service to all U.S. and non-U.S. destinations
We Are Unlikely to See a Return to 2019 Passenger Volumes Before 2023

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

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

Source: A4A and various airline equity analysts
U.S. Passenger Airlines Entered 2021 With a 19% Smaller Operating Fleet Than in Start of 2020
Accounting for Retirements/Disposals/Deliveries, Net Reduction From YE19 to Present = 862 Aircraft

Number of Active Aircraft*

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<th>3/31/2021</th>
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<tr>
<td>Regional</td>
<td>1,810</td>
<td>1,517</td>
<td>1,545</td>
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<tr>
<td>Single-Aisle</td>
<td>3,475</td>
<td>2,847</td>
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<tr>
<td>Twin-Aisle</td>
<td>495</td>
<td>307</td>
<td>318</td>
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% Change vs YE19

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<tr>
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<th>YE20</th>
<th>3/31/2021</th>
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<tbody>
<tr>
<td>Regional</td>
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<tr>
<td>Single-aisle</td>
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<tr>
<td>Twin-aisle</td>
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<tr>
<td>Total</td>
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Source: Global Eagle's masFlight Aviation Platform

* Operated by or on behalf of Alaska/Allegiant/American/Delta/Frontier/Hawaiian/JetBlue/Southwest/Spirit/Sun Country/United in any of the previous seven days
U.S. Exposure to Aviation Noise Has Fallen 94% Despite a Five-Fold Increase in Passengers
Commercial Aviation Accounts for Less Than 2% of the U.S. Greenhouse Gas Emissions Inventory

Demand for Air Transportation Helps Support More Than 10 Million U.S. Jobs
Every U.S. Airline Job Helps Support an Estimated 9 U.S. Jobs Outside the Industry

Source: The Economic Impact of Civil Aviation on the U.S. Economy (FAA, January 2020) and A4A