

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K**

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 001-5424



DELTA AIR LINES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

58-0218548

(I.R.S. Employer Identification No.)

Post Office Box 20706

Atlanta, Georgia

(Address of principal executive offices)

30320-6001

(Zip Code)

Registrant's telephone number, including area code: (404) 715-2600

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	DAL	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐
Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2021 was approximately \$27.7 billion.

On January 31, 2022, there were outstanding 639,929,760 shares of the registrant's common stock.

This document is also available on our website at <http://ir.delta.com/>.

Documents Incorporated By Reference

Part III of this Form 10-K incorporates by reference certain information from the registrant's definitive Proxy Statement for its 2021 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

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Unless otherwise indicated or the context otherwise requires, the terms "Delta," "we," "us," and "our" refer to Delta Air Lines, Inc. and its subsidiaries.

FORWARD-LOOKING STATEMENTS

Statements in this Form 10-K (or otherwise made by us or on our behalf) that are not historical facts, including statements about our estimates, expectations, beliefs, intentions, projections or strategies for the future, may be "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from historical experience or our present expectations. Known material risk factors applicable to Delta are described in "Risk Factors Relating to Delta" and "Risk Factors Relating to the Airline Industry" in "Item 1A. Risk Factors" of this Form 10-K, other than risks that could apply to any issuer or offering. All forward-looking statements speak only as of the date made, and we undertake no obligation to publicly update or revise any forward-looking statements to reflect events or circumstances that may arise after the date of this report.

Part I

ITEM 1. BUSINESS

General

As a global airline based in the U.S., we connect customers across our expansive global network. In 2019, prior to the onset of the COVID-19 pandemic, we served approximately 200 million customers and were the world's largest airline by total revenues and the most profitable with five consecutive years of \$5 billion or more in pre-tax income from 2015 through 2019. In 2020, we made significant adjustments to our network and operations as a result of the unprecedented and widespread impact of COVID-19 and the related travel restrictions and social distancing measures that significantly reduced demand for air travel.

We began restoring our network in 2021, as travel restrictions eased and vaccine programs became widespread both domestically and in international markets. As the year progressed, we saw a full return of domestic consumer travel to 2019 levels while business and international demand continued to lag. Despite this lag, business and international travel began to increase in the latter part of 2021, spurred in part by the U.S. government's lifting of restrictions in November 2021 that prevented travelers from entering the United States from a number of specifically-identified countries.

In 2021, we continued to demonstrate agility, operational excellence and discipline. We believe that we are well positioned to manage the continued challenges brought by the pandemic, even when considering new variants spreading globally, continued uncertainty linked to the full return of business travel and evolving international travel restrictions. More information about the effect of the COVID-19 pandemic on our business and our recovery can be found in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Our internet address is www.delta.com. Information contained on our website is not part of, and is not incorporated by reference in, this Form 10-K.

Competitive Advantages and Brand Strength

We have five competitive advantages that support our trusted consumer brand, including our people and culture, our global network, our operational reliability, our customer loyalty and our financial foundation. Through the pandemic, we believe that we have strengthened our advantages and our brand. In 2021, we continued to have the world's most valuable airline brand.

People and Culture

Our people are our strongest competitive advantage. Our employees provide world-class travel experiences for our customers while also giving back to the communities where they live, work and serve. Throughout the pandemic, we were able to avoid involuntary furloughs of U.S. employees by providing voluntary separation and early retirement programs, voluntary unpaid leaves and other initiatives. We have prioritized the health and safety of our employees by implementing an extensive employee COVID-19 testing program, partnering with Georgia to host the state's largest COVID-19 vaccination site while steadily increasing the vaccination rate among our employees, providing pay protection programs for employees diagnosed with, exposed to or at high risk from COVID-19 and offering free flu shots for all U.S. employees. In February 2021, we hired a Chief Health Officer to reimagine our approach to health and well-being to accommodate the physical and mental health needs of our people. Delta was recognized by Glassdoor as one of its Best Places to Work for the sixth year in a row, ranking number 18 on the 2022 list of 100 large companies. The list is solely based on the input of employees who provide anonymous feedback on their daily jobs, benefits, interview experience and work environment. Being recognized on this list is a testament to Delta people and our culture.

Global Network

We and our alliance partners collectively serve over 130 countries and territories and over 800 destinations around the world. In 2019, prior to the onset of the COVID-19 pandemic, we offered more than 5,000 daily departures and as many as 15,000 affiliated departures including the premier SkyTeam alliance, of which Delta is a founding member. At the end of 2021, we offered more than 4,000 daily departures and approximately 5,500 affiliated departures as we began restoring our network.

Our domestic network is centered around core hubs in Atlanta, Minneapolis-St. Paul, Detroit and Salt Lake City. Core hubs have strong local passenger share, a high penetration of customers loyal to Delta, competitive cost position and strong margins. Core hub positions complement strong coastal hub positions in Boston, Los Angeles, New York-LaGuardia, New York-JFK and Seattle. Coastal hubs provide a strong presence in large revenue markets and enable growth in premium products and international service. We are elevating the customer experience in key markets by deploying our newest aircraft and products and by accelerating generational airport investments. We opened a new facility at Salt Lake City in 2021 and expect to open new facilities at New York-LaGuardia, Los Angeles and Seattle in 2022. In addition to our domestic mainline operations, we have agreements with domestic regional carriers that operate as Delta Connection[®] to feed traffic to our domestic hubs.

Internationally, we have significant hubs and market presence in Amsterdam, London-Heathrow, Mexico City, Paris-Charles de Gaulle and Seoul-Incheon. As we continue our recovery from the impact of the COVID-19 pandemic, we expect to continue to evaluate and adjust our operations to address evolving conditions. Although our international operations have been substantially curtailed since March 2020 as a result of the COVID-19 pandemic, we have continued to serve Transatlantic, Transpacific and Latin America markets directly on Delta and through joint ventures with global airline partners. In 2021, we restored approximately 50% of capacity in international markets, but do not expect our international network to be fully restored to 2019 levels until 2023.

Through innovative alliances with Aeroméxico, Air France-KLM, China Eastern, Korean Air and Virgin Atlantic, and an alliance pending regulatory approval with LATAM Airlines Group S.A. (“LATAM”), we seek to bring more choice to customers worldwide. Our strategic relationships with these international airlines are an important part of our business as they improve our access to markets around the world and enable us to provide customers a more seamless global travel experience across our alliance network. The most significant of these arrangements are commercial joint ventures that include joint sales and marketing coordination, co-location of airport facilities and other commercial cooperation arrangements. In some cases, we have reinforced strategic alliances through equity investments where we have opportunity to create deep relationships and maximize commercial cooperation. For additional information about the effect of the COVID-19 pandemic on our investments in these airlines, see Note 4 of the Notes to the Consolidated Financial Statements.

Our global network is supported by a fleet of approximately 1,200 aircraft as of December 31, 2021 that are varied in size and capabilities, giving us flexibility to adjust aircraft to the network. Prior to the pandemic, we began refreshing our fleet by acquiring new and more fuel efficient aircraft with increased premium seating to replace older aircraft, and had begun to reduce our fleet complexity with fewer fleet types. We accelerated this fleet simplification strategy by retiring 227 aircraft in 2020, with plans to retire additional aircraft by 2025, though we remain flexible and may decide to fly certain aircraft beyond their planned retirement date, to the extent supported by demand. Our new aircraft are on average 25% more fuel efficient per seat mile than retiring aircraft.

Operational Reliability

We remain committed to industry-leading reliability and are consistently among the industry’s best performers. In 2021, we had a system-wide completion factor of 99.4%, with 88.0% of our domestic flights arriving on time as reported to the U.S. Department of Transportation, both of which, based on preliminary data, are expected to exceed the performance of our U.S.-based peers. This reliability was a key component in Delta being named the Top U.S. Airline of 2021 by the Wall Street Journal in its annual airline scorecard rankings, which tracks seven important operations and customer metrics among nine U.S. airlines. This achievement recognizes the consistent efforts of our people to safely deliver reliable, on-time service while providing exceptional service.

Following the onset of the COVID-19 pandemic, we intensified our focus on ensuring the health and safety of our customers, including the creation of our industry-leading cleanliness standards through the Global Cleanliness organization and the implementation of the Delta CareStandardSM to ensure a consistently safe and sanitized experience across our facilities and aircraft.

Customer Loyalty

Over the last decade, we significantly improved the quality and reliability of our operations, and our customer satisfaction scores increased meaningfully as a result. With operational excellence, best-in-class service and a commitment to ensuring the health and safety of our customers, we have continued to earn our customers' trust and preference by delivering the "Delta Difference." In 2021, we were recognized as No. 1 in customer satisfaction among airlines in North America by J.D. Power, underscoring the professionalism, care and humanity that our people delivered during one of the most stressful periods for travel in modern history. We were also ranked No. 1 on Fortune Magazine's Most Admired Airline List for the tenth time in the past 11 years and named one of Fast Company's most innovative travel companies in 2021. In 2021, corporate travel professionals also rated us No. 1 in the annual Business Travel News Airline Survey for the 11th year in a row, citing our responsiveness to customers as well as our flexibility-minded approach throughout the pandemic and beyond. We believe our continued investment in customer service and experience, operations, product, airports and technology has shaped customer perception of our brand leading to increases in our domestic net promoter scores and increased customer loyalty compared to pre-pandemic levels. In 2021, customers demonstrated increased loyalty through higher levels of engagement with our SkyMiles program, our co-branded American Express card and use of our FlyDelta app, with remuneration from our co-branded American Express card nearly achieving 2019 levels for the full year and exceeding 2019 levels during the December 2021 quarter.

Our SkyMiles program is designed to attract lifetime members and grow customer loyalty by offering incentives to increase travel with us. Our award-winning program offers a wide variety of benefits including award travel and access to complimentary elite benefits and services when traveling with us and our partners. As our brand has strengthened, the SkyMiles program has seen an acceleration in membership growth. We believe there is opportunity to continue this trend as we seek to elevate our customer engagement through opportunities to earn and redeem mileage credits ("miles") as well as co-brand card offerings coupled with a strong customer experience. The SkyMiles program has a large, growing and premium membership base. This membership base has historically resulted in higher premium revenues and more resilient cash flows for us. SkyMiles has been widely recognized as a top loyalty program by external reviewers such as U.S. News and World Report and The Points Guy.

The SkyMiles program provides its members with the ability to earn miles when traveling on Delta, Delta Connection and our partner airlines. Miles may also be earned by using certain services offered by program partners, such as credit card companies, hotels, car rental agencies and ridesharing companies. To facilitate transactions with participating companies, we sell miles to non-airline businesses, customers and other airlines. Our most significant and valuable contract to sell miles relates to our co-brand credit card relationship with American Express. Miles may be used toward award redemptions such as flights and upgrades on Delta, our regional carriers and other participating airlines as well as donations with specific charities and more. In 2021, 10% of revenue miles flown on Delta were from award travel, as program members redeemed miles in the loyalty program for approximately 23 million award tickets.

Financial Foundation

In response to the effects of the COVID-19 pandemic, we raised significant amounts of liquidity in 2020 through the issuance of debt securities or through bilateral and syndicated secured and/or unsecured credit facilities and through the entry into sale-leaseback transactions. Our capital raising efforts were aided by the strength of our balance sheet prior to the pandemic. Restoring the strength of our balance sheet and reducing debt is a key financial priority. During 2021, we executed on our financial priority of stabilizing the business on the path to restoration and recovery. Since October 2020, we have made progress in restoring our balance sheet by reducing our debt by approximately \$12 billion and voluntarily contributing \$1.5 billion to our pension plans. We continue to be disciplined in managing non-fuel costs. We are efficiently rebuilding the airline, capturing fleet renewal benefits and driving operating leverage that we expect to produce a competitive cost structure. We expect that our unit revenue premium to the industry and competitive cost structure will support industry-leading margins and strong operating cash flow.

Expanded Products and Diversified Revenue Streams

In addition to our competitive advantages, Delta continues to differentiate itself from the industry through expanded products, diversified revenue streams and investments in technology.

Over the last decade we have fundamentally transformed our business by investing in our people, our product and our reliability to alter the commodity-like nature of air travel. We have a retail-oriented, merchandised approach to distribution with well-defined and differentiated products for our customers. Through improved product segmentation, we offer distinct travel experiences with clear value propositions that enable customer choice and include exceptional service onboard our aircraft. In 2021, approximately one-third of our passenger revenue was from premium products, which include Delta One[®], Delta Premium Select, First Class and Delta Comfort+[®]. Main Cabin products, including Basic Economy, represented approximately half of our passenger revenue in 2021. We derive the remainder of our passenger revenue from loyalty travel awards and travel-related services.

Our tickets are sold through various distribution channels, with 64% of tickets sold through direct channels in 2021. These include digital channels, such as delta.com and the Fly Delta app, and our reservations specialists where we deliver more direct, personalized interactions with our customers at reduced distribution costs. Indirect distribution channels include online travel agencies and traditional "brick and mortar" agencies. We make fare and product information widely available across those channels in an effort to ensure customers receive the best information and service options.

We continue to implement merchandising initiatives across our distribution channels to allow customers to better understand our product offerings, make it easier to buy the products they desire and increase customer satisfaction. This merchandising effort is most effective in Delta's digital channels where customers can compare all product options in a single, easy to understand display.

In recent years, we have diversified revenue streams beyond the basic sale of an airline ticket in an effort to reduce the impact of cyclicity and other reductions in air travel demand on our results. Our partnership with American Express provides us a co-brand revenue stream tied to broader consumer spending. Our continued focus on premium products and customer segmentation enhanced our revenue growth prior to the pandemic and reduced reliance on the most price sensitive customer segment, a differentiator that we believe has benefited us during the pandemic. We also maintain complementary portfolio businesses, such as our cargo business, which has grown significantly during the pandemic, and our Maintenance, Repair and Overhaul ("MRO") operation, where we believe we remain well positioned for growth through contractual agreements with jet engine manufacturers.

Cargo

Through our global network, our cargo operations are able to connect the world's major freight gateways. We have historically generated cargo revenues in domestic and international markets through the use of cargo space on regularly scheduled passenger aircraft. In 2020, following the onset of the COVID-19 pandemic, reduced industry cargo capacity drove a significant increase in our cargo yield, and we also generated cargo revenue through the operation of cargo-only charter flights (i.e., using aircraft in our fleet not being utilized for passenger travel to fly cargo internationally). This trend continued in 2021, and we would expect capacity constraints and elevated market yields to continue through 2022 while the industry rebuilds international networks to pre-pandemic levels. We are a member of SkyTeam Cargo, an international airline cargo alliance with ten other airlines that offer a network spanning six continents, through which we provide global solutions to our customers by connecting our network with those partners.

Other Complementary Businesses

We have various other businesses arising from our airline operations, including the following:

- In addition to providing maintenance and engineering support for our fleet of approximately 1,200 mainline and regional aircraft, our MRO operation, known as Delta TechOps, serves aviation and airline customers from around the world.
- Our vacation wholesale subsidiary, Delta Vacations, provides vacation packages to third-party consumers.

In 2021, the total revenue from our MRO operation and Delta Vacations was approximately \$800 million.

Innovative Technology Investments to Improve Service and Efficiency

Our objective is to make technology a strategic differentiator. We continue to invest in technological improvements that support our operations and provide tools for our employees. These investments include improvements to infrastructure and technology architecture to unify and improve access to data sources and continuing innovations to customer facing applications. We believe this digital transformation enhances interactions with our customers and allows our people to deliver more personalized service, further enhancing the customer experience and strengthening our brand.

Through the development of innovative new technologies, we can better serve customers and give our employees the best tools. For our customers, we are making investments in the digital platforms, in the airport and onboard our aircraft. We are evolving the Fly Delta app into a digital travel concierge for our customers to offer convenient services on the day of travel and deliver thoughtful notifications to make their travel journeys more seamless. In the airport, we are investing to create a smoother, less stressful and increasingly contactless travel experience. Onboard the aircraft, we continue to invest in in-flight entertainment with free messaging and improved Wi-Fi connectivity. As of December 31, 2021, approximately 95% of our mainline aircraft were equipped with seat-back screens. For our employees, we are investing in applications that allow our people to have more meaningful interactions with our customers, as well as tools to make our employees safer and better able to do their jobs.

Commercial Arrangements with Other Airlines

We have marketing alliances with other airlines to enhance our access to domestic and international markets.

Joint Venture Agreements. We have implemented three separate joint venture arrangements with foreign carriers, each of which has been granted antitrust immunity from the U.S. Department of Transportation ("DOT"). We have sought to reinforce a number of the agreements through equity investments in those carriers. As described in Note 4 of the Notes to the Consolidated Financial Statements, although we continue to hold the equity investments referenced below, we reduced the carrying value of our investments in Virgin Atlantic, Grupo Aeroméxico and LATAM to zero during 2020 and the carrying values remain at zero as of December 31, 2021. During 2021, we announced additional investments in each of these carriers, which, with respect to LATAM and Grupo Aeroméxico, remain subject to completion of their respective reorganizations and related terms, conditions and approvals.

Each of our joint venture arrangements provides for joint commercial cooperation with the relevant partner within the geographic scope of the arrangement, including the sharing of revenues and/or profits and losses generated by the parties on the joint venture routes, as well as joint marketing and sales, coordinated pricing and revenue management, network and schedule planning and other coordinated activities with respect to the parties' operations on joint venture routes. Our implemented commercial joint ventures consist of the following:

- A combined joint venture with Air France, KLM and Virgin Atlantic with respect to transatlantic traffic flows. In addition to the joint venture, we own a non-controlling 49% equity stake in Virgin Atlantic Limited, the parent company of Virgin Atlantic Airways and a 6% ownership stake in the parent company of Air France and KLM.
- A joint venture with Aeroméxico with respect to trans-border traffic flows between the U.S. and Mexico, which the court has approved for Aeroméxico to assume as part of its bankruptcy proceedings. In addition to the joint venture, we currently own a non-controlling 51% equity stake in Grupo Aeroméxico, S.A.B. de C.V., the parent company of Aeroméxico. Upon, and subject to, completion of Grupo Aeroméxico's restructuring process, we expect to acquire an approximately 20% equity stake in Grupo Aeroméxico. We and Aeroméxico have also established a joint venture relating to an airframe MRO operation located in Querétaro, Mexico.
- A joint venture with Korean Air with respect to traffic flows between the United States and certain countries in Asia. In addition to the joint venture, we own an approximately 13% equity stake in Hanjin-KAL, the largest shareholder of Korean Air.

In 2019, we entered into a framework agreement with LATAM to form a strategic alliance. Pursuant to that agreement, we acquired an approximately 20% equity stake in LATAM in January 2020 and made certain agreed-upon transition payments to LATAM. As part of our planned strategic alliance with LATAM, we also assumed 10 of LATAM's A350 purchase commitments with Airbus S.A.S. for deliveries through 2025. In May 2020, we signed a trans-American joint venture agreement with LATAM that, subject to regulatory approvals, will combine our highly complementary route networks between North and South America, with the goal of providing customers a seamless travel experience and industry-leading connectivity. As a result of the COVID-19 pandemic, LATAM initiated a voluntary proceeding to reorganize under U.S. bankruptcy laws in which it has assumed the joint venture agreement. Upon, and subject to, completion of LATAM's restructuring process, we expect to acquire an approximately 10% equity stake in LATAM.

Enhanced Commercial Agreements with China Eastern. We own a 2% equity interest in China Eastern, with whom we have a strategic joint marketing and commercial cooperation arrangement covering traffic flows between China and the U.S., which includes reciprocal codesharing, loyalty program participation, airport lounge access and joint sales cooperation.

SkyTeam. In addition to our marketing alliance agreements with individual foreign airlines, we are a member of the SkyTeam global airline alliance. The other members of SkyTeam are Aeroflot, Aerolíneas Argentinas, Aeroméxico, Air Europa, Air France, China Airlines, China Eastern, Czech Airlines, Garuda Indonesia, ITA Airways, Kenya Airways, KLM, Korean Air, Middle East Airlines, Saudia, TAROM, Vietnam Airlines and Xiamen Airlines. Through alliance arrangements with other SkyTeam carriers, we are able to link our network with the route networks of the other member airlines, providing opportunities to increase connecting traffic while offering enhanced customer service through reciprocal codesharing and loyalty program participation, airport lounge access and cargo operations.

Regional Carriers

We have air service agreements with domestic regional air carriers that feed traffic to our route system by serving passengers primarily in small and medium-sized cities in the domestic market. These arrangements enable us to better match capacity with demand in these markets.

Through our regional carrier program, Delta Connection[®], we have contractual arrangements with regional carriers to operate aircraft using our "DL" designator code. We currently have contractual arrangements with:

- Endeavor Air, Inc., a wholly owned subsidiary of ours.
- Republic Airline, Inc. ("Republic").
- SkyWest Airlines, Inc. ("SkyWest Airlines").

Our contractual agreements with regional carriers are primarily capacity purchase arrangements, under which we control the scheduling, pricing, reservations, ticketing and seat inventories for the regional carriers' flights operating under our "DL" designator code. We are entitled to all ticket, cargo, mail, in-flight and ancillary revenues associated with the flights under these capacity purchase arrangements. We pay those airlines an amount, as defined in the applicable agreement, which is based on a determination of their cost of operating those flights and other factors intended to approximate market rates for those services. These capacity purchase agreements are long-term agreements, usually with initial terms of at least ten years, which grant us the option to extend the initial term. Certain of these agreements provide us the right to terminate the entire agreement, or in some cases remove some of the aircraft from the scope of the agreement, for convenience at certain future dates.

SkyWest Airlines operates some flights for us under a revenue proration agreement. This proration agreement establishes a fixed dollar or percentage division of revenues for tickets sold to passengers traveling on connecting flight itineraries.

Environmental Sustainability

During 2021, we built on our previously announced plan to invest \$1.0 billion through the end of 2030 toward airline carbon neutrality (the “\$1.0 billion airline carbon neutrality goal”) by announcing our intention to set new climate goals that are aligned with the applicable framework of the Science Based Targets initiative (“SBTi”):

- Medium-term goal: Reducing emissions intensity by 2035 as compared to 2019, based on jet fuel emissions of greenhouse gases (“GHGs”) in accordance with SBTi guidance for the aviation industry, and in line with the Paris Agreement’s goal of limiting global warming to well below two degrees Celsius above pre-industrial levels.
- Long-term goal: Achieving net zero GHG emissions across the airline operation and its value chain (Scopes 1, 2 and 3) no later than 2050, as outlined by the SBTi Net Zero Standard Criteria.

We have submitted both goals to SBTi for validation, but we are unable to predict the outcome of that process and when it will be completed.

The global aviation industry is viewed as a hard-to-abate sector, meaning it is innately difficult to decarbonize. We expect our path toward achievement of these ambitious climate goals to include the following levers, with the fleet and fuel levers expected to play the most significant roles:

- *Fleet*: Currently, fleet renewal provides the largest impact on reducing emissions and emissions intensity. In 2020, we retired more than 200 of our less efficient aircraft ahead of schedule, improving emissions intensity and fuel efficiency on an available seat mile (“ASM”) basis in 2020 and 2021, as compared to 2019. We expect our fleet renewal plans to continue to improve fuel efficiency in future periods.
- *Fuel*: Sustainable aviation fuel (“SAF”) is central to reducing the lifecycle emissions from aviation fuel; however, it is not currently available at the scale or cost necessary to meet the industry’s needs. We have established a goal of replacing 10% of our jet fuel consumption with SAF by the end of 2030, which we expect to require at least 400 million gallons of SAF annually. At the end of 2021, Delta had agreements in place with multiple suppliers for an aggregate of 81 million gallons of SAF annually beginning in 2025, subject to third-party investment and timely facility development.
- *Operational Initiatives*: Delta is launching a cross-functional senior leadership team, through a group known as the Carbon Council, to execute and track operational initiatives to reduce jet fuel consumption and improve our emissions intensity. This work supplements industry-wide efforts to modernize the air traffic control system, which would allow for more fuel efficient and therefore less carbon intensive flying.
- *Technological Innovation*: We plan to evaluate emerging technologies, such as synthetic hydrocarbon fuels, direct air capture and carbon capture and sequestration to support our efforts to achieve our climate goals.
- *Carbon Offsets*: In the near term and subject to market dynamics, Delta plans to continue the purchase and retirement of verified carbon offsets in support of our \$1.0 billion airline carbon neutrality goal.

These ambitious goals will require significant capital investment by Delta and third parties, government policies and incentives, research and development from manufacturers and other stakeholders and transformation of some of the world’s largest industries. Delta is committed to engaging our stakeholders and building coalitions to help drive down cost and increase production and consumption of alternative fuels and new technologies, and we recently hired the airline industry’s only C-Suite level Chief Sustainability Officer to lead the continuing development of our climate strategy and transition plan. We have joined aviation industry-specific and broader coalitions in an effort to accelerate our climate goals and to influence climate and sustainability policy development. For example, within the aviation industry, Delta serves on the steering committee for Clean Skies for Tomorrow, which is focused on bringing SAF to scale faster by putting in place key processes and sending strong demand signals to the market.

Community Engagement

As we connect people with communities, experiences and each other, we are committed to doing our part to build a better world. Giving back to the communities where we live, work and serve is part of our culture at Delta, and we focus our efforts in the community on four pillars of support: Environment, Equity, Education and Entire Well-being.

In 2021, Delta people continued to demonstrate their commitment to serving their community, even during a pandemic. Delta people donated 11,347 pints of blood, making Delta the No. 1 American Red Cross corporate blood drive sponsor for the fourth straight year. Our people helped build the 276th home built by Delta volunteers with Habitat for Humanity and built two playgrounds with The Trust for Public Land. Delta TechOps employees donated and assembled a record 1,250 bikes and collected 20 boxes of toys in partnership with Toys for Tots in addition to Delta's \$550,000 contribution to the organization to help make the holidays brighter for families in need.

As part of our commitment to equity, Delta launched a partnership with UNCF in 2021 to provide funding for their Emergency Student Aid program with a contribution of \$500,000 dedicated to Degree Completion Aid and Emergency Retention Grants to assist students in need of emergency funding to be able to graduate. Delta also sponsors UNCF chapters in Atlanta, Boston, Detroit, Los Angeles, Minneapolis and New York.

Employee Matters

Human Capital and Commitment to Diversity, Equity and Inclusion

We believe that Delta people are our strongest competitive advantage, and the high-quality service that they provide sets us apart from other airlines. As of December 31, 2021, we had approximately 83,000 full-time employee equivalents, of which approximately 81,000 were based in the U.S. In 2021, as our business began to recover from the impact of the COVID-19 pandemic, we hired approximately 11,000 new full-time employees across our business, including pilots, flight attendants, and gate and reservation agents.

Our principal human capital management objectives are to attract, retain and develop people who understand and are committed to delivering the "Delta Difference" that is core to our brand. To support these objectives, we have put in place programs that seek to:

- Prepare our employees for key roles and future leadership positions through a variety of training and development programs.
- Reward our people through highly competitive total compensation and benefit programs designed to share our success, promote teamwork and foster our people's physical, emotional, social and financial well-being.
- Enhance our culture through efforts aimed at making our workplace more engaging, equitable and inclusive.
- Drive employees' professional and community engagement.

The health and safety of our employees is foundational to achieving these objectives. We have long led the airline industry in employee safety and seek to achieve world-class personal safety performance. We have prioritized the health and safety of our employees by offering an extensive employee COVID-19 testing program, partnering with Georgia to host the state's largest COVID-19 vaccination site while steadily increasing the vaccination rate among our employees, providing pay protection programs for employees diagnosed with, exposed to or at high risk from COVID-19 and offering free flu shots for all U.S. employees.

Our commitment to diversity, equity and inclusion is critical to effective human capital management at Delta. As a global airline, we are in the business of bringing people together, and we believe our business should reflect the diversity of our customer base. To achieve this goal, we seek diverse talent internally and externally in an effort to achieve broader representation throughout our organization. We also promote inclusion through education, training and development opportunities as well as by leveraging insights from our ten employee resource groups, which we refer to as business resource groups, totaling membership of more than 25,000 as of December 31, 2021. During 2021, we offered enhanced inclusion training to our employees, with more than 62,000 employees participating. We also invested in our leadership's equity education and understanding with nearly 30% of officers participating in a two-day racial equity workshop in 2021 and the remaining officers slated to participate by the end of 2022. In addition, we are reviewing and revising systems, practices and policies in support of our commitment to diversity, equity and inclusion and with a focus on achieving equitable outcomes. Two key areas on which we are focused are (1) reinforcement of our diverse talent pipeline by, among other things, requiring hiring candidate slates and interview panels to reflect diversity and creating new pathways to certain roles by removing college degree requirements, and (2) closing diversity gaps in senior leadership positions by increasing the representation of women, Black and other ethnic minority groups in those roles, including doubling the number of Black officers and director-level employees by 2025 as compared to 2020.

We believe that listening, engaging and connecting with employees furthers our human capital management objectives. We have historically done so primarily through our open-door policy, digital communication across all levels of the company, in-person events with senior management and company-wide and division-specific surveys to evaluate employee satisfaction. Since the onset of the pandemic, senior management has participated in regular company-wide town hall discussions with our employees and our senior executive leadership team has regularly shared memos with all employees regarding our ongoing commitment to our people and our culture. We have also continued to conduct periodic employee surveys to seek feedback on engagement levels in general, our well-being programs, diversity, equity and inclusion efforts and our culture of safety.

Collective Bargaining

As of December 31, 2021, 20% of our approximately 83,000 full-time equivalent employees were represented by unions.

Domestic airline employees represented by collective bargaining agreements by group

Employee Group	Approximate Number of Employees Represented	Union	Date on which Collective Bargaining Agreement Becomes Amendable
Delta Pilots	13,180	ALPA	December 31, 2019
Delta Flight Superintendents (Dispatchers)	380	PAFCA	November 1, 2024
Endeavor Air Pilots	1,900	ALPA	January 1, 2029
Endeavor Air Flight Attendants	1,480	AFA	March 31, 2025

We are in mediated discussions with the representative of the Delta pilots regarding terms of their amendable collective bargaining agreement under the auspices of the National Mediation Board ("NMB").

In addition to the domestic airline employee groups discussed above, approximately 180 refinery employees of our wholly owned subsidiary, Monroe Energy, LLC ("Monroe") are represented by the United Steel Workers under an agreement that expires on February 28, 2022. This agreement is governed by the National Labor Relations Act ("NLRA"), which generally allows either party to engage in self-help upon the expiration of the agreement. Certain of our employees outside the U.S. are represented by unions, work councils or other local representative groups.

Labor unions periodically engage in organizing efforts to represent various groups of our employees, including at our operating subsidiaries, that are not represented for collective bargaining purposes.

Fuel

Our results of operations are significantly impacted by changes in the price and availability of aircraft fuel. We purchase most of our aircraft fuel under contracts that establish the price based on various market indices and therefore do not provide material protection against price increases or assure the availability of our fuel supplies. We also purchase aircraft fuel on the spot market, from off-shore sources and under contracts that permit the refiners to set the price. We are currently able to obtain adequate supplies of aircraft fuel, including fuel produced by Monroe or procured through the exchange of gasoline, diesel and other refined petroleum products ("non-jet fuel products") the refinery produces, and crude oil for Monroe's operations.

The following table shows our aircraft fuel consumption and costs, which were materially reduced in 2020 and 2021 in large part due to our reduced operations in response to the COVID-19 pandemic.

Fuel consumption and expense by year

Year	Gallons Consumed ⁽¹⁾ (in millions)	Cost ⁽¹⁾⁽²⁾ (in millions)	Average Price Per Gallon ⁽¹⁾⁽²⁾	Percentage of Total Operating Expense ⁽¹⁾⁽²⁾
2021	2,778	\$ 5,633	\$ 2.02	20 %
2020	1,935	\$ 3,176	\$ 1.64	11 %
2019	4,214	\$ 8,519	\$ 2.02	21 %

⁽¹⁾ Includes the operations of our regional carriers operating under capacity purchase agreements.

⁽²⁾ Includes the impact of fuel hedge activity, refinery segment results and carbon offset costs.

Monroe Energy

Our Monroe subsidiaries operate the Trainer refinery and related logistics assets located near Philadelphia, Pennsylvania. The facilities include pipelines and terminal assets that allow the refinery to supply jet fuel to our airline operations throughout the Northeastern U.S., including our New York hubs at LaGuardia and JFK. These companies are distinct from us, operating under their own management teams and with their own boards. We own Monroe as part of our strategy to mitigate the cost of the refining margin reflected in the price of jet fuel, as well as to maintain sufficiency of supply to our New York operations.

Refinery Operations. The facility is capable of refining approximately 200,000 barrels of crude oil per day. Monroe sources domestic and foreign crude oil supply from a variety of providers. During 2021, the refinery progressively increased operations, ending the year near pre-pandemic levels. Additionally, due to the decrease in demand for jet fuel, the refinery has shifted production to produce more non-jet fuel products.

Strategic Agreements. Monroe has agreements in place to exchange the non-jet fuel products the refinery produces with third parties for jet fuel consumed in our airline operations.

Environmental Sustainability. Delta is evaluating operational pathways for integrating Monroe into a net zero future. Monroe's sustainability ambitions include being one of the most energy efficient refineries in the country with the lowest energy intensity and GHG emissions on an absolute and per barrel basis. For example, Monroe is implementing a plan to replace steam driven turbines that currently power pumps at the facility with more efficient and reliable electric motors, which will reduce the amount of steam required from the facility's natural gas-fired boilers. Monroe is also recovering and utilizing methane, a potent GHG, instead of flaring it to the atmosphere. Finally, in support of Delta's 10% SAF goal, Monroe is evaluating the possibility of producing SAF and other renewable fuels at the Trainer refinery, although additional analyses must be conducted to determine economic and operational viability of various SAF production pathways.

Fuel Hedging Program

Our derivative contracts to hedge the financial risk from changing fuel prices are primarily related to Monroe's inventory. We may utilize different contract and commodity types in this program and frequently test their economic effectiveness against our financial targets. We closely monitor the hedge portfolio and rebalance the portfolio based on market conditions, which may result in locking in gains or losses on hedge contracts prior to their settlement dates.

Competition

The airline industry is highly competitive, marked by significant competition with respect to routes, fares, schedules (both timing and frequency), operational reliability, services, products, customer service and loyalty programs. The industry has evolved through mergers and new entry, both domestically and internationally, and evolution in international alliances. Consolidation in the airline industry, the presence of subsidized government sponsored international carriers, changes in international alliances and the creation of immunized joint ventures have altered, and will continue to alter, the competitive landscape in the industry, resulting in the formation of airlines and alliances with significant financial resources, extensive global networks and competitive cost structures.

Domestic

Our domestic operations are subject to significant competition from traditional network carriers, including American Airlines and United Airlines, national point-to-point carriers, including Alaska Airlines, JetBlue Airways and Southwest Airlines, and other discount or ultra-low-cost carriers, including Spirit Airlines, Frontier Airlines and Allegiant Air, some of which may have lower costs than we do and provide service at low fares to destinations served by Delta. In particular, we face significant competition at our domestic hubs and key airports either directly at those airports or at the hubs of other airlines that are located in close proximity. We also face competition in smaller to medium-sized markets from regional jet operations of other carriers.

International

Our international operations are subject to competition from both foreign and domestic carriers, including from point-to-point carriers on certain international routes. Through alliance and other marketing and codesharing agreements with foreign carriers, U.S. carriers have increased their ability to sell international transportation, such as services to and beyond traditional European and Asian gateway cities. Similarly, foreign carriers have obtained increased access to interior U.S. passenger traffic beyond traditional U.S. gateway cities through these relationships.

In particular, several joint ventures among U.S. and foreign carriers, including several of our joint ventures as well as those of our competitors, have received grants of antitrust immunity allowing the participating carriers to coordinate schedules, pricing, sales and inventory. In addition, alliances formed by domestic and foreign carriers, including SkyTeam, the Star Alliance (among United Airlines, Lufthansa German Airlines, Air Canada and others) and the oneworld alliance (among American Airlines, British Airways, Qantas and others) have enhanced competition in international markets.

Regulatory Matters

The DOT and the Federal Aviation Administration (the "FAA") exercise regulatory authority over air transportation in the U.S. The DOT has authority to issue certificates of public convenience and necessity required for airlines to provide air transportation. An air carrier that the DOT finds fit, willing, and able to perform the proposed service is given authority to operate domestic and international air transportation (including the carriage of passengers and cargo), as applicable. Since the passage of the Airline Industry Deregulation Act in 1978, airlines have generally been free to launch or terminate service to U.S. airports without restriction, except with respect to certain slot-controlled and schedule-facilitated airports, as well as certain constraints related to service to small communities governed by the "Essential Air Services" program. The Coronavirus Aid, Relief, and Economic Security Act of 2020 (the "CARES Act") created certain continuation of service obligations in connection with the receipt of payroll support program funds by passenger airlines. Specifically, the DOT has the authority until March 1, 2022 to require airlines that received such funds to maintain scheduled air service deemed necessary to any point served by the airline before March 1, 2020. The DOT has issued several orders mandating such service, the most recent of which was finalized on April 29, 2021, mandating service levels through September 30, 2021, subject to certain definitions and exceptions as described in the order.

The DOT has jurisdiction over certain economic and consumer protection matters, such as unfair or deceptive practices and methods of competition, advertising, denied boarding compensation, baggage liability and disabled passenger transportation. The DOT also has authority to review certain joint venture agreements between domestic and international carriers. The DOT engages in regulation of economic matters such as transactions involving allocation of "slots" or similar regulatory mechanisms which limit the rights of carriers to conduct operations at airports where such mechanisms are in place. The FAA has primary responsibility for matters relating to the safety of air carrier flight operations, including airline operating certificates, control of navigable air space, flight personnel, aircraft certification and maintenance and other matters affecting air safety.

Authority to operate international routes and international codesharing arrangements is regulated by the DOT and by the governments of the foreign countries involved. International certificate authorities are also subject to the approval of the U.S. President for conformance with national defense and foreign policy objectives.

The Transportation Security Administration and the U.S. Customs and Border Protection, each a division of the Department of Homeland Security, are responsible for certain civil aviation security matters, including passenger and baggage screening at U.S. airports and international passenger prescreening prior to entry into or departure from the U.S.

Airlines are also subject to various other federal, state, local and foreign laws and regulations. For example, the U.S. Department of Justice has jurisdiction over some airline competition matters. The U.S. Postal Service has authority over certain aspects of the transportation of mail. Labor relations in the airline industry, as discussed below, are generally governed by the Railway Labor Act with oversight by the NMB. Environmental matters are regulated by various federal, state, local and foreign governmental entities. Privacy of passenger and employee data is regulated by domestic and foreign laws and regulations.

Fares and Rates

Airlines set ticket prices in all domestic and most international city-pairs with minimal governmental regulation, and the industry is characterized by significant price competition. Certain international fares and rates are subject to the jurisdiction of the DOT and the governments of the foreign countries involved. Many of our tickets are sold by travel agents, and fares are subject to commissions, overrides and discounts paid to travel agents, brokers and wholesalers.

Route Authority

Our flight operations are authorized by certificates of public convenience and necessity and also by exemptions and limited-entry frequency awards issued by the DOT. The requisite approvals of other governments for international operations are controlled by bilateral agreements (and a multilateral agreement in the case of the U.S. and the European Union) with, or permits or approvals issued by, foreign countries. Because international air transportation is governed by bilateral or other agreements between the U.S. and the foreign country or countries involved, changes in U.S. or foreign government aviation policies could result in the alteration or termination of such agreements, diminish the value of our international route authorities or otherwise affect our international operations. Bilateral agreements between the U.S. and various foreign countries that we serve are subject to renegotiation from time to time. The U.S. government has negotiated "Open Skies" agreements with many countries, which allow unrestricted access between the U.S. and these foreign markets.

Certain of our international route authorities are subject to periodic renewal requirements. We request extension of these authorities when and as appropriate. While the DOT usually renews temporary authorities on routes where the authorized carrier is providing a reasonable level of service, there is no assurance this practice will continue in general or with respect to a specific renewal. Dormant route authorities may not be renewed in some cases, especially where another U.S. carrier indicates a willingness to provide service.

Airport Access

Operations at three major domestic airports and certain foreign airports that we serve are regulated by governmental entities through allocations of "slots" or similar regulatory mechanisms. Each slot represents the authorization to land at or take off from the particular airport during a specified time period.

In the U.S., the FAA currently regulates the allocation of slots, slot exemptions, operating authorizations or similar capacity allocation mechanisms at Reagan National in Washington, D.C. and LaGuardia and JFK in the New York City area. Our operations at these airports generally require the allocation of slots or analogous regulatory authorizations. Similarly, our operations at London's Heathrow airport, Tokyo's Haneda airport and other international airports are regulated by local slot coordinators pursuant to the International Air Transport Association's Worldwide Scheduling Guidelines and applicable local law. We currently have sufficient slots or analogous authorizations to operate our existing flights, and we have generally been able to obtain the rights to expand our operations and to change our schedules. There is no assurance, however, that we will be able to do so in the future because, among other reasons, such allocations are subject to changes in governmental policies.

Airline Labor Regulation

In the U.S., airlines and labor unions are governed by the Railway Labor Act. Under the Railway Labor Act, a labor union seeking to represent an unrepresented craft or class of employees is required to file with the NMB an application alleging a representation dispute, along with authorization cards signed by at least 50% of the employees in that craft or class. The NMB then investigates the dispute and, if it finds the labor union has obtained a sufficient number of authorization cards, conducts an election to determine whether to certify the labor union as the collective bargaining representative of that craft or class. A labor union will be certified as the representative of the employees in a craft or class if more than 50% of votes cast are for representation. A certified labor union would then commence negotiations toward a collective bargaining agreement with the employer.

Under the Railway Labor Act, a collective bargaining agreement between an airline and a labor union does not expire, but instead becomes amendable as of a stated date. Either party may request that the NMB appoint a federal mediator to participate in the negotiations for a new or amended agreement. If no agreement is reached in mediation, the NMB may determine, at any time, that an impasse exists and offer binding arbitration. If either party rejects binding arbitration, a 30-day "cooling off" period begins. At the end of this 30-day period, the parties may engage in "self-help," unless the U.S. President appoints a Presidential Emergency Board ("PEB") to investigate and report on the dispute. The appointment of a PEB maintains the "status quo" for an additional 60 days. If the parties do not reach agreement during this period, the parties may then engage in self-help. Self-help includes, among other things, a strike by the union or the imposition of proposed changes to the collective bargaining agreement by the airline. The U.S. Congress and the President have the authority to prevent self-help by enacting legislation that, among other things, imposes a settlement on the parties.

Environmental Regulation

Environmental Compliance Obligations. Our operations are subject to numerous international, federal, state and local laws and regulations governing protection of the environment, including regulation of greenhouse gases and other air emissions, noise reduction, water discharges, aircraft drinking water, storage and use of petroleum and other regulated substances, and the management and disposal of hazardous waste, substances and materials.

We are also subject to certain environmental laws and contractual obligations governing the management and release of regulated substances, which may require the investigation and remediation of affected sites. Soil and/or ground water impacts have been identified at certain of our current or former leaseholds at several domestic airports. To address these impacts, we have a program in place to investigate and, if appropriate, remediate these sites. Although the ultimate outcome of these matters cannot be predicted with certainty, we believe that the resolution of these matters will not have a material adverse effect on our Consolidated Financial Statements.

GHG Emissions. Aviation industry GHG emissions, particularly carbon emissions, and their impact on climate change have become a focus in the international community and within the U.S. In 2016, the International Civil Aviation Organization ("ICAO") formally adopted a global, market-based emissions offset program known as the Carbon Offsetting and Reduction Scheme for International Aviation ("CORSIA"). This program establishes a goal for the aviation industry to achieve carbon-neutral growth in international aviation beginning in 2021. Any growth above the baseline would need to be addressed using either eligible carbon offset credits or a lower carbon fuel. The baseline for establishing airlines' offset obligations under CORSIA was originally set as an average of 2019 and 2020 emissions. However, given the COVID-19 pandemic and resulting unprecedented reduction in international travel, ICAO removed 2020 from the baseline calculation for the first phases of CORSIA, from 2021 to 2027. ICAO has yet to decide how to apply the baseline beyond 2027. Some countries and other stakeholders, however, have advocated for reestablishing 2020 in the baseline and for using 2020 for the future baseline calculation, which, if adopted, would significantly increase the airline industry's projected obligations under the program and the cost of compliance.

A pilot phase of the CORSIA program runs from 2021 to 2023, followed by a first phase of the program beginning in 2024 and a second phase beginning in 2027. Countries can voluntarily participate in the pilot and first phase, and the United States agreed to participate in these voluntary phases. Participation in the second phase is mandatory for certain countries, including the United States. The U.S. government has not yet enacted legislation to mandate that U.S. operators participate in CORSIA. Nonetheless, Delta has voluntarily submitted verified emissions reports for our 2019 and 2020 international emissions.

Additionally, the European Union ("EU") requires its member states to implement regulations to include aviation in its Emissions Trading Scheme ("ETS"). Under these regulations, any airline with flights originating or landing in the European Economic Area ("EEA") is subject to the ETS and, beginning in 2012, was required to purchase emissions allowances if the airline exceeds the number of free allowances allocated to it under the ETS. The scope of the ETS has been narrowed so that it currently applies only to flights within the EEA through 2023 to align with the pilot phase of CORSIA. However, its scope may be expanded in the future. As a result of the UK's withdrawal from the EU, UK flights are no longer part of the EU ETS and will fall under a separate UK ETS scheme. UK ETS is applicable to UK domestic flights and flights from the UK to EEA countries.

In 2017, ICAO also adopted aircraft certification standards to reduce carbon dioxide ("CO₂") emissions from new aircraft. The new aircraft certification standards applied to new fleet types in 2020 and will apply to in-production aircraft starting in 2023 but no later than 2028. These standards will not apply to existing in-service aircraft.

In 2016, the U.S. Environmental Protection Agency ("EPA") issued a final finding under the Clean Air Act that GHGs threaten the public health and welfare, and further determined that certain classes of aircraft engines cause or contribute to GHGs. The endangerment finding did not establish standards but triggered an obligation for the EPA to regulate GHG emissions from certain aircraft engines. In January 2021, the EPA finalized GHG emission standards for new aircraft engines designed to implement the ICAO standards on the same timeframe contemplated by ICAO. Like the ICAO standards, the final EPA standards would not apply to engines on in-service aircraft. The final standards have been challenged by several states and environmental groups. On November 15, 2021, the EPA announced that it plans to defend the current standards while simultaneously calling for ambitious new international CO₂ standards at the upcoming round of ICAO negotiations. The outcome of the legal challenge cannot be predicted at this time.

The airline industry may face additional regulation of aircraft emissions in the U.S. and abroad and become subject to further taxes, charges or additional requirements to obtain permits or purchase allowances or emission credits for GHG emissions in various jurisdictions. For example, in 2021 the European Commission proposed legislation that could expand the reach of the EU ETS to include flights into and out of the EEA beginning in 2027 under certain circumstances, increase the stringency of the program, and establish a sustainable aviation fuel blending mandate for aviation fuel suppliers beginning in 2025, among other requirements. Individual EU member states have been developing their own requirements, including for example, a SAF mandate in France that will be phased in beginning in 2022. In the United States, various exploratory discussions continue around approaches to address climate change, such as carbon pricing, without a clear legislative path forward. Additional regulation could result in taxation, regulatory or permitting requirements from multiple jurisdictions for the same operations and significant costs for us and the airline industry. In addition to direct costs, such regulation could result in increased fuel costs passed through from fuel suppliers affected by any such regulations. Certain airports have also adopted, and others could in the future adopt, GHG emission or climate-related goals and requirements that could impact our operations or require us to make changes or investments in our infrastructure. We are monitoring and evaluating the potential impact of such developments.

Noise. The Airport Noise and Capacity Act of 1990 recognizes the rights of operators of airports with noise problems to implement local noise abatement programs so long as such programs do not interfere unreasonably with interstate or foreign commerce or the national air transportation system. This statute generally provides that local noise restrictions on Stage 3 aircraft first effective after October 1, 1990, require FAA approval. While we have had sufficient scheduling flexibility to accommodate local noise restrictions in the past, our operations could be adversely impacted if locally imposed regulations become more restrictive or widespread. In addition, foreign governments may allow airports to enact similar restrictions, which could adversely impact our international operations or require significant expenditures in order for our aircraft to comply with the restrictions.

Refinery Matters. Monroe's operation of the Trainer refinery is subject to numerous environmental laws and extensive regulations, including those relating to the discharge of materials into the environment, waste management, pollution prevention measures and greenhouse gas and other air emissions.

Under the Energy Policy Act of 2005, as expanded by the Energy Independence and Security Act of 2007, the Renewable Fuel Standard ("RFS") was created, setting up specific targets of renewable fuel to be used in the U.S. economy by mandating the blending of renewable fuels into gasoline and on-road diesel ("Transportation Fuels"). Renewable Identification Numbers ("RINs") are assigned to renewable fuels produced by or imported into the U.S. that are blended into Transportation Fuels to demonstrate compliance with this obligation. A refinery may meet its obligation under RFS by blending the necessary volumes of renewable fuels with Transportation Fuels, by purchasing RINs in the open market or through a combination of blending and purchasing RINs. Because Monroe is able to blend only a small amount of renewable fuels, it must purchase the majority of its RINs requirement in the secondary market. Market prices for RINs have been volatile, marked by periods of sharp increases and decreases primarily in response to speculation about what the EPA and/or the U.S. Congress will do with respect to compliance obligations. In December 2021, the EPA issued proposed RFS volume requirements for 2020, 2021 and 2022, which are expected to be finalized in the first half of 2022. The EPA has not finalized the compliance deadlines to retire our obligations for 2020 and 2021, but we expect those deadlines to be within one year of the effective date of the new RFS volume requirements.

Civil Reserve Air Fleet Program

We participate in the Civil Reserve Air Fleet program (the "CRAF Program"), which permits the U.S. military to use the aircraft and crew resources of participating U.S. airlines during airlift emergencies, national emergencies or times of war. We have agreed to make available under the CRAF Program a portion of our international aircraft during the contract period ending September 30, 2022. The CRAF Program has only been activated three times since it was created in 1951, most recently in 2021 to support the military's effort to evacuate people from Afghanistan following the withdrawal of U.S. troops from the country. Delta played a central role in transporting 10,000 Afghan refugees that were evacuated from Afghanistan and delivering needed supplies.

Information About Our Executive Officers

Edward H. Bastian, Age 64: Chief Executive Officer of Delta since May 2016; President of Delta (September 2007 - May 2016); President of Delta and Chief Executive Officer Northwest Airlines, Inc. (October 2008 - December 2009); President and Chief Financial Officer of Delta (September 2007 - October 2008); Executive Vice President and Chief Financial Officer of Delta (July 2005 - September 2007); Chief Financial Officer of Acuity Brands (June 2005 - July 2005); Senior Vice President - Finance and Controller of Delta (2000 - April 2005); Vice President and Controller of Delta (1998 - 2000).

Glen W. Hauenstein, Age 61: President of Delta since May 2016; Executive Vice President - Chief Revenue Officer of Delta (August 2013 - May 2016); Executive Vice President - Network Planning and Revenue Management of Delta (April 2006 - July 2013); Executive Vice President and Chief of Network and Revenue Management of Delta (August 2005 - April 2006); Vice General Director - Chief Commercial Officer and Chief Operating Officer of Alitalia (2003 - 2005); Senior Vice President- Network of Continental Airlines (2003); Senior Vice President - Scheduling of Continental Airlines (2001 - 2003); Vice President Scheduling of Continental Airlines (1998 - 2001).

Allison C. Ausband, Age 59: Executive Vice President - Chief Customer Experience Officer of Delta since June 2021; Senior Vice President - In-Flight Service of Delta (September 2014 - May 2021); Vice President - Reservation Sales and Customer Care of Delta (January 2010 - September 2014).

Alain Bellemare, Age 60: President - International of Delta since January 2021; Chief Executive Officer of Bombardier (February 2015 - March 2020); President and Chief Executive Officer of United Technologies Corporation Propulsion & Aerospace Systems (June 2011 - February 2015).

Peter W. Carter, Age 58: Executive Vice President - Chief Legal Officer of Delta since July 2015; Partner of Dorsey & Whitney LLP (1999 - 2015), including co-chair of Securities Litigation and Enforcement practice group, chair of Policy Committee and chair of trial department.

Daniel C. Janki, Age 53: Executive Vice President - Chief Financial Officer of Delta since July 2021; Senior Vice President of General Electric Company (GE) and Chief Executive Officer of GE Power Portfolio (October 2020 - June 2021); Senior Vice President, Business and Portfolio Transformation of GE (2018 - 2020); Senior Vice President, Treasurer and Global Business Operations of GE (2014 - 2017); Senior Vice President, CEO of GE Energy Management (2012 - 2013).

John E. Laughter, Age 51: Executive Vice President - Chief of Operations of Delta since June 2021; Senior Vice President and Chief of Operations of Delta (October 2020 - June 2021); Senior Vice President - Flight Operations of Delta (March 2020 - October 2020); Senior Vice President - Corporate Safety, Security and Compliance of Delta (August 2013 - March 2020); Senior Vice President - Maintenance Operations of Delta (March 2008 - July 2013); Vice President - Maintenance of Delta (December 2005 - March 2008).

Rahul Samant, Age 55: Executive Vice President - Chief Information Officer of Delta since January 2018; Senior Vice President and Chief Information Officer of Delta (February 2016 - December 2017); Senior Vice President and Chief Digital Officer of American International Group, Inc. (January 2015 - February 2016); Senior Vice President and Global Head, Application Development and Management of American International Group, Inc. (September 2012 - December 2014); Managing Director of Bank of America (1999 - September 2012).

Steven M. Sear, Age 56: Executive Vice President - Global Sales of Delta since February 2016; Senior Vice President - Global Sales of Delta (December 2011 - February 2016); Vice President - Global Sales of Delta (October 2008 - December 2011); Vice President - Sales & Customer Care of Northwest Airlines, Inc. (June 2005 - October 2008).

Joanne D. Smith, Age 63: Executive Vice President and Chief People Officer of Delta since October 2014; Senior Vice President - In-Flight Service of Delta (March 2007 - September 2014); Vice President - Marketing of Delta (November 2005 - February 2007); President of Song (January 2005 - October 2005); Vice President - Marketing and Customer Service of Song (November 2002 - December 2004).

Additional Information

We make available free of charge on our website at ir.delta.com our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and amendments to those reports as soon as reasonably practicable after these reports are filed with or furnished to the Securities and Exchange Commission ("SEC"). Information on our website is not incorporated into this Form 10-K or our other securities filings and is not a part of those filings.

ITEM 1A. RISK FACTORS

In addition to the other information set forth in this report, you should carefully consider the following material risk factors applicable to Delta. As described below, these risks could materially affect our business, financial condition or results of operations in the future.

Risk Factors Relating to Delta

The rapid spread of the COVID-19 virus, the continuing spread of its variants, the persistence of the resulting pandemic and measures implemented to combat it have had, and will continue to have, a material adverse effect on our business. It is possible that there will be future negative effects that we cannot presently predict, including near-term effects.

The rapid spread of the COVID-19 virus in 2020 and variants of the virus in 2021, the persistence of the resulting pandemic, the measures governments and private parties have implemented in order to stem the spread of this pandemic, and the general concern about the virus among travelers have had, and are continuing to have, a material adverse effect on the demand for worldwide air travel compared to historical levels, and consequently upon our business. Among other effects of the COVID-19 pandemic affecting air travel and our business:

- In the United States, which is our primary market, the federal government discouraged travel and encouraged social distancing efforts and limits on gathering size for an extended period. In addition, state and local governments issued travel restrictions, quarantines and health-related curfews or “shelter in place” orders which dissuaded or restricted air travel.
- Numerous travel advisories and restrictions were implemented, some of which remain in place or have been reinstated, between the United States and specific countries, and many foreign governments have placed restrictions or quarantines on citizens of other countries, including citizens of the U.S., flying into their countries. For instance, the U.S. and numerous other countries have required and in some instances continue to require airline passengers to provide negative COVID-19 test results prior to travel into their countries.
- Employers in both the public and private sectors have issued instructions to employees to work from home and/or have otherwise dissuaded or restricted air travel.
- Business conventions and conferences, concerts and similar entertainment have been and occasionally continue to be cancelled. Many popular tourist destinations were closed, or operations curtailed. Significant sporting events were, and occasionally continue to be, cancelled or held with limited or no spectators.
- Travelers have been discouraged from air travel to destinations where COVID-19 is particularly virulent.
- Travelers may be dissuaded from flying due to possible enhanced COVID-19-related screening measures, which have been implemented to varying degrees and in different ways across multiple markets we serve, or due to the concern that additional travel restrictions implemented between their departure and return may affect their ability to return to their homes.

These effects related to the COVID-19 pandemic have negatively impacted air travel in general, which in turn has materially adversely affected our revenues, results of operations and financial condition. Although vaccines have generally proved to be effective and certain of the restrictions above have been eased in some places, the ongoing pandemic, including large outbreaks, resurgences of COVID-19 in various regions and appearances of new variants of the virus, has resulted, and may continue to result, in their reinstitution. The effectiveness of vaccines against future variants that may develop is also unknown. Moreover, additional currently unknown restrictions or other events dissuading air travel may occur in the future as a result of an increase in COVID-19 case levels or other factors related to the pandemic (including possibly in the near term), lengthening the negative effects of the pandemic on our business.

Our operations have been, and could in the future be, negatively affected further if our employees are quarantined or sickened as a result of exposure to COVID-19, or if they are subject to additional governmental COVID-19 curfews or “shelter in place” health orders or similar restrictions. Measures restricting the ability of our airport or in-flight employees to come to work negatively impact our service or operations, all of which could negatively affect our business.

In response to the crisis, we took steps to mitigate the effects on our business, which themselves may have negative consequences with respect to our business and operations. For example, we took cost-saving actions to significantly reduce our capacity in 2020 but were not able to eliminate all costs related to unused capacity. Ultimately, cost-saving measures that we implemented to date, or may consider in the future, have not made up, and will not in the future make up, for the loss in revenue as a result of decreased ticket sales and cancellations. In addition, to protect the safety of our employees and customers, we have implemented significant additional cleaning measures on all of our aircraft and at the airports in which we operate which have increased our costs.

We are unable to predict how long conditions related to the pandemic will persist. The overall situation remains fluid, and it is impossible to predict the timing of future material developments and whether they will occur in the near, medium or long term. At this time, we are also not able to predict the extent to which the COVID-19 pandemic may result in permanent changes to our customers' behavior, with such changes including but not limited to a permanent reduction in business travel as a result of increased usage of virtual meetings, and videoconferencing and teleconferencing products and more broadly, a general reluctance to travel, each of which could have a material impact on our business.

Collectively, the foregoing circumstances have had, and are continuing to have, a material adverse effect on our business, results of operations and financial condition. Future disease outbreaks or similar public health threats could have similar effects.

We have a significant amount of fixed obligations and incurred significant amounts of new debt in a short period in response to the COVID-19 pandemic. Insufficient liquidity may have a material adverse effect on our financial condition and business.

We have a significant amount of existing fixed obligations, including aircraft lease and debt financings, leases of airport property and other facilities, and other material cash obligations. In addition, we have substantial commitments for capital expenditures.

We had approximately \$14.2 billion in cash, cash equivalents, short-term investments and aggregate principal amount committed and available to be drawn under our revolving credit facilities ("liquidity") as of December 31, 2021; however, our future liquidity could be negatively affected by the risk factors discussed in this Form 10-K, and in other filings we may make from time to time with the SEC. If our liquidity is materially diminished, we might not be able to timely pay our leases and debts or comply with certain financial covenants in our financing and credit card processing agreements or with other material provisions of our contractual obligations.

Agreements governing our debt, including our credit facilities and our SkyMiles financing agreements, include financial and other covenants. Certain of these covenants impose restrictions on our business, and failure to comply with any of the covenants in these agreements could result in events of default.

Our debt agreements contain various affirmative, negative and financial covenants, including our credit facilities and our SkyMiles financing agreements, each of which contains a minimum liquidity covenant. Certain of our debt agreements also contain collateral coverage ratios, and our SkyMiles financing agreements contain a debt service coverage ratio. A decline in these coverage ratios, including due to factors that are beyond our control, could require us to post additional collateral or trigger an early amortization event. Our SkyMiles financing agreements also restrict our ability to, among other things, change the policies and procedures of the SkyMiles program in a manner that would reasonably be expected to materially impair repayment of our SkyMiles debt.

Complying with certain of the covenants in our debt agreements and other restrictive covenants that may be contained in any future debt agreements could limit our ability to operate our business and to take advantage of business opportunities that are in our long-term interest. The terms of any future indebtedness we may incur could include more restrictive covenants.

While the covenants in our debt agreements are subject to important exceptions and qualifications, if we fail to comply with them and are unable to obtain a waiver or amendment, refinance the indebtedness subject to these covenants or take other mitigating actions, an event of default would result. These arrangements also contain other events of default customary for such financings. If an event of default were to occur, the lenders or noteholders could, among other things, declare outstanding amounts due and payable and where applicable and subject to the terms of relevant collateral agreements, repossess collateral, including aircraft or other valuable assets. In addition, an event of default or acceleration of indebtedness under one agreement could result in an event of default under other of our financing agreements. The acceleration of significant indebtedness could require us to seek to renegotiate, repay or refinance the obligations under our financing arrangements, and there is no assurance that such renegotiation or refinancing efforts would be successful.

We are at risk of losses and adverse publicity stemming from a serious accident involving our aircraft or aircraft of our airline partners.

An aircraft crash or other serious accident involving our aircraft or those of our airline partners could expose Delta to significant liability. Although we believe that our insurance coverage is appropriate, we may be forced to bear substantial losses from an accident in the event that the coverage was not sufficient.

In addition, any accident involving an aircraft that we operate or an aircraft that is operated by an airline that is one of our regional carriers or codeshare, alliance or joint venture partners could create a negative public perception about safety and reliability for aviation authorities and the public, which could harm our reputation, resulting in air travelers being reluctant to fly on our aircraft and therefore harm our business.

Breaches or lapses in the security of the technology systems we use and rely on and the data stored within them, as well as ever-evolving global privacy and security regulatory obligations, could have a material adverse effect on our business.

As a regular part of our ordinary business operations, we collect and store sensitive data, including information necessary for our operations, personal information of our passengers and employees and information of our business partners. The secure operation of the networks and systems on which this type of information is stored, processed and maintained is critical to our business operations and strategy.

Our information systems and those of our service providers are subject to an increasing threat of continually evolving cybersecurity risks, and the increase in work-from-home arrangements since the onset of the COVID-19 pandemic could potentially enhance these risks. We expect unauthorized parties to continue attempting to gain access to our systems or information, or those of our business partners and service providers, including through fraud or other means of deception, or introduction of malicious code, such as viruses, worms, Trojan horses and ransomware. If successful, these actions could cause harm to our computer systems or compromise data stored on our computer networks or those of our business partners and service providers. For example, we were notified in 2018 that a third-party vendor of chat services for Delta and other companies determined we had been involved in a cyber incident for a short period in 2017. We have incurred remedial, legal and other costs in connection with this incident but the costs were not material to our financial position or results of operations. Hardware or software we or our business partners or service providers develop, acquire or use in connection with our systems may contain defects that could unexpectedly compromise information security.

The methods used to obtain unauthorized access, disable or degrade service or sabotage systems are constantly evolving and may be difficult to anticipate or to detect for long periods of time. As a result of these types of risks and regular attacks on our systems, we regularly review and update procedures and processes to prevent and protect against unauthorized access to our systems and information and inadvertent misuse of data. In addition to continuously assessing risk and reviewing our procedures, processes and technologies, we continue to educate our people about these risks and to monitor, review and update the process and control requirements we expect third parties and vendors to leverage and implement for the protection of information regarding our customers, employees or business partners that is in their care. However, the constantly changing nature of the threats means that we may not be able to prevent all information security breaches or misuse of data.

The compromise of our or our business partners' or service providers' technology systems resulting in the loss, disclosure, misappropriation of, or access to, our information or that of our customers, employees or business partners could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy and security of personal information, disruption to our operations and damage to our reputation, any or all of which could adversely affect our business. The costs to remediate breaches and similar system compromises that do occur could be material. In addition, as cybercriminals become more sophisticated, the cost of proactive defensive measures continues to increase.

Disruptions of our information technology infrastructure could interfere with our operations, possibly having a material adverse effect on our business.

Disruptions in our information technology capability could result from a technology error or failure impacting our internal systems, whether hosted internally at our data centers or externally at third-party locations, or large scale external interruption in technology infrastructure support on which we depend, such as power, telecommunications or the internet. The operation of our technology systems and the use of related data may also be vulnerable to a variety of other sources of interruption, including natural disasters, terrorist attacks, computer viruses, hackers and other security issues. A significant individual, sustained or repeated failure of our information technology infrastructure, including third-party networks we utilize and on which we depend, could impact our operations and our customer service, result in increased costs and damage our reputation. While we have in place initiatives to prevent disruptions and disaster recovery plans and continue to invest in improvements to these initiatives and plans, we have previously experienced infrastructure disruptions and these measures may not be adequate to prevent a future business disruption and any material adverse financial and reputational consequences to our business as recent outages of large cloud providers whom we rely on has shown.

Failure of the technology we use to perform effectively could have a material adverse effect on our business.

We are dependent on technology initiatives and capabilities to provide customer service and operational effectiveness in order to compete in the current business environment. For example, substantially all of our tickets are issued to our customers as electronic tickets, and a growing number of our customers check in using our website, airport kiosks and our FlyDelta mobile application. We have made and continue to make significant investments in customer facing technology such as delta.com, the FlyDelta mobile application, in-flight wireless internet, check-in kiosks, customer service applications, application of biometric technology, airport information displays and related initiatives, including security for these initiatives. We are also investing in significant upgrades to technology infrastructure and other supporting systems and transitioning to cloud-based technologies. The performance, reliability and security of the technology we use are critical to our ability to serve customers. If this technology does not perform effectively, including as a result of the implementation or integration of new or upgraded technologies or systems, our business and operations would be negatively affected, which could be material.

Our commercial relationships with airlines in other parts of the world and the investments that we have in certain of those carriers may not produce the results or returns we expect.

An important part of our strategy to expand our global network has been to develop and expand strategic relationships with a number of airlines through joint ventures and other forms of cooperation and support, including equity investments. We expect to continue exploring ways to deepen our alliance relationships with other carriers as part of our global business strategy. These relationships and investments involve significant challenges and risks, including that they may not generate the expected financial results or that we may not realize a satisfactory return on our investment. We are dependent on these other carriers for significant aspects of our network in the regions in which they operate.

The COVID-19 pandemic has significantly impacted the operations of our airline partners and could adversely affect the expansion of strategic relationships in the future. These carriers have incurred significant financial losses as a result of the pandemic, and some have been or may be forced to seek protection under applicable bankruptcy laws. For example, following the onset of the pandemic, LATAM and Grupo Aeroméxico filed voluntary proceedings to reorganize under Chapter 11 of the United States bankruptcy code and Virgin Atlantic undertook a voluntary recapitalization process in the United Kingdom ("U.K.") and instituted ancillary proceedings in support of that process in the U.S. As discussed further in Note 4 of the Notes to the Consolidated Financial Statements, due to the effects of the COVID-19 pandemic, along with these actions, the carrying value of our equity investments in these three carriers has been reduced to, and remained, zero as of December 31, 2021. During the December 2021 quarter, we announced additional investments in each of these carriers, which with respect to LATAM and Grupo Aeroméxico, remain subject to completion of their respective reorganizations and related terms, conditions and approvals. If any airline partners that seek to restructure or recapitalize are unable to do so successfully or if our commercial arrangements with these partners are not maintained, any investments or other assets associated with those partners could become impaired, and our business and results of operations could be materially adversely affected.

A significant disruption in, or other problems with respect to, the operations or performance of third parties on which we rely, including third-party carriers, could have a material adverse effect on our business and results of operations.

We rely on the operations and performance of third parties in a number of areas that are important to our business, including third-party regional carriers, international alliance partners and ground operation providers at some airports. While we have agreements with certain of these third parties that define expected service performance, we do not have direct control over their operations. To the extent that the operations of a third party on which we rely is significantly disrupted, including as a result of the pandemic, or if these third parties experience significant performance issues (including failing to satisfy any applicable performance standards) or fail to meet any applicable compliance requirements, our revenue may be reduced, our expenses may be increased and our reputation may be harmed, any or all of which could result in a material adverse effect on our business and results of operations.

Some regional carriers, including our wholly-owned subsidiary, Endeavor, have faced a shortage of qualified pilots. If this shortage becomes more widespread, third-party regional carriers may not be able to comply with their obligations to us, and Endeavor may not be able to perform as expected, which could reduce our capacity (available seat miles) and revenue, resulting in a material adverse effect on our business and results of operations.

We may never realize the full value of our intangible assets or our long-lived assets, causing us to record impairments that may materially adversely affect our results of operations.

In accordance with applicable accounting standards, we are required to test our goodwill and other indefinite-lived intangible assets for impairment on an annual basis, or more frequently where there is an indication of impairment. In addition, we are required to test certain of our other assets for impairment where there is an indication that an asset may be impaired. During the fiscal year ended December 31, 2020, we recorded significant impairment and related charges related to acceleration of our fleet simplification strategy and the write-down of investments in certain airline partners, stemming from the impact of the COVID-19 pandemic.

We may be required to recognize losses in the future due to, among other factors, extreme fuel price volatility, tight credit markets, government regulatory changes, decline in the fair values of certain tangible or intangible assets, such as aircraft, route authorities, and airport slots, unfavorable trends in forecasted results of operations and cash flows and an uncertain economic environment, as well as other uncertainties. Further impairment charges could have a material adverse effect on our results of operations.

Employee strikes and other labor-related disruptions may have a material adverse effect on our operations.

Our business is labor intensive, utilizing large numbers of pilots, flight attendants, aircraft maintenance technicians, ground support personnel and other personnel. As of December 31, 2021, 20% of our workforce, primarily pilots, was unionized. Relations between air carriers and labor unions in the United States are governed by the Railway Labor Act, which provides that a collective bargaining agreement between an airline and a labor union does not expire, but instead becomes amendable as of a stated date. The Railway Labor Act generally prohibits strikes or other types of self-help actions both before and after a collective bargaining agreement becomes amendable, unless and until the collective bargaining processes required by the Railway Labor Act have been exhausted. The collective bargaining agreement with our pilots became amendable on December 31, 2019 and we are in discussions with the representative of the pilots regarding terms of the agreement under the auspices of the NMB. Separately, the NLRA governs Monroe's relations with the union representing their employees, which generally allows self help after a collective bargaining agreement expires.

If we or our subsidiaries are unable to reach agreement with any of our unionized work groups in future negotiations regarding the terms of their collective bargaining agreements or if additional segments of our workforce become unionized, we may be subject to work interruptions or stoppages, subject to the requirements of the Railway Labor Act or the NLRA, as the case may be. Strikes or labor disputes with our unionized employees may have a material adverse effect on our ability to conduct business. Likewise, if third-party regional carriers with which we have contract carrier agreements are unable to reach agreement with their unionized work groups in current or future negotiations regarding the terms of their collective bargaining agreements, those carriers may be subject to work interruptions or stoppages, subject to the requirements of the Railway Labor Act, which could have a material adverse effect on our operations.

Our results can fluctuate due to the effects of weather, natural disasters and seasonality.

Our results of operations are impacted by severe weather, natural disasters and seasonality. Severe weather conditions and natural disasters (or other environmental events) can significantly disrupt service and create air traffic control problems. These events decrease revenue and can also increase costs. In addition, increases in the frequency, severity or duration of thunderstorms, hurricanes, typhoons, floods or other severe weather events, including from changes in the global climate and rising global temperatures, could result in increases in delays and cancellations, turbulence-related injuries and fuel consumption to avoid such weather, any of which could result in loss of revenue and higher costs. In addition, demand for air travel is typically higher in the June and September quarters, particularly in our international markets, because there is more vacation travel during these periods than during the remainder of the year. The seasonal shifting of demand causes our financial results to vary on a seasonal basis. Because of fluctuations in our results from weather, natural disasters and seasonality, results of operations for a historical period are not necessarily indicative of results of operations for a future period and results of operations for an interim period are not necessarily indicative of results of operations for an entire year.

Our business and results of operations are dependent on the price of aircraft fuel. High fuel costs or cost increases, including in the cost of crude oil, could have a material adverse effect on our results of operations.

Our results of operations are significantly impacted by changes in the price of aircraft fuel. Over the last decade, fuel prices have been highly volatile and at times have increased substantially. From 2019 to 2021, our average annual fuel price per gallon, including the impact of fuel hedges, has varied from \$1.64 to \$2.02 with year to year variations ranging from a decrease of 19% to an increase of 23%.

We acquire a significant amount of jet fuel from Monroe and through strategic agreements associated with the refinery that Monroe has with third parties. The cost of the fuel we purchase under these arrangements remains subject to volatility in the cost of crude oil and jet fuel. In addition, we have historically purchased a significant amount of aircraft fuel in addition to what we obtain from Monroe. Our aircraft fuel purchase contracts alone do not provide material protection against price increases as these contracts typically establish the price based on industry standard market price indices.

The competitive nature of the airline industry may affect our ability to pass along rapidly increasing fuel costs to our customers. In addition, because passengers often purchase tickets well in advance of their travel, a significant rapid increase in fuel price may result in the fare charged not covering that increase. At times in the past, we often were not able to increase our fares to offset fully the effect of increases in fuel costs, and we may not be able to do so in the future.

Significant extended disruptions in the supply of aircraft fuel, including from Monroe, could have a material adverse effect on our operations and results of operations.

Weather-related events, natural disasters, political disruptions or disputes involving oil-producing countries, changes in governmental policy concerning aircraft fuel production, transportation or taxes, changes in refining capacity, environmental concerns and other unpredictable events may impact crude oil and fuel supply and could result in shortages in the future. Shortages in fuel supplies could have negative effects on our results of operations and financial condition.

The disruption or interruption of production at the refinery could have a negative impact on our ability to acquire jet fuel needed for our operations. Disruptions or interruptions of production at the refinery could result from various sources including a major accident or mechanical failure, interruption of supply or delivery of crude oil, work stoppages relating to organized labor issues, or damage from severe weather or other natural or man-made disasters, including acts of terrorism. If the refinery were to experience an interruption in operations, disruptions in fuel supplies could have negative effects on our results of operations and financial condition. In addition, the financial benefits from the operation of the refinery could be materially adversely affected (to the extent not recoverable through insurance) because of lost production and repair costs.

If Monroe's cost of producing non-jet fuel products exceeds the value it receives for those products, the financial benefits we expect to achieve through the ownership of the refinery and our consolidated results of operations could be materially adversely affected.

An environmental or other incident associated with the operation of the Monroe refinery could have a material adverse effect on our consolidated financial results if insurance is unable to cover a significant liability. In addition, such an incident could damage our reputation.

Monroe's refining operations are subject to various hazards unique to refinery operations, including explosions, fires, toxic emissions and natural catastrophes. Monroe could incur substantial losses, including cleanup costs, fines and other sanctions and third-party claims, and its operations could be interrupted, as a result of such an incident. Monroe's insurance coverage does not cover all potential losses, costs or liabilities, and Monroe could suffer losses for uninsurable or uninsured risks or in amounts greater than its insurance coverage. In addition, Monroe's ability to obtain and maintain adequate insurance may be affected by conditions in the insurance market over which it has no control. If Monroe were to incur a significant liability for which it is not fully insured or for which insurance companies do not or are unable to provide coverage, this could have a material adverse effect on our consolidated financial results of operations or consolidated financial position. In addition, because of our ownership of Monroe, the occurrence of an environmental or other incident could result in damage to our reputation, which could have a material adverse effect on our financial results.

The operation of the refinery by Monroe is subject to significant environmental regulation. Failure to comply with environmental regulations or the enactment of additional regulation applicable to Monroe could have a material adverse effect on our consolidated financial results.

Monroe's operations are subject to extensive environmental, health and safety laws and regulations, including those relating to the discharge of materials into the environment, waste management, pollution prevention measures and greenhouse gas emissions, which are subject to change over time. Monroe could incur fines and other sanctions, cleanup costs and third-party claims as a result of violations of or liabilities under environmental, health and safety requirements, which if significant, could have a material adverse effect on our consolidated financial results. In addition, the enactment of new, more stringent environmental laws and regulations, including any laws or regulations relating to greenhouse gas emissions, could significantly increase the level of expenditures required for Monroe or restrict its operations.

In particular, under the Energy Independence and Security Act of 2007, the EPA has adopted RFS that mandates the blending of renewable fuels into Transportation Fuels. RINs are assigned to renewable fuels produced or imported into the U.S. that are blended into Transportation Fuels to demonstrate compliance with this obligation. A refinery may meet its obligation under RFS by blending the necessary volumes of renewable fuels with Transportation Fuels, by purchasing RINs in the open market or through a combination of blending and purchasing RINs.

Because Monroe is able to blend only a small amount of renewable fuels, it must purchase the majority of its RINs requirement in the secondary market. As a result, Monroe is exposed to the market price of RINs. Market prices for RINs have been volatile, marked by periods of sharp increases and decreases primarily in response to speculation about what the EPA and/or the U.S. Congress will do with respect to compliance obligations. We cannot predict these actions or the future prices of RINs. During 2021 and 2020, Monroe's operating losses were driven in part by an increase in RINs costs. Monroe's purchase of RINs at elevated prices in the future could have a material impact on our consolidated results of operations and cash flows.

Existing laws or regulations could change, and the minimum volumes of renewable fuels that must be blended with refined petroleum products may increase. Increases in the volume of renewable fuels that must be blended into Monroe's products could limit the refinery's production if sufficient numbers of RINs are not available for purchase or relief from this requirement is not obtained, which could have a material adverse effect on our consolidated financial results.

If we lose senior management and other key employees and they are not replaced by individuals with comparable skills, or we otherwise fail to maintain our company culture, our business and results of operations could be materially adversely affected.

We are dependent on the experience and industry knowledge of our officers and other key employees to design and execute our business plans. If we experience a substantial turnover in our leadership and other key employees and we are not able to replace these persons with individuals with comparable skills, or we otherwise fail to maintain our company culture, our performance could be materially adversely impacted. Furthermore, we may be unable to attract and retain additional qualified senior management and other key personnel as needed in the future.

Significant damage to our reputation and brand, including as a result of significant adverse publicity or inability to achieve certain sustainability goals, could materially adversely affect our business and financial results.

Maintaining our reputation and global brand is critical to our business. We operate in a highly visible and public environment with significant real-time exposure to traditional and social media. Adverse publicity, whether justified or not, can rapidly spread, including through social or digital media. In particular, passengers can use social media to portray interactions with Delta, without context, in a manner that can be quickly and broadly disseminated. To the extent we are unable to respond in a timely and appropriate manner to adverse publicity, our brand and reputation may be damaged.

Our reputation and brand could also be adversely impacted by, among other things, failure to make progress toward and achieve our environmental sustainability and diversity, equity and inclusion goals, as well as public pressure from investors or policy groups to change our policies or negative public perception of the environmental impact of air travel. For example, we intend to invest \$1.0 billion through 2030 toward airline carbon neutrality and to establish ambitious new medium- and long-term goals to reduce our emissions, but we are unable to achieve the latter goals using our existing fleet, current technologies and available fuel sources. We are diligently working to establish a reasonable transition plan with respect to our medium- and long-term climate goals; however, our ability to execute on such a plan is subject to substantial risks and uncertainties, as it is dependent on the actions of governments and third parties and will require, among other things, significant capital investment, including from third parties, research and development from manufacturers and other stakeholders, along with government policies and incentives to reduce the cost, and incent production, of SAF and other technologies that are not presently in existence or available at scale. Significant damage to our reputation and brand could have a material adverse effect on our business and financial results, including as a result of litigation related to any of these matters.

Risk Factors Relating to the Airline Industry

Terrorist attacks, geopolitical conflict or security events may adversely affect our business, financial condition and results of operations.

Terrorist attacks, geopolitical conflict or security events, or the fear or threat of any of these events, could have a significant adverse effect on our business. Despite significant security measures at airports and airlines, the airline industry remains a high profile target for terrorist groups. We rely on government provided threat intelligence and utilize private sources to constantly monitor for threats from terrorist groups and individuals, including from violent extremists both internationally and domestically, with respect to direct threats against our operations and in ways not directly related to the airline industry. In addition, the impact on our operations of avoiding areas of the world, including airspace, in which there are geopolitical conflicts and the targeting of commercial aircraft by parties to those conflicts can be significant. Security events, primarily from external sources but also from potential insider threats, also pose a significant risk to our passenger and cargo operations. These events could include random acts of violence and could occur in public areas that we cannot control.

Terrorist attacks, geopolitical conflict or security events, or the fear or threat of any of these events, even if not made directly on or involving the airline industry, could have a significant negative impact on us by discouraging passengers from flying, leading to decreased ticket sales and increased refunds. In addition, potential costs from these types of events include increased security costs, impacts from avoiding flight paths over areas in which conflict is occurring or could occur, such as flight redirections or cancellations, reputational harm and other costs. If any or all of these types of events occur, they could have a material adverse effect on our business, financial condition and results of operations.

The global airline industry is highly competitive and, if we cannot successfully compete in the marketplace, our business, financial condition and results of operations will be materially adversely affected.

The airline industry is highly competitive, marked by significant competition with respect to routes, fares, schedules (both timing and frequency), operational reliability, services, products, customer service and loyalty programs. Consolidation in the airline industry, changes in international alliances, the creation of immunized joint ventures and the rise of subsidized government-sponsored international carriers have altered and will continue to alter the competitive landscape in the industry, resulting in the formation of airlines and alliances with increased financial resources, more extensive global networks and competitive cost structures.

Our domestic operations are subject to significant competition from traditional network carriers, including American Airlines and United Airlines, national point-to-point carriers, including Alaska Airlines, JetBlue Airways and Southwest Airlines, and other discount or ultra-low-cost carriers, including Spirit Airlines, Frontier Airlines and Allegiant Air, some of which may have lower costs than we do and provide service at low fares to destinations served by Delta. In particular, we face significant competition at our domestic hubs and key airports either directly at those airports or at the hubs of other airlines that are located in close proximity. We also face competition in smaller to medium-sized markets from regional jet operations of other carriers. Our ability to compete in the domestic market effectively depends, in part, on our ability to maintain a competitive cost structure. If we cannot maintain our costs at a competitive level, then our business, financial condition and results of operations could be materially adversely affected.

Our international operations are subject to competition from both foreign and domestic carriers, including from point-to-point carriers on certain international routes. Through alliance and other marketing and codesharing agreements with foreign carriers, U.S. carriers have increased their ability to sell international transportation, such as services to and beyond traditional European and Asian gateway cities. Similarly, foreign carriers have obtained increased access to interior U.S. passenger traffic beyond traditional U.S. gateway cities through these relationships.

In particular, several joint ventures among U.S. and foreign carriers, including several of our joint ventures as well as those of our competitors, have received grants of antitrust immunity allowing the participating carriers to coordinate schedules, pricing, sales and inventory. In addition, alliances formed by domestic and foreign carriers, including SkyTeam, the Star Alliance (among United Airlines, Lufthansa German Airlines, Air Canada and others) and the oneworld alliance (among American Airlines, British Airways, Qantas and others) have enhanced competition in international markets.

The airline industry also faces competition from surface transportation and technological alternatives such as virtual meetings, teleconferencing or videoconferencing, and the intensity of this competition has likely increased, at least in the near term, as a result of the COVID-19 pandemic. Increased competition in both the domestic and international markets may have a material adverse effect on our business, financial condition and results of operations.

Extended interruptions or disruptions in service at major airports in which we operate or significant problems associated with a type of aircraft or engine we operate could have a material adverse effect on our operations.

The airline industry is heavily dependent on business models that concentrate operations in major airports in the United States and throughout the world. An extended interruption or disruption at an airport where we have significant operations, whether resulting from a discrete event, such as a hurricane, or the manifestation of a chronic physical risk, such as rising sea levels, could have a material adverse effect on our business, financial condition and results of operations.

Similarly, the airline industry is heavily dependent on a limited number of aircraft and engine manufacturers whose products are subject to extensive regulatory requirements. Any significant problems associated with an aircraft or engine type that we operate, such as design defects, mechanical problems, contractual performance by the manufacturers or adverse perception by the public leading to customer avoidance or adverse actions by the FAA resulting in grounding could have a negative impact on our operations if we are not able to substitute or replace the affected aircraft or engine type and could, in any event, have a material adverse effect on our financial condition and results of operations.

The airline industry is subject to extensive government regulation, which is costly and could materially adversely affect our business.

Airlines are subject to extensive regulatory and legal compliance requirements that result in significant costs and may have material adverse effects on our business. For instance, the FAA from time to time issues directives and other regulations relating to the maintenance and operation of aircraft that necessitate significant expenditures and could carry operational implications. We expect to continue incurring significant expenses to comply with the FAA's regulations. In addition, a directive or other regulation that has a significant operational impact on us could have a material adverse impact on our financial results.

Other laws, regulations, taxes and airport rates and charges have also been imposed from time to time that significantly increase the cost of airline operations, reduce revenues or otherwise impact our business. The industry is heavily taxed. Additional taxes and fees, if implemented, could negatively impact our results of operations.

Airport slot access is subject to government regulation and changes in slot regulations or allocations could impose a significant cost on the airlines operating in airports subject to such regulations or allocations or otherwise adversely affect an airline's business. Certain of our hubs are among the most congested airports in the United States and have been, and could in the future be, the subject of regulatory action that might limit the number of flights and/or increase costs of operations at certain times or throughout the day. Air traffic control inefficiencies can also enhance these pressures.

In addition, the failure of the federal government to upgrade the U.S. air traffic control system, which is regulated by the FAA, has resulted in delays and disruptions of air traffic during peak travel periods in certain congested markets. The failure to improve the air traffic control system could lead to increased delays and inefficiencies in flight operations as demand for U.S. air travel increases, having a material adverse effect on our operations. Failure to update the air traffic control system in a timely manner, and the substantial funding requirements of an updated system that may be imposed on air carriers, may have an adverse impact on our financial condition and results of operations.

As an international carrier, we are subject to a wide variety of U.S. and foreign laws that affect trade, including tariff and trade policies, export and import requirements, taxes, monetary policies and other restrictions and charges. In particular, the imposition of significant tariffs with respect to aircraft that we are not able to mitigate could substantially increase our costs, which in turn could have a material adverse effect on our financial results.

In addition, some of our operations are in high-risk legal compliance environments. Failure to comply with trade sanctions and restrictions, the Foreign Corrupt Practices Act (the "FCPA") and similar anti-bribery laws in non-U.S. jurisdictions, as well as other applicable laws or regulations could result in litigation, assessment of damages, imposition of penalties or other consequences, any or all of which could harm our reputation and have an adverse effect on our financial results. In certain circumstances, we also may be subject to consequences of the failure of our airline partners to comply with laws and regulations, including U.S. laws to which they may be subject such as the FCPA.

We and other U.S. carriers are subject to U.S. and foreign laws regarding privacy of passenger and employee data that are not consistent in all countries in which we operate and which are continuously evolving, requiring ongoing monitoring and updates to our privacy and information security programs. Although we dedicate significant resources to manage compliance with global privacy and information security obligations, this challenging regulatory environment may pose material risks to our business, including increased operational burdens and costs, regulatory enforcement, and legal claims or proceedings.

The airline industry is subject to many forms of environmental regulation, including but not limited to increased regulation to reduce emissions and other risks associated with climate change. The cost of compliance with more stringent environmental regulations, failure to comply with existing or future regulations or failure to otherwise manage the risks of climate change effectively could have a material adverse effect on our business.

Many aspects of our operations are subject to evolving and increasingly stringent federal, state, local and international laws governing the protection of the environment. Compliance with existing and future environmental laws and regulations could require capital investment and increase operational costs, and violations can lead to significant fines and penalties and reputational harm.

Future regulatory action concerning climate change, aircraft emissions and noise emissions could have a significant effect on the airline industry. In order to address aircraft carbon dioxide emissions, the International Civil Aviation Organization, a United Nations specialized agency, formally adopted a global, market-based emission offset program known as CORSIA. This program establishes a goal for the aviation industry to achieve carbon-neutral growth in international aviation beginning in 2021 through the use of carbon offsets and/or lower carbon aviation fuel. The baseline for establishing airlines' offset obligations under CORSIA was originally set as an average of 2019 and 2020 emissions. However, given the COVID-19 pandemic and resulting unprecedented reduction in international travel, ICAO removed 2020 from the baseline calculation for the first phases of CORSIA, from 2021 to 2027. ICAO has yet to decide how to apply the baseline beyond 2027. Some countries and other stakeholders, however, have advocated for reestablishing 2020 in the baseline and for using 2020 for the future baseline calculation, which, if adopted, would significantly increase the airline industry's projected obligations under the program and the cost of compliance. Certain CORSIA program details remain to be developed and could potentially be affected by political developments in participating countries or the results of the pilot phase of the program, and thus the impact of CORSIA cannot be predicted at this time. However, CORSIA is expected to increase operating costs for airlines that operate internationally.

In addition to CORSIA, we may face a patchwork of regulation of aircraft emissions in the U.S. and abroad and could become subject to further taxes, charges or additional requirements to obtain permits or purchase allowances or emission credits for greenhouse gas emissions in various jurisdictions. For example, in 2021 the European Commission proposed legislation that would expand the reach of the EU ETS to include flights into and out of the European Economic Area beginning in 2027 under certain circumstances, increase the stringency of the program, and establish a sustainable aviation fuel blending mandate for aviation fuel suppliers, among other requirements. Individual EU member states have been developing their own requirements, including for example, a SAF mandate in France that will be phased in at the beginning of 2022. In the United States various exploratory discussions continue around approaches to address climate change, such as carbon pricing, without a clear legislative path forward. Additional regulation could result in taxation, regulatory or permitting requirements from multiple jurisdictions for the same operations and significant costs for the airline industry, including Delta. In addition to direct costs, such regulation could result in increased fuel costs passed through from fuel suppliers affected by any such regulations. While the specific nature of future actions is hard to predict, new laws or regulations related to environmental matters adopted in the U.S. or other countries could impose significant additional costs on or otherwise adversely affect our operations. Certain airports have also adopted, and others could in the future adopt, greenhouse gas emission or climate-related goals and requirements that could impact our operations or require us to make changes or investments in our infrastructure.

In addition to risks from potential changes to environmental regulation and policy, the transition to lower-carbon technologies, such as SAF, or changes in consumer preferences resulting from a negative perception of the environmental impact of air travel could materially adversely affect our business and financial results. For example, lower-carbon technologies such as SAF and direct air capture technologies are currently not available at scale and may take decades to develop, and the cost to transition to them could be prohibitively expensive without appropriate government policies and incentives in place. As more businesses have publicly announced environmental sustainability goals, the cost of carbon offsets has also increased significantly and will likely continue to do so.

Because of the global nature of our business, unfavorable economic or political conditions in the markets in which we operate or volatility in currency exchange rates could have a material adverse effect on our business, financial condition and results of operations.

As a result of the discretionary nature of air travel, the airline industry has been cyclical and particularly sensitive to changes in economic conditions. Because we operate globally, our business is subject to economic and political conditions throughout the world. During periods of unfavorable or volatile economic conditions in the economy in the U.S. or abroad, including as a result of the COVID-19 pandemic and the worldwide response to it, demand for air travel can be significantly impacted as business and leisure travelers choose not to travel, seek alternative forms of transportation for short trips or conduct business using technological alternatives. If unfavorable economic conditions occur, particularly for an extended period, our business, financial condition and results of operations may be adversely affected. In addition, significant or volatile changes in exchange rates between the U.S. dollar and other currencies, and the imposition of exchange controls or other currency restrictions, may have a material adverse effect on our liquidity, financial conditions and results of operations.

Our international operations are an important part of our route network. Political disruptions and instability around the world can negatively impact the demand and network availability for air travel. Additionally, any deterioration in global trade relations, such as increased tariffs or other trade barriers, could result in a decrease in the demand for international air travel.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Flight Equipment

Our operating aircraft fleet, purchase commitments and options at December 31, 2021 are summarized in the following table. We have been experiencing a recovery in demand from the COVID-19 pandemic, which has led to an increase in our capacity and utilization of our aircraft compared to the year ended December 31, 2020. Accordingly, as of December 31, 2021, all aircraft in our operating fleet are reflected in the table below compared to approximately 10% that were temporarily parked as of December 31, 2020. See Note 15 of the Notes to the Consolidated Financial Statements for additional information on the restructuring charges recorded in 2020 related to our fleet retirement plans.

Operating aircraft information by fleet type

Fleet Type	Current Fleet ⁽¹⁾					Commitments	
	Owned	Finance Lease	Operating Lease	Total	Average Age (Years)	Purchase	Options
A220-100	37	4	—	41	2.3	4	—
A220-300	10	—	—	10	1.0	40	50
A319-100	55	2	—	57	19.9	—	—
A320-200	52	4	—	56	26.0	—	—
A321-200	69	22	36	127	3.1	—	—
A321-200neo	—	—	—	—	—	155	70
A330-200	11	—	—	11	16.8	—	—
A330-300	28	—	3	31	13.0	—	—
A330-900neo	3	3	5	11	1.6	26	—
A350-900	13	—	11	24	3.7	20	—
B-717-200	9	42	3	54	20.6	—	—
B-737-800	73	4	—	77	20.3	—	—
B-737-900ER	91	—	49	140	5.6	19	—
B-757-200	99	1	—	100	24.4	—	—
B-757-300	16	—	—	16	18.9	—	—
B-767-300ER	40	—	—	40	25.4	—	—
B-767-400ER	21	—	—	21	21.1	—	—
Total	627	82	107	816	14.0	264	120

⁽¹⁾ Excludes certain aircraft we own or lease that are operated by regional carriers on our behalf shown in the table below. Includes used aircraft purchases from 2021 that are undergoing modifications and will enter service in the second half of 2022.

The following table summarizes the aircraft operated by regional carriers on our behalf at December 31, 2021.

Regional aircraft information by carrier

Carrier	Fleet Type					Total
	CRJ-200	CRJ-700	CRJ-900	Embraer 170	Embraer 175	
Endeavor Air, Inc. ⁽¹⁾	46	13	115	—	—	174
SkyWest Airlines, Inc.	—	6	44	—	71	121
Republic Airline, Inc.	—	—	—	8	46	54
Total	46	19	159	8	117	349

⁽¹⁾ Endeavor Air, Inc. is a wholly owned subsidiary of Delta.

Aircraft Purchase Commitments

As part of a multi-year effort, we have been investing in new aircraft to provide an improved customer experience, greater fuel efficiency and thus reduced carbon emissions, better operating economics and more premium products. Our purchase commitments for additional aircraft at December 31, 2021 are detailed in the following table:

Aircraft purchase commitments by fleet type

Aircraft Purchase Commitments	Delivery in Calendar Years Ending				Total
	2022	2023	2024	After 2024	
A220-100	4	—	—	—	4
A220-300	7	11	10	12	40
A321-200neo	27	33	25	70	155
A330-900neo	9	8	7	2	26
A350-900	4	—	6	10	20
B-737-900ER	19	—	—	—	19
Total	70	52	48	94	264

Ground Facilities**Airline Operations**

We lease most of the land and buildings that we occupy. Our largest aircraft maintenance base, various equipment maintenance, cargo, flight kitchen and training facilities and most of our principal offices are located at or near the Atlanta airport on land leased from the City of Atlanta. We lease ticket counters, gate areas, operating facilities and other terminal space in most of the airports that we serve. At most airports, we have entered into use agreements which provide for the non-exclusive use of runways, taxiways and other improvements and facilities; landing fees under these agreements normally are based on the number of landings and weight of aircraft. These leases and use agreements generally run for periods of less than one year to 30 years or more, and often contain provisions for periodic adjustments of lease rates, landing fees and other charges applicable under that type of agreement. We also lease aircraft maintenance, equipment maintenance and air cargo facilities at several airports. Our facility leases generally require us to pay the cost of providing, operating and maintaining such facilities, including, in some cases, amounts necessary to pay debt service on special facility bonds issued to finance their construction. We also lease computer facilities, marketing offices, reservations offices and other off-airport facilities in certain locations for varying terms.

We own our Atlanta reservations center, other real property in Atlanta and reservations centers in Minot, North Dakota and Chisholm, Minnesota.

Refinery Operations

Our Monroe subsidiaries own and operate the Trainer refinery and related assets in Pennsylvania. The facilities include pipelines and terminal assets that allow the refinery to supply jet fuel to our airline operations throughout the Northeastern U.S., including our New York hubs at LaGuardia and JFK.

ITEM 3. LEGAL PROCEEDINGS

Capacity Antitrust Litigation

In July 2015, a number of purported class action antitrust lawsuits were filed alleging that Delta, American, United and Southwest had conspired to restrain capacity. The lawsuits were filed in the wake of media reports that the U.S. Department of Justice had served civil investigative demands upon these carriers seeking documents and information relating to this subject. The lawsuits have been consolidated into a single Multi-District Litigation proceeding in the U.S. District Court for the District of Columbia. We believe the claims in these cases are without merit and vigorously defended these lawsuits. Our summary judgment motion has been fully briefed and pending since May 2021.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

Part II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**Market Information**

Our common stock is listed on the New York Stock Exchange ("NYSE") under the trading symbol DAL.

Holders

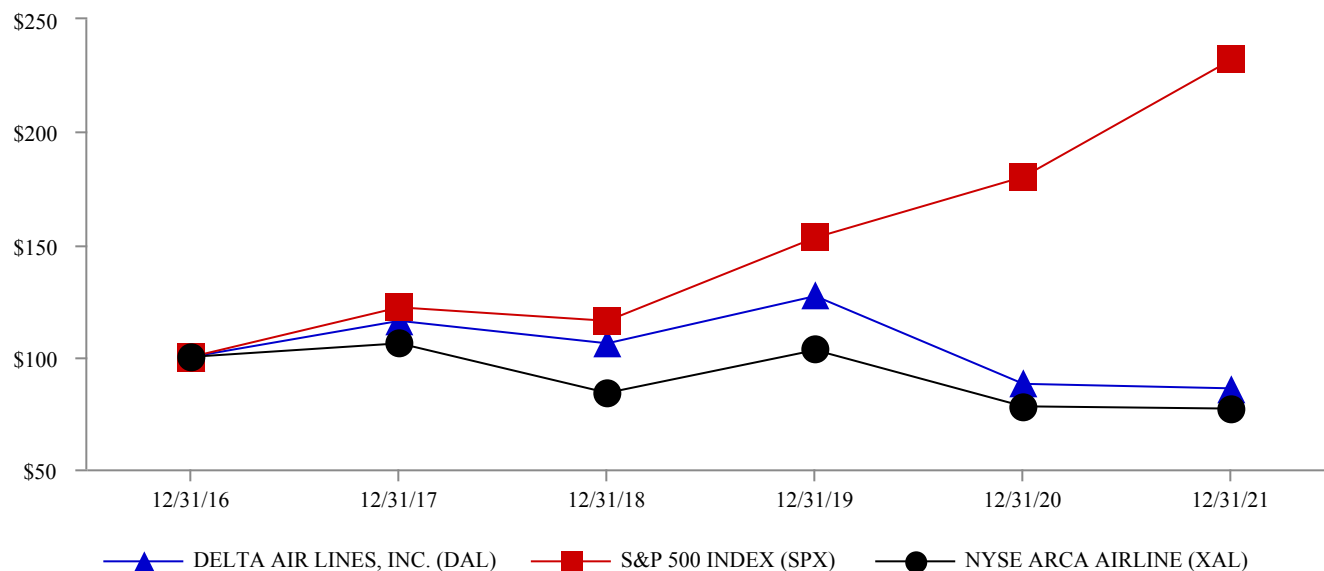
As of January 31, 2022, there were approximately 2,300 holders of record of our common stock.

Dividends

We made cash dividend payments of \$980 million during the year ended December 31, 2019 and \$260 million in the March 2020 quarter prior to the COVID-19 pandemic. In March 2020, we suspended dividends due to the impact of the COVID-19 pandemic. The CARES Act and payroll support program extensions restrict the payment of dividends through September 2022. Dividend payments beyond that time will be dependent upon our results of operations, financial condition, cash requirements, future prospects and other factors deemed relevant by the Board of Directors.

Stock Performance Graph

The following graph compares the cumulative total returns during the period from December 31, 2016 to December 31, 2021 of our common stock to the Standard & Poor's 500 Stock Index and the NYSE ARCA Airline Index. The comparison assumes \$100 was invested on December 31, 2016 in each of our common stock and the indices and assumes that all dividends were reinvested.

Cumulative Total Returns

Issuer Purchases of Equity Securities

The following table presents information with respect to purchases of common stock we made during the December 2021 quarter. The table reflects shares withheld from employees to satisfy certain tax obligations due in connection with grants of stock under the Delta Air Lines, Inc. Performance Compensation Plan (the "Plan"). The Plan provides for the withholding of shares to satisfy tax obligations but it does not specify a maximum number of shares that can be withheld for this purpose. The shares of common stock withheld to satisfy tax withholding obligations may be deemed to be "issuer purchases" of shares that are required to be disclosed pursuant to this Item.

Shares purchased / withheld from employee awards during the December 2021 quarter

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value (in millions) of Shares That May Yet Be Purchased Under the Plan or Programs
October 2021	1,098	\$ 45.12	1,098	\$ —
November 2021	4,488	\$ 40.10	4,488	\$ —
December 2021	3,005	\$ 37.78	3,005	\$ —
Total	8,591		8,591	

ITEM 6. (RESERVED)

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Our business and operating results continue to be significantly impacted by the COVID-19 pandemic. However, as described further below, we have seen improvement in our business beginning in March 2021 and progressing through 2021. Given the drastic and unprecedented impact of the pandemic on our operating results in 2020, we believe that for the financial highlights discussion below, a comparison of our results in 2021 to both 2020 and 2019 allows for a better understanding of the full impact of the COVID-19 pandemic and the progress of our recovery.

This section of Form 10-K, however, does not address certain items regarding the year ended December 31, 2019. Discussion and analysis of 2019 and year-to-year comparisons between 2020 and 2019 not included in this Form 10-K can be found in "Item 7. Management's Discussion and Analysis" of our Annual Report on Form 10-K for the year ended December 31, 2020. The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our audited Consolidated Financial Statements and the related notes and other financial information as well as the material risk factors included elsewhere in this Annual Report on Form 10-K.

The table below shows certain key financial measures for the years ended December 31, 2021, 2020 and 2019:

(in millions)	Year Ended December 31,			2021 vs 2020	2021 vs 2019
	2021	2020	2019	% Increase (Decrease) ⁽¹⁾	% Increase (Decrease) ⁽¹⁾
Total operating revenue	\$ 29,899	\$ 17,095	\$ 47,007	75 %	(36)%
Total operating expense	28,013	29,564	40,389	(5)%	(31)%
Total non-operating expense, net	(1,488)	(3,118)	(420)	(52)%	NM
Income/(loss) before income taxes	398	(15,587)	6,198	NM	(94)%

⁽¹⁾ Certain variances are labeled as not meaningful ("NM") throughout management's discussion and analysis.

Financial Highlights - 2021 Compared to 2019

Our pre-tax income for 2021 was \$398 million, which includes recognition of \$4.5 billion in grants from the Payroll Support Program Extension ("PSP2") and Payroll Support Program 3 ("PSP3"). This is a \$5.8 billion decrease compared to 2019 primarily due to the impact of the COVID-19 pandemic on our business which resulted in a 36% decrease in revenue, partially offset by a reduction in operating expense, including the government grant recognition. Pre-tax loss, adjusted (a non-GAAP financial measure) which excludes the government grant recognition and other items was \$3.4 billion, a decrease of \$9.6 billion compared to 2019.

Revenue. Compared to 2019, our operating revenue decreased \$17.1 billion, or 36% due to reduced demand resulting from the COVID-19 pandemic.

The length and severity of the reduction in travel demand due to the COVID-19 pandemic remains uncertain; however, with continued distribution of effective vaccines and easing of travel advisories and restrictions, we believe customer confidence will continue to grow, leading to increased demand during 2022. We expect domestic leisure travel to exceed 2019 levels in 2022, while we expect business travel to continue to return as many companies are expected to expand "return to office" plans throughout 2022. International demand recovery has been uneven as the COVID-19 variants and related travel restrictions impact various countries within our international network, though we believe demand will begin accelerating in the second half of 2022 as travel restrictions are lifted. We continue to monitor risks to the pace of recovery from COVID-19 variants, the effectiveness of vaccine programs and travel advisories and restrictions. We are planning for our system capacity to be approximately 15% lower in the March 2022 quarter than the March 2019 quarter and approximately 10% lower for the full year of 2022 compared to 2019.

Operating Expense. Total operating expense decreased \$12.4 billion, or 31%, compared to 2019, primarily resulting from recognition of the grants from PSP2 and PSP3, lower volume-related expenses (mainly fuel and passenger commissions and other selling expenses), lower salaries and related costs and profit sharing expense, and significant cost reduction measures taken across all aspects of our operation in response to the COVID-19 pandemic. These decreases were partially offset by an increase in expenses related to refinery sales to third parties, reflected in ancillary business and refinery expense, as well as recovery related and transition costs incurred (e.g., aircraft reactivation, hiring, training, overtime and reservations volume) as we return closer to pre-pandemic levels of demand and capacity. Total operating expense, adjusted (a non-GAAP financial measure) decreased \$10.9 billion, or 27% compared to 2019.

Our total operating cost per available seat mile ("CASM") decreased 2% to 14.40 cents compared to 2019, primarily due to the cost reductions discussed above and partially offset by a 29% decrease in capacity. Non-fuel unit costs ("CASM-Ex", a non-GAAP financial measure) increased 11% to 12.12 cents due to the 29% decrease in capacity, despite a decline in adjusted operating expenses.

Minimizing unit cost increases is important to delivering on our overall financial objectives. During 2022, however, we expect non-fuel unit costs to increase 7%-10% compared to 2019. This expected unit cost increase is primarily due to 2022 capacity projected to be lower than 2019, costs associated with rebuilding our network, investments to support an elevated customer experience and our premium brand focus, and inflation and labor cost escalation in the underlying business. We expect non-fuel unit cost increases compared to 2019 to moderate in future years as we return to and exceed pre-pandemic capacity and benefit from cost reduction measures implemented during 2020 that were structural in nature.

We have experienced, and expect to continue experiencing, increased cost inflation as a result of global macroeconomic trends, actions we took in response to the COVID-19 pandemic and labor shortages at our suppliers. Actions we have taken to mitigate the impact of expected inflation include leveraging scale and efficiency in our underlying business through improved asset utilization and seeking productivity improvements through increased scale efficiencies and technology enhancements.

Non-Operating Results. Total non-operating expense was \$1.5 billion in 2021, \$1.1 billion higher than 2019, primarily due to higher interest expense as a result of our increased debt balances due to the financing arrangements entered into during 2020.

Cash Flow. Our liquidity at December 31, 2021 was \$14.2 billion, an \$8.2 billion increase compared to December 31, 2019 as a result of proceeds from loans and debt issuances and other liquidity initiatives. During 2021, operating activities provided \$3.3 billion, including \$4.5 billion from the payroll support program grants, which was partially offset by the \$1.5 billion in contributions we made to our defined benefit pension plans. During 2021, we incurred approximately \$900 million of net investing cash outflows, primarily for \$3.2 billion capital expenditures, partially offset by \$2.4 billion of net redemptions of short-term investments. Capital expenditures primarily related to the purchase of aircraft, fleet modifications, our airport redevelopment projects and technology enhancements. These results generated \$1.3 billion of free cash flow (a non-GAAP financial measure) in 2021 compared to \$4.2 billion in 2019. Also, during 2021 we had cash outflows of approximately \$5.8 billion related to repayments of our debt and finance leases, including approximately \$3.8 billion for early repayments and the remainder from scheduled maturities.

The non-GAAP financial measures pre-tax loss, adjusted, operating expense, adjusted, CASM-Ex and free cash flow used above are defined and reconciled in "Supplemental Information" below.

Financial Highlights - 2021 Compared to 2020

Our 2021 pre-tax income improved \$16.0 billion compared to 2020. This was primarily due to the restructuring charges, investment impairments and equity method losses recorded during 2020 and a partial recovery in the demand for air travel during 2021, which resulted in a 75% increase in revenue. Pre-tax loss, adjusted (a non-GAAP financial measure) was \$3.4 billion, an increase of \$5.6 billion compared to 2020.

Revenue. Compared to 2020, our 2021 operating revenue increased \$12.8 billion, or 75%, primarily due to increased travel demand.

Operating Expense. Total operating expense decreased \$1.6 billion, or 5%, compared to 2020, primarily resulting from the reduction in restructuring charges and recognition of the PSP2 and PSP3 grants. These decreases were almost fully offset by higher volume-related expenses associated with the increase in capacity and demand, mainly fuel and aircraft maintenance and higher salaries and related costs and an increase in expenses related to refinery sales to third parties, reflected in ancillary business and refinery expense. Total operating expense, adjusted (a non-GAAP financial measure) increased \$5.1 billion, or 21% compared to 2020.

Our CASM decreased 35% to 14.40 cents compared to 2020, primarily due to a 45% increase in capacity and reduction in operating expense from the reduction in restructuring charges and recognition of the PSP2 and PSP3 grants as noted above. CASM-Ex (a non-GAAP financial measure) decreased 22% to 12.12 cents.

Non-Operating Results. Total non-operating expense was \$1.5 billion in 2021, \$1.6 billion lower than 2020 primarily due to impairments and our proportionate share of equity method losses related to our investments in LATAM and Grupo Aeroméxico in 2020, which were zero in 2021, and mark-to-market gains on certain of our other equity investments. These decreases were partially offset by higher interest expense as a result of our increased debt balances due to the financing arrangements entered into during 2020 and losses on debt extinguishment.

Cash Flow. The \$1.3 billion of free cash flow generated in 2021 compared to \$4.3 billion of negative free cash flow in 2020.

Environmental Sustainability

During 2021, we built on our previously announced plan to invest \$1.0 billion through the end of 2030 toward airline carbon neutrality by committing to, among other things, set medium- and long-term climate goals that are aligned with applicable SBTi frameworks, as described further in Part I, Item 1, "Business - Environmental Sustainability." We expect our path toward achievement of these ambitious climate goals to depend heavily on increased use of SAF, which is not presently available at scale or at prices competitive to jet fuel, and improved fuel efficiency from fleet renewal and operational initiatives. During 2021, we signed agreements with numerous corporate and agency customers to offset the premium from our SAF purchases. While we do not expect a material adverse effect on our Consolidated Financial Statements in the near term from the use of SAF, we are unable to predict the financial impact of increased use of SAF on our Consolidated Financial Statements over the longer term, as government policies and incentives for, and sufficient third-party investment in, SAF are necessary to make its use in larger quantities commercially and economically feasible. In addition, our fleet renewal efforts will require extensive capital investment in future periods.

In the near-term and subject to market dynamics, we also expect to continue the purchase and retirement of verified carbon offsets in support of our \$1.0 billion airline carbon neutrality goal. During 2021, we incurred \$95 million of expense related to carbon offsets. This amount consists of \$30 million to address 13 million metric tons of carbon emissions generated by our airline segment from March 1 to December 31, 2020 through carbon offsets, as well as an additional \$65 million for the purchase and retirement of carbon offsets related to a portion of our airline segment's 2021 carbon emissions. The cost of carbon offsets increased significantly during 2021 and will likely continue to do so, which could adversely affect our financial results as we purchase such offsets either in support of our \$1.0 billion airline carbon neutrality goal or in satisfaction of future obligations under CORSIA, which are described further in Part I, Item 1, "Business - Environmental Regulation."

Results of Operations**Operating Revenue**

(in millions) ⁽¹⁾	Year Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2021	2020		
Ticket - Main cabin	\$ 11,626	\$ 6,676	\$ 4,950	74 %
Ticket - Business cabin and premium products	7,713	4,294	3,419	80 %
Loyalty travel awards	1,786	935	851	91 %
Travel-related services	1,394	978	416	43 %
Total passenger revenue	\$ 22,519	\$ 12,883	\$ 9,636	75 %
Cargo	1,032	608	424	70 %
Other	6,348	3,604	2,744	76 %
Total operating revenue	\$ 29,899	\$ 17,095	\$ 12,804	75 %
TRASM (cents)	15.37 ¢	12.73 ¢	2.64 ¢	21 %
Third-party refinery sales ⁽²⁾	(1.66)	(0.86)	(0.80)	93 %
TRASM, adjusted (cents)	13.71 ¢	11.87 ¢	1.84 ¢	16 %

⁽¹⁾ Total amounts in the table above may not calculate exactly due to rounding.

⁽²⁾ For additional information on adjustments to TRASM, see "Supplemental Information" below.

Operating Revenue

Our operating revenue increased \$12.8 billion, or 75%, compared to the year ended December 31, 2020 due primarily to increased demand in 2021 as a result of the continued recovery from the COVID-19 pandemic. The increase in operating revenue, on a 45% increase in capacity, generated a 21% increase in total revenue per available seat mile ("TRASM") and a 16% increase in TRASM, adjusted (a non-GAAP financial measure) compared to 2020.

See "Refinery Segment" below for additional details on the refinery's operations, including third-party refinery sales recorded in other revenue, during each period.

We have historically generated cargo revenues in domestic and international markets through the use of cargo space on regularly scheduled passenger aircraft. In 2020, following the onset of the COVID-19 pandemic, reduced industry cargo capacity drove a significant increase in our cargo yield, and we also generated cargo revenue through the operation of cargo-only charter flights (i.e., using aircraft in our fleet not being utilized for passenger travel to fly cargo internationally). This trend continued in 2021, and we would expect capacity constraints and elevated market yields to continue through 2022 while the industry rebuilds international networks to pre-pandemic levels. Compared to 2020, we flew additional cargo volume as international networks returned, coupled with a continued increase in yield driven by a combination of constrained capacity and increased demand.

Passenger Revenue by Geographic Region

(in millions)	Year Ended December 31, 2021	Increase (Decrease) vs. Year Ended December 31, 2020					
		Passenger Revenue	RPMs (Traffic)	ASMs (Capacity)	Passenger Mile Yield	PRASM	Load Factor
Domestic	\$ 18,468	84 %	98 %	45 %	(7)%	27 %	20 pts
Atlantic	1,777	52 %	56 %	42 %	(3)%	7 %	5 pts
Latin America	1,873	68 %	82 %	79 %	(8)%	(6)%	1 pt
Pacific	401	(28)%	(55)%	(2)%	58 %	(26)%	(27) pts
Total passenger revenue	\$ 22,519	75 %	83 %	45 %	(5)%	21 %	15 pts

Domestic

Domestic passenger unit revenue ("PRASM") for the year ended December 31, 2021 increased 27% with capacity up 45% compared to the year ended December 31, 2020 as a result of the low levels of capacity and demand during 2020 due to the COVID-19 pandemic and the ongoing recovery throughout 2021.

Beginning in the latter half of the March 2021 quarter, we began to see bookings, primarily leisure, improve from the low levels of 2020. Throughout 2021, demand continued to improve, with some variability in periods of rising COVID-19 cases attributable to variants of the virus. We remain optimistic about the ultimate recovery of business travel which has been recovering at a slower pace than consumer. We expect this demand to continue to be led by small- and medium-sized businesses and accelerate in the first half of 2022 as more corporate offices reopen; we are, however, unable to fully predict the pace of that recovery.

International

International passenger revenue for the year ended December 31, 2021 increased 43% with capacity up 45% compared to the year ended December 31, 2020 as travel to certain destinations has resumed or increased. Additionally, while some countries have removed or eased travel restrictions, many countries maintained or reinstituted international testing requirements and travel restrictions, which have restrained demand in the short term but are expected to support the long-term recovery of international air travel.

In November 2021, travel restrictions on most fully vaccinated foreign visitors to the United States were lifted. This action made travel to the U.S. by many foreign nationals possible for the first time in 18 months. Despite this policy change, we expect the significantly lower international demand environment to continue through at least the beginning of 2022, with the recovery pace continuing to trail domestic travel.

The Atlantic and Pacific regions continue to be the most impacted by the restrictions described above. However, during 2021, we began, resumed or increased our service to certain countries in the Atlantic region based on their lifting or easing of travel restrictions. Travel in the Pacific region is largely limited to essential travel, and we expect only small demand improvements until government restrictions ease with minimal improvement until at least the second half of 2022. We will continue to be agile in the restoration of our international network based on changes in government restrictions and consumer demand.

The Latin America region has shown the most recovery of the international regions, with continued demand improvement for leisure destinations in the Caribbean, Mexico and Central America. We expect this trend to continue through 2022 with the recovery in the Atlantic and Pacific regions lagging behind Latin America.

Ticket Validity Flexibility

In order to provide our customers more flexibility and time to plan or rebook their travel, we made the following changes to our ticket and travel credit expiration dates.

In the March 2021 quarter, we announced the extension of the validity of all passenger tickets and travel credits purchased or expiring in 2021 to December 31, 2022, which allowed for tickets to be rebooked through December 31, 2022 for travel through 2023.

In January 2022, we announced that all existing travel credit holders will have until December 31, 2023 to rebook their ticket for travel throughout 2024. Additionally, all Delta customers with upcoming 2022 travel or who purchase a ticket in 2022 will also have the flexibility to rebook their ticket through December 31, 2023, and travel throughout 2024.

During 2020, with the exception of Basic Economy, we eliminated change fees for all tickets originating in North America and waived change fees for tickets originating outside of North America. We also implemented a temporary waiver that allowed Basic Economy tickets with travel for 2021, which are normally non-changeable, to be changed without paying a fee regardless of origin or destination. Starting January 1, 2022, Basic Economy tickets may be cancelled for a fee to receive a partial ticket credit. We do not expect the updated change fee policies to materially affect our revenue in future periods; however, our estimates of revenue that will be recognized for tickets that expire unused ("ticket breakage") may vary in future periods due to the extension of the validity of passenger tickets and travel credits.

Other Revenue

(in millions)	Year Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2021	2020		
Refinery	\$ 3,229	\$ 1,150	\$ 2,079	181 %
Loyalty program	1,770	1,458	312	21 %
Ancillary businesses	793	648	145	22 %
Miscellaneous	556	348	208	60 %
Total other revenue	\$ 6,348	\$ 3,604	\$ 2,744	76 %

Refinery. This represents refinery sales to third parties. These sales, which are at or near cost, increased \$2.1 billion compared to 2020. The increase in third-party refinery sales resulted from the refinery's shift to producing and selling more non-jet fuel products due to the lower level of demand for jet fuel compared to historical levels, in addition to higher pricing during 2021. See "Refinery Segment" below for additional details on the refinery's operations, including third-party refinery sales recorded in other revenue, during each period.

Loyalty Program. Loyalty program revenues relate to brand usage by third parties and other performance obligations embedded in miles sold, including redemption of miles for non-travel awards. These revenues are mainly driven by customer spend on American Express cards and new cardholder acquisitions. As co-brand card spend and card acquisitions continue to be strong, revenues from our relationship with American Express increased in the year ended December 31, 2021 compared to 2020.

Ancillary Businesses. Ancillary businesses includes aircraft maintenance services we provide to third parties and our vacation wholesale operations.

Miscellaneous. Miscellaneous revenue is primarily composed of lounge access, including access provided to certain American Express cardholders, and codeshare revenues. Compared to 2020, these transactions have increased due to the ongoing recovery of our business that continued to materialize in 2021. Our network of Delta Sky Club lounges was fully reopened by the end of July 2021 after some lounges temporarily closed at the onset of the pandemic in 2020.

Operating Expense

(in millions)	Year Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2021	2020		
Salaries and related costs	\$ 9,728	\$ 9,001	\$ 727	8 %
Aircraft fuel and related taxes	5,633	3,176	2,457	77 %
Ancillary businesses and refinery	3,957	1,785	2,172	122 %
Contracted services	2,420	1,953	467	24 %
Landing fees and other rents	2,019	1,833	186	10 %
Depreciation and amortization	1,998	2,312	(314)	(14)%
Regional carrier expense	1,736	1,584	152	10 %
Aircraft maintenance materials and outside repairs	1,401	822	579	70 %
Passenger commissions and other selling expenses	953	643	310	48 %
Passenger service	756	551	205	37 %
Aircraft rent	430	399	31	8 %
Restructuring charges	(19)	8,219	(8,238)	(100)%
Profit sharing	108	—	108	NM
Government grant recognition	(4,512)	(3,946)	(566)	14 %
Other	1,405	1,232	173	14 %
Total operating expense	\$ 28,013	\$ 29,564	\$ (1,551)	(5)%

In response to the reduced demand and related reduction in revenue following the onset of the COVID-19 pandemic in early 2020, we quickly reduced capacity to more closely align with demand, implemented cost saving initiatives related to our fleet and operations, offered employees voluntary separation programs and delayed or eliminated nearly all discretionary spending.

During 2021, distribution of vaccines continued, travel restrictions and advisories eased and customer confidence continued to grow despite the negative impact of COVID-19 virus variants in the second half of 2021. As a result, we saw revenue and capacity return and related operating expense line items increase. The continued restoration of our operations was the primary driver for the increases in contracted services, landing fees and other rents, passenger commissions and other selling expenses, passenger service and other expense. Other year-over-year fluctuations are discussed below.

Salaries and Related Costs. In the second half of 2020, approximately 18,000 employees elected to participate in voluntary separation programs, which initially reduced our workforce by approximately 20%, though some of those positions have subsequently been filled. Since the beginning of 2021, we have hired approximately 11,000 employees in certain areas, including flight operations, airport customer service and reservations and customer care, in order to support our operations as demand and capacity return.

Beginning in March 2020 and continuing through December 2020, we reduced salaries by 100% for our CEO and 50% for our officers. In addition, we reduced work hours by 25% for all other management and most front-line employee work groups. On January 1, 2021, employees were restored to full work hours, officer salaries were restored and during 2021 we recalled approximately 1,700 pilots from inactive status back to active service. Additionally, we offered voluntary unpaid leaves of absence for periods ranging from 30 days up to 12 months and approximately 50,000 and 20,000 of our employees elected to take a leave of absence at various times throughout 2020 and 2021, respectively. These actions resulted in higher salaries and related costs in 2021 compared to 2020.

Aircraft Fuel and Related Taxes. Fuel expense increased \$2.5 billion compared to 2020 primarily due to a 44% increase in consumption on a 45% increase in capacity, and a 31% increase in the market price of jet fuel.

Additionally, during 2021, we purchased and retired \$95 million of carbon offsets, of which \$30 million relates to 13 million metric tons of carbon emissions generated by our airline segment from March 1 to December 31, 2020 as well as \$65 million which relates to a portion of 2021 carbon emissions generated by our airline segment. In the table below, these costs are shown in the carbon offset costs line item.

Fuel expense and average price per gallon

(in millions, except per gallon data)	Year Ended December 31,			Average Price Per Gallon		
	Year Ended December 31,		Increase (Decrease)	Year Ended December 31,		Increase (Decrease)
	2021	2020		2021	2020	
Fuel purchase cost ⁽¹⁾	\$ 5,527	\$ 2,938	\$ 2,589	\$ 1.99	\$ 1.52	\$ 0.47
Carbon offset costs	95	—	95	0.03	—	0.03
Fuel hedge impact	9	22	(13)	—	0.01	(0.01)
Refinery segment impact	2	216	(214)	—	0.11	(0.11)
Total fuel expense	\$ 5,633	\$ 3,176	\$ 2,457	\$ 2.02	\$ 1.64	\$ 0.38

⁽¹⁾ Market price for jet fuel at airport locations, including related taxes and transportation costs.

Ancillary Businesses and Refinery. Ancillary businesses and refinery includes expenses associated with refinery sales to third parties, aircraft maintenance services we provide to third parties and our vacation wholesale operations. Increased expenses were primarily related to refinery sales to third parties, which are at or near cost and increased \$2.1 billion compared to 2020. The increase compared to 2020 was driven by higher pricing during 2021, with lower production and demand for both jet and non-jet fuel products during 2020. The cost of aircraft maintenance services we provide to third parties increased compared to 2020 due to the increase in flights operated worldwide in 2021.

Depreciation and Amortization. Depreciation and amortization decreased compared to 2020 primarily due to the aircraft that were retired or impaired during 2020. As we acquire new aircraft to provide an improved customer experience, greater fuel efficiency and thus reduced carbon emissions, better operating economics and more premium products, we expect depreciation expense to increase in future years.

Regional Carrier Expense. Regional carrier expense increased compared to 2020 due to an increase in utilization as a result of the increased demand discussed above.

Until 2021, we allocated certain costs (such as landing fees and other rents, salaries and related costs and contracted services) to regional carrier expense in our Consolidated Statements of Operations ("income statement") based on relevant statistics (such as passenger counts). Beginning in 2021 we ceased performing this allocation and have reclassified the costs presented in prior periods to align with this presentation. This reclassification better reflects the nature of, and how management views, these regional carrier related expenses. This allocation was approximately \$900 million in 2020. The amounts in regional carrier expense under the current presentation represent the accrual of payments to our regional carriers under capacity purchase agreements, maintenance costs related to our regional fleet and the expenses of our wholly owned regional subsidiary, Endeavor Air, Inc.

Aircraft Maintenance Materials and Outside Repairs. Maintenance expense increased compared to 2020 as we returned aircraft to service and to support our operational reliability. The increase compared to 2020 was particularly pronounced due to the significantly reduced capacity during 2020 and the large number of aircraft we had parked during that time.

Aircraft Rent. Most aircraft operating lease expenses are recorded in aircraft rent and are contractually fixed. Therefore, the increase in aircraft rent was more muted than our other operating expense line items when compared to 2020.

Restructuring Charges. During 2020, we recorded restructuring charges of \$8.2 billion for items such as fleet impairments and voluntary early retirement and separation programs following strategic business decisions in response to the COVID-19 pandemic. In the year ended December 31, 2021, we recognized \$19 million of adjustments to certain of those restructuring charges, representing changes in our estimates. See Note 15 of the Notes to the Consolidated Financial Statements for additional information about the restructuring charges recorded in 2020.

Profit Sharing. To recognize the extraordinary efforts of our employees through the pandemic, we will make a special profit-sharing payment to eligible employees in February 2022, based on the adjusted pre-tax profit earned during the second half of 2021.

Government Grant Recognition. During the year ended December 31, 2021, we received a total of \$6.4 billion under the PSP2 and PSP3 agreements with the U.S. Department of the Treasury, which we were required to use exclusively for the payment of employee wages, salaries and benefits. The support payments included grants totaling \$4.5 billion that were recognized as contra-expense in 2021 over the period that the funds were used. The amount recognized in 2021 exceeded the amount recognized during 2020 due to the increase in grants received during the year. See Note 6 of the Notes to the Condensed Consolidated Financial Statements for additional information on PSP2 and PSP3.

Non-Operating Results

(in millions)	Year Ended December 31,		Favorable (Unfavorable)
	2021	2020	
Interest expense, net	\$ (1,279)	\$ (929)	\$ (350)
Impairments and equity method losses	(337)	(2,432)	2,095
Gain/(loss) on investments, net	56	(105)	161
Loss on extinguishment of debt	(319)	(8)	(311)
Pension and related benefit/(expense)	451	219	232
Miscellaneous, net	(60)	137	(197)
Total non-operating expense, net	\$ (1,488)	\$ (3,118)	\$ 1,630

Interest expense, net. Interest expense, net includes interest expense and interest income. This increased as a result of the additional interest expense related to financing arrangements entered into during 2020. See Note 6 of the Notes to the Consolidated Financial Statements for additional information on recent financings and repayments. We have begun reducing the total amount of interest expense by pre-paying our debt in addition to periodic amortization payments and scheduled maturities. This began with early repayments made during the December 2020 quarter and continued with multiple early repayments during 2021 including the early repayment of our \$1.5 billion secured term loan, approximately \$450 million of various Enhanced Equipment Trust Certificates ("EETCs"), approximately \$850 million of certain notes through a cash tender offer and \$647 million of other secured certificates, unsecured notes and a portion of the SkyMiles Term Loan through repurchases on the open market. We will continue to seek opportunities to pre-pay our debt, in addition to periodic amortization payments and scheduled maturities, during 2022 and beyond.

Impairments and equity method losses. Impairments and equity method losses in 2021 reflect our share of Virgin Atlantic's equity method losses. Impairments and equity method losses in 2020 reflected our share of LATAM and Grupo Aeroméxico's equity method results prior to their respective bankruptcy filings, our share of Virgin Atlantic's equity method results and the impairments reducing the basis of these investments to zero during the June 2020 quarter. See Note 4 of the Notes to the Consolidated Financial Statements for additional information on our equity investments.

Gain/(loss) on investments, net. See Note 4 of the Notes to the Consolidated Financial Statements for additional information on our equity investments measured at fair value on a recurring basis.

Loss on extinguishment of debt. Loss on extinguishment of debt reflects the losses incurred in the early repayment of the notes, outstanding term loan and EETCs mentioned above. See Note 6 of the Notes to the Consolidated Financial Statements for additional information on the early repayment of debt.

Pension and related benefit/(expense). Pension and related benefit/(expense) reflects the net periodic benefit/(cost) of our pension and other postretirement and postemployment benefit plans. Based on our current level of funding, we have modified, and continue to evaluate, the asset allocation mix to reduce the investment risk of the portfolio. The lower risk profile of the portfolio is projected to result in a lower expected long-term rate of return on plan assets in 2022. We expect pension and related benefits to decline in 2022 compared to 2021. See Note 9 of the Notes to the Consolidated Financial Statements for additional information on our employee benefit plans.

Miscellaneous, net. Miscellaneous, net primarily includes foreign exchange gains/(losses) and charitable contributions. Miscellaneous, net in 2020 included the \$240 million gain recognized as a result of the combination of Delta Private Jets with Wheels Up in January 2020.

Income Taxes

Our effective tax rate for 2021 was 30%. As of December 31, 2021, we had approximately \$4.8 billion of U.S. federal pre-tax net operating loss carryforwards, of which \$1.1 billion was generated prior to 2018 and will not begin to expire until 2029. Under current tax law, the remaining amount has no expiration.

For more information about our income taxes, see Note 11 of the Notes to the Consolidated Financial Statements.

Refinery Segment

The refinery operated by our wholly-owned subsidiary Monroe primarily produces gasoline, diesel and jet fuel. Monroe has agreements in place to exchange the non-jet fuel products the refinery produces with third parties for jet fuel consumed in our airline operations. Historically, the jet fuel produced and procured through exchanging gasoline and diesel fuel produced by the refinery provided approximately 200,000 barrels per day, or approximately 75% of our pre-COVID-19 pandemic consumption, for use in our airline operations.

The refinery's production has also been altered by the dramatic change in economic conditions caused by the COVID-19 pandemic. During 2021, the refinery progressively increased operations, ending the year at near pre-pandemic levels.

Refinery segment financial information

(in millions, except per gallon data)	Year Ended December 31,		% Increase (Decrease)
	2021	2020	
Exchange products	\$ 2,293	\$ 1,472	56 %
Sales of refined products	40	307	(87)%
Sales to airline segment	492	214	130 %
Third-party refinery sales	3,229	1,150	181 %
Operating revenue	<u>\$ 6,054</u>	<u>\$ 3,143</u>	93 %
Operating loss	\$ (2)	\$ (216)	(99)%
Refinery segment impact on average price per fuel gallon	\$ —	\$ 0.11	(100)%

Refinery revenues increased from \$3.1 billion in 2020 to \$6.1 billion in 2021, primarily driven by the increase in third-party refinery sales. The increase in third-party refinery sales resulted from the refinery's shift to producing and selling more non-jet fuel products due to the lower level of demand for jet fuel compared to historical levels, in addition to higher pricing during 2021. The refinery decreased its operating loss from \$216 million in 2020 to \$2 million in 2021 mainly due to the increased production and pricing, partially offset by higher Renewable Identification Numbers ("RINs") compliance costs discussed below.

A refinery is subject to annual EPA requirements to blend renewable fuels into the gasoline and on-road diesel fuel it produces. Alternatively, a refinery may purchase RINs from third parties in the secondary market. The Monroe refinery purchases the majority of its RINs in the secondary market. Monroe incurred \$422 million in RINs compliance costs during 2021, of which \$98 million related to accrual rate increases on the prior year obligation, in addition to \$172 million accrued in 2020. Observable RIN prices increased significantly through the first half of 2021, ending 2021 at nearly double the market price at the end of 2020.

At December 31, 2021, we had a net fair value obligation of \$497 million. Our obligation as of December 31, 2021 was calculated using the EPA's proposed Renewable Fuel Standard ("RFS") volume requirements for 2020 and 2021, which were issued in December 2021. The EPA has not finalized the compliance deadlines to retire our obligations for 2020 and 2021, but we expect those deadlines to be within one year of the effective date of the new RFS volume requirements.

For more information regarding the refinery's results, see Note 14 of the Notes to the Consolidated Financial Statements.

Operating Statistics

Consolidated ⁽¹⁾	Year Ended December 31,		
	2021	2020	2019
Revenue passenger miles (in millions)	134,692	73,412	237,680
Available seat miles (in millions)	194,474	134,339	275,379
Passenger mile yield	16.72 ¢	17.55 ¢	17.79 ¢
Passenger revenue per available seat mile ("PRASM")	11.58 ¢	9.59 ¢	15.35 ¢
Total revenue per available seat mile ("TRASM")	15.37 ¢	12.73 ¢	17.07 ¢
TRASM, adjusted ⁽²⁾	13.71 ¢	11.87 ¢	16.97 ¢
Cost per available seat mile ("CASM")	14.40 ¢	22.01 ¢	14.67 ¢
CASM-Ex ⁽²⁾	12.12 ¢	15.61 ¢	10.88 ¢
Passenger load factor	69 %	55 %	86 %
Fuel gallons consumed (in millions)	2,778	1,935	4,214
Average price per fuel gallon ⁽³⁾	\$ 2.02	\$ 1.64	\$ 2.02
Average price per fuel gallon, adjusted ⁽²⁾⁽³⁾	\$ 2.02	\$ 1.64	\$ 2.01
Approximate full-time equivalent employees, end of period	83,000	74,000	91,000

⁽¹⁾ Includes the operations of our regional carriers under capacity purchase agreements. Full-time equivalent employees exclude employees of regional carriers that we do not own.

⁽²⁾ Non-GAAP financial measures are defined and reconciled to TRASM, CASM and average fuel price per gallon, respectively, in "Supplemental Information" below.

⁽³⁾ Includes the impact of fuel hedge activity, refinery segment results and carbon offset costs.

Financial Condition and Liquidity

As of December 31, 2021, we had \$14.2 billion in cash, cash equivalents, short-term investments and aggregate principal amount committed and available to be drawn under our revolving credit facilities. We expect to meet our liquidity needs for the next twelve months with cash and cash equivalents, short-term investments, restricted cash equivalents and cash flows from operations. We expect to meet our long-term liquidity needs with cash flows from operations and financing arrangements. We are continuing to evaluate the appropriate level of liquidity to maintain following the COVID-19 pandemic though, at least in the near term, we expect this level to be higher than the liquidity maintained prior to the pandemic. By 2024, we expect liquidity to be between \$5 billion and \$6 billion as we work to reduce our financial obligations and reinvest in the business.

Sources and Uses of Liquidity

Operating Activities

Operating activities in 2021 provided \$3.3 billion, including funds received from the government support programs described in "Financing Activities" below, compared to using \$3.8 billion in 2020. We expect to continue generating positive cash flows from operations during 2022.

Our operating cash flow is impacted by the following factors:

Seasonality of Advance Ticket Sales. We sell tickets for air travel in advance of the customer's travel date. When we receive a cash payment at the time of sale, we record the cash received on advance sales as deferred revenue in air traffic liability. The air traffic liability typically increases during the winter and spring months as advanced ticket sales grow prior to the summer peak travel season and decreases during the summer and fall months. However, the reduction in demand for air travel due to the COVID-19 pandemic resulted in a lower level of advance bookings and the associated cash received than we have historically experienced which has impacted the typical seasonal trend of air traffic liability since March 2020.

Domestic demand has improved since the latter half of the March 2021 quarter as consumers have regained confidence to travel and increased ticket purchases for travel further in advance. We experienced small moderations in demand growth during parts of the second half of 2021 due to a rise in COVID-19 cases attributable to COVID-19 virus variants. Our air traffic liability remains above historical levels with travel credits representing approximately 45% of the balance as of December 31, 2021. This compares to approximately 65% as of December 31, 2020 and approximately 20% prior to the onset of the COVID-19 pandemic.

Fuel. Fuel expense represented approximately 20% of our total operating expense during 2021. The market price for jet fuel is volatile, which can impact the comparability of our periodic cash flows from operations. The average fuel price per gallon increased in 2021. As capacity and demand increased throughout the year, fuel consumption was higher in 2021 than 2020 as well. We expect that fuel consumption will continue to increase throughout 2022 as we return closer to pre-pandemic levels of demand for air travel, partially offset by increases in fuel efficiency of our fleet.

We expect our commitment to environmental sustainability to depend on increased use of SAF, which is not presently available at scale or at prices competitive to jet fuel. While we do not expect a material adverse effect on our Consolidated Financial Statements in the near-term from the use of SAF, we are unable to predict the financial impact of increased use of SAF on our Consolidated Financial Statements over the longer term as government policies and incentives for, and sufficient third-party investment in, SAF are necessary to make its use in larger quantities commercially and economically feasible.

Employee Benefit Obligations. We sponsor defined benefit pension plans for eligible employees and retirees. These plans are closed to new entrants and are frozen for future benefit accruals. Our funding obligations for these plans are governed by the Employee Retirement Income Security Act ("ERISA") and any applicable legislation. We had no minimum funding requirements in 2020 or 2021, and have no such requirements in 2022. However, we voluntarily contributed \$1.5 billion to these plans during 2021. At this level of funding, investment returns are expected to satisfy future benefit payments, which we believe would eliminate further material voluntary or required cash contributions to the plans under the terms of ERISA. Further, based on this level of funding, we have modified, and continue to evaluate, the asset allocation mix to reduce the investment risk of the portfolio. Estimates of future funding requirements are based on various assumptions and could vary materially from actual funding requirements. Assumptions include, among other things, the actual and projected market performance of assets, statutory requirements and demographic data for participants.

In addition, we have employee benefit obligations relating primarily to projected future benefit payments from our unfunded postretirement and postemployment plans. See Note 9 of the Notes to the Consolidated Financial Statements for more information on our employee benefit obligations.

Voluntary Separation Programs. In 2020, we recorded a \$3.4 billion charge associated with voluntary early retirement and separation programs and other employee benefit charges. Approximately \$575 million of this charge was disbursed in cash payments to participants during 2021 in addition to \$720 million disbursed in 2020. We anticipate that a total of approximately \$500 million in cash payments will be made to participants in the voluntary separation programs in 2022 and the remaining payments in 2023 and beyond.

Profit Sharing. Our broad-based employee profit sharing program provides that, for each year in which we have an annual pre-tax profit, as defined by the terms of the program, we will pay a specified portion of that profit to employees. We did not have a profit sharing payment for 2020 based on the pre-tax loss incurred in that year.

To recognize the extraordinary efforts of our employees through the pandemic, we will make a special profit-sharing payment to eligible employees in February 2022, based on the adjusted pre-tax profit earned during the second half of 2021. We will pay \$108 million in profit sharing in February 2022.

Government Support Programs. See "Financing Activities" below for discussion of the impact to our liquidity from the government support programs in 2020 and 2021. We included \$4.5 billion and \$3.9 billion of grants received in our operating cash flow for the years ended December 31, 2021 and 2020, respectively.

Contract Carrier Obligations. We have certain estimated minimum fixed obligations under capacity purchase agreements with third-party regional carriers. These minimum amounts are based on the required minimum levels of flying by the regional carriers under the respective agreements and assumptions regarding the costs associated with such minimum levels of flying. As of December 31, 2021 the total of these minimum amounts was \$11.7 billion, which range from approximately \$1.5 billion to \$1.6 billion on an annual basis over the next five years. See Note 10 of the Notes to the Consolidated Financial Statements for more information on our contract carrier obligations.

Operating Lease Obligations. As described further in Note 7 of the Notes to the Consolidated Financial Statements, as of December 31, 2021 we had a total of \$9.8 billion of minimum operating lease obligations. These minimum lease payments range from approximately \$800 million to \$1.0 billion on an annual basis over the next five years.

New York-JFK Airport Expansion. In 2015, we completed two phases of redevelopment at New York-JFK's Terminal 4 to facilitate convenient connections for our passengers and improve coordination with our SkyTeam alliance partners. Terminal 4 is operated by JFK International Air Terminal LLC ("IAT"), a private party, under its lease with the Port Authority of New York and New Jersey ("Port Authority"). In December 2010, we entered into a 33-year agreement with IAT to sublease space in Terminal 4. Also, in 2010, the Port Authority issued approximately \$800 million principal amount of special project bonds (the "Series 8 Bonds") to fund the majority of the project. In December 2020, the NYTDC issued approximately \$611 million principal amount of special project bonds to refinance the outstanding balance of the Series 8 Bonds. During 2021, we signed an amendment to the Sublease for additional gates at JFK, increasing our lease obligation by \$1.2 billion.

We continue to plan for further expansion of Terminal 4 and during 2021, the Port Authority approved modified project plans to renovate Terminal 4 and add 10 new gates enabling us to move out of Terminal 2 and consolidate our operations at Terminal 4. The project is estimated to cost approximately \$1.5 billion, and we expect to amend the Sublease in the March 2022 quarter. Construction started in late 2021 with the project estimated to be complete by the end of 2023.

Other Obligations. We have certain purchase obligations under which we are required to make minimum payments for goods and services, including, but not limited to, aviation-related, maintenance, insurance, marketing, technology, sponsorships and other third-party services and products. As of December 31, 2021, we had approximately \$8.0 billion of such obligations, which range from approximately \$300 million to \$800 million on an annual basis over the next five years.

Investing Activities

Short-Term Investments. In 2021 we redeemed a net of \$2.4 billion in short-term investments. See Note 3 of the Notes to the Consolidated Financial Statements for further information on these investments.

Capital Expenditures. Our capital expenditures (i.e., property and equipment additions in our Consolidated Statements of Cash Flows ("cash flows statement")) were \$3.2 billion and \$1.9 billion in 2021 and 2020, respectively. Our capital expenditures are primarily related to the purchases of aircraft, airport construction projects, fleet modifications and technology enhancements.

We have committed to future aircraft purchases and have obtained, but are under no obligation to use, long-term financing commitments for a substantial portion of the purchase price of the aircraft. Excluding the New York-LaGuardia airport project discussed below, our expected 2022 capital expenditures of approximately \$6.0 billion, which may vary depending on financing decisions, will be primarily for aircraft, including deliveries and advance deposit payments, as well as fleet modifications and technology enhancements. As described in Part I, Item 1. "Business - Environmental Sustainability," aircraft fleet renewal is an important component of our environmental sustainability strategy and the path to achievement of our ambitious climate goals, which will continue to require extensive capital investment in future periods. See Note 10 of the Notes to the Consolidated Financial Statements for additional information regarding our aircraft purchase commitments, which totaled approximately \$16.2 billion as of December 31, 2021.

New York-LaGuardia Redevelopment. As part of the terminal redevelopment project at LaGuardia Airport, we are partnering with the Port Authority to replace Terminals C and D with a new state-of-the-art terminal facility consisting of 37 gates across four concourses connected to a central headhouse. The terminal will feature a new, larger Delta Sky Club, wider concourses, more gate seating and nearly double the amount of concessions space than the existing terminals. The facility will also offer direct access between the parking garage and terminal and improved roadways and drop-off/pick-up areas. The design of the new terminal will integrate sustainable technologies and improvements in energy efficiency. Construction is underway and is being phased to limit passenger inconvenience. Due to an acceleration effort that commenced in 2020, completion is expected by 2025.

In connection with the redevelopment, during 2017, we entered into an amended and restated terminal lease with the Port Authority with a term through 2050. Pursuant to the lease agreement, as amended to date, we will (1) fund (through debt issuance and existing cash) and undertake the design, management and construction of the terminal and certain off-premises supporting facilities, (2) receive a Port Authority contribution of approximately \$500 million to facilitate construction of the terminal and other supporting infrastructure, (3) be responsible for all operations and maintenance during the term of the lease and (4) have preferential rights to all gates in the terminal subject to Port Authority requirements with respect to accommodation of designated carriers. We currently expect our net project cost to be approximately \$3.5 billion and we bear the risks of project construction, including any potential cost over-runs. Using funding primarily provided by existing financing arrangements, we spent approximately \$950 million, which is primarily reflected in investing activities in our cash flows statement, during 2021, bringing the total amount spent on the project to date to approximately \$2.5 billion. We expect to spend approximately \$750 million during 2022, of which a majority will be paid using cash restricted for airport construction. See Note 6 of the Notes to the Consolidated Financial Statements for additional information on the debt related to this redevelopment project, the New York Transportation Development Corporation ("NYTDC") Special Facilities Revenue Bonds, Series 2018 and NYTDC Special Facilities Revenue Bonds, Series 2020.

In 2019, we opened Concourse G, the first of four new concourses, housing seven of the 37 new gates. Not only did the new Concourse G provide the first direct impact to the Delta passenger experience, it also represented the first major phasing milestone. The next major milestone will be the opening of the headhouse and Concourse E, which is scheduled for the second quarter of 2022.

Los Angeles International Airport ("LAX") Construction. We executed a modified lease agreement during 2016 with the City of Los Angeles (the "City"), which owns and operates LAX, and announced plans to modernize, upgrade and provide post-security connection to Terminals 2 and 3. Construction is underway, which includes a new centralized ticketing and arrival hall, a new security checkpoint, core infrastructure to support the City's planned airport people mover, ramp improvements and a post-security connector to the north side of the Tom Bradley International Terminal.

Given reduced passenger volumes resulting from the COVID-19 pandemic, we accelerated the construction schedule for this project in 2020. Additionally, in 2020, we enhanced the project's scope to include a more customer-friendly design of Terminal 3, an expanded Delta Sky Club and baggage system upgrades designed to increase the terminals' operational efficiency going forward. Construction is expected to be completed in 2023.

The project is expected to cost approximately \$2.3 billion. A substantial majority of the project costs are being funded through the Regional Airports Improvement Corporation ("RAIC"), a California public benefit corporation, using a revolving credit facility provided by a group of lenders. The credit facility was executed in 2017 and amended in 2020, and we have guaranteed the obligations of the RAIC under the credit facility. The revolving credit facility agreement was amended again in January 2022, increasing the revolver capacity from \$800 million to \$1.1 billion. Loans made under the credit facility are being repaid with the proceeds from the City's purchase of completed project assets. Under the lease agreement and subsequent project component approvals by the City's Board of Airport Commissioners, the City has appropriated to date approximately \$1.8 billion to purchase completed project assets, representing the maximum allowable reimbursement by the City. Costs incurred in excess of the \$1.8 billion maximum will not be reimbursed by the City. We currently expect our net project costs to be approximately \$500 million, of which approximately \$250 million has been reflected as investing activities in our cash flows statement since the project started in 2017.

In 2021, \$487 million was spent on this project, with \$450 million paid by the credit facility and \$37 million paid directly by Delta. Approximately \$500 million is expected to be spent on the project during 2022, with \$325 million to be paid by the credit facility and \$175 million to be paid directly by Delta.

Equity Investments. To support our international presence, we are investing in Virgin Atlantic, Grupo Aeroméxico and LATAM as each carrier emerges from restructuring or recapitalization processes. After investing approximately \$630 million in these carriers during 2021, we expect to invest another approximately \$600 million during 2022 for a total combined investment of new capital in these carriers of approximately \$1.2 billion. Upon completion of their respective processes, we expect to receive an approximately 20% equity stake in Grupo Aeroméxico and an approximately 10% equity stake in LATAM, while maintaining our 49% equity stake in Virgin Atlantic. See Note 4 of the Notes to the Consolidated Financial Statements for additional information on our equity investments

Financing Activities

Debt and Finance Leases. See Note 6 of the Notes to the Consolidated Financial Statements for additional information on recent financings and repayments. In 2021, we had cash outflows of approximately \$5.8 billion related to repayments of our debt and finance leases, including approximately \$3.8 billion for the early repayment of the term loan secured by certain of our slots, gates and routes, various EETCs, certain notes through a cash tender offer and other various unsecured notes, secured certificates and SkyMiles term loan. We will continue to seek opportunities to pre-pay our debt, in addition to periodic amortization payments and scheduled maturities, during 2022 and beyond.

The principal amount of our debt and finance leases was \$27.1 billion at December 31, 2021.

Future Debt Obligations. As described further in Note 6 of the Notes to the Consolidated Financial Statements, as of December 31, 2021, scheduled maturities of our debt in 2022 and 2023 were \$1.5 billion and \$2.5 billion, respectively, with maturities from 2024 through 2026 ranging between \$3.1 billion and \$4.2 billion annually. As of December 31, 2021, scheduled maturities after 2026 aggregate to \$10.9 billion. In addition, we are obligated to make periodic interest payments at fixed and variable rates, depending on the terms of the applicable debt agreements. Based on applicable interest rates and scheduled debt maturities as of December 31, 2021, these interest obligations total approximately \$5.5 billion and range from approximately \$500 million to \$1.0 billion on an annual basis over the next five years. In addition to payment of scheduled debt maturities, we expect to continue paying down our debt in 2022, and therefore reduce our future interest obligations.

Our current ratings from the three major credit rating agencies are summarized in the table below:

Credit agency ratings information

Rating Agency	Current Rating	Outlook
Fitch	BB+	Negative
Moody's	Baa3	Stable
Standard & Poor's	BB	Stable

Finance Lease Obligations. As described further in Note 7 of the Notes to the Consolidated Financial Statements as of December 31, 2021 we had a total of \$2.0 billion of minimum finance lease obligations. These minimum lease payments range from approximately \$200 million to \$400 million on an annual basis over the next five years.

Undrawn Lines of Credit. As of December 31, 2021 we had approximately \$2.9 billion undrawn and available under our revolving credit facilities. In addition, we had \$300 million outstanding letters of credit as of December 31, 2021 that did not affect the availability under our revolvers.

Covenants. We were in compliance with the covenants in our debt agreements at December 31, 2021. See Note 6 of the Notes to the Consolidated Financial Statements for more information on the covenants in our debt agreements.

Critical Accounting Estimates

Our critical accounting estimates are those estimates made in accordance with GAAP that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on our consolidated results of operations or financial condition. Accordingly, the actual results may differ materially from these estimates. For a discussion of our significant accounting policies, see Note 1 of the Notes to the Consolidated Financial Statements, unless otherwise noted below.

Loyalty Program

Our SkyMiles loyalty program generates customer loyalty by rewarding customers with incentives to travel on Delta. This program allows customers to earn mileage credits ("miles") by flying on Delta, Delta Connection carriers and other airlines that participate in the loyalty program. When traveling, customers earn miles primarily based on the passenger's loyalty program status, fare class and ticket price. Customers can also earn miles through participating companies such as credit card companies, hotels, car rental agencies and ridesharing companies. Miles are redeemable by customers in future periods for air travel on Delta and other participating airlines, access to our Sky Club and other program awards. To facilitate transactions with participating companies, we sell miles to non-airline businesses, customers and other airlines.

The loyalty program includes two types of transactions that are considered revenue arrangements with multiple performance obligations (1) passenger ticket sales earning miles and (2) sale of miles to participating companies.

Passenger Ticket Sales Earning Miles. Passenger ticket sales earning miles provide customers with (1) miles earned and (2) air transportation, which are each considered performance obligations. We value each performance obligation on a standalone basis. To value the miles earned, we consider the quantitative value a passenger receives by redeeming miles for a ticket rather than paying cash, which is referred to as equivalent ticket value ("ETV"). Our estimate of ETV is adjusted for miles that are not likely to be redeemed ("mileage breakage"). We use statistical models to estimate mileage breakage based on historical redemption patterns. A change in assumptions to the redemption activity for miles or the estimated fair value of miles expected to be redeemed could have a material impact on our revenue in the year in which the change occurs and in future years. We recognize mileage breakage proportionally during the period in which the remaining miles are actually redeemed.

At December 31, 2021, the aggregate deferred revenue balance associated with the SkyMiles program was \$7.6 billion. A hypothetical 10% change in the number of outstanding miles estimated to be redeemed would result in an impact of approximately \$140 million on total operating revenue recognized for the year ended December 31, 2021.

We defer revenue for the miles when earned and recognize loyalty travel awards in passenger revenue as the miles are redeemed and transportation is provided. We record the air transportation portion of the passenger ticket sales in air traffic liability and recognize passenger revenue when we provide transportation or if the ticket goes unused. A hypothetical 10% increase in our estimate of the ETV of a mile would have decreased total operating revenue by approximately \$60 million for the year ended December 31, 2021, as a result of an increase in the amount of revenue deferred associated with the miles earned.

Sale of Miles to Participating Companies. Customers earn miles based on their spending with participating companies such as credit card companies, hotels, car rental agencies and ridesharing companies with which we have marketing agreements to sell miles. Our contracts to sell miles under these marketing agreements have multiple performance obligations. Payments are typically due to us monthly based on the volume of miles sold during the period, and the initial terms of our marketing contracts are from three to eleven years. During the years ended December 31, 2021, 2020 and 2019, total cash sales from marketing agreements related to our loyalty program were \$4.1 billion, \$2.9 billion and \$4.2 billion, respectively, which are allocated to travel and other performance obligations, as discussed below.

Our most significant contract to sell miles relates to our co-brand credit card relationship with American Express. Our agreements with American Express provide for joint marketing, grant certain benefits to Delta-American Express co-branded credit card holders ("cardholders") and American Express Membership Rewards program participants, and allow American Express to market its services or products using our customer database. Cardholders earn miles for making purchases using co-branded cards, and certain cardholders may also check their first bag for free, are granted discounted access to Delta Sky Club lounges and receive priority boarding and other benefits while traveling on Delta. Additionally, participants in the American Express Membership Rewards program may exchange their points for miles under the loyalty program. We sell miles at agreed-upon rates to American Express which are then provided to their customers under the co-brand credit card program and the Membership Rewards program.

We account for marketing agreements, including those with American Express, by allocating the consideration to the individual products and services delivered. We allocate the value based on the relative selling prices of those products and services, which generally consist of award travel, priority boarding, baggage fee waivers, lounge access and the use of our brand. We determine our best estimate of the selling prices by using a discounted cash flow analysis using multiple inputs and assumptions, including (1) the expected number of miles awarded and number of miles redeemed, (2) ETV for the award travel obligation adjusted for mileage breakage, (3) published rates on our website for baggage fees, discounted access to Delta Sky Club lounges and other benefits while traveling on Delta, (4) brand value (using estimated royalties generated from the use of our brand) and (5) volume discounts provided to certain partners.

We defer the amount allocated to award travel as part of loyalty program deferred revenue and recognize loyalty travel awards in passenger revenue as the miles are redeemed and transportation is provided. Revenue allocated to services performed in conjunction with a passenger's flight, such as baggage fee waivers, is recognized as travel-related services in passenger revenue when the related service is performed. Revenue allocated to access Delta Sky Club lounges is recognized as miscellaneous in other revenue as access is provided. Revenue allocated to the remaining performance obligations, primarily brand value, is recorded as loyalty program in other revenue as miles are delivered.

The timing of mile redemptions can vary widely; however, the majority of new miles have historically been redeemed within two years of being earned. The loyalty program deferred revenue classified as a current liability represents our current estimate of revenue expected to be recognized in the next twelve months based on projected redemptions, while the balance classified as a noncurrent liability represents our current estimate of revenue expected to be recognized beyond twelve months. Compared to pre-pandemic levels, a larger portion of mile redemptions is projected to occur beyond twelve months and is therefore reflected as a noncurrent liability as of December 31, 2021. We will continue to monitor redemptions as the situation evolves.

For additional information on our significant accounting policies related to the loyalty program, see Note 2 of the Notes to the Consolidated Financial Statements.

Passenger Ticket Sales

We defer sales of passenger tickets to be flown by us or that we sell on behalf of other airlines in our air traffic liability. Passenger revenue is recognized when we provide transportation or when the ticket expires unused ("ticket breakage"). For tickets that we sell on behalf of other airlines, we reduce the air traffic liability when consideration is remitted to those airlines. The air traffic liability primarily includes sales of passenger tickets with scheduled departure dates in the future and credits which can be applied as payment toward the cost of a ticket ("travel credits"). Travel credits are typically issued as a result of ticket cancellations prior to their expiration dates. We periodically evaluate the estimated air traffic liability and may record adjustments in our income statement. These adjustments relate primarily to refunds, exchanges, ticket breakage, transactions with other airlines and other items for which final settlement occurs in periods subsequent to the sale of the related tickets at amounts other than the original sales price.

We have experienced significant ticket cancellations, particularly in the early months of the pandemic in 2020. During 2020, with the exception of Basic Economy, we eliminated change fees for all tickets originating in North America and waived change fees for tickets originating outside of North America. In the March 2021 quarter, we announced the extension of the validity of all passenger tickets and travel credits purchased or expiring in 2021 to December 31, 2022, which allowed for tickets to be rebooked through December 31, 2022 for travel through 2023. In January 2022, we announced that all existing travel credit holders will have until December 31, 2023 to rebook their ticket for travel throughout 2024. Additionally, all Delta customers with upcoming 2022 travel or who purchase a ticket in 2022 will also have the flexibility to rebook their ticket through December 31, 2023, and travel throughout 2024.

We estimate the value of ticket breakage and recognize revenue at the scheduled flight date. Our ticket breakage estimates are primarily based on historical experience, ticket contract terms and customers' travel behavior. Given the impact of the COVID-19 pandemic on customer behavior and changes made in ticket validity terms, as well as the elimination of change fees for most tickets, our estimates of revenue that will be recognized from the air traffic liability for unused tickets may vary in future periods. Travel credits represented approximately 45% of the air traffic liability as of December 31, 2021. This compares to approximately 65% as of December 31, 2020 and approximately 20% prior to the onset of the COVID-19 pandemic.

For additional information on our significant accounting policies related to passenger ticket sales, see Note 2 of the Notes to the Consolidated Financial Statements.

Long-Lived Assets

Our long-lived assets, including flight equipment, which consists of aircraft and associated engines and parts, operating lease right-of-use ("ROU") assets and other long-lived assets, which have a recorded value of approximately \$36.0 billion at December 31, 2021, are recorded in property and equipment, net and operating lease right-of-use assets on our balance sheets. This value is based on various factors, including the assets' acquisition costs, estimated useful lives, salvage values, discounted lease payments and lease terms. We review flight equipment, ROU assets and other long-lived assets used in operations for impairment losses when events and circumstances indicate the assets may be impaired. Factors which could be indicators of impairment include, but are not limited to (1) a decision to permanently remove flight equipment or other long-lived assets from operations, (2) significant changes in the estimated useful life, (3) significant changes in projected cash flows, (4) permanent and significant declines in fleet fair values and (5) changes to the regulatory environment. For long-lived assets held for sale, we discontinue depreciation and record impairment losses when the carrying amount of these assets is greater than the fair value less the cost to sell.

To determine whether impairments exist for aircraft used in operations, we group assets at the fleet type level or at the contract level for aircraft operated by third-party regional carriers (i.e., the lowest level for which there are identifiable cash flows) and then estimate future cash flows based on projections of capacity, passenger mile yield, fuel and labor costs and other relevant factors. If an asset group is impaired, the impairment loss recognized is the amount by which the asset group's carrying amount exceeds its estimated fair value. We estimate aircraft fair values using published sources, appraisals and bids received from third parties, as available.

As a result of the COVID-19 pandemic and our response, we made decisions to remove certain aircraft from active service and to early retire certain fleets. We evaluated our fleet during 2020 and determined that only the fleet types discussed in Note 15 of the Notes to the Consolidated Financial Statements were impaired, as the future cash flows from the operation of other fleet types through the respective retirement dates exceeded the carrying value. This resulted in impairment and other related charges of \$4.4 billion, recorded in restructuring charges in our income statement. These charges were calculated using Level 3 fair value inputs based primarily upon recent market transactions and third-party bids, which were corroborated with published pricing guides and our assessment of existing market conditions based on industry knowledge. The effects of the COVID-19 pandemic created additional estimation uncertainty as there was a limited market for aircraft and limited data on how the COVID-19 pandemic affected the fair value of aircraft.

Due to the recovery in demand that we have experienced throughout 2021, we decided not to retire any additional aircraft and returned to service a majority of the aircraft that were temporarily parked in 2020. We recorded no further impairments during 2021. As we gained updated information during the year, we updated estimates to the 2020 fleet-related impairment charges and recorded adjustments of \$19 million to certain of the restructuring charges during 2021.

Following the impairment charges, the aggregate net book value of these aircraft as of December 31, 2021 and December 31, 2020 was approximately \$340 million and \$500 million, respectively, with the reduction in 2021 primarily due to aircraft sales. See Note 15 of the Notes to the Consolidated Financial Statements for additional details regarding these impairments and related charges.

Goodwill and Indefinite-Lived Intangible Assets

We apply a fair value-based impairment test to the carrying value of goodwill and indefinite-lived intangible assets on an annual basis (as of October 1) and, if certain events or circumstances indicate that an impairment loss may have been incurred, on an interim basis. We assess the value of our goodwill and indefinite-lived assets under either a qualitative or quantitative approach. Under a qualitative approach, we consider various market factors, including certain of the key assumptions listed below. We analyze these factors to determine if events and circumstances have affected the fair value of goodwill and indefinite-lived intangible assets. If we determine that it is more likely than not that the asset may be impaired, we use the quantitative approach to assess the asset's fair value and the amount of the impairment. Under a quantitative approach, we calculate the fair value of the asset incorporating the key assumptions listed below into our calculation.

When we evaluate goodwill for impairment using a quantitative approach, we estimate the fair value of the reporting unit by considering both comparable public company multiples (a market approach) and projected discounted future cash flows (an income approach). When we perform a quantitative impairment assessment of our indefinite-lived intangible assets, fair value is estimated based on (1) recent market transactions, where available, (2) the royalty method for the Delta tradename (which assumes hypothetical royalties generated from using our tradename) or (3) projected discounted future cash flows (an income approach).

Key Assumptions. The key assumptions in our impairment tests include (1) forecasted revenues, expenses and cash flows, including the duration and extent of impact to our business and our alliance partners from the COVID-19 pandemic, (2) current discount rates, (3) observable market transactions and (4) anticipated changes to the regulatory environment (e.g., changes in slot access and/or availability, additional Open Skies agreements or changes to antitrust approvals). These assumptions are consistent with those that hypothetical market participants would use. Because we are required to make estimates and assumptions when evaluating goodwill and indefinite-lived intangible assets for impairment, actual transaction amounts may differ materially from these estimates. In addition, when performing a qualitative valuation, we consider the amount by which the intangible assets' fair values exceeded their respective carrying values in the most recent fair value measurements calculated using a quantitative approach.

Changes in certain events and circumstances could result in impairment or a change from indefinite-lived to definite-lived. Factors which could cause impairment include, but are not limited to (1) negative trends in our market capitalization, (2) reduced profitability resulting from lower passenger mile yields or higher input costs (primarily related to fuel and employees), (3) lower passenger demand as a result of weakened U.S. and global economies, global pandemics or other factors, (4) interruption to our operations due to a prolonged employee strike, terrorist attack or other reasons, (5) changes to the regulatory environment (e.g., changes in slot access and/or availability, additional Open Skies agreements or changes to antitrust approvals), (6) competitive changes by other airlines and (7) strategic changes to our operations leading to diminished utilization of the intangible assets.

Goodwill. Our goodwill balance, which is related to the airline segment, was \$9.8 billion at December 31, 2021.

Identifiable Intangible Assets. Our identifiable intangible assets, which are related to the airline segment, had a net carrying amount of \$6.0 billion at December 31, 2021, of which \$5.9 billion related to indefinite-lived intangible assets. Indefinite-lived assets are not amortized and consist of routes, slots, the Delta tradename and assets related to alliances and collaborative arrangements. Definite-lived assets consist primarily of marketing and maintenance service agreements.

In 2021, we performed qualitative assessments of our goodwill and indefinite-lived intangible assets, including applicable factors noted in "Key Assumptions" above, and determined that there was no indication that the assets were impaired. Our qualitative assessments include analyses and weighting of all relevant factors, which impact the fair value of our indefinite-lived intangible assets.

For additional information on our goodwill and indefinite-lived intangible assets' significant accounting policies and the related fair values and book values, see Note 5 of the Notes to the Consolidated Financial Statements.

Defined Benefit Pension Plans

We sponsor defined benefit pension plans for eligible employees and retirees. These plans are closed to new entrants and frozen for future benefit accruals. As of December 31, 2021, the unfunded benefit obligation for these plans recorded on our Consolidated Balance Sheets ("balance sheets") was \$1.6 billion. We had no minimum funding requirements in 2020 or 2021, and have no such requirements in 2022. However, we voluntarily contributed \$1.5 billion to these plans during 2021. The most critical assumptions impacting our defined benefit pension plan obligations and net periodic benefit cost are the discount rate, the expected long-term rate of return on plan assets and life expectancy of plan participants.

Weighted Average Discount Rate. We determine our weighted average discount rate on our measurement date primarily by reference to annualized rates earned on high-quality fixed income investments and yield-to-maturity analyses specific to our estimated future benefit payments. We used a weighted average discount rate to value the obligations of 2.97% and 2.62% at December 31, 2021 and 2020, respectively. Our weighted average discount rate for net periodic benefit cost in each of the past three years has varied from the rate selected on our measurement date, ranging from 2.65% to 4.33%.

Expected Long-Term Rate of Return. Our expected long-term rate of return on plan assets is based primarily on plan-specific investment studies using historical market return and volatility data. Modest excess return expectations versus some public market indices are incorporated into the return projections based on the actively managed structure of the investment programs and their records of achieving such returns historically. We also expect to receive a premium for investing in less liquid private markets. We review our rate of return on plan assets assumptions annually. Our annual investment performance for one particular year does not, by itself, significantly influence our evaluation. Our weighted average expected long-term rate of return on assets for net periodic benefit cost for the year ended December 31, 2021 was 8.98%.

The investment strategy for our defined benefit pension plan assets is to earn a long-term return that meets or exceeds our annualized return target while taking an acceptable level of risk and maintaining sufficient liquidity to pay current benefits and other cash obligations of the plan. Based on our current level of funding, we have modified, and continue to evaluate, the asset allocation mix to reduce the investment risk of the portfolio. The lower risk profile of the portfolio is projected to result in a lower expected long-term rate of return on plan assets in 2022.

The impact of a 0.50% change in weighted average discount rate and 1.00% change in expected long-term rate of return on assets are shown in the table below:

Benefit plan effects of change in assumptions used

Change in Assumption	Effect on 2022 Pension Benefit Cost	Effect on Accrued Pension Liability at December 31, 2021
0.50% decrease in weighted average discount rate	\$ (17) million	\$ 1.2 billion
0.50% increase in weighted average discount rate	\$ 14 million	\$ (1.1) billion
1.00% decrease in expected long-term rate of return on assets	\$ 188 million	\$ —
1.00% increase in expected long-term rate of return on assets	\$ (188) million	\$ —

Life Expectancy. Changes in life expectancy may significantly impact our benefit obligations and future net periodic benefit cost. We use the Society of Actuaries ("SOA") published mortality data and other publicly available information to develop our best estimate of life expectancy. The SOA publishes updated mortality tables for U.S. plans and updated improvement scales. Each year we consider updates by the SOA in setting our mortality assumptions for purposes of measuring pension and other postretirement and postemployment benefit obligations.

Funding. Our funding obligations for qualified defined benefit plans are governed by the Employee Retirement Income Security Act and any applicable legislation. Under the Pension Protection Act of 2006, we elected alternative funding rules so that the unfunded liability for a frozen defined benefit plan may be amortized over a fixed 17-year period and is calculated using an 8.85% discount rate until the 17-year period expires for all frozen defined benefit plans by the end of 2024. Upon expiration, under recent legislation passed in 2021, any required funding would be amortized over a rolling 15-year period and calculated using a discount rate of no less than 4.75% through 2030.

While this recent legislation makes our funding obligations for these plans more predictable, factors outside our control continue to have an impact on the funding requirements. Estimates of future funding requirements are based on various assumptions and can vary materially from actual funding requirements. Assumptions include, among other things, the actual and projected market performance of assets, statutory requirements and demographic data for participants.

Investments Valued at Net Asset Value ("NAV") Per Share. On an annual basis we assess the potential for adjustments to the fair value of all investments. These investments valued using NAV as a practical expedient are typically valued on a monthly or quarterly basis by third-party administrators, valuation agents or fund managers with an annual audit performed by an independent third party, but certain of these investments have a lag in the availability of data. This primarily applies to private equity, private equity-related strategies and real assets. We solicit valuation updates from the investment fund managers and use their information and corroborating data from public markets to determine any needed fair value adjustments.

For additional information on our significant accounting policies related to defined benefit pension plans, see Note 9 of the Notes to the Consolidated Financial Statements.

Income Tax Valuation Allowance

We periodically assess whether it is more likely than not that we will generate sufficient taxable income to realize our deferred income tax assets. We establish valuation allowances if it is more likely than not that we will be unable to realize our deferred income tax assets. In making this determination, we consider available positive and negative evidence and make certain assumptions. We consider, among other things, projected future taxable income, scheduled reversals of deferred tax liabilities, the overall business environment, our historical financial results and tax planning strategies. In evaluating the likelihood of utilizing our net deferred income tax assets, the significant factors that we consider include (1) our recent history of significant profitability, (2) growth in the U.S. and global economies, (3) forecast of airline revenue trends, (4) estimate of future fuel prices and (5) future impact of taxable temporary differences.

At December 31, 2021 our net deferred tax asset balance was \$1.3 billion, including an \$833 million valuation allowance primarily related to capital loss carryforwards and certain state net operating losses. Although we have recent cumulative losses, we have a history of significant earnings prior to the onset of the COVID-19 pandemic. While we expect to return to sustained profitability as the effects of the pandemic subside and to generate sufficient taxable income to utilize our federal net operating loss carryforwards before any expire, the generation of future taxable income is dependent on many factors, including those which are out of our control, such as the demand for air travel and overall health of the economy. As such, there are no guarantees that a valuation allowance will not be required against some or all of our deferred tax assets in future periods.

Our federal net operating loss carryforwards generated before 2018 do not begin to expire until 2029. Under current tax law, federal net operating losses generated after 2017 do not expire. Therefore, we have not recorded a valuation allowance on our deferred tax assets other than the capital loss carryforwards and certain state net operating losses that have short expiration periods.

For additional information on our significant accounting policies related to income taxes, see Note 11 of the Notes to the Consolidated Financial Statements.

Recent Accounting Standards

Government Assistance. In 2021, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") No. 2021-10, "Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance." This ASU will require certain disclosures about the significant terms and conditions of material government assistance agreements in order to provide more consistent information to users of the financial statements. This standard is effective for annual reporting periods beginning after December 15, 2021, and early adoption is permitted. We determined that our material government assistance agreements are the payroll support program agreements under the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") and the program extensions, and we adopted the new standard in 2021. See Note 6 of the Notes to the Consolidated Financial Statements where we reflect the requirements of this new standard as it relates to our payroll support program disclosures.

Supplemental Information

We sometimes use information ("non-GAAP financial measures") that is derived from the Consolidated Financial Statements, but that is not presented in accordance with GAAP. Under the U.S. Securities and Exchange Commission rules, non-GAAP financial measures may be considered in addition to results prepared in accordance with GAAP, but should not be considered a substitute for or superior to GAAP results. Reconciliations below may not calculate exactly due to rounding.

Included below are reconciliations of non-GAAP measures used within this Form 10-K to the most directly comparable GAAP financial measures. These reconciliations include certain adjustments to GAAP measures, which are directly related to the impact of COVID-19 and our response. These adjustments are made to provide comparability between the reported periods, if applicable, as indicated below:

- *Restructuring charges.* During 2020, we recorded restructuring charges of \$8.2 billion for items such as fleet impairments and voluntary early retirement and separation programs following strategic business decisions in response to the COVID-19 pandemic. In the year ended December 31, 2021, we recognized \$19 million of adjustments to certain of those restructuring charges, representing changes in our estimates.
- *Government grant recognition.* We recognized \$4.5 billion and \$3.9 billion of the grant proceeds from the payroll support program extensions as a contra-expense during 2021 and 2020, respectively. We recognized the grant proceeds as contra-expense based on the periods that the funds were intended to compensate and have fully used all proceeds from the payroll support program extensions.
- *Impairments and equity method losses.* These adjustments relate to recording our share of losses recorded by our equity method investees. Additionally, during 2020, we recognized charges from write-downs of our investments in LATAM and Grupo Aeroméxico following their financial losses and separate Chapter 11 bankruptcy filings, and the write-down of our investment in Virgin Atlantic based on our share of its losses.
- *Pension settlement charges.* These charges were recognized in connection with the voluntary early retirement and separation programs that were offered to our employees in 2020.
- *Loss on extinguishment of debt.* This adjustment relates to the early termination of a portion of our debt.
- *Special profit-sharing payment.* This adjustment is exclusive to 2021. To recognize the extraordinary efforts of our employees through the pandemic, we will make a special profit-sharing payment to eligible employees in February 2022, based on the adjusted pre-tax profit earned during the second half of 2021. This adjustment allows investors to better understand and analyze our recurring cost performance and provides a more meaningful comparison of our core operating costs to the airline industry.

We also regularly adjust certain GAAP measures for the following items, if applicable, for the reasons indicated below:

- *MTM adjustments and settlements on hedges.* Mark-to-market ("MTM") adjustments are defined as fair value changes recorded in periods other than the settlement period. Such fair value changes are not necessarily indicative of the actual settlement value of the underlying hedge in the contract settlement period, and therefore we remove this impact to allow investors to better understand and analyze our core performance. Settlements represent cash received or paid on hedge contracts settled during the applicable period.
- *Equity investment MTM adjustments.* We record our proportionate share of losses from our equity investments in non-operating expense. As a result of Grupo Aeroméxico's and LATAM's bankruptcy filings in 2020, we discontinued accounting for these investments under the equity method at that time as we no longer had significant influence with those investees. We adjust for our equity method investees' hedge portfolio MTM adjustments to allow investors to understand and analyze our core operational performance in the periods shown.
- *MTM adjustments on investments.* Unrealized gains/losses result from our equity investments that are accounted for at fair value in non-operating expense. The gains/losses are driven by changes in stock prices, foreign currency fluctuations and other valuation techniques for investments in companies without publicly-traded shares. Adjusting for these gains/losses allows investors to better understand and analyze our core operational performance in the periods shown.

- *Third-party refinery sales.* Refinery sales to third parties, and related expenses, are not related to our airline segment. Excluding these sales therefore provides a more meaningful comparison of our airline operations to the rest of the airline industry.
- *Aircraft fuel and related taxes.* The volatility in fuel prices impacts the comparability of year-over-year financial performance. The adjustment for aircraft fuel and related taxes allows investors to better understand and analyze our non-fuel costs and year-over-year financial performance.
- *Profit sharing.* We adjust for profit sharing because this adjustment allows investors to better understand and analyze our recurring cost performance and provides a more meaningful comparison of our core operating costs to the airline industry.
- *Delta Private Jets adjustment.* Because we combined Delta Private Jets with Wheels Up in January 2020, we have excluded the impact of Delta Private Jets from 2019 results for comparability.

Pre-tax (loss)/income, adjusted reconciliation

(in millions)	Year Ended December 31,		
	2021	2020	2019
Pre-tax income/(loss)	\$ 398	\$ (15,587)	\$ 6,198
Adjusted for:			
Restructuring charges	(19)	8,219	—
Government grant recognition	(4,512)	(3,946)	—
Impairments and equity method losses	337	2,172	—
Pension settlement charges	—	36	—
Loss on extinguishment of debt	319	—	—
Special profit sharing payment	108	—	—
MTM adjustments and settlements on hedges	9	10	14
Equity investment MTM adjustments	—	(19)	(14)
MTM adjustments on investments	(56)	119	13
Delta Private Jets adjustment	—	—	3
Pre-tax (loss)/income, adjusted	\$ (3,415)	\$ (8,996)	\$ 6,214

Operating expense, adjusted reconciliation

(in millions)	Year Ended December 31,		
	2021	2020	2019
Operating expense	\$ 28,013	\$ 29,564	\$ 40,389
Adjusted for:			
Restructuring charges	19	(8,219)	—
Government grant recognition	4,512	3,946	—
Special profit sharing payment	(108)	—	—
MTM adjustments and settlements on hedges	(9)	(10)	(14)
Third-party refinery sales	(3,229)	(1,150)	(97)
Delta Private Jets adjustment	—	—	(196)
Operating expense, adjusted	\$ 29,197	\$ 24,130	\$ 40,082

Fuel expense, adjusted and Average fuel price per gallon, adjusted reconciliations

(in millions, except per gallon data)	Year Ended December 31,			Average Price Per Gallon		
	Year Ended December 31,			Year Ended December 31,		
	2021	2020	2019	2021	2020	2019
Total fuel expense	\$ 5,633	\$ 3,176	\$ 8,519	\$ 2.02	\$ 1.64	\$ 2.02
Adjusted for:						
MTM adjustments and settlements on hedges	(9)	(10)	(14)	—	(0.01)	—
Delta Private Jets adjustment	—	—	(28)	—	—	(0.01)
Total fuel expense, adjusted	\$ 5,625	\$ 3,166	\$ 8,477	\$ 2.02	\$ 1.64	\$ 2.01

TRASM, adjusted reconciliation

(in cents)	Year Ended December 31,		
	2021	2020	2019
TRASM	15.37 ¢	12.73 ¢	17.07 ¢
Adjusted for:			
Third-party refinery sales	(1.66)	(0.86)	(0.04)
Delta Private Jets adjustment	—	—	(0.07)
TRASM, adjusted	13.71 ¢	11.87 ¢	16.97 ¢

CASM-Ex reconciliation

(in cents)	Year Ended December 31,		
	2021	2020	2019
CASM	14.40 ¢	22.01 ¢	14.67 ¢
Adjusted for:			
Restructuring charges	0.01	(6.12)	—
Government grant recognition	2.32	2.94	—
Aircraft fuel and related taxes	(2.90)	(2.36)	(3.10)
Third-party refinery sales	(1.66)	(0.86)	(0.04)
Special profit sharing payment	(0.06)	—	—
Profit sharing	—	—	(0.60)
Delta Private Jets adjustment	—	—	(0.06)
CASM-Ex	12.12 ¢	15.61 ¢	10.88 ¢

Free Cash Flow

The following table shows a reconciliation of net cash provided by/(used in) operating activities (a GAAP measure) to free cash flow (a non-GAAP financial measure). We present free cash flow because management believes this metric is helpful to investors to evaluate the company's ability to generate cash that is available for use for debt service or general corporate initiatives. Adjustments include:

- *Net (redemptions)/purchases of short-term investments.* Net (redemptions)/purchases of short-term investments represent the net purchase and sale activity of investments and marketable securities in the period, including gains and losses. We adjust for this activity to provide investors a better understanding of the company's free cash flow generated by our operations.
- *Strategic investments and related.* Cash flows related to our investments in and related transactions with other airlines are included in our GAAP investing activities. We adjust for this activity because it provides a more meaningful comparison to our airline industry peers.
- *Net cash flows related to certain airport construction projects and other.* Cash flows related to certain airport construction projects are included in our GAAP operating activities and capital expenditures. We have adjusted for these items because management believes investors should be informed that a portion of these capital expenditures from airport construction projects are either reimbursed by a third party or funded with restricted cash specific to these projects.

Free cash flow reconciliation

(in millions)	Year Ended December 31,		
	2021	2020	2019
Net cash provided by/(used in) operating activities	\$ 3,264	\$ (3,793)	\$ 8,425
Net cash used in investing activities	(898)	(9,238)	(4,563)
Adjusted for:			
Net (redemptions)/purchases of short-term investments	(2,381)	5,792	(206)
Strategic investments and related	181	2,192	170
Net cash flows related to certain airport construction projects and other	1,090	721	338
Free cash flow	\$ 1,255	\$ (4,327)	\$ 4,164

Glossary of Defined Terms

ASM - Available Seat Mile. A measure of capacity. ASMs equal the total number of seats available for transporting passengers during a reporting period multiplied by the total number of miles flown during that period.

CASM - (Total Operating) Cost per Available Seat Mile. The amount of operating cost incurred per ASM during a reporting period. CASM is also referred to as "unit cost."

CASM-Ex - The amount of operating cost incurred per ASM during a reporting period, adjusted for the items shown above in "Supplemental Information."

Free Cash Flow - Represents the cash available for use for debt service or general corporate initiatives.

Load Factor - A measure of utilized available seating capacity calculated by dividing RPMs by ASMs for a reporting period.

Passenger Mile Yield or Yield - The amount of passenger revenue earned per RPM during a reporting period.

PRASM - Passenger Revenue per ASM. The amount of passenger revenue earned per ASM during a reporting period. PRASM is also referred to as "unit revenue."

RPM - Revenue Passenger Mile. One revenue-paying passenger transported one mile. RPMs equal the number of revenue passengers during a reporting period multiplied by the number of miles flown by those passengers during that period. RPMs are also referred to as "traffic."

TRASM - Total Revenue per ASM. The amount of total revenue earned per ASM during a reporting period.

TRASM, adjusted - The amount of total revenue earned per ASM during a reporting period, adjusted for the item shown above in "Supplemental Information."

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have market risk exposure related to fuel prices, interest rates and foreign currency exchange rates. Market risk is the potential negative impact of adverse changes in these prices or rates on our Consolidated Financial Statements. In an effort to manage our exposure to these risks, we may enter into derivative contracts and may adjust our derivative portfolio as market conditions change. See Note 3 of the Notes to the Consolidated Financial Statements for further information on our derivative contracts. We expect adjustments to the fair value of financial instruments to result in ongoing volatility in earnings and stockholders' equity.

The following sensitivity analyses do not consider the effects of a change in demand for air travel, the economy as a whole or actions we may take to seek to mitigate our exposure to a particular risk. For these and other reasons, the actual results of changes in these prices or rates may differ materially from the following hypothetical results.

Fuel Price Risk

Changes in fuel prices materially impact our results of operations. A one cent increase in the cost of jet fuel would result in approximately \$40 million of additional annual fuel expense based on annual pre-COVID-19 pandemic consumption of approximately four billion gallons of jet fuel. As a result of the reduced capacity from the COVID-19 pandemic, our jet fuel consumption during 2021 of 2.8 billion gallons was significantly less than our historical and expected future consumption. Our derivative contracts to hedge the financial risk from changing fuel prices are primarily related to Monroe's inventory.

Interest Rate Risk

Our exposure to market risk from adverse changes in interest rates is primarily associated with our debt and lease obligations. Market risk associated with our fixed-rate debt relates to the potential reduction in fair value from an increase in interest rates. Market risk associated with our variable-rate debt and variable-rate leases relates to the potential negative impact to future earnings from an increase in interest rates.

At December 31, 2021, we had \$21.4 billion of fixed-rate debt, \$3.9 billion of variable-rate debt and \$833 million of variable-rate leases. The rates used in our variable-rate debt are based on LIBOR, or another index rate, which in certain cases is subject to a floor. An increase of 100 basis points in average annual interest rates would have decreased the estimated fair value of our fixed-rate debt by \$1.1 billion at December 31, 2021 and would have increased the annual interest expense on our variable-rate debt and variable-rate leases by \$24 million.

In March 2021, the administrator of LIBOR announced that the publication of certain LIBOR settings will cease after December 2021 and publication of the remainder of the LIBOR settings will cease after June 2023. At December 31, 2021, we had no exposure to the discontinued LIBOR settings and had approximately \$3.9 billion of LIBOR-based debt and finance leases maturing after June 2023, all of which include mechanisms for replacing the applicable reference rate, which we do not expect to be materially different from LIBOR.

Foreign Currency Exchange Risk

We are subject to foreign currency exchange rate risk because we have revenue, expense and equity investments denominated in foreign currencies. To manage exchange rate risk, we execute both our international revenue and expense transactions in the same foreign currency to the extent practicable. From time to time, we may also enter into foreign currency option and forward contracts.

At December 31, 2021, we had a U.S. dollar-South Korean won cross currency swap contract totaling a \$1 million asset position. We estimate that a 10% depreciation or appreciation in the price of the South Korean won in relation to the U.S. dollar would have changed the projected cash settlement value of our open hedge contract by \$15 million for the year ending December 31, 2021.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Delta Air Lines, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Delta Air Lines, Inc. (the Company) as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income/(loss), cash flows, and stockholders' equity for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 11, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatements of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Employee Benefit Plans

Description of the Matter

At December 31, 2021, the fair value of the Company's benefit plan assets measured at fair value on a recurring basis totaled \$20.0 billion, of which \$12.7 billion do not have a readily determinable fair value and are measured at net asset value per share ("NAV assets") as a practical expedient. Management determines the fair value of NAV assets by applying the methodologies described in Note 9 to the consolidated financial statements. The Company's expected long-term rate of return on assets for net periodic benefit for the year ended December 31, 2021 was 8.98%. The expected return on plan assets provided net periodic benefit of \$1.5 billion for the year ended December 31, 2021. As disclosed in Note 9 to the consolidated financial statements, the expected long-term rate of return on plan assets is reviewed annually and is based primarily on plan-specific investment studies using historical market return and volatility data.

Auditing the fair value of the Company's NAV assets required significant judgment in estimating the fair value of the NAV assets, primarily resulting from the lag in the availability of data provided by the investment fund managers and the use of corroborating data from public markets to estimate fair value. Auditing the expected long-term rate of return on plan assets required significant judgment due to the subjective nature of certain assumptions. In particular, the Company incorporated excess return expectations compared to historical market return and volatility data based on the Company's investment strategy. Net periodic benefit is sensitive to the expected long-term rate of return on plan assets, which is affected by expectations about future market and economic conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's accounting for its employee benefit plans, including controls over management's assessment of the significant inputs and estimates included in the fair value measurements of NAV assets and management's review of the significant assumptions and the inputs used in estimating the expected long-term rate of return on plan assets.

To test the fair value of plan assets measured at NAV, our audit procedures included, among others, evaluating the valuation methodologies used by the Company and comparing significant inputs and underlying data used in the Company's valuations to information available from third-party sources and market data. Additionally, we performed sensitivity analyses to evaluate the changes to the Company's net periodic benefit that would result from changes in the fair value measurement, and compared the Company's asset performance results to applicable third-party benchmarks and assessed management's historical accuracy of estimating fair value by performing retrospective review procedures comparing the Company's estimates of fair value as of the prior year end to the final fair value NAV in the investment's audited financial statements made available during the current year.

To test the expected long-term rate of return on plan assets, our audit procedures included, among others, evaluating the methodology used, testing the significant assumptions used in the determination of the expected return and testing the underlying data used by the Company. We involved an actuarial specialist to assist in evaluating the appropriateness of the Company's estimate, including independently calculating a range of expected long-term rates of return based on the Company's current investment portfolio and strategy, and assessed whether management's assumption was consistent with a range of returns for a portfolio of comparative investments. Additionally, we tested the completeness and accuracy of the data used by management and performed sensitivity analyses to evaluate the changes to the Company's net periodic benefit that would result from changes in the expected long-term rate of return on plan assets.

Loyalty Program - Mileage Breakage

Description of the Matter

At December 31, 2021 the Company's aggregate current and noncurrent loyalty program deferred revenue balance was \$7.6 billion. For the year ended December 31, 2021, the Company recognized \$1.8 billion of revenue classified as loyalty travel awards within passenger revenue and \$1.8 billion of revenue classified as loyalty program revenue within other revenue in the consolidated statement of operations. As disclosed in Note 2 to the consolidated financial statements, the Company defers revenue for mileage credits earned and recognizes loyalty travel awards in passenger revenue as the miles are redeemed and services are provided. In determining the value of mileage credits earned, the Company applies an estimate of mileage credits earned that are not expected to be redeemed ("mileage breakage"). The Company recognizes mileage breakage proportionally during the period in which the remaining mileage credits are actually redeemed. Under the Company's loyalty program, mileage credits do not expire. Therefore, the Company uses statistical models to estimate mileage breakage based on historical redemption patterns.

Auditing the Company's accounting for its loyalty program required significant estimation in determining the mileage breakage estimate for mileage credits. In particular, there is complexity and subjectivity in estimating mileage breakage based on expectations of future redemption patterns due to the absence of historical expirations as the Company's mileage credits do not expire.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's accounting for its loyalty program, including controls over management's review of the estimation of the mileage breakage and the completeness and accuracy of the data underlying the mileage breakage estimate.

To test the estimate of breakage of mileage credits, our audit procedures included, among others, involving an actuarial specialist to assist in assessing the method used to develop the mileage breakage estimate and independently developing a range of mileage breakage estimates and comparing them to the Company's estimates. Additionally, we tested the completeness and accuracy of the underlying mileage data used in the Company's statistical models and performed sensitivity analyses to evaluate the changes to the Company's deferred revenue that would result from changes in the mileage breakage estimate.

Realizability of Deferred Tax Assets

Description of the Matter

At December 31, 2021, the Company had gross deferred tax assets of \$9.4 billion with a related valuation allowance of \$0.8 billion, and gross deferred tax liabilities of \$7.3 billion. As discussed in Notes 1 and 11 to the consolidated financial statements, the Company records a valuation allowance based on the assessment of the realizability of the Company's deferred tax assets. Deferred tax assets are reduced by a valuation allowance if, based on the weight of all available evidence, in management's judgment it is more likely than not that some portion, or all, of the deferred tax assets will not be realized.

Auditing management's assessment of recoverability of deferred tax assets involved subjective estimation and complex auditor judgment in weighing the positive and negative evidence to determine whether a valuation allowance for deferred tax assets is needed, including the Company's estimate of future taxable income that may be affected by future market and economic conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls that address the risks of material misstatement relating to the realizability of deferred tax assets. This included controls over management's scheduling of the future reversal of existing taxable temporary differences, identification and use of available tax planning strategies and estimates of future taxable income.

To test the realizability of the Company's deferred tax assets, our audit procedures included, among others, evaluating the assumptions used to develop the scheduling of the future reversal of existing taxable temporary differences, evaluating tax planning strategies and evaluating the assumptions used by the Company to develop projections of future taxable income. We compared the projections of future taxable income with the actual results of prior periods, as well as management's consideration of current industry and economic trends. We also compared the projections of future taxable income with other forecasted financial information prepared by the Company. In addition, we involved our tax specialists to evaluate the application of tax law in the performance of these procedures.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2006.

Atlanta, Georgia

February 11, 2022

DELTA AIR LINES, INC.
Consolidated Balance Sheets

(in millions, except share data)	December 31,	
	2021	2020
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 7,933	\$ 8,307
Short-term investments	3,386	5,789
Accounts receivable, net of an allowance for uncollectible accounts of \$50 and \$89	2,404	1,396
Fuel inventory	694	377
Expendable parts and supplies inventories, net of an allowance for obsolescence of \$176 and \$188	404	355
Prepaid expenses and other	1,119	1,180
Total current assets	15,940	17,404
Noncurrent Assets:		
Property and equipment, net of accumulated depreciation and amortization of \$18,671 and \$17,511	28,749	26,529
Operating lease right-of-use assets	7,237	5,733
Goodwill	9,753	9,753
Identifiable intangibles, net of accumulated amortization of \$893 and \$883	6,001	6,011
Cash restricted for airport construction	473	1,556
Equity investments	1,712	1,665
Deferred income taxes, net	1,294	1,988
Other noncurrent assets	1,300	1,357
Total noncurrent assets	56,519	54,592
Total assets	\$ 72,459	\$ 71,996
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Current maturities of debt and finance leases	\$ 1,782	\$ 1,732
Current maturities of operating leases	703	678
Air traffic liability	6,228	4,044
Accounts payable	4,240	2,840
Accrued salaries and related benefits	2,457	2,086
Loyalty program deferred revenue	2,710	1,777
Fuel card obligation	1,100	1,100
Other accrued liabilities	1,746	1,670
Total current liabilities	20,966	15,927
Noncurrent Liabilities:		
Debt and finance leases	25,138	27,425
Noncurrent air traffic liability	130	500
Pension, postretirement and related benefits	6,035	10,630
Loyalty program deferred revenue	4,849	5,405
Noncurrent operating leases	7,056	5,713
Other noncurrent liabilities	4,398	4,862
Total noncurrent liabilities	47,606	54,535
Commitments and Contingencies		
Stockholders' Equity:		
Common stock at \$0.0001 par value; 1,500,000,000 shares authorized, 649,720,387 and 647,352,203 shares issued	—	—
Additional paid-in capital	11,447	11,259
Accumulated deficit	(148)	(428)
Accumulated other comprehensive loss	(7,130)	(9,038)
Treasury stock, at cost, 9,752,872 and 9,169,683	(282)	(259)
Total stockholders' equity	3,887	1,534
Total liabilities and stockholders' equity	\$ 72,459	\$ 71,996

The accompanying notes are an integral part of these Consolidated Financial Statements.

DELTA AIR LINES, INC.
Consolidated Statements of Operations

(in millions, except per share data)	Year Ended December 31,		
	2021	2020	2019
Operating Revenue:			
Passenger	\$ 22,519	\$ 12,883	\$ 42,277
Cargo	1,032	608	753
Other	6,348	3,604	3,977
Total operating revenue	29,899	17,095	47,007
Operating Expense:			
Salaries and related costs	9,728	9,001	11,601
Aircraft fuel and related taxes	5,633	3,176	8,519
Ancillary businesses and refinery	3,957	1,785	1,245
Contracted services	2,420	1,953	2,942
Landing fees and other rents	2,019	1,833	2,176
Depreciation and amortization	1,998	2,312	2,581
Regional carrier expense	1,736	1,584	2,158
Aircraft maintenance materials and outside repairs	1,401	822	1,751
Passenger commissions and other selling expenses	953	643	2,211
Passenger service	756	551	1,312
Aircraft rent	430	399	423
Restructuring charges	(19)	8,219	—
Profit sharing	108	—	1,643
Government grant recognition	(4,512)	(3,946)	—
Other	1,405	1,232	1,827
Total operating expense	28,013	29,564	40,389
Operating Income/(Loss)	1,886	(12,469)	6,618
Non-Operating Expense:			
Interest expense, net	(1,279)	(929)	(301)
Impairments and equity method losses	(337)	(2,432)	(62)
Gain/(loss) on investments, net	56	(105)	119
Loss on extinguishment of debt	(319)	(8)	—
Pension and related benefit/(expense)	451	219	(65)
Miscellaneous, net	(60)	137	(111)
Total non-operating expense, net	(1,488)	(3,118)	(420)
Income/(Loss) Before Income Taxes	398	(15,587)	6,198
Income Tax (Provision)/Benefit	(118)	3,202	(1,431)
Net Income/(Loss)	\$ 280	\$ (12,385)	\$ 4,767
Basic Earnings/(Loss) Per Share	\$ 0.44	\$ (19.49)	\$ 7.32
Diluted Earnings/(Loss) Per Share	\$ 0.44	\$ (19.49)	\$ 7.30
Cash Dividends Declared Per Share	\$ —	\$ 0.40	\$ 1.51

The accompanying notes are an integral part of these Consolidated Financial Statements.

DELTA AIR LINES, INC.
Consolidated Statements of Comprehensive Income/(Loss)

(in millions)	Year Ended December 31,		
	2021	2020	2019
Net Income/(Loss)	<u>\$ 280</u>	<u>\$ (12,385)</u>	<u>\$ 4,767</u>
Other comprehensive income/(loss):			
Net change in derivative contracts and other	—	(66)	6
Net change in pension and other benefits	<u>1,908</u>	<u>(983)</u>	<u>(170)</u>
Total Other Comprehensive Income/(Loss)	<u>1,908</u>	<u>(1,049)</u>	<u>(164)</u>
Comprehensive Income/(Loss)	<u><u>\$ 2,188</u></u>	<u><u>\$ (13,434)</u></u>	<u><u>\$ 4,603</u></u>

The accompanying notes are an integral part of these Consolidated Financial Statements.

DELTA AIR LINES, INC.
Consolidated Statements of Cash Flows

(in millions)	Year Ended December 31,		
	2021	2020	2019
Cash Flows From Operating Activities:			
Net income/(loss)	\$ 280	\$ (12,385)	\$ 4,767
Adjustments to reconcile net income to net cash provided by operating activities:			
Restructuring charges	5	4,111	—
Depreciation and amortization	1,998	2,312	2,581
Deferred income taxes	115	(3,110)	1,473
Pension, postretirement and postemployment payments less/(greater) than expense	(2,038)	898	(922)
Impairments and equity method losses	337	2,432	62
Changes in certain assets and liabilities:			
Receivables	(981)	1,168	(775)
Fuel inventory	(318)	354	(139)
Noncurrent assets	(76)	210	111
Air traffic liability	1,814	(572)	454
Loyalty program deferred revenue	376	455	87
Profit sharing	108	(1,650)	354
Other payables, deferred revenue and accrued liabilities	1,986	240	144
Noncurrent liabilities	(399)	1,185	(16)
Other, net	57	559	244
Net cash provided by/(used in) operating activities	3,264	(3,793)	8,425
Cash Flows From Investing Activities:			
Property and equipment additions:			
Flight equipment, including advance payments	(1,596)	(896)	(3,344)
Ground property and equipment, including technology	(1,651)	(1,003)	(1,592)
Proceeds from sale-leaseback transactions	—	465	—
Purchase of equity investments	—	(2,099)	(170)
Sale of equity investments	—	—	279
Purchase of short-term investments	(12,655)	(13,400)	—
Redemption of short-term investments	15,036	7,608	206
Other, net	(32)	87	58
Net cash used in investing activities	(898)	(9,238)	(4,563)
Cash Flows From Financing Activities:			
Proceeds from short-term obligations	—	3,261	1,750
Proceeds from long-term obligations	1,902	22,790	2,057
Proceeds from sale-leaseback transactions	—	2,306	—
Payments on debt and finance lease obligations	(5,834)	(8,559)	(3,320)
Repurchase of common stock	—	(344)	(2,027)
Cash dividends	—	(260)	(980)
Fuel card obligation	—	364	(339)
Other, net	80	(202)	(21)
Net cash (used in)/provided by financing activities	(3,852)	19,356	(2,880)
Net (Decrease)/Increase in Cash, Cash Equivalents and Restricted Cash	(1,486)	6,325	982
Cash, cash equivalents and restricted cash at beginning of period	10,055	3,730	2,748
Cash, cash equivalents and restricted cash at end of period	<u>\$ 8,569</u>	<u>\$ 10,055</u>	<u>\$ 3,730</u>
Supplemental Disclosure of Cash Paid for Interest	\$ 1,506	\$ 761	\$ 481
Non-Cash Transactions:			
Right-of-use assets acquired under operating leases	\$ 2,113	\$ 1,077	\$ 464
Flight and ground equipment acquired under finance leases	1,049	381	650
Other financings	—	280	—
Operating leases converted to finance leases	42	—	190

The accompanying notes are an integral part of these Consolidated Financial Statements.

DELTA AIR LINES, INC.
Consolidated Statements of Stockholders' Equity

(in millions, except per share data)	Common Stock		Additional Paid-In Capital	Retained Earnings / (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Treasury Stock		Total
	Shares	Amount				Shares	Amount	
Balance at January 1, 2019	688	\$ —	\$ 11,671	\$ 10,039	\$ (7,825)	8	\$ (198)	\$13,687
Net income	—	—	—	4,767	—	—	—	4,767
Dividends declared	—	—	—	(981)	—	—	—	(981)
Other comprehensive loss	—	—	—	—	(164)	—	—	(164)
Common stock issued for employee equity awards ⁽¹⁾	2	—	114	—	—	1	(38)	76
Stock purchased and retired	(38)	—	(656)	(1,371)	—	—	—	(2,027)
Balance at December 31, 2019	652	—	11,129	12,454	(7,989)	9	(236)	15,358
Net loss	—	—	—	(12,385)	—	—	—	(12,385)
Dividends declared	—	—	—	(257)	—	—	—	(257)
Other comprehensive loss	—	—	—	—	(1,049)	—	—	(1,049)
Common stock issued for employee equity awards and other ⁽¹⁾	1	—	120	—	—	—	(23)	97
Stock purchased and retired	(6)	—	(104)	(240)	—	—	—	(344)
Government grant warrant issuance	—	—	114	—	—	—	—	114
Balance at December 31, 2020	647	—	11,259	(428)	(9,038)	9	(259)	1,534
Net income	—	—	—	280	—	—	—	280
Other comprehensive income	—	—	—	—	1,908	—	—	1,908
Common stock issued for employee equity awards ⁽¹⁾	3	—	102	—	—	1	(23)	79
Government grant warrant issuance	—	—	86	—	—	—	—	86
Balance at December 31, 2021	650	\$ —	\$ 11,447	\$ (148)	\$ (7,130)	10	\$ (282)	\$ 3,887

⁽¹⁾ Treasury shares were withheld for payment of taxes, at a weighted average price per share of \$38.87, \$52.17 and \$50.20 in 2021, 2020 and 2019, respectively.

The accompanying notes are an integral part of these Consolidated Financial Statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

Delta Air Lines, Inc., a Delaware corporation, provides scheduled air transportation for passengers and cargo throughout the United States ("U.S.") and around the world. Our Consolidated Financial Statements include the accounts of Delta Air Lines, Inc. and our consolidated subsidiaries and have been prepared in accordance with accounting principles generally accepted in the U.S. ("GAAP"). We are the primary beneficiary of, and have a controlling financial interest in, certain immaterial entities in which we have voting rights of 50% or less, which we consolidate in our financial results.

We have marketing alliances with other airlines to enhance our access to domestic and international markets. These arrangements may include codesharing, reciprocal loyalty program benefits, shared or reciprocal access to passenger lounges, joint promotions, common use of airport gates and ticket counters, ticket office co-location and other marketing agreements. We have received antitrust immunity for certain marketing arrangements, which enables us to offer a more integrated route network and develop common sales, marketing and discount programs for customers. Some of our marketing arrangements provide for the sharing of revenues and expenses. Revenues and expenses associated with collaborative arrangements are presented on a gross basis in the applicable line items on our Consolidated Statements of Operations ("income statement").

We have reclassified certain prior period amounts to conform to the current period presentation. Unless otherwise noted, all amounts disclosed are stated before consideration of income taxes.

Regional Carrier Expense

Until 2021, we allocated certain costs (such as landing fees and other rents, salaries and related costs and contracted services) to regional carrier expense in our income statement based on relevant statistics (such as passenger counts). Beginning in 2021 we ceased performing this allocation and have reclassified the costs presented in prior periods to align with this presentation. This reclassification better reflects the nature of, and how management views, these regional carrier related expenses. This allocation was approximately \$900 million in 2020 and \$1.4 billion in 2019. The amounts in regional carrier expense under the current presentation represent the accrual of payments to our regional carriers under capacity purchase agreements, maintenance costs related to our regional fleet and the expenses of our wholly owned regional subsidiary, Endeavor Air, Inc.

Use of Estimates

We are required to make estimates and assumptions when preparing our Consolidated Financial Statements in accordance with GAAP. These estimates and assumptions affect the amounts reported in our Consolidated Financial Statements and the accompanying notes. Actual results could differ materially from those estimates.

Recent Accounting Standards

Government Assistance. In 2021, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") No. 2021-10, "Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance." This ASU will require certain disclosures about the significant terms and conditions of material government assistance agreements in order to provide more consistent information to users of the financial statements. This standard is effective for annual reporting periods beginning after December 15, 2021, and early adoption is permitted. We determined that our material government assistance agreements are the payroll support program agreements under the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") and the program extensions, and we adopted the new standard in 2021. See Note 6, "Debt," where we reflect the requirements of this new standard as it relates to our payroll support program disclosures.

Significant Accounting Policies

Our significant accounting policies are disclosed below or included within the topic-specific notes included herein.

Cash and Cash Equivalents and Short-Term Investments

Short-term, highly liquid investments with maturities of three months or less when purchased are classified as cash and cash equivalents. Investments with maturities of greater than three months, but not in excess of one year, when purchased are classified as short-term investments. Investments with maturities beyond one year when purchased may be classified as short-term investments if they are expected to be available to support our short-term liquidity needs. Our short-term investments are classified as fair value investments and gains and losses are recorded in non-operating expense.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Consolidated Balance Sheets ("balance sheets") that sum to the total of the same such amounts shown within the Consolidated Statements of Cash Flows ("cash flows statement").

Reconciliation of cash, cash equivalents and restricted cash

(in millions)	December 31,		
	2021	2020	2019
Current assets:			
Cash and cash equivalents	\$ 7,933	\$ 8,307	\$ 2,882
Restricted cash included in prepaid expenses and other	163	192	212
Noncurrent assets:			
Cash restricted for airport construction	473	1,556	636
Total cash, cash equivalents and restricted cash	\$ 8,569	\$ 10,055	\$ 3,730

Inventories

Fuel. As part of our strategy to mitigate the cost of the refining margin reflected in the price of jet fuel, our wholly owned subsidiary, Monroe Energy, LLC ("Monroe"), operates the Trainer oil refinery. Refined products (finished goods) and feedstock and blendstock inventories (work-in-process) are both carried at the lower of cost and net realizable value. We use jet fuel in our airline operations that is produced by the refinery and procured through the exchange with third parties of gasoline, diesel and other refined products ("non-jet fuel products") the refinery produces. Cost is determined using the first-in, first-out method. Costs include the raw material consumed plus direct manufacturing costs (such as labor, utilities and supplies) as incurred and an applicable portion of manufacturing overhead.

Expendables Parts and Supplies. Inventories of expendable parts related to flight equipment, which cannot be economically repaired, reconditioned or reused after removal from the aircraft, are carried at moving average cost and charged to aircraft maintenance materials and outside repairs as consumed. An allowance for obsolescence is provided over the remaining useful life of the related fleet. We also provide allowances for parts identified as excess or obsolete to reduce the carrying costs to the lower of cost or net realizable value. These parts are estimated to have residual value of 5% of the original cost.

Accounting for Refinery Related Buy/Sell Agreements

To the extent that we receive jet fuel for non-jet fuel products exchanged under buy/sell agreements, we account for these transactions as nonmonetary exchanges. We have recorded these nonmonetary exchanges at the carrying amount of the non-jet fuel products transferred within aircraft fuel and related taxes on the income statement.

Derivatives

Changes in fuel prices, interest rates and foreign currency exchange rates impact our results of operations. In an effort to manage our exposure to these risks, we may enter into derivative contracts and adjust our derivative portfolio as market conditions change. Our derivative contracts are recognized at fair value on our balance sheets and have net balances of \$17 million and \$1 million at December 31, 2021 and 2020, respectively.

Long-Lived Assets

Our long-lived assets, including flight equipment, which consists of aircraft and associated engines and parts, operating lease right-of-use ("ROU") assets and other long-lived assets, are recorded in property and equipment, net and operating lease right-of-use assets on our balance sheets. See Note 7, "Leases," for further information regarding our leases. The following table summarizes our property and equipment:

Property and equipment by classification

(in millions, except for estimated useful life)	Estimated Useful Life	December 31,	
		2021	2020
Flight equipment	20-34 years	\$ 33,368	\$ 31,572
Ground property and equipment	3-40 years	7,758	6,387
Information technology-related assets	3-15 years	3,389	3,403
Flight and ground equipment under finance leases	Shorter of lease term or estimated useful life	2,052	1,795
Advance payments for equipment		853	883
Less: accumulated depreciation and amortization ⁽¹⁾		(18,671)	(17,511)
Total property and equipment, net		\$ 28,749	\$ 26,529

⁽¹⁾ Includes accumulated amortization for flight and ground equipment under finance leases in the amount of \$456 million and \$793 million at December 31, 2021 and 2020, respectively.

We record property and equipment at cost and depreciate or amortize these assets on a straight-line basis to their estimated residual values over their estimated useful lives. The estimated useful life for leasehold improvements is the shorter of lease term or estimated useful life. Depreciation and amortization expense related to our property and equipment was \$2.0 billion, \$2.3 billion and \$2.6 billion for the years ended December 31, 2021, 2020 and 2019, respectively. Residual values for owned aircraft, engines, spare parts and simulators are generally 5% to 10% of cost.

We capitalize certain internal and external costs incurred to develop and implement software and amortize those costs over an estimated useful life of three to ten years. Included in the depreciation and amortization expense discussed above, we recorded \$301 million, \$304 million and \$239 million for amortization of capitalized software for the years ended December 31, 2021, 2020 and 2019, respectively. The net book value of these assets, which are included in information technology-related assets above, totaled \$876 million and \$1.0 billion at December 31, 2021 and 2020, respectively.

Our tangible assets consist primarily of flight equipment, which is mobile across geographic markets. Accordingly, assets are not allocated to specific geographic regions.

We review flight equipment, ROU assets and other long-lived assets used in operations for impairment losses when events and circumstances indicate the assets may be impaired. Factors which could be indicators of impairment include, but are not limited to (1) a decision to permanently remove flight equipment or other long-lived assets from operations, (2) significant changes in the estimated useful life, (3) significant changes in projected cash flows, (4) permanent and significant declines in fleet fair values and (5) changes to the regulatory environment. For long-lived assets held for sale, we discontinue depreciation and record impairment losses when the carrying amount of these assets is greater than the fair value less the cost to sell.

To determine whether impairments exist for aircraft used in operations, we group assets at the fleet type level or at the contract level for aircraft operated by third-party regional carriers (i.e., the lowest level for which there are identifiable cash flows) and then estimate future cash flows based on projections of capacity, passenger mile yield, fuel and labor costs and other relevant factors. If an asset group is impaired, the impairment loss recognized is the amount by which the asset group's carrying amount exceeds its estimated fair value. We estimate aircraft fair values using published sources, appraisals and bids received from third parties, as available. Due to the impacts of the COVID-19 pandemic, we evaluated our fleet during 2020 and determined that only the fleet types discussed in Note 15, "Restructuring," were impaired, as the future cash flows from the operation of other fleet types through the respective retirement dates exceeded the carrying value. Due to the recovery in demand that we have experienced throughout 2021, we decided not to retire any additional aircraft and returned to service a majority of the aircraft that were temporarily parked in 2020. We recorded no further impairments during 2021. As we gained updated information during the year, we updated estimates to the 2020 fleet-related impairment charges and recorded adjustments of \$19 million to certain of the restructuring charges during 2021.

Income Taxes

We account for deferred income taxes under the liability method. We recognize deferred tax assets and liabilities based on the tax effects of temporary differences between the financial statement and tax basis of assets and liabilities, as measured by current enacted tax rates. Deferred tax assets and liabilities are net by jurisdiction and are recorded as noncurrent on the balance sheet.

We have elected to recognize earnings of foreign affiliates that are determined to be global intangible low tax income in the period it arises and do not recognize deferred taxes for basis differences that may reverse in future years.

A valuation allowance is recorded to reduce deferred tax assets when necessary. We periodically assess whether it is more likely than not that we will generate sufficient taxable income to realize our deferred income tax assets. We establish valuation allowances if it is more likely than not that we will be unable to realize our deferred income tax assets. In making this determination, we consider available positive and negative evidence and make certain assumptions. We consider, among other things, projected future taxable income, scheduled reversals of deferred tax liabilities, the overall business environment, our historical financial results and tax planning strategies. See Note 11, "Income Taxes," for further information on our deferred income taxes.

Fuel Card Obligation

We have a purchasing card with American Express for the purpose of buying jet fuel and crude oil. The card carried a maximum credit limit of \$1.1 billion as of December 31, 2021 and must be paid monthly. At both December 31, 2021 and 2020, we had \$1.1 billion outstanding on this purchasing card and the activity was classified as a financing activity in our cash flows statement.

Retirement of Repurchased Shares

We immediately retire shares repurchased pursuant to any share repurchase program. We allocate the share purchase price in excess of par value between additional paid-in capital and retained earnings.

Manufacturers' Credits

We periodically receive credits in connection with the acquisition of aircraft and engines. These credits are deferred until the aircraft and engines are delivered, and then applied as a reduction to the cost of the related equipment.

Maintenance Costs

We record maintenance costs related to our mainline and regional fleets in aircraft maintenance materials and outside repairs and regional carrier expense, respectively. Maintenance costs are expensed as incurred, except for costs incurred under power-by-the-hour contracts, which are expensed based on actual hours flown. Power-by-the-hour contracts transfer certain risk to third-party service providers and fix the amount we pay per flight hour to the service provider in exchange for maintenance and repairs under a predefined maintenance program. Modifications that enhance the operating performance or extend the useful lives of airframes or engines are capitalized and amortized over the remaining estimated useful life of the asset or the remaining lease term, whichever is shorter.

Advertising Costs

We expense advertising costs in passenger commissions and other selling expenses in the year the advertising first takes place. Advertising expense was \$198 million, \$119 million and \$288 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Commissions and Merchant Fees

Passenger sales commissions and merchant fees are recognized in passenger commissions and other selling expenses when the related revenue is recognized.

Carbon Offset Costs

We may purchase and retire carbon offsets and we expense the cost of carbon offsets upon retirement of the credits within aircraft fuel and related taxes on our income statement as these costs are related to our carbon emissions generated by our airline segment. The purchase of carbon offsets is included in operating activities on our cash flows statement. During 2021, we purchased and retired \$95 million of carbon offsets, of which \$30 million relates to 13 million metric tons of carbon emissions generated by our airline segment from March 1 to December 31, 2020 as well as \$65 million which relates to a portion of 2021 carbon emissions generated by our airline segment.

NOTE 2. REVENUE RECOGNITION*Passenger Revenue*

Passenger revenue is composed of passenger ticket sales, loyalty travel awards and travel-related services performed in conjunction with a passenger's flight.

Passenger revenue by category

(in millions)	Year Ended December 31,		
	2021	2020	2019
Ticket	\$ 19,339	\$ 10,970	\$ 36,908
Loyalty travel awards	1,786	935	2,900
Travel-related services	1,394	978	2,469
Total passenger revenue	\$ 22,519	\$ 12,883	\$ 42,277

Ticket

Passenger Tickets. We defer sales of passenger tickets to be flown by us or that we sell on behalf of other airlines in our air traffic liability. Passenger revenue is recognized when we provide transportation or when the ticket expires unused ("ticket breakage"). For tickets that we sell on behalf of other airlines, we reduce the air traffic liability when consideration is remitted to those airlines. The air traffic liability primarily includes sales of passenger tickets with scheduled departure dates in the future and credits which can be applied as payment toward the cost of a ticket ("travel credits"). Travel credits are typically issued as a result of ticket cancellations prior to their expiration dates. We periodically evaluate the estimated air traffic liability and may record adjustments in our income statement. These adjustments relate primarily to refunds, exchanges, ticket breakage, transactions with other airlines and other items for which final settlement occurs in periods subsequent to the sale of the related tickets at amounts other than the original sales price.

We recognized approximately \$2.2 billion, \$3.1 billion and \$3.8 billion in passenger revenue during the years ended December 31, 2021, 2020 and 2019, respectively, that had been recorded in our air traffic liability balance at the beginning of those periods.

The air traffic liability typically increases during the winter and spring months as advanced ticket sales grow prior to the summer peak travel season and decreases during the summer and fall months. However, the ongoing reduction in demand for air travel due to the COVID-19 pandemic has resulted in a lower level of advance bookings and the associated cash received, as well as significant ticket cancellations which led to issuance of cash refunds or travel credits to customers. The total value of cash refunds, excluding taxes and related fees, issued to customers during the years ended December 31, 2021 and 2020 was approximately \$1.1 billion and \$3.1 billion, respectively. Travel credits represented approximately 45% and 65% of the air traffic liability as of December 31, 2021 and 2020, respectively.

In the March 2021 quarter, we announced the extension of the validity of all passenger tickets and travel credits purchased or expiring in 2021 to December 31, 2022, which allowed for tickets to be rebooked through December 31, 2022 for travel through 2023. The air traffic liability classified as noncurrent as of December 31, 2021 represents our current estimate of tickets and travel credits to be used or refunded beyond one year, while the balance classified as current represents our current estimate of tickets and travel credits to be used or refunded within one year. We will continue to monitor our customers' travel behavior and may adjust our estimates in the future. In January 2022, we announced changes to expiration dates, as discussed below.

Ticket Breakage. We estimate the value of ticket breakage and recognize revenue at the scheduled flight date. Our ticket breakage estimates are primarily based on historical experience, ticket contract terms and customers' travel behavior. Given the impact of the COVID-19 pandemic on customer behavior and changes made in ticket validity terms, as well as the elimination of change fees for most tickets as discussed below, our estimates of revenue that will be recognized from the air traffic liability for unused tickets may vary in future periods.

Further Extension to Ticket Validity. In January 2022, we announced that all existing travel credit holders will have until December 31, 2023 to rebook their ticket for travel throughout 2024. Additionally, all Delta customers with upcoming 2022 travel or who purchase a ticket in 2022 will also have the flexibility to rebook their ticket through December 31, 2023, and travel throughout 2024. This change is expected to shift a portion of our air traffic liability to noncurrent. We will also consider this change in estimating the future ticket breakage rate.

Regional Carriers. Our regional carriers include both third-party regional carriers with which we have contract carrier agreements ("contract carriers") and Endeavor Air, Inc., our wholly owned subsidiary. Our contract carrier agreements are primarily structured as capacity purchase agreements where we purchase all or a portion of the contract carrier's capacity and are responsible for selling the seat inventory we purchase. We record revenue related to our capacity purchase agreements in passenger revenue and the related expenses in regional carrier expense.

Loyalty Travel Awards

Loyalty travel awards revenue is related to the redemption of miles for travel. We recognize loyalty travel awards revenue in passenger revenue as miles are redeemed and transportation is provided. See below for discussion of our loyalty program accounting policies.

Travel-Related Services

Travel-related services are primarily composed of services performed in conjunction with a passenger's flight, including baggage fees, on-board sales and administrative fees. We recognize revenue for these services when the related transportation service is provided.

During 2020, with the exception of Basic Economy, we eliminated change fees for all tickets originating in North America and waived change fees for tickets originating outside of North America. We also implemented a temporary waiver that allowed Basic Economy tickets with travel for 2021, which are normally non-changeable, to be changed without paying a fee regardless of origin or destination. Starting January 1, 2022, Basic Economy tickets may be cancelled for a fee to receive a partial ticket credit.

Loyalty Program

Our SkyMiles loyalty program generates customer loyalty by rewarding customers with incentives to travel on Delta. This program allows customers to earn mileage credits ("miles") by flying on Delta, Delta Connection carriers and other airlines that participate in the loyalty program. When traveling, customers earn miles primarily based on the passenger's loyalty program status, fare class and ticket price. Customers can also earn miles through participating companies such as credit card companies, hotels, car rental agencies and ridesharing companies. Miles are redeemable by customers in future periods for air travel on Delta and other participating airlines, access to our Sky Club and other program awards. To facilitate transactions with participating companies, we sell miles to non-airline businesses, customers and other airlines.

The loyalty program includes two types of transactions that are considered revenue arrangements with multiple performance obligations (1) passenger ticket sales earning miles and (2) sale of miles to participating companies.

Passenger Ticket Sales Earning Miles. Passenger ticket sales earning miles provide customers with (1) miles earned and (2) air transportation, which are each considered performance obligations. We value each performance obligation on a standalone basis. To value the miles earned, we consider the quantitative value a passenger receives by redeeming miles for a ticket rather than paying cash, which is referred to as equivalent ticket value ("ETV"). Our estimate of ETV is adjusted for miles that are not likely to be redeemed ("mileage breakage"). We use statistical models to estimate mileage breakage based on historical redemption patterns. A change in assumptions to the redemption activity for miles or the estimated fair value of miles expected to be redeemed could have a material impact on our revenue in the year in which the change occurs and in future years. We recognize mileage breakage proportionally during the period in which the remaining miles are actually redeemed.

We defer revenue for the miles when earned and recognize loyalty travel awards in passenger revenue as the miles are redeemed and transportation is provided. We record the air transportation portion of the passenger ticket sales in air traffic liability and recognize passenger revenue when we provide transportation or if the ticket goes unused.

Sale of Miles to Participating Companies. Customers earn miles based on their spending with participating companies such as credit card companies, hotels, car rental agencies and ridesharing companies with which we have marketing agreements to sell miles. Our contracts to sell miles under these marketing agreements have multiple performance obligations. Payments are typically due to us monthly based on the volume of miles sold during the period, and the initial terms of our marketing contracts are from three to eleven years. During the years ended December 31, 2021, 2020 and 2019, total cash sales from marketing agreements related to our loyalty program were \$4.1 billion, \$2.9 billion and \$4.2 billion, respectively, which are allocated to travel and other performance obligations, as discussed below.

Our most significant contract to sell miles relates to our co-brand credit card relationship with American Express. Our agreements with American Express provide for joint marketing, grant certain benefits to Delta-American Express co-branded credit card holders ("cardholders") and American Express Membership Rewards program participants, and allow American Express to market its services or products using our customer database. Cardholders earn miles for making purchases using co-branded cards, and certain cardholders may also check their first bag for free, are granted discounted access to Delta Sky Club lounges and receive priority boarding and other benefits while traveling on Delta. Additionally, participants in the American Express Membership Rewards program may exchange their points for miles under the loyalty program. We sell miles at agreed-upon rates to American Express which are then provided to their customers under the co-brand credit card program and the Membership Rewards program.

We account for marketing agreements, including those with American Express, by allocating the consideration to the individual products and services delivered. We allocate the value based on the relative selling prices of those products and services, which generally consist of award travel, priority boarding, baggage fee waivers, lounge access and the use of our brand. We determine our best estimate of the selling prices by using a discounted cash flow analysis using multiple inputs and assumptions, including (1) the expected number of miles awarded and number of miles redeemed, (2) ETV for the award travel obligation adjusted for mileage breakage, (3) published rates on our website for baggage fees, discounted access to Delta Sky Club lounges and other benefits while traveling on Delta, (4) brand value (using estimated royalties generated from the use of our brand) and (5) volume discounts provided to certain partners.

We defer the amount allocated to award travel as part of loyalty program deferred revenue and recognize loyalty travel awards in passenger revenue as the miles are redeemed and transportation is provided. Revenue allocated to services performed in conjunction with a passenger's flight, such as baggage fee waivers, is recognized as travel-related services in passenger revenue when the related service is performed. Revenue allocated to access Delta Sky Club lounges is recognized as miscellaneous in other revenue as access is provided. Revenue allocated to the remaining performance obligations, primarily brand value, is recorded as loyalty program in other revenue as miles are delivered.

Current Activity of the Loyalty Program. Miles are combined in one homogeneous pool and are not separately identifiable. Therefore, 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.

The table below presents the activity of the current and noncurrent loyalty program deferred revenue, and includes miles earned through travel and miles sold to participating companies, which are primarily through marketing agreements.

Loyalty program activity

(in millions)	2021	2020	2019
Balance at January 1	\$ 7,182	\$ 6,728	\$ 6,641
Miles earned	2,238	1,437	3,156
Travel miles redeemed	(1,786)	(935)	(2,900)
Non-travel miles redeemed	(75)	(48)	(169)
Balance at December 31	\$ 7,559	\$ 7,182	\$ 6,728

The timing of mile redemptions can vary widely; however, the majority of new miles have historically been redeemed within two years of being earned. The loyalty program deferred revenue classified as a current liability represents our current estimate of revenue expected to be recognized in the next twelve months based on projected redemptions, while the balance classified as a noncurrent liability represents our current estimate of revenue expected to be recognized beyond twelve months. Compared to pre-pandemic levels, a larger portion of mile redemptions is projected to occur beyond twelve months and is therefore reflected as a noncurrent liability as of December 31, 2021. We will continue to monitor redemptions as the situation evolves.

Cargo Revenue

Cargo revenue is recognized when we provide the transportation.

Other Revenue

(in millions)	Year Ended December 31,		
	2021	2020	2019
Refinery	\$ 3,229	\$ 1,150	\$ 97
Loyalty program	1,770	1,458	1,962
Ancillary businesses	793	648	1,200
Miscellaneous	556	348	718
Total other revenue	\$ 6,348	\$ 3,604	\$ 3,977

Refinery. This represents refinery sales to third parties, which are at or near cost; accordingly, the margin on these sales is *de minimis*. See Note 14, "Segments," for more information on revenue recognition within our refinery segment.

Loyalty Program. Loyalty program revenues relate to brand usage by third parties and other performance obligations embedded in miles sold, including redemption of miles for non-travel awards. These revenues are included within the total cash sales from marketing agreements, discussed above.

Ancillary Businesses. Ancillary businesses includes aircraft maintenance services we provide to third parties and our vacation wholesale operations. In January 2020, we combined Delta Private Jets, our former wholly owned subsidiary which provided private jet operations, with Wheels Up. Upon closing, we received an equity stake in Wheels Up, and Delta Private Jets is no longer reflected in ancillary businesses.

Miscellaneous. Miscellaneous revenue is primarily composed of lounge access, including access provided to certain American Express cardholders, and codeshare revenues.

Revenue by Geographic Region

Operating revenue for the airline segment is recognized in a specific geographic region based on the origin, flight path and destination of each flight segment. A significant portion of the refinery's revenues typically consists of fuel sales to support the airline, which is eliminated in the Consolidated Financial Statements. The remaining operating revenue for the refinery segment is included in the domestic region. Our passenger and operating revenue by geographic region is summarized in the following table:

Revenue by geographic region

(in millions)	Passenger Revenue			Operating Revenue		
	Year Ended December 31,			Year Ended December 31,		
	2021	2020	2019	2021	2020	2019
Domestic	\$ 18,468	\$ 10,041	\$ 30,465	\$ 24,320	\$ 13,339	\$ 33,382
Atlantic	1,777	1,171	6,326	2,537	1,649	7,308
Latin America	1,873	1,113	2,985	2,284	1,321	3,326
Pacific	401	558	2,501	758	786	2,991
Total	\$ 22,519	\$ 12,883	\$ 42,277	\$ 29,899	\$ 17,095	\$ 47,007

Accounts Receivable

Accounts receivable primarily consist of amounts due from credit card companies from the sale of passenger tickets, ancillary businesses, refinery sales and other companies for the purchase of miles under the loyalty program. We provide an allowance for uncollectible accounts using an expected credit loss model which represents our estimate of expected credit losses over the lifetime of the asset. In 2020, due to the COVID-19 pandemic, we recorded reserves on certain receivables, which are discussed further in Note 15, "Restructuring".

Passenger Taxes and Fees

We are required to charge certain taxes and fees on our passenger tickets, including U.S. federal transportation taxes, federal security charges, airport passenger facility charges and foreign arrival and departure taxes. These taxes and fees are assessments on the customer for which we act as a collection agent. Because we are not entitled to retain these taxes and fees, we do not include such amounts in passenger revenue. We record a liability when the amounts are collected and reduce the liability when payments are made to the applicable government agency or operating carrier (i.e., for codeshare-related fees).

NOTE 3. FAIR VALUE MEASUREMENTS

Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. Each fair value measurement is classified into one of the following levels based on the information used in the valuation:

- *Level 1.* Observable inputs such as quoted prices in active markets.
- *Level 2.* Inputs, other than quoted prices in active markets, that are observable either directly or indirectly.
- *Level 3.* Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Assets and liabilities measured at fair value are based on the valuation techniques identified in the tables below. The valuation techniques are as follows:

- (a) *Market Approach.* Prices and other relevant information generated by observable transactions involving identical or comparable assets or liabilities; and
- (b) *Income Approach.* Techniques to convert future amounts to a single present value amount based on market expectations (including present value techniques and option-pricing models).

Assets (Liabilities) Measured at Fair Value on a Recurring Basis⁽¹⁾

(in millions)	December 31, 2021				Valuation Technique
	Total	Level 1	Level 2	Level 3	
Cash equivalents	\$ 5,450	\$ 5,450	\$ —	\$ —	(a)
Restricted cash equivalents	635	635	—	—	(a)
Short-term investments					
U.S. Government securities	3,386	1,376	2,010	—	(a)
Long-term investments	1,459	1,326	36	97	(a)(b)
Hedge derivatives, net					
Fuel hedge contracts	(18)	—	(18)	—	(a)(b)
Foreign currency exchange contracts	1	—	1	—	(a)

(in millions)	December 31, 2020				Valuation Technique
	Total	Level 1	Level 2	Level 3	
Cash equivalents	\$ 5,755	\$ 5,755	\$ —	\$ —	(a)
Restricted cash equivalents	1,747	1,747	—	—	(a)
Short-term investments					
U.S. Government securities	5,789	3,919	1,870	—	(a)
Long-term investments	1,417	948	38	431	(a)(b)
Hedge derivatives, net					
Fuel hedge contracts	(9)	—	(9)	—	(a)(b)
Interest rate contracts	23	—	23	—	(a)
Foreign currency exchange contracts	(13)	—	(13)	—	(a)

⁽¹⁾ See Note 9, "Employee Benefit Plans," for fair value of benefit plan assets.

Cash Equivalents and Restricted Cash Equivalents. Cash equivalents generally consist of money market funds. Restricted cash equivalents are recorded in prepaid expenses and other and cash restricted for airport construction on our balance sheets and generally consist of money market funds, time deposits, commercial paper and negotiable certificates of deposit, which primarily relate to proceeds from debt issued to finance, among other things, a portion of the construction costs for our new terminal facilities at New York's LaGuardia Airport. The fair value of these cash equivalents is based on a market approach using prices generated by market transactions involving identical or comparable assets.

Short-Term Investments. The fair values of our short-term investments are based on a market approach using industry standard valuation techniques that incorporate observable inputs such as quoted market prices, interest rates, benchmark curves, credit ratings of the security and other observable information.

As of December 31, 2021, the estimated fair value of our short-term investments was \$3.4 billion. Of these investments, \$2.8 billion are expected to mature in one year or less, with the remainder maturing by the second half of 2023.

Long-Term Investments. Our long-term investments measured at fair value primarily consist of equity investments, which are valued based on market prices or other observable transactions and inputs, and are recorded in equity investments on our balance sheet. During 2021, both Wheels Up Experience Inc. ("Wheels Up") and Clear Secure, Inc. ("CLEAR") became publicly traded and as of December 31, 2021, our investment in both of these are classified as Level 1. In addition, our equity investments in private companies are classified as Level 3 in the fair value hierarchy as their equity is not traded on a public exchange and our valuations incorporate certain unobservable inputs, including non-public equity issuances and forecasts provided by our investees. Fair value measurement using unobservable inputs is inherently uncertain, and a change in significant inputs could result in different fair values. During the year ended December 31, 2021 there were no material gains or losses as a result of fair value adjustments. See Note 4, "Investments," for further information on our long-term investments.

Hedge Derivatives. A portion of our derivative contracts may be negotiated over-the-counter with counterparties without going through a public exchange. Accordingly, our fair value assessments give consideration to the risk of counterparty default (as well as our own credit risk). Such contracts would be classified as Level 2 within the fair value hierarchy. The remainder of our hedge contracts are comprised of futures contracts, which are traded on a public exchange. These contracts are classified within Level 1 of the fair value hierarchy.

- **Fuel Hedge Contracts.** Our derivative contracts to hedge the financial risk from changing fuel prices are primarily related to Monroe's inventory. Our fuel hedge portfolio may consist of a combination of options, swaps or futures. Option and swap contracts are valued under income approaches using option pricing models and discounted cash flow models, respectively, based on data either readily observable in public markets, derived from public markets or provided by counterparties who regularly trade in public markets. Futures contracts and options on futures contracts are traded on a public exchange and valued based on quoted market prices. We recognized losses of \$146 million, gains of \$85 million and losses of \$41 million on our fuel hedge contracts for the years ended December 31, 2021, 2020 and 2019, respectively.
- **Interest Rate Contracts.** Our interest rate derivatives were swap contracts, which were valued based on data readily observable in public markets. We unwound our final interest rate contract in January 2021 and have no contracts open as of December 31, 2021.

- *Foreign Currency Exchange Contracts.* Our foreign currency derivatives consist of forward contracts and are valued based on data readily observable in public markets.

NOTE 4. INVESTMENTS

We have developed strategic relationships with a number of airlines and airline services companies through joint ventures and other forms of cooperation and support, including equity investments. Our equity investments reinforce our commitment to these relationships and generally enhance our ability to offer input to the investee on strategic issues and direction, in some cases through representation on the board of directors.

Changes in the valuation of investments accounted for at fair value are recorded in gain/(loss) on investments, net in our income statement within non-operating expense and are driven by changes in stock prices, other valuation techniques for investments in companies without publicly-traded shares and foreign currency fluctuations.

Our share of Unifi Aviation's financial results is recorded in contracted services in our income statement as this entity is integral to the operations of our business by providing services at our airport locations, while our share of other equity method investees' financial results is recorded in impairments and equity method losses in our income statement under non-operating expense. If an investment accounted for under the equity method experiences a loss in value that is determined to be other than temporary, we will reduce our carrying value of the investment to fair value and record the loss in impairments and equity method losses in our income statement.

Equity investments ownership interest and carrying value

(in millions)	Accounting Treatment	Ownership Interest		Carrying Value	
		December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Wheels Up	Fair Value	21 %	24 %	\$ 241	\$ 210
Hanjin-KAL	Fair Value	13 %	13 %	455	512
Air France-KLM	Fair Value	6 %	9 %	165	235
China Eastern	Fair Value	2 %	3 %	177	201
CLEAR	Fair Value	6 %	6 %	260	120
Unifi Aviation	Equity Method	49 %	49 %	159	154
Other investments	Various			255	233
Equity investments				\$ 1,712	\$ 1,665

Wheels Up. In the September 2021 quarter, Wheels Up became a publicly-traded company through a merger with Aspirational Consumer Lifestyle Corp ("Aspirational"). Aspirational subsequently changed its name to Wheels Up Experience Inc. and its common stock trades on the New York Stock Exchange under the symbol UP. We account for our investment under the fair value option and use the stock price to recognize fair value adjustments.

CLEAR. In the June 2021 quarter, Clear Secure, Inc. completed an initial public offering of Class A common stock, which trades on the New York Stock Exchange under the symbol YOU. We own shares of Alclear Holdings, LLC, which are convertible on a one-to-one basis for the Class A common stock of Clear. Our 6% ownership interest in Clear is determined on a fully exchanged and converted basis. We account for our investment under the fair value method and use the stock price to recognize fair value adjustments.

Other Investments. This category includes various investments that are accounted for at fair value or under the equity method, depending on our ownership interest and the level of influence conveyed by our investment. Included therein are our investments in Grupo Aeroméxico, LATAM Airlines Group S.A. ("LATAM") and Virgin Atlantic, all of which are undergoing in-court or out-of-court restructurings, and the carrying values of these investments have been reduced to and remain zero as of December 31, 2021. In order to support our relationships with these carriers, we have provided them with strategic and operational assistance through their restructurings.

In the December 2021 quarter, we purchased approximately \$525 million in obligations from certain lenders under LATAM, Grupo Aeroméxico and Virgin Atlantic's restructuring processes, which reduced current maturities of debt and finance leases on the balance sheet. These purchases are reflected as financing outflows on the cash flows statement. As a result of these purchases, we have assumed a pro-rata portion of each lender's rights under the financing arrangements with each respective partner, which are recorded within other noncurrent assets as of December 31, 2021. The receivables from Grupo Aeroméxico and LATAM are subject to certain reserves based on our assessment of collectability, the amounts of which are not material.

In addition to the loans we purchased from a third party lender in Virgin Atlantic's restructuring process, in the December 2021 quarter, we also loaned \$275 million to Virgin Atlantic which is reflected as an investing outflow on the cash flows statement. After the carrying amount of our investment in Virgin Atlantic was reduced to zero during 2020, we have continued to track our 49% share of their losses under the equity method of accounting. These previously unrecognized losses are only recorded to the extent we make additional investments in Virgin Atlantic (i.e., additional shareholder support). The loans we have extended to Virgin Atlantic are treated as additional shareholder support and during 2021 resulted in our recognition of \$340 million of previously unrecognized losses in impairments and equity method losses within non-operating expense in our income statement. As of December 31, 2021, we have an additional \$130 million of unrecognized equity method losses related to our 49% interest in Virgin Atlantic.

Upon completion of their respective processes, we expect to receive an approximately 20% equity stake in Grupo Aeroméxico and an approximately 10% equity stake in LATAM, while maintaining our 49% equity stake in Virgin Atlantic. Our total investments to be made in these carriers, inclusive of the transactions described above, will be approximately \$1.2 billion.

We also have an investment in JFK IAT Member LLC which is accounted for under the equity method and is discussed further in Note 8, "Airport Redevelopment."

GOL. During 2020, we loaned GOL Linhas Aéreas Inteligentes, the parent company of GOL Linhas Aéreas (operating as GOL), \$250 million to be used exclusively to repay the term loan we had previously guaranteed. As of December 31, 2020, GOL had repaid approximately \$160 million of this loan and during 2021 GOL repaid the remaining balance.

NOTE 5. GOODWILL AND INTANGIBLE ASSETS

Goodwill and Indefinite-Lived Intangible Assets

Our goodwill and identifiable intangible assets relate to the airline segment. We apply a fair value-based impairment test to the carrying value of goodwill and indefinite-lived intangible assets on an annual basis (as of October 1) and, if certain events or circumstances indicate that an impairment loss may have been incurred, on an interim basis. We assess the value of our goodwill and indefinite-lived assets under either a qualitative or quantitative approach. Under a qualitative approach, we consider various market factors, including certain of the key assumptions listed below. We analyze these factors to determine if events and circumstances have affected the fair value of goodwill and indefinite-lived intangible assets. If we determine that it is more likely than not that the asset may be impaired, we use the quantitative approach to assess the asset's fair value and the amount of the impairment. Under a quantitative approach, we calculate the fair value of the asset incorporating the key assumptions listed below into our calculation.

We value goodwill and indefinite-lived intangible assets primarily using market and income approach valuation techniques. These measurements include the following key assumptions (1) forecasted revenues, expenses and cash flows, including the duration and extent of impact to our business and our alliance partners from the COVID-19 pandemic, (2) current discount rates, (3) observable market transactions and (4) anticipated changes to the regulatory environment (e.g., changes in slot access and/or availability, additional Open Skies agreements or changes to antitrust approvals). These assumptions are consistent with those that hypothetical market participants would use. Because we are required to make estimates and assumptions when evaluating goodwill and indefinite-lived intangible assets for impairment, actual transaction amounts may differ materially from these estimates. We recognize an impairment charge if the asset's carrying value exceeds its estimated fair value.

Changes in certain events and circumstances could result in impairment or a change from indefinite-lived to definite-lived. Factors which could cause impairment include, but are not limited to (1) negative trends in our market capitalization, (2) reduced profitability resulting from lower passenger mile yields or higher input costs (primarily related to fuel and employees), (3) lower passenger demand as a result of weakened U.S. and global economies, global pandemics or other factors, (4) interruption to our operations due to a prolonged employee strike, terrorist attack or other reasons, (5) changes to the regulatory environment (e.g., changes in slot access and/or availability, additional Open Skies agreements or changes to antitrust approvals), (6) competitive changes by other airlines and (7) strategic changes to our operations leading to diminished utilization of the intangible assets.

Identifiable Intangible Assets. Indefinite-lived assets are not amortized and consist of routes, slots, the Delta tradename and assets related to alliances and collaborative arrangements. Definite-lived intangible assets consist primarily of marketing and maintenance service agreements and are amortized on a straight-line basis or under the undiscounted cash flows method over the estimated economic life of the respective agreements. Costs incurred to renew or extend the term of an intangible asset are expensed as incurred.

As a result of the significant impact the COVID-19 pandemic had on our market capitalization, profitability and overall travel demand, we performed a quantitative valuation of our goodwill and indefinite-lived intangible assets during the December 2020 quarter. These quantitative impairment tests of goodwill and intangibles concluded that there was no indication of impairment as the fair value exceeded our carrying value. In the December 2021 quarter we performed qualitative assessments of goodwill and indefinite-lived intangible assets, including applicable factors noted above, and determined that there was no indication that the assets were impaired. Our qualitative assessments include analyses and weighting of all relevant factors that impact the fair value of our goodwill and indefinite-lived intangible assets.

Goodwill and indefinite-lived intangible assets by category

(in millions)	Carrying Value at		Excess Fair Value at 2020 Testing Date
	December 31, 2021	December 31, 2020	
Goodwill	\$ 9,753	\$ 9,753	>100%
International routes and slots	2,583	2,583	10% to 30%
Airline alliances	1,863	1,863	20% to >100%
Delta tradename	850	850	>100%
Domestic slots	622	622	60% to >100%
Total	\$ 15,671	\$ 15,671	

International Routes and Slots. This primarily relates to Pacific route authorities and slots at capacity-constrained airports in Asia, and slots at London-Heathrow airport.

Airline Alliances. This primarily relates to our commercial agreements with LATAM and our SkyTeam partners.

Domestic Slots. This primarily relates to our slots at New York-LaGuardia and Washington-Reagan National airports.

Definite-Lived Intangible Assets

Definite-lived intangible assets by category

(in millions)	December 31, 2021		December 31, 2020	
	Gross Carrying Value	Accumulated Amortization	Gross Carrying Value	Accumulated Amortization
Marketing agreements	\$ 730	\$ (700)	\$ 730	\$ (696)
Maintenance contracts	193	(140)	193	(134)
Other	53	(53)	53	(53)
Total	\$ 976	\$ (893)	\$ 976	\$ (883)

Amortization expense was \$10 million, \$10 million and \$11 million for the years ended December 31, 2021, 2020 and 2019, respectively. Based on our definite-lived intangible assets at December 31, 2021, we estimate that we will incur approximately \$9 million of amortization expense annually from 2022 through 2026.

NOTE 6. DEBT

The following table summarizes our debt as of the dates indicated below:

Summary of outstanding debt by category

(in millions)	Maturity Dates		Interest Rate(s) Per Annum at December 31, 2021		December 31,	
					2021	2020
Unsecured notes	2022	to 2029	2.90%	to 7.38%	\$ 4,354	\$ 5,350
Unsecured Payroll Support Program Loans	2030	to 2031	1.00%		3,496	1,648
Financing arrangements secured by SkyMiles assets:						
SkyMiles Notes ⁽¹⁾	2023	to 2028	4.50%	and 4.75%	6,000	6,000
SkyMiles Term Loan ⁽¹⁾⁽²⁾	2023	to 2027	4.75%		2,820	3,000
Financing arrangements secured by slots, gates and/or routes:						
2020 Senior Secured Notes	2025		7.00%		2,589	3,500
2020 Term Loan	n/a		n/a		—	1,493
2018 Revolving Credit Facility ⁽²⁾	2023	to 2024	Undrawn		—	—
Financing arrangements secured by aircraft:						
Certificates ⁽¹⁾	2022	to 2028	2.00%	to 8.00%	1,932	2,633
Notes ⁽¹⁾⁽²⁾	2022	to 2033	0.79%	to 5.75%	1,139	1,284
NYTDC Special Facilities Revenue Bonds, Series 2020 ⁽¹⁾	2026	to 2045	4.00%	to 5.00%	1,511	1,511
NYTDC Special Facilities Revenue Bonds, Series 2018 ⁽¹⁾	2022	to 2036	4.00%	to 5.00%	1,383	1,383
Other financings ⁽¹⁾⁽²⁾	2022	to 2030	2.51%	to 8.00%	68	412
Other revolving credit facilities ⁽²⁾	2022	to 2024	Undrawn		—	—
Total secured and unsecured debt					25,292	28,214
Unamortized (discount)/premium and debt issuance cost, net and other					(208)	(240)
Total debt					25,084	27,974
Less: current maturities					(1,502)	(1,443)
Total long-term debt					\$ 23,582	\$ 26,531

⁽¹⁾ Due in installments.

⁽²⁾ Certain financings are comprised of variable rate debt. All variable rates are equal to LIBOR (generally subject to a floor) or another index rate plus a specified margin.

Unsecured Payroll Support Program Extension Loans

A summary of the amounts received and warrants issued under the initial payroll support program under the CARES Act and the payroll support program extensions is set forth in the following table:

Summary of payroll support program activity

(in millions)	Total	Grant	Loan	Number of Warrants	Percentage of Outstanding Shares at December 31, 2021
Payroll Support Program (PSP1)	\$ 5,594	\$ 3,946	\$ 1,648	6.8	1.1 %
Payroll Support Program Extension (PSP2)	3,290	2,333	957	2.4	0.4 %
Payroll Support Program 3 (PSP3)	3,069	2,178	891	1.9	0.3 %
Total	\$ 11,953	\$ 8,457	\$ 3,496	11.1	1.8 %

Grants received were recognized in government grant recognition in our income statement over the periods that the funds were intended to compensate. The PSP1 grant was recognized during 2020 and grants received from PSP2 and PSP3 were fully recognized during 2021.

Payroll Support Program Extension (PSP2). The Consolidated Appropriations Act, 2021 was enacted on December 27, 2020, and included an extension of the payroll support program created under the CARES Act providing an additional \$15 billion in grants and loans to the airline industry. In January 2021, we entered into a payroll support program extension agreement with the U.S. Department of the Treasury. During the six months ended June 30, 2021, we received a total of \$3.3 billion in payroll support payments under this extension agreement, which we were required to use exclusively for the payment of employee wages, salaries and benefits and were conditioned on our agreement to refrain from conducting involuntary employee layoffs or furloughs from the date of the extension agreement through March 2021. Other conditions include prohibitions on share repurchases and dividends through March 2022 and certain limitations on executive compensation until October 2022. The Department of Transportation also has the authority until March 1, 2022 to require airlines that received payroll support program funds to maintain scheduled air service deemed necessary to any point served by the airline before March 1, 2020.

These support payments consisted of \$2.3 billion in a grant and \$957 million in an unsecured 10-year low interest loan. In return, we entered into a promissory note for the loan and issued warrants to the U.S. Department of the Treasury to acquire approximately 2.4 million shares of Delta common stock. The loan bears interest at an annual rate of 1.00% for the first five years and the applicable Secured Overnight Financing Rate ("SOFR") plus 2.00% in the final five years. The warrants have an initial exercise price of \$39.73 per share, subject to adjustment in certain cases, and a five-year term. We have recorded the value of the promissory note and warrants on a relative fair value basis as \$905 million of noncurrent debt, net of discount, and \$52 million in additional paid in capital, respectively.

Payroll Support Program 3 (PSP3). The American Rescue Plan Act of 2021 was enacted on March 11, 2021, and included a further extension of the payroll support program providing an additional \$14 billion in grants and loans to the airline industry. In April 2021, we entered into a Payroll Support Program 3 Agreement with the U.S. Department of the Treasury. During the June 2021 quarter, we received a total of \$3.1 billion in payroll support payments under this agreement, which we were required to use exclusively for the payment of employee wages, salaries and benefits and was conditioned on our agreement to refrain from conducting involuntary employee layoffs or furloughs from the date of the agreement through September 30, 2021 or the date on which we have expended all of the payroll support, whichever is later. We expended all of the payroll support during 2021. Other conditions include prohibitions on share repurchases and dividends through September 30, 2022 and certain limitations on executive compensation until April 1, 2023.

These support payments consisted of \$2.2 billion in a grant and \$891 million in an unsecured 10-year low interest loan. In return, we entered into a promissory note for the loan and issued warrants to the U.S. Department of the Treasury to acquire approximately 1.9 million shares of Delta common stock. The loan bears interest at an annual rate of 1.00% for the first five years and the applicable SOFR plus 2.00% in the final five years. The warrants have an initial exercise price of \$47.80 per share, subject to adjustment in certain cases, and a five-year term. We have recorded the value of the promissory note and warrants on a relative fair value basis as \$857 million of noncurrent debt, net of discount, and \$34 million in additional paid in capital, respectively.

2020 Term Loan

In 2020 we entered into a \$1.5 billion term loan secured by certain slots, gates and routes. In the March 2021 quarter, we repaid in full the term loan, which was scheduled to mature in April 2023, and incurred a \$56 million loss on extinguishment of debt, which is recorded in loss on extinguishment of debt in non-operating expense in our income statement.

Enhanced Equipment Trust Certificates ("EETCs") Prepayments

In the June 2021 quarter, we repaid in full approximately \$450 million of various EETCs which were scheduled to mature between 2022 and 2023, and incurred a \$26 million loss on extinguishment of debt, which is recorded in loss on extinguishment of debt in non-operating expense in our income statement.

Early Settlement of Outstanding Notes

In July 2021, we completed a cash tender offer for an aggregate purchase price of \$1.0 billion, excluding accrued and unpaid interest, of our outstanding 7.0% Senior Secured Notes due 2025 (the "2025 Notes"), 7.375% Notes due 2026 (the "2026 Notes") and 4.5% Senior Secured Notes due 2025 (the "2025 SkyMiles Notes"). As a result of the tender offer, we purchased 2025 Notes, included as 2020 Senior Secured Notes in the table above, with principal amount of \$677 million for approximately \$800 million and 2026 Notes, included in Unsecured Notes in the table above, with principal amount of \$169 million for approximately \$200 million. We did not purchase any of the 2025 SkyMiles Notes under the tender offer. In addition to the early settlement of the principal amount of the purchased notes, we recorded a loss of \$166 million on extinguishment of debt in non-operating expense in our income statement.

During the second half of 2021, we also repurchased \$647 million of various secured certificates, unsecured notes and a portion of the SkyMiles Term Loan on the open market. These payments resulted in a \$71 million loss on extinguishment of debt.

In January 2022, we irrevocably committed to the early redemption of \$1.0 billion of our 3.625% unsecured notes that had an original maturity during March 2022. We will repay these notes plus accrued interest during February 2022.

Availability Under Revolving Facilities

As of December 31, 2021, we had approximately \$2.9 billion undrawn and available under our revolving credit facilities. In addition, we had \$300 million outstanding letters of credit as of December 31, 2021 that did not affect the availability under our revolvers.

Fair Value of Debt

Market risk associated with our fixed- and variable-rate debt relates to the potential reduction in fair value and negative impact to future earnings, respectively, from an increase in interest rates. The fair value of debt, shown below, is principally based on reported market values, recently completed market transactions and estimates based on interest rates, maturities, credit risk and underlying collateral. Debt is primarily classified as Level 2 within the fair value hierarchy.

Fair value of outstanding debt

(in millions)	December 31, 2021	December 31, 2020
Net carrying amount	\$ 25,084	\$ 27,974
Fair value	\$ 26,900	\$ 29,800

Covenants

Our debt agreements contain various affirmative, negative and financial covenants. For example, our credit facilities and our SkyMiles financing agreements, contain, among other things, a minimum liquidity covenant. The minimum liquidity covenant requires us to maintain at least \$2.0 billion of liquidity (defined as cash, cash equivalents, short-term investments and aggregate principal amount committed and available to be drawn under our revolving credit facilities). Certain of our debt agreements also include collateral coverage ratios and limit our ability to (1) incur liens under certain circumstances, (2) dispose of collateral, (3) engage in mergers and consolidations or transfer all or substantially all of our assets and (4) pay dividends or repurchase our common stock through September 2022. Our SkyMiles financing agreements include a debt service coverage ratio and also restrict our ability to, among other things, (1) modify the terms of the SkyMiles program, or otherwise change the policies and procedures of the SkyMiles program, in a manner that would reasonably be expected to materially impair repayment of the SkyMiles Debt, (2) sell pre-paid miles in excess of \$550 million in the aggregate and (3) terminate or materially modify the intercompany arrangements governing the relationship between Delta and SMIP with respect to the SkyMiles program.

Each of these restrictions, however, is subject to certain exceptions and qualifications that are set forth in these debt agreements. We were in compliance with the covenants in our debt agreements at December 31, 2021.

Future Maturities

The following table summarizes scheduled maturities of our debt for the years succeeding December 31, 2021:

Future debt maturities

(in millions)	Total Debt	Amortization of Debt (Discount)/Premium and Debt Issuance Cost, net and other	
2022	\$ 1,483	\$ (54)	
2023	2,516	(60)	
2024	3,094	(61)	
2025	4,215	(39)	
2026	3,051	(8)	
Thereafter	10,933	14	
Total	\$ 25,292	\$ (208)	\$ 25,084

NOTE 7. LEASES

We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the term. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. We do not separate lease and nonlease components of contracts, except for regional aircraft and information technology ("IT") assets as discussed below.

When available, we use the rate implicit in the lease to discount lease payments to present value; however, we have an insignificant number of leases representing an immaterial portion of our lease liability that provide readily determinable implicit rates. When the rate implicit in the lease is not available, we use our incremental borrowing rate, which is based on the estimated interest rate for collateralized borrowing over a similar term of the lease at commencement date.

Some of our aircraft lease agreements include provisions for residual value guarantees. These provisions primarily relate to our regional aircraft and the amounts are not significant. We do not have other forms of variable interests with the lessors of our leased assets, other than at New York-JFK, in which we are not the primary beneficiary as discussed in Note 8, "Airport Redevelopment," and with respect to one lessor, in which we have a variable interest in certain immaterial aircraft leases, that we have consolidated.

Aircraft

As of December 31, 2021, including aircraft operated by our regional carriers, we leased 290 aircraft, of which 107 were under finance leases and 183 were operating leases. Our aircraft leases had remaining lease terms of one month to 14 years.

In addition, we have regional aircraft leases that are embedded within our capacity purchase agreements and included in the ROU asset and lease liability. We allocated the consideration in each capacity purchase agreement to the lease and nonlease components based on their relative standalone value. Lease components of these agreements consist of 110 aircraft as of December 31, 2021 and nonlease components primarily consist of flight operations, in-flight and maintenance services. We determined our best estimate of the standalone value of the individual components by considering observable information including rates paid by our wholly owned subsidiary, Endeavor Air, Inc., and rates published by independent valuation firms. See Note 10, "Commitments and Contingencies," for additional information about our capacity purchase agreements.

Airport Facilities

Our facility leases are primarily for space at approximately 300 airports around the world that we serve. These leases reflect our use of airport terminals, office space, cargo warehouses and maintenance facilities. We generally lease space from government agencies that control the use of the airport, and as a result, these leases are classified as operating leases. The remaining lease terms vary from one month to 29 years. At the majority of the U.S. airports, the lease rates depend on airport operating costs or use of the facilities and are reset at least annually. Because of the variable nature of the rates, these leases are not recorded on our balance sheet as a ROU asset and lease liability.

Some airport facilities have fixed payment schedules, the most significant of which are New York-LaGuardia and New York-JFK. For those airport leases, we have recorded a ROU asset and lease liability representing the fixed component of the lease payments. See Note 8, "Airport Redevelopment," for more information on our significant airport redevelopment projects.

Other Ground Property and Equipment

We lease certain IT assets (including servers, mainframes, etc.), ground support equipment (including tugs, tractors, fuel trucks and de-icers), and various other equipment. The remaining lease terms range from one month to eight years. Certain leased assets are embedded within various ground and IT service agreements. For ground service contracts, we have elected to include both the lease and nonlease components in the lease asset and lease liability balances on our balance sheet. For IT service contracts, we have elected to separate the lease and nonlease components and only the lease components are included in the lease asset and lease liability balances on our balance sheet. The amounts of these lease and nonlease components are not significant.

Sale-Leaseback Transactions

In 2020, we entered into \$2.8 billion of sale-leaseback transactions for 85 aircraft including 25 A321-200s, 25 A220-100s, 23 CRJ-900s, 10 737-900ERs and two A330-900s. Of these transactions, 74 did not qualify as a sale as they are finance leases or have an option to repurchase at a stated price. The assets associated with these transactions remain on our balance sheet within property and equipment, net and we recorded the related liabilities under the lease. These liabilities are classified within other accrued or other noncurrent liabilities on our balance sheet. The cash proceeds were treated as financing inflows on the cash flows statement.

The other 11 transactions qualified as sales, generating an immaterial loss, and the associated assets were removed from our balance sheet within property and equipment, net and recorded within ROU assets. The liabilities are recorded within current maturities of operating leases and noncurrent operating leases on our balance sheet. The cash proceeds were treated as investing cash inflows on the cash flows statement.

Lease Position

The table below presents the lease-related assets and liabilities recorded on the balance sheet.

Lease asset and liability balance sheet position by category

(in millions)		Classification on the Balance Sheet	December 31,	
			2021	2020
Assets				
Operating lease assets	Operating lease right-of-use assets	\$	7,237	\$ 5,733
Finance lease assets	Property and equipment, net		1,596	1,002
Total lease assets		\$	8,833	\$ 6,735
Liabilities				
Current				
Operating	Current maturities of operating leases	\$	703	\$ 678
Finance	Current maturities of debt and finance leases		280	289
Noncurrent				
Operating	Noncurrent operating leases		7,056	5,713
Finance	Debt and finance leases		1,556	894
Total lease liabilities		\$	9,595	\$ 7,574
Weighted-average remaining lease term				
Operating leases			13 years	12 years
Finance leases			6 years	5 years
Weighted-average discount rate				
Operating leases			3.81 %	4.88 %
Finance leases			3.36 %	3.61 %

Lease Costs

The table below presents certain information related to the lease costs for finance and operating leases.

Lease cost by category

(in millions)	Year Ended December 31,		
	2021	2020	2019
Finance lease cost			
Amortization of leased assets	\$ 131	\$ 131	\$ 110
Interest of lease liabilities	55	32	29
Operating lease cost ⁽¹⁾	863	1,019	1,013
Short-term lease cost	245	264	500
Variable lease cost ⁽¹⁾	1,599	1,406	1,456
Total lease cost	\$ 2,893	\$ 2,852	\$ 3,108

⁽¹⁾ Expenses are classified within aircraft rent, landing fees and other rents and regional carrier expense on the income statement. For the years ended December 31, 2021, 2020 and 2019, operating lease costs of \$111 million, \$187 million and \$174 million, respectively, are attributed to our regional carriers. For the years ended December 31, 2021, 2020 and 2019, variable lease costs of \$29 million, \$50 million and \$64 million, respectively, are attributable to our regional carriers.

Other Information

The table below presents supplemental cash flow information related to leases.

Supplemental lease-related cash flow information

(in millions)	Year Ended December 31,		
	2021	2020	2019
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows for operating leases	\$ 999	\$ 1,053	\$ 1,166
Operating cash flows for finance leases	46	32	27
Financing cash flows for finance leases	336	255	192

Undiscounted Cash Flows

The table below reconciles the undiscounted cash flows for each of the first five years and total of the remaining years to the finance lease liabilities and operating lease liabilities recorded on the balance sheet.

Future lease cash flows and reconciliation to the balance sheet

(in millions)	Operating Leases	Finance Leases
2022	\$ 944	\$ 324
2023	974	286
2024	894	369
2025	866	232
2026	766	168
Thereafter	5,307	636
Total minimum lease payments	9,751	2,015
Less: amount of lease payments representing interest	(1,992)	(179)
Present value of future minimum lease payments	7,759	1,836
Less: current obligations under leases	(703)	(280)
Long-term lease obligations	\$ 7,056	\$ 1,556

As of December 31, 2021, we had additional leases that had not yet commenced of \$403 million. These leases will commence in 2022 to 2024 with lease terms of 7 to 10 years.

NOTE 8. AIRPORT REDEVELOPMENT**New York-JFK Airport**

In 2015, we completed two phases of redevelopment at New York-JFK's Terminal 4 to facilitate convenient connections for our passengers and improve coordination with our SkyTeam alliance partners. Terminal 4 is operated by JFK International Air Terminal LLC ("IAT"), a private party, under its lease with the Port Authority of New York and New Jersey ("Port Authority"). In December 2010, we entered into a 33-year agreement with IAT ("Sublease") to sublease space in Terminal 4. Also, in 2010, the Port Authority issued approximately \$800 million principal amount of special project bonds (the "Series 8 Bonds") to fund the majority of the project. In December 2020, the NYTDC issued approximately \$611 million principal amount of special project bonds to refinance the outstanding balance of the Series 8 Bonds. We have recognized a ROU asset and lease liability representing the fixed component of the lease payments for this facility. During 2021, we signed an amendment to the Sublease for additional gates at JFK, increasing our lease obligation by \$1.2 billion.

We have an equity method investment in JFK IAT Member LLC, which owns IAT, our sublessor at Terminal 4. The Sublease requires us to pay certain fixed management fees. We determined the investment is a variable interest entity and assessed whether we have a controlling financial interest in IAT. Our rights under the Sublease, with respect to management of Terminal 4, are consistent with rights granted to an anchor tenant under a standard airport lease. Accordingly, we do not consolidate this entity in our Consolidated Financial Statements.

We continue to plan for further expansion of Terminal 4 and during 2021, the Port Authority approved modified project plans to renovate Terminal 4 and add 10 new gates enabling us to move out of Terminal 2 and consolidate our operations at Terminal 4. The project is estimated to cost approximately \$1.5 billion and we expect to amend the Sublease in the March 2022 quarter. Construction started in late 2021 with the project estimated to be complete by the end of 2023.

We have not completed our assessment of the project accounting, but we expect that we will not control the underlying assets being constructed, and therefore, do not expect to have the project asset or related obligation recorded on our balance sheet.

Los Angeles International Airport ("LAX")

We executed a modified lease agreement during 2016 with the City of Los Angeles (the "City"), which owns and operates LAX, and announced plans to modernize, upgrade and provide post-security connection to Terminals 2 and 3. Construction is underway, which includes a new centralized ticketing and arrival hall, a new security checkpoint, core infrastructure to support the City's planned airport people mover, ramp improvements and a post-security connector to the north side of the Tom Bradley International Terminal.

Given reduced passenger volumes resulting from the COVID-19 pandemic, we accelerated the construction schedule for this project in 2020. Additionally, in 2020, we enhanced the project's scope to include a more customer-friendly design of Terminal 3, an expanded Delta Sky Club and baggage system upgrades designed to increase the terminals' operational efficiency going forward. Construction is expected to be completed in 2023.

The project is expected to cost approximately \$2.3 billion. A substantial majority of the project costs are being funded through the Regional Airports Improvement Corporation ("RAIC"), a California public benefit corporation, using a revolving credit facility provided by a group of lenders. The credit facility was executed in 2017 and amended in 2020, and we have guaranteed the obligations of the RAIC under the credit facility. The revolving credit facility agreement was amended again in January 2022, increasing the revolver capacity from \$800 million to \$1.1 billion. Loans made under the credit facility are being repaid with the proceeds from the City's purchase of completed project assets. Under the lease agreement and subsequent project component approvals by the City's Board of Airport Commissioners, the City has appropriated to date approximately \$1.8 billion to purchase completed project assets, representing the maximum allowable reimbursement by the City. Costs incurred in excess of the \$1.8 billion maximum will not be reimbursed by the City. We currently expect our net project costs to be approximately \$500 million, of which approximately \$250 million has been reflected as investing activities in our cash flows statement since the project started in 2017. In 2021, \$487 million was spent on this project, with \$450 million paid by the credit facility and \$37 million paid directly by Delta.

Based on our assessment of the project, we concluded that we do not control the underlying assets being constructed, and therefore, we do not have the project asset or related obligation recorded on our balance sheet.

New York-LaGuardia Airport

As part of the terminal redevelopment project at LaGuardia Airport, we are partnering with the Port Authority to replace Terminals C and D with a new state-of-the-art terminal facility consisting of 37 gates across four concourses connected to a central headhouse. The terminal will feature a new, larger Delta Sky Club, wider concourses, more gate seating and nearly double the amount of concessions space than the existing terminals. The facility will also offer direct access between the parking garage and terminal and improved roadways and drop-off/pick-up areas. The design of the new terminal will integrate sustainable technologies and improvements in energy efficiency. Construction is underway and is being phased to limit passenger inconvenience. Due to an acceleration effort that commenced in 2020, completion is expected by 2025.

In connection with the redevelopment, during 2017, we entered into an amended and restated terminal lease with the Port Authority with a term through 2050. Pursuant to the lease agreement, as amended to date, we will (1) fund (through debt issuance and existing cash) and undertake the design, management and construction of the terminal and certain off-premises supporting facilities, (2) receive a Port Authority contribution of approximately \$500 million to facilitate construction of the terminal and other supporting infrastructure, (3) be responsible for all operations and maintenance during the term of the lease and (4) have preferential rights to all gates in the terminal subject to Port Authority requirements with respect to accommodation of designated carriers. We currently expect our net project cost to be approximately \$3.5 billion and we bear the risks of project construction, including any potential cost over-runs. Using funding primarily provided by existing financing arrangements, we spent approximately \$950 million, which is primarily reflected in investing activities in our cash flows statement, during 2021, bringing the total amount spent on the project to date to approximately \$2.5 billion. See Note 6, "Debt," for additional information on the debt related to this redevelopment project, NYTDC Special Facilities Revenue Bonds, Series 2018 and NYTDC Special Facilities Revenue Bonds, Series 2020.

In 2019, we opened Concourse G, the first of four new concourses, housing seven of the 37 new gates. Not only did the new Concourse G provide the first direct impact to the Delta passenger experience, it also represented the first major phasing milestone. The next major milestone will be the opening of the headhouse and Concourse E, which is scheduled for the second quarter of 2022.

Based on our assessment of the project, we concluded that we do not control the underlying assets being constructed. Costs incurred by Delta are accounted for as leasehold improvements. We entered into loan agreements to fund a portion of the construction, which are recorded on our balance sheet as debt with the proceeds reflected as restricted cash.

NOTE 9. EMPLOYEE BENEFIT PLANS

We sponsor defined benefit and defined contribution pension plans, healthcare plans and disability and survivorship plans for eligible employees and retirees and their eligible family members.

Defined Benefit Pension Plans. We sponsor defined benefit pension plans for eligible employees and retirees. These plans are closed to new entrants and frozen for future benefit accruals. Our funding obligations for qualified defined benefit plans are governed by the Employee Retirement Income Security Act and any applicable legislation. Under the Pension Protection Act of 2006, we elected alternative funding rules so that the unfunded liability for a frozen defined benefit plan may be amortized over a fixed 17-year period and is calculated using an 8.85% discount rate until the 17-year period expires for all frozen defined benefit plans by the end of 2024. Upon expiration, under recent legislation passed in 2021, any required funding would be amortized over a rolling 15-year period and calculated using a discount rate of no less than 4.75% through 2030. We have no minimum funding requirements for these plans in 2022 and do not plan to make voluntary contributions during 2022.

Defined Contribution Pension Plans. We sponsor several defined contribution plans. These plans generally cover different employee groups and employer contributions vary by plan. The costs associated with our defined contribution pension plans were approximately \$875 million, \$805 million and \$1.0 billion for the years ended December 31, 2021, 2020 and 2019, respectively.

Postretirement Healthcare Plans. We sponsor healthcare plans that provide benefits to eligible retirees and their dependents who are under age 65. We have generally eliminated company-paid post age 65 healthcare coverage, except for (1) subsidies available to a limited group of retirees and their dependents, (2) a group of retirees who retired prior to 1987 and (3) retiree medical accounts which provide a fixed dollar amount to eligible employees who retired under the 2012 voluntary workforce reduction programs or under the 2020 voluntary early retirement and separation programs ("voluntary programs"). Benefits under these plans are funded from current assets and employee contributions.

During 2020, we remeasured our postretirement healthcare obligation to account for the retiree medical accounts provided to eligible participants in our voluntary programs. As a result, we recorded a \$1.3 billion special termination benefit charge and increased our postretirement healthcare obligation by \$1.3 billion.

Postemployment Plans. We provide certain other welfare benefits to eligible former or inactive employees after employment but before retirement, primarily as part of the disability and survivorship plans. Substantially all employees are eligible for benefits under these plans in the event of death and/or disability.

Benefit Obligations, Fair Value of Plan Assets and Funded Status

(in millions)	Pension Benefits December 31,		Other Postretirement and Postemployment Benefits December 31,	
	2021	2020	2021	2020
Benefit obligation at beginning of period	\$ 22,626	\$ 21,199	\$ 4,766	\$ 3,379
Service cost	—	—	86	96
Interest cost	582	700	117	120
Actuarial (gain)/loss	(851)	2,051	23	247
Benefits paid, including lump sums and annuities	(1,279)	(1,233)	(405)	(356)
Participant contributions	—	—	18	20
Special termination benefits	—	—	—	1,260
Settlements	(5)	(91)	—	—
Benefit obligation at end of period ⁽¹⁾	\$ 21,073	\$ 22,626	\$ 4,605	\$ 4,766
Fair value of plan assets at beginning of period	\$ 16,541	\$ 15,845	\$ 496	\$ 607
Actual gain on plan assets	2,732	1,973	57	76
Employer contributions	1,513	47	192	189
Participant contributions	—	—	18	20
Benefits paid, including lump sums and annuities	(1,279)	(1,233)	(406)	(396)
Settlements	(5)	(91)	—	—
Fair value of plan assets at end of period	\$ 19,502	\$ 16,541	\$ 357	\$ 496
Funded status at end of period	\$ (1,571)	\$ (6,085)	\$ (4,248)	\$ (4,270)

⁽¹⁾ At the end of each year presented, our accumulated benefit obligations for our pension plans are equal to the benefit obligations shown above.

During 2021, actuarial gains decreased our benefit obligation due to the increase in discount rate, while in 2020 our obligation increased due to the actuarial losses from a decrease in discount rates. These gains and losses are recorded in AOCI and reflected in the table below. Amounts are generally amortized from AOCI over the expected future lifetime of plan participants.

Balance Sheet Position

(in millions)	Pension Benefits December 31,		Other Postretirement and Postemployment Benefits December 31,	
	2021	2020	2021	2020
Current liabilities	\$ (9)	\$ (10)	\$ (203)	\$ (143)
Noncurrent liabilities	(1,562)	(6,075)	(4,045)	(4,127)
Total liabilities	\$ (1,571)	\$ (6,085)	\$ (4,248)	\$ (4,270)
Net actuarial loss	\$ (7,462)	\$ (9,878)	\$ (831)	\$ (886)
Prior service credit	—	—	23	29
Total accumulated other comprehensive loss, pre-tax	\$ (7,462)	\$ (9,878)	\$ (808)	\$ (857)

Net Periodic (Benefit) Cost

(in millions)	Pension Benefits			Other Postretirement and Postemployment Benefits		
	Year Ended December 31,			Year Ended December 31,		
	2021	2020	2019	2021	2020	2019
Service cost	\$ —	\$ —	\$ —	\$ 86	\$ 96	\$ 83
Interest cost	582	700	833	117	120	137
Expected return on plan assets	(1,522)	(1,373)	(1,186)	(34)	(44)	(47)
Amortization of prior service credit	—	—	—	(6)	(9)	(9)
Recognized net actuarial loss	354	300	291	55	44	37
Settlements	2	38	5	—	—	—
Special termination benefits	—	—	—	—	1,260	—
Net periodic (benefit) cost	\$ (584)	\$ (335)	\$ (57)	\$ 218	\$ 1,467	\$ 201

Service cost is recorded in salaries and related costs in the income statement. Special termination benefits are recorded in restructuring charges, while all other components are recorded within pension and related benefit/(expense) under non-operating expense.

Assumptions

We used the following actuarial assumptions to determine our benefit obligations and our net periodic benefit cost for the periods presented:

Benefit Obligations ⁽¹⁾	December 31,	
	2021	2020
Weighted average discount rate	2.97 %	2.62 %

Net Periodic (Benefit) Cost ⁽¹⁾	Year Ended December 31,		
	2021	2020	2019
Weighted average discount rate - pension benefit	2.65 %	3.40 %	4.33 %
Weighted average discount rate - other postretirement benefit	2.43 %	3.47 %	4.32 %
Weighted average discount rate - other postemployment benefit	2.55 %	3.34 %	4.32 %
Weighted average expected long-term rate of return on plan assets	8.98 %	8.97 %	8.97 %
Assumed healthcare cost trend rate for the next year ⁽²⁾	6.25 %	6.25 %	6.50 %

⁽¹⁾ Future employee compensation levels do not impact our frozen defined benefit pension plans or other postretirement plans and impact only a small portion of our other postemployment obligation.

⁽²⁾ Healthcare cost trend rate is assumed to decline gradually to 5.00% by 2028 and remain unchanged thereafter.

Expected Long-Term Rate of Return. Our expected long-term rate of return on plan assets is based primarily on plan-specific investment studies using historical market return and volatility data. Modest excess return expectations versus some public market indices are incorporated into the return projections based on the actively managed structure of the investment programs and their records of achieving such returns historically. We also expect to receive a premium for investing in less liquid private markets. We review our rate of return on plan assets assumptions annually. Our annual investment performance for one particular year does not, by itself, significantly influence our evaluation. The investment strategy for our defined benefit pension plan assets is to earn a long-term return that meets or exceeds our annualized return target while taking an acceptable level of risk and maintaining sufficient liquidity to pay current benefits and other cash obligations of the plan. This is achieved by investing in a globally diversified mix of public and private equity, fixed income, real assets, hedge funds and other assets and instruments. Our weighted average expected long-term rate of return on assets for net periodic benefit cost for the year ended December 31, 2021 was 8.98%.

Life Expectancy. Changes in life expectancy may significantly impact our benefit obligations and future net periodic benefit cost. We use the Society of Actuaries ("SOA") published mortality data and other publicly available information to develop our best estimate of life expectancy. The SOA publishes updated mortality tables for U.S. plans and updated improvement scales. Each year we consider updates by the SOA in setting our mortality assumptions for purposes of measuring pension and other postretirement and postemployment benefit obligations.

Benefit Payments

Benefit payments in the table below are based on the same assumptions used to measure the related benefit obligations. Actual benefit payments may vary significantly from these estimates. Benefits earned under our pension plans and certain postemployment benefit plans are expected to be paid from funded benefit plan trusts, while our other postretirement benefits are funded from current assets.

The following table summarizes the benefit payments that are expected to be paid in the years ending December 31:

Expected future benefit payments

(in millions)	Pension Benefits	Other Postretirement and Postemployment Benefits
2022	\$ 1,290	\$ 420
2023	1,280	460
2024	1,270	460
2025	1,270	460
2026	1,260	460
2027-2031	6,110	2,160

Plan Assets

We have adopted and implemented investment policies for our defined benefit pension plans that incorporate strategic asset allocation mixes intended to best meet the plans' long-term obligations, while maintaining an appropriate level of risk and liquidity. These asset portfolios employ a diversified mix of investments, which are reviewed periodically. Active management strategies are utilized where feasible in an effort to realize investment returns in excess of market indices. Derivatives in the plans are primarily used to manage risk and gain asset class exposure while still maintaining liquidity. As part of these strategies, the plans are required to hold cash collateral associated with certain derivatives. Our investment strategies target a mix of 30-50% growth-seeking assets, 25-35% income-generating assets and 30-40% risk-diversifying assets. Risk diversifying assets include hedged mandates implementing long-short, market neutral and relative value strategies that invest primarily in publicly-traded equity, fixed income, foreign currency and commodity securities and are used to improve the impact of active management on the plans.

Benefit Plan Assets Measured at Fair Value on a Recurring Basis

Benefit Plan Assets. Benefit plan assets relate to our defined benefit pension plans and certain of our postemployment benefit plans. These investments are presented net of the related benefit obligation in pension, postretirement and related benefits on the balance sheets. See Note 3, "Fair Value Measurements," for a description of the levels within the fair value hierarchy and associated valuation techniques used to measure fair value. The following table shows our benefit plan assets by asset class.

Benefit plan assets measured at fair value on a recurring basis

(in millions)	December 31, 2021			December 31, 2020			Valuation Technique
	Level 1	Level 2	Total	Level 1	Level 2	Total	
Cash equivalents	\$ 2,390	\$ 2,097	\$ 4,487	\$ 305	\$ 3,359	\$ 3,664	(a)
Equities and equity-related instruments	1,034	161	1,195	1,061	59	1,120	(a)
Fixed income and fixed income-related instruments	69	979	1,048	—	882	882	(a)(b)
Delta common stock	407	—	407	507	—	507	(a)
Real assets	—	256	256	—	—	—	(a)
Benefit plan assets	\$ 3,900	\$ 3,493	\$ 7,393	\$ 1,873	\$ 4,300	\$ 6,173	
Investments measured at net asset value ("NAV") ⁽¹⁾			12,653			10,427	
Total benefit plan assets			\$20,046			\$16,600	

⁽¹⁾ Investments that were measured at NAV per share (or its equivalent) as a practical expedient have not been classified in the fair value hierarchy.

Cash Equivalents. These investments primarily consist of high-quality, short-term obligations that are a part of institutional money market mutual funds that are valued using current market quotations or an appropriate substitute that reflects current market conditions.

Equities and Equity-Related Instruments. These investments include common stock and equity-related instruments. Common stock is valued at the closing price reported on the active market on which the individual securities are traded. Equity-related instruments include investments in securities traded on exchanges, including listed futures and options, which are valued at the last reported sale prices on the last business day of the year or, if not available, the last reported bid prices. Over-the-counter securities are valued at the bid prices or the average of the bid and ask prices on the last business day of the year from published sources or, if not available, from other sources considered reliable, generally broker quotes.

Fixed Income and Fixed Income-Related Instruments. These investments include corporate bonds, government bonds, collateralized mortgage obligations and other asset-backed securities, and are generally valued at the bid price or the average of the bid and ask price. Prices are based on pricing models, quoted prices of securities with similar characteristics or broker quotes. Fixed income-related instruments include investments in securities traded on exchanges, including listed futures and options, which are valued at the last reported sale prices on the last business day of the year, or if not available, the last reported bid prices. Over-the-counter securities are valued at the bid prices or the average of the bid and ask prices on the last business day of the year from published sources or, if not available, from other sources considered reliable, generally broker quotes.

Delta Common Stock. The Delta common stock investment is managed by an independent fiduciary.

Real Assets. These investments include precious metals and precious metals-related instruments, some of which are valued at the closing price reported on the active market on which the individual instruments are traded, while others are priced based on pricing models, quoted prices of securities with similar characteristics or broker quotes.

The following table summarizes investments measured at fair value based on NAV per share as a practical expedient:

Benefit plan investment assets measured at NAV

(in millions)	December 31, 2021			December 31, 2020		
	Fair Value	Redemption Frequency	Redemption Notice Period	Fair Value	Redemption Frequency	Redemption Notice Period
Hedge funds and hedge fund-related strategies ⁽⁴⁾	\$ 7,563	(3)	2-180 Days	\$ 5,474	(3)	2-180 Days
Commingled funds, private equity and private equity-related instruments ⁽⁴⁾	2,228	(3)	3-45 Days	2,136	(3)	3-30 Days
Fixed income and fixed income-related instruments ⁽⁴⁾	877	(3)	65-90 Days	1,118	(3)	15-90 Days
Real assets ⁽⁴⁾	773	(2)	N/A	671	(2)	N/A
Other	1,212	(1)	2-10 Days	1,028	(1)	2-90 Days
Total investments measured at NAV	\$12,653			\$10,427		

⁽¹⁾ Weekly, semi-monthly, monthly

⁽²⁾ Semi-annually and annually

⁽³⁾ Various. Includes funds with weekly, semi-monthly, monthly, quarterly and custom redemption frequencies as well as funds with a redemption window following the anniversary of the initial investment.

⁽⁴⁾ Unfunded commitments were \$1.0 billion for commingled funds, private equity and private equity-related instruments, \$259 million for fixed income and fixed income-related instruments and \$386 million for real assets at December 31, 2021.

Hedge Funds and Hedge Fund-Related Strategies. These investments are primarily made through shares of limited partnerships or similar structures for which a liquid secondary market does not exist.

Commingled Funds, Private Equity and Private Equity-Related Instruments. These investments include commingled funds invested in common stock, as well as private equity and private equity-related instruments. Commingled funds are valued based on quoted market prices of the underlying assets owned by the fund. Private equity and private equity-related strategies are typically valued quarterly by the fund managers using valuation models where one or more of the significant inputs into the model cannot be observed and which require the development of assumptions.

Fixed Income and Fixed Income-Related Instruments. These investments include commingled funds invested in debt obligations. Commingled funds are valued based on quoted market prices of the underlying assets owned by the fund. Private fixed income strategies are typically valued monthly or quarterly by the fund managers or third-party valuation agents using valuation models where one or more of significant inputs into the model cannot be observed and which require the development of assumptions.

Real Assets. These investments include real estate, energy, timberland, agriculture and infrastructure. The valuation of real assets requires significant judgment due to the absence of quoted market prices as well as the inherent lack of liquidity and the long-term nature of these assets. Real assets are typically valued quarterly by the fund managers using valuation models where one or more of the significant inputs into the model cannot be observed and which require the development of assumptions.

Other. Primarily includes globally-diversified, risk-managed commingled funds consisting mainly of equity, fixed income and commodity exposures.

On an annual basis we assess the potential for adjustments to the fair value of all investments. These investments valued using NAV as a practical expedient are typically valued on a monthly or quarterly basis by third-party administrators, valuation agents or fund managers with an annual audit performed by an independent third party, but certain of these investments have a lag in the availability of data. This primarily applies to private equity, private equity-related strategies and real assets. We solicit valuation updates from the investment fund managers and use their information and corroborating data from public markets to determine any needed fair value adjustments.

Other

We also sponsor defined benefit pension plans for eligible employees in certain foreign countries. These plans did not have a material impact on our Consolidated Financial Statements in any period presented.

Voluntary Programs

During 2020, in response to the COVID-19 pandemic, we announced the voluntary programs, which primarily applied to eligible U.S. merit, ground and flight attendant and pilot employees. Those employees who elected to participate in the voluntary programs were eligible for separation payments, continued healthcare benefits and certain participants received retiree medical accounts. The election and revocation windows for these programs closed during 2020 with approximately 18,000 employees electing to participate. We recorded \$3.4 billion in restructuring charges in our income statement associated with these programs and other employee benefit charges during 2020, including \$1.3 billion of special termination benefits (discussed above). The remainder of the restructuring charge primarily relates to separation payments and healthcare benefits. Approximately \$720 million was disbursed in cash payments to participants in the voluntary programs during 2020 and approximately \$575 million in 2021. An additional approximately \$250 million of cash payments were disbursed during 2020 related to unused vacation and other benefits, which were accrued prior to the voluntary programs charge. Accruals related to the voluntary programs are primarily recorded in pension, postretirement and related benefits, other noncurrent liabilities, other accrued liabilities and accrued salaries and related benefits on our balance sheet.

Profit Sharing Program

Our broad-based employee profit sharing program provides that, for each year in which we have an annual pre-tax profit, as defined by the terms of the program, we will pay a specified portion of that profit to employees. In determining the amount of profit sharing, the program defines profit as pre-tax profit adjusted for profit sharing and certain other items.

To recognize the extraordinary efforts of our employees through the pandemic, we will make a special profit-sharing payment to eligible employees in February 2022, based on the adjusted pre-tax profit earned during the second half of 2021.

For the years ended December 31, 2021 and 2019 we recorded profit sharing expense of \$108 million and \$1.6 billion, respectively. For the year ended December 31, 2020 we recorded no profit sharing expense.

NOTE 10. COMMITMENTS AND CONTINGENCIES***Aircraft Purchase Commitments***

Our future aircraft purchase commitments totaled approximately \$16.2 billion at December 31, 2021:

Aircraft purchase commitments	
(in millions)	Total
2022	\$ 3,700
2023	3,040
2024	3,290
2025	2,880
2026	2,340
Thereafter	920
Total	\$ 16,170

Our future aircraft purchase commitments included the following aircraft at December 31, 2021:

Aircraft purchase commitments by fleet type	
Fleet Type	Purchase Commitments
A220-100	4
A220-300	40
A321-200neo	155
A330-900neo	26
A350-900	20
B-737-900ER	19
Total	264

Aircraft Orders

During 2021, we agreed with Airbus to add incremental aircraft to our order book by converting options for 55 A321neo aircraft into firm orders and replenishing 25 of our options. We expect to take delivery of our first A321neo in the first half of 2022, with deliveries of these aircraft continuing through 2027. Additionally, we agreed to move up two A350-900 deliveries and one A330-900neo delivery to occur in the second half of 2022.

During 2021, we agreed to acquire 29 B-737-900 aircraft and enter into leases for nine A350-900 aircraft. We began taking delivery of these preowned aircraft in 2021 and deliveries are expected to continue through the first quarter of 2022. Phased entry into service is expected through the summer of 2023.

Contract Carrier Agreements

We have contract carrier agreements with regional carriers expiring from 2022 to 2031. These agreements are structured as either capacity purchase or revenue proration agreements.

Capacity Purchase Agreements. Our regional carriers primarily operate for us under capacity purchase agreements. Under these agreements, the regional carriers operate some or all of their aircraft using our flight designator codes, and we control the scheduling, pricing, reservations, ticketing and seat inventories of those aircraft and retain the revenues associated with those flights. We pay those airlines an amount, as defined in the applicable agreement, which is based on a determination of their cost of operating those flights and other factors intended to approximate market rates for those services.

The following table shows our minimum obligations under our existing capacity purchase agreements with third-party regional carriers. The obligations set forth in the table contemplate minimum levels of flying by the regional carriers under the respective agreements and also reflect assumptions regarding certain costs associated with the minimum levels of flying such as the cost of fuel, labor, maintenance, insurance, catering, property tax and landing fees. Accordingly, our actual payments under these agreements could differ materially from the minimum fixed obligations set forth in the table below.

Contract carrier minimum obligations

(in millions)	Amount ⁽¹⁾
2022	\$ 1,513
2023	1,515
2024	1,488
2025	1,521
2026	1,554
Thereafter	4,141
Total	\$ 11,732

⁽¹⁾ These amounts exclude contract carrier payments accounted for as leases of aircraft, which are described in Note 7, "Leases."

Revenue Proration Agreement. As of December 31, 2021, a portion of our contract carrier arrangement with SkyWest Airlines, Inc. was structured as a revenue proration agreement. This revenue proration agreement establishes a fixed dollar or percentage division of revenues for tickets sold to passengers traveling on connecting flight itineraries.

Legal Contingencies

We are involved in various legal proceedings related to employment practices, environmental issues, antitrust matters and other matters concerning our business. We record liabilities for losses from legal proceedings when we determine that it is probable that the outcome in a legal proceeding will be unfavorable and the amount of loss can be reasonably estimated. Although the outcome of the legal proceedings in which we are involved cannot be predicted with certainty, we believe that the resolution of current matters will not have a material adverse effect on our Consolidated Financial Statements.

Credit Card Processing Agreements

Our VISA/MasterCard and American Express credit card processing agreements provide that no cash reserve ("Reserve") is required, and no withholding of payment related to receivables collected will occur, except in certain circumstances, including when we do not maintain a required level of liquidity as outlined in the merchant processing agreements. In circumstances in which the credit card processor can establish a Reserve or withhold payments, the amount of the Reserve or payments that may be withheld would be equal to the potential liability of the credit card processor for tickets purchased with VISA/MasterCard or American Express credit cards, as applicable, that had not yet been used for travel. We did not have a Reserve or an amount withheld as of December 31, 2021 or 2020.

Other Contingencies**General Indemnifications**

We are the lessee under many commercial real estate leases. It is common in these transactions for us, as the lessee, to agree to indemnify the lessor and the lessor's related parties for tort, environmental and other liabilities that arise out of or relate to our use or occupancy of the leased premises. This type of indemnity would typically make us responsible to indemnified parties for liabilities arising out of the conduct of, among others, contractors, licensees and invitees at, or in connection with, the use or occupancy of the leased premises. This indemnity often extends to related liabilities arising from the negligence of the indemnified parties, but usually excludes any liabilities caused by either their sole or gross negligence or their willful misconduct.

Our aircraft and other equipment lease and financing agreements typically contain provisions requiring us, as the lessee or obligor, to indemnify the other parties to those agreements, including certain of those parties' related persons, against virtually any liabilities that might arise from the use or operation of the aircraft or other equipment.

We believe that our insurance would cover most of our exposure to liabilities and related indemnities associated with the commercial real estate leases and aircraft and other equipment lease and financing agreements described above. While our insurance does not typically cover environmental liabilities, we have insurance policies in place as required by applicable environmental laws.

Some of our aircraft and other financing transactions include provisions that require us to make payments to preserve an expected economic return to the lenders if that economic return is diminished due to specified changes in law or regulations. In some of these financing transactions, we also bear the risk of changes in tax laws that would subject payments to non-U.S. lenders to withholding taxes.

We cannot reasonably estimate our potential future payments under the indemnities and related provisions described above because we cannot predict (1) when and under what circumstances these provisions may be triggered and (2) the amount that would be payable if the provisions were triggered because the amounts would be based on facts and circumstances existing at such time.

Employees Under Collective Bargaining Agreements

As of December 31, 2021, we had approximately 83,000 full-time equivalent employees, 20% of whom were represented by unions.

Domestic airline employees represented by collective bargaining agreements by group

Employee Group	Approximate Number of Employees Represented	Union	Date on which Collective Bargaining Agreement Becomes Amendable
Delta Pilots	13,180	ALPA	December 31, 2019
Delta Flight Superintendents (Dispatchers)	380	PAFCA	November 1, 2024
Endeavor Air Pilots	1,900	ALPA	January 1, 2029
Endeavor Air Flight Attendants	1,480	AFA	March 31, 2025

In addition to the domestic airline employee groups discussed above, approximately 180 refinery employees of our wholly owned subsidiary Monroe are represented by the United Steel Workers under an agreement that expires on February 28, 2022. This agreement is governed by the National Labor Relations Act, which generally allows either party to engage in self-help upon the expiration of the agreement. Certain of our employees outside the U.S. are represented by unions, work councils or other local representative groups.

Other

We have certain contracts for goods and services that require us to pay a penalty, acquire inventory specific to us or purchase contract-specific equipment, as defined by each respective contract, if we terminate the contract without cause prior to its expiration date. Because these obligations are contingent on our termination of the contract without cause prior to its expiration date, no obligation would exist unless such a termination occurs.

NOTE 11. INCOME TAXES***Income Tax Provision*****Components of income tax (provision) benefit**

(in millions)	Year Ended December 31,		
	2021	2020	2019
Current tax (provision) benefit:			
Federal	\$ —	\$ 94	\$ 94
State and local	(1)	3	(39)
International	(3)	(5)	(13)
Deferred tax (provision) benefit:			
Federal	(130)	2,766	(1,343)
State and local	16	344	(130)
Income tax (provision) benefit	\$ (118)	\$ 3,202	\$ (1,431)

The following table presents the principal reasons for the difference between the effective tax rate and the U.S. federal statutory income tax rate:

Reconciliation of statutory federal income tax rate to the effective income tax rate

	Year Ended December 31,		
	2021	2020	2019
U.S. federal statutory income tax rate	21.0 %	21.0 %	21.0 %
State taxes, net of federal benefit	(4.4)	1.9	2.3
Permanent differences	4.9	(0.6)	(0.3)
Valuation allowance	9.1	(2.6)	0.7
Other	(0.8)	0.8	(0.6)
Effective income tax rate	29.8 %	20.5 %	23.1 %

Deferred Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes.

Significant components of deferred income tax assets and liabilities

(in millions)	December 31,	
	2021	2020
Deferred tax assets:		
Net operating loss carryforwards	\$ 1,301	\$ 1,495
Capital loss carryforward	480	483
Pension, postretirement and other benefits	2,089	2,956
Investments	314	—
Deferred revenue	2,288	1,929
Lease liabilities	2,452	2,185
Other	494	479
Valuation allowance	(833)	(460)
Total deferred tax assets	\$ 8,585	\$ 9,067
Deferred tax liabilities:		
Depreciation	\$ 4,463	\$ 4,507
Operating lease assets	1,676	1,324
Intangible assets	1,097	1,076
Other	55	172
Total deferred tax liabilities	\$ 7,291	\$ 7,079
Net deferred tax assets	\$ 1,294	\$ 1,988

As of December 31, 2021, we had approximately \$4.8 billion of U.S. federal pre-tax net operating loss carryforwards, of which \$1.1 billion was generated prior to 2018 and will not begin to expire until 2029. Under current tax law, the remaining amount has no expiration.

Valuation Allowance

We periodically assess whether it is more likely than not that we will generate sufficient taxable income to realize our deferred income tax assets. We establish valuation allowances if it is more likely than not that we will be unable to realize our deferred income tax assets. In making this determination, we consider available positive and negative evidence and make certain assumptions. We consider, among other things, projected future taxable income, scheduled reversals of deferred tax liabilities, the overall business environment, our historical financial results and tax planning strategies.

At December 31, 2021 our net deferred tax asset balance was \$1.3 billion, including an \$833 million valuation allowance primarily related to capital loss carryforwards and certain state net operating losses. Although we have recent cumulative losses, we have a history of significant earnings prior to the onset of the COVID-19 pandemic. While we expect to return to sustained profitability as the effects of the pandemic subside and to generate sufficient taxable income to utilize our federal net operating loss carryforwards before any expire, the generation of future taxable income is dependent on many factors, including those which are out of our control, such as the demand for air travel and overall health of the economy. As such, there are no guarantees that a valuation allowance will not be required against some or all of our deferred tax assets in future periods.

Our federal net operating loss carryforwards generated before 2018 do not begin to expire until 2029. Under current tax law, federal net operating losses generated after 2017 do not expire. Therefore, we have not recorded a valuation allowance on our deferred tax assets other than the capital loss carryforwards and certain state net operating losses that have short expiration periods.

The following table presents the balance of our valuation allowance on our deferred income tax assets and the associated activity:

Valuation allowance activity

(in millions)	2021	2020
Balance at January 1	\$ 460	\$ 58
Tax provision	26	402
Equity investment activity	347	—
Balance at December 31	\$ 833	\$ 460

Other

The amount of, and changes to, our uncertain tax positions were not material in any of the years presented. We are currently under audit by the IRS for the 2021 and 2020 tax years.

NOTE 12. EQUITY AND EQUITY COMPENSATION**Equity**

We are authorized to issue 2.0 billion shares of capital stock, of which up to 1.5 billion may be shares of common stock, par value \$0.0001 per share, and up to 500 million may be shares of preferred stock.

Preferred Stock. We may issue preferred stock in one or more series. The Board of Directors is authorized (1) to fix the descriptions, powers (including voting powers), preferences, rights, qualifications, limitations and restrictions with respect to any series of preferred stock and (2) to specify the number of shares of any series of preferred stock. We have not issued any preferred stock.

Treasury Stock. We generally withhold shares of Delta common stock to cover employees' portion of required tax withholdings when employee equity awards are issued or vest. These shares are valued at cost, which equals the market price of the common stock on the date of issuance or vesting. The weighted average cost per share held in treasury was \$28.87 and \$28.23 as of December 31, 2021 and 2020, respectively.

Warrants. See Note 6, "Debt," for further discussion of the warrants issued during 2020 and 2021 in connection with the CARES Act payroll support program and extensions to acquire more than 11.1 million shares of Delta common stock.

Equity Compensation

Our broad-based equity and cash compensation plan provides for grants of restricted stock, stock options, performance awards, including cash incentive awards and other equity-based awards (the "Plan"). Shares of common stock issued under the Plan may be made available from authorized, but unissued, common stock or common stock we acquire. If any shares of our common stock are covered by an award that expires, is canceled, forfeited or otherwise terminates without delivery of shares (including shares surrendered or withheld for payment of taxes related to an award), such shares will again be available for issuance under the Plan except for (1) any shares tendered in payment of an option, (2) shares withheld to satisfy any tax withholding obligation with respect to the exercise of an option or stock appreciation right ("SAR") or (3) shares covered by a stock-settled SAR or other awards that were not issued upon the settlement of the award. The Plan authorizes the issuance of up to 163 million shares of common stock. As of December 31, 2021, there were 19 million shares available for future grants.

We make long-term incentive awards annually to eligible employees under the Plan. Generally, awards vest over time, subject to the employee's continued employment. Equity compensation expense, including awards payable in common stock or cash, is recognized in salaries and related costs over the employee's requisite service period (generally, the vesting period of the award) and totaled \$149 million, \$119 million and \$161 million for the years ended December 31, 2021, 2020 and 2019, respectively. We record expense on a straight-line basis for awards with installment vesting. As of December 31, 2021, unrecognized costs related to unvested shares and stock options totaled \$77 million. We expect substantially all unvested awards to vest and recognize forfeitures as they occur.

Restricted Stock. Restricted stock is common stock that may not be sold or otherwise transferred for a period of time and is subject to forfeiture in certain circumstances. The fair value of restricted stock awards is based on the closing price of the common stock on the grant date. As of December 31, 2021, there were 2.9 million unvested restricted stock awards. Restricted stock activity under the plan for the years ended December 31, 2021, 2020 and 2019 is as follows:

Restricted Stock Award Activity

(in millions, except wtd avg grant price)	2021		2020		2019	
	Restricted Stock Awards	Weighted-Average Grant Price	Restricted Stock Awards	Weighted-Average Grant Price	Restricted Stock Awards	Weighted-Average Grant Price
Outstanding at January 1	2.2	\$ 54.06	2.6	\$ 51.28	2.4	\$ 49.24
Granted	2.3	39.93	1.4	56.84	1.8	51.75
Vested	(1.4)	51.15	(1.6)	51.95	(1.5)	48.65
Forfeited	(0.2)	44.01	(0.2)	56.11	(0.1)	50.78
Outstanding at December 31	2.9	\$ 45.66	2.2	\$ 54.06	2.6	\$ 51.28

Stock Options. Stock options are granted with an exercise price equal to the closing price of Delta common stock on the grant date and generally have a 10-year term. We determine the fair value of stock options at the grant date using an option pricing model. As of December 31, 2021, there were 6.2 million outstanding stock option awards with a weighted average exercise price of \$50.41 of which 3.3 million were exercisable. Stock option activity under the plan for the years ended December 31, 2021, 2020 and 2019 is as follows:

Stock Option Activity

(in millions, except wtd avg grant price)	2021		2020		2019	
	Stock Options	Weighted-Average Exercise Price	Stock Options	Weighted-Average Exercise Price	Stock Options	Weighted-Average Exercise Price
Outstanding at January 1	5.4	\$ 52.37	3.9	\$ 49.57	2.5	\$ 48.99
Granted	1.0	39.78	1.6	58.89	1.4	50.52
Exercised	—	—	(0.1)	44.05	—	—
Forfeited	(0.2)	49.61	—	—	—	—
Outstanding at December 31	6.2	\$ 50.41	5.4	\$ 52.37	3.9	\$ 49.57

Performance Awards. Performance awards are dollar-denominated long-term incentive opportunities which, for grants prior to 2021, are payable in Delta stock to executive officers on the payment date and in cash to all other participants. Beginning with the 2021 grants, performance awards are payable in cash to all participants. Potential performance award payments range from 0%-200% of a target level and are contingent upon our achieving certain financial and operational goals over a three-year performance period. Based on the closing stock price at each respective year end and contingent on achieving the specified performance conditions, the maximum shares that could be issued were 1.5 million, 2.2 million and 1.4 million for the years ended December 31, 2021, 2020 and 2019, respectively.

NOTE 13. ACCUMULATED OTHER COMPREHENSIVE LOSS**Components of accumulated other comprehensive loss**

(in millions)	Pension and Other Benefits Liabilities ⁽²⁾	Other ⁽³⁾	Total
Balance at January 1, 2019 (net of tax effect of \$1,492)	\$ (7,925)	\$ 100	\$ (7,825)
Changes in value (net of tax effect of \$133)	(422)	7	(415)
Reclassifications into earnings (net of tax effect of \$76) ⁽¹⁾	252	(1)	251
Balance at December 31, 2019 (net of tax effect of \$1,549)	(8,095)	106	(7,989)
Changes in value (net of tax effect of \$384)	(1,269)	17	(1,252)
Reclassifications into earnings (net of tax effect of \$169) ⁽¹⁾	286	(83)	203
Balance at December 31, 2020 (net of tax effect \$1,764)	(9,078)	40	(9,038)
Changes in value (net of tax effect of \$484)	1,593	—	1,593
Reclassifications into earnings (net of tax effect of \$96) ⁽¹⁾	315	—	315
Balance at December 31, 2021 (net of tax effect of \$1,184)	\$ (7,170)	\$ 40	\$ (7,130)

⁽¹⁾ Amounts reclassified from AOCI for pension and other benefits liabilities are recorded in pension and related benefit/(expense) in non-operating expense in the income statement.

⁽²⁾ Includes approximately \$760 million of deferred income tax expense as a result of tax law changes and prior valuation allowance releases through continuing operations, that will not be recognized in net income until pension and other benefit obligations are fully extinguished.

⁽³⁾ In 2020, all remaining foreign currency hedges expired, and we recognized an \$83 million tax benefit which was released from AOCI.

NOTE 14. SEGMENTS

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker and is used in resource allocation and performance assessments. Our chief operating decision maker is considered to be our executive leadership team. Our executive leadership team regularly reviews discrete information for our two operating segments, which are determined by the products and services provided: our airline segment and our refinery segment.

Airline Segment

Our airline segment is managed as a single business unit that provides scheduled air transportation for passengers and cargo throughout the U.S. and around the world and includes our loyalty program, as well as other ancillary airline services. This allows us to benefit from an integrated revenue pricing and route network. Our flight equipment forms one fleet, which is deployed through a single route scheduling system. When making resource allocation decisions, our chief operating decision maker evaluates flight profitability data, which considers fleet type and route economics, but gives no weight to the financial impact of the resource allocation decision on a geographic region or mainline/regional carrier basis. Our objective in making resource allocation decisions is to optimize our consolidated financial results.

Refinery Segment

Our Monroe subsidiary operates the Trainer oil refinery and related assets located near Philadelphia, Pennsylvania, as part of our strategy to mitigate the cost of the refining margin reflected in the price of jet fuel. Monroe's operations include pipelines and terminal assets that allow the refinery to supply jet fuel to our airline operations throughout the Northeastern U.S., including our New York hubs at LaGuardia and JFK.

Our refinery segment operates for the benefit of the airline segment by providing jet fuel to the airline segment from its own production and through jet fuel obtained through agreements with third parties. The refinery's production consists of jet fuel, as well as non-jet fuel products. We use several counterparties to exchange the non-jet fuel products produced by the refinery for jet fuel consumed in our airline operations. The gross fair value of the products exchanged under these agreements during the years ended December 31, 2021, 2020 and 2019 was \$2.3 billion, \$1.5 billion and \$4.0 billion, respectively. The decline in exchange transactions compared to the year ended December 31, 2019 is primarily due to the decrease in demand for jet fuel from our airline operations as a result of the economic conditions caused by the COVID-19 pandemic.

Segment Reporting

Segment results are prepared based on our internal accounting methods described below, with reconciliations to consolidated amounts in accordance with GAAP. Our segments are not designed to measure operating income or loss directly related to the products and services included in each segment on a stand-alone basis.

Financial information by segment

(in millions)	Airline	Refinery	Intersegment Sales/Other	Consolidated
Year Ended December 31, 2021				
Operating revenue:	\$ 26,670	\$ 6,054		\$ 29,899
Sales to airline segment			\$ (492) ⁽¹⁾	
Exchanged products			(2,293) ⁽²⁾	
Sales of refined products			(40) ⁽³⁾	
Operating income (loss) ⁽⁴⁾	1,888	(2)		1,886
Interest expense, net	1,272	7		1,279
Depreciation and amortization	1,998	95	(95) ⁽⁴⁾	1,998
Restructuring charges	(19)	—		(19)
Total assets, end of period	70,360	2,099		72,459
Net fair value obligations, end of period ⁽⁵⁾	—	(497)		(497)
Capital expenditures	3,188	59		3,247
Year Ended December 31, 2020				
Operating revenue:	\$ 15,945	\$ 3,143		\$ 17,095
Sales to airline segment			\$ (214) ⁽¹⁾	
Exchanged products			(1,472) ⁽²⁾	
Sales of refined products			(307) ⁽³⁾	
Operating loss ⁽⁴⁾	(12,253)	(216)		(12,469)
Interest expense, net	928	1		929
Depreciation and amortization	2,312	99	(99) ⁽⁴⁾	2,312
Restructuring charges	8,219	—		8,219
Total assets, end of period	70,548	1,448		71,996
Net fair value obligations, end of period ⁽⁵⁾	—	(156)		(156)
Capital expenditures	1,879	20		1,899
Year Ended December 31, 2019				
Operating revenue:	\$ 46,910	\$ 5,558		\$ 47,007
Sales to airline segment			\$ (1,103) ⁽¹⁾	
Exchanged products			(3,963) ⁽²⁾	
Sales of refined products			(395) ⁽³⁾	
Operating income ⁽⁴⁾	6,542	76		6,618
Interest expense (income), net	327	(26)		301
Depreciation and amortization	2,581	99	(99) ⁽⁴⁾	2,581
Total assets, end of period	62,793	1,739		64,532
Net fair value obligations, end of period ⁽⁵⁾	—	(4)		(4)
Capital expenditures	4,880	56		4,936

⁽¹⁾ Represents transfers, valued on a market price basis, from the refinery to the airline segment for use in airline operations. We determine market price by reference to the market index for the primary delivery location, which is New York Harbor, for jet fuel from the refinery.

⁽²⁾ Represents value of products delivered under our exchange agreements, as discussed above, determined on a market price basis.

⁽³⁾ These sales were at or near cost; accordingly, the margin on these sales is *de minimis*.

⁽⁴⁾ Refinery segment operating results, including depreciation and amortization, are included within aircraft fuel and related taxes in our income statement.

⁽⁵⁾ The fair values of these obligations, which are related to renewable fuel compliance costs, are based on quoted market prices and other observable information and are classified as Level 2 in the fair value hierarchy. At December 31, 2021 we had a gross fair value obligation of \$593 million recorded in current liabilities on the balance sheet and related assets of \$96 million. Our obligation as of December 31, 2021 was calculated using the EPA's proposed Renewable Fuel Standard ("RFS") volume requirements for 2020 and 2021, which were issued in December 2021. The EPA has not finalized the compliance deadlines to retire our obligations for 2020 and 2021, but we expect those deadlines to be within one year of the effective date of the new RFS volume requirements. At December 31, 2020 we had a gross fair value obligation of \$172 million and related assets of \$16 million. At December 31, 2019 we had a gross fair value obligation of \$58 million and related assets of \$54 million. We expect to use the assets in settling a portion of our obligations.

NOTE 15. RESTRUCTURING

As a result of the unprecedented, widespread and persistent impact of the COVID-19 pandemic, demand for travel declined at a rapid pace in the March 2020 quarter and remained depressed throughout 2020, which had an unprecedented and materially adverse impact on our results of operations and financial position. Although demand improved throughout 2021, system-wide demand remained below pre-pandemic levels. During 2020, we implemented enhanced measures focusing on the safety of our customers and employees, while at the same time seeking to mitigate the impact on our financial position and operations and to position our business for recovery through actions including fleet retirements, offering voluntary retirement and separation programs and other decisions. These actions resulted in significant restructuring charges during 2020 which are summarized as follows:

Restructuring charges by category

(in millions)	Year Ended December 31, 2020
Fleet Retirements	\$ 4,409
Voluntary Programs and Other Employee Benefit Charges	3,409
Receivables and Other	401
Total Restructuring Charges	\$ 8,219

During 2021, we recorded \$19 million of net adjustments to decrease certain of these restructuring charges, representing changes in our estimates.

Fleet Retirements. As a result of the COVID-19 pandemic and our response, we made decisions to remove certain aircraft from active service and to early retire certain fleets. The table below summarizes the number of leased and owned aircraft being retired early, though we remain flexible and may decide to fly certain aircraft beyond their planned retirement date, to the extent supported by demand.

Fleet retirement by aircraft type

Fleet Type	Number of Aircraft	Planned Retirement During the Quarter Ended	Impairment-Related Charge (in millions)
777	18	December 2020	\$ 1,440
767-300ER	56	December 2025	1,084
717	91	December 2025	950
MD-90	26	June 2020	335
CRJ-200 ⁽¹⁾	125	December 2023	320
737-700	10	September 2020	223
A320	10	June 2020	57
MD-88 ⁽²⁾	47	June 2020	—
Total	383		\$ 4,409

⁽¹⁾ Certain of the CRJ-200 aircraft scheduled to be retired by the December 2023 quarter are operated for us by SkyWest Airlines under a revenue proration agreement.

⁽²⁾ During the March 2020 quarter, we recorded a \$22 million charge related to accelerating the planned retirement of the MD-88 fleet from December 2020 to June 2020. However, this amount was recorded in depreciation and amortization, rather than in restructuring charges, as it would have been incurred during 2020 prior to the onset of the COVID-19 pandemic.

These impairment and other related charges were recorded in restructuring charges in our income statement. These charges were calculated using Level 3 fair value inputs based primarily upon recent market transactions and third-party bids, which were corroborated with published pricing guides and our assessment of existing market conditions based on industry knowledge. Following the impairment charges, the aggregate net book value of these aircraft as of December 31, 2021 and December 31, 2020 was approximately \$340 million and \$500 million, respectively, with the reduction in 2021 primarily due to aircraft sales.

Voluntary Programs and Other Employee Benefit Charges. During 2020, in response to the COVID-19 pandemic, we announced the voluntary programs, which primarily applied to eligible U.S. merit, ground and flight attendant and pilot employees. We recorded \$3.4 billion in restructuring charges in our income statement associated with these programs and other employee benefit charges during 2020, including \$1.3 billion of special termination benefits. See Note 9, "Employee Benefit Plans," for more information on these voluntary programs.

Receivables and Other. Based on our assessment of collectability, during the year ended December 31, 2020, we recorded approximately \$100 million of reserves against outstanding receivables from LATAM, Grupo Aeroméxico, GOL, Virgin Atlantic and others.

NOTE 16. EARNINGS/(LOSS) PER SHARE

We calculate basic earnings/(loss) per share and diluted (loss) per share by dividing net income/(loss) by the weighted average number of common shares outstanding, excluding restricted shares. We calculate diluted earnings per share by dividing net income by the weighted average number of common shares outstanding plus the dilutive effect of outstanding share-based awards, including stock options, restricted stock awards and warrants. Antidilutive common stock equivalents excluded from the diluted earnings/(loss) per share calculation are not material. The following table shows our computation:

(in millions, except per share data)	Year Ended December 31,		
	2021	2020	2019
Net income/(loss)	\$ 280	\$ (12,385)	\$ 4,767
Basic weighted average shares outstanding	636	636	651
Dilutive effect of share-based awards	5	—	2
Diluted weighted average shares outstanding	641	636	653
Basic earnings/(loss) per share	\$ 0.44	\$ (19.49)	\$ 7.32
Diluted earnings/(loss) per share	\$ 0.44	\$ (19.49)	\$ 7.30

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and Chief Financial Officer, performed an evaluation of our disclosure controls and procedures, which have been designed to permit us to record, process, summarize and report, within time periods specified by the SEC's rules and forms, information required to be disclosed. Our management, including our Chief Executive Officer and Chief Financial Officer, concluded that the controls and procedures were effective as of December 31, 2021 to ensure that material information was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control

During the three months ended December 31, 2021, we did not make any changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies may deteriorate.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2021 using the criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in the 2013 Internal Control-Integrated Framework. Based on that evaluation, management believes that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by Ernst & Young LLP, an independent registered public accounting firm, which also audited our Consolidated Financial Statements for the year ended December 31, 2021. Ernst & Young LLP's report on our internal control over financial reporting is set forth below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Delta Air Lines, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Delta Air Lines, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Delta Air Lines, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income/(loss), cash flows and stockholders' equity for each of the three years in the period ended December 31, 2021, and the related notes and our report dated February 11, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitation of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Atlanta, Georgia
February 11, 2022

/s/ Ernst & Young LLP

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not Applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this item is set forth under the headings "Governance - Board Matters," "Proposal 1 - Election of Directors," and "Executive Compensation - Executive Officers" in our Proxy Statement to be filed with the Commission related to our 2022 Annual Meeting of Stockholders ("Proxy Statement"), and is incorporated by reference.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this item is set forth under the headings "Executive Compensation" and "Director Compensation" in our Proxy Statement and is incorporated by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information about the number of shares of common stock that may be issued under Delta's equity compensation plans as of December 31, 2021.

Equity compensation plan information

Plan Category	(a) No. of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights ⁽¹⁾	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights ⁽²⁾	(c) No. of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) ⁽³⁾
Equity compensation plans approved by securities holders	7,777,834	\$ 40.41	19,117,558
Equity compensation plans not approved by securities holders	—	—	—
Total	7,777,834	\$ 40.41	19,117,558

⁽¹⁾ Includes a maximum of 1,543,006 shares of common stock that may be issued upon the achievement of certain performance conditions under outstanding performance share awards as of December 31, 2021.

⁽²⁾ Includes performance share awards, which do not have exercise prices. The weighted average exercise price of outstanding options at December 31, 2021 was \$50.41.

⁽³⁾ Reflects shares remaining available for issuance under Delta's Performance Compensation Plan. If any shares of our common stock are covered by an award under the Plan that expires, is canceled, forfeited or otherwise terminates without delivery of shares (including shares surrendered or withheld for payment of taxes related to an award), then such shares will again be available for issuance under the Plan except for (1) any shares tendered in payment of an option, (2) shares withheld to satisfy any tax withholding obligation with respect to the exercise of an option or stock appreciation right ("SAR") or (3) shares covered by a stock-settled SAR or other awards that were not issued upon the settlement of the award. Because 2,938,646 shares of restricted stock remained unvested and subject to forfeiture as of December 31, 2021, these shares could again be available for issuance.

Other information required by this item is set forth under the heading "Share Ownership - Beneficial Ownership of Securities" in our Proxy Statement and is incorporated by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this item is set forth under the headings "Governance - Board Matters" and "Proposal 1 - Election of Directors" in our Proxy Statement and is incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this item is set forth under the heading "Proposal 3 - Ratification of the Appointment of Independent Auditors" in our Proxy Statement and is incorporated by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) (1). The following is an index of the financial statements required by this item that are included in this Form 10-K:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets—December 31, 2021 and 2020

Consolidated Statements of Operations for the years ended December 31, 2021, 2020 and 2019

Consolidated Statements of Comprehensive Income/(Loss) for the years ended December 31, 2021, 2020 and 2019

Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2021, 2020 and 2019

Notes to the Consolidated Financial Statements

(2). Financial Statement Schedules. Financial statement schedules are not included herein as the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the Consolidated Financial Statements and accompanying notes included in this Form 10-K.

- (3). Exhibit List.

The exhibits required by this item are listed below. The management contracts and compensatory plans or arrangements required to be filed as an exhibit to this Form 10-K are listed as Exhibits 10.14 through 10.23.

Note to Exhibits: Any representations and warranties of a party set forth in any agreement (including all exhibits and schedules thereto) filed with this Annual Report on Form 10-K have been made solely for the benefit of the other party to the agreement. Some of those representations and warranties were made only as of the date of the agreement or such other date as specified in the agreement, may be subject to a contractual standard of materiality different from what may be viewed as material to stockholders, or may have been used for the purpose of allocating risk between the parties rather than establishing matters as facts. Such agreements are included with this filing only to provide investors with information regarding the terms of the agreements, and not to provide investors with any other factual or disclosure information regarding the registrant or its business.

- 3.1(a) [Delta's Amended and Restated Certificate of Incorporation \(Filed as Exhibit 3.1 to Delta's Current Report on Form 8-K as filed on April 30, 2007\).*](#)
- 3.1 (b) [Amendment to Amended and Restated Certificate of Incorporation \(Filed as Exhibit 3.1 to Delta's Current Report on Form 8-K as filed on June 27, 2014\).*](#)
- 3.2 [Delta's Bylaws \(Filed as Exhibit 3.1 to Delta's Current Report on Form 8-K as filed on February 8, 2019\).*](#)
- 4.1 [Description of Registrant's Securities \(Filed as Exhibit 4.1 to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)

Delta is not filing any instruments evidencing any indebtedness because the total amount of securities authorized under any single such instrument does not exceed 10% of the total assets of Delta and its subsidiaries on a consolidated basis. Copies of such instruments will be furnished to the Securities and Exchange Commission upon request.

- 10.1(a) [Credit Agreement, dated as of April 19, 2018, among Delta Air Lines, Inc., as borrower, the lenders party thereto and JP Morgan Chase Bank, N.A., as administrative agent \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018\).*](#)
- 10.1(b) [Amendment No. 1 to Credit Agreement, dated as of June 29, 2020, among Delta Air Lines, Inc., the lenders party thereto, and JP Morgan Chase Bank, N.A., as administrative agent \(Filed as Exhibit 10.5 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020\).*](#)

- 10.1(c) [Amendment No. 2 to Credit Agreement, dated as of November 17, 2021, among Delta Air Lines, Inc., JPMorgan Chase Bank, N.A., as administrative agent and collateral agent, and the lenders party thereto.](#)
- 10.2(a) [364-Day Term Loan Credit Agreement, dated as of March 17, 2020, among Delta Air Lines, Inc., the lenders party thereto, and JP Morgan Chase Bank, N.A., as administrative agent \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020\).*](#)
- 10.2(b) [Amendment No. 1 to 364-Day Term Loan Credit Agreement, dated as of April 3, 2020, among Delta Air Lines, Inc., the lenders party thereto, and JP Morgan Chase Bank, N.A., as administrative agent \(Filed as Exhibit 10.4\(a\) to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020\).*](#)
- 10.2(c) [Amendment No. 2 to 364-Day Term Loan Credit Agreement, dated as of June 29, 2020, among Delta Air Lines, Inc., the lenders party thereto, and JP Morgan Chase Bank, N.A., as administrative agent \(Filed as Exhibit 10.4\(b\) to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020\).*](#)
- 10.3(a) [Payroll Support Program Agreement, dated as of April 20, 2020, between Delta Air Lines, Inc. and the United States Department of the Treasury \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020\).*](#)
- 10.3(b) [Warrant Agreement, dated as of April 20, 2020, between Delta Air Lines, Inc. and the United States Department of the Treasury \(Filed as Exhibit 10.2 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020\).*](#)
- 10.3(c) [Form of Warrant to Purchase Common Stock \(Filed as Exhibit 10.4\(b\) to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)
- 10.4(a) [Payroll Support Program Extension Agreement, dated as of January 15, 2021, between Delta Air Lines, Inc. and the United States Department of the Treasury \(Filed as Exhibit 10.7 to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)
- 10.4(b) [Warrant Agreement, dated as of January 15, 2021, between Delta Air Lines, Inc. and the United States Department of the Treasury \(Filed as Exhibit 10.8\(a\) to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)
- 10.4(c) [Form of Warrant to Purchase Common Stock \(Filed as Exhibit 10.8\(b\) to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)
- 10.5(a) [Payroll Support Program 3 Agreement, dated as of April 23, 2021, between Delta Air Lines, Inc. and the United States Department of the Treasury \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021\).*](#)
- 10.5(b) [Warrant Agreement, dated as of April 23, 2021, between Delta Air Lines, Inc. and the United States Department of the Treasury \(including Form of Warrant to Purchase Common Stock\) \(Filed as Exhibit 10.2 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021\).*](#)
- 10.6 [Term Loan Credit and Guaranty Agreement, dated as of September 23, 2020, among Delta, SkyMiles IP Ltd., the guarantors party thereto, Barclays Bank PLC, as administrative agent, U.S. Bank National Association, as collateral administrator, and the lenders party thereto \(Filed as Exhibit 10.1 to Delta's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 25, 2020\).*](#)
- 10.7 [Anchor Tenant Agreement dated as of December 9, 2010 between JFK International Air Terminal LLC and Delta Air Lines, Inc. \(Filed as Exhibit 10.4 to Delta's Annual Report on Form 10-K for the year ended December 31, 2010\).*](#)
- 10.8 [Amended and Restated Agreement of Lease by and between The Port Authority of New York and New Jersey and Delta Air Lines, Inc., dated as of September 13, 2017 \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017\).*](#)

- 10.9(a) [Airbus A330-900neo Aircraft and A350-900 Aircraft Purchase Agreement dated as of November 24, 2014 between Airbus S.A.S and Delta Air Lines, Inc. \(Filed as Exhibit 10.9 to Delta's Annual Report on Form 10-K for the year ended December 31, 2014\). */**](#)
- 10.9(b) [Amendment No. 3, dated May 10, 2017, to Airbus A330-900 Aircraft and A350-900 Aircraft Purchase Agreement dated as of November 24, 2014 between Airbus S.A.S. and Delta Air Lines, Inc. \("Amendment No. 3"\) \(Filed as Exhibit 10.2\(a\) to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017\). */**](#)
- 10.9(c) [Letter Agreements, dated May 10, 2017, relating to Amendment No. 3 \(Filed as Exhibit 10.2\(b\) to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017\). */**](#)
- 10.9(d) [Amendment No. 8, dated as of October 30, 2018, to Airbus A330-900 Aircraft and A350-900 Aircraft Purchase Agreement dated as of November 24, 2014 between Airbus S.A.S. and Delta Air Lines, Inc. \("Amendment No. 8"\) \(Filed as Exhibit 10.7\(d\) to Delta's Annual Report on Form 10-K for the year ended December 31, 2018\). */**](#)
- 10.9(e) [Letter Agreements, dated as of October 30, 2018, relating to Amendment No. 8 \(Filed as Exhibit 10.7\(e\) to Delta's Annual Report on Form 10-K for the year ended December 31, 2018\). */**](#)
- 10.9(f) [Amendment No 11, dated as of July 30, 2020 to Airbus A330-900 Aircraft and A350-900 Aircraft Purchase Agreement, dated as of November 24, 2014 between Delta and Airbus S.A.S. \(Filed as Exhibit 10.1\(a\) to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020\). */**](#)
- 10.9(g) [Amended and Restated Letter Agreement No. 1, dated as of July 30, 2020, relating to Airbus A330-900 Aircraft and A350-900 Aircraft Purchase Agreement dated as of November 24, 2014 \(Filed as Exhibit 10.1\(b\) to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020\). */**](#)
- 10.9(h) [Amended and Restated Letter Agreement No. 4, dated as of July 30, 2020, relating to Airbus A330-900 Aircraft and A350-900 Aircraft Purchase Agreement dated as of November 24, 2014** \(Filed as Exhibit 10.1\(c\) to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020\). */**](#)
- 10.10(a) [Airbus A321neo Aircraft Purchase Agreement dated as of December 15, 2017 between Airbus S.A.S. and Delta Air Lines, Inc. \(Filed as Exhibit 10.10 to Delta's Annual Report on Form 10-K for the year ended December 31, 2017\). */**](#)
- 10.10(b) [Amendment No. 2, dated as of July 30, 2020 to Airbus A321neo Aircraft Purchase Agreement, dated as of December 15, 2017 between Delta and Airbus S.A.S. \(Filed as Exhibit 10.2\(a\) to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020\). */**](#)
- 10.10(c) [Amended and Restated Letter Agreement No. 3, dated as of July 30, 2020, relating to Airbus A321neo Aircraft Purchase Agreement, dated as of December 15, 2017 between Delta and Airbus S.A.S. \(Filed as Exhibit 10.2\(b\) to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020\). */**](#)
- 10.10(d) [Amendment No. 3, dated April 22, 2021, to Airbus A321neo Aircraft Purchase Agreement, dated as of December 15, 2017, between Airbus S.A.S. and Delta Air Lines, Inc. \("Amendment No. 3"\) \(Filed as Exhibit 10.3\(a\) to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021\). */**](#)
- 10.10(e) [Amended and Restated Letter Agreements related to Amendment No. 3, dated April 22, 2021 \(Filed as Exhibit 10.3\(b\) to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021\). */**](#)
- 10.10(f) [Amendment No. 4, dated August 20, 2021, to Airbus A321neo Aircraft Purchase Agreement, dated as of December 15, 2017, between Airbus S.A.S. and Delta Air Lines, Inc. \("Amendment No. 4"\) \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2021\). */**](#)
- 10.10(g) [Amended and Restated Letter Agreements No. 3 related to Amendment No. 4, dated August 20, 2021 \(Filed as Exhibit 10.2 to Delta's Quarterly Report on Form 10-Q for the quarter ended September 30, 2021\). */**](#)

- 10.11 [Framework Agreement, dated as of September 26, 2019, by and between LATAM Airlines Group S.A. and Delta Air Lines, Inc. \(Filed as Exhibit 10.1 to Delta Quarterly Report on Form 10-Q for the quarter ended September 30, 2019\). */**](#)
- 10.12 [Delta Air Lines, Inc. Performance Compensation Plan \(Filed as Exhibit 10.2 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016\).*](#)
- 10.13(a) [Delta Air Lines, Inc. Officer and Director Severance Plan, as amended and restated as of June 1, 2016 \(Filed as Exhibit 10.3 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016\).*](#)
- 10.13(b) [Amendment to Delta Air Lines, Inc. Officer and Director Severance Plan, as amended and restated as of June 1, 2016 \(Filed as Exhibit 10.15\(b\) to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)
- 10.14 [Description of Certain Benefits of Members of the Board of Directors and Executive Officers.](#)
- 10.15(a) [Delta Air Lines, Inc. 2019 Long-Term Incentive Program \(Filed as Exhibit 10.16 to Delta's Annual Report on Form 10-K for the year ended December 31, 2018\).*](#)
- 10.15(b) [Model Award Agreement for the Delta Air Lines, Inc. 2019 Long-Term Incentive Program \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019\).*](#)
- 10.16(a) [Delta Air Lines, Inc. 2020 Long-Term Incentive Program \(Filed as Exhibit 10.14 to Delta's Annual Report on Form 10-K for the year ended December 31, 2019\).*](#)
- 10.16(b) [Model Award Agreement for the Delta Air Lines, Inc. 2020 Long-Term Incentive Program \(Filed as Exhibit 10.2 to Delta's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020\).*](#)
- 10.17 [Delta Air Lines, Inc. Management Incentive Plan \(Filed as Exhibit 10.21 to Delta's Annual Report on Form 10-K for the year ended December 31, 2020\).*](#)
- 10.18 [Model Award Agreement for the Delta Air Lines, Inc. 2021 Long-Term Incentive Program \(Filed as Exhibit 10.1 to Delta's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021\).*](#)
- 10.19 [Delta Air Lines, Inc. Restoration Long Term Disability Plan \(Filed as Exhibit 10.24 to Delta's Annual Report on Form 10-K for the year ended December 31, 2011\).*](#)
- 10.20 [Offer letter, dated as of May 14, 2021, between Delta Air Lines, Inc. and Dan Janki \(including addendum\) \(Filed as Exhibit 10.4 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021\).*](#)
- 10.21 [Terms of 2021 Restricted Stock Awards for Non-Employee Directors \(Filed as Exhibit 10.5 to Delta's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021\).*](#)
- 21.1 [Subsidiaries of the Registrant.](#)
- 23.1 [Consent of Ernst & Young LLP.](#)
- 31.1 [Rule 13a-14\(a\)/15d-14\(a\) Certification of Chief Executive Officer.](#)
- 31.2 [Rule 13a-14\(a\)/15d-14\(a\) Certification of Chief Financial Officer.](#)
- 32 [Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act 2002.](#)

101.INS	XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	The cover page from this Annual Report on Form 10-K for the year ended December 31, 2021 formatted in Inline XBRL (included in Exhibit 101)

* Incorporated by reference.

** Portions of this exhibit have been omitted as confidential information.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 11th day of February, 2022.

DELTA AIR LINES, INC.

By: /s/ Edward H. Bastian
Edward H. Bastian
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on the 11th day of February, 2022 by the following persons on behalf of the registrant and in the capacities indicated.

Signature	Title
<u>/s/ Edward H. Bastian</u> Edward H. Bastian	Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Daniel C. Janki</u> Daniel C. Janki	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
<u>/s/ William C. Carroll</u> William C. Carroll	Senior Vice President - Controller (Principal Accounting Officer)
<u>/s/ Francis S. Blake</u> Francis S. Blake	Chairman of the Board
<u>/s/ Ashton B. Carter</u> Ashton B. Carter	Director
<u>/s/ David G. DeWalt</u> David G. DeWalt	Director
<u>/s/ William H. Easter III</u> William H. Easter III	Director
<u>/s/ Christopher A. Hazleton</u> Christopher A. Hazleton	Director
<u>/s/ Michael P. Huerta</u> Michael P. Huerta	Director
<u>/s/ Jeanne P. Jackson</u> Jeanne P. Jackson	Director
<u>/s/ George N. Mattson</u> George N. Mattson	Director
<u>/s/ Sergio A.L. Rial</u> Sergio A.L. Rial	Director
<u>/s/ David S. Taylor</u> David S. Taylor	Director
<u>/s/ Kathy N. Waller</u> Kathy N. Waller	Director