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#### **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 our stakeholders. We have produced an annual Corporate Responsibility Report since 2007, but this year's report marks a new phase in the evolution of our reporting. We seek to adhere to best practices for ESG disclosure, so for the first time we are aligning our report 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. To reflect our updated reporting strategy, we are adopting the title ESG Report going forward. We intend to continue providing our stakeholders with information on our ESG performance annually.

In this 2019–2020 ESG Report, we include a discussion of American's approach to managing our most material ESG issues, along with highlights of our progress and performance in 2019 and, where relevant, into 2020. Unless noted otherwise, performance data is as of December 31, 2019.

#### **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.



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# Message from Our Chairman and CEO

Companies today face growing expectations to demonstrate they are effectively managing, measuring and reporting on environmental, social and governance (ESG) issues. At American Airlines, we welcome this scrutiny. We know that rigorous ESG management is critical not only to the long-term success of our company, but also to the health of the planet we all share. While we have long focused on these issues, this year's ESG Report — which is our first aligned with the standards of both the Task Force on Climate-related Financial Disclosures and the Sustainability Accounting Standards Board — marks a new point in the evolution of our ESG approach and transparency.

A key focus of this report is our strategy for addressing climate change. Investors and other stakeholders rightly expect us to demonstrate that we understand the risks that climate change presents for our business and are taking steps to get on a low-carbon path. The science makes clear that getting on this path requires significant reductions in greenhouse gas (GHG) emissions — and that is why we've set a new goal to achieve net zero carbon emissions by 2050.

Reaching this ambitious goal will require operational, technological, policy and market advances, many of which are outside of our direct control. Our strategy is focused on driving improvements within our operations while helping to facilitate the broader changes needed to enable the transition to low-carbon aviation. We have made significant investments in fleet renewal that have given American the youngest fleet of any U.S. network carrier. And, as a result of COVID-19, we are retiring older, less fuel-efficient aircraft even more quickly. Accelerating the commercial availability and use of sustainable aviation fuel (SAF) — which can reduce lifecycle GHG emissions by up to 80% compared with conventional jet fuel — is another critical part of our long-term carbon-reduction pathway. We've committed to purchase 9 million gallons of SAF over three years and, in parallel, are working to make our operations more fuel efficient.

We're committed to advancing these efforts even as we work to shepherd our company through one of its most challenging periods. The COVID-19 pandemic has brought unprecedented disruption to our industry. Throughout the crisis, we have worked to care for our team members and customers, restore confidence in air travel and strengthen our financial footing. I couldn't be prouder of the way our team members are taking care of our customers and each other as we deal with this crisis. With demand for air travel still dramatically reduced, however, we have also had to become a smaller airline for at least a period of time, including making painful reductions to our team.

The past year has tested our mettle in other ways as well. Our nation is reckoning with senseless murders of Black Americans, systemic racism and inequality. It is clear that we must redouble our efforts to do what

# "It has never been more clear that we have to work harder to build a more resilient and just society, economy and planet."

is right. As an airline, creating connections is our business; we exist to bring the world and people closer together. Fundamental to this is our unequivocal belief that the lives of our Black team members, customers and community members matter. We know actions are more important than words, so we are taking concrete steps to translate our conviction into meaningful change, starting within our company.

We are listening to and learning from the experiences of our Black colleagues and customers and partnering with them to develop solutions to the issues they have raised. We are taking a hard look at our own policies, hiring, customer service practices, training programs and policy advocacy to identify how we can do a better job to support our team members, diversify our talent pipeline and be responsive to our customers. We know we have work to do, and we pledge to do it.

The confluence of the increasingly visible effects of climate change, the ongoing COVID-19 pandemic and urgent calls for racial justice underscore why our focus on ESG is so critical: It has never been more clear that we have to work harder to build a more resilient and just society, economy and planet. At American Airlines, we are determined to do our part.

1) ---

**Doug Parker** | Chairman and CEO
October 2020





At American Airlines, we know that rigorous management of environmental, social and governance (ESG) issues is critical to the long-term success of our company and our planet. This includes effectively governing our business and holding ourselves accountable on a set of key issues that are important to our company and our stakeholders. It also means being responsive to our stakeholders and transparent about our performance.

anagement of ESG issues is integral to how we operate our business and is embedded within our corporate strategy and objectives. While many issues that fall under the ESG umbrella are not new for our company — indeed, a key reason American has thrived for more than 90 years is because we have long recognized the importance of these issues — we have recently worked to develop a more integrated approach to ESG management, measurement and reporting.

## **Our Material Issues**

Our ESG strategy focuses on the issues that are most important to our company and our stakeholders. Since 2009, we have undertaken periodic materiality assessments to evaluate areas of risk and opportunity, as well as the concerns and expectations of our stakeholders. We conducted our most recent assessment process in 2018, and in 2020 we reviewed this analysis. One key new input to our analysis was the Sustainability Accounting Standards Board's standards for airlines; we consider these standards an important indicator of investor perspectives on the most material ESG issues for our industry.

Through this latest review, we affirmed that the material issues we had identified remain relevant, though in some instances we refined their scope and how we prioritize them.

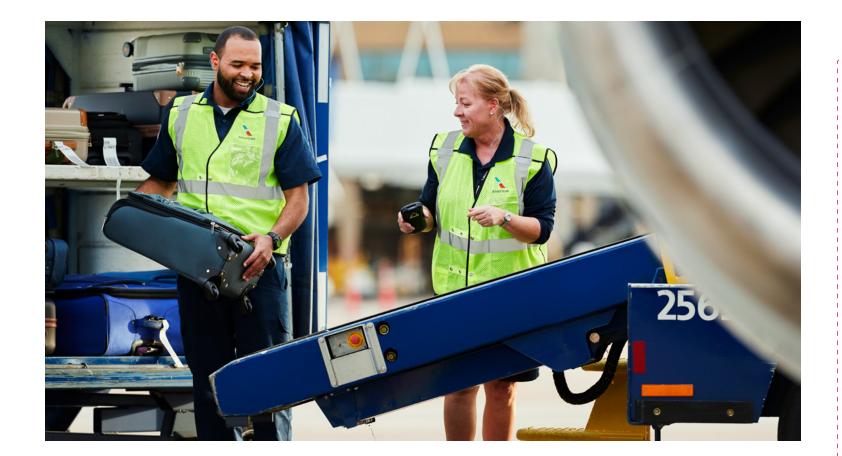
Our top material ESG issues are:

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

# **Management and Governance**

Since ESG issues touch nearly every aspect of our business, day-to-day management of the individual elements is distributed throughout our operations and functions. As part of our effort to take a more integrated approach to ESG management, we have recently taken steps to enhance our leadership and coordination of ESG efforts and reconsider the way these issues are overseen by our Board of Directors.

We formally placed responsibility for companywide ESG efforts in our Corporate Affairs group, with a team that already had responsibility for some of the major building blocks, including corporate governance, government relations, labor relations and real estate. We recruited a new Managing Director for ESG in 2019 and reorganized our sustainability group under her leadership. In 2020, we also reconstituted our Sustainability Steering Committee, which is a cross-functional



and cross-operational group of leaders from across our business, led by our Executive Vice President of Corporate Affairs. We tasked the committee with advising on the development of American's updated climate change strategy (see p. 14).

Although our full Board continues to oversee our ESG efforts, we assigned primary responsibility for coordinating oversight to the Board's Corporate Governance and Public Responsibility Committee (formerly known as the Nominating and Corporate Governance Committee) and updated its charter in 2020 to document this role.

For more information on American's corporate governance policies and procedures, including committee charters and information on the members of our Board, go to our website.

# Public Policy and Political Contributions

Engaging in the political, legislative and regulatory process is important to our success, and we have adopted policies that set forth how we do so.

In 2020, we updated our Statement on Public Policy Engagement and Political Participation to better reflect best practices. This includes committing to not use corporate funds for a wide range of political activities, including contributions to candidates, political party committees and political action committees. We also commit to not use corporate funds for the electioneering 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 committed to disclose that contribution. We also updated the charter for the Board's Corporate Governance and Public Responsibility Committee to clarify that it oversees the company's major advocacy priorities and activities, principal trade association memberships and political contributions.

Team members may voluntarily participate in the political process by joining the company's nonpartisan political action committee (PAC), the American Airlines PAC, which is governed by comprehensive federal, state and local regulations that require filing monthly reports with the Federal Election Commission, among other reporting and disclosure requirements. American's Executive Vice President of Corporate Affairs and the Board's Corporate Governance and Public Responsibility Committee oversee the company's political engagements and compliance with our policies.

For more information, please see our <u>Statement on Public Policy</u> Engagement and Political Participation.

### **Our ESG Goals**

Our long-term corporate and ESG strategy is guided and measured by three overarching objectives — each underpinned by specific and detailed goals — aimed at keeping American healthy, competitive and successful by thinking forward and maintaining a strong financial foundation. These objectives are as follows:



#### Create a world-class customer experience:

Deliver operational excellence and grow our global network



#### Make culture a competitive advantage:

Build on an environment that cares for team members



#### **Build American** to Thrive Forever:

Improve profitability and deliver innovative technology

#### **Climate Change and Fuel Efficiency**



#### **2019 Goals**

Attain a 1.5% improvement in average fuel efficiency from 2014 through 2020, or 9% cumulatively over the six years

Source 2.5 million gigajoules (GJs) of cost-competitive renewable energy by 2025

#### **2019 Performance**

Achieved a 0.1% efficiency improvement in 2019, for a 5.3% cumulative improvement during the first five years of the six-year goal

Sourced nearly 200,000 GJs of renewable energy in 2019. Contracted with Neste to purchase 9 million gallons of sustainable aviation fuel over the next three years, which should provide more than 1.1 million GJs of renewable energy

#### 2020+ Goal

Achieve net zero direct carbon emissions by 2050

We intend to develop intermediate goals once our demand forecast is stabilized

#### **Customer Satisfaction and Operational Performance**



#### 2019 & 2020 Goals

Improve Likelihood to Recommend scores

Achieve improved systemwide operational metrics, including on-time performance percentage, completion factor percentage and mishandled baggage rate

#### **2019 Performance**

Likelihood to Recommend score dropped fractionally in 2019, largely due to an illegal maintenance disruption undertaken by a union during collective bargaining negotiations

On-time performance and completion factor metrics improved fractionally in 2019; after a challenging first half of 2019, the baggage metric steadily improved in the third and fourth quarters

#### **Diversity, Equity and Inclusion**



Data

#### **2019 Goals**

Launch in-person implicit bias training for all team members systemwide

#### **2019 Performance**

Delivered implicit bias training to more than 100,000 team members

#### **2020 Goals**

Listen more intentionally to team member concerns and address those concerns in our learning, development, advancement and recruitment programs and processes

Provide additional learning opportunities beyond implicit bias to deepen awareness of diversity and inclusion issues

Launch an external Community Council composed of executives and a cross-section of Black community leaders to provide feedback on company initiatives

#### **Safety Management**





#### 2019 & 2020 Goals

Maintain the highest passenger safety standards, with zero serious customer injuries

Reduce on-the-job team member injuries

Reduce aircraft ground damage

#### **2019 Performance**

Experienced zero serious customer injuries

Reduced team member injury rate by 5.8% in regional operations; saw rate increase by 3.9% in mainline operations

Saw regional aircraft damage rates increase 4.3% and mainline damage rates increase 16.3%

#### **Team Member and Labor Relations**



#### **2019 Goals**

Achieve a joint collective bargaining agreement with mainline fleet service and maintenance teams

Launch new uniforms with highest levels of safety, comfort and durability

#### **2019 Performance**

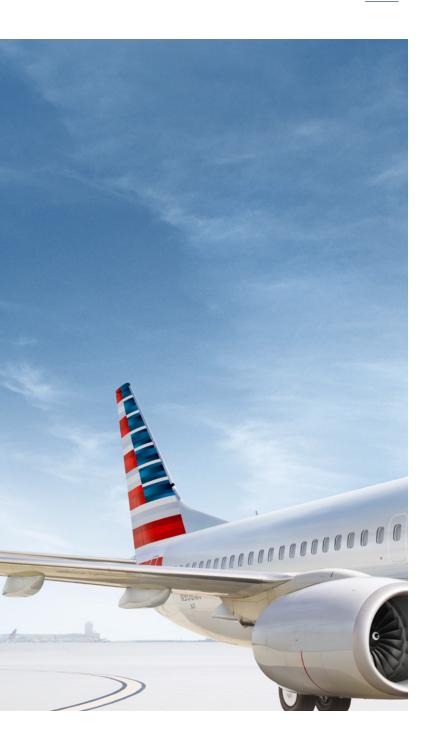
In the first quarter of 2020, reached an agreement with the TWU-IAM for a new, five-year contract for our maintenance and fleet service team members

Successfully launched new uniforms with highest levels of safety, comfort and durability

#### **2020 Goal**

Support our team members with emotional, physical and financial wellbeing resources





Climate change is a pressing global challenge, and American Airlines believes we must do our part to address it. That is why we have set a new goal to achieve net zero carbon emissions by 2050. While ambition is important, we know that what matters most is that we have a clear roadmap — with both a long-term vision and intermediate milestones — for how we will achieve it.

e have launched an effort to build American's carbon reduction pathway to 2050 and to refine and expand our strategy for addressing the risks and opportunities associated with climate change. This report is our first step toward both efforts, and we intend to develop intermediate goals once our demand forecast is stabilized following the disruption caused by the COVID-19 pandemic.

We expect there will be a higher price on carbon in the future — which reinforces our intention to drive to net zero — and we are developing a strategy to position our company to succeed.

While there are many steps we can take to reduce our carbon footprint, transitioning to a low- or no-carbon aviation future will depend on the combined efforts of the private sector and effective policies from governments at all levels, along with advances in airframe, engine and fuel technologies. We are committed to helping lead the way.

# **Advancing Industry Goals**

The global airline industry contributes about 2% of all human-induced carbon dioxide (CO<sub>2</sub>) emissions, and our industry's share of global emissions is projected to rise. Our industry is one of the few sectors that has established global CO<sub>2</sub> emissions goals, which include an average improvement in fuel efficiency of 1.5% per year from 2009 to 2020, carbon-neutral growth after 2020 and a 50% reduction in net aviation CO<sub>2</sub> emissions from 2005 levels by 2050.

#### **Our Goals**

Achieve net zero direct carbon emissions by 2050

Source 2.5 million gigajoules (GJ) of renewable energy by 2025

Attain a 1.5% improvement in average fuel efficiency from 2014 through 2020, or 9% cumulatively over the six years

To achieve these important industry goals, American adopted two environmental sustainability targets for our own operations: attain an average improvement in fuel efficiency of 1.5% per year from 2014





American Airlines is proud to be part of the **one**world® alliance, which in September 2020 became the first global airline alliance to unite behind a common target to achieve carbon neutrality. Each member airline in the alliance will develop its individual approach to reach the target of net zero carbon emissions by 2050, through various initiatives such as efficiency measures, investments in sustainable aviation fuels and more fuel-efficient aircraft and carbon offsets, among other measures.

(the first full year after we merged with US Airways) through 2020, and source 2.5 GJ of renewable energy by 2025. In addition, along with others in our industry, we are subject to the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which aims to achieve carbon-neutral growth in CO<sub>2</sub> emissions from international aviation after 2020. Adopted by the United Nations' International Civil Aviation Organization (ICAO) in 2016 and currently being implemented by the United States and countries around the world, CORSIA is the first global carbon pricing mechanism covering an entire sector.

American supports our industry's goals — but we believe the scale of the climate challenge, and the science behind it, demands that

we increase the scale of our company's ambitions to achieve net zero carbon emissions by 2050. As one of the world's largest airlines, we know we need to be a leader in helping to drive the operational, policy and technological changes needed to reduce CO<sub>2</sub> emissions from air travel to try to limit global warming to 1.5° Celsius, which is the limit advised by the Intergovernmental Panel on Climate Change (IPCC) to avoid the most damaging and irreversible impacts of climate change.

While the COVID-19 crisis has upended our industry and compelled us to adjust the pace of some of our efforts, it has not diminished our belief in the importance of addressing climate change. Instead, the pandemic has underscored the need for collective action to

address critical global challenges that have profound implications for people and economies and reinforced our work to make our company stronger and more resilient.

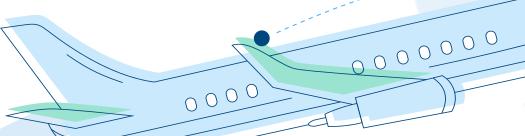
In the remainder of this section, we detail our carbon footprint and greenhouse gas (GHG) emissions performance trends, discuss our strategy for addressing climate change, report on our analysis of climate-related risks and opportunities and describe the company's governance of climate-related issues.

Safety CEO Message Strategy Climate Team Members Customers TCFD/SASB Data

# Carbon Anatomy of a Flight

Many factors determine the amount of GHG emissions associated with a particular flight. Fuel efficiency of the aircraft is a key factor, but it's not the only one — and efficiency itself is influenced by a complex set of variables.

Here are the main determinants of a flight's carbon footprint:



#### Distance of flight

The takeoff and climb phases of a flight burn more fuel than the cruising or landing phases, which makes shorter flights less fuel efficient than long-haul flights.

**15-20**%

IMPROVEMENT IN FUEL **EFFICIENCY ON AVERAGE** WITH EACH NEW **GENERATION OF AIRCRAFT** 

#### Type of fuel

While the vast majority of aviation fuel used today is petroleum-based, sustainable aviation fuel from renewable feedstocks can cut lifecycle carbon emissions related to fuel by up to 80%.

# Aircraft design

Modern aircraft incorporate many features to save fuel, including the use of lightweight materials, aerodynamic design and more fuel-efficient engines.



Many aircraft have winglets, which are small additions at the end of wings that reduce drag and can improve fuel efficiency by up to 4%.



Fuel efficiency is so sensitive to the weight of an aircraft that using a thinner paint across a fleet could save a million gallons of fuel each year.

#### On the ground

Single-engine taxiing and the use of high-speed tugs reduce the amount of jet fuel needed to move aircraft on the ground. And operators plug into grid electricity at the gate, which is typically less carbon intensive than using the plane's auxiliary power.

**COULD BE SAVED ANNUALLY THROUGH IMPROVEMENTS IN AIR TRAFFIC CONTROL MANAGEMENT - EQUAL** TO ALMOST 5 BILLION GALLONS OF JET FUEL A YEAR¹ (SEE P. 18)













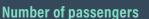
#### One way airlines measure fuel efficiency and GHG intensity is by dividing absolute fuel use or emissions by revenue ton miles (RTM).

RTM is the weight of revenue-generating passengers and cargo, and it — along with GHG intensity — is affected by the following factors:



#### Seats on the plane

The number of seats on a given aircraft varies depending on how it is configured — such as the space devoted to first-class seating, galleys and bathrooms — and the design of the seats themselves.



While the number of seats on a plane determines the maximum passenger capacity, any given flight may operate with fewer passengers. Operating at or close to the maximum capacity increases fuel efficiency.

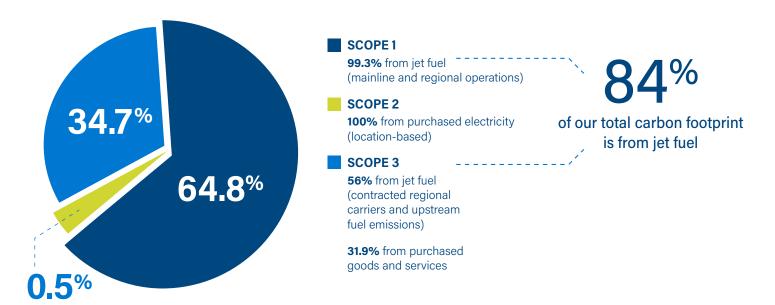
#### Cargo

Many passenger flights also carry cargo, which may include mail and items like medicines that need to get to their destination quickly. This adds revenue and increases efficiency.

1. https://www.icao.int/environmental-protection/Documents/ICAO-ENV-Report2019-F1-WEB%20(1).pdf

## **Our GHG Emissions in 2019**

Total emissions (Scopes 1, 2, and 3): 63.5 million metric tons of carbon dioxide equivalents (CO<sub>a</sub>e)



## **Our Business in 2019**\*

Operated **1,547** aircraft

Grew revenue passenger miles by **4.4%** compared with 2018

Carried **680K** tons of cargo

Flew **215** million passengers on **2.3** million flights

Operated an average of **6,300 flights** per day to more than **365 destinations** in **61 countries** 

Nearly all — 99% — of the GHG emissions from American's direct operations result from burning jet fuel. So reducing our consumption of petroleum-based jet fuel is the single best way we can reduce our carbon footprint. A variety of factors — from the aircraft we fly to where and how we fly them — affect our fuel use and associated emissions. We have taken a range of actions to be more fuel efficient in our operations and increase our use of renewable energy (see Our Strategy on p. 14). We have made progress — but we know we have more to do.

#### **Our GHG Emissions in 2019**

American's Scope 1 (direct) GHG emissions — which account for about two-thirds of our GHG footprint — stem almost entirely from the burning of jet fuel by our aircraft, plus a small portion from the fuel used by our ground service equipment. Our Scope 2 emissions include emissions associated with the purchase of electricity to run our operations, and they make up the smallest portion of our carbon footprint (0.5%). Our estimated Scope 3 (upstream and downstream) emissions are nearly 35% of our overall emissions, the largest element of which is upstream emissions associated with the production of jet fuel, followed by emissions from our third-party regional carriers and those associated with purchased goods and services and team member travel.

#### **Fuel-Efficiency Performance**

We improved the average fuel efficiency of our mainline operations by 7.4% between 2014 and 2019, including a 0.8% improvement during 2019 alone.

We typically track efficiency using revenue ton miles (RTM), which measure the fuel needed (and associated GHG emissions) to fly one ton of payload — the combined weight of passengers, their bags and

Our Carbon Footprint

<sup>\*</sup> All data are as of December 31, 2019, or for full-year 2019, as applicable

cargo on an aircraft — one mile. The less fuel needed per RTM, the more efficient the flight. Consistent with the industry's goal, we set a target to improve our fuel efficiency by an average of 1.5% annually — or 9% cumulatively — from 2014 to 2020.

While we were just shy of achieving our cumulative goal of a 7.5% improvement by year-end 2019 in our mainline operations, improving efficiency in our regional operations has been more challenging. In 2019, we achieved a 2% efficiency improvement in our regional operations, but our cumulative improvement since 2014 is 1.6%. Collectively, our mainline and regional operations have achieved a 5.3% efficiency improvement since 2014.

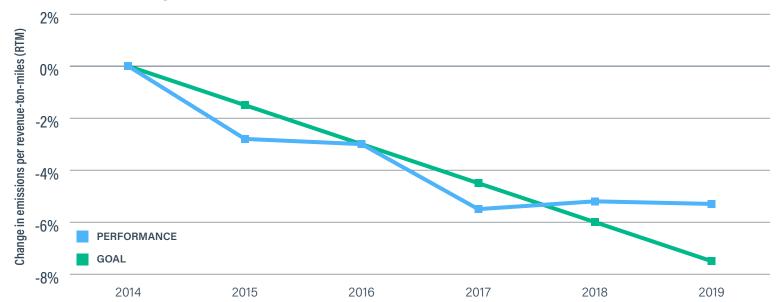
#### **Absolute Emissions**

In 2019, our Scope 1 emissions were up 2% compared with 2018. Since 2005, however, we have reduced our systemwide Scope 1 emissions by 8% due to improved fuel efficiency, while increasing the number of passengers and amount of cargo we carried.

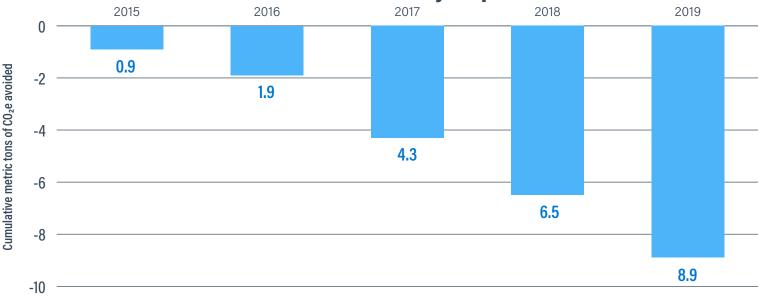
The increase in emissions in 2019 was driven by growth in our network, particularly by our regional carriers. Emissions from our mainline operations increased 0.6% from 2018 to 2019, whereas emissions from our wholly owned regional carriers were up nearly 15% as they flew almost 75,000 additional flights and added seven new destinations to our route map. While only about 12% of our total emissions came from these wholly owned regional carriers, they were the fastest-growing part of our network, and regional aircraft are on average less fuel efficient per ton mile than mainline aircraft (see Community Connectivity and Climate Change on p. 13).

Our Scope 2 (location-based) emissions decreased by 10% in 2019 because we were able to lower the carbon intensity of the electric power we purchased. Our Scope 3 emissions increased by 2% in 2019 compared to the prior year.

# **Fuel-Efficiency Performance**



# **Emissions Avoided Due to Fuel-Efficiency Improvements**



#### **Community Connectivity and Climate Change**

Connectivity is at the heart of American's purpose and value proposition, and our regional carriers are an integral part of that. In 2019, approximately 59 million passengers boarded our regional carriers' aircraft, more than 40% of whom connected to or from our mainline flights.

This is precisely the kind of connectivity that our hub-and-spoke network is designed to facilitate: Through our regional carriers, we serve smaller communities and low-density markets that don't have the passenger traffic to support larger, mainline aircraft. Then, through our hub airports across the United States and our international gateways, we connect those passengers to destinations around the world. In fact, American provided small communities nearly 60% more one-stop connection options than other U.S. network carriers in 2019.<sup>2</sup> Thanks to the power of our network, we connect more people to more places.

**\$134 billion** in economic activity generated by air service to the 570 small community airports across the United States

**1 million** jobs created by air service to those community airports, which generate \$36 billion in wages and tax revenue to those states and communities<sup>3</sup>

Data are for the 100 smallest markets in the United States with air service by at least one U.S. network carrier based on actual schedules flown in July 2019, using origin/destination data. We believe deeply in the value of connectivity. Commercial air service not only expands horizons and connects people, it also provides significant economic opportunity for local communities.

But shorter flights on smaller planes come at a fuel-efficiency cost. The takeoff and climb phases of a flight burn more fuel than the cruising phase, which makes shorter regional flights less fuel efficient than long-haul flights. In addition, when we were building out our regional fleet, the advancements in aircraft and engine design that have improved the fuel efficiency of our mainline fleet were not — and sometimes still aren't — available on smaller aircraft. Altogether, the result is that for each mile we fly a passenger or unit of cargo, regional aircraft are on average less fuel efficient than mainline aircraft.

Our commitment to providing industry-leading regional service makes it more challenging for us to meet our fuel-efficiency targets. By appropriately balancing our climate change goals with our commitment to connectivity, we believe we can best help the communities we serve to thrive.

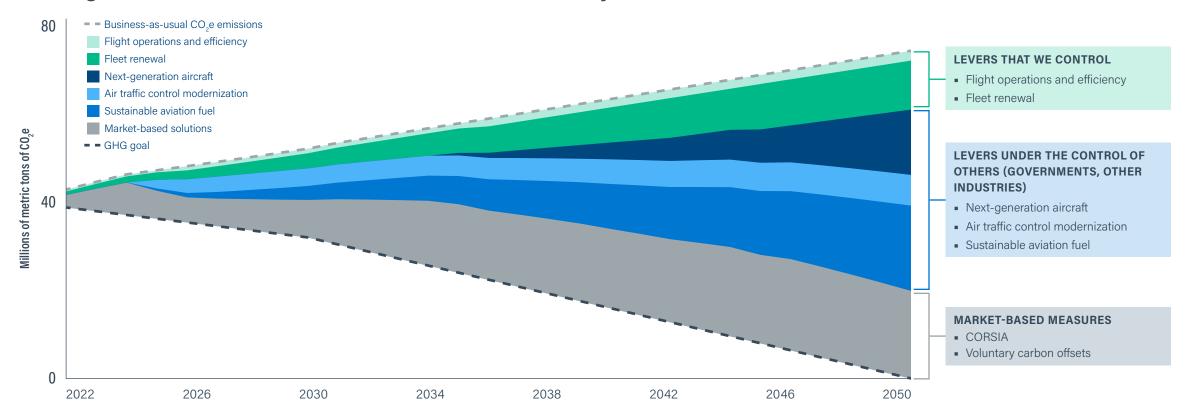
60%

more one-stop connection options provided by American than other U.S. network carriers in 2019



<sup>3.</sup> https://www.raa.org/wp-content/uploads/2019/04/RAA\_RH\_2019\_Q1\_g.pdf

# **Getting to Net Zero in 2050: American's Initial Pathway**



# **Our Strategy**

American's strategy to achieve net zero carbon emissions by 2050 is focused on driving operational and technical improvements that reduce GHG emissions by continuously improving fuel efficiency and substituting petroleum-based fuels with lower-carbon alternatives. We also expect to rely on market-based mechanisms, including carbon offsets, certainly over the short to medium terms and potentially over the long term as well, depending on how quickly the market for sustainable aviation fuel develops. In parallel, we are helping to facilitate the broader policy, market, infrastructure

and technological advances needed to enable the transition to low-carbon aviation.

We are targeting our efforts where we can have the most meaningful near-term impact in reducing our carbon footprint and mitigating our most significant climate-related risks (see Identifying and Assessing Climate-Related Risks, p. 20). The following outlines the key components of our climate strategy.

#### **Aircraft Fuel Efficiency**

Jet fuel consumption is the chief source of our direct GHG emissions and one of the largest categories of expense for our company. As a result, maximizing the fuel efficiency of our aircraft is both a core focus of our climate change strategy and a key business objective.

Over the past several years, American has undertaken the most extensive fleet renewal effort in the history of our industry. Since 2013, we have taken delivery of 550 new, more fuel-efficient aircraft — at a cost of \$23 billion — including the Boeing 787 and the Airbus 321neo, which were developed with the latest engine and airframe technologies.

Invested

\$23<sub>B</sub>

in 550 more fuel-efficient aircraft since 2013, the largest fleet renewal effort in the history of our industry

Over the same period, we retired a similar number of older, less fuel-efficient planes, including retiring the last of our McDonnell Douglas MD-80 aircraft in 2019. And because of the reduction in demand due to the COVID-19 pandemic, we accelerated the retirement of four additional aircraft types — Embraer E190s, Boeing 757s, Boeing 767s and Airbus A330-300s — and certain older regional aircraft. In addition, we anticipate benefiting from increased fuel efficiency as the Boeing 737 MAX comes back into service. The MAX is 35% more efficient than the fleet of Boeing 757s that we retired earlier this year.

Our fleet renewal effort will have the greatest near-term impact on emissions, since each new generation of aircraft targets fuel-efficiency improvements of 10–15%, though there are factors beyond the aircraft itself that affect fuel efficiency (see Carbon Anatomy of a Flight, p. 10). Over the long term, we expect to rely on future technologies, including new engine and aircraft technology, air traffic control reform and sustainable aviation fuels, to achieve our goal of net zero emissions by 2050.

#### Operational Efficiency in the Air and on the Ground

Alongside fleet renewal efforts, we are investing in new technology to help our aircraft operate more efficiently. For example, in 2020 we began deploying specialized software that uses real-time weather conditions to provide our flight crews with better data about optimal

4. https://www.nlr.org/areas-of-change/increasing-single-engine-taxi-operations-taxi-inboard-engines-4-engine-aircraft/

flight altitudes and speeds. This can save fuel and reduce emissions, particularly on long-haul flights. By mid-2020, we were using this technology on 85% of our mainline aircraft.

We are also reducing jet fuel consumption pre- and post-flight. This on-the-ground fuel use represents approximately 6% of our total jet fuel consumption. For example, we are reducing the use of onboard auxiliary power units (APUs) during flight preparation by connecting to ground power at the airport terminal, rather than relying on jet fuel to heat or cool the aircraft, operate onboard lighting and run other functions while the aircraft is parked at the gate. This simple change in operational behavior provides a substantial opportunity to decrease both costs and emissions, since electric power is less carbon intensive. We estimate that by reducing the time an APU is run by just one minute on every flight, an aircraft can save 1,000 gallons or more of jet fuel annually.

Other changes include increasing our use of single-engine taxi operation (i.e., using just one aircraft engine to taxi to the gate after landing). This technique reduces the carbon emissions produced by taxiing by 20–40%.<sup>4</sup> We are also working to reduce excess weight on each aircraft, from using lighter materials on board to optimizing the amount of extra fuel each flight carries.

The next largest source of American's direct GHG emissions after jet fuel — albeit a distant second, representing only 1% of our Scope 1 emissions — comes from the fuel used by required ground service equipment (GSE), such as baggage carts, cargo loaders, pushout tractors and maintenance equipment. As part of our climate strategy, we are purchasing low-emission GSE vehicles and working to transition from diesel- or gasoline-powered GSE to electric GSE. In 2019, we added more than 50 electric-powered vehicles to our GSE fleet.



#### **SAF 101**

#### What is sustainable aviation fuel (SAF)?

SAF is jet fuel produced from renewable hydrocarbon resources, including both biological and nonbiological resources. SAF can be produced from a range of feedstocks, including municipal solid waste, used cooking oil, plant oils, waste gases and agricultural residues. SAF is certified as Jet-A1 fuel, which means it meets the same performance standards as conventional jet fuel and can be used without technical modifications to aircraft.

#### What are the benefits?

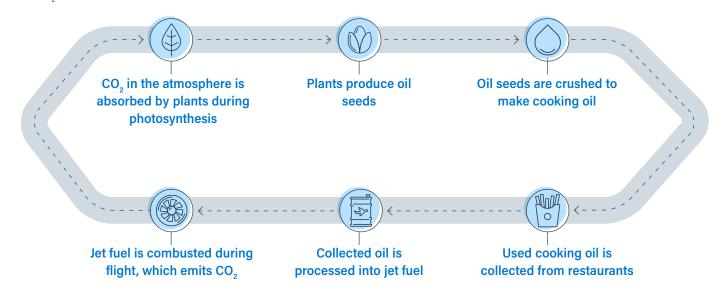
SAF reduces lifecycle GHG emissions by up to 80% compared with conventional, petroleum-based jet fuel. To realize this benefit, however, SAF must be sustainably produced — using feedstocks and methods that don't compete with food production and don't contribute to deforestation, natural resource depletion or climate change. To ensure they don't, airlines are encouraged to follow rigorous, independently verified sustainability standards for SAF production.

#### What are the challenges?

SAF is available now — but at smaller quantities and a significant price premium compared with conventional kerosene (fossilbased) jet fuel, because the SAF market is still at a nascent stage of development. To be a feasible alternative for widespread commercial use, SAF must be cost-competitive with conventional jet fuel and must not be disadvantaged relative to other fuels because of incentive programs. It also must be available at scale. And that requires both investments in production capacity and smart government policies.

# The SAF CO<sub>2</sub> Lifecycle: From Cooking Oil to Jet Fuel

Here's the CO<sub>2</sub> lifecycle when used cooking oil — a common feedstock used to produce SAF — is converted to jet fuel:



#### **Sustainable Aviation Fuel**

American recognizes that increasing the use of sustainable aviation fuel — which can reduce lifecycle GHG emissions by up to 80% compared with conventional, petroleum-based jet fuel — must be a core part of our low-carbon pathway. But while the SAF industry is continuing to invest and grow production capacity, there remain significant challenges to the availability of SAF in the quantities and at the prices necessary to materially reduce emissions in the near term.

In early 2020, we committed to purchase 9 million gallons of SAF over three years from Neste, a leading producer of renewable products. This SAF will be certified through the International Sustainability and Carbon Certification scheme. We began to take delivery of Neste SAF at San Francisco International Airport in July 2020. This commitment contributes to our goal of sourcing 2.5 million GJ of cost-competitive renewable energy by 2025. When announced, our agreement with Neste was the

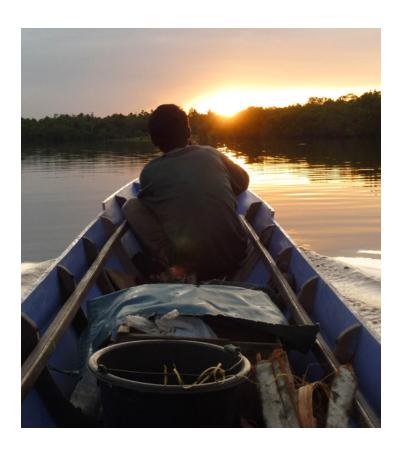
largest single SAF purchasing commitment in our industry, but it still represents considerably less than 1% of our total annual fuel consumption. Bringing the SAF market to scale will require the combined efforts of the private sector and effective policies from governments at all levels. By committing to this initial order from Neste, we aim to help facilitate more widespread production of SAF and accelerate its commercial viability.

American is also involved in other efforts and collaborations to build the market for SAF and identify other ways to reduce emissions associated with aviation. We participate in the World Economic Forum's Clean Skies for Tomorrow Coalition and Business for Social Responsibility's Sustainable Air Freight Alliance. We also participate in the Commercial Aviation Alternative Fuels Initiative, which brings together airlines, alternative fuel producers, and university and governmental stakeholders. And we have on-the-ground efforts at a number of airports — including Dallas/Fort Worth International Airport, San Francisco International Airport and Seattle-Tacoma International Airport — to use SAF.

#### **Carbon Offsets**

While the core focus of American's climate strategy is increasing efficiency and reducing emissions, we recognize that carbon offsets also have a role to play. As part of our support for CORSIA, we endorsed the industry goal to achieve carbon-neutral growth in emissions from international aviation after 2020, relative to a baseline set at the average of 2019 and 2020 emissions.

However, the collapse in demand for air travel in 2020 because of COVID-19 distorted the planned baseline. To bring the costs of compliance in line with what was originally intended, the industry petitioned to change the CORSIA baseline to include only 2019 emissions levels. Such a change was vital to keeping the credibility and feasibility of



CORSIA intact. In mid-2020, the ICAO decided that 2019 emissions will serve as the baseline for the first phase of CORSIA implementation (2021–2023), and that in 2022 it will consider the baseline for CORSIA's later phases.

In addition, in 2020, we introduced a customer-facing carbon offset program, enabling our passengers to offset their emissions from air travel. The program enables customers to purchase verified offsets through Cool Effect, a nonprofit organization. Customers can purchase offsets in a portfolio of projects that include work to prevent deforestation in Brazil and protect peat marshlands in Indonesia (see photo at left). For more information, see www.cooleffect/american-airlines.

#### **Renewable Energy Use in Our Facilities**

Over the past several years, we have expanded our use of renewable energy to power our administrative, ground and support operations. While emissions associated with the purchase of electricity to run our operations comprise the smallest portion of our carbon footprint, switching to renewable energy provides an immediate opportunity to reduce our GHG emissions.

We have focused our renewable energy efforts on our primary facilities in North Texas, where we have our largest airport operation, and our Fort Worth campus, which includes our integrated operations center, the majority of our training facilities, a large call center and our principal offices. The electricity used on our campus and at our Dallas/Fort Worth International Airport terminals and facilities is from renewable sources. As of April 2020, American was the highest-ranked transportation company — and among the top 50 companies overall — on the U.S. Environmental Protection Agency's (EPA's) Green Power Partnership Fortune 500° Partners List.

We have also undertaken a range of other initiatives to make our new and existing facilities more energy efficient and sustainable (see Our Other Environmental Efforts, p. 19).

#### **Public Policy and Collaboration**

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, achieving our goal will depend not only on our own efforts but also on sound policy and meaningful collaboration across the public and private sectors.

For example, smart policies that help the nascent SAF market to grow to commercial scale will be critical. In all future projections of low- or no-carbon aviation, SAF must play an increasingly large role in satisfying fuel demand. But current production levels are well below the scale needed to make SAF cost-competitive with conventional jet fuel. Through incentives, credits, investments in research and other policy tools, governments can create the market conditions needed to make SAF an economically viable alternative to conventional jet fuel.

Another high-impact way to reduce GHG emissions associated with aviation in the United States would be to modernize our air traffic control (ATC) system. This would help to alleviate congestion and reduce delays that result in additional fuel consumption and associated emissions — not to mention frustration for passengers. ATC reform is projected to bring up to 12% fuel and emissions savings. But developing and implementing a more modern and efficient ATC system requires government and our industry to work together (see p. 18).

In these and other areas, we believe it is important for our company to play a constructive role in advancing policies that are consistent with the goals of the Paris Agreement. That's why we supported the Business Roundtable's September 2020 <u>update</u> of its principles and policies addressing climate change. The update prioritizes the alignment of climate goals with scientific evidence, international engagement and support for investments in innovation.

# Modernizing Our Air Traffic Control System

Our Air Traffic Control (ATC) system is a vital part of our country's transportation infrastructure — equally important to the economy and society as the bridges, highways, rails and roads we travel on the ground. The design and operation of our ATC system also has environmental implications: The more efficiently aircraft can travel our routes in the skies, the less fuel they burn and the fewer emissions they produce.

While the United States has the safest ATC system in the world, it continues to rely too heavily on outdated technology and processes that are inefficient or poorly equipped to accommodate growing air traffic. At the same time, the complexity of our air space is expanding rapidly — from the dramatic uptick in drone use to emerging urban air mobility technologies.

To keep pace with these demands — and to help reduce aviation's impact on the climate — it is essential we modernize our ATC system, which in turn can reduce millions of tons of CO<sub>2</sub> each year. However, it must have the best technology and the operational agility and flexibility to deploy it fully and quickly. This goal requires timely and effective government policies that ensure an integrated approach by airlines, airports and air traffic management.

Up to **12% reduction** in fuel use and GHG emissions can be achieved by completing the transition to a satellite-based navigation system<sup>5</sup>

#### **Realizing the Promise of NextGen**

NextGen is the common term for the Federal Aviation Administration's (FAA) plan to modernize the country's network of aviation infrastructure, technology and services. A key part of NextGen involves moving from outdated radar technology to a primarily satellite-enabled navigation system, backed up by more sophisticated radar, which will allow FAA and operators to create optimal flight paths and arrival and landing operations — significantly reducing flying time and GHG emissions.

A critical part of enhancing the efficiency of air traffic management is strengthening the ability of FAA to deploy and, in partnership with airlines and airports, to accelerate and operationalize NextGen capabilities and the next generation of technological advancements.

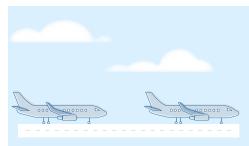
The FAA anticipates that through 2030, NextGen's benefits include:

Reducing CO<sub>2</sub> emissions by 27 million metric tons — equivalent to taking 5.9 million cars off the road<sup>6</sup>

**Eliminating 38% of delays**, saving \$106.7 billion in passenger value of time

## The ATC and Climate Connection

About a third of all flight delays are caused by solvable ATC issues, often unrelated to airline operations. The congestion, delays and diversions that result from our outmoded ATC system significantly increase fuel burn and GHG emissions. Inefficiencies in our current ATC system increase emissions from gate to gate:



#### On the ground

Delays and congestion result in aircraft spending more time on the taxiway waiting for departure slots and gates upon arrival



#### **Takeoff and landing**

Outdated technology and procedures often force aircraft to forgo the most fuel-efficient continuous climb and descent operations



#### In the air

Indirect flight paths increase flight time and fuel burn, while inefficient air-space management can require additional separation between aircraft while en route and more aircraft in holding patterns awaiting clearance to land

<sup>5.</sup> https://www.airlines.org/wp-content/uploads/2019/02/Young-Testimony.pdf

<sup>6.</sup> https://www.faa.gov/nextgen/media/BusinessCaseForNextGen-2016.pdf

## **Our Other Environmental Efforts**

While reducing our carbon footprint is the most significant way American can minimize our impact on the environment, we also work hard to improve environmental sustainability across our operations. For example:



#### **Environmental Management**

In 2019, American became the first major U.S. carrier to begin the process of seeking 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.



#### **Green Building**

We are integrating green building principles — such as energy efficiency, water conservation and sustainable materials — into our new and renovated facilities. We have multiple LEED Gold- and Silver-certified facilities across the United States; most recently, we opened two new LEED Gold-certified buildings — called Skyview 7 and 8 — at our corporate headquarters campus in Fort Worth in 2019. The buildings' sustainable design features include the use of materials that meet stringent requirements for low or no volatile organic compounds, preferred parking for zero- and low-emitting vehicles and a 97% diversion of construction waste to landfills. Skyview 8 also boasts a 41% reduction in water use compared with standard practices through its high-efficiency water fixtures and other features. The new campus replaced 21 acres of formerly concrete surfaces with water-efficient landscaping, which included planting 3,000 trees.



#### **Aircraft Noise**

We recognize and are committed to addressing the ongoing concerns of local communities regarding aircraft noise. Our fleet of mainline aircraft is the youngest among U.S. network carriers, and these newer aircraft are up to 50% quieter than the aircraft they replaced. We are proud of the fact that our entire mainline and regional fleet of aircraft meets ICAO Chapter 4 noise certification standards. American continues our work with airports, communities and the Federal Aviation Administration (FAA) to find reasonable solutions.



#### **Renewable Energy**

We have set a goal to source 2.5 million GJ of cost-competitive renewable energy to power our operations by 2025 — the equivalent of nearly 20 million gallons of jet fuel. In 2019, we sourced nearly 200,000 GJ through the purchase of electricity from renewable sources for our headquarters facilities and operations at Dallas/Fort Worth International Airport, which are 100% powered by renewable energy. As of April 2020, American was the highest-ranked transportation company — and among the top 50 companies overall — on the U.S. EPA's Green Power Partnership Fortune 500° Partners List.



#### **Energy Efficiency**

We are taking steps across all of our facilities to make them more energy efficient. For example, we are re-lighting our 13 hangar facilities with high-efficiency LED lights, which use only 20% of the electricity of the lights they replace. In 2019, we completed the re-lighting of our maintenance facility in Pittsburgh — bringing to five the number of hangar facilities where we've made the switch to 100% LED — and we are well on our way to completing the effort at the remaining ones.



#### **Waste Reduction and Recycling**

We have a variety of efforts aimed at reducing waste and increasing recycling onboard our aircraft and within our facilities. On average, American recycles about 340,000 pounds of aluminum cans annually through our flight services. And we have changed our processes and materials — including by switching from plastic to bamboo stir sticks — to eliminate thousands of pounds of unnecessary plastic in 2019.

During the COVID-19 pandemic, we adjusted our onboard meal service to protect the health and safety of our passengers and team members. Some of these adjustments, such as providing bottles of water rather than refilling cups to minimize contact, present challenges to advancing our waste and recycling goals. As soon as it's safe to do so, we will ramp up and launch a range of planned new efforts to reduce, reuse and recycle across our operations.

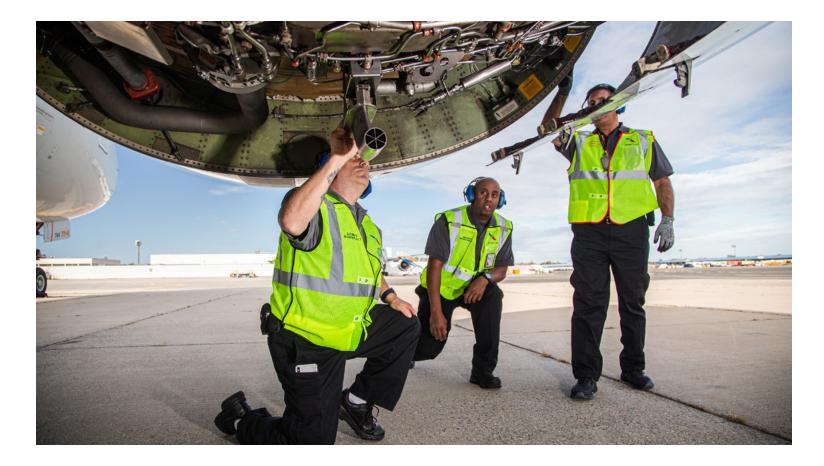
For data on our performance related to energy use, air emissions, waste, water, noise and other environmental topics, see p. 54.

# Identifying and Assessing Climate-Related Risks

We know that effectively managing and mitigating the climate-related risks facing our company starts with a comprehensive understanding of those risks and their potential impacts on our business, operations and the broader environment in which we work. This insight is a key basis for our updated climate strategy and lays the foundation for more deeply integrating climate risk analysis into our ongoing risk management and business planning processes.

#### **Our Process**

Through our existing enterprisewide risk management process, American monitors and manages a broad range of strategic, financial and operational risks, including certain climate change risks. To develop a more robust understanding of the climate risk landscape, in 2020 we launched a process focused specifically on identifying and assessing the climate-related risks facing our company over the short, medium and long terms. The initial qualitative phase, in which we considered both physical and transition risks, informs future quantitative analysis, and we will continue to refine and improve the process.



This process — and our related reporting — has been informed by the Task Force on Climate-related Financial Disclosures, the leading framework for disclosure on climate-related risk.

The Task Force on Climate-related Financial Disclosures divides risks into two categories:

Risks related to the physical impacts of climate change, including from acute weather events and chronic changes to the climate that may present operational risk for companies

Risks related to the transition to a lowercarbon economy, including the policy, legal, technology and market changes that may pose financial and reputational risk for companies

#### **Physical Risk Assessment**

We focused our physical risk analysis on 10 strategically important sites for our company: the nine hub airports that form the foundation of our network, and our largest maintenance facility, which is in Tulsa, Oklahoma. Our largest hub, in Dallas/Fort Worth, Texas, is also home to our corporate headquarters, our integrated operations center and our primary training facility.

For each site, we considered the likelihood and implications of acute risks, such as extreme weather events, and chronic risks, such as sustained increased temperatures. We looked first at historical trends and impacts, including changes between 1990 and 2018, and then at projections for 2035 and 2060. We based these future projections on the IPCC's Representative Concentration Pathway (RCP) 8.5 emissions scenario, which assumes essentially "business as usual" between now and 2100. We chose the high-emissions RCP 8.5 scenario because it produces an up-to-6° C rise in global temperatures, which would cause the most significant potential physical impacts on our facilities, creating an upper-level boundary condition for our analysis.

We identified and assessed potential physical risks from chronic changes in climate norms (such as rising sea levels, increasing temperatures and changes in precipitation) and acute events (such as cyclones, flooding, drought and extreme heat). We used downscaled climate data and projections that enabled us to evaluate the likelihood that climate-related impacts will affect our operations at each of the 10 sites in the assessment in 2035 and 2060. Our sources included data from the U.S. Global Change Research Program's Fourth National Climate Assessment, Climate Central's States at Risk, the U.S. EPA's Climate Resilience Evaluation & Awareness Tool, and other relevant resources for non-U.S. data where needed.

We then established criteria to evaluate the relative business importance of each site — such as capital assets on site and flight activity — and combined that value-at-risk assessment with the hazards assessment. Taken together, this analysis will help us determine resilience investment priorities and mitigation strategies.

#### **Transition Risk Assessment**

We also looked at 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.



We based our analysis on the International Energy Agency's (IEA's) 2019 World Energy Outlook global climate change scenarios, which include a 6° C Current Policies scenario that generally aligns with the higher-emissions RCP 8.5 scenario we used for our physical risk assessment, a 2.7° C Stated Policies Scenario in which the policies agreed to as part of the Paris Agreement are enacted, and a 1.65°–1.85° C Sustainable Development Scenario that would align with net zero carbon by 2070.

For each scenario, we assessed policy assumptions for major emitting countries and cross-cutting global policies, along with transport sector assumptions. We also looked at GDP and population growth assumptions by region and the forecasted price of carbon and crude oil under the scenarios. We recognize that in 2020 the COVID-19 pandemic created a dramatic and unanticipated shock to the global economy and policy landscape that will affect these scenarios, but because material policy changes are likely to take effect gradually, the impact of the pandemic on these variables is likely to grow increasingly

muted in the medium and long terms. As a result, we believe they remain useful analytical tools for establishing a climate-related risk assessment process that can be refined.

We then engaged leaders and experts from across our business and operations to qualitatively assess the potential transition risks and opportunities, based on the different assumptions (see table on p. 22). We used this analysis to inform our strategy for mitigating climate-related risk and driving progress toward our company's longer-term goal of net zero carbon emissions by 2050.

#### **Our Findings**

The initial qualitative phase of our assessment yielded important insights into the nature, likelihood and projected impact of climate-related risks facing American currently and in the medium and long terms (in 2035 and 2060, respectively). We are using these insights to guide our climate change strategy and goals, develop mitigation strategies and inform future analysis of the financial impacts of the risks identified.

# **Climate-Related Risks and Opportunities**Key Risks

Timeline	Short Term	Medium Term	Long Term
Physical Risks	2020	2035	2060
Transition Risks and Opportunities	0-2 Years	2–15 years	15-30 years

#### Potential Financial Impact Level



	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
	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 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 impacting our international joint venture contracts.  Policymakers in the U.S. 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 to meet those requirements.				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.
Transition Risks	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	Recent completion of 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.  There is a risk that technology does not develop sufficiently to allow us to meet our ambitious climate goals.				Since 2013, we have undertaken an extensive fleet replacement initiative, taking delivery of 550 new, more fuel-efficient aircraft, including the Boeing 787 Dreamliner and the Airbus 321neo, 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.  We will continue to engage with SAF producers and airframe and aircraft engine manufacturers to better understand new low-carbon technologies that may become available over our planning horizon.
	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 with us.				We recently introduced a carbon offsetting opportunity for our customers as a way to enable to them to travel efficiently while also offsetting the GHG impact of their flights. We intend to further integrate other sustainability practices into the products, services and experiences we offer our customers.  We will deepen our customer relationships by partnering with a range of stakeholders, including governments, manufacturers, suppliers and customers, on sustainability initiatives that have the potential to boost low-carbon pathways, such as sustainable aviation fuels.

#### Potential Financial Impact Level



# **Key Risks (continued)**

	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
Transition Risks	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 U.S. 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.				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 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 overall climate mitigation strategy. We are looking to embrace new low-carbon levers as they become available.  We also plan to 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.
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.  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.				We will 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.  We are investigating options to mitigate the impacts of hurricanes, which may include enhancing airport infrastructure to withstand stronger winds from storms.

#### Potential Financial Impact Level



# **Key Risks (continued)**

	Risk Type	Climate-Related Risk Definition	Potential Financial Impact	Short Term	Medium Term	Long Term	Mitigation Strategy
	Acute (continued)	The risk of increasing severity of weather events	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.				To mitigate the impact of flooding on infrastructure, we plan to incorporate the projected impacts of increasing precipitation into design standards for physical assets, capital improvement plans, disaster management and emergency response, master plan development and early warning systems.
Physical Risks			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.				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.
	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.				We recognize that we cannot halt sea-level rise on our own. 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 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.

CEO Message Strategy Climate Safety Team Members TCFD/SASB Data Customers

#### Potential Financial Opportunity Level







High

# **Key Opportunities (continued)**

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				We already have the youngest fleet among U.S. network carriers, and we are planning 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 shares of SAF, reducing exposure to the cost of growing carbon regulation and diversifying fuel supply				We have executed an offtake agreement with Neste, agreeing to purchase 9 million gallons of SAF over three years beginning in 2020. We plan to continue to pursue opportunities to increase our use of SAF and 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				We have added a consumer-facing carbon offset option on our website and are exploring other opportunities to provide low-carbon offerings to our customers.
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)				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				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

#### **Climate-Related Risks and Opportunities (continued)**

# Climate-Related Scenarios Used to Explore the Resiliency of Our Short-, Medium- and Long-Term Strategy

Name	Scenario	Warming Above Pre-Industrial Levels Projected for 2100	American Airlines 2030 Global Annual Emissions in MMTCO <sub>2</sub> *
Business-as-usual	IEA 2019 World Energy Outlook (WEO) Current Policies Scenario (CPS)	Approximately 6° C	52.5
Existing expressed commitments to mitigation	IEA 2019 WEO Stated Policies Scenario (STEPS)	Approximately 2.7° C	33.1
Rapid reductions in line with Paris Agreement	IEA 2019 WEO Sustainable Development Scenario (SDS)	66% chance of 1.8° C or less	26.5

<sup>\*</sup> Million metric tons of CO.

#### Results of Carbon Risk Scenario Analysis Used to Quantify the Annual Financial Impact of Rising Energy Costs

Carbon Risk Pricing Metric	tric Climate Scenarios					
Annual Impact in 2030 Compared to 2019 Baseline	CPS	STEPS	SDS			
Potential cost of carbon (million dollars)	\$116.98	\$139.97	\$425.39			
Percentage change in fuel costs	0.97%	1.16%	3.53%			
Potential change in operating margin	(0.21) pts	(0.25) pts	(0.75) pts			

#### **Extreme Heat and Flight**

One impact of climate change — which is already being felt across the southwestern part of the United States — will be more frequent heat waves and extreme temperature days. Rising temperatures will affect how people live and how industries operate, including airlines.

Extreme heat affects aircraft in several ways. Hotter air is less dense than cooler air, meaning higher temperatures result in less lift and require more engine thrust for planes to take off. Hotter, thinner air also reduces engine output. While most aircraft can operate in very high temperatures (generally up to 126° F), doing so depends on a variety of factors — such as airport infrastructure and altitude — and requires making operational changes. And, smaller regional aircraft typically have lower maximum temperature thresholds.

Constructing longer runways, which can accommodate the higher speeds needed to attain the altitude required by the flight path, is one way to enable planes to take off in hotter weather. A more immediate way is to reduce aircraft weight — thereby reducing the thrust required to take off — by limiting the number of passengers or the amount of cargo. On a typical American flight from Phoenix to New York, for example, we can fly with all the seats filled when it's 100° F. But if the temperature goes up to 110° F, the flight's capacity goes down by six seats — and if it rises to 120° F, we may have to reduce our maximum capacity by as many as 35 seats.

Increases in the number of hot days can cause heat buckling on runways and taxiways and other infrastructure damage. And in extreme cases, it may become difficult to cool the aircraft to an acceptable temperature for customers and crew.

As part of our analysis of climate-related risks, we have identified which of our key sites face risks from increased temperatures and more frequent extreme heat events in the short, medium and long terms. And we are exploring strategies for mitigating those risks, such as making schedule changes to have more flights depart during cooler times of day at certain times of year and implementing new health and safety procedures for our team members.

CEO Message Strategy Climate Safety TCFD/SASB Team Members Customers Data

#### **Site-Level Analysis of Physical Risks**

Our initial assessment indicates that our existing risk management processes, including diversification of key assets and revenue streams and allocation of risk to third parties such as insurance companies — as well as ongoing due diligence related to changes in the likelihood of acute hazards — have been effective in avoiding material risk from the physical impacts of climate change.

We will regularly evaluate and refine our risk management processes to ensure they remain effective as climate-related risks evolve and emerge. We will also continue to monitor and assess the key physical risks identified during our initial assessment, which include those noted in the table at right:

Risk assessments were based on qualitative analysis that considered and factored in both the likelihood and the consequences of a particular risk affecting operations at each site over the two time horizons.

Low Risk

Medium Risk

High Risk

		Chronic Risks					Acute Risks							
		eased ratures		Level se	Precip Cha	itation nges	Flooding		Cyclonic Events		Extended Drought			eme ratures
Timeframe	2035	2060	2035	2060	2035	2060	2035	2060	2035	2060	2035	2060	2035	2060
Charlotte (CLT)														
Chicago (ORD)														
Dallas/Fort Worth														
<b>London</b> (LHR)														
Los Angeles (LAX)														
Miami (MIA)														
New York (JFK and LGA)														
<b>Philadelphia</b> (PHL)														
Phoenix (PHX)														
Tulsa (Tech Ops)														

# **Governance and Management**

The potential impacts of climate change span many aspects of American's business. Day-to-day management of climate-related issues is embedded across our company — from our Airport Operations teams that do resiliency planning for more frequent and severe weather events, to our Fuel Procurement team working to secure cost-competitive supplies of sustainable aviation fuel.

As climate change has become a more pressing challenge for our company and our planet, we have taken steps to formalize and centralize coordination of how American manages climate-related issues. This includes reconsidering the way environmental, social and governance (ESG) matters — and climate change, in particular — are overseen by our Board of Directors to ensure we have robust governance of climate-related risks and opportunities. It also includes enhancing our management capacity to lead the development and execution of our long-term climate change strategy.

#### **Board-Level Oversight**

American's Board of Directors oversees the company's enterprisewide approach to risk management. Either as a full Board or through one or more of its committees, the Board reviews strategy and management's assessment of material risks affecting our business, including potential climate-related risks.

The Corporate Governance and Public Responsibility Committee has primary responsibility for oversight of American's sustainability efforts. In 2020, the committee's charter was updated to formally codify this role, including explicit reference to its oversight of climate-related risks and opportunities. The committee meets every quarter, and beginning in 2020, climate-related issues will be a standing agenda item for committee meetings and included in all quarterly updates.

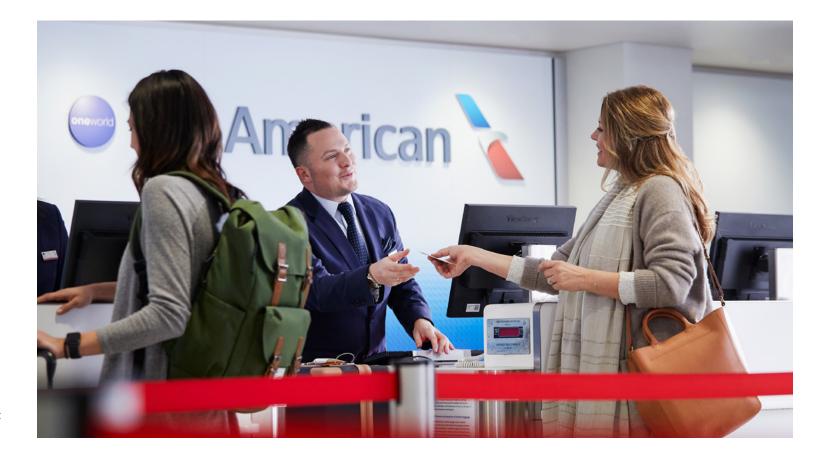
The full Board receives periodic updates on climate-related issues, most recently at its October 2019 meeting when it approved management's

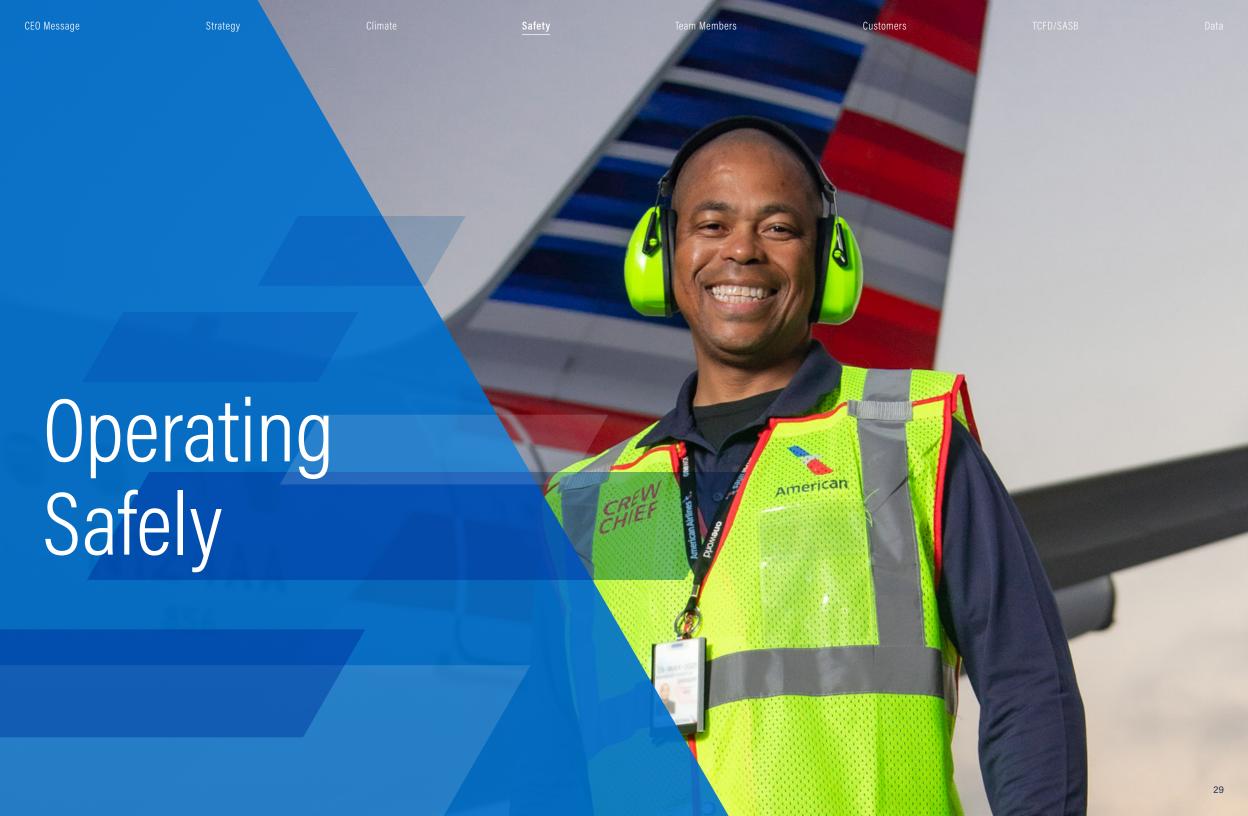
plans to update and expand American's sustainability strategy, with a focus on addressing climate-related risks and opportunities.

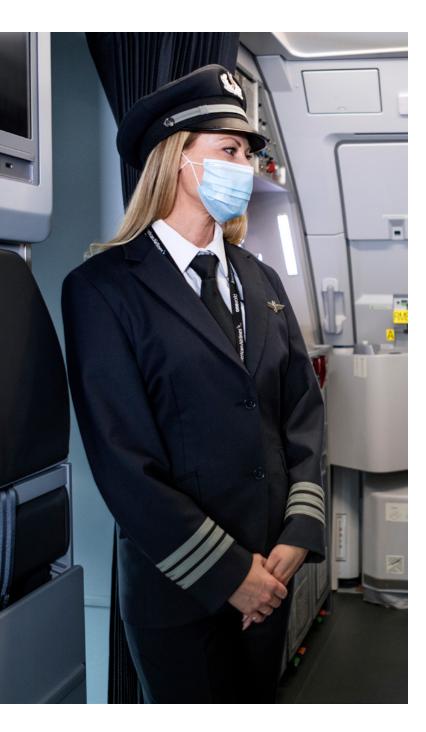
#### **Management Responsibility**

Led by an Executive Vice President who reports directly to the CEO, American's Corporate Affairs group has responsibility for managing and coordinating the company's ESG efforts, including those related to sustainability and climate change. In 2019, we recruited a new Managing Director for ESG and reorganized the sustainability group under her leadership. This group was tasked with, among other responsibilities, facilitating the enterprisewide climate risk assessment and scenario-planning process to inform our new climate strategy.

Our Sustainability Steering Committee — which is a cross-functional and cross-operational group of leaders from across our business — has responsibility for monitoring global trends, responding to stakeholder inquiries, offering recommendations to senior leadership and engaging with our Board on sustainability issues. Led by our Executive Vice President of Corporate Affairs, the group includes representatives from Airport Operations, Flight Operations, Technical Operations, Cargo, Finance, Safety, People and Communications, Legal, Government Affairs and Investor Relations. In 2020, this committee is focusing on identifying, assessing and making recommendations for addressing climate-related risks and opportunities.







At American Airlines, our first priority — and our foremost duty to our customers and our team members — is ensuring we operate every flight safely. Flight safety means protecting our customers and team members from the start through the end of a trip, from boarding passengers and loading baggage before departure to parking the aircraft on arrival and deplaning passengers and team members.

unning a safe and reliable operation is critical to our success, and we are proud to have safely transported more than 215 million customers on more than 2.3 million flights in 2019. Since our merger with US Airways at the end of 2013, our team members have safely transported more than 1 billion passengers.

We are dedicated to fostering and sustaining a culture of safety that guides every decision we make. We have helped change the way the industry uses operational data and works with the Federal Aviation Administration (FAA) to identify and address risks. We have empowered every team member who touches our aircraft to take a plane out of service if there is a safety concern. And we have built a culture that encourages all team members and contractors to ask questions and report safety hazards, concerns and incidents without fear of reprisal.

Our best-in-class maintenance program meets or exceeds FAA and manufacturer requirements. In 2019, we had the largest maintenance team in the industry with 15,000 Technical Operations professionals, which includes more than 9,000 FAA-licensed aviation maintenance technicians and more than 100 FAA-awarded Master Mechanics. We are constantly improving our maintenance and safety processes through state-of-the-art data analysis.

We aim to improve our team member safety performance every year, but we have not met our own goals in this area. While we are deeply saddened to have experienced an employee fatality at

# Our Goals

Maintain the highest passenger safety standards, with zero serious customer injuries

Reduce on-the-job team member injuries

Reduce aircraft ground damage

one of our wholly owned regional carriers in 2019 (see <u>p. 33</u>), key safety metrics for our regional operations have improved since 2017 — reflecting our continual efforts to strengthen our safety- and health-related policies, procedures and practices. In our mainline operations, several key metrics have worsened since 2017. In 2020, we are redoubling our efforts to keep our team members safe, and we are already seeing results.

We have empowered every team member who touches our aircraft to take a plane out of service if there is a safety concern.

# 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 performance, and our Board of Directors receives monthly updates on key safety performance metrics. In July 2020, we updated the charter for the Board of Directors' Corporate Governance and Public Responsibility Committee to include safety as one of its formal oversight responsibilities. That committee will review quarterly presentations from management on our safety performance and will also receive the same monthly updates that management receives.

The safety of our customers and team members is guided by our Safety Management System (SMS), an organizationwide approach to managing risk and assuring the safety of our operations and team members. Our SMS emphasizes safety management as a fundamental business process to be considered in the same manner as other aspects of business management. It involves a full commitment from the most senior levels of our company through to each team member to integrate safety into all parts of how we do our jobs. Our

SMS promotes a culture in which our team members proactively identify, analyze and mitigate risks throughout all aspects of our operations. The SMS ensures robust and repeatable processes driven by data to reduce risks and continuously improve and enhance safety for our customers and team members. 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.

#### **Safety Policy**

Our Corporate Safety Policy applies to all team members, business partners, contractors and consultants, and 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, the 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 in which we operate and establishes standards for acceptable operational behaviors.

#### **Safety Assurance**

The Safety Assurance component of our SMS outlines how we use data collection and conduct quality assurance and internal oversight to validate the effectiveness of risk controls and the performance of the SMS. Through the Safety Assurance component, we verify that risk controls in our operational processes continue to conform to the

#### **The Four Components of Our SMS**

#### **SAFETY POLICY**

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

Applies to

100%

of team members, business partners, contractors and consultants

#### **SAFETY ASSURANCE**

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

11,952 reports in 2019

#### SAFETY RISK MANAGEMENT

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

1,222
risk management
worksheets

completed in 2019

#### SAFETY PROMOTION

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

219,400 hours of employee

safety training in 2019

requirements for which they are intended and that they remain effective at maintaining risks at acceptable levels.

#### **Aviation Safety Action Program**

We proactively mitigate any risks to team members before those risks can cause injury. In a large organization like ours, one challenge in countering potential hazards is that the individuals who can implement positive change cannot be the eyes and ears for the whole system. We therefore rely on the Aviation Safety Action Program (ASAP), an industry tool that encourages voluntary reporting of safety events or discrepancies, which are then reviewed jointly by management, the relevant union and the FAA. The goal of ASAP is to prevent accidents and incidents by encouraging frontline team members and airlines to report safety information that can identify safety risks, rather than letting such incidents go undocumented. American was the first airline to create an ASAP program; they have since been adopted by more than 250 carriers worldwide.

In 2019, American recorded 11,952 ASAP reports, up from 10,924 in 2018. We view an increase in ASAP reports as a positive trend because it gives us more opportunities to identify and resolve potential safety issues and signals that team members are comfortable raising safety concerns when they see them. Currently, we have ASAPs for Flight, Flight Service, Dispatch, Technical Operations and Central Load Planning. To enhance our safety performance and culture, we are expanding safety reporting with a new Ground Safety Action Program (GSAP). This will enable full reporting for ramp employees. We created GSAP by collaborating with the Transport Workers Union of America-International Association of Machinists & Aerospace Workers (TWU-IAM) and the FAA. The ASAP and GSAP programs will be able to share information that cuts across multiple workgroups. This allows for comprehensive reporting and actions to address safety risks across all of our operations. All programs will use event review committees composed of representatives from the company, the relevant union and the FAA.

#### **Flight Operations Quality Assurance**

Flight Operations Quality Assurance 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. Through this program, we routinely monitor approximately 90% of our flights, using algorithms that sift through each flight's data looking for potential safety events. We use the results to understand pilot performance and to monitor aircraft systems, performance and operational efficiency.

#### **IOSA Audit**

As part of our commitment to transparency and monitoring, we are a registered participant in the International Air Transport Association's Operational Safety Audit (IOSA) program, an internationally recognized evaluation system designed to assess an airline's operational management and control systems. The IOSA audit, 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.

#### **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 the 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 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 (although a clear line differentiates between acceptable and unacceptable behaviors). We train our teams to look at potential safety events using three types of behaviors: human errors, at-risk behavior and reckless behavior.

#### **Responding to Emergencies**

Our Emergency Response Manual (ERM), which establishes effective and efficient response practices for various types of emergencies, is an integral part of our SMS program. The ERM serves as the governing document for the entire American Airlines Corporate Emergency Response Plan and details guidelines to prepare for and respond to emergencies, responsibilities for team members across our organization, protocols for communicating with both internal and external stakeholders and mechanisms for stakeholders to report emergencies.

3,900+

risk management worksheets completed since our merger with US Airways in 2013

The ERM includes a detailed Pandemic Preparedness and Response Plan, which we put into action once the severity of the COVID-19 pandemic became clear. The pandemic response plan provides uniform policies and procedures for protecting our team members and customers and facilitates coordination among our Chief Medical Officer, our pandemic committee and regulatory agencies. American's corporate response is guided by the World Health Organization's Pandemic Level ratings, in addition to information from the Centers for Disease Control and Prevention. (See <u>p. 35</u> for more on our response to COVID-19.)

# **Team Member Safety**

Maintaining a safe workplace for every one of our team members is a cornerstone of American's safety program, and we aim to reduce our employee injury rate every year. Although our regional operations have improved over the last three years, we have experienced a disappointing increase in injuries across our mainline operations during this same period.

In 2019, we were deeply saddened to experience an employee fatality — a valued member of our ground support crew in our regional operations. We can — and must — do better, and we have therefore increased safety oversight at the highest levels of our company and put into place new initiatives and structures designed to improve safety throughout our operations. (See <u>p. 31</u> for information on Board of Director oversight.)

In August, a ramp agent was killed during an accident at Charlotte Douglas International Airport. Described as a hard worker and dedicated team member, he was passionate about people and airplanes. He was also known for shining a positive light in any situation. Our wholly owned regional carrier, Piedmont, continues to investigate the root cause of the accident and implement risk controls while working with the U.S. Occupational Safety and Health Administration (OSHA) to ensure the safest environment for our team members and customers.

Our senior leadership team, including our Chief Executive Officer and our company President, receive monthly updates on team member safety. These updates are provided as part of our SMS. (See more on p. 31.)

Across our organization, we focus on injury reduction, evaluate trends and develop programs to enhance safety. We have been centralizing our data collection and injury reporting tools to provide better visibility and access to company leaders. In addition to monitoring injury rates, we closely track aircraft ground damage because it is strongly correlated with on-the-job injuries.

We have developed a strong culture of injury reporting, and team members are urged to report all injuries — including those that do not require medical attention — because having the most comprehensive view possible into potential injury risks is critical to finding ways to reduce them.

Among all team member groups, our ramp agents have the highest rate of injuries, primarily as the result of lifting baggage, often in awkward and tight spaces. We recently conducted a training program on proper lifting techniques and hired on-site athletic trainers at 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. To address flight attendant injuries during flight, we established a Turbulence Task Force to provide policies, procedures and capabilities to reduce team member and passenger injuries and improve the flight experience. Through this group, we have revised our turbulence avoidance and event procedures, strengthened our seat belt policy, and improved our technology to provide our pilots with real-time turbulence avoidance information.

To reduce head and scalp injuries among mechanics, we introduced a new bump cap, which is a hat with a hard plastic insert — worn when hard hats are not required — that helps protect against injuries. Our mechanics told us that they wanted a lighter cap with a shorter bill

that would be less hot to wear and give them greater visibility. We tested prototypes of the new caps at locations with high head/scalp injury rates and, based on the feedback we received, rolled out two new bump caps to our entire team in 2019.

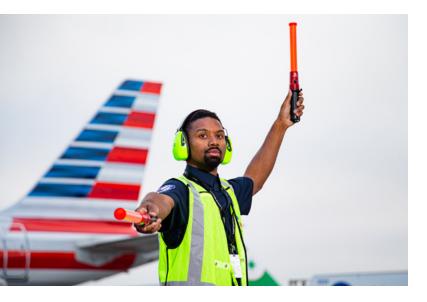
Data

We also recently developed a program for team members who suffer repeated on-the-job injuries. The initiative will evaluate whether these team members are working unsafely — and therefore need trainings and tools to change their work behaviors — or if their initial injuries made them more susceptible to repeated injuries.

#### **Partnering with Our Unions**

We work with our unions on an ongoing basis to identify safety concerns and new ways to improve our safety performance. The ASAP process described on <u>p. 32</u> is the result of cooperation between airlines and their union partners. Such cooperation is integral to our entire safety program. Over the course of 10 months in 2019–2020, for example, we teamed up with union leaders from the TWU-IAM and the APA to evaluate safety risks at the gate at our 14 largest airports and to develop mitigation plans for each identified risk. This exercise resulted in a number of findings, all of which are being addressed now.

Importantly, our unions have been instrumental in developing and communicating new team member safety measures enacted because of the COVID-19 pandemic. Learn more on <u>p. 35</u>.



#### **VPP Status**

OSHA's Voluntary Protection Program (VPP) recognizes employers and workers who have implemented effective safety and health management systems and maintain injury and illness rates below U.S. Bureau of Labor Statistics' national averages for their industries. The VPP is focused on preventing fatalities, injuries and illnesses through a system that emphasizes hazard prevention and control, worksite analysis and training. Our Tech Ops–Tulsa Auxiliary Power Unit and Aircraft Wiring Center facility was the first group at American to become VPP-certified, and our maintenance centers in Pittsburgh and Charlotte are seeking VPP certification.

# **Safety Performance**

Flig	ht Safety Performance	20	)19		
		Mainline	Regional		
Num	ber of flights*	1.9 million			
S	Number of aviation accidents**	4	3		
Metrics	Number of enforcement actions from government agencies***	0	0		
SASBI	Number of safety risks and hazardous situations identified <sup>†</sup>	81	372		
S	Percentage of safety risks and hazardous situations identified that were mitigated <sup>‡</sup>	97%	97%		
Aircı	raft ground damages (rate per 10,000 departures) <sup>\$</sup>	2.43	0.72		
ASA	P reports	11,952	10,349		

<sup>\*</sup> Mainline and owned regional

<sup>§</sup> We use guidance from Airlines for America to determine aircraft ground damages.

Team Member Safety Performance	20	)19	20	)18	2017		
	Mainline	Regional	Mainline	Regional	Mainline	Regional	
Injury rate*	9.57	7.11	9.21	7.55	8.43	8.13	
Lost day rate**	6.14	3.74	5.43	3.88	4.89	3.88	
Work-related fatalities	0	1	0	0	0	0	

<sup>\*</sup> Total recordable cases per 200,000 manhours

Defined according to the International Civil Aviation Organization (Annex 13) and the National Transportation Safety Board (Part 830). Of the four mainline accidents in 2019, three involved crew member injuries due to turbulence and the fourth involved aircraft damage to a wingtip. Of the three regional accidents in 2019, one involved a crew member injury due to turbulence, a second involved a crew member injury when one aircraft touched another while taxiing and a third involved a skid off a runway under icy conditions (with no injuries). No customer was injured in these accidents.

<sup>&</sup>quot;Defined to include enforcement actions by the FAA, the European Aviation Safety Agency or equivalent national authorities related to the regulation of aviation safety.

<sup>&</sup>lt;sup>†</sup> 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. Regional data combines all risks from Piedmont, PSA and Envoy airlines.

<sup>&</sup>lt;sup>‡</sup> Our SMS requires that we mitigate identified risks, particularly high risks, to as low as reasonably practicable (ALARP). 3% of our 2019 identified risks were already ALARP. These systemic and residual risks are monitored, measured and tracked.

<sup>&</sup>quot;The lost day rate, which OSHA 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.

# **Responding to COVID-19**



The COVID-19 pandemic has disrupted our world, our industry and our company to an extraordinary and unprecedented extent, upending business as usual across every sector of society and devastating families and communities with immeasurable pain and loss.

Since the start of the crisis, our foremost priorities have been the health and well-being of our customers and team members and, notwithstanding the impact of the virus on customer demand, the continued ability of American to deliver access to needed air service across our nation and provide livelihoods for our team members.

#### **Travel with Confidence**

COVID-19 has forced us to rethink how we deliver our services, to keep customers and team members healthy and to provide peace of mind during air travel.

Throughout the pandemic, we have worked closely with the Centers for Disease Control and Prevention and a range of outside experts to understand the latest developments and determine the adaptations necessary for our operations. In June 2020, we announced our new Travel Health Advisory Panel, which is providing us with advice and guidance on disease prevention, cleaning procedures and other public health matters. This panel complements our internal COVID-19 working group of experts from across our business, including our medical director; this group meets regularly to review the latest guidance from health officials and coordinate our response.

The high-efficiency particulate air (HEPA) filtration system on board our entire mainline fleet — and most regional jets — provides a complete air change every two to four minutes. HEPA technology is similar to the standards for hospitals, helping keep environments clear of bacteria and viruses while providing clean air.

In addition, we have put in place a multilayered and ever-evolving approach to protect the health of customers and team members, including:

- Requiring face coverings for customers throughout their entire journey — and denying boarding or future travel for customers who refuse to comply<sup>7</sup>
- Making the wearing of a face covering an essential function of our team members' jobs, requiring them while at work
- Enhancing cleaning procedures on our aircraft, in our airports and at our facilities
- Installing plexiglass shields at ticket counters and boarding gates
- Deploying touchless check-in at airports, including printing baggage tags at kiosks
- Modifying onboard food and beverage service to minimize contact

- Asking customers during check-in to certify that they have been free of COVID-19 symptoms for the past 14 days
- Instituting temperature checks for team members at major locations across the system
- Offering preflight COVID-19 testing for customers traveling to international destinations, starting with Jamaica and the Bahamas, with plans to expand the program to additional markets

These are just some of the important safety measures we are taking.

#### **Our Clean Commitment**

The American Airlines Clean Commitment is our promise that we're taking bold measures and using the latest products and technology to help ensure the well-being of our customers when they travel with us and the well-being of our team members as they provide this service. We have expanded our already comprehensive efforts to clean our aircraft and airports, enhancing procedures on all flights and developing new disinfection protocols for catering equipment and supplies.

In late August, we became the first airline to announce plans to upgrade to SurfaceWise2, a breakthrough electrostatic spraying solution from Allied BioScience. The SurfaceWise2 solution is the first long-lasting

Visit our <u>website</u> for the most up-to-date information on our response to COVID-19 and what we are doing to keep our customers and team members safe.

<sup>7.</sup> American Airlines requires all customers over the age of 2 to wear face coverings at airports and on board. The only time face coverings may be removed at the airport or on board is when the customer is eating or drinking.

product approved by the U.S. Environmental Protection Agency to help fight the spread of COVID-19. SurfaceWise2 creates an invisible barrier on surfaces, which physically breaks down and kills virus cells, helping to protect passengers and team members against COVID-19 transmission via surfaces, particularly on high-touch areas such as seats, armrests, tray tables and overhead bin doors.

We also were the first airline to begin working with the Global Biorisk Advisory Council (GBAC) for STAR™ accreditation for our fleet and customer lounges. GBAC STAR accreditation demonstrates that proper cleaning and disinfection practices, procedures and systems are in place to prepare for, respond to and recover from pandemics. We expect to receive full accreditation by the end of 2020 for our entire fleet and all lounges. GBAC is a division of ISSA, the worldwide cleaning industry association.

The combination of required face coverings, thorough cleaning protocols, HEPA filters and the use of SurfaceWise2 will help make the travel experience even safer for team members and customers who are ready to return to the skies.

#### **Taking Care of Our Team Members**

To take good care of our customers, we must take good care of our team. The extensive safety measures we have enacted in response to COVID-19 are designed to protect customers and team members.

All team members must wear face coverings when indoors and on aircraft. Face coverings are also required when working outdoors, except in extreme heat.

To help ensure a safe work environment for everyone, mainline team members are required to complete a short self-declaration called "Well for Work" at least every 31 days. This self-declaration is designed to reduce the spread of COVID-19 by asking team members to monitor their health daily for any new, unusual or worsening COVID-19 symptoms and to take appropriate safety precautions when necessary. And at many of our locations, we're

checking team members' temperatures when they enter their work location. Those who record a temperature above the limit set by the CDC or applicable government order are sent home. We've also made COVID-19 testing more accessible for team members.

Team members are eligible for two weeks of paid leave if they are awaiting test results, have received a confirmed diagnosis, or have been ordered quarantined by a physician or public health official because of exposure.

We also have been offering voluntary and extended leave options for team members who do not feel comfortable going to work or who need the flexibility to care for children or other family members. All of our voluntary leave programs come with continued health benefits and continued company match to 401(k) and other contractual pension programs. As we adjust our business to the lower demand levels for air travel in a pandemic, we are doing everything we can to support our team members whose positions have been cut. Learn more on p. 45.

#### **Offering Flexibility for Customers**

Flexibility is one way to improve peace of mind in today's travel environment. We recently announced we are eliminating change fees for all domestic and short-haul international flights on Premium Cabin fares and most Main Cabin fares for tickets purchased October 1, 2020, and beyond. We're also giving customers the ability to fly standby for free on earlier flights to the same destination on the same day, and we're providing access to upgrades and seats for all fare types.

Our aim is to make travel easier and less complicated for customers, giving them more flexibility when they travel on American.

During 2020, we also began notifying customers whose flights may be full, allowing them to move at no cost to more open flights. If space is available on the aircraft once boarding is complete — considering any aircraft weight or balance restrictions — customers may move to another seat within their ticketed cabin.

### **Supporting Our Communities**

When COVID-19 struck, American quickly mobilized to address critical needs in communities across our nation that were affected by the pandemic. To ensure the world's goods continued to get where they needed to go, we used aircraft otherwise grounded to fly cargo flights carrying life-saving pharmaceuticals and medical supplies, as well as fresh produce, electronics and manufacturing parts, to keep the global supply chain moving. As of September 2020, we had operated 2,500 cargo-only flights to transport these critical goods and supplies around the globe.

As of August 2020, we had contributed more than 1 million pounds of food from our inventory to food banks across the country — the result of excess supplies given our reduced flying schedule. We provided thousands of care packages to military bases for troops quarantined after returning from deployment and donated supply kits to hospitals in major U.S. cities. In cooperation with our generous customers, we raised more than \$3 million to support the American Red Cross and its volunteers. And, team members at multiple locations sewed masks for their coworkers and members of the community.

In May 2020, American and Hyatt awarded more than 4,000 health care professionals — from doctors, physician assistants and nurses to facilities and food service teams — at a hard-hit New York City hospital with three-night complimentary vacations, in recognition of the extraordinary care these individuals provide to the community. We also have awarded hundreds of thousands of air miles points to small businesses and nonprofit organizations needing travel support.





Our team members are our most important asset — and we believe that if we create an environment where they feel supported, they will take good care of our customers. To do this, we must continue to build a diverse and inclusive environment, helping all team members reach their full potential and providing them with health and wellness support. This philosophy has long guided our company and is even more important as we navigate the COVID-19 pandemic.

or our company to emerge from this crisis on sound footing and return to profitability, we must become a smaller airline in the near term — and that means taking steps to adjust our staffing to reflect the current demand environment. See p. 45 for a discussion of how we are going about this.

Even amid one of the most difficult periods in our company's history, we recognize that our country is facing another significant challenge: the systemic racism that for far too long has harmed Black Americans and other Americans of color. We remain committed to fostering a more diverse, equitable and inclusive workplace that helps all of our team members build successful and rewarding careers. We also recognize that we must do more to use our corporate voice to help eliminate systemic racism in America.

### **Diversity, Equity and Inclusion**

Cultivating an environment that celebrates diversity, equity and inclusion is a top priority at American, and we seek to create a workplace where diverse perspectives and experiences are welcomed and encouraged, where team members feel comfortable to be their authentic selves and where we are always learning from one another.

We have heard from team members and customers that we need to improve in this area. In response, we established the role of Chief

### **Our Goals**

Listen more intentionally to team member concerns and address those concerns in our learning, development, advancement and recruitment programs and processes

Provide additional learning opportunities beyond implicit bias to generate further education and awareness of diversity and inclusion issues

Launch an external Community Council composed of executives and a cross-section of Black community leaders to provide feedback on company initiatives

Support our team members with emotional, physical and financial well-being resources

Inclusion and Diversity Officer; created an Office of Diversity, Equity and Inclusion (DEI); and moved DEI into our talent function so we can view all hiring and development through the lens of equity and inclusion. We also formed a Team Member Experience organization to review any concerns from team members. We created an industry-leading implicit bias training program — delivering it to approximately 105,000 team members as of March 2020 — and formed a specialized Customer Relations team to listen to, resolve and learn from customer complaints of discrimination (learn more on p. 50).

Recent events in the United States — which have highlighted the pervasive and far-reaching impacts of systemic racism — have prompted us to think even more deeply about how we can do more within our company to advance diversity, equity and inclusion, as well as use our corporate voice to be a positive force for change.

#### Deepening Our Commitment to Our Black Colleagues and Customers

The widespread protests for racial justice in 2020 in response to the violence and social injustices faced by Black people in the United States underscore the urgent need for systemic change. It also underscores the work we must do within our own company to strengthen our existing DEI efforts and address the needs of our Black team members and customers.

In the weeks following the first demonstrations, we spoke openly with our Black team members, leading to important suggestions and recommendations focused on relationship building, continued learning and intentional recruitment and advancement. These conversations are ongoing.

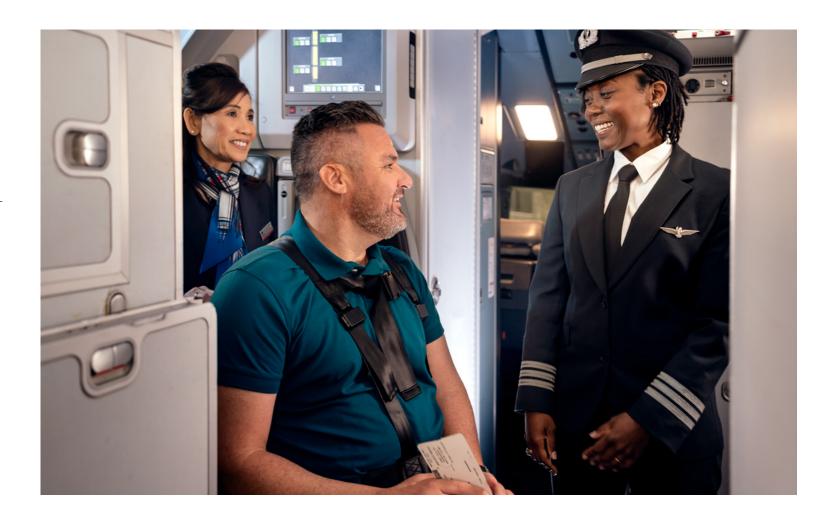
We are establishing a Community Council, sponsored by American Airlines President Robert Isom and composed of senior company executives and a cross-section of Black community leaders. The council will provide feedback on company initiatives, focusing on issues affecting the customer travel experience. We will look to the external members of the council for their perspectives on the chal-

lenges our Black customers face. In addition, we are hosting numerous gatherings and listening sessions about race with our team members.

We recognize that the representation of Black professionals in our senior leadership is insufficient. We are redoubling our commitment to diversifying our leadership team. We will establish specific objectives and lay out a plan to achieve them, including by enhancing our recruiting, development and mentorship programs.

We also pledge to assist Black youth in developing job skills and

expanding access to well-paying careers as part of our overall strategy to increase opportunities in Dallas/Fort Worth, in our nine other hub cities and in Tulsa, Oklahoma, where our maintenance facility is based. As we return to growing our airline and hiring again, we will do all we can to ensure that young people in historically underserved communities have opportunities to join our team.



## Creating an Inclusive Workplace for All of Our Team Members

We know the importance of creating an inclusive workplace for current and future team members, and we are redoubling our commitment to supporting a culture in which everyone is valued

### **Listening Sessions**

At American, we aim to translate the energy and awareness sparked by Black Lives Matter protests into meaningful change. But to help create a more inclusive culture, our leaders must first listen and learn from the experiences of our Black team members.

Between June and September, company leaders hosted nearly 40 listening sessions involving more than 1,200 team members across our network. Additionally, senior executives visited our hubs in Philadelphia and Charlotte to better understand the experiences of our Black team members and learn what we can do to make our company stronger and more inclusive.

In Philadelphia — our hub with the highest concentration of Black team members — President Robert Isom and other senior leaders heard the need for greater representation at the executive level and for a more equitable process for career advancement. In Charlotte, team members expressed the desire for improved management trust and support.

Following the listening sessions, participants were asked about their hopes and how American can use the stories shared during the sessions to create a more inclusive environment for team members and customers. Only through continued dialogue can we break down barriers, improve our shared understanding and build a better company.

and respected. Any incident of conscious or unconscious bias toward our customers or team members is unacceptable and will be addressed appropriately. Each one of us is accountable for ensuring that our actions and those of our fellow team members support a culture of inclusion and respect.

To create a truly diverse workplace — one that provides every person with equal opportunities — we must fight unconscious bias. We require all team members to participate in a leading, multipronged implicit bias training program, which examines ways to recognize and mitigate implicit bias and establishes cultural expectations. Launched in 2018, the training uses the PAUSE model developed by Howard Ross, a leader in creating inclusive leadership and cultures.

The program includes workplace-specific scenarios that enable participants to understand how implicit bias may manifest itself at American. More than 105,000 team members completed both the in-person and online components of the training as of March 2020. Even in our constrained budgetary environment, we committed to implementing the second phase of the program in 2020 and beyond through online and in-person training.

One of the other important ways we cultivate support is through our Employee Business Resource Groups, which are dedicated to promoting cultural enrichment, supporting business success and engaging team members in community service.

To create a supportive and inclusive environment, we must have policies that make clear how we expect our team members to act, uphold our values and treat one another. We are updating our policies — including our social media policies — to provide clear guidance on conduct and consequences for discriminatory and racially biased behavior in the workplace and online. The policies will provide guidance on consequences for customers who are verbally abusive or use discriminatory language while traveling with us.

### **Anti-Racism Learning Pathway**

Engagement, advocacy and solidarity with our Black team members and customers are more essential than ever. In July, we rolled out an anti-racism learning pathway through Degreed, our online learning platform, which is available to all of our team members. Being an ally requires education and action. The pathway offers a collection of articles, books, movies and podcasts about bias and what team members can do to combat it.

"The first thing we need to do as business leaders is to get our own houses in order. It's incumbent upon the business sector to make social justice a collective priority and to lobby for change, which will require legislation and community action on things like criminal justice, education and economic equality. That's going to require sustained engagement and support — and we at American are looking forward to tackling this aggressively."

Doug Parker, Chairman and CEO

#### **Recruiting and Developing Diverse Talent**

We have been working to build a strong and diverse pipeline of talent through multiple community partnerships dedicated to encouraging and mentoring people of color and women who are traditionally underrepresented in the aviation and aerospace industries. We also partner with Historically Black Colleges and Universities and Hispanic Serving Institutions.

To develop and retain Black leadership talent, we are piloting a sponsorship program to foster relationship-building opportunities for our Black directors and managing directors. Applicants to this program, which is voluntary, will be matched with a member of the senior team or one of our senior vice presidents. The objectives of the program are to enable Black leaders to benefit from the perspective and experience of senior leaders; give senior leaders exposure to issues Black professionals experience in their day-to-day work lives that these leaders may not have encountered personally; and nurture mutual understanding that will help facilitate the advancement of greater numbers of Black professionals into senior leadership roles in our company. As of August 2020, we are testing this approach with a small group of Black leaders and will refine it as we receive feedback from participants.



# Fighting for LGBTQ Inclusion and Equality

American has been a longtime leader and ally in the struggle for equal rights and protections for our lesbian, gay, bisexual, transgender and queer (LGBTQ) team members, customers and community members. We offer medical coverage to same-sex domestic partners and provide benefits for gender reassignment coverage. And we were the first major U.S. airline to protect LGBTQ team members by including gender identity and sexual orientation in workplace nondiscrimination policies.

In 2019, we joined an amicus brief supporting LGBTQ workplace protections under the Civil Rights Act, which the U.S. Supreme Court upheld in 2020. And in 2020, we joined an amicus brief supporting the application of nondiscrimination laws in the public sphere to protect the rights of same-sex couples, in *Fulton vs. The City of Philadelphia*. We also have been advocating for the passage of hate crime laws in states where we conduct business. While federal laws exist to penalize hate crimes, we believe every state should affirm that crimes committed as acts of hate have no place in any community in our country. American supported the successful effort to enact a hate crimes law in Georgia, and we have joined with other companies to urge the states of South Carolina and Wyoming to pass similar legislation.

In late 2019, we began offering a nonbinary gender option during the booking process. To implement that enhancement, we are training team members to help raise awareness and sensitivity about issues facing our nonbinary colleagues and customers. The training offers tips and potential language alternatives, such as using "they/them" or names in place of gendered pronouns.

## 18

years with a perfect ranking from the Human Rights Campaign's Corporate Equality Index

Top score of

100

on the 2020 Disability Equality Index<sup>®</sup> for the 5th year in a row

Named to the

#### **Diversity Best Practices** 2020 Inclusion Index

350<sup>+</sup>

certified diverse suppliers

\$449<sub>M</sub>

spend with diverse suppliers (Tier 1 and Tier 2) in 2019

\$628<sub>M</sub>

spend with 1,500+ small business suppliers\*

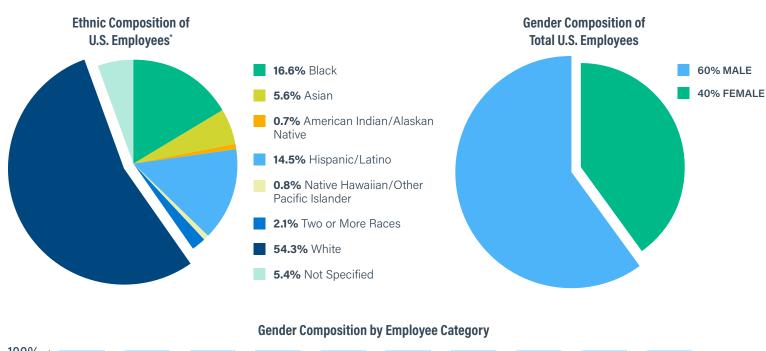
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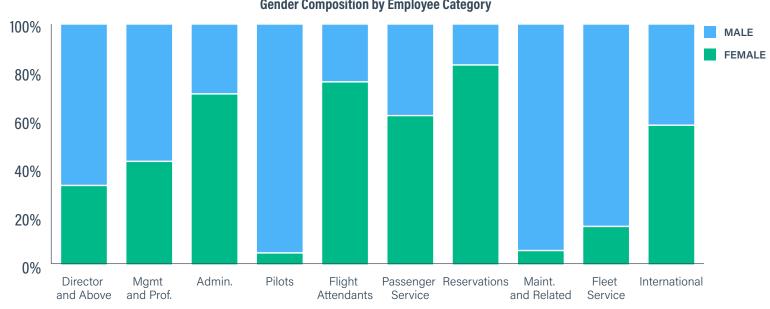
Employee Business Resource Group chapters worldwide

105,000

team members completed implicit bias training as of March 2020

## **2019 Team Member Diversity**





Diversity data are for our U.S. workforce only since diversity tracking is prohibited by law in some other countries. See <u>p. 58</u> and our <u>website</u> for more diversity data.

<sup>\*</sup> Data are for the Small Business Administration fiscal year ending September 2019.

### **Talent Development**

We give our team members the tools, training and resources they need to do their best work and stay true to our purpose — caring for people on life's journey. In the years since our merger with US Airways, we have created a suite of programs aimed at helping our people develop the skills and experience to succeed in their roles and build rewarding, long-term careers within our company.

The COVID-19 pandemic has forced us to make difficult decisions as we adjust to the new reality. Even though we have had to reduce our workforce (see <u>p. 45</u>), we must continue to invest in our people to develop and retain the talent we need to succeed in a highly competitive and fast-changing industry.

In 2019, we began analyzing the skills that our team members had, identifying where there were gaps in connection with our business needs and determining how we could help team members build these skills we lacked. As part of this process, we partnered with a leading online skills development platform called <u>Degreed</u>, which connects team members to millions of courses, videos, articles, books, podcasts and experts from thousands of internal and external sources. In 2019, more than 5,000 team members piloted the platform, which has since been made available to all team members to develop their professional and personal skills on their own time and at their own pace.

Degreed lets team members take charge of their professional development, helping them assess and advance their skills, making them more versatile for their current roles and preparing them for new positions. The platform also helps us better understand what skills our team members have so we can align the right talent with the right roles in the company.

When it became clear that COVID-19 would have a tremendous impact on our company — and recognizing the need to continue to invest in our team — we moved quickly to an all-digital professional development platform to facilitate on-demand access for our team



members. As of July 31, 2020, more than 12,000 team members had accessed Degreed and consumed more than 670,000 pieces of learning content.

We also have a partnership with Harvard Business School Publishing to 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.

By offering robust development opportunities, we're building a more engaged and flexible team while strengthening our overall business.

At year-end 2019:

Data

24 years

average team member tenure at American

60%

of open positions filled with internal candidates

## **Comprehensive Benefits**

We work to provide comprehensive benefits that support the physical, emotional and financial well-being of our team members so they can live their best lives and enjoy a healthy work-life balance.

**Medical coverage.** We're committed to providing medical coverage that's both affordable and flexible. At our headquarters and largest hub in Dallas/Fort Worth, we recently launched a new health care option called DFW ConnectedCare, which offers lower monthly premiums and reduced copays through a direct relationship with an accountable care organization affiliated with Baylor Scott & White Health. This plan is available to approximately 25,000 team members.

Health care navigation and support. To help team members manage and understand their health and well-being 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, so they can make the most of all the health-related programs and resources American offers. As of July 2020, more than 40% of unique eligible families had taken advantage of this service — an increase from last year — demonstrating the value of this program to team members. A similar service is available for team members enrolled in DFW ConnectedCare.

Among the health care resources available for team members are telemedicine and discount prescription services. Thousands of team members have taken advantage of Doctor On Demand, which offers physician consultations via telemedicine 24 hours a day, seven days a week. For our round-the-clock workforce, this service offers convenient care when team members need it most. In addition, StayWell Rx supports team members with high blood pressure, diabetes and asthma by providing discounted medications and supplies.

**Well-being resources.** Our new well-being program, Journey to Well-Being, launched in 2020 to help all U.S.-based mainline team

members — and their covered dependents age 18 and older — make lasting changes in four key areas of well-being: physical, emotional, financial and work. Activities include biometric screenings, online well-being assessments, daily step tracking, developing financial plans and more. Human performance coaching and stress resilience training are also part of the Journey to Well-Being offerings.

To help further support our team members during the COVID-19 pandemic, we launched free access to online fitness courses, including both live-streamed sessions and 1,000 video-on-demand workouts. We also began offering two new digital resources to help users reduce anxiety and stress and improve their sleep habits.

Financial wellness resources. In addition to the financial well-being track in the Journey to Well-Being platform, this year we launched two new tools from Fidelity to support team members in their financial planning efforts. The first is the Financial Wellness Checkup, a financial wellness portal that addresses broad financial needs all in one place. The Financial Wellness Checkup offers a score across four key categories — budgeting, debt management, savings and protection — so team members know where they stand financially at any given point in time.

Second, we updated our Fidelity NetBenefits home page to allow those with an American Airlines pension to see their pension benefit next to their 401(k) balance. The estimated monthly pension benefit is also integrated into Fidelity's retirement planning software.

**COVID-19 testing.** 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 receive referrals to local testing sites for both diagnostic and antibody testing.

(See <u>p. 36</u> to learn about the pandemic-related leave benefits we have offered.)

Other benefits include the following:

- Up to 10 weeks of paid leave through our maternity disability plan
- Up to \$4,000 in financial support for adoption-related expenses
- Optum Employee Assistance Program (EAP) to provide counseling services for team members and their households; on-site support is available at 10 locations
- Optum WorkLife Services to help team members find resources for child care, elder care, home repairs, legal services and other solutions to assist with everyday challenges

### **Appreciating Team Members**

Our internal recognition programs give team members and customers the opportunity to show their appreciation for a job well done. In 2019, our team members were recognized by customers, peers and company leaders more than 2.5 million times. Last year, American launched a new Nonstop Thanks program through which team members award each other points for stellar work or as an expression of gratitude. Those points can be redeemed for items in an online catalog.

Every quarter, hundreds of team members are nominated for the Chairman's Award, the highest honor that American bestows upon team members. The 365 quarterly winners honored in 2019 each received \$2,500 and were eligible to be named one of the 100 Annual Chairman's recipients, who are awarded \$10,000.

### Creating an Airline to Fit the New Reality

The COVID-19 pandemic has disrupted our world, our industry and the company to an extraordinary and unprecedented extent. Since the start of the crisis, we have focused on our continued ability to provide livelihoods for our team members and maintain as much air service as possible, notwithstanding the impact of COVID-19 on demand. We know that we must be prepared to expand capacity quickly and efficiently when the crisis subsides and help lead the economy back to stability and growth.

To support these goals, we joined with union leaders and other airlines in a joint request to federal government leaders for financial support to stabilize the passenger airline industry and protect its outstanding workforce. In March, Congress and the Administration responded with the Coronavirus Aid, Relief and Economic Security (CARES) Act, an economic stabilization package to help U.S. workers and businesses devastated by the drastic economic downturn. The Payroll Support Program (PSP) of the CARES Act allowed us to keep our frontline workforce in place through the first phase of the crisis, providing us with approximately \$5.8 billion to be used exclusively for the continued payment of team member wages, salaries and benefits. By providing airlines with the funds to pay much of our team members' salaries and benefits, the CARES Act ensured that the commercial airline industry kept serving customers who needed to fly, kept providing vital air service to U.S. communities and kept our country moving in the midst of economic turmoil.

When we do emerge from the COVID-19 crisis, we know that we will need to be a smaller airline for at least a period of time. We have reduced operating expenses, in part through voluntary leave and early out programs. Across our mainline and wholly owned regional carriers, more than 12,500 of our colleagues have made the difficult decision to leave the company permanently through early out programs or retirement. Another 11,000 team members have offered

to take leaves of absence. We have also reduced our management and support staff (MSS) team by about 30% to reach the size of the team we will need for a smaller airline moving forward. The MSS team members who were involuntarily separated earlier this year remained on payroll and received full benefits through September 30, 2020, consistent with the CARES Act.

From the start of the crisis, we set a goal for ourselves to properly size our frontline team for the future without having to implement involuntary furloughs. The PSP worked as intended to protect our team against involuntary separations for the six months that ended on September 30. But the virus has outlasted our assumptions about when demand for air travel would return. Based on current demand levels, we expect to fly less than 50% of our airline in the fourth quarter, with long-haul international capacity reduced to only 25% of 2019 levels. At the time of publication of this report — and despite enormous bipartisan support for an extension of the PSP — Congress had not yet extended the program, and we had begun the difficult process of furloughing 19,000 of our hardworking and dedicated colleagues. However, if efforts to extend the PSP are successful in the near term, we will reverse our furlough processes and recall any impacted team members.

This has been a painful time for all of us at our company, but especially for our departing colleagues who gave American their all and left through no fault of their own. They deserve our respect and gratitude — and we owe them a commitment to return American to profitability and growth as quickly as possible.

### **Labor Relations**

American respects our team members' rights to free association and collective bargaining, and we strive to work collaboratively with our union partners to negotiate industry-leading contracts. Approximately 85% of our workforce is represented by labor unions<sup>8</sup> — the highest percentage of represented workers of any U.S. airline.

Since 2005, we have completed more than 30 collective bargaining agreements, significantly more than any other airline. Our goal is to offer industry-leading total compensation and benefits packages, including profit sharing, to all of our team members. Following the merger of American and US Airways in 2013, we completed joint collective bargaining agreements combining our workforces in a record period of time, with the exception of one agreement. These agreements increased average pay for our represented team members by 63%.

In the first quarter of 2020, we reached an agreement with the Transport Workers Union–International Association of Machinists (TWU–IAM) Association on a new, five-year contract for our maintenance and fleet service team members.

During the COVID-19 crisis, we have worked with our union leaders to develop voluntary leave and early out programs to prioritize the most immediate needs of our team members. We also continue to work in partnership with our unions to protect jobs and the important role our industry will play in the recovery from the pandemic.

8. As of April 30, 2020; SASB metric.

### **Human Rights**

Our business is all about people — connecting people, cultures and commerce worldwide. Respect for human rights is embedded in all aspects of our business and in all geographies where we operate.

Our core values include integrity, respect for the individual and the unique customs and cultures in the communities where we operate, respect for human rights as embodied in the principles of the United Nations (U.N.) Universal Declaration of Human Rights, 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. We respect and support the U.N.'s Guiding Principles on Business and Human Rights, the Organisation for Economic Co-operation and Development's Guidelines for Multinational Enterprises, the core Conventions of the International Labour Organization (ILO), the ILO's Declaration on Fundamental Principles and Rights at Work, and the U.N.'s Universal Declaration of Human Rights.

Our American Airlines Human Rights Statement, which was formally approved by our Board of Directors in 2020, applies to all team members and contractors, employees of our wholly owned subsidiaries, and our suppliers and other business relationships. For many years, we addressed expectations about our commitment to human rights in our Standards of Business Conduct for team members and suppliers; in 2020 we strengthened those expectations by aligning them formally with global standards, such as the U.N.'s 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.

Our full Human Rights Statement can be found on our website.

## **Combating Human Trafficking**

American is committed to combating human trafficking and child exploitation. As a prominent participant in the worldwide travel industry, we can help fight these terrible crimes.

Through training, we empower our team members to follow their instincts and take care of customers who may find themselves in unsafe or dangerous situations. 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 employees 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.

Ending human trafficking requires a coordinated approach, and we seek partners to amplify our efforts. In January 2020, we joined the U.S. Department of Homeland Security's <u>Blue Campaign</u>, a national public awareness effort that aims to educate the public, law enforcement and industry partners to recognize the indicators of human trafficking. We also are 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.

50,000

Data

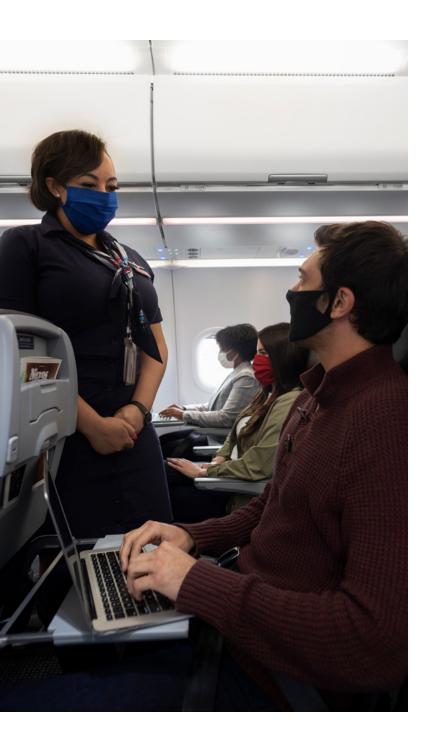
frontline team members trained in human trafficking awareness in 2019

In 2020, we teamed up with 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. 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, mental health and spiritual support, NFNL helps women and their children overcome backgrounds of abuse, addiction, poverty and limited opportunities. In the first months of the partnership, NFNL held training sessions for more than 100 American team members at our headquarters in Fort Worth, Texas, and another 120 at Miami International Airport. Our legal team is also providing pro bono services to NFNL, such as helping the organization's clients expunge criminal records resulting from their time being trafficked.

In addition, American is a partner member of Texas Businesses Against Trafficking, a public–private awareness and prevention initiative led by the Texas Secretary of State.

<sup>9.</sup> https://www.newfriendsnewlife.org/





Providing our customers with exceptional service is crucial to our success. Our overarching goal is to provide a world-class customer experience, including safe and reliable service tailored to customers' preferences. We constantly look for ways to improve our operations and the services we provide and seek feedback from our customers to understand how we can make our company even better.

e have made significant investments to enhance the customer experience, including rolling out new aircraft with enhanced amenities, increasing overhead bin space, boosting onboard Wi-Fi speed, upgrading airport lounges and improving communications. Many of these changes were in direct response to specific customer feedback. And, in response to the COVID-19 pandemic, we have taken other actions to help our customers feel safe and cared for when flying with us. (Learn more on p. 35.)

While comfort and convenience are essential aspects of our service offerings, we know that dependability and reliability are what customers expect and care about the most. 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. We also rigorously measure and track customer satisfaction through passenger surveys. In those surveys, we ask our customers about their likelihood to recommend American to others, which is driven by several critical factors: service delivery, check-in and boarding, onboard products and operational performance.

### **Operational Performance**

Our customers expect that we will get them to their destinations on time, with limited or minimal cancellations or disruptions. They also rightly expect their baggage to arrive with them. We track three

### **Our Goals**

Improve systemwide metrics for:

On-time performance Flight completion Baggage handling

Improve Likelihood to Recommend scores

related operational metrics to measure how well we are doing on these fronts: on-time performance, completion factor (i.e., percentage of flights arriving at their destinations without cancellations) and mishandled baggage.

In 2019, our progress in improving operational performance was mixed.

While we improved both on-time performance and completion factor in

our regional operations, performance on those metrics in our mainline operations declined slightly. Beginning in 2019, the U.S. Department of Transportation developed a new way to measure the mishandled baggage rate (MBR), which made comparisons with prior years inapplicable. Looking at 2019 only, we saw our MBR increase in the second quarter after the Transport Workers Union–International Association of Machinists engaged in an illegal work slowdown to influence contract negotiations. The MBR started to slowly improve again in the third quarter, with continued improvement in subsequent quarters, as shown in the table at right.

In parallel with our focus on improving operational performance in 2020 and beyond, we are working to provide more options for our customers when flight schedules are disrupted. We now give customers the ability to rebook delayed or cancelled flights on their mobile devices. (Customers previously had to call our reservations phone line to change a booking affected by a schedule change.) We also deliver digital meal and hotel vouchers to customers whose flights are disrupted, allowing them to electronically choose a hotel and redeem meal vouchers, also on their mobile devices. And we have improved our ability to keep customers and their checked bags together by expanding the use of baggage reconciliation tools to all of our ramp team members.

10	1+	day	10
IU	U	uay	)

of perfect mainline completion performance in 2020

Operational Performance							
	2019	2018	2017				
On-time performance*	77.7%	77.6%	78.9%				
Completion factor**	97.6%	97.4%	97.9%				

Mishandled Baggage Rate (MBR)***									
	20	19	2018		2017				
By year	8.48		_		_				
	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019	Q1 2019			
By quarter	4.22	7.11	7.51	8.56	10.05	7.75			

<sup>\*</sup> Percentage of reported flight operations arriving less than 15 minutes after the scheduled arrival time.

### **Customer Satisfaction Surveys**

We regularly survey our passengers to measure and improve the customer experience. Every month, approximately 180,000 travelers complete an electronic survey that asks questions about their experience with American on a specific segment of travel, including booking, check in, boarding, airline personnel and onboard comforts such as food, seats and connectivity. The surveys are sent to a random sampling of our customers within 48 hours of a flight, with a five-day window for completion.

When we survey our customers, the first and most important question we ask is their Likelihood to Recommend (LTR), which measures a combination of satisfaction, customer loyalty and customer engagement. We know that our LTR scores improve when customers are satisfied with the service they receive from our team members and with

their check-in and boarding experiences. LTR also strongly correlates with on-time performance. Our customers want to depart and arrive as scheduled, and if a delay occurs, they want it handled well.

Since we conducted our first online surveys in 1999, we have been using the responses to learn more about what customers want, where we are falling short and where we can improve. Typically, the biggest areas mentioned for improvement are the check-in and boarding processes. We've learned that customers enjoy the speed and flexibility of checking in online, which is why we're looking at more ways to streamline the check-in process for an improved experience.

In 2020, we created a separate COVID-19 survey to understand what additional steps we could take to make our customers feel more comfortable with air travel. In response to survey feedback, we are offering more touchless experiences at the airport and are allowing customers to scan

<sup>\*\*</sup> Percentage of scheduled flight operations completed.

<sup>&</sup>quot;The U.S. Department of Transportation changed the way it measures mishandled baggage on domestic flights as of January 1, 2019. The new MBR captures total lost, delayed or damaged baggage reports, divided by 1,000 checked bags; the previous rate was calculated per 1,000 passengers. We cannot recalculate prior years using the new methodology and thus are reporting 2019 data only, which is combined for mainline and regional domestic flights.

their own boarding passes for lounge entry and at the gate. We also have launched touchless kiosks for check-in, available to select U.S. travelers who scan their boarding passes at a kiosk to automatically print bag tags. Learn more about our response to the pandemic on p. 35.

## **Being Responsive to Customers**

On a typical day, American receives approximately 4,500 customer comments, which range from frustrations with flight delays or fees to compliments for our team members.<sup>10</sup> Our goal is to respond to the vast majority of these comments within 24 hours.

Our customers share feedback with us through several channels, including our website, social media and emails, and we are currently testing a live chat function on our app. With live chat, our customer service agents are able to resolve most customer queries as they come in. For the other channels, we code each customer's comment according to the concern they raise and assign responsibility for responding to one of our 12 specialty Customer Relations teams, each of which focuses on a particular type of service issue. These teams' primary task is rebuilding customer trust. Coding also allows leadership to see trends across the company for feedback and coaching.

Before the COVID crisis, the most common service issue centered on delays and cancellations. We know that schedule changes that we handle well almost always result in fewer concerns raised by our customers.

We share reports of customer concerns quarterly with senior executives and our Board of Directors. Particularly strong comments regarding our service are shared verbatim with senior executives, and our Chief Customer Officer receives information about customer correspondence daily, including examples of how problems are resolved.

While we take all issues raised by our customers seriously, we are especially focused on those that allege discriminatory behavior. In 2018, we created a special Customer Relations group to elevate sensitive discrimination complaints and to increase awareness among customer-facing team members of discriminatory behaviors. Each allegation is investigated, and disciplinary action, up to and including termination, will result if we determine that unacceptable behavior occurred.

In 2019, as part of our implicit bias training program, this special Customer Relations group partnered with the Human Resources department to provide real-world examples of correspondence received from customers who complained about discriminatory behavior or treatment. We incorporated these examples into our training materials. (Learn more about our implicit bias training program on <u>p. 40</u>.)

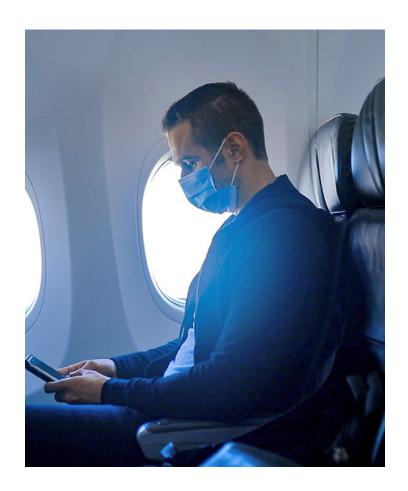
We aspire to learn from customer feedback to improve our processes for all passengers. For example, we have used customer comments to improve our services for unaccompanied minors, identifying specific seating zones where flight crews can better monitor unaccompanied youth during the duration of the flight. Customer comments also prompted us to change digital signage at gate check-ins to display upgrades by cabin and seat assignments.

## **Data Privacy**

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.

Our Privacy Office regularly conducts privacy impact assessments of business processes and supporting information technology (IT)

systems involved in processing personal data to identify and remediate associated privacy risks. Information obtained from these assessments is used to populate our personal data inventory detailing 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.



<sup>10.</sup> The 4,500 figure refers to customer inquiries before the COVID-19 pandemic. In June 2020, customer complaints averaged around 3,000 per day.

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

	TCFD Recommended Disclosure	Disclosure Location in this Report
GOVERNANCE		
Disclose the organization's governance around climate-related risks and opportunities.	<ul> <li>Describe the board's oversight of climate-related risks and opportunities.</li> </ul>	<ul> <li>Addressing Climate Change — Governance and Management (p. 28)</li> </ul>
	<ul> <li>Describe management's role in assessing and managing climate- related risks and opportunities.</li> </ul>	
STRATEGY		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial	<ul> <li>Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</li> </ul>	<ul> <li>Addressing Climate Change — (p. 8)</li> <li>Addressing Climate Change — Climate-Related Risks and</li> </ul>
planning where such information is material.	<ul> <li>Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.</li> </ul>	Opportunities (p. 22)  Addressing Climate Change — Our Strategy (p. 14)
	<ul> <li>Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</li> </ul>	
RISK MANAGEMENT		
Disclose how the organization identifies, assesses and manages climate-related risks.	<ul> <li>Describe the organization's processes for identifying and assessing climate-related risks.</li> </ul>	<ul> <li>Addressing Climate Change — Identifying and Assessing Climate- Related Risks (p. 20)</li> </ul>
	<ul> <li>Describe the organization's processes for managing climate- related risks.</li> </ul>	
	<ul> <li>Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.</li> </ul>	
METRICS AND TARGETS		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	<ul> <li>Disclose the metrics used by the organization to assess climate- related risks and opportunities in line with its strategy and risk management process.</li> </ul>	<ul> <li>Addressing Climate Change — Our Carbon Footprint (p. 11)</li> <li>Data Tables (p. 54)</li> </ul>
	<ul> <li>Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.</li> </ul>	
	<ul> <li>Describe the targets used by the organization to manage climate- related risks and opportunities and performance against targets.</li> </ul>	

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

SASB Code	SASB Metric	Disclosure Location or Response
GREENHOUSE G	AS EMISSIONS	
TR-AL-110a.1	Gross global Scope 1 emissions	<ul> <li>Addressing Climate Change — Our Carbon Footprint (p. 11)</li> <li>Data Tables (p. 54)</li> </ul>
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	<ul> <li>Addressing Climate Change (p. 8)</li> <li>Addressing Climate Change — Our Carbon Footprint (p. 11)</li> <li>Addressing Climate Change — Our Strategy (p. 14)</li> <li>Data Tables (p. 54)</li> </ul>
TR-AL-110a.3	(1) Total fuel consumed, (2) percentage alternative, (3) percentage sustainable	■ Data Tables (p. 55)
LABOR PRACTIC	CES	
TR-AL-310a.1	Percentage of active workforce covered under collective bargaining agreements	Supporting Our Team Members — Labor Relations (p. 45)
TR-AL-310a.2	(1) Number of work stoppages and (2) total days idle	American Airlines has not had any union work stoppages or idle days since our merger with US Airways in December 2013; however, in 2019, the Transport Workers Union–International Association of Machinists (TWU–IAM) engaged in an illegal work slowdown to influence contract negotiations.
COMPETITIVE B	EHAVIOR	
TR-AL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	In 2019, we had zero monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations.
ACCIDENT AND	SAFETY MANAGEMENT	
TR-AL-540a.1	Description of implementation and outcomes of a Safety Management System	<ul> <li>Operating Safely — Safety Governance and Management (p. 31)</li> <li>Operating Safely — Safety Performance (p. 34)</li> <li>Data Tables (p. 56)</li> </ul>
TR-AL-540a.2	Number of aviation accidents	<ul> <li>Operating Safely — Safety Performance (p. 34)</li> <li>Data Tables (p. 56)</li> </ul>
TR-AL-540a.3	Number of governmental enforcement actions of aviation safety regulations	<ul> <li>Operating Safely — Safety Performance (p. 34)</li> <li>Data Tables (p. 56)</li> </ul>

### **Data Tables**

Financial Performance*	2019	2018	2017
REVENUE			
Passenger	\$42,010	\$40,676	\$39,131
Cargo	863	1,013	890
Other	2,895	2,852	2,601
Total operating revenue	45,768	44,541	42,622
Total operating expenses	42,703	41,885	38,391
Operating income	3,065	2,656	4,231
Income tax provision	570	472	2,113
Net income	1,686	1,412	1,282
Basic earnings per common share	3.80	3.04	2.62
Cash dividends declared per common share	0.40	0.40	0.40

<sup>\*</sup> In millions of U.S. dollars, except per-share amounts.

Оре	erational Data	SASB Code	2019	2018	2017				
MA	MAINLINE AND REGIONAL (OWNED AND CONTRACTED)								
*SS	Revenue passenger miles (millions)	TR-AL-000.C	241,252	231,160	226,346				
Metrics*	Available seat miles (millions)	TR-AL-000.A	285,088	282,054	276,493				
SB	Passenger load factor (percent)	TR-AL-000.B	84.6	82.0	81.9				
$\boldsymbol{\prec}$	Revenue ton miles (millions)	TR-AL-000.D	26,633	26,039	25,439				

<sup>\*</sup> American uses miles for our operational data reporting, rather than kilometers as in the SASB metrics.

Operational Performance						
	2019	2018	2017			
On-time performance*	77.7%	77.6%	78.9%			
Completion factor**	97.6%	97.4%	97.9%			

Data

Mishandled Baggage Rate (MBR)***								
2019 2018 2017								
By year	8.48		_		_			
	Q2 2020 Q1 2020		Q4 2019	Q3 2019	Q2 2019	Q1 2019		
By quarter	4.22	7.11	7.51	8.56	10.05	7.75		

<sup>\*</sup> Percentage of reported flight operations arriving less than 15 minutes after the scheduled arrival time.

<sup>\*\*</sup> Percentage of scheduled flight operations completed.

<sup>&</sup>quot;The U.S. Department of Transportation changed the way it measures mishandled baggage on domestic flights as of January 1, 2019. The new MBR captures total lost, delayed or damaged baggage reports, divided by 1,000 checked bags; the previous rate was calculated per 1,000 passengers. We cannot recalculate prior years using the new methodology and thus are reporting 2019 data only, which is combined for mainline and regional domestic flights.

Data

### **Data Tables (continued)**

Environmental Performance	20	019	2	018	20	17
	Mainline	Regional	Mainline	Regional	Mainline	Regional
GREENHOUSE GAS (GHG) EMISSIONS						
Total absolute emissions (thousands of metric tons of CO <sub>2</sub> e)						
Scope 1 (jet fuel, natural gas, diesel, gasoline, propane, refrigerants)	36,280	4,863	36,037	4,239	35,391	3,671
Scope 2 location-based (purchased electricity)	278	18	306	22	310	16
Scope 2 market-based (purchased electricity)	259	15	306	22	310	16
Scope 3 (categories 1, 2, 3, 5, 6, 7, 8, 9 and 15)	14,243	7,799	15,569	9,212	_	_
Emissions intensity						
GHG intensity (Scope 1 emissions from jet fuel per 1,000 revenue ton miles)	1.52	3.21	1.53	3.28	1.49	2.93
GHG intensity (Scope 1 emissions from jet fuel per million dollars of revenue)	893		899		911	
OTHER AIR EMISSIONS						
Aircraft emissions (metric tons from landing/take-off cycle)						
Nitrogen oxides (NOx)	19,8	19,883		19,254		65
Hydrocarbons (HC)	1,0	099	1,087		1,073	
Carbon monoxide (CO)	11,!	534	11,146		10,898	
Sulfur content of jet fuel	1,	132	1,108		1,075	
Ozone-depleting substances (metric tons)		1.2	14.5		7.4	
Ground emissions (metric tons)*						
Carbon monoxide (CO)		40.7	;	39.5		_
Nitrogen oxides (NOx)	65.5		ţ	58.9		_
Sulfur oxides (SOx)	1.9			1.5		_
Volatile organic compounds (VOCs)	!	91.7		91.3	_	
Particulate matter (PM)		6.7	11.5		_	

<sup>\*</sup> From facilities where American must file routine emissions inventory reports. These include: Charlotte (CLT), Dallas/Forth Worth (DFW), Los Angeles (LAX), Chicago (ORD), Phoenix (PHX), Pittsburgh (PIT) and Tulsa (TUL).

Data

#### **Data Tables (continued)**

Environmental Performance		2	019	20	2018		2017	
		Mainline	Regional	Mainline	Regional	Mainline	Regional	
ENEF	RGY							
, s	Jet fuel consumption (millions of gallons)*	3,666	491	3,644	428	3,579	371	
SASB Metrics	Electricity consumption (megawatt hours (MWhs))	663,123	39,526	638,424	40,222	658,916	29,777	
0, ≥	Percent of energy from renewable sources**	0.03%	0.03%	0.02%	0.02%	0.01%	0.02%	
Direct	t energy from jet fuel (millions of gigajoules (GJs))	521.4	69.8	518.2	60.8	509.0	52.7	
Energ	y from electricity (million GJs)	2.4	0.1	2.3	0.1	2.4	0.1	
Direct	t purchase of renewable electricity (million GJs)***	0.16	0.02	0.09	0.01	0.07	0.01	
Direct	t + indirect purchase of renewable electricity (million GJs) <sup>†</sup>	0.77	0.04	0.63	0.02	0.35	0.01	
Direct	t purchase of renewable electricity (MWhs)	44,777	6,780	24,530	3,606	18,790	3,369	
Direct	t + indirect purchase of renewable electricity (MWhs) <sup>†</sup>	216,727	10,646	152,604	1,442	78,701	79	
Energ	y intensity					,		
Energ	y intensity — jet fuel (GJs per thousand ton miles)	22.0	46.5	22.2	47.5	22.3	45.8	
Energ	y intensity — electricity (GJs per ton miles)	0.10	0.09	0.10	0.11	0.10	0.09	
WAS	TE							
Hazar	dous waste (U.S. tons)	849	52	742	41	732	44	
WATE	ER .							
Water	use for major facilities, excluding airports (millions of gallons) <sup>‡</sup>	495	_	457	_	430	_	

<sup>\*</sup> Regional jet fuel consumption represents jet fuel from owned regional airlines Envoy, PSA and Piedmont.

<sup>&</sup>quot; 2018 and 2017 data are restated to reflect when the renewable energy credits (RECs) were retired, rather than when the electricity was used, as reported previously.

<sup>\*\*\*</sup> Amounts from 2016 to 2018 were restated to reflect the year in which RECs were retired rather than when electricity was purchased.

<sup>†</sup> Indirect purchases represent electricity purchased for American's facilities indirectly through airport authorities.

<sup>&</sup>lt;sup>‡</sup> From municipal water supplies.

### **Data Tables (continued)**

Environmental Performance	2019		2018		2017	
	Mainline	Regional	Mainline	Regional	Mainline	Regional
NOISE						
Percent of aircraft certified as, or meeting, Chapter 3 noise limits	100%	100%	100%	100%	100%	100%
Percent of aircraft certified as, or meeting, Chapter 4 noise limits	100%	100%	97%	100%	95%	100%
Percent of aircraft certified as, or meeting, Chapter 5 noise limits	12%	46%	10%	53%	8%	50%
ENVIRONMENTAL COMPLIANCE						
Number of environmental notices of violation	5	0	9	0	7	0
Amount of environmental fines and penalties (thousands of dollars)	\$6.5	0	\$4.8	0	\$4.8	0
Number of spills recorded (1 gallon or greater)	357	72	341	77	370	74

Data

Community Impact	2019	2018	2017			
GLOBAL GIVING						
Cash* donations and in-kind (miles) donations (millions of U.S. dollars)	\$33.0	\$35.0	\$34.8			
VOLUNTEER SUPPORT						
Total volunteer hours (thousand hours)	157	186	155			

<sup>\*</sup> Cash includes cash contributions and the value of mile donations from American and our customers, as well as proceeds from American's charity events.

#### **Data Tables (continued)**

Fli	ght Safety Performance	2019			
		Mainline	Regional		
Number of flights*		1.9 million			
rics	Number of aviation accidents**	4	3		
Metri	Number of enforcement actions from government agencies***	0	0		
ASB I	Number of safety risks and hazardous situations identified <sup>†</sup>	81	372		
8/	Percentage of safety risks and hazardous situations identified that were mitigated <sup>‡</sup>	97%	97%		
Airc	eraft ground damages (rate per 10,000 departures) <sup>§</sup>	2.43	0.72		
ASA	AP reports	11,952	10,349		

Data

<sup>§</sup> We use guidance from Airlines for America to determine aircraft ground damages.

Team Member Safety Performance	2019		2018		2017	
	Mainline	Regional	Mainline	Regional	Mainline	Regional
Injury rate*	9.57	7.11	9.21	7.55	8.43	8.13
Lost day rate**	6.14	3.74	5.43	3.88	4.89	3.88
Work-related fatalities	0	1	0	0	0	0

<sup>\*</sup> Total recordable cases per 200,000 manhours

<sup>\*</sup> Mainline and owned regional

Defined according to the International Civil Aviation Organization (Annex 13) and the National Transportation Safety Board (Part 830). Of the four mainline accidents in 2019, three involved a crew member injuries due to turbulence and the fourth involved aircraft damage to a wingtip. Of the three regional accidents in 2019, one involved a crew member injury due to turbulence, a second involved a crew member injury when one aircraft touched another while taxiing and a third involved a skid off a runway under icy conditions (with no injuries). No customer was injured in these accidents.

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

<sup>†</sup> 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 service, ground operations, technical operations (maintenance), security and environmental. The figures reported here include all such risks identified by our SMS. Regional data combines all risks from Piedmont, PSA and Envoy airlines.

<sup>†</sup> Our SMS requires that we mitigate identified risks, particularly high risks, to as low as reasonably practicable (ALARP). 3% of our 2019 identified risks were already ALARP. These systemic and residual risks are monitored, measured and tracked.

<sup>&</sup>quot;The lost day rate, which OSHA 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.

Data

### **Data Tables (continued)**

Gender Diversity	Total	Female	Male				
Permanent employees	145,070	41%	59%				
EMPLOYMENT TYPE							
Full-time	123,756	39%	61%				
Part-time	21,314	50%	50%				
EMPLOYEES BY REGION							
U.S.	138,792	40%	60%				
Canada	431	48%	52%				
Mexico, Caribbean, Latin America	4,221	60%	40%				
Europe and Asia	1,626	56%	44%				
EMPLOYEE CATEGORY							
Director and above	569	33%	67%				
Management and professional	16,136	43%	57%				
Administrative	3,803	71%	29%				
Passenger service	22,219	62%	38%				
Reservations	4,385	83%	17%				
Maintenance and related	18,847	6%	94%				
Fleet service	22,385	16%	84%				
Pilots	19,957	5%	95%				
Flight attendants	30,491	76%	24%				
International	6,278	58%	42%				
BOARD OF DIRECTORS							
Board of Directors	10	20%	80%				

### **Data Tables (continued)**

Ethnic Composition of U.S. Employees and Board of Directors*	Self-Identified Minority	Self-Identified Nonminority	Not Reported/Identified	
<b>Employee Category</b>				
Director and above	21.6%	76.4%	1.9%	
Management and professional	42.1%	55.8%	2.2%	
Administrative	50.8%	41.2%	8.0%	
Passenger service	58.3%	32.4%	9.3%	
Reservations	55.5%	43.4%	1.2%	
Maintenance and related	31.0%	65.9%	3.1%	
Fleet service	60.8%	31.9%	7.3%	
Pilots	10.6%	82.6%	6.7%	
Flight attendants	33.1%	62.9%	4.0%	
BOARD OF DIRECTORS				
Board of Directors	20.0%	80.0%	0.0%	

Data

<sup>\*</sup> Diversity data are for U.S. workforce only since diversity tracking is prohibited by law in some other countries.

Ethnic Composition of U.S. Employees*	African- American	Asian	American Indian/ Alaskan Native	Hispanic/Latino	Native Hawaiian/ Other Pacific Islander	Two or More Races	White	Not Specified
<b>Employee Category</b>								
Total	23,087	7,767	977	20,126	1,088	2,857	75,340	7,550
Male	51%	58%	65%	62%	53%	50%	62%	62%
Female	49%	42%	35%	38%	47%	50%	38%	38%

<sup>\*</sup> Diversity data are for U.S. workforce only since diversity tracking is prohibited by law in some other countries.



The SCS Greenhouse Gas Footprint Verification Program has conducted a verification of GHG emissions based upon the following objectives, criteria, and scope:

#### **Verification Objectives**

- Evaluate the organization's GHG inventory based per the level of assurance and materiality specified, including assessment of any significant changes and the organization's GHG-related controls
- Evaluate conformance with specified verification criteria

#### **Verification Criteria**

- The Climate Registry General Reporting Protocol v2.1, January 2016
- The Investor CDP 2020 Information Request
- ISO 14064-3: 2006 Specification with guidance for the validation and verification of GHG assertions

#### Verification Scope

- Company: American Airlines Group, Inc.
- Emissions Year: EY2019
- Geographic Boundary: Worldwide operations under operational control (includes flight from American Airlines, Envoy, Piedmont, PSA and domestic and international terminals, cargo facilities, vehicle shops, reservation offices, main headquarters and credit unions)
- Level of Assurance: Limited
- Materiality: +/-5% quantitative threshold for direct and indirect emissions, qualitative based upon requirements specified within referenced criteria

#### **Verification Opinion**

This Verification Statement documents that SCS Global Services has conducted verification activities in compliance with ISO 14064-3: 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 GHG assertion prepared in all material respects with the reporting criteria
- ☐ Negative Verification GHG assertion was NOT prepared in all material respects with the reporting criteria

#### **Verified Emissions**

EMISSIONS S	TOTAL			
SCOPE	CO <sub>2</sub> CH <sub>4</sub> N <sub>2</sub> O		(tCO2e)	
SCOPE 1	40,811,050	787	331,649	41,143,487
SCOPE 2 (Location)	294,394	648	1,087	296,129
SCOPE 2 (Market)	272,600	646	1,087	274,333
SCOPE 3 - Category 3a (Fuel & Energy Related Activities - Upstream emissions of purchased fuels)	Repor	12,347,696		
SCOPE 3 - Category 3b (Fuel & Energy Related Activities - Transmission and Distribution Losses)	Repor	16,428		

Version 1-0 (October 2019) | © SCS Global Services

Signature: Tavio Benetti

**Lead Verifier:** Tavio Benetti **Date:** 7/14/2020

Signature:

Independent Reviewer:Nicole MunozDate:7/23/2020



Data



#### Cautionary Statement Regarding Forward-Looking Statements

Certain of the statements contained in this report should be considered forward-looking statements within the meaning of the Securities Act, the Exchange Act, 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, 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 in the Company's Quarterly Report on Form 10-Q for the six months ended June 30, 2020 (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 the time in the Company's other fillings with the Securities and Exchange Commission. 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 set forth in the Company in particular, the consequences of the coronavirus outbreak to economic conditions and the travel industry in general and the financial position and poerating results of the Company in particular have been material, are changing rapidly, and cannot be predicted. The Company does not a