About This Report

American Airlines is committed to providing regular and transparent information about our strategies and performance on the environmental, social and governance (ESG) issues that are most important to our company and stakeholders. This ESG report includes a discussion of American's approach to managing our most material ESG issues, along with highlights of our progress and performance in 2021. Unless noted otherwise, performance data is for the 12 months ending Dec. 31, 2021.

Adhering to best practices for ESG disclosure, this report also aligns with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and the standard for the airline industry developed by the Sustainability Accounting Standards Board (SASB). We view both of these reporting frameworks as important indicators of the ESG issues that investors and others consider most material. Regarding forward-looking statements, please see the last page of this report.

About American Airlines Group

American's purpose is to care for people on life's journey. Shares of American Airlines Group Inc. trade on Nasdaq under the ticker symbol AAL, and the company's stock is included in the S&P 500. Learn more about what's happening at American by visiting news.aa.com and connect with American on Twitter @AmericanAir and at Facebook.com/AmericanAirlines.

As the world begins to emerge from the pandemic and reconnect, American Airlines is committed to living our purpose to care for people on life's journey. People want to explore and make connections again, while businesses recognize the importance of reestablishing relationships, and they are turning to American to make that possible. To do so, we are focused on running a reliable operation and returning American to profitability. And, thanks to the hard work and dedication of our team, we are making strong progress on both.

Our environmental, social and governance (ESG) efforts are a key part of American's success today and critical to building a resilient airline that will thrive forever. At the core, we are a people business, relying on our 127,000 team members to fly millions of customers each year to the important moments in their lives. Operating every flight safely and protecting the health and well-being of our team members and customers is the starting point for everything we do at American.

We're also focused on ensuring we have the talent our company needs to grow and compete. Doing so requires recruiting and advancing the best talent and creating a culture in which every one of our team members is valued, empowered and has the opportunity to grow at American. To make that a reality, we are prioritizing diversity, equity and inclusion (DEI) throughout our organization.

I'm proud to say that in 2021 we met or exceeded the goals we set to address our largest gaps in leadership representation. We will continue to track representation closely, because we know what gets measured gets done. In 2022, we included DEI goals in the annual short-term incentive plan for our entire leadership team, encouraging all managers and above to be accountable for our performance.

Equally essential to our long-term success is preparing our airline to thrive in a carbon-constrained future. To address climate change, American continues to strive to achieve net zero emissions by 2050 by running a more fuel-efficient operation, with more fuel-efficient aircraft, powered by low-carbon fuel. In April 2022, we became the first airline in the world to receive validation from the Science Based Targets initiative that our intermediate emissions-reduction target complies with its rigorous criteria. In 2021, we used over 1.4 million gallons of sustainable aviation fuel (SAF), making us the only airline in the United States to report using more than 1 million gallons of SAF. We also finalized agreements that bring our total SAF purchase commitment to date to over 120 million gallons.

As a result of these and other efforts, in 2021 American was included in the Dow Jones Sustainability North America Index for the first time — the only passenger airline to be included. American is also proud to continue our support for the United Nations Global Compact's Ten Principles, and our ESG efforts are integral to meeting that commitment.

I am honored to add to the strong ESG foundation we have laid at American Airlines and to have the opportunity to support our incredible team as we build an even brighter future.

Robert Isom | Chief Executive Officer

June 2022


American

The last two years have brought enormous change and disruption to our industry, economy and the world. More than ever, rigorous management of environmental, social and governance (ESG) risks and opportunities is critical to the success of American Airlines and to the health of our planet. We have long recognized the importance of these issues and have developed an integrated and transparent approach to ESG management, measurement and reporting. That said, there's always room for improvement, and we continue to look to best practices within and outside our industry as we refine and strengthen our policies, practices and disclosures.

Our Priority ESG Issues

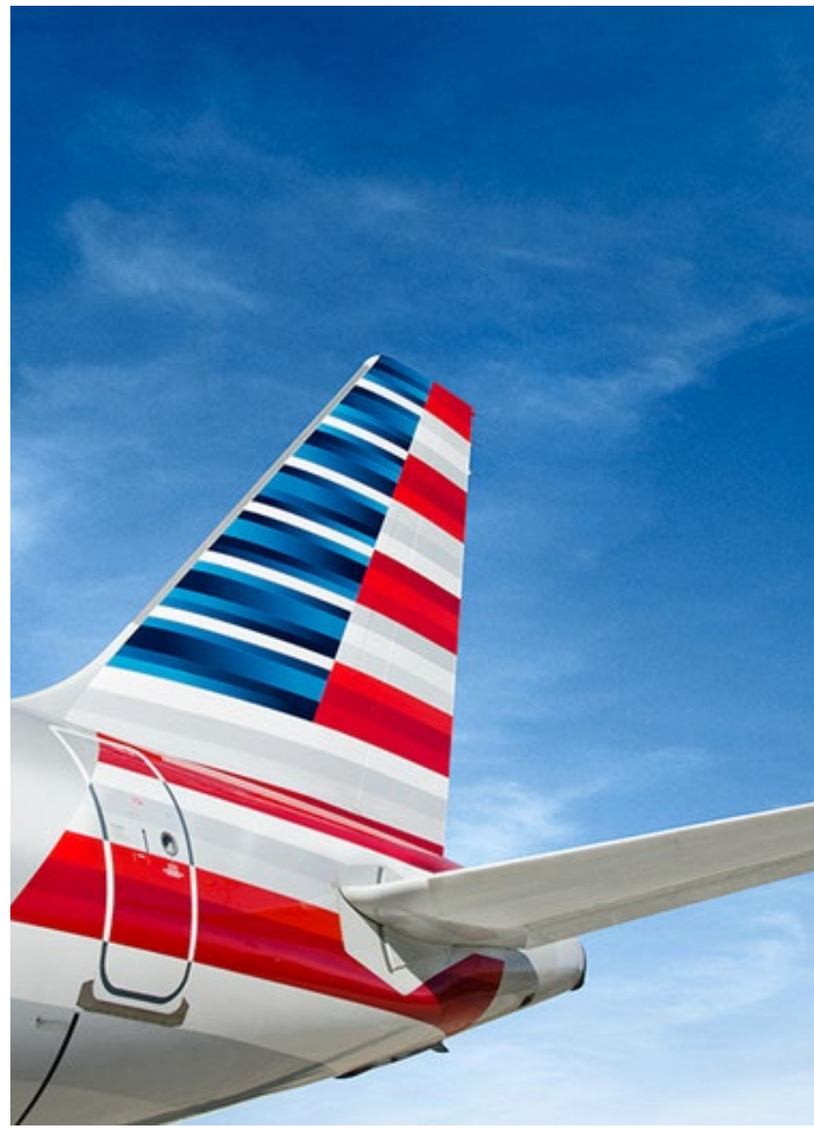
Our ESG strategy is focused on the topics that are most important to our company and our stakeholders. We periodically conduct formal ESG materiality assessment processes, most recently in 2018, that serve as the foundation of our analysis of areas of risk and opportunity. And, through ongoing engagement across our company and with a broad range of external stakeholders, we validate and, as needed, refine our assessment based on the input we receive and changes in our operating environment.

We also continually monitor ESG trends, standards and practices relevant to our industry, and look to external reporting frameworks, including SASB and TCFD, as key indicators of investor perspectives on the most significant ESG risks and opportunities for our company. In 2021, these activities affirmed our focus on the following priority issues:

- Climate change and fuel efficiency
- Customer satisfaction and operational performance
- Diversity, equity and inclusion (DEI)
- Safety (including flight safety and team member health and safety)
- Team member and labor relations

Driving progress across all these issues is a key objective for American. At the same time, we recognize that the business landscape is evolving rapidly and that we must be ready to address new areas of concern if and when they emerge. We will continue to seek stakeholder input while also closely monitoring emerging ESG practices and trends.

In 2021, American joined the United Nations Global Compact, the world's largest corporate sustainability effort. The index on page 53 guides stakeholders on where to find information on our efforts to implement the Global Compact's Ten Principles.



Management and Governance

Since ESG issues touch nearly every aspect of our business, day-to-day management of individual elements is distributed throughout our operations and functions. American's Managing Director for ESG is responsible for guiding and coordinating our activities at the executive level. She receives guidance and feedback from a cross-functional and cross-operational group of senior leaders with responsibility for regularly assessing the effectiveness of our ESG strategy, its implementation and further integration of sustainability into our company strategy and operations.

At the Board level, the Corporate Governance, Public Responsibility and Safety (CGPRS) Committee has primary responsibility for overseeing ESG efforts. The CGPRS Committee is regularly updated on the company's efforts related to sustainability and to addressing climate change. (See *A Director's View on ESG* on page 6.)

Climate-related governance

Because climate change is a pressing challenge for our company and our planet, American takes a coordinated approach to ensuring we have robust governance of climate-related risks and opportunities. It begins with Board-level oversight and accountability and extends to our day-to-day operations.

American's Board oversees our climate strategy as part of an enterprise-wide approach to risk management. Either as a full Board or through one or more of its committees, the Board reviews management's strategy and its assessment of material risks affecting our business. This includes potential climate-related risks.

In 2022, we formally assigned Chief Executive Officer Robert Isom, who also serves on our Board of Directors, with responsibility for oversight of American's climate change strategy. In addition, climate-related issues are a standing agenda item in the CGPRS Committee's quarterly meetings. The full Board receives updates as well at least three times per year.

At the management level, responsibility for climate-related issues is embedded in senior roles across our company. For example, the Airport Operations team does resiliency planning for more frequent and severe weather events; our Fuel Procurement team works to secure cost-competitive supplies of sustainable aviation fuel (SAF); and our Flight Operations and Fleet Engineering teams are focused on improving fuel efficiency in the air and on the ground. Our Climate Change Steering Committee — which is led by an Executive Vice President and includes representatives from Airport Operations, Flight Operations, Technical Operations, Cargo, Finance, Safety, People and Communications, Legal, Government Affairs and Investor Relations — provides guidance across these efforts. And American's Managing Director of ESG is responsible for developing and coordinating the company's overall climate strategy and driving its implementation.

Public Policy and Political Contributions

Political, legislative and regulatory decisions can play an important role in American's success, and we have adopted policies that guide our participation in these processes. Reflecting best practices, our Statement on Public Policy Engagement and Political Participation precludes American from using corporate funds for contributions to candidates, political party committees and political action committees. Our Board reviews this statement annually and last approved a revision in January 2022.

We do not use corporate funds for the election-eering activities that the Supreme Court allowed in *Citizens United*. On the rare occasion when we do use corporate funds to contribute to a state or local ballot initiative or a 501(c)(4) organization, we have committed to disclose that contribution. In 2021, American did not make any political contributions.

The CGPRS Committee oversees the company's major advocacy priorities and activities, political contributions and principal trade association memberships. For example, we have committed to aligning our lobbying efforts with the priorities and goals of the Paris Agreement, the international treaty on climate change. In 2022, we will also assess our trade groups' alignment with this agreement and include that in our reporting.

IN CONVERSATION:

A Director's View on ESG

Sue Kronick is the former Vice Chairman of Macy's, Inc., and has served on the American Airlines Board of Directors since 2015. In early 2022, she shared her perspectives on ESG as an independent director and Chair of the CGPRS Committee.

How do you view ESG in the context of the other priorities over which the Board has oversight?

ESG is an important part of American's long-term strategy. We don't look at ESG and other strategic priorities as either/or decisions. The health of people and planet are not separate from the financial health of our company.

Can you provide an example?

Let me give you two examples. More than 90% of American's total carbon footprint comes from jet fuel, so our fleet renewal program and our work to run our flight operations more efficiently are an absolute win-win. It's the same with DEI. The company that wins is the company that has the best talent, and DEI is about having access to the best talent available. If you create an environment that combines empathy and action, where people with different perspectives and experiences can come together and move quickly and in concert, you get better decision-making across the board.

How is your committee working to drive progress on ESG at American?

You have to examine performance, and you have to do that in a consistent way. The committee is deeply engaged on our climate strategy and receives regular updates about progress toward our goals and data on our performance. It's the same with safety, which is the backbone of American, as well as DEI. This year, we added DEI metrics to the company's management compensation plan, which is important because it clearly signals where the organization stands and propels progress.

Importantly, the committee is trying to provide oversight in a way that is not boilerplate. We are looking for management to talk to us about challenges and how they're working to find solutions. Even if we miss our goals, we can dig into why and what it's going to take to correct course. A strong safety culture — which we have at American — depends on zero blame, only learning. The same goes for other aspects of ESG.

What does corporate leadership on ESG require?

There are categories of decision-making where the information and data aren't perfect, but even with uncertainty, you can and must make decisions. That doesn't mean you operate just on instinct or without the facts, but you try innovative approaches with the best information you have. Some will fail, some will be successful — but progress depends on thoughtful action.

But one courageous company — or even several companies — is not enough to move the market or the world. We need to build a cohort of leaders who are willing to work together and act boldly. Take climate, for example: We need the environmental and scientific communities, but we also need the business sector and government to step up. For our part at American, we recognize the urgency of climate change and that for our business — and for our customers, shareholders and team members — it is in our interest to help find solutions, working with others both within and outside our industry. Leadership requires thinking on a collective level, not solely an enterprise level.

Our ESG Goals

CLIMATE CHANGE AND FUEL EFFICIENCY

Goal	Target Year	2021 Progress
Receive validation from the Science Based Targets initiative (SBTi) for our 2035 greenhouse gas (GHG) emissions reduction goal	2021	Received validation in April 2022
Achieve absolute reduction of 50 million gallons of jet fuel from fuel-efficiency initiatives	2025	Ahead of goal due to pandemic-related schedule reduction and new aircraft efficiency initiatives
Source 2.5 million gigajoules (GJs) of cost-competitive renewable energy	2025	1.35 million GJs of electricity from renewable sources and from SAF since 2019
Replace 10% of our jet fuel with SAF	2030	1.4 million gallons used, 0.05% of total
Reduce GHG emissions intensity by 45%	2035	*SBTi goal approved in 2022*
Reduce Scope 2 emissions by 40%	2035	*SBTi goal approved in 2022*
Achieve net zero emissions	2050	Improved fuel efficiency by 10.2% compared with 2013, avoiding 19 million metric tons of CO_2

SAFETY MANAGEMENT

Goal	Target Year	2021 Progress
Maintain the highest passenger safety standards with no customer injuries	Ongoing	One serious customer injury due to turbulence
Reduce on-the-job team member injuries	Ongoing	Injuries increased but remained below 2019 levels
Reduce aircraft ground damage	Ongoing	Regional carriers achieved this goal; the mainline aircraft ground damage rate increased

TEAM MEMBERS AND DIVERSITY, EQUITY AND INCLUSION

Goal	Target Year	2021 Progress
Increase Black representation at the director and above levels by 50%	2021	Exceeded goal
Retain at least 90% of Black leaders at the director and above levels	2021	Achieved goal
Increase Black representation among senior managers by 20%	2021	Achieved goal
Retain 75% of Black management and support staff	2021	Exceeded goal
Increase Black representation at the manager and above levels by 15%	2022	*Goal set in 2022*
Retain at least 90% of people of color at the manager and above levels	2022	*Goal set in 2022*

CUSTOMER SATISFACTION AND OPERATIONAL PERFORMANCE

Goal	Target Year	2021 Progress
Improve Likelihood to Recommend scores	Ongoing	Achieved goal with 1.2 point improvement over 2020
Achieve improved on-time performance percentage, completion factor percentage and mishandled baggage rate (MBR)	Ongoing	Improved completion factor MBR rose and on-time performance fell slightly, due largely to the significant increase in flights and travelers

ADDRESSING CLIMATE CHANGE

At American, we know that the challenge of climate change is acute and imminent, and we recognize our industry's contribution to it. We believe we have an obligation to our customers, team members, shareholders and the communities we serve to transition to operating a low-carbon airline. To make that happen, we have set aggressive climate goals that match the seriousness of the challenge, and we've laid out a clear plan for how we will achieve them.

Our aim is to achieve net zero greenhouse gas (GHG) emissions by 2050, and we have set an intermediate target to drive progress toward that goal. In April 2022, we received validation from the Science Based Targets initiative (SBTi) that our intermediate 2035 GHG reduction target complies with the SBTi criteria. That makes us the first airline globally to achieve this milestone.

American's science-based target is to reduce carbon intensity, which means GHG emissions per unit of passenger and cargo payload that the airline transports, by 45% by 2035, compared to a 2019 baseline. In setting this goal, we are committing to reduce the intensity associated with the entire life cycle emissions of jet fuel. This includes both direct emissions (Scope 1) — which are primarily from the jet fuel used in flight — and the emissions from the production of the jet fuel the airline uses (Scope 3).

American has also committed to reduce by 40% the emissions from the production of the electricity we purchase (Scope 2) by 2035, also with a 2019 baseline. Scope 2 emissions are a small part of our overall GHG emissions, but an important focus for reducing the impacts of global warming.

We are also engaging with and supporting efforts to drive broader action on climate across the public and private sectors. For example, American is a signatory to the Business Ambition for 1.5°C campaign, and we joined the United Nations-backed Race to Zero. We are also an anchor partner, together with other leading companies, of Breakthrough Energy Catalyst (see page 13). We know that our ability to achieve our climate goals depends on other actors — within the aviation industry and beyond it — and we intend to be a leader in helping drive the operational, policy and technological changes needed to advance the transition to a low-carbon economy.

In 2022, American became the first airline globally to receive validation from the Science Based Targets initiative (SBTi) that our 2035 GHG reduction target complies with the SBTi criteria.

OUR CLIMATE GOALS

ACHIEVED

Received SBTi validation

FOR OUR 2035 GHG EMISSIONS REDUCTION GOAL

IN PROGRESS

ACHIEVE ABSOLUTE REDUCTION OF
50m gallons of jet fuel from fuel-efficiency initiatives
BY 2025

SOURCE
2.5m GJs of cost-competitive renewable energy
BY 2025

REPLACE
10% of our jet fuel with SAF
BY 2030

REDUCE
GHG emissions intensity by 45%
BY 2035

REDUCE
Scope 2 emissions by 40%
BY 2035

Achieve net zero emissions
BY 2050

Our Climate Strategy

More than 90% of American's total carbon footprint, including our Scope 3 emissions, comes from our use of jet fuel, so our strategy for reaching net zero emissions by 2050 is focused on running an ever more fuel-efficient operation, with more fuel-efficient aircraft, powered by low-carbon fuel.

To do so, we are working to drive progress across several key levers — some of which we have the ability to influence directly, and some of which will require action and collaboration within our industry, across sectors and by policymakers. (See chart on the following page.)

Integrating climate risk into our strategy and investments

Underpinning our strategy is the in-depth analysis we conducted in 2020 — and updated and expanded in 2022 — to understand the climate-related risks and opportunities facing our company. We studied their potential impacts on our business, operations and the broader environment in which we work under different warming scenarios.

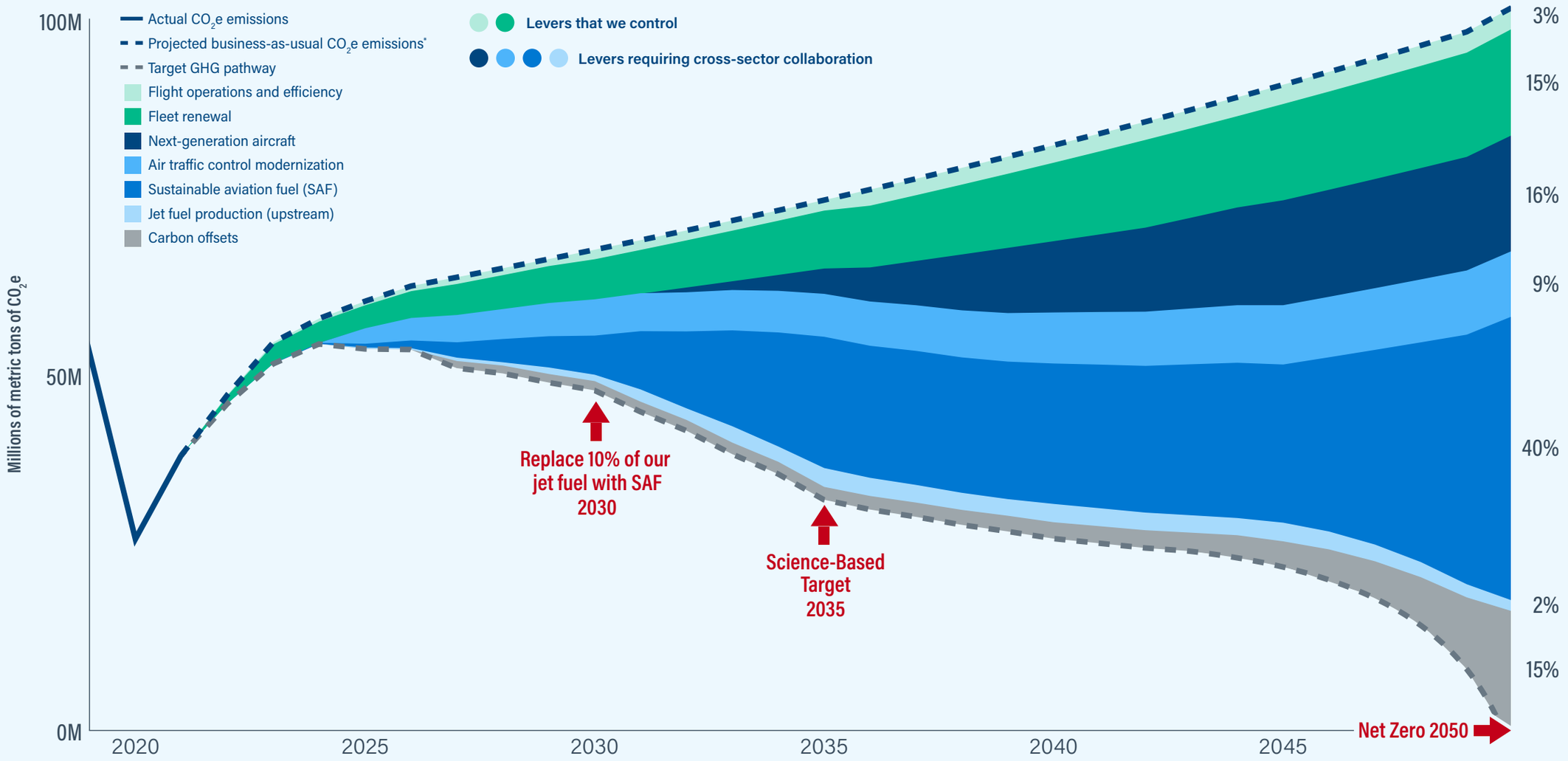
While there is considerable uncertainty about the likelihood and operational and financial consequences of these scenarios, the direction and potential magnitude of climate-related risk is clear. Our strategy is designed to position American to anticipate, mitigate and respond to climate-related risks and to thrive in an uncertain future. It includes making targeted investments to address the demonstrated and high-probability risks associated with climate change that may affect our business, such as the impact of extreme heat on aircraft or of sea level rise at our major hubs. It also includes strategic investments, based on the best available information, to enable American to adapt quickly and be successful if lower-probability or higher-consequence risks manifest. As a result, another core part of our strategy is making ongoing investments in deepening our understanding and analysis of climate-related risks and opportunities to inform our evolving approach. For a detailed discussion of our climate-risk assessment process and findings, see page 22.

As part of our ongoing analysis of transition climate risks and opportunities, we incorporate a price on carbon when estimating American's potential obligations under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), European Union Emissions Trading System and other possible regulatory programs that may impact our operations. The carbon prices used for these estimates are based on cost projections from respected external sources. We have also begun incorporating a shadow price on carbon in evaluating investments in our fleet and fuel efficiency initiatives, as well as sustainable aviation fuel (SAF) purchases.

Our strategy for reaching net zero emissions by 2050 is focused on running an ever more fuel-efficient operation, with more fuel-efficient aircraft, powered by low-carbon fuel.

AMERICAN'S DIRECTIONAL PATHWAY TO NET ZERO IN 2050

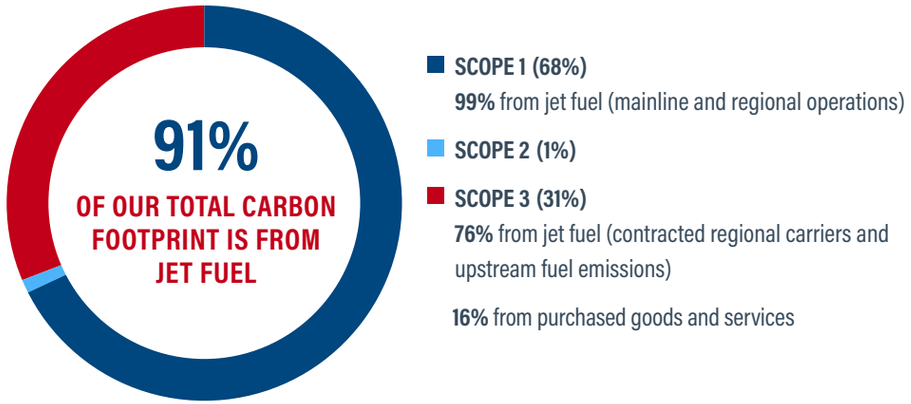
Updated April 2022



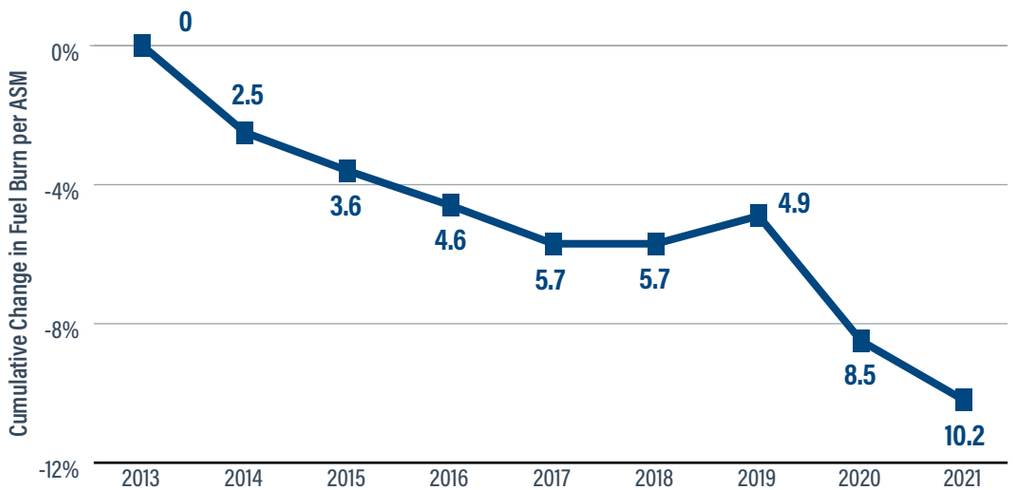
* Includes Scopes 1 and 2, as well as Scope 3 Category 3

OUR CARBON FOOTPRINT IN 2021

Total emissions (Scopes 1, 2 and 3): 42 million metric tons of carbon dioxide equivalent (CO_2e)



REDUCING FUEL USE AND GHG EMISSIONS IN OUR FLEET

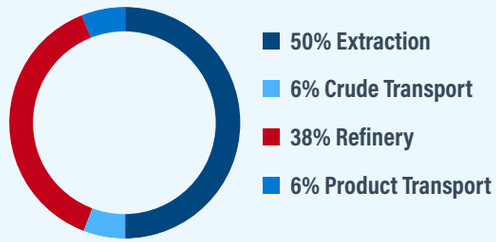


Engaging With Our Fuel Suppliers on Upstream Emissions

We know that tackling climate change requires companies like ours to address not only the GHG emissions that stem from our own operations (Scopes 1 and 2), but also those associated with our supply chain and other Scope 3 emissions.

About 76% of American's Scope 3 emissions are from jet fuel, including the fuel used by our contracted regional carriers and the upstream emissions from our fuel suppliers. These upstream "well-to-pump" emissions — including extraction, crude transport, refining and product transport — constitute approximately 20% of petroleum jet fuel life cycle emissions.* To move the needle on our Scope 3 emissions, we know we must work with our fuel suppliers to better understand the steps they are taking to reduce emissions within their operations.

ESTIMATED INDUSTRY UPSTREAM WELL-TO-PUMP JET FUEL EMISSIONS*



In 2021, we initiated a process to engage with our key fuel suppliers, with the initial objectives of improving data quality and our reporting on their upstream emissions, as well as understanding their resiliency to the physical risks from climate change.

Also in 2021, we improved our CDP Supplier Engagement score to an "A–". In 2022, we became the first major U.S. airline to join the CDP Supply Chain program to help us develop a more detailed understanding of our Scope 3 emissions.

* LCA of Current & Future GHG Emissions from Petroleum Jet Fuel, Massachusetts Institute of Technology Laboratory for Aviation and the Environment. Estimates are for 2020; see slide on page 5 of linked document.

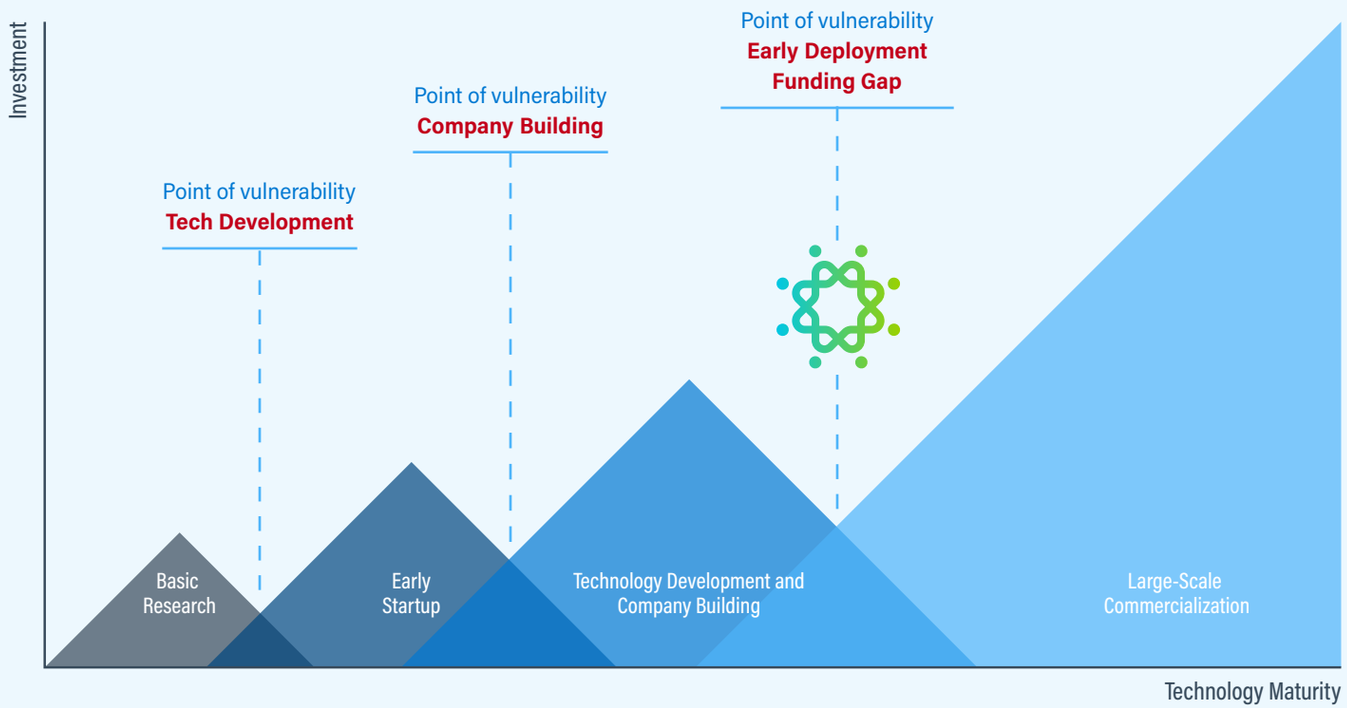
Collaborating on Climate-Related Technology and Policy Solutions

American is actively working to reduce our carbon footprint, but we recognize that we cannot achieve our ambitious goal of net zero carbon emissions by 2050 on our own. Given the nature of the climate challenge and of our industry, transitioning to low- and no-carbon aviation depends on innovations in airframe, engine and fuel technologies, combined with effective policies that drive those innovations and the necessary investments to bring them to scale. American is committed to collaborating across the public and private sectors to help advance the policy and technology solutions needed to get to net zero.

One way we are doing that is as an anchor partner of Breakthrough Energy Catalyst (Catalyst), a groundbreaking program within the larger Breakthrough Energy network that is working to accelerate the development and commercialization of critical technologies for decarbonization. Catalyst's initial focus is on SAF, green hydrogen, long-duration energy storage and direct air capture. It is bringing together partners from across the public and private sectors, using a creative, blended financing approach that combines philanthropic, below-market and low-cost capital to make targeted investments to scale and reduce the "green premium" of new decarbonization technologies. American has committed to invest $100 million in the effort. Catalyst also brings together experts to develop policy recommendations for accelerating innovation and encouraging the widespread adoption of clean technologies.

Climate technologies moving out of the lab and into the market often struggle to access capital due to higher risk, lower demand and lesser returns than exist for more mature solutions. Catalyst helps finance first-of-their-kind projects that deploy these innovative climate technologies, with the aim of reducing risks, driving down costs and creating a smoother pathway to widespread market adoption.

Breakthrough Energy Catalyst



Fleet Renewal

A key way to reduce our jet fuel usage — and therefore our carbon footprint — is to replace older, less fuel-efficient aircraft with new, more efficient ones. Since 2013, American has invested more than $24 billion in modernizing our fleet by taking delivery of more than 600 new aircraft. Over the same period, we retired 670 older, less fuel-efficient planes through the end of 2021. The result: American has the youngest mainline fleet among U.S. network carriers, with an average age of 11.3 years old. At the end of 2021, 55% of American's mainline fleet was 10 years old or less.

New aircraft, such as the Boeing 787 Dreamliner, Boeing 737 MAX and the Airbus A321neo, which incorporate the latest engine and airframe technologies, made up 17% of our total available seat miles (ASMs) in 2021. Approximately $3.6 billion, or 12% of our revenue during the year, stemmed from passengers flying on the market-leading, fuel-efficient aircraft in our fleet. The Boeing 737 MAX 8 reduces fuel use and CO_2 emissions by an additional 14% over today's other most fuel-efficient single-aisle airplanes — and 20% better than the original 737 next generation aircraft when they first entered service.[1] The Airbus A320neo family delivers 20% fuel savings and CO_2 reduction compared to previous generation Airbus aircraft.[2]

Largely as a result of flying these more efficient aircraft, American has improved fuel efficiency by 10.2% compared with 2013, based on fuel burn per ASM. That adds up to 1.9 billion gallons of fuel saved and 19 million metric tons of CO_2 avoided.

1 https://www.boeing-me.com/en/products-and-services/commercial-airplanes/737-MAX.page.
2 https://aircraft.airbus.com/en/aircraft/a320/a320neo.

At the end of 2021, American had 42 Boeing 737 MAX 8 aircraft in our fleet. In January 2022, we announced our plans to exercise purchase options on an additional 30 Boeing 737 MAX 8 aircraft, bringing our firm order total to 88 additional deliveries through 2026. We also had 44 Airbus A321neo aircraft in our fleet at the end of 2021 and have agreed to purchase an additional 76 for delivery through 2026. Of the firm order for 76 aircraft, 50 are the latest generation and long-range Airbus A321XLR aircraft. By 2026, we expect approximately 34% of our ASMs will be flown by the Boeing 787 Dreamliner, Boeing 737 MAX and Airbus A321neo.

In recent years, we have also made significant investments in updating our regional aircraft fleet. Smaller aircraft and shorter flights — which devote a larger percentage of overall flight time to takeoff and landing — come at a fuel-efficiency cost. However, our regional carriers enable American to serve many smaller communities and low-density markets that don't have the passenger traffic to support larger jets. This service plays a vital role in connecting members of those communities to other people, places and economic opportunities. American is committed to providing industry-leading regional service, while continuously working to make that service more fuel efficient. This includes retiring a number of small regional jets in recent years and replacing them with large regional jets — such as the Embraer 175 and the Bombardier CRJ900 — which are on average more fuel efficient. We also continue to evaluate emerging low-carbon technologies such as electric- and hydrogen-powered aircraft, which hold promise for use in regional air travel. (See accompanying box.)

American received a CDP Climate Change score of "A–" in 2021 — the highest score among airlines in North America, and one of only two airlines globally to score that high.

Advancing Next-Generation Aircraft

Decarbonizing aviation requires near-term action to improve efficiency and significantly expand the use of SAF, but it will also depend on technological advancements that enable aircraft to be powered by low- and no-carbon fuel sources such as green hydrogen and electricity. American continues to engage with our aircraft suppliers and other key players in the aviation sector to support the advancement of next-generation aircraft.

One initiative that will further this goal is American's investment in Vertical Aerospace Ltd., which is developing an emissions-free electric vertical takeoff and landing (eVTOL) aircraft. Designed for transporting customers quickly both between and within cities, Vertical's piloted four-passenger VX4 is projected to be capable of traveling distances over 100 miles at speeds over 200mph, while producing minimal noise and zero operating emissions.

Flight Operations and Efficiency

At the same time as we are adding new, more fuel-efficient aircraft to our fleet, we continually look for ways to operate our existing fleet as efficiently as possible. Doing so enables us to both save on jet fuel costs and reduce GHG emissions. American has set a target to achieve a 50 million-gallon absolute reduction in jet fuel use by 2025, using 2019 aircraft as a baseline. That is, aircraft in our fleet as of January 2019 that continue to fly through 2025 will use 50 million gallons less fuel as a result of fuel-efficiency initiatives.

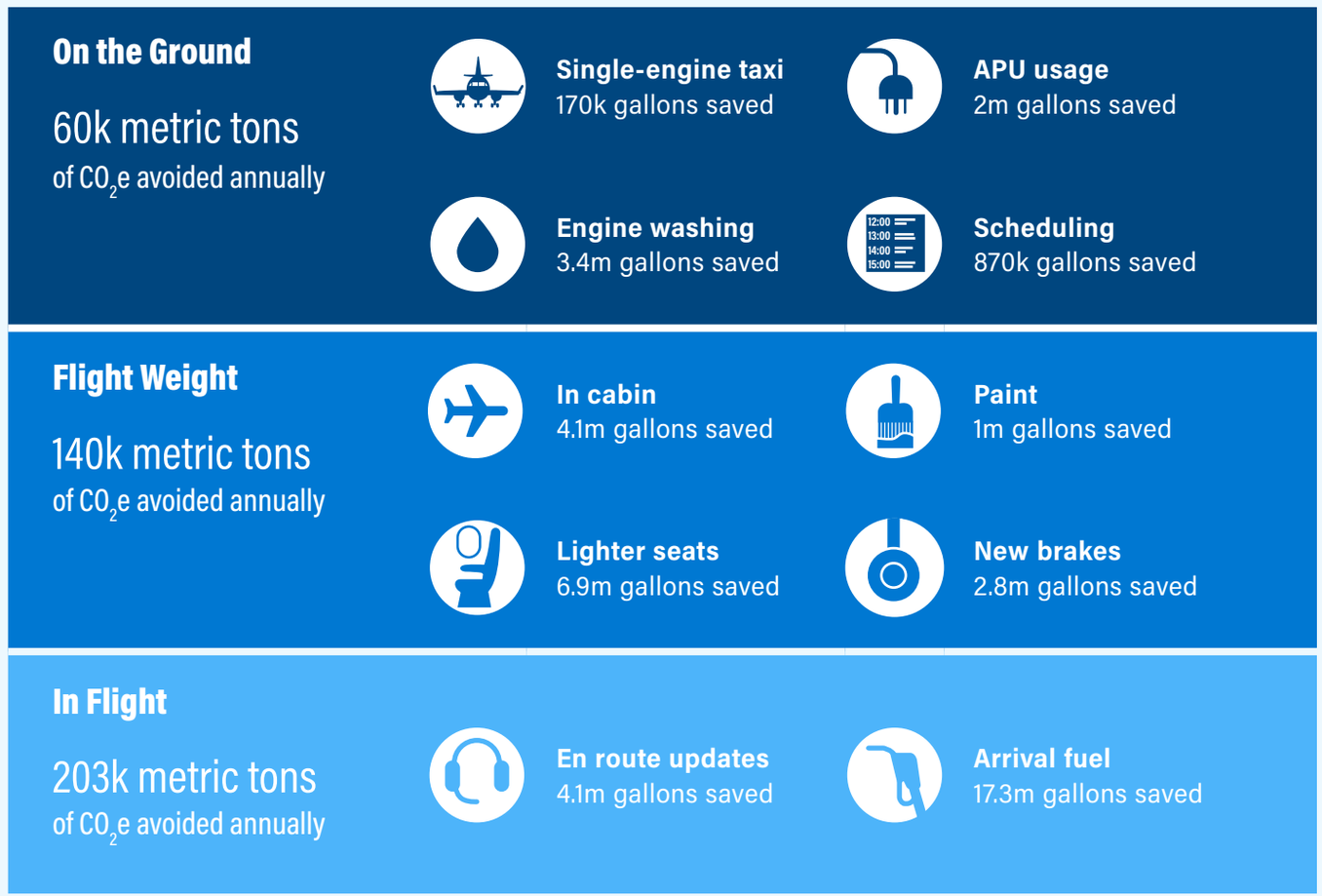
We have implemented a host of fuel-savings initiatives, both on the ground and in the air, focused on three key areas:

- **Operating more efficiently on the ground.** We have implemented a number of operational changes to reduce on-the-ground fuel use. For example, in 2021, American developed a new application to optimize how we assign gates to aircraft at Dallas-Fort Worth International Airport (DFW). This new approach to gating optimizes for taxi time, maximizes on-time arrivals, reduces ramp congestion, minimizes gate conflicts, saves fuel and reduces GHG emissions. Leveraging real-time Federal Aviation Administration (FAA) flight data and routing information, we are using the new tool for all our DFW flights today; we also expect to expand its use to other airports. Based on the reduced taxi time resulting from use of the tool today, we project full-year fuel savings of 870,000 gallons at DFW alone, equal to more than 2,600 metric tons of CO_2.

  American has also reduced the use of onboard auxiliary power units during flight preparation by connecting to less carbon-intensive electric ground power at the airport terminal. We have also increased our use of single-engine

OUR FUEL-SAVINGS INITIATIVES ARE FOCUSED ON THREE KEY AREAS

Estimated annual fuel savings and GHG emissions avoided



taxi operation (i.e., using just one aircraft engine to taxi to the gate after landing), which reduces the carbon emissions produced by taxiing by 20%–40%. In addition, we have implemented new procedures for staggering flight departures and arrivals, which results in less time for aircraft on the ramp and, therefore, less fuel use.

Increasing Efficiency by Modernizing Our Air Traffic Control System

Improving the country's network of aviation infrastructure, technology and services will increase operational efficiency and reduce jet fuel use. In turn, that will avoid millions of metric tons of CO_2 emissions annually and help reduce aviation's carbon footprint. Improvements in our Air Traffic Control (ATC) system will produce enormous environmental and economic benefits, and American supports efforts to modernize our ATC system. We encourage policymakers to advance policies that achieve that objective, and we are committed to working with the FAA and other policymakers to make it a reality.

In 2021, the FAA implemented more efficient descent procedures that will make a meaningful impact in reducing fuel use and associated CO_2 emissions. American supported designing the new procedures by providing technical data and expertise on aircraft behavior and systems, energy management considerations and application. The new Optimized Profile Descents allow planes to glide down safely from cruising altitudes into airspace around some of the nation's largest airports, instead of the traditional stair-step procedure that consumes more fuel. For each group of descents used at an airport, the FAA estimates that an average of 2 million gallons of fuel is saved, and 18,000 metric tons of CO_2 emissions are reduced annually.*[*]

American has also partnered with the FAA and NASA on a trial program in Charlotte, North Carolina, to test and validate the benefits of Terminal Flight Data Manager infrastructure. During testing at Charlotte Douglas International Airport, the program reduced taxi times, helping to save more than 275,000 gallons of fuel annually. The program also avoided almost eight tons of CO_2 emissions daily and cut delays by 916 hours over four years, equivalent to an average of 15 minutes of wait time on a taxiway for more than 3,600 departing flights.[**] **In 2021, NASA transferred findings from the trial program to the FAA for nationwide implementation.**

* https://www.faa.gov/newsroom/faa-implements-more-efficient-descent-procedures-reduce-fuel-burn-emissions.

** https://www.nasa.gov/press-release/nasa-transfers-air-traffic-management-tool-updates-to-faa.

- **Reducing excess weight.** The weight on an aircraft is a critical driver of how much fuel it uses, and even small reductions in weight can add up to significant fuel and GHG emissions savings when multiplied across our whole fleet and the many flights each aircraft makes.

  We have taken a number of steps to reduce weight on our aircraft, including installing lighter seats, removing seat-back entertainment systems, discontinuing *American Way* magazine, and stocking our galleys with only as much ice as we expect passengers will use on each flight. Even using lighter paint makes a difference: On our A321 fleet alone, this saves about 1 million gallons of fuel per year. Collectively, our weight-reduction efforts save 12.4 million gallons of fuel annually, which equals 117,800 million metric tons of CO_2 emissions avoided each year.

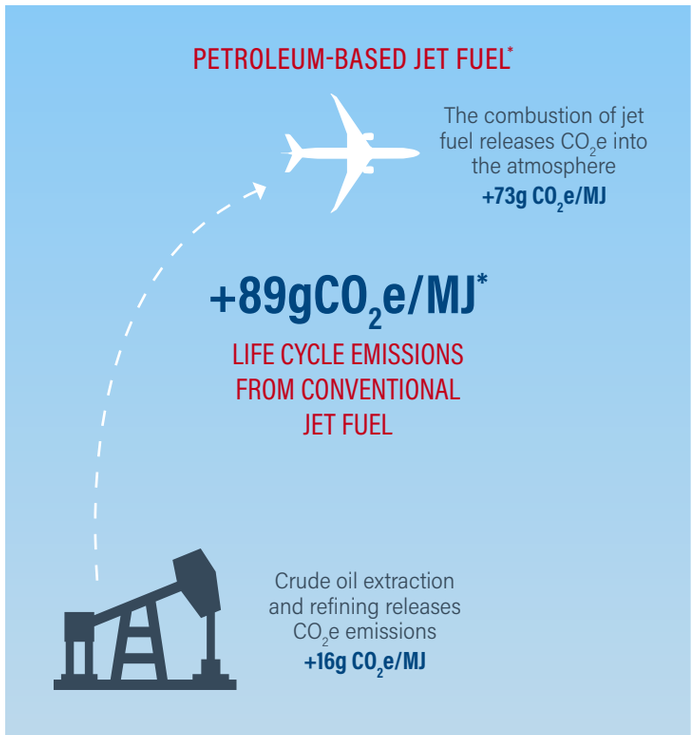
- **Optimizing flight plans and procedures.** We focus on flying as efficiently as possible, which includes considering everything from the speed and paths our aircraft take on departure and descent to how flight crews adjust en route to account for changing weather conditions.

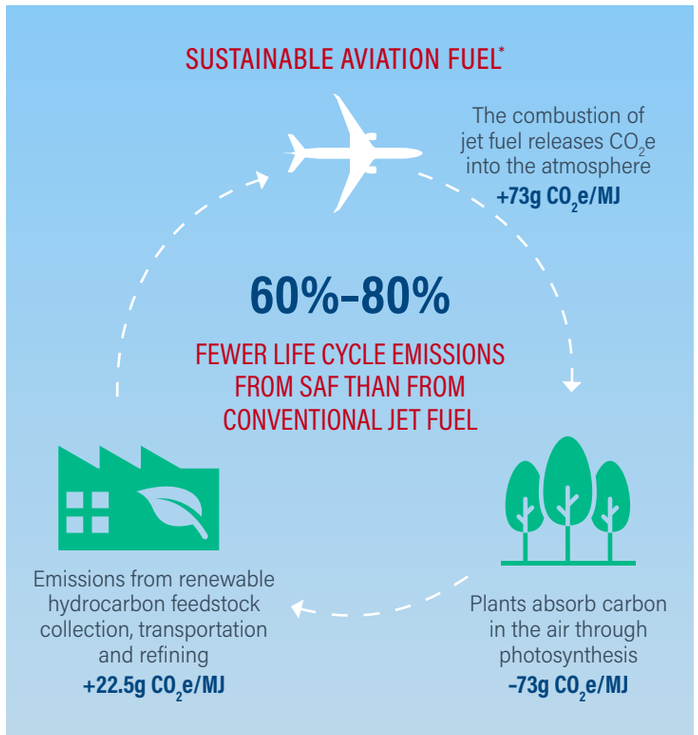
  Since we began deploying specialized software in 2020 that uses real-time weather conditions to provide our flight crews with better data about optimal flight altitudes and speeds, we have saved more than 8.4 million gallons of fuel. That translates to just over 80,000 metric tons of CO_2 emissions avoided. This and other flight planning improvements also help us optimize the amount of arrival fuel on the aircraft — that is, the extra fuel carried on the aircraft — which makes a big difference in reducing weight and, therefore, improving fuel efficiency.

Sustainable Aviation Fuel

The clearest near-term way for us to decarbonize is by using SAF, which is why purchasing and helping scale SAF production is the cornerstone of our climate strategy this decade. SAF will also be key to achieving the in-sector reductions required to meet our science-based target for 2035.

In late 2021, we finalized a new SAF offtake agreement with Aemetis, an advanced renewable fuels and biochemicals company, to take delivery of 16 million gallons of Aemetis SAF annually over a seven-year period beginning in 2024. The agreement is the result of work with the **one**world® Alliance. (See box at right.) The SAF will be produced at the Aemetis Carbon Zero plant under development in Riverbank, California. The facility will use zero carbon intensity hydroelectric electricity to process nonedible waste oils into SAF. Emissions associated with the SAF will be further reduced by producing hydrogen, which is used in SAF processing, from waste wood and by capturing and sequestering any remaining CO_2 underground.





* Emissions data are averages, based on estimates from LCA of Current & Future GHG Emissions from Petroleum Jet Fuel, Massachusetts Institute of Technology Laboratory for Aviation and the Environment. CO_2e per megajoule (MJ) is a measure of GHG emissions per unit of energy.

Advancing SAF Through the **one**world Alliance

The members of the oneworld Alliance — which includes American and 12 other carriers — have taken a number of important steps to chart a path forward in reducing their emissions. In September 2020, oneworld became the first global airline alliance to announce a target of carbon neutrality by 2050, establishing its commitment to sustainability. The alliance followed up that commitment with an intermediate goal to achieve 10% SAF use across the member airlines by 2030. This is not just about setting a target, but also committing to playing an active role in the development of SAF at commercial scale that is affordable, available and certified with the sustainability criteria as recognized by the International Civil Aviation Organization (ICAO) and relevant authorities.

In late 2021 and early 2022, the oneworld Alliance airlines announced their intention to purchase up to 550 million gallons of blended SAF from the renewable fuels companies Aemetis and Gevo for their operations at California airports. Once finalized, the agreements will cover the delivery of SAF over a five- to seven-year term beginning in 2024. The SAF is blended with petroleum jet fuel to meet international standards for aviation fuel.

The agreement with Aemetis brings American's total SAF commitment to more than 120 million gallons. That includes plans to purchase up to 10 million gallons of carbon-neutral SAF produced by Prometheus Fuels, which uses a novel process to make net zero carbon transportation fuels. American took our first delivery of SAF in mid-2020, and in 2021 we used over 1.4 million gallons of SAF. That makes us the only member of Airlines for America to report using more than 1 million gallons of SAF during the year.

As critical as SAF is for achieving our own and our industry's climate goals, it is not yet available at the scale or price needed to reduce emissions significantly. Scaling SAF production to the point where it can materially reduce aviation's emissions and be cost competitive will take the combined efforts of the private and public sectors. One way American is helping advance those efforts is as an anchor partner in Breakthrough Energy Catalyst (see page 13). We also continue to advocate for governments to deploy policy tools, including incentives, credits and investments in research, to create the market conditions needed to make SAF an economically viable alternative to conventional jet fuel.

Another way we are working to build the SAF market is by partnering with our corporate customers to simultaneously help advance their climate commitments while growing demand for SAF. In early 2021, we launched an innovative pilot program with Deloitte to explore how a new market-based solution — a certificate that allocates the emissions reduction value of SAF — can benefit companies seeking to reduce their Scope 3 business travel emissions. The SAF certificate is a concept under development by the World Economic Forum's Clean Skies for Tomorrow initiative, aimed at unlocking new capital to boost SAF production by harnessing the ambition of corporate climate goals.

Enabling Our Customers to Offset Their Flights

American partners with Cool Effect, a leading nonprofit provider of carbon offsets, to give our customers the opportunity to easily calculate the emissions of their flight and purchase high-quality offsets. Thousands of customers have chosen to offset the emissions from their flights through Cool Effect since we launched the program in 2020. Companies participating in American's Business Extra® program can redeem their points with Cool Effect to offset the carbon emissions of their business travel. And AAdvantage® members can use their Loyalty Choice Rewards to redeem carbon offsets through Cool Effect as well.

Cool Effect uses more than 90% of each offset dollar to fund a portfolio of high-quality, verified carbon reduction projects that protect and conserve our planet's resources.

Learn more at www.cooleffect.org/american-airlines.

This agreement was one of the first collaborations between an organization seeking to reduce net emissions from business travel and a U.S. airline that is using SAF in its daily operations. We have since completed similar agreements with Kuehne+Nagel, a global logistics company, Bank of America, and a number of other companies.

Market-Based Measures

Market-based mechanisms such as carbon offsets are a valuable tool for meeting the global climate challenge, but reducing emissions through improved efficiency and increased use of SAF are — and will remain — our priority. Where necessary, though, we will purchase offsets.

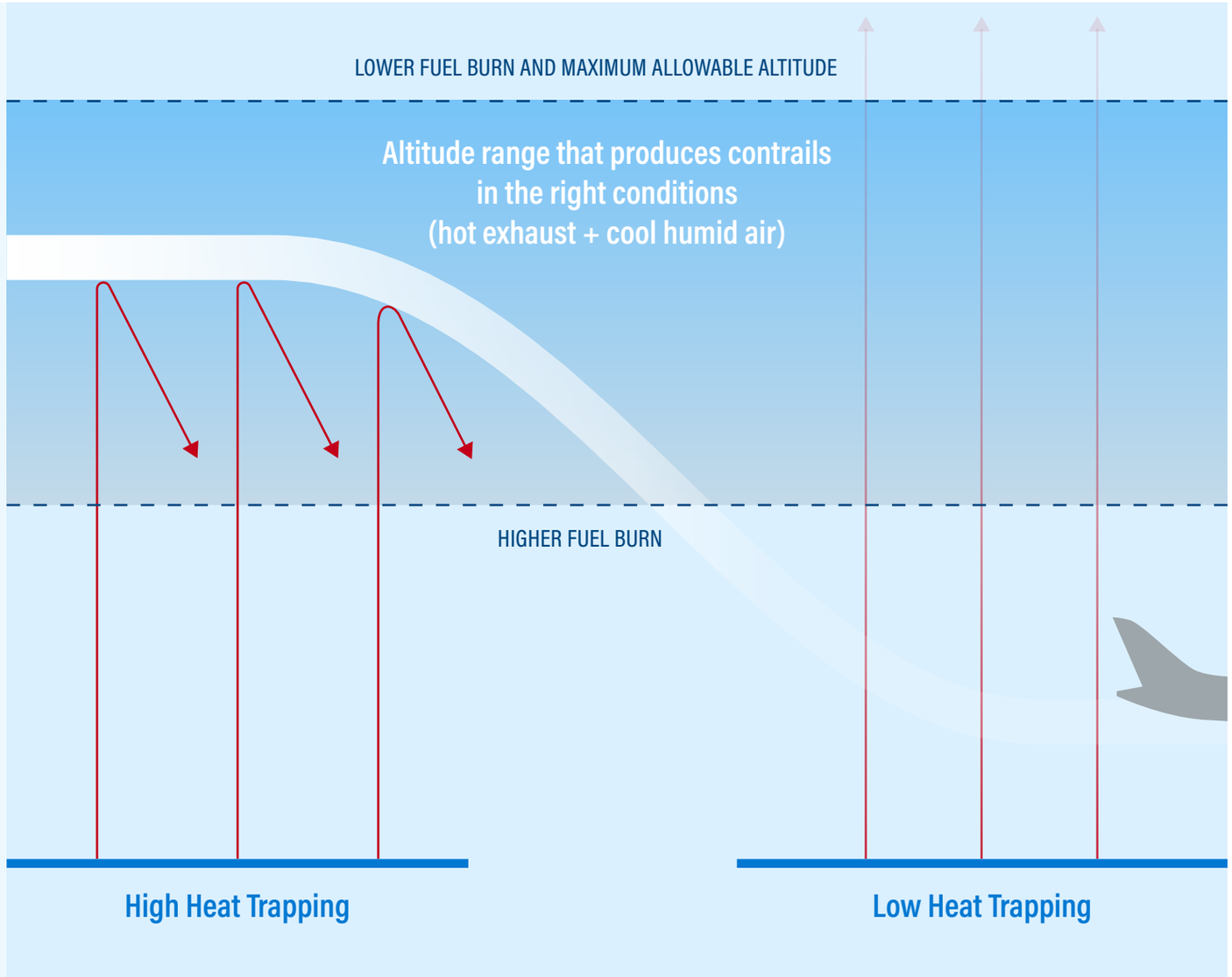
CORSIA regulates emissions from international aviation. We have endorsed its goal of achieving carbon-neutral growth in emissions after 2019. Airlines and other aircraft operators will offset any growth in CO_2 emissions above the revised 2019 baseline established in the wake of the COVID-19 pandemic. In 2021, American and other airlines did not face offsetting obligations under CORSIA, as international flight volumes were still below pre-pandemic levels. Going forward, American's aim is to meet our CORSIA obligations by increasing our use of SAF, but we recognize offsets will also play a role.

Avoiding Contrails

Reducing the aviation industry's contribution to climate change requires fully understanding and addressing all the ways our industry currently impacts the climate. While the GHG emissions of jet fuel use are well understood, there is a growing focus on the effect of condensation trails — known as contrails — the ice clouds that can form when a plane's hot, humid exhaust mixes with cool, humid air high in the atmosphere.

Contrails change the climate in two ways: They stop the Earth's heat from escaping from the atmosphere (warming effect) and they block the sun by reflecting incoming sunlight back into space (cooling effect). During the day, contrails can cool the Earth, whereas they are warming at night. (See accompanying illustration.) While there remains uncertainty about the precise magnitude of contrails' climate impact, there is an emerging scientific consensus that the warming impact of contrails is dominant.

Given that, developing effective contrail avoidance strategies must be part of the industry's net zero roadmap. American recognizes that such strategies come with competing climate effects: Changing flight paths to avoid contrail formation could increase fuel burn and associated GHG emissions. American is committed to helping advance understanding of this important climate issue — and to taking action to address it within our own operations.



Climate-Related Risk Assessment

Through our existing enterprisewide risk management process, American monitors and manages a broad range of strategic, financial and operational risks, including risks associated with climate change. To inform our understanding of the climate risk landscape, in 2020 we conducted an initial forward-looking scenario analysis that focused on identifying and assessing the physical and transition climate-related risks and opportunities facing the company over the short, medium and long term. In 2022, we built on this by undertaking a more detailed analysis of the risks and opportunities. This included expanding the number of sites included in the physical risk evaluation; exploring geographic regions around the world in which we operate that are projected to experience greater impacts; examining more closely the effects of potential changes in policy, technologies and markets; and refining and updating the scenarios we used to model and assess potential risks and opportunities.

The insights from this process, conducted in alignment with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), are directly informing our climate strategy and updates to our pathway to net zero. They are also building the foundation for more deeply integrating climate risk analysis into our ongoing risk management and business, strategy and financial planning processes. They were also used to facilitate conversations with key internal stakeholders.

Physical Risk Assessment

As part of our expanded physical risk assessment, we conducted a climate risk screening in 2022 of approximately 400 American Airlines facilities and suppliers, including

SITE-LEVEL ANALYSIS OF PHYSICAL RISKS

Location	PRIMARY HAZARDS 2020s	2030s	2050s
MIA Miami Int. Airport	Coastal Flooding	Coastal Flooding	Coastal Flooding
JFK & LGA JFK Int. Airport and LaGuardia Airport	Coastal Flooding, River Flooding	Coastal Flooding, River Flooding	Coastal Flooding, River Flooding
CLT Charlotte Douglas Int. Airport	River Flooding	River Flooding	River Flooding
DFW Dallas Fort Worth Int. Airport and area	Temperature Extremes	Temperature Extremes	Temperature Extremes
TUL Tulsa Maintenance Base	River Flooding	River Flooding	River Flooding
PHL Philadelphia Int. Airport	River Flooding	River Flooding	Coastal Flooding
ORD Chicago O'Hare Int. Airport	River Flooding	River Flooding	Temperature Extremes
DCA Ronald Reagan Washington National Airport	Coastal Flooding	Coastal Flooding	Coastal Flooding
PHX Phoenix Sky Harbor Int. Airport and area	Temperature Extremes	Temperature Extremes	Temperature Extremes
LAX Los Angeles Int. Airport	Temperature Extremes	Temperature Extremes	Temperature Extremes
LHR London Heathrow Int. Airport	Temperature Extremes	River Flooding	River Flooding
Key Fuel Suppliers Texas	Coastal Flooding	Coastal Flooding, Water Stress	Coastal Flooding, Water Stress

Coastal Flooding

River Flooding

Temperature Extremes

Water Stress

airports, cargo facilities, data centers, maintenance facilities, offices and training centers around the world. For each of these sites, we assessed the risk associated with temperature, coastal flooding, fluvial (river) flooding, tropical cyclones (Eastern Atlantic basin only), water stress, drought and wildfire.[3] Our analysis was supported by The Climate Service, a leading provider of climate science and analytics for business.

The results of our analysis refined our focus on 12 strategically important sites for our company, which include hub airports that form the foundation of our network; our largest maintenance facility; our corporate headquarters, which is also home to our integrated operations center and primary training facility; and a key fuel supplier. For each site, we assessed the exposure and implications of the projected key physical hazards in the 2020s, 2030s and 2050s, based on the scenarios used. (See accompanying box for information on the scenarios.) In the table on the preceding page, these sites are listed in order of the total modeled potential annual loss over the time frame assessed under the higher emissions scenario used in our analysis.

We also gathered information on adaptive capacity for each of the locations. Adaptive capacity refers to the resilience measures to manage climate-related impacts. We are taking the results from the 2022 assessment and engaging key stakeholders across the company to discuss the identified risks and how we can better prepare our assets.

Transition Risks and Opportunities Assessment

We also deepened and refined our analysis of American's exposure to transition risks related to climate change, including the policy and legal, technology, market, reputation and operational risks — as well as opportunities — that could arise from the transition to a low-carbon or carbon-constrained economy.

For the lower- and higher-emissions scenarios considered, we used the International Energy Agency (IEA) 2021 World Energy Outlook (WEO) Stated Policies Scenario (STEPS) and Sustainable Development Scenario (SDS) as the primary lens for the transition risk and opportunity assessment. Transition scenarios compare different possible versions of the future and the levers and actions that produce them, with the aim of stimulating insights about the future of global energy. The IEA notes that decisions made by governments are the main differentiating factor explaining the variations in outcomes across the scenarios, but they also account for the economic and demographic context, technology costs and learning, energy prices and affordability, corporate sustainability commitments, and social and behavioral factors.

The table that starts on the following page summarizes the key transition risks and opportunities identified, along with American's mitigation strategies.

Climate Scenarios

Scenario analysis is not a prediction or forecast of future events but rather a tool to explore and highlight central elements of possible futures. American aligns with best practice in selecting the scenarios we use in our climate risk assessment process. We use multiple scenarios, including a lower-emissions, below 2°C scenario — consistent with the ambition of the Paris Agreement in limiting global warming to well below 2°C — as well as an above 2°C scenario.

Due to the distinct nature of physical and transition risks, standard practice is to use different scenarios for analyzing the two different types of risks. For analysis of physical risk, we use Representative Concentration Pathway (RCP) scenarios, as recommended by TCFD, which were developed for use in Intergovernmental Panel on Climate Change assessments. For analysis of transition risk, we use the IEA's WEO STEPS and SDS scenarios. For our 2022 analysis, we used 2030 and 2050 timeframes, consistent with our initial 2020 analysis.

The following are the scenarios we used:

	PHYSICAL RISKS	TRANSITION RISKS
Lower emissions scenarios	RCP4.5	IEA 2021 WEO Sustainable Development Scenario (SDS)
Warming projections	1.7–3.2°C by 2100	Approximately 1.7°C by 2050 (peak) then declines
Higher emissions scenarios	RCP8.5	IEA 2021 WEO Stated Policies Scenario (STEPS)
Warming projections	3.2–5.4°C by 2100	Approximately 2.6°C by 2100

3 American is reviewing the methodology for wildfire projections, which currently do not account for land use or land cover. References to wildfire risk are therefore omitted from this report.

ANALYSIS OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

Transition Risk and Opportunities	SHORT TERM: **0–2 yrs**	MEDIUM TERM: **3–15 yrs**	LONG TERM: **16–30 yrs**
Physical Risk	SHORT TERM: **2020s**	MEDIUM TERM: **2030s**	LONG TERM: **2050s**

Potential Financial Impact Level

low med high

	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
Transition Risks	Policy and legal	The risk from existing and emerging regulation aimed at addressing climate change. This might include: ▪ Increased pricing of GHG emissions ▪ Enhanced reporting obligations ▪ Exposure to litigation ▪ Limits on a license to operate	New carbon taxes or SAF mandates could increase the price of jet fuel, which would raise our operating costs and potentially reduce demand for travel. Regional or country-specific aviation emission reduction policies could undercut CORSIA's place as a single global approach to addressing international aviation emissions, raising our compliance and reporting costs and potentially affecting our international joint venture contracts. Policymakers in the United States could enact laws setting domestic emission reduction targets for airlines, which could limit our ability to grow. They could also mandate new technologies that would impose significant capital and operating costs on us.	low	high	high	We are developing a robust and multifaceted long-term climate change strategy aimed at driving progress toward ambitious goals and positioning our company to be a leader on sustainability. We monitor emerging regulations around the world to understand the risks and opportunities for our business. And we work with policymakers to identify policy solutions that can help the aviation industry reduce its emissions through new technologies. We also continue to advocate for CORSIA as the single global approach to addressing emissions from international aviation. We continue to seek efficiency gains in our operations, pursue opportunities to employ SAF and seek to employ lower-emission or zero-emission technologies as they become available on a commercially reasonable basis.
	Technology	The risk from emerging technologies aimed at supporting the global low-carbon transition. This might include: ▪ Substitution of existing products and services with lower-emission options ▪ Upfront costs to transition to lower-emission technology	Our fleet renewal program gives us the youngest fleet among U.S. network carriers; however, more aggressive emission constraints imposed in the near to medium term may place us at a disadvantage to competitors who are beginning to upgrade their fleets to the most recent generation of aircraft. The emerging focus on hydrogen propulsion system modifications for regional aircraft may reduce investment in the next generation of conventionally powered regional jets, which could improve efficiency by more than 15%. There is a risk that technology does not develop sufficiently to allow us to also meet our ambitious climate goals.	low	med	high	Since 2013, we have undertaken an extensive fleet replacement initiative, taking delivery of more than 600 new, more fuel-efficient aircraft — including the Boeing 737 MAX, the Airbus A321neo and the Boeing 787 Dreamliner — which are among the most fuel-efficient aircraft on the market. Over the same period, we retired a similar number of older, less fuel-efficient aircraft. As of year-end 2021, American continues to have the youngest mainline fleet of any U.S. network airline, with an average age of 11.3 years and 55% of our mainline aircraft being less than 10 years old. To accelerate private sector action, in September 2021, we became an anchor partner to Breakthrough Energy Catalyst. American committed to invest $100 million in an innovative collaborative effort to advance a set of clean energy technologies that are critical to a zero-carbon economy but are currently more expensive than their existing fossil-fuel counterparts. Catalyst and its partners will work together to finance and produce new solutions in four technologies: SAF, green hydrogen, long-duration energy storage and direct air capture.

Potential Financial Impact Level

low med high

	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
Transition Risks	Market	The risk from shifting supply and demand as economies react to climate change. This might include: ▪ Changing customer behavior ▪ Uncertainty in market signals ▪ Increased cost of raw materials	Business customers may choose to use alternatives to travel, such as virtual meetings and workspaces. The collateral we use to secure loans — in the form of aircraft, spare parts and airport slots — could lose value as customer demand shifts and economies move to low-carbon alternatives. Greater development of high-speed rail in markets now served by short-haul flights could provide passengers with lower-carbon alternatives to flying.	med	med	high	We have introduced new tools to help our business customers manage their emissions from air travel, including GHG footprint reports, carbon offsetting opportunities and SAF emissions reductions. We intend to further integrate other sustainability practices into the products, services and experiences we offer our customers. We are testing new ways to expand our network and reduce emissions. In 2022, we introduced premium motorcoach service to connect our customers in three Pennsylvania markets to Philadelphia International Airport — increasing convenience for our passengers while helping take individual cars off the road.
	Reputation	The risks of damage to brand value and loss of customer base from shifting public sentiment about climate change. This may include: ▪ Shifts in customer preferences ▪ Stigmatization of the sector ▪ Increased stakeholder concern	Growing recognition among consumers that climate change is a serious danger may mean some customers choose to fly less frequently or fly on an airline they perceive as more sustainable. Investors may demand more aggressive sustainability goals and practices from our industry.	low	med	high	We are positioning our company to be a leader on sustainability by implementing a robust and multifaceted climate change strategy aimed at driving progress toward our ambitious climate goals, including our 2035 SBTi target and long-term net zero 2050 goal. We intend to continue our efforts to reduce carbon emissions using the various levers available to us at this time — including consideration of how to include modern aircraft, efficient technology, sound operational practices and sustainable fuels — in our climate mitigation strategy. We are looking to embrace new low-carbon levers as they become available. We continue to communicate our sustainability practices to our customers, team members and suppliers so they understand the measures we are taking to reduce our climate impact. We also regularly solicit feedback from these stakeholders to inform our efforts.

Potential Financial Impact Level

low med high

	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
Physical Risks	Acute	The risk of increasing severity of weather events	Extremely high temperatures may exceed the maximum allowable temperature at which our aircraft are certified by the FAA to operate. Increases in hot days can interrupt our operations by causing heat buckling on runways and taxiways and other infrastructure damage. Such damage in turn can increase operational and repair costs for airports — costs that would be passed through to us. In extreme cases, it may become difficult to cool aircraft to an acceptable temperature for customers and crew.	low	low	high	We continue to monitor temperatures at airports exposed to acute temperature risk and work with aircraft manufacturers to ensure that our aircraft are able to operate safely under a range of operational conditions. Over the next five years, we intend to incorporate the projected impacts of climate change into design standards for physical assets, capital improvement plans, disaster management, emergency response and scheduling. To mitigate projected impacts from increasing temperatures, we plan to invest in additional ground cooling and upgrades to gate-based cooling systems.
			Increased frequency and intensity of hurricanes places operations and infrastructure at Miami International Airport at risk. Increases in storm activities can result in substantial costs relating to canceled flights and airport closures.	low	low	high	We are investigating options to mitigate the impacts of hurricanes, which may include enhancing airport infrastructure to withstand stronger winds from storms.
			Flooding from intense precipitation at major hubs in Charlotte, North Carolina, Los Angeles and London can interrupt critical expansion strategies. Increases in precipitation can result in excess loading of stormwater infrastructure designed for lesser flows, increasing the risk of flooding. Increases in the severity of storms can cause flooding, which can wear infrastructure.	low	med	high	To mitigate the impact of flooding on infrastructure, we plan to incorporate the projected impact of increasing precipitation into design standards for physical assets, capital improvement plans, disaster management and emergency response, master plan development and early warning systems.
			Cyclonic events in the Gulf of Mexico region — where almost 50% of U.S. crude oil refining capacity is located — can disrupt fuel supplies. A significant portion of our fuel is sourced from Gulf of Mexico refineries and is stored in, or must be transported from, the region, which poses a risk to our operations if those facilities are disabled for any period of time. Pipelines and storage terminals may also be at risk from extreme weather. Terminals may be supplied via ocean-going vessels if refineries are shut down, but there are no viable alternatives to move the amount of fuel stranded if pipelines are shut down due to flooding or other hurricane impacts.	low	med	low	Our strategies to mitigate this risk include sourcing our fuel from multiple regions and maintaining a reserve of fuel at our hub airports. The number of days of operations held in these reserves varies by airport, depending on the risk of extreme weather, the number of pipelines that serve the airport and other factors. We monitor closely the changing likelihood of severe weather and adjust these reserves accordingly. Another strategy to mitigate this risk is our work to expand the commercial availability of SAF, which has the potential to further diversify fuel sources and supply.

Potential Financial Impact Level

low med high

	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
Physical Risks	Chronic	The risk of longer-term changes in weather patterns	Sea-level rise in Miami, Los Angeles, Philadelphia and New York may require hardening of the airports in these locations, or even relocation. Because high air temperatures reduce air density, chronically high temperatures at some of our hub airports may require restricting the availability of seats for sale in certain markets, the use of aircraft with higher engine thrust and potentially reduced schedules.				Given the vulnerability of these key airports to flooding from sea-level rise, and the resulting impact to business continuity, we intend to investigate options to mitigate the impacts of sea-level rise, which may include fortifying the shoreline around those facilities and, as a last resort, considering options for relocation to areas further inland. The cost/benefit of available options may lead to adjustments to our network. We also plan to engage with policymakers and airport authorities to explore paths to greater resiliency. Over the next five years, we plan to incorporate the projected impacts of climate change into aircraft purchasing plans, routing and scheduling. We will also work with airframe and engine manufacturers to develop aircraft that meet the technical specifications required for operation at airports with sustained high temperatures.

Potential Financial Opportunity Level

none low med high

Opportunity Type	Potential Financial Impact	Short Term	Medium Term	Long Term	Realization Strategy
Resource efficiency	Reduce fuel costs by continuously modernizing our fleet with more efficient aircraft and operational improvements	low	med	high	We already have the youngest fleet among U.S. network carriers and plan to continue our fleet modernization program in the coming years. We are pursuing measures to improve operational efficiency, including further strengthening our fuel conservation management and oversight. We will also continue to advocate with policymakers for reform of the nation's air traffic control system, which has the potential to reduce GHG emissions from aviation.
Energy resources	Shift to increasing supply of SAF, reducing exposure to the cost of growing carbon regulation and diversifying fuel supply	low	med	high	We took delivery of 1.4 million gallons of SAF in 2021 — more than any other U.S. airline — and expect to increase deliveries in 2022. We also worked with other carriers in the **one**world Alliance to source additional future deliveries of SAF, culminating in our agreement in late 2021 to purchase SAF from Aemetis. That brings our total SAF commitment to more than 120 million gallons. We also advocate for policies that will increase SAF production capacity and improve its commercial viability.
Products and services	Attract travelers with a preference for low-carbon travel	low	low	low	Through our fleet renewal program, we have taken delivery of the most fuel-efficient aircraft in their respective classes: the Boeing 737 MAX and Airbus A321neo for narrow-bodies and the Boeing 787 Dreamliner for widebodies. By 2026, we estimate that 34% of our ASMs will be flown on these aircraft. Combining a modern fleet with carbon offsets and greater volumes of SAF over time will give our customers more sustainable options.
Markets	Increase scheduled flights at our hubs that are at lower risk of adverse effects from climate change, such as Charlotte Douglas International Airport (CLT) and Dallas/Fort Worth International Airport (DFW)	none	low	med	CLT is American's second-busiest hub and is geographically well-positioned to connect passengers domestically and internationally. Plans for the expansion and augmentation of current services will be considered. DFW is currently our largest hub, but there remains opportunity for growth.
Resilience	Continue to expand our network of hubs and gateways across multiple sites with reduced climate risk, which we expect will in turn provide more connectivity for our customers	low	med	high	Our planned resilience program includes: ▪ Conducting criticality and resilience assessments for operational procedures and existing infrastructure ▪ Integrating the projected impacts of climate change into business continuity plans and emergency planning ▪ Developing effective communication channels with airport staff and aviation stakeholders, including air navigation service providers, off-airport service providers, academia, communities and municipal authorities responsible for weather monitoring, climate analysis and disaster management.

Sustainable Operations

Reducing our carbon footprint is the most impactful way American can minimize our impact on the environment, but we also work hard to improve environmental sustainability across all of our operations — from how we construct and power our corporate facilities to how we source the products we provide to our customers on board and in our lounges.

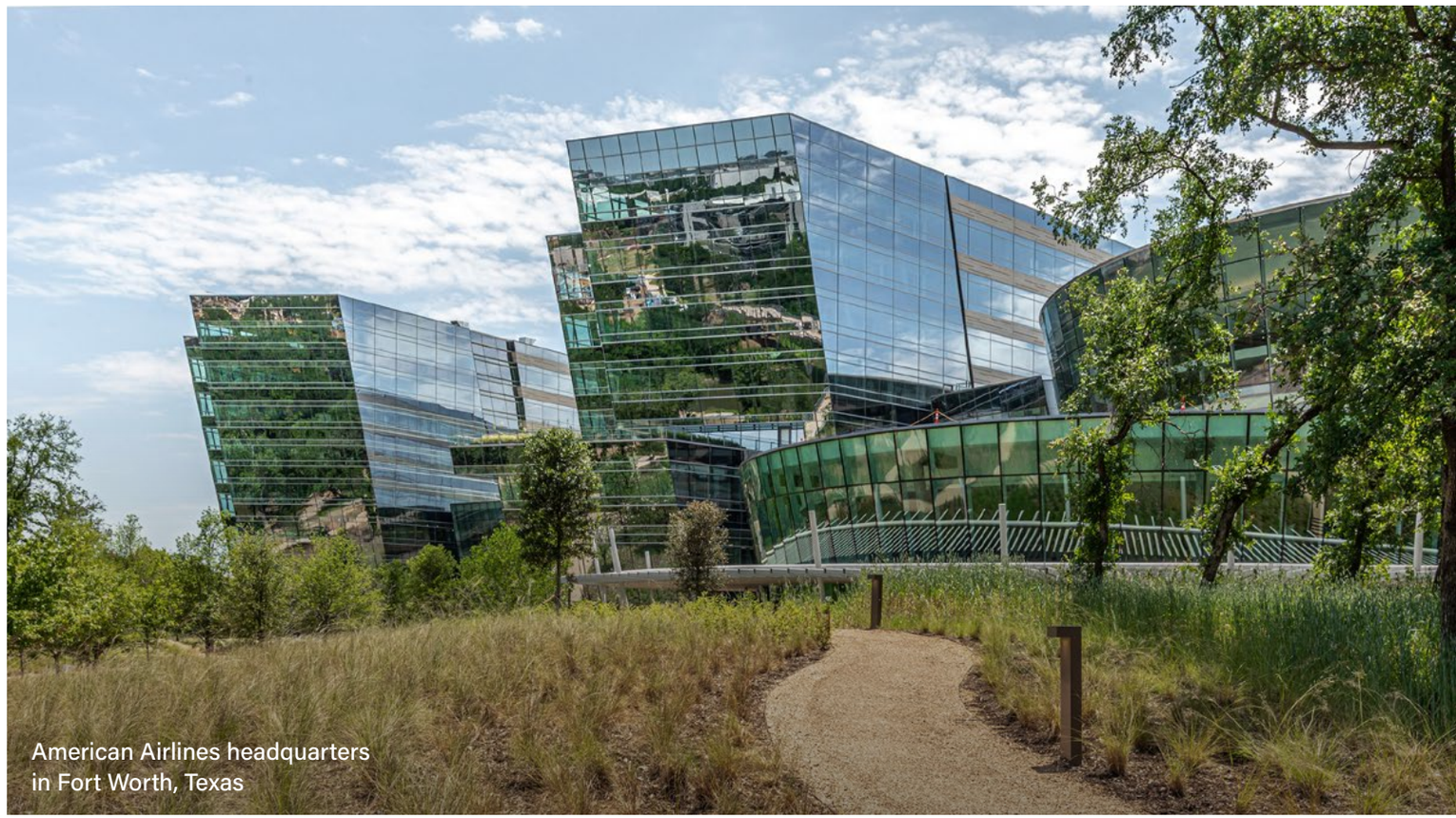
In 2022, we updated and expanded our Environmental Policy Statement to more clearly articulate American's commitment to environmental stewardship and our expectations and objectives for how we integrate that across our operations.

We also continue to pursue certification for our environmental management system under the International Air Transport Association's Environmental Assessment (IEnvA) program, which assesses airline performance against sustainability standards for air quality and emissions, noise, fuel consumption, recycling and sustainable procurement. Airlines certified under IEnvA standards will also be ISO 14001 certified.

Operating sustainably in our facilities

As part of our goal to source 2.5 million GJs of cost-competitive renewable energy to power our operations by 2025, we purchased nearly 750,000 GJs of electricity from renewable sources for our headquarters facilities and operations at DFW in 2021. In the past year, these facilities were 100% powered by renewable energy. As of January 2022, American was the highest-ranked transportation company — and 53rd overall — on the U.S. Environmental Protection Agency's Green Power Partnership Fortune 500® Partners List.[4]

4 https://www.epa.gov/system/files/documents/2022-04/fortune500_jan2022.pdf.



American Airlines headquarters in Fort Worth, Texas

We also have multiple LEED Gold- and Silver-certified facilities across the United States, including two LEED Gold-certified buildings at our corporate headquarters campus that we opened in 2019.

Reducing environmental impacts on board

American has a number of longtime efforts aimed at reducing waste and increasing recycling on board our aircraft. Among them, American recycles an average of about 21,000 pounds of aluminum cans annually through our flight services.

We are also taking steps to use more sustainable materials — and, in particular, to find ways to reduce single-use plastics — as part of our onboard products and meal service. While adjustments made in response to COVID-19 presented challenges in advancing some of our sustainable materials goals — such as providing bottles of water rather than refilling cups to minimize contact — we have tested a number of new products over the past two years that we are aiming to roll out more broadly.

For example, in 2021 we piloted a sustainable cutlery kit made out of bamboo. We also began offering a sustainable meal box, which is a fully compostable box with prepackaged snacks, across our regional operations. In addition, we introduced new onboard amenity kits for premium cabin customers in partnership with Shinola and D.S. & Durga, which include a number of sustainability features. For example, the dental kit and ear plugs are individually packaged within a biodegradable wax paper instead of single-use plastic, and the toothbrush is made from wheat straw instead of plastic.

Alongside these onboard efforts, we have instituted a number of sustainability improvements in our lounges. They include switching from plastic to compostable flatware and straws, installing water bottle filler stations, testing reusable to-go bags and more.

For detailed performance data related to energy use, GHG and other air emissions, waste, water, noise and other environmental topics, see page 55.

Reducing Aircraft Noise

We recognize and are committed to addressing the ongoing concerns of local communities regarding aircraft noise. One way we have done this over the past few years is by voluntarily retrofitting our aircraft with fuel vent vortex generators (VGs). These fairings are installed around the wing fuel tank over the pressure vent, on the underside of the wing of the A320 family of aircraft. These vents reduce airframe noise during portions of the approach by an estimated four to six decibels. Prior to 2014 deliveries, Airbus did not equip aircraft with VGs — so American has invested over $1 million to retrofit our pre-2014 aircraft with this feature.

By April 2022, we had modified 290 narrowbody pre-2014 aircraft with retrofit VGs, meaning all Airbus aircraft in our fleet now have the VGs utility.

We also continue to meet or exceed ICAO noise certification standards, which currently specify that operators can fly Stage 3, Stage 4 or Stage 5 aircraft. All of American's mainline and regional fleet meet Stage 4 noise certification levels, and 20% meet Stage 5 noise certification levels.


American
CREW CHIEF
American

American aspires to be nothing less than the safest airline in the world — for our customers and our workforce. Even as we dealt with a second full year of COVID-19, this mission remained our top priority. We were proud to safely transport over 165 million customers in 2021, more than any other U.S. carrier.

To ensure that we operate every flight safely and protect our people, we insist on a culture where all team members believe they can personally drive our safety efforts. Every team member who touches our aircraft is empowered to take a plane out of service if they have a safety concern. And we continue to expand a culture that encourages all team members and contractors to ask questions and report safety hazards, concerns and incidents without fear of reprisal.

Safety Governance and Management

An uncompromising commitment to safety, security and continuous improvement is a shared responsibility — from our Board of Directors to frontline team members. Our Chief Executive Officer retains ultimate responsibility and authority for safety culture and performance, while the Board's Corporate Governance, Public Responsibility and Safety Committee has formal oversight responsibilities for safety. Additionally, the Board receives monthly updates on key safety performance metrics and multiple detailed reviews throughout the year.

Reorganizing our safety group

Flying is already the safest transportation industry in the world, but we continually seek ways of further elevating our safety efforts. As part of this process, we reorganized our safety team in 2021 to create cross-departmental centers of excellence designed to drive a more consistent, unified approach to addressing risk and compliance across the company. As a result, our safety group is now organized into the following three teams:

- **Safety Systems Engineering and Safety Science** is responsible for creating proactive and predictive strategies based on the high reliability organization (HRO) model (see accompanying box). This team includes Fatigue Risk Management, the Safety Management System, Emergency Planning and Response, Safety Science, Safety System Design and Resiliency, and Safety Technology and Analytics.
- **Compliance and Auditing** is responsible for managing reactive daily air and ground operational concerns tactically, managing safety audits and proactively engaging with our regulators to enhance collaboration and relationships. This team includes Regulatory Compliance, Internal Evaluation Program, Environmental, Dangerous Goods/Hazmat and Employee Safety and Health programs.
- **Safety, Efficiency and Continuous Improvement** is designed to analyze and react to data sourced from investigations, compliance reporting, safety reporting and safety programs to continuously improve on current processes and grow American's safety culture.

Adopting the High Reliability Organization Model

American has adopted the HRO model as part of our safety efforts because HROs have demonstrated success in hazardous industries, maintaining safe work standards despite environmental and organizational complexity. HROs exhibit and value the following five principles:

- **Commitment to resilience**
- **Preoccupation with failure**
- **Sensitivity to operations**
- **Deference to expertise**
- **Reluctance to simplify**

Our Safety Management System

The safety of our customers and team members is guided by our Safety Management System (SMS), an organization-wide approach to identifying and managing risk. American was the first U.S. carrier to pioneer SMS in 2009. It has since been incorporated into Federal Aviation Administration (FAA) regulations for all carriers.

Our SMS emphasizes safety management as a fundamental business process across the enterprise. It involves a full commitment from the most senior leaders through to each team member to integrate safety into how we do our jobs. Our SMS promotes a culture in which our team members proactively identify, analyze and mitigate risks. The SMS ensures robust and repeatable processes with local ownership, driven by data to reduce risks and continuously improve and enhance safety. We collaborate closely with the FAA to maintain operational safety at the highest level possible and actively share best practices with our industry peers, governments and aerospace manufacturers. The four components of our SMS are noted in the accompanying box.

OUR SAFETY MANAGEMENT SYSTEM

1 Safety Policy

Establishes senior management's commitment to continually improve safety; defines the methods, processes and organizational structure needed to meet goals

2 Safety Assurance

Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards

3 Safety Risk Management

Determines the need for, and adequacy of, new revised risk controls, based on the assessment of acceptable risk

4 Safety Promotion

Includes training, communication and other actions to create a positive safety culture within all levels of the workforce

Safety Policy

Our corporate Safety Policy applies to all team members, business partners, contractors and consultants. It sets American's safety objectives and standards and assigns responsibilities for safety across our organization. The policy also conveys management's commitment to safety performance and to improving the level of safety through measurable goals and key performance indicators. Part of our SMS foundation, this policy helps to create a culture that encourages effective management of risk along with continuous improvement. The Safety Policy complies with all applicable regulatory requirements and laws in the countries where we operate and establishes standards for acceptable operational behaviors.

Our Emergency Response Manual (ERM), which establishes effective and efficient response practices for various types of emergencies, is an integral part of our SMS. The ERM serves as the governing document for the American Airlines Corporate Emergency Response Plan. It includes guidelines to prepare for and respond to emergencies, responsibilities for team members, protocols for communicating with internal and external stakeholders and mechanisms to report emergencies. The ERM also includes a detailed Pandemic Preparedness and Response Plan that helped us navigate through every phase of the COVID-19 pandemic.

Safety Assurance

The Safety Assurance component of our SMS stipulates how we use data and conduct quality assurance and internal oversight to validate the effectiveness of risk controls and the performance of the SMS. Composed of several individual programs and initiatives, Safety Assurance verifies that risk controls in our operational processes continue to conform to requirements and remain effective in maintaining risks at acceptable levels.

Safety Reporting

Our senior leadership team, which includes our Chief Executive Officer and Chief Operating Officer, receives monthly updates on team member safety and risks across our system. We focus on injury reduction, evaluate trends and develop programs to enhance safety. We are centralizing our data collection and injury reporting tools to provide better visibility, simplicity and easy access for company leaders. In addition to monitoring injury rates, we closely track aircraft ground damage, both as a part of our safety culture and because it is correlated with on-the-job injuries.

After a significant decline from 2019 to 2020, team member injury rates in our mainline and regional operations rose along with the increase in our operations in 2021. The challenges associated with ramping up our operations as demand returned and introducing new and returning team members back into our operations contributed to this increase. We remain focused on reducing injuries and redoubling our efforts to enhance our health and safety policies and procedures and elevate our safety culture. In 2021, we also experienced an increase in accidents in our mainline operations; five of the six recorded accidents were due to turbulence that caused crewmember injuries. As a result, we are implementing new technologies that pilots can use while en route to identify upcoming turbulence, updating flight attendant procedures for anticipated and forecasted turbulence, and expanding our use of data analysis by our Turbulence Task Force.

The overall goal of team member reporting is to improve safety awareness and identify operational deficiencies by facilitating an open line of communication between the employees and management without fear of reprisal. Potential safety concerns and suggestions identified through our many safety reporting programs are critical to early identification of hazards. These reports also allow the company to proactively address potential risks and implement corrective actions to resolve safety and security issues.

When a team member identifies any safety-related concern, he or she is encouraged to report the issue. Once the concern is received, skilled safety investigators collaborate with operational partners to review the information provided, assess the hazard and develop corrective actions to ensure the issue is addressed. These reports are then reviewed as part of the broader SMS to determine if there are system-related risks developing. We follow up with the reporter to communicate what we learned and what steps we are taking to prevent similar concerns from arising again. This follow-through and prompt action helps encourage additional reporting, thus creating a robust safety reporting life cycle.

Our most prominent safety reporting initiatives include the following: Aviation Safety Action Programs, Ground Safety Action Programs, Flight Operations Quality Assurance, the International Air Transport Association's Operational Safety Audit, Line Operations Safety Audits, and the Learning and Improvement Team.

Safety Action Programs

Everyone at American has a role to perform in ensuring that our people, customers and assets remain safe. Through Aviation Safety Action Programs (ASAPs) and Ground Safety Action Programs (GSAPs), team members can openly report potential hazards without concern of fault, thus improving our operations along the way.

American was the first airline to create an ASAP, although such programs are now commonplace among airlines worldwide. Currently, we have ASAPs for our Flight, Flight

Service, Dispatch, Technical Operations and Central Load Planning teams, giving us significantly greater coverage than the industry average. In 2021, we recorded 10,847 ASAP reports. We expect to roll out programs in 2022 for Gate Agent and Crew Scheduling teams, which will give us ASAP coverage across 100% of our operations.

Our GSAP for Fleet Service and Cargo teams plays the same role, encouraging team members to report potential safety issues in cargo and catering environments, control centers and on the ramp. This program was created in collaboration with the Transport Workers Union of America–International Association of Machinists & Aerospace Workers and the FAA. In 2021, we recorded 487 GSAP reports.

Flight Operations Quality Assurance (FOQA)

FOQA is a voluntary safety program administered jointly by American and the Allied Pilots Association (APA) that uses routinely recorded flight data to proactively identify and correct deficiencies in flight operations. We routinely monitor approximately 90% of our flights and use algorithms to look for potential safety risks. The results help us better understand pilot performance and the operating environment. They also allow us to monitor aircraft systems, performance and operational efficiency.

To enhance FOQA's effectiveness, American partnered with Collins Aerospace in 2021 to retrofit our narrowbody aircraft with its Aircraft Interface Device (AID). The entire fleet at American will be equipped with this wireless data transfer system by the end of 2024. AID improves the speed with which we can retrieve FOQA data, and it represents an important step toward increasing accuracy in monthly reporting, improving aircraft reliability and preparing for future products and capabilities.

American will also be the first carrier in the United States to adopt CEFA Aviation Mobile Services, a cloud-based application that allows pilots to recreate their flights on their company iPad. This tool will improve on the concept of crew debriefing by providing real-time feedback to our pilots. It turns each flight into a learning opportunity, ultimately contributing to the safety assurance of our SMS.

International Air Transport Association's Operational Safety Audit (IOSA)

As part of our commitment to transparency and monitoring, we are a registered participant in the IOSA program, which is an internationally recognized evaluation system designed to assess an airline's operational management and control systems. An IOSA, which takes place every two years, creates a structured methodology with standardized checklists that are comparable on a worldwide basis, enabling and maximizing the joint use of audit reports. In April 2022, we successfully completed our IOSA audit in conformance with all standards and recommended practices. As a result, American Airlines IOSA registration has been renewed until July 2024.

Line Operations Safety Audits (LOSA)

Since launching our continuous pilot LOSA program in 2017, we have been sending highly trained pilot observers onto the flight deck to better understand work-as-done versus work-as-imagined. Observing our frontline team members in action and gathering safety-related data on environmental conditions, operational complexities and crew performance in real time provides us with valuable insights for enhancing safety and resilience.

We are expanding LOSA to other work groups outside our pilot group. In 2021, we implemented a continuous Dispatch LOSA and are collecting data to enhance safety performance.

> **"The Learning and Improvement Team is the latest addition to our Flight SMS programs. By focusing on what we do well, it complements the programs that concentrate primarily on areas where we need to improve."**
>
> **— Bobbi Wells**
> Vice President, Safety Systems, Efficiency and Compliance

We also are developing a Cabin LOSA program and expect to start conducting observations in 2023. The Cabin LOSA program will help us better understand the challenges facing our flight attendants and the measures we can take to keep the cabin safe for everyone. We will continue to evaluate the feasibility of expanding LOSA to other operational groups, with 100% coverage as our ultimate goal.

Learning and Improvement Team (LIT)

We created LIT in 2022 to collect and analyze data on what makes our pilots successful in their everyday work. LIT is composed of line pilots who are specially trained in flight deck observations and facilitated discussions. While it is similar in some ways to LOSA, LIT is a separate program. One of the key differences between LIT and American's other Flight SMS programs (i.e., ASAP, FOQA, LOSA) is that LIT focuses on what goes well and why, thus providing a new safety lens through which to view the operation. Combining LIT data with other SMS data provides American with a broader picture of the system, rather than looking solely at unwanted outcomes.

Efficiency and Continuous Improvement Team

Learning and continuous improvement are essential to a robust safety program. This new team at American will solicit input and suggestions from frontline operational employees on how to improve the efficiency of the operation without compromising safety. Deferring to the expertise and input from these employees, all ideas and suggestions will be reviewed and vetted through our formalized SMS process. Employees may submit feedback and suggestions through their safety reporting programs, directly by email or by scanning the QR code on a card that is handed out during efficiency and safety meetings and posted in select locations.

Safety Risk Management

The Safety Risk Management (SRM) element of our SMS provides a decision-making process for identifying hazards and mitigating risk based on a thorough understanding of our systems and their operating environment. SRM enables us to consider the risks in our operations and reduce them to an acceptable level. We use the SRM process whenever there is a significant change to our operations, such as delivery of a new type of aircraft or the addition of a new airport to our network. We also apply SRM when our Safety Assurance process identifies a new hazard or an ineffective control of an existing hazard.

We use several tools to identify hazards and evaluate the need for new or revised risk controls. The process of risk management is the same regardless of the trigger or event, and our SMS looks at multiple factors for risk. While the FAA requirements are geared toward flight safety, our SMS goes further to evaluate a wider range of global risks, including operational disruptions.

Safety Promotion

Safety culture is the foundation of any SMS, with trust at the core. At American we believe in a Just Culture approach, which encourages each team member to take responsibility and have accountability for achieving the highest safety standards and results. This approach, which we have championed for more than a decade and has since become an accepted aviation industry standard, encourages team members to report errors, risky decisions or omissions without fear of punitive actions. We train our teams to look at potential safety events using three types of behaviors: human errors, at-risk behavior and reckless behavior.

Safety Training

Our ramp agents have the highest rate of injuries among all team member groups, primarily as the result of lifting baggage, often in awkward and tight spaces. Working with Pristine Condition International, which introduced the science of Olympic weightlifting techniques to industry, we recently conducted a training program on proper lifting techniques. This initiative included bringing athletic trainers to our busiest airport hubs to work with ramp agents on body mechanics and fitness. Our flight attendant group has the second-highest rate of injuries, followed by aircraft mechanics, and we have initiatives underway to reduce these rates as well. For example, we produced three new seatbelt safety videos for team members based on actual incidents.

Turbulence Task Force

In 2021, our Turbulence Task Force completed serving its original charter to reduce flight attendant and passenger injuries during flight, and now the identified hazards and concerns are addressed in our established and approved SMS process. The program proved highly successful.

StaySafe and Safety Engagement Tool

StaySafe is a safety communications campaign implemented across our airport and technical operations organizations. Its materials focus on lessons learned and ways to prevent team member injuries and equipment damage. Any bulletins or alerts are available across multiple platforms in order to reach all team members.

Through our new Safety Engagement Tool, we are bringing company leadership to the frontlines to engage in conversations with team members. Managers can communicate safety expectations, assess risks in the operation and reinforce safe behaviors.

Connecting Pilots to Peers for Valuable Support

American has long offered an Employee Assistance Plan that provides emotional and mental support for our team members around the world. We know that pilots, in particular, face unique pressures every time they enter the flight deck.

For more than a decade, Project Wingman has been providing our pilots and their family members with additional, specialized support whenever they need it. Established by American and the APA, this peer-to-peer 24/7 helpline allows pilots to reach out to other pilots for emotional and occupational support. Because it protects the privacy of its users, Project Wingman also alleviates any concerns pilots may have regarding the stigma of seeking help.

More than 40 pilots currently volunteer for Project Wingman. In addition to bringing a unique understanding of the challenges pilots can face in their professional and personal lives, these volunteers all undergo specialized, intensive training. As a result, they know when to lend a sympathetic ear and provide encouragement or recommend other resources when the situation warrants greater intervention.

Project Wingman is managed by a deputy chair of the APA aeromedical committee, and American employs a pilot at the managerial level on a full-time basis to support and promote it. That includes visiting our pilot training programs to talk about it and meeting with the chief pilots on a regular basis. Given the program's success, he also advises other airlines on their pilot mental health initiatives. The U.K. and European Union require such peer-to-peer programs, and the FAA recommends them for all airlines.

PROJECT WINGMAN

For detailed safety performance data, see page 58.

SUPPORTING OUR TEAM MEMBERS

The airline business is labor intensive. At American Airlines, the 127,000 team members who support our customers and business are the single most important reason for our company's success. We devote significant resources to recruiting and retaining our team members by providing competitive pay and benefits, top-tier training programs and a supportive work environment. Across all these areas, American has made diversity, equity and inclusion (DEI) a priority. We have accomplished much and continue to invest in initiatives that build upon our progress.

Diversity, Equity and Inclusion

American is implementing a multiyear strategy focused on embedding DEI throughout our organization. As the global leader in commercial aviation, we strive to lead the industry in DEI by:

- Hiring, engaging and retaining the best and brightest talent for growth
- Delivering excellence in our operations to serve and expand our global markets
- Ensuring our teams reflect the diversity of our global customer base
- Driving innovation to build competitive advantages

We have been intentional, innovative and timely in our efforts, making measurable progress quarter by quarter to building a diverse workforce and an inclusive workplace.

We have invested in education, starting with the launch of mandatory implicit bias training in 2018. In 2021, approximately 90,000 team members completed diversity training. Additionally, in September 2021, we introduced a web-based Inclusion Education Series. It Is designed to help each team member become an upstander, with the first course focusing on how team members can recognize when something is wrong, act to make it right and better understand microaggressions.

Retaining the best and brightest talent for growth

In 2021, American set representation goals to address our largest gaps in leadership representation. We found that our biggest opportunity for driving change required an initial focus on our Black team members. We met or exceeded our goals and accomplished the following:

- Increased Black representation at the director and above levels by approximately 80%, exceeding our goal of a 50% increase set at the beginning of 2021
- Retained at least 90% of Black leaders at the director and above levels and at least 75% of Black management and support staff
- Increased Black representation among senior managers by 20%

Following our initial focus on increasing Black representation, we will apply what we have learned to broaden our approach to other populations.

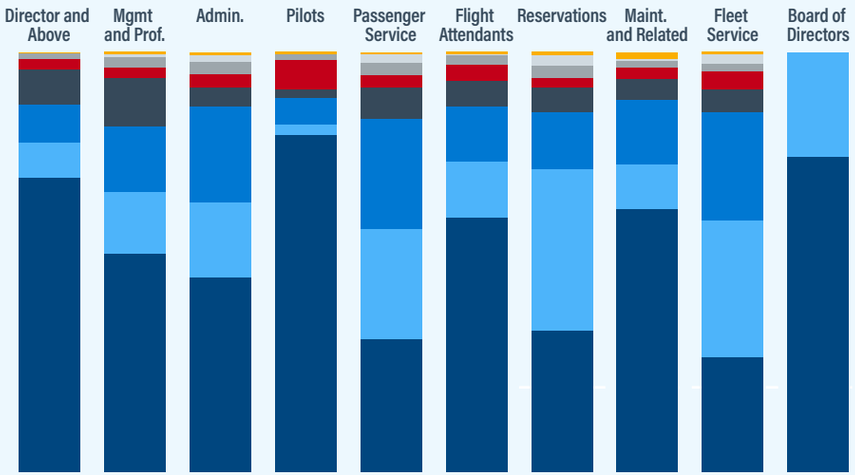
Our progress is the result of actions aimed at strengthening and expanding how we engage and advance all of our team members. Our strategic efforts provided a number of opportunities, including the following:

- **Executive Sponsorship Program (ESP)**: Launched in 2020, the two-year ESP provided valuable mentoring opportunities for 15 directors and managing directors.
- **Selection, Onboarding, Advancement, Retention (SOAR)**: To address the needs of all diverse leaders, we expanded ESP in 2022 into a new program called SOAR. This program will lay the foundation for a sustainable approach to supporting diverse talent and underrepresented groups across our enterprise.
- **McKinsey & Company Academies**: Consulting firm McKinsey & Company's development programs help organizations improve their talent pipeline and promote equity for diverse leaders. In 2021, American participated in four McKinsey & Company Leadership Academies.

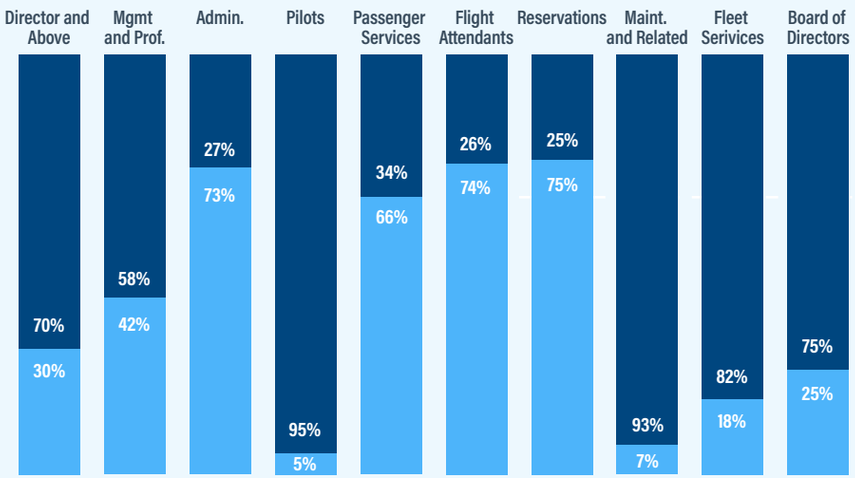
McKinsey & Company Leadership Academy	American Airlines Leader Group	2021 Participants
Black Management Accelerator	Managers and senior managers	100
Black Executive Leadership Program	Directors and managing directors	15
Hispanic and Latino Leadership Academy	Managers and above	23
Asian Leadership Academy	Managers and above	24

2021 TEAM MEMBER DIVERSITY

- **50.7%** White
- **18.2%** Black
- **17.4%** Hispanic/Latino
- **6.0%** Asian
- **3.9%** Not Specified
- **2.1%** Two or More Races
- **1.1%** Native Hawaiian/ Other Pacific Islander
- **0.7%** American Indian/ Alaskan Native



- **60%** Male
- **40%** Female



Note: Percentages may not add to 100% due to rounding.

American's 2021 Equal Employment Opportunity Report (EEO-1) is available on our website.

Our DEI commitment extends to our supply chain. In 2021, we spent $291 million with approximately 215 certified diverse suppliers (Tiers 1 and 2) and $318 million with 1,500+ small business suppliers.

Our Community Council, which is composed of executives from different industries, also helps us deepen and expand our commitment to diverse and global markets. Council members have advised American on ways to improve the travel experience for all our customers and provided candid insight on our talent development, supplier diversity and other efforts.

Driving accountability and recruiting diverse talent

In 2022, we deepened our DEI commitment by introducing a DEI metric into our short-term incentive plan, weighted at 10%. We designed this new metric to drive accountability in the specific aspects of our DEI program that we believe are critical to our company's financial and operational success. They include the following:

- Increasing diverse representation among leaders
- Retaining diverse leaders
- Encouraging engagement by all leaders to increase awareness of the value diversity can bring to our business
- Providing team members with training to help them recognize and address bias effectively in their day-to-day work at American

We are also expanding our recruitment efforts to attract the best diverse talent to our organization. For example, we joined the HBCU Partnership Challenge to promote greater engagement and support between private companies and historically Black colleges and universities. American also regularly participates in recruiting events organized by and for diverse populations to ensure that we are their employer of choice.

2021 Recruitment Partners:

Receiving recognition for inclusion

Our DEI efforts have received high scores from leading benchmarks such as the Disability Equality Index, Seramount Inclusion Index and Human Rights Campaign (HRC) Corporate Equality Index (CEI). The latter rates companies on their policies and practices with regard to lesbian, gay, bisexual, transgender and queer (LGBTQ) employees. In receiving the CEI's highest-possible rating, American was also designated as an HRC 2022 Best Place to Work for LGBTQ+ Equality.

American shares are also held by the NAACP Minority Empowerment ETF, an exchange-traded fund that tracks the Morningstar Minority Empowerment Index. According to Morningstar, this index is "designed to provide exposure to U.S. companies that have embedded strong racial and

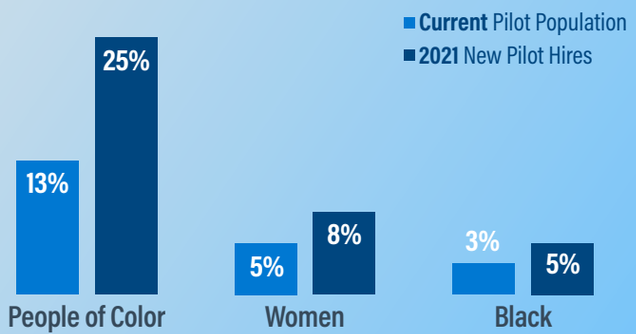
ethnic diversification policies into their corporate culture and that ensure equal opportunities to employees irrespective of their race or nationality." To that end, American started using HiredScore in 2021. This hiring technology platform uses artificial intelligence-driven solutions to ensure accountability and mitigate potential hiring bias.

Diversifying the flight deck

American was the first U.S. commercial carrier to hire both a Black pilot (in 1964) and a female pilot (in 1973). However, our company and the aviation industry in general still need to do better in the pilot's seat to mirror the DEI progress we've made elsewhere. We did make substantial progress during the past year in hiring pilots that self-reported as people of color, Black and women. See the chart on the next page for a breakdown of overall pilot diversity at American as well as the gains we made in 2021.

PILOT DIVERSITY

We hired 2,155 pilots in 2021 and started to meaningfully impact representation.



We are also exploring ways of ramping up those figures substantially. With a large number of pilots retiring over the next several years due to the FAA-mandated retirement age, we find ourselves with a once-in-a-generation opportunity to change the face of the flight deck. Diversifying our pilot pipeline not only helps ensure that we have the talent we need to support our customers, but it uplifts diverse communities by providing individuals with access to well-paying careers with clear paths for advancement. Among our initiatives, we expect our recently revitalized Cadet Academy to play an important role. (See *Developing the Next Generation of Pilots* on page 42.)

Building on a long-standing commitment to pay equity

American has long championed pay equity, and we were proud to sign the White House Equal Pay Pledge in 2016. Since then, we have continued to refine our efforts to identify and close pay gaps based on gender, race and ethnicity. The 86% of our workforce that is covered by collective bargaining agreements has built-in pay equity as part of those agreements. Therefore, we have focused on pay equity for the remaining 14%, made up of management and support staff, who do not belong to unions.

After engaging a labor and economics firm to support our pay equity analysis, American began deploying Syndio's workplace equity platform in 2020. Through Syndio's guidance, we fine-tuned our methodology and successfully completed pay equity reviews through 2021. Our approach begins by placing team members in one of 50 "similarly situated groups" (SSGs) across American based on the type of work they do. We then identify factors that can impact compensation within each SSG, such as an individual's seniority, experience or pay scale. Of course, higher salaries awarded to any new or existing team members can result in unintended pay gaps. By running a pay analysis at key points throughout the year, we can identify any drift in pay equity and address it. (See box at right.)

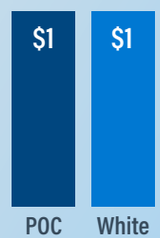
In 2021, American also became the first airline — and one of only a handful of large U.S. companies — to receive Fair Pay Workplace's inaugural pay equity certification. This Seattle-based nonprofit is working to dismantle pay disparities based on gender, race and ethnicity to create sustained fair pay. Our certification means that American has committed to apply valid methods for identifying pay equity issues and for implementing an ongoing remediation plan over time. As such, our rules and standards are available to the public.

The Fair Pay Workplace certification applies specifically to our management and support staff teams. Among our certification requirements, American will undergo regular check-ins that involve a seven-point review of our remediation plan. We have also pledged not to ask job candidates about their prior compensation or expectations for starting pay, which Fair Pay has identified as one of the largest sources of pay gaps.

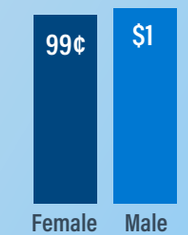
IDENTIFYING PAY GAPS

The chart below shows American's controlled pay gap for gender and race/ethnicity as of May 2022. By running a pay analysis on a regular basis, we can quickly close any gaps.

People of color earned $1 for every $1 earned by white team members in similar jobs



Women earned 99¢ for every $1 earned by men in similar jobs



Advocating for Equal Treatment for the LGBTQ+ Community

Targeting of transgender youth — and the LGBTQ+ community in general — is gaining traction in several states. That is why American continues to advocate for the Equality Act and opposes efforts to exclude the LGBTQ+ community from full civil rights protections. We are among the more than 200 major companies that have signed the Business Statement on Anti-LGBTQ Legislation sponsored by the HRC and Freedom for All Americans.

Our commitment to supporting the LGBTQ+ community is also reflected in the benefits we offer our team members. For example, American's medical plan options have included medically necessary services related to gender-affirmation surgery since 2011 and, beginning in 2022, we added certain cosmetic procedures to our self-funded medical plans related to gender dysphoria diagnosis.

Creating Pathways for a Second Chance

American's hiring practices are among our industry's most rigorous. In our quest to recruit and retain the best people, we also believe in creating a pathway for a second chance. That's why we signed the Fair Chance Business Pledge at the White House back in 2016, which helps eliminate employment barriers for those with a criminal record.

In March 2022, we furthered our commitment by joining the Second Chance Business Coalition (SCBC). Based on SCBC research, nearly 78 million Americans have a criminal record, and the unemployment rate among formerly incarcerated people is around 27%. That is the highest rate in U.S. history, even when including the Great Depression.

As an SCBC member, we will share successful second chance hiring strategies with other companies and participate in the SCBC annual survey of hiring practices. We will also play a part in other activities aimed at closing the employment gap for individuals in the criminal justice system.

Talent Development

American gives our team members the tools and resources they need to do their best work. We spent approximately $560 million on functional and professional development training in 2021. Our suite of programs helps our people develop the skills and experience to succeed in their roles and build rewarding, long-term careers within our company. Additionally, we've partnered with leading online learning platforms such as Skillsoft Percipio to enable team members to further their skills.

American's Skillsoft Learning Hub connects users to a wide variety of courses, videos, articles, books, podcasts and experts from thousands of internal and external sources. In 2021, this platform had more than 165,000 average monthly enabled users who were free to assess and develop their professional and personal skills on their own time and at their own pace.

Through our partnership with Harvard Business School Publishing, we provide mainline team members with access to Harvard ManageMentor (HMM). One of the most trusted, on-demand professional development resources, HMM covers 41 essential business topics — everything from managing change to leading people to handling difficult interactions. Each topic features a collection of concise lessons, videos and tools for fast and effective learning. We also mapped the HMM topics to our company's leadership attributes and Strategic Objectives to help our team members understand how their own development can align with what's important at American.

Developing the Next Generation of Pilots

Given anticipated global demand for air travel and other factors, American plans to hire approximately 7,000 pilots over the next five years. To support this future growth, we know that we must develop a strong pipeline of pilot candidates. Our Cadet Academy, relaunched in early 2022, will help us get there.

American designed this aviator training program to address the obstacles associated with traditional flight training. By providing an affordable financing opportunity and a predictable path to completion, the Cadet Academy removes barriers for anyone who wants to enter the profession. That includes women and people of color, who have long been underrepresented. This is made possible by flexible loan options and predictable training costs. In addition, participants have access to the American Airlines pilot group as a resource for professional development and mentorship.

American has partnered with two highly regarded flight schools for the Cadet Academy: CAE in Phoenix, and Coast Flight Training, which has locations in San Diego as well as Dallas and San Marcos, Texas. Students are expected to take approximately three years to complete the program as an airline-ready professional pilot. Among its eligibility requirements, pilots must be at least 21 years old by completion. They are then guaranteed an interview with one of American's three wholly owned regional carriers: Envoy Air, PSA Airlines or Piedmont Airlines. Since we have contractual flow-through agreements with each of these carriers, pilots who get hired have the opportunity to transfer directly to American once seniority accrues.

The Cadet Academy costs approximately $100,000, depending on the school selected. Once accepted, students can apply for attractive variable- or fixed-rate loan options. These loans have no fees, do not require a co-signer and allow students to cover the entire cost of the Cadet Academy. Housing and meal costs can be added, up to a $120,000 aggregate borrowing limit.

Comprehensive Benefits

Our comprehensive benefits support the physical, emotional and financial well-being of our team members and their families. One of the most popular new benefits in 2021 was a medical option that provides team members with health reimbursement credits, to use now and in the future, when they get an annual preventive exam. Each year they're enrolled in the plan, team members can receive $500 for health care expenses to use today and $1,000 for health care expenses in retirement. We also brought in SurgeryPlus, a complimentary concierge service that aligns team members needing surgery with the most qualified and experienced surgeons, coordinates scheduling from consults through follow-up and consolidates almost all — if not all — services into a single bill.

The following pages list some of the other core benefits our team members enjoy:

Medical, dental, vision and prescription coverage. We're committed to providing coverage that's both affordable and flexible to meet the needs of a diverse workforce and their families. All our medical options include prescription drug coverage, and team members can participate in one or more pretax health spending account options.

Our team members who live in Dallas-Fort Worth have access to an additional option, DFW ConnectedCare. This unique medical plan with lower monthly premiums and reduced co-pays is possible through a direct relationship with the Baylor Scott & White Quality Alliance. Finally, team members with high blood pressure, diabetes and asthma can access free generic or discounted name-brand medications and supplies through StayWell Rx.

Health care navigation and support. To help team members manage and understand their health benefits, we have partnered with Accolade, an independent health benefits navigator. Accolade's personal health assistants help U.S.-based mainline team members navigate the health care system and take full advantage of their insurance coverage. A similar service is available for team members enrolled in DFW ConnectedCare.

Telemedicine and on-site clinics. Thousands of team members have relied on Doctor On Demand, a program that offers physician consultations via telemedicine 24 hours a day, seven days a week. American also partners with Premise Health to staff on-site clinics at nearly all our hub airports and corporate headquarters. These clinics offer both acute and preventive care, along with basic lab services, vaccines and COVID-19 testing. For our round-the-clock workforce, these options provide convenient care when and where team members need it most.

Well-being programs. Pop-up events around the system make it easier for team members to keep an eye on their health. In 2021, nearly 4,000 team members participated and received flu vaccines, more than 1,000 had preventive health screenings and over 100 took advantage of mobile mammography events.

Employee Assistance Program (EAP). Our EAP is a 24/7/365 confidential support system for our team members and members of their households. Whether they need a listening ear, caregiving referrals, legal or financial consultations, veterans' assistance or help preparing for college, our EAP provides practical, real-life assistance for life's changes and challenges. Through the EAP, our team members and their families can receive four free counseling sessions per issue per year, and they choose from video, phone or in-person therapy. With dedicated onsite counselors at nine of our U.S. hubs, team members are never far from help and support.

Life insurance. Caring for our team members on their life's journey also means caring for their families, so American provides basic life insurance coverage for all team members at no cost, effective on day one.

Financial well-being resources. American wants our team members to be knowledgeable and enthusiastic participants in their financial future, so our 401(k) plan allows them to begin contributing on day one of employment. After one year of service, they're eligible for a company match or contribution, depending on their workgroup. Fidelity Investments, our 401(k) administrator, offers robust education-centered seminars and tools to help team members learn how they can best achieve financial wellness and meet their money goals. Online tools like the Financial Wellness Checkup make it quick and easy for our team members to see where they can improve their debt management, savings, budgeting and income protection. Team members also have access to complimentary one-on-one consultations through our dedicated Fidelity representative or by speaking with a Fidelity adviser at an investor center or by phone.

COVID-19 testing and vaccines. American worked with local health care providers in 10 metropolitan areas to make priority COVID-19 testing available to covered U.S.-based mainline team members and, in some cases, their dependents. For example, we performed more than 1,000 diagnostic tests at our headquarters in Dallas-Fort Worth. Nationwide, team members were able to be screened for COVID-19 via telemedicine as well as to

receive referrals to local testing sites for both diagnostic and antibody testing.

In early 2021, when vaccines were difficult to come by, American advocated for team members to have access. In addition, American announced an incentive program that spring which awarded fully vaccinated team members an extra day of vacation or vacation pay and $50 in recognition points.

Family support resources. We provide up to 10 weeks of paid leave through our maternity disability plan and up to $4,000 in financial support per case for adoption-related expenses (with a maximum reimbursement of $8,000 over a team member's career with us). American also provides positive-space round-trip tickets to pick up a qualified adoptee and bring the child home. The American Airlines Family Fund is a nonprofit organization funded *by* team members *for* team members, which provides tax-free grants to those affected by natural disasters, health crises and other unforeseen circumstances.

Human Rights

Our core values include integrity, respect for human rights and the unique customs and cultures of the locations where we operate, and compliance with the law.

Although governments are primarily responsible for safeguarding human rights, we endeavor to conduct our business in a socially responsible and ethical manner consistent with human rights principles. Our approach to human rights is guided by international standards, and we respect and support the following:

- United Nations (U.N.) Guiding Principles on Business and Human Rights

- Organisation for Economic Co-operation and Development's Guidelines for Multinational Enterprises
- Core Conventions of the International Labour Organization (ILO)
- ILO's Declaration on Fundamental Principles and Rights at Work
- U.N. Universal Declaration of Human Rights

The American Airlines Human Rights Statement applies to all team members and contractors, employees of our wholly owned subsidiaries, and our suppliers and other business relationships. It is formally aligned with global standards, such as the U.N. Guiding Principles on Business and Human Rights. We continuously evaluate our operations and value chain to identify, assess and address human rights risks and to engage key stakeholders.

Our statement complements our annual team member training on the Standards of Business Conduct. We also provide a dedicated 24/7 hotline for team members, suppliers and partners to anonymously report human rights concerns. We do not tolerate any retribution or retaliation taken against any individual who has, in good faith, sought advice or reported questionable behavior or a possible violation.

Human Trafficking Prevention

American has become an industry leader in combating human trafficking and child exploitation. We have mandatory human trafficking awareness training for our frontline, customer-facing team members — including flight attendants, pilots and airport customer service representatives — as well as for team members with international purchasing responsibilities. This training is required for new hires and as part of our recurrent training programs. We know that vigilance is key in fighting the scourge of human trafficking, and we stand ready to help.

American's collaboration with government agencies, industry partners and nongovernmental organizations is a key part of our human trafficking prevention program. We work with a range of partners, including the following:

- The U.S. Department of Homeland Security's Blue Campaign, a national public awareness effort that aims to educate the public, law enforcement and industry partners to recognize the indicators of human trafficking.
- New Friends New Life (NFNL), a Dallas-based organization working to restore and empower formerly trafficked teenage girls and sexually exploited women and their children. According to NFNL research, Texas ranks second in the country for trafficking prevalence, with more than 300,000 victims annually statewide. By providing access to education, job training, financial assistance and mental health support, NFNL helps women and their children overcome backgrounds of abuse, addiction, poverty and limited opportunities. NFNL has held training sessions for more than 150 American team members at our headquarters in Fort Worth, Texas, and another 50 at Miami International Airport. The organization honored American in October 2021 as a recipient of its ProtectHER award, which recognized our commitment — in partnership with Jones Day — to helping remove the barrier of a criminal record obtained as a direct result of being trafficked and exploited.
- Texas Businesses Against Trafficking, a public–private awareness and prevention initiative led by the Texas Secretary of State.

Our Government Contracts Compliance team ensures the company's compliance with domestic and international modern slavery and human trafficking laws. In July 2021, we published the annual update of American's Modern Slavery and Human Trafficking Statement to comply with the U.K. Modern Slavery Act of 2015 and Australia's Modern Slavery Act of 2018. American is also a signatory to ECPAT-USA's Tourism Child-Protection Code of Conduct, a voluntary set of business principles to prevent child sex tourism and the trafficking of children.

For detailed team member diversity data, see page 59.

American Airlines flies to more than 300 destinations in the United States and internationally, and we are committed to providing our customers with a world-class travel experience. Despite the challenges presented by COVID-19 over the past two years, we continue to rigorously measure and track customer satisfaction through passenger surveys — efforts that led to further improvements in our operations and the services we provide.

Although comfort and convenience are essential aspects of our service offerings, we know that dependability and reliability are the foundation for meeting our customers' needs. Our chief priority is getting passengers to their destinations safely, on schedule and with their baggage in tow, and we closely track our performance on these metrics.

Driving record performance in customer satisfaction

In 2021, American safely transported over 165 million passengers, about 25% more than the next largest carrier. Despite the ongoing volatility in demand for air travel based on the spread of COVID-19 and its emerging variants, we achieved our best performance in on-time arrivals, on-time departures and completion factor compared with any pre-pandemic year in our history.

Our operating performance was particularly strong during the year-end holidays. In fact, our on-time performance in December 2021 outperformed any December in years prior to the pandemic, and American performed better than our primary competitors in these key operational metrics during the month. We achieved these results despite an increase in sick calls toward the end of the year due to the Omicron variant, a challenge American managed with far less disruption than other airlines.

Driven largely by this performance, American posted record Likelihood to Recommend (LTR) scores for 2021. Our full-year score of 73.0 exceeded our target and reflected a 1.7% gain over 2020. Our score for the fourth quarter — 75.6 — was our highest ever recorded for a single quarter. LTR measures satisfaction on a scale of 0 to 100 points based on a recent trip, and it strongly correlates with on-time performance. Based on 2021 data, we see an average penalty of more than 20 points to LTR when a flight's arrival is delayed.

LTR also reflects other aspects of the customer journey at the airport and in the air, such as check-in and boarding, customer service and onboard products.

Although LTR is a commonly used metric across industries, there is no industry standard methodology for measuring or reporting it. Our sampling of 2 million customer surveys reflects a representative mix of customers by segment relative to the passenger mix of customers who fly on a daily basis. This helps ensure a balance of feedback from both AAdvantage members and nonmembers, making American more accountable to all our customers and helping us better understand their collective priorities.

Our mishandled baggage rate (MBR) rose to 7.63 in 2021, due largely to the significant increase in flights and travelers as we ramped back up operations. Our higher MBR rate of 8.48 in 2019 provides a somewhat better point of comparison, although our flight volumes for that year were greater than in 2021.

Enhancing the customer experience

Providing exceptional service is crucial to our success. In 2021, American was recognized for the fourth consecutive year with the prestigious Five Star rating in The APEX Official Airline Ratings — Global Airline category. This rating is based on verified customer feedback on the overall travel experience.

Among the dozens of initiatives we implemented in 2021, we expanded our free inflight entertainment options through exclusive partnerships with Rosetta Stone, Skillshare and Apple Books. We also reintroduced free access to live sports and news networks for customers traveling on any of American's domestic narrowbody aircraft. These inflight entertainment offerings are supported by the fastest Wi-Fi on more aircraft than any other carrier. Through our Five Star Essentials service, we simplified the airport experience at select locations for passengers traveling with children or with anyone needing extra help.

Among other travel enhancements, the updated American Airlines app added a chat function so that customers can ask a Customer Care representative for assistance in real time. With so many customers amassing flight credits as a result of COVID-19, we also streamlined the process for redeeming credits online without requiring specialized assistance. In addition, we introduced an automated callback feature to support customers who prefer to manage their travel over the phone at a time that's most convenient for them.

We have introduced a number of other initiatives in 2022 that should further improve the customer experience, such as a relaunched effort to improve accessibility for passengers needing wheelchairs or other support while traveling. Further, as we continue to expand our partnerships, we are rolling out customer surveys across them as well to ensure we are delivering for the customer across carriers.

Being fair and honest in our interactions

We are in business to provide safe, dependable and friendly air transportation to our customers, and we work hard to make their experience a positive one. At the same time, operating a network of more than 3,400 daily flights is challenging and complex, and inevitably some of our flights are affected by adverse circumstances — some within our control and others not. When that happens, our comprehensive customer service plan outlines the many policies and processes we have put in place to ensure that American's customers are treated fairly and receive the assistance they need.

In addition, we are committed to accuracy in our communications and marketing — and to refrain from any deceptive practices.

Responding swiftly to customer concerns

The ability to respond swiftly to any customer concerns is a critical part of our approach to customer satisfaction. During peak times, when our response may not be as rapid as we would like, we have tools in place such as chat through the mobile app, automated callback and immediate, automated correspondence to update customers with the most relevant information for their travels.

We also share reports of customer concerns quarterly with senior executives and our Board of Directors. Our Chief Customer Officer receives information about customer correspondence daily.

American is especially focused on comments that allege discriminatory behavior, and we have empowered a special Customer Relations team to increase awareness of such complaints among customer-facing team members. Each allegation is investigated, and disciplinary action — up to

and including termination — can result if we determine that unacceptable behavior occurred.

Providing inclusive offerings

American's commitment to diversity, equity and inclusion extends to our approach to customer engagement. As an integral part of this deepening commitment, we formed a Community Council in late 2020 made up of well-established community leaders with experience representing different industries. The members of the council have served as strategic advisers who provide us with objective and candid insight on company initiatives, particularly those focused on improving the customer travel experience.

Insights from the Community Council have motivated American to take many steps towards meaningful action, including adding more Black representation in our dining and inflight products as well as entertainment offerings. In 2021, we launched partnerships with Essence, the leading media, technology and commerce company dedicated to the needs of Black women, and Blavity Inc., a diversified digital media company that builds platforms to inform, entertain and engage communities of color. We also retained Walton Isaacson, a leading Black-owned advertising and marketing agency, as one of our agencies of record.

Through our James Beard Foundation sponsorship, American is featuring menu items from diverse chefs in our Flagship Lounges and Flagship First Dining locations. They include Chef Tiffany Derry, a two-time James Beard Award finalist, at the DFW Flagship Lounge. Bundt cakes from Silver Spoons Desserts, founded by black female entrepreneur Tamara Turned, are now featured on board select American Airlines flights as well.

Customers will continue to experience more representation throughout their travel journey to reflect the airline's commitment to becoming an industry leader in diversity, equity and inclusion.

Taking a multipronged approach to data privacy and cybersecurtity

Cybersecurity and data privacy are key priorities at American Airlines. Our approach for identifying and mitigating cybersecurity risk is aligned with the National Institute of Standards and Technology Special Program 800-171. Our program, which includes process flows, policies and standards, is evaluated annually by a global cybersecurity firm. Our Chief Information Security Officer is responsible for cybersecurity and reports to the Chief Information Officer, who is a member of our senior management team. In addition, our most senior cybersecurity leaders brief the Audit Committee of our Board of Directors on cybersecurity matters quarterly. Our company also has a cybersecurity training and awareness program focused on educating our team members about cyber risk and our internal policies and procedures related to cybersecurity, privacy and compliance.

American's privacy program, which is audited annually, is led by our Chief Privacy and Data Protection Officer and staffed with certified privacy professionals. We also have a Privacy Council, composed of more than 20 senior leaders who meet quarterly to discuss privacy issues, challenges and proposed solutions. The council is supported by approximately 75 privacy liaisons across the business.

The privacy program is guided by key privacy principles that inform how American handles and protects the personal information in our care, such as responsibility, transparency, security and choice. Our Privacy Office regularly conducts privacy impact assessments of business processes and supporting information technology (IT) systems that process personal data. The primary role of these assessments is to identify and remediate associated privacy risks.

Information obtained from privacy impact assessments is used to populate our personal data inventory, which details what personal data our company stores, how it is used, where it is stored, with whom it is shared and for how long it is retained. We supplement these efforts by coordinating with our IT department to implement privacy design requirements into the architecture and operation of our systems that store and process personal data. We also use these processes to fulfill our legal requirements for handling data rights requests and data disclosures via our internal and external privacy policies and statements.

Our team members take privacy training courses annually, and the Privacy Office conducts individual training sessions with different business units each year that address a variety of privacy issues. We also coordinate closely with our Vendor Management and Corporate Legal functions, which provide input on privacy terms and provisions in our agreements with our business partners and vendors to ensure that privacy issues are appropriately addressed.

For operational performance data, see page 54.

Providing Travel Resources to Help Navigate the Persistent COVID-19 Pandemic

As the pandemic extended into its second year — with travel requirements shifting frequently depending on destination and other factors — American provided our customers with the resources they needed. We expanded the use of Sherpa, an independent travel resource, to provide updates on international travel requirements due to COVID-19 variants. We also continued to partner with VeriFLY to help customers understand and verify their travel requirements. Its mobile health wallet makes it easy for passengers to upload negative COVID-19 test results, vaccination records and forms they need to get verified status for travel. Our customers can also use the app to get mobile boarding passes and take advantage of dedicated and expedited check-in lanes at several airports.

Customers traveling internationally can now access our Ready to Fly checklist when viewing their eligible reservations on aa.com and the American Airlines mobile app. The checklist outlines everything our customers need, including test and vaccination requirements, along with options to submit digital documentation and contact tracing information.

Ready to Fly also links to the VeriFLY app. Customers can now check-in online at aa.com, through the American Airlines mobile app or at the airport kiosk after receiving their green check mark from VeriFLY and head straight to the gate. These new digital options save customers time at the airport and give them peace of mind that they are ready to fly before arriving at the airport.

American also partnered with trusted COVID-19 testing providers to allow customers to take a test at a clinic, at home before their trip or to order a test kit to pack for their return trip. Among our clinic partners, both GoHealth and CareNow each offer more than 150 locations in the United States. For at-home testing before a trip, customers can order a kit from LetsGetChecked. It offers a 48-hour turnaround time for results. Qured, eMed and Optum all provide packable test kit options for return trips.

Task Force on Climate-related Financial Disclosures (TCFD) Index

	TCFD Recommended Disclosure	Disclosure Location
GOVERNANCE		
Disclose the organization's governance around climate-related risks and opportunities.	▪ Describe the board's oversight of climate-related risks and opportunities. ▪ Describe management's role in assessing and managing climate-related risks and opportunities.	▪ ESG Strategy — Management and Governance (p. 5)
STRATEGY		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning where such information is material.	▪ Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term. ▪ Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. ▪ Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	▪ Addressing Climate Change (p. 8) ▪ Addressing Climate Change — Analysis of Climate-Related Risks and Opportunities (p. 22)
RISK MANAGEMENT		
Disclose how the organization identifies, assesses and manages climate-related risks.	▪ Describe the organization's processes for identifying and assessing climate-related risks. ▪ Describe the organization's processes for managing climate-related risks. ▪ Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	▪ Addressing Climate Change — Climate-Related Risk Assessment (p. 20)
METRICS AND TARGETS		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	▪ Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. ▪ Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks. ▪ Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	▪ Addressing Climate Change — Our Climate Goals (p. 9) ▪ Addressing Climate Change — Our Directional Pathway to Net Zero in 2050 (p. 11) ▪ Addressing Climate Change — Our Carbon Footprint in 2021 (p. 12) ▪ Data Tables (p. 55)

Sustainability Accounting Standards Board (SASB) Index — Airline Industry Standard

SASB Code	SASB Metric	Disclosure Location or Response
GREENHOUSE GAS EMISSIONS		
TR-AL-110a.1	Gross global Scope 1 emissions	▪ Addressing Climate Change — Our Carbon Footprint in 2021 (p. 12) ▪ Data Tables (p. 55)
TR-AL-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	▪ Addressing Climate Change (p. 8) ▪ Addressing Climate Change — Our Climate Goals (p. 9) ▪ Addressing Climate Change — Our Directional Pathway to Net Zero in 2050 (p. 11) ▪ Data Tables (p. 55)
TR-AL-110a.3	(1) Total fuel consumed, (2) percentage alternative, (3) percentage sustainable	▪ Data Tables (p. 56)
LABOR PRACTICES		
TR-AL-310a.1	Percentage of active workforce covered under collective bargaining agreements	▪ Supporting our Team Members (p. 40)
TR-AL-310a.2	(1) Number of work stoppages and (2) total days idle	American Airlines did not have any union work stoppages or idle days in 2021.
COMPETITIVE BEHAVIOR		
TR-AL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	In 2021, we had no monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations. We also had no confirmed cases of corruption or bribery during the year.
ACCIDENT AND SAFETY MANAGEMENT		
TR-AL-540a.1	Description of implementation and outcomes of a Safety Management System	▪ Operating Safely (p. 29) ▪ Operating Safely — Our Safety Management System (p. 31) ▪ Data Tables (p. 58)
TR-AL-540a.2	Number of aviation accidents	▪ Data Tables (p. 58)
TR-AL-540a.3	Number of governmental enforcement actions of aviation safety regulations	▪ Data Tables (p. 58)

United Nations Global Compact Communication on Progress Index

CEO Statement	Reference Link
A statement by the Chief Executive expressing continued support for the UN Global Compact and renewing the participant's ongoing commitment to the initiative	Message From Our CEO (p. 2)

UNGC Principle	Reference Link
HUMAN RIGHTS	
1. Businesses should support and respect the protection of internationally proclaimed human rights.	See our Standards of Business Conduct for Employees, Human Rights Statement and Modern Slavery and Human Trafficking Statement ▪ Supporting our Team Members — Human Rights (p. 44)
2. Businesses should make sure that they are not complicit in human rights abuses.	See our Standards of Business Conduct for Employees, Human Rights Statement and Modern Slavery and Human Trafficking Statement
LABOR STANDARDS	
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	See our Standards of Business Conduct for Employees, Standards of Business Conduct for Suppliers and Proxy Statement
4. Businesses should uphold the elimination of all forms of forced and compulsory labor.	See our Standards of Business Conduct for Employees, Modern Slavery and Human Trafficking Statement and Human Rights Statement
5. Businesses should uphold the effective abolition of child labor.	See our Standards of Business Conduct for Employees, Modern Slavery and Human Trafficking Statement and Human Rights Statement
6. Businesses should uphold the elimination of discrimination in respect of employment and occupation.	See our Work Environment Policy (U.S.), Human Rights Statement and Ethics helpline for team members, vendors and contractors ▪ Supporting our Team Members — Diversity, Equity and Inclusion (p. 37)

UNGC Principle	Reference Link
ENVIRONMENT	
7. Businesses should support a precautionary approach to environmental challenges.	▪ Addressing Climate Change (p. 8) ▪ Sustainable Operations (p. 27) ▪ Data Tables (p. 54) ▪ CDP Response
8. Businesses should undertake initiatives to promote greater environmental responsibility.	▪ Addressing Climate Change (p. 8) ▪ Sustainable Operations (p. 27) ▪ Data Tables (p. 54) ▪ CDP Response
9. Businesses should encourage the development and diffusion of environmentally friendly technologies.	▪ Addressing Climate Change (p. 8) ▪ Sustainable Operations (p. 27) ▪ Data Tables (p. 54) ▪ CDP Response
ANTI-CORRUPTION	
10. Businesses should work against corruption in all its forms, including extortion and bribery.	See our Standards of Business Conduct for Employees and Standards of Business Conduct for Suppliers

Financial Performance*	2021	2020	2019
REVENUE			
Passenger	$26,063	$14,518	$42,010
Cargo	1,314	769	863
Other	2,505	2,050	2,895
Total operating revenue	29,882	17,337	45,768
Total operating expenses	30,941	27,758	42,703
Operating income (loss)	(1,059)	(10,421)	3,065
Income tax provision (benefit)	(555)	(2,568)	570
Net income (loss)	(1,993)	(8,885)	1,686
Basic earnings (loss) per share	(3.09)	(18.36)	3.80
Cash dividends declared per common share	—	0.10	0.40

* In millions of U.S. dollars, except per-share amounts.

Operational Performance		2021	2020	2019
SASB Metrics	MAINLINE			
	Revenue passenger miles (millions)*	136,512	77,065	212,859
	Available seat miles (millions)**	182,189	119,567	248,833
	Passenger load factor (percent)***	74.9	64.5	85.5
	Departures (thousands)	870	619	1,115
	REGIONAL			
	Revenue passenger miles (millions)*	25,026	14,760	28,393
	Available seat miles (millions)**	32,346	23,600	36,255
	Passenger load factor (percent)***	77.4	62.5	78.3
	Departures (thousands)	955	720	1,191

Note: American uses miles for our operational data reporting, rather than kilometers, as in the SASB metrics.

* Revenue passenger mile (RPM): A basic measure of sales volume. One RPM represents one passenger flown one mile.

** Available seat mile (ASM): A basic measure of production. One ASM represents one seat flown one mile.

*** Passenger load factor: The percentage of available seats that are filled with revenue passengers.

Operational Performance	2021	2020	2019
On-time performance*	81.6%	82.3%	77.7%
Completion factor**	98.1%	93.9%	97.6%

Mishandled Baggage Rate (MBR)	2021	2020	2019
By year	7.63	5.96	8.48

* Percentage of reported flight operations arriving less than 15 minutes after the scheduled arrival time.

** Percentage of scheduled flight operations completed.

Environmental Performance		2021	2020	2019
DIRECT AND INDIRECT GHG EMISSIONS				
Scope 1 Emissions (thousands of metric tons of CO_2e)				
SASB Metrics	Scope 1 emissions — all sources*,**	28,810	19,831	41,143***
	– Jet fuel emissions†	28,414	19,636	
	– Emissions associated with Sustainable Aviation Fuel (CH_4 and N_2O)	0.08	0.02	
	– Diesel emissions	35	31	
	– Gasoline emissions	47	50	
	– LP gas emissions	0.3	0.2	
	– Heating oil emissions	9	6	
	– Natural gas emissions	68	75	
	– Purchased CO_2e	237	33	
Biogenic Emissions (thousands of metric tons of CO_2)				
Emissions associated with Sustainable Aviation Fuel emissions (CO_2)**		13.4	3.6	—
Scope 2 Emissions (thousands of metric tons of CO_2e)				
Scope 2 location-based emissions**		251	258	296
Scope 2 market-based emissions**		249	250	274
Scope 3 Emissions (thousands of metric tons of CO_2e)				
Scope 3 emissions — all categories‡		12,907	9,674	15,968
– Category 1 (purchased goods and services)		2,031	1,905	2,640
– Category 2 (capital goods)		296	289	271
– Category 3 (fuel and energy-related activities)†		6,074	6,802	12,348
– Category 4 (upstream transportation and distribution)		3,771		
– Category 5 (waste generated in operations)		2	2	2

Environmental Performance	2021	2020	2019
DIRECT AND INDIRECT GHG EMISSIONS (CONTINUED)			
Scope 3 Emissions (thousands of metric tons of CO_2e) (continued)			
– Category 6 (business travel)	75	58	122
– Category 7 (employee commuting)	210	223	227
– Category 8 (upstream leased assets)	42	52	3
– Category 9 (downstream transport)	14	11	23
– Category 15 (investments)	392	332	332
OTHER EMISSIONS			
Aircraft Emissions (metric tons from landing/take-off cycle)			
Nitrogen oxides (NOx)	15,563	12,061	19,883
Hydrocarbons (HC)	573	514	1,099
Carbon monoxide (CO)	8,271	7,474	11,534
Ground Emissions From Reporting Facilities (metric tons)			
Carbon monoxide (CO)	46.0	63.0	40.7
Nitrogen oxides (NOx)	61.6	85.7	64.5
Sulfur oxides (SOx)	1.7	1.0	1.9
Volatile organic compounds (VOC)	76.8	81.8	91.7
Particulate matter (PM)	5.3	6.8	6.7
Other Emissions (metric tons)			
Ozone-depleting substances	1.1	0.4	1.2

* In 2020, Scope 1 emission factors transitioned from The Climate Registry to the GHG Protocol and EPA Emissions Factor Hub. Prior years were not restated.

** Data externally verified; see page 62.

*** Disaggregated categories for 2019 for Scope 1 emissions are not available.

† Jet fuel emissions represents emissions from mainline operations and owned regional airlines Envoy, PSA and Piedmont.

‡ In 2020, Scope 3 emission factors transitioned from the WRI Scope 3 Tool to the EPA's Supply Chain GHG Emissions Factors for US Industries. Prior years were not restated.

Environmental Performance	2021	2020	2019
SASB Metrics			
FUEL USE			
Nonrenewable Fuel Use (millions of gallons)			
Jet fuel*	2,995	2,070	4,157
Diesel	3.44	2.96	4.21
Gasoline	5.34	5.60	7.49
LP gas	0.05	0.03	0.04
Heating oil	0.11	0.08	0.02
Natural gas (million MMBtu)	1.27	1.41	1.63
Renewable Fuel Use (millions of gallons)			
Jet fuel sourced from sustainable feedstock	1.42	0.381	—
STANDARDIZED ENERGY CONSUMPTION			
Nonrenewable Energy Consumption (thousand MWhs)			
Jet fuel — nonrenewable	107,539	74,351	151,612
Other fuels — nonrenewable	716	750	940
Total fuel — nonrenewable fuels	108,255	75,101	152,552
Electricity consumption — nonrenewable direct	550	530	627
Total energy consumption — nonrenewable	108,805	75,631	153,179
Renewable Energy Consumption (thousand MWhs)			
Jet fuel sourced from sustainable feedstock	51	14	—
Direct purchase of renewable electricity	36	53	52
Indirect purchase of renewable electricity**	208	127	175
Renewable energy consumption	295	194	227

Environmental Performance	2021	2020	2019
SASB Metrics			
STANDARDIZED ENERGY CONSUMPTION (CONTINUED)			
Total Energy Consumption (thousand MWhs)			
Jet fuel	107,590	74,365	151,612
Other fuels	716	750	940
Total fuels	108,306	75,115	152,552
Electricity	586	583	679
Total energy	108,892	75,698	153,231
Renewable Energy as a Percentage of Total Energy			
Renewable jet fuel as a percentage of total jet fuel	0.05%	0.02%	—
Renewable direct electricity as a percentage of total electricity	6.1%	9.1%	7.6%
Renewable direct + indirect electricity as a percentage of total electricity***	41.6%	30.9%	33.5%
Renewable direct energy as a percentage of total energy	0.1%	0.1%	0.03%
Renewable direct + indirect energy as a percentage of total energy***	0.3%	0.3%	0.1%

* Jet fuel consumption represents jet fuel from mainline operations and owned regional airlines Envoy, PSA and Piedmont.

** Indirect purchases represent electricity purchased for facilities under American's operational control through airport authorities.

*** Represents estimated amount that will be updated when actual data is available.

Environmental Performance	2021	2020	2019
PROGRESS TOWARD GOALS			
Renewable Energy Goal			
Jet fuel sourced from sustainable feedstock (million gigajoules)	0.18	0.05	—
Renewable electricity (million gigajoules)	0.75	0.19	0.19
Cumulative renewable energy used since 2019	1.36	0.43	0.19
Percent of goal achieved to use 2.5 million gigajoules by 2025	54.3%	17.2%	7.6%
Emissions Intensity Goal			
Intensity improvement since baseline year of 2014	0.8%	20.2%	–5.3%
INTENSITY PERFORMANCE			
Fuel and NOx Intensity			
Passenger fuel intensity (liters/100 passenger kilometer)	4.349	5.424	
Cargo fuel intensity (liters/tonne kilometer)	0.417	0.949	
Passenger NOx intensity (g of NOx/ passenger kilometer)	0.056	0.075	
Cargo NOx intensity (g of NOx/tonne kilometer)	0.369	0.829	
GHG Emissions Intensity			
Scope 1 jet fuel emissions per 1,000 revenue ton miles (using U.S. DOT standard)	1.66	1.98	1.56
Scope 1 jet fuel emissions per 1,000 revenue ton miles (using International Air Transport Association standard)	1.53	1.82	1.43
Sales intensity (g CO_2e from jet fuel per dollar of revenue)	952	1,133	862
SBTi Aviation Tool carbon intensity (life cycle g CO_2e/RTK)	1,317	1,595	1,228

Environmental Performance	2021	2020	2019
WASTE			
Hazardous waste (tons)	692	715	901
WATER			
Water use for American's major facilities, excluding airports (millions of gallons)*	465	466	495
NOISE			
Percent of aircraft certified as, or meeting, Chapter 3 noise limits	100%	100%	100%
Percent of aircraft certified as, or meeting, Chapter 4 noise limits	100%	100%	100%
Percent of aircraft certified as, or meeting, Chapter 5 noise limits	20%	19%	22%
ENVIRONMENTAL COMPLIANCE			
Number of environmental notices of violation	15	3	5
Amount of environmental fines and penalties (thousands of U.S. dollars)	$5.7	$1.5	$6.5
Spills recorded (1 gallon or greater)	256	212	429

* From municipal water supplies.

Community Impact	2021	2020	2019
GLOBAL GIVING			
Total global giving — all sources (millions of U.S. dollars)	$20.2	$22.5	$33.0
– Cash donations (millions of U.S. dollars)	$6.0	$6.0	
– Total product or services donations, projects/ partnerships or similar (millions of U.S. dollars)	$14.2	$16.5	
VOLUNTEER SUPPORT			
Total volunteer hours (thousand hours)	20	134	157

Flight Safety Performance		2021		2020		2019	
		Mainline	Regional	Mainline	Regional	Mainline	Regional
Number of flights*		1.5 million		1.1 million		1.9 million	
SASB Metrics	Number of aviation accidents**	6	2	2	3	4	3
	Number of enforcement actions from government agencies***	0	3	0	0	0	0
	Number of safety risks and hazardous situations identified†	140	332	104	441	81	372
	Percentage of safety risks and hazardous situations identified that were mitigated‡	100%	99%	95%	99%	97%	97%
Aircraft ground damages (rate per 10,000 departures)§		2.37	0.72	2.16	0.81	1.61	0.72
Aviation Safety Action Program reports		11,295	7,306	7,131	5,667	11,952	10,349

* Mainline and owned regional.

** Defined according to the International Civil Aviation Organization (Annex 13) and the National Transportation Safety Board (Part 830). Of the six mainline accidents in 2021, five involved turbulence that caused crewmember injuries. The sixth involved damage that occurred when the aircraft struck a light pole with a wingtip during taxiing; there were no injuries to customers or crewmembers as a result of this event. Of the two regional accidents, one involved a passenger injury that occurred during a turbulence event, when a passenger failed to follow crewmember instructions to remain seated. The other was a crewmember injury during pushback from a gate.

*** Defined to include enforcement actions by the FAA, the European Aviation Safety Agency or equivalent national authorities related to the regulation of aviation safety.

† The majority of our risk assessments are performed proactively prior to implementing or revising systems/procedures. American's comprehensive SMS covers safety risks and hazardous situations related to six areas: flight safety, flight service, ground operations, technical operations (maintenance), security and environmental. The figures reported here include all such risks identified by our SMS. The number of risk assessments increased in 2020 due to operational and staffing changes as a result of COVID-19; e.g., returning to service aircraft that had been stored required risk assessments to determine readiness to fly.

‡ Our SMS requires that we mitigate identified risks, particularly high risks, to as low as reasonably practicable (ALARP). These systemic and residual risks are monitored, measured and tracked.

§ Due to the slowdown in travel across the industry in 2020, American implemented an expansive temporary aircraft storage program throughout the network that resulted in a significant increase of aircraft on the ground, where damages are most likely to occur.

Team Member Safety Performance	2021		2020		2019	
	Mainline	Regional	Mainline	Regional	Mainline	Regional
Injury rate*	6.29	5.13	5.64	3.82	9.57	7.11
Lost day rate**	5.60	2.99	3.66	2.33	6.14	3.74
Work-related fatalities	0	0	0	1	0	1

* Total recordable cases per 200,000 hours worked.

** The lost day rate, which the U.S. Occupational Safety and Health Administration calls the Days Away from Work Injury and Illness rate, is calculated as the number of cases multiplied by 200,000 work hours divided by total hours worked.

Gender Diversity of American Airlines Group (AAG) Employees Globally	2021			2020			2019		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
Permanent employees	127,018	40%	60%	130,529	40%	60%	139,103	41%	59%
EMPLOYMENT TYPE									
Full-time	108,805	38%	62%	110,795	39%	61%	118,573	39%	61%
Part-time	18,213	49%	51%	19,734	48%	52%	20,530	49%	51%
EMPLOYEES BY REGION									
United States	121,148	39%	61%	125,811	40%	60%	133,012	40%	60%
Canada	289	47%	53%	179	48%	52%	408	47%	53%
Mexico, Caribbean, Latin America	4,347	60%	40%	3,555	59%	41%	4,125	59%	41%
Europe and Asia	1,234	54%	46%	984	51%	49%	1,558	55%	45%
EMPLOYEE CATEGORY									
Director and above	480	30%	70%	563	32%	68%	589	33%	67%
Management and professional	13,632	42%	58%	15,343	43%	57%	16,715	44%	56%
Administrative	2,469	73%	27%	3,008	72%	28%	3,955	70%	30%
Passenger service	19,905	66%	34%	21,338	61%	39%	23,615	61%	39%
Reservations	5,687	75%	25%	5,328	82%	18%	5,157	79%	21%
Maintenance and related	17,565	7%	93%	18,614	7%	93%	19,003	7%	93%
Fleet service	24,503	18%	82%	20,491	15%	85%	21,800	16%	84%
Pilots	17,313	5%	95%	17,915	5%	95%	18,776	5%	95%
Flight attendants	25,464	74%	26%	27,929	75%	25%	29,493	76%	24%
BOARD OF DIRECTORS									
Board of Directors	12	25%	75%	11	18%	82%	10	20%	80%

Ethnic Composition of AAG U.S. Employees and Board of Directors in 2021*	African American	Asian	American Indian/ Alaskan Native	Hispanic/ Latino	Native Hawaiian/ Other Pacific Islander	Two or More Races	White	Not Specified
Total number of U.S. employees	22,059	7,303	863	21,038	1,297	2,513	61,407	4,668
Percentage of total U.S. employees	18.2%	6.0%	0.7%	17.4%	1.1%	2.1%	50.7%	3.9%
PERCENTAGE BY CATEGORY								
Director and above	8.4%	8.4%	0.2%	9.0%	0.2%	1.3%	70.0%	2.5%
Management and professional	14.7%	11.5%	0.7%	15.6%	0.7%	2.3%	52.0%	2.5%
Administrative	18.0%	4.7%	0.9%	22.7%	1.6%	2.9%	46.2%	2.9%
Passenger service	26.4%	7.4%	0.6%	26.2%	2.0%	2.8%	31.5%	3.1%
Reservations	38.6%	5.8%	0.7%	13.7%	2.7%	2.9%	33.5%	2.3%
Maintenance and related	10.7%	4.9%	1.7%	15.4%	0.5%	1.5%	62.5%	2.8%
Fleet service	32.4%	5.6%	0.5%	25.9%	2.2%	2.0%	27.3%	4.1%
Pilots	2.7%	2.2%	0.5%	6.2%	0.1%	1.2%	80.1%	7.0%
Flight attendants	13.5%	6.1%	0.5%	13.2%	0.3%	2.4%	60.4%	3.7%
Board of Directors	25.0%	0%	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%

Ethnic Composition of AAG U.S. Employees and Board of Directors*	2020			2019		
Category	Self-Identified Minority	Self-Identified Nonminority	Not Reported/Identified	Self-Identified Minority	Self-Identified Nonminority	Not Reported/Identified
Director and above	22.5%	75.1%	2.3%	21.6%	76.4%	1.9%
Management and professional	42.4%	55.4%	2.1%	42.1%	55.8%	2.2%
Administrative	49.6%	45.9%	4.5%	50.8%	41.2%	8.0%
Passenger service	61.9%	33.6%	3.6%	58.3%	32.4%	9.3%
Reservations	56.9%	41.6%	1.5%	55.5%	43.4%	1.2%
Maintenance and related	33.2%	64.4%	2.4%	31.0%	65.9%	3.1%
Fleet service	63.2%	31.4%	5.4%	60.8%	31.9%	7.3%
Pilots	11.6%	82.3%	6.0%	10.6%	82.6%	6.7%
Flight attendants	34.1%	62.2%	3.8%	33.1%	62.9%	4.0%
Board of Directors	18%	82%	0.0%	20%	80%	0.0%

* In 2021, we expanded our reporting to provide more detailed data on ethnic composition by employee category. Diversity data are for U.S. workforce only since diversity tracking is prohibited by law in some other countries.

Note: Percentages may not add to 100% due to rounding.

American's 2021 Equal Employment Opportunity Report (EEO-1) is available on our website.

Age Composition of AAG U.S. Employees	2021			2020		
Employee Category	Total	Female	Male	Total	Female	Male
Less than 30 years old	17,663	41%	59%	16,839	43%	57%
From 30–50 years old	45,744	39%	61%	46,117	39%	61%
More than 50 years old	57,741	38%	62%	62,855	39%	61%

Employee Turnover and Rate	2021		2020	
	Turnover	Rate	Turnover	Rate
AAG (GLOBAL)				
Total	28,406	22.4%	31,272	24.0%
TURNOVER BY TYPE				
Voluntary	22,765	17.9%	12,561	9.6%
Involuntary	5,641	4.4%	18,711	14.3%
TURNOVER BY REGION				
United States	27,576	21.7%	30,175	23.1%
Canada	87	0.1%	252	0.2%
Mexico, Caribbean, Latin America	628	0.5%	586	0.4%
Europe and Asia	115	0.1%	259	0.2%
TURNOVER BY GENDER				
Female	13,351	10.5%	14,964	11.5%
Male	15,016	11.8%	16,308	12.5%
Undisclosed	39	0.0%	0	0.0%

Supply Chain Diversity	2021	2020	2019
Certified diverse suppliers (with which we had spend)	~215	~250	~300
Spend with diverse suppliers — Tiers 1 & 2 (millions of U.S. dollars)	$291	$249	$449
Spend with small business suppliers (millions of U.S. dollars)	$318	$381	$628

New Employee Hires	2021	2020
AAG (GLOBAL)		
Total	26,439	21,716
NEW EMPLOYEE HIRES BY REGION		
United States	24,908	21,445
Canada	184	42
Mexico, Caribbean, Latin America	1,270	150
Europe and Asia	77	79
NEW EMPLOYEE HIRES BY GENDER		
Female	11,947	10,397
Male	14,492	11,319
Undisclosed	0	0

Percentage of Female Employees	2021	2020
Companywide	40%	40%
United States	39%	40%
Canada	47%	48%
Mexico, Caribbean, Latin America	60%	59%
Europe and Asia	54%	51%

The SCS Greenhouse Gas Footprint Verification Program has conducted a verification of GHG emissions based upon the following Scope, Objectives, and Criteria:

Verification Scope

American Airlines Group, Inc.

1 Skyview Dr Fort Worth (HQ), TX

Reporting Period: 01/01/2021 – 12/31/2021

Geographic Boundary: Approximately 150 domestic airports, 100 international airports, 20 maintenance facilities, 15 cargo facilities, 15 vehicle shops, 5 reservation offices, main campus headquarters, credit unions

VERIFIED by SCS GLOBAL SERVICES CARBON FOOTPRINT

Facilities, physical infrastructure, activities, technologies, and processes:
Flights, Airport Terminals, Maintenance/Cargo Facilities, Offices, Ground Support Equipment

GHG Sources, Sinks, and/or Reservoirs:
Scope 1 - Jet Fuel, Diesel, Gasoline, LPG, Natural Gas, Fuel Oil, Fugitive Emissions (Refrigerants, CO2, Other Gases)
Scope 2 - Electricity, Purchased Heat, RECs
Biogenic – Sustainable Aviation Fuel

Boundary Method: Operational Control

GHG Gases: CO_2, CH_4, N_2O, HFCs

Level of Assurance: Limited

Materiality: +/-5% quantitative, qualitative based upon requirements specified within verification criteria

Verification Objectives

- Evaluate the organization's GHG inventory for material discrepancies based upon the specified level of assurance
- Evaluate the organization's GHG inventory is in conformance with the specified verification criteria

Verification Criteria

- World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" dated March 2004
- World Resources Institute/World Business Council for Sustainable Development's "Scope 2 Guidance Document: An Amendment to the GHG Protocol Corporate Standard" dated 2015
- World Resources Institute/World Business Council for Sustainable Development's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" dated 2011
- The Investor CDP Information Request
- ISO 14064-3: 2019 Specification with guidance for the validation and verification of GHG assertions

SCSglobal SERVICES

Verification Opinion

This Verification Statement documents that SCS Global Services has conducted verification activities in conformance with ISO 14064-3: 2019, Specification with guidance for the validation and verification of greenhouse gas assertions. Based upon the reporting scope, criteria, objectives, and agreed upon level of assurance, SCS has issued the following verification opinion:

☒ Positive Verification (Limited Assurance) – No evidence was found that the GHG assertion was not prepared in all material respects with the reporting criteria

Verification Qualifications

– None

Verified Emissions

Emissions Summary – Tonnes CO_2e					
Scope	CO_2	CH_4	N_2O	HFCs	Total (tCO_2e)
Scope 1	28,398,766.22	111,085.22	63,683.09	236,701.09	28,810,235.62
Scope 2 - Location	Reported as tCO2e Only				250,698.98
Scope 2 - Market	Reported as tCO2e Only				249,111.83
Biogenic	13,358.77	-	-	-	13,358.77
Scope 3 – Category 3	Reported as tCO2e Only				6,074,205.31

Lead Verifier

Tavio Benetti DATE: 06-27-2022

Tavio Benetti, *Program Manager, GHG Footprint Verification Program*
Environmental Certification Services
SCS Global Services, 2000 Powell Street, Suite 600,
Emeryville, CA 94608 USA

Independent Reviewer

DATE: 06-29-2022

Nicole Muñoz, *Vice President - ECS*
Environmental Certification Services
SCS Global Services, 2000 Powell Street, Suite 600,
Emeryville, CA 94608 USA

SCSglobal SERVICES

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

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/ScienceBasedTargets @sciencetargets

Approved science-based target

The Science Based Targets initiative has validated that the corporate greenhouse gas emissions reduction target(s) submitted by

American Airlines Inc.

have been deemed to be in conformance with the SBTi Criteria and Recommendations (version 4.2). The SBTi's Target Validation Team has classified your company's scope 1 and 2 target ambition and has determined that it is in line with a well-below 2°C trajectory.

The official target wording is:

American Airlines Group Inc. commits to reduce well-to-wake GHG emissions related to jet fuel 45% per revenue ton kilometer from owned and subcontracted operations by 2035 from a 2019 base year.
**The target boundary includes biogenic emissions and removals from bioenergy feedstocks.*
***Non-CO2e effects which may also contribute to aviation induced warming are not included in this target. American Airlines Inc. commits to report publicly on its collaboration with stakeholders to improve understanding of opportunities to mitigate the non-CO2e impacts of aviation annually over its target timeframe. American Airlines Group Inc. also commits to reduce absolute scope 2 GHG emissions by 40% over the same target timeframe.*

Date of issue: Apr, 2022

Certificate Number: AMAI-USA-001-OFF

An initiative by CDP WORLD RESOURCES INSTITUTE WWF

Forward-Looking Statements

Certain of the statements contained in this report should be considered forward-looking statements within the meaning of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. These forward-looking statements may be identified by words such as "may," "will," "expect," "intend," "anticipate," "believe," "estimate," "plan," "project," "could," "should," "would," "continue," "seek," "target," "guidance," "outlook," "if current trends continue," "optimistic," "forecast" and other similar words. Such statements include, but are not limited to, statements about the company's plans, objectives, expectations, intentions, estimates and strategies for the future, the continuing availability of borrowings under revolving lines of credit, and other statements that are not historical facts. These forward-looking statements are based on the company's current objectives, beliefs and expectations, and they are subject to significant risks and uncertainties that may cause actual results and financial position and timing of certain events to differ materially from the information in the forward-looking statements. These risks and uncertainties include, but are not limited to, those set forth herein as well as in the company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 (especially in Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations and Part II, Item 1A. Risk Factors), and other risks and uncertainties listed from time to time in the company's other filings with the Securities and Exchange Commission. In particular, the consequences of the coronavirus outbreak to economic conditions and the travel industry in general and the financial position and operating results of the company in particular have been material, are changing rapidly, and cannot be predicted. Additionally, there may be other factors of which the company is not currently aware that may affect matters discussed in the forward-looking statements and may also cause actual results to differ materially from those discussed. The company does not assume any obligation to publicly update or supplement any forward-looking statement to reflect actual results, changes in assumptions or changes in other factors affecting these forward-looking statements other than as required by law. Any forward-looking statements speak only as of the date hereof or as of the dates indicated in the statement.

American Airlines