



The Jackson Hole Airport (JAC) is dedicated to becoming an industry leader in environmental stewardship, green building initiatives, and sustainability. In effort to preserve the power of place for future generations, we have and will continue to implement environmentally sustainable initiatives at JAC. Our commitment is to protect our natural **ENVIRONMENT**, support our local **COMMUNITY**, and focus on **RESILIENCY** to support a balanced future for the unique area we serve.

Sustainability

#### ENVIRONMENT

- Adopted Waste Policy and Waste Diversion Goal (Resolution No. 2019-03)
- Awarded a Volkswagen Settlement Grant (\$173,474) to reduce air pollution
- Initiated a pilot composting program at the Airport restaurant, Jedediah's
- Completed a baseline Greenhouse Gas Emissions Inventory and Report
- Initiated the Jackson Hole Airport Good Traveler Program (for carbon offsets)
- Joined the Rocky Mountain Institute Good Traveler Advisory Board
- Added Electric Vehicle Charging Stations (8 stations available for public use)
- Joined US Environmental Protection Agency Green Power Partnership Program
- Completed wetlands mitigation work in Grand Teton National Park (the Park)
- Updated the Spill Prevention, Control and Countermeasures document (SPCC)
- Initiated the Fly Quiet Program as a recommendation from the Part 150 Noise Study
- Installed an Automatic Dependent Surveillance – Broadcast (ADS-B) extender to provide improved radar coverage and efficiency for use in the noise system.

#### COMMUNITY

- Named as Best Tiny Airport in the World by Fodor's
- Recognized as "Large Business of the Year" by the Jackson Hole Chamber of Commerce
- Achieved Business Emerald Sustainability Tier (BEST) Certification (97%)
- Awarded the Balchen Post Award by the American Association of Airport Executives (AAAE) at the 2019 Annual Snow Symposium
- Kody Jeppson, Jackson Hole Airport (JAC) Operations Officer, named Snowplow Operator of the Year by the AAAE at the 2019 Snow Symposium
- Created 'Sustainability Focus Group' for Airport stakeholders
- Created a Sustainability Management Plan (SMP)
- Created the JAC Sustainability Accomplishments Report
- Developed the 'Airport Sustainability Assessment Tool Project' in cooperation with the University of Wyoming Haubs School of Environment and Natural Resources to help track sustainability goals

#### RESILIENCY

- Completed construction of a Stormwater Detention and Filtration System
- Completion of new Fuel and Glycol Storage Facility
- Completion of new Quick-Turn-Around (QTA)
- Closed out final Underground Injection Control (UIC) permits
- Completed radon mitigation project (Terminal basement)



# Sustainability Report



Airport Board Members are passionate about conservation and sustainability

A gateway to Grand Teton National Park (GTNP), the Airport plays a vital role in protecting and preserving the environment. Our close partnership with the National Park Service (NPS) is supported by the involvement of our shared stakeholders who are dedicated to supporting NPS initiatives while providing air service to the Jackson Hole area. NPS collaboration has been integral in our completed sustainability initiatives and will continue to be a key component of future efforts. This section highlights the environmental progress we’ve made to support Grand Teton National Park and the surrounding environment that makes this area special. But we recognize that these steps are just a starting point and are committed to continually reducing the environmental footprint of the Airport. Starting with the adoption of the Noise Abatement Plan in 1985, JAC has been committed to reducing airport noise. Key elements of our noise mitigation program and milestones include:



Noise Reduction

**MAXIMUM NOISE LEVEL LIMIT:** The maximum noise level limit is imposed by a cumulative noise standard per the agreement between the Airport and NPS. A maximum of 6.5 average daily departures are allowed by the “Base Class” aircraft (Boeing 737-200). Note: if an aircraft is quieter than the ‘Base Class’ aircraft, it may operate in greater numbers. The Airport has never exceeded this maximum noise level limit.

**SCHEDULE REQUIREMENTS:** Commercial jet aircraft are contractually required to schedule arrivals prior to 9:30 p.m. and departures no earlier than 7:00 a.m.

**VOLUNTARY CURFEW:** A voluntary curfew for general aviation aircraft is set between 11:30 p.m. and 6:00 a.m. for landing, and between 10:00 p.m. and 6:00 a.m. for takeoff. Pilots are notified if they do not conform.

**MEASUREMENT AND MODELING PROGRAM:** The Airport began monitoring noise levels in 1984 with short-term seasonal monitoring. In 2004 the Airport upgraded to a sophisticated, state-of-the-art, permanent monitoring system.

**BI-6:** In 2008 the FAA installed a Beacon Interrogator Type 6 radar system (BI-6) that enables the Airport to correlate an aircraft noise event with the responsible aircraft, and identify operations that deviate from preferred paths.

**NEXTGEN APPROACHES:** In 2013, FAA implemented a NextGen satellite-based precision procedure that makes the landing path to JAC safer and shorter, while avoiding noise sensitive areas of the Park.

Due to the success of these extensive noise reduction initiatives, *JAC has never exceeded the cumulative metrics and as enplaned passengers have gone up over time, the noise contour size has generally decreased.* The Airport remains committed to continuous improvement supporting future efforts such as the Fly Quiet voluntary reporting and tracking program.

In 2018 the Airport purchased and installed an ADS-B receiver unit. ADS-B is a surveillance technology that allows aircraft to determine its position via satellite navigation, periodically broadcasting it. This data will give the Airport a better way of tracking aircraft for purposes of the Fly Quiet program.

NextGen Benefits

- ▶ More Direct Routes
- ▶ Reduced Need for Aircraft to Hold
- ▶ Reduced Carbon Emissions
- ▶ Reduced Fuel Consumption
- ▶ Reduced Noise Levels

Environment







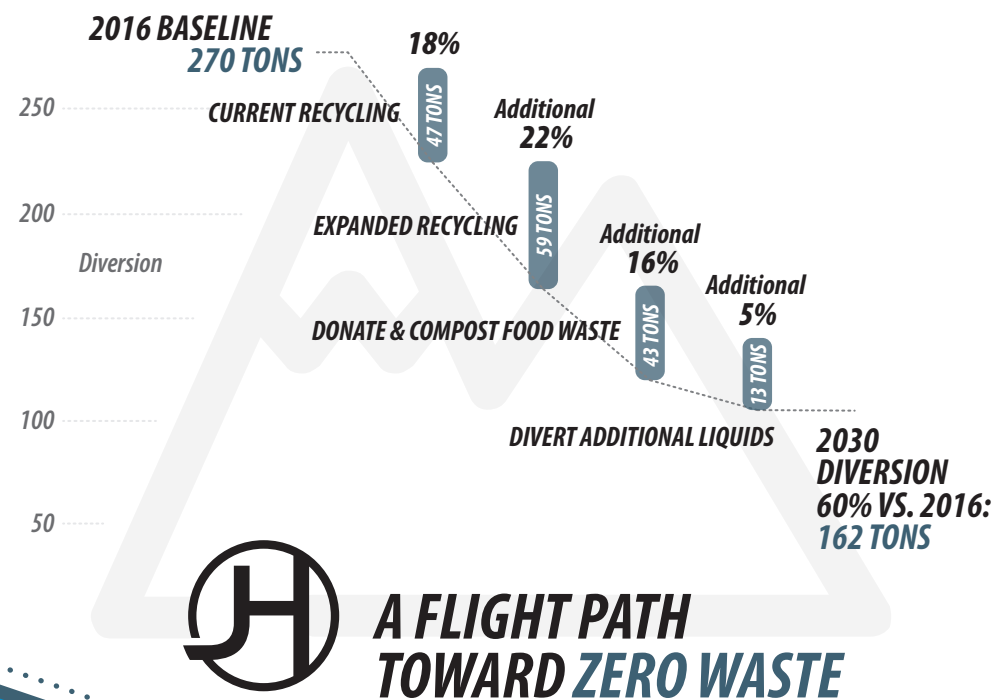
# Waste Management & Recycling

**RECYCLING:** In the 1990s, the Board, with the support of all tenants, started a small recycling program. This program has grown from a limited number of recyclables to a broader program in partnership with the Teton County Integrated Solid Waste & Recycling Center (ISWR). There are currently six multi-stream recycling stations available in the Terminal for recycling aluminum, #1 plastic, and newspaper. The Airport also recycles cardboard, white paper, glass, magazines, textiles, fluorescent bulbs, ink/toner cartridges, batteries, e-waste (electronic devices, parts and equipment) and bear spray.

In 2018, JAC conducted a waste audit and developed a Waste Management Plan. Aligning with local organizations to pursue the objective of net zero waste, the Board approved an ambitious goal called the Flight Path Toward Zero Waste: a goal of 60% diversion by 2030 (compared to the 2016 baseline).

Strategies for waste reduction were identified in the waste management plan. The items for FY 2019 and FY 2020/2021 are identified below, as well as the progress made to date.

The most notable successes include the implementation of a pilot project for



composting at Jedediah's, the approval to build and install new, uniform waste/recycling bins to aid the public in making the right choice with recyclables, and completion of a new waste tracking tool. Of the 14 items on the list for the three-year period, seven have been completed, and ALL of the initiatives have been started as of the end of 2019. JAC will track diversion in 2020 to check the success of these programs and identify additional measures to build on the progress already made in this area

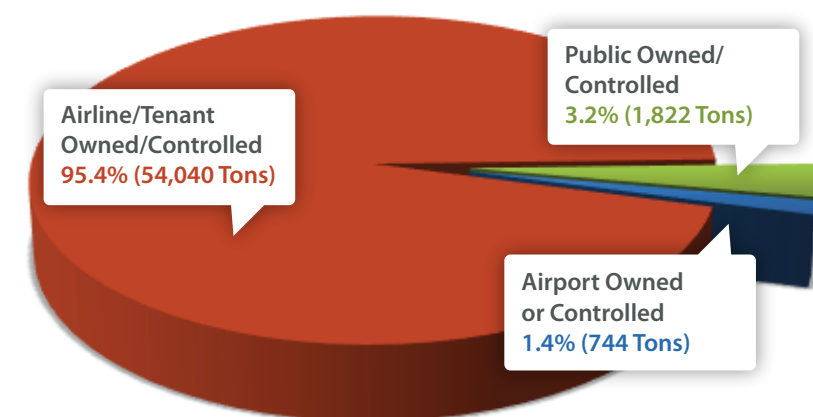
Summary of Recycling and Waste Management Program: Total diversion rate in 2016 was 18%. The waste tracking tool was completed in summer 2019, with data inputs for June through January. As a result of the initiatives indicated above, the diversion rate was approximately 26% for that period.



# Air Quality & Emissions

**GREENHOUSE GAS EMISSIONS INVENTORY:** In 2018 and 2019, the Airport continued to make headway in employing sustainable measures to reduce their emissions and improve air quality. In 2019, the Airport completed a baseline Greenhouse Gas Emissions Inventory based upon the Airport Cooperative Research Program (ACRP) methodology. The data was based upon 2017 data in order to align with the most recent Teton County GHG Emissions Inventory, which was an update to the County's 2008 GHG report. Of the total 56,363 tons, most of these emissions (95.4%) are associated with aircraft emissions. 1.4% of the emissions (774 tons) are Airport owned and controlled, which includes elements such as employee commute, fleet vehicles owned by the Airport, and facility heating/cooling/lighting. Due to the low emissions factor in the valley (owing to the presence of hydropower), the bulk of the Airport owned sources comes from the employee commute, representing more than 50% of airport owned emissions.

- Airport Owned or Controlled
- Airline/Tenant Owned/Controlled
- Public Owned/Controlled



2013-2018  
Over 285,625 Refills

Airport Hydration Stations

Environment





**GOOD TRAVLER PROGRAM:** In 2019, JAC became a member of the Rocky Mountain Institute's Good Traveler Program, a program focused on offsetting greenhouse gas emissions associated with travel. As one of the early adopters, JAC joined the advisory board for the Good Traveler Program, which is focused on improving the program. Because such a small portion of the overall GHG footprint is owned and controlled by the Airport, the board decided to take voluntary action to allow individuals flying through the Airport to offset their emissions. Based on current costs, an individual can offset 1,000 miles of flying or 400 miles of driving with a \$2 offset. These offsets are available and advertised through the Jackson Hole Airport Wi-Fi landing page and social media outlets. In 2020, JAC also offset all airport-controlled emission sources including employee commute, airport fleet and facilities, among other sources.

Additional outreach and partnerships to expand this program are planned throughout 2020. One priority is to identify an eligible carbon sequestration project within the Greater Yellowstone Ecosystem (GYE), in cooperation with the Park.



**Award of Volkswagen Settlement Grant (\$173,474).** In 2019, JAC was awarded a grant from the Volkswagen Settlement totaling \$173,474. These funds were used to replace an inefficient diesel snowblower with a wheel loader and front mounted snow blower with technology improvements and cleaner diesel engines to enable a 69% reduction in NOx emissions.

**ALTERNATE FUEL VEHICLES:** The Board has made a commitment to reduce its carbon footprint through several policies. One of these is the purchase and use of alternative fuel vehicles for airport operations. The Board plans to acquire additional alternative fuel vehicles as older airport operations fleet vehicles are retired. In 2018 and 2019, the Airport earned the designation as a GreenFleet through Yellowstone-Teton Clean Cities for consistently updating its current fleet with alternative fuel vehicles. The Airport currently operates two plug-in all-electric maintenance vehicles and two propane-powered maintenance trucks. As part of the 2019 plan, the remaining vehicles in the fleet are going to be screened relative to grant cycles to see if additional vehicles could be switched out for alternative fuel. Additionally, the Airport is working to improve the efficiency of the rental fleet and investigate use of additional hybrid or alternative fuel vehicles.

**100%  
Green Power**

**CHARGING STATIONS:** The Airport expanded dual Level 2 PowerPost EVSE charging stations in the public parking lot to help support electric/hybrid vehicle charging. This is part of the community wide effort to support the use of electrical vehicles in the Valley. In 2019, eight dual Level 2 PowerPost EVSE charging stations are available for public use.

**TAXI2FLY AND TAXIPOOL:** In 2018 Taxi2Fly was implemented and the Board instituted a TaxiPool program. Under Taxi2Fly, travelers can select the taxi provider of their choice and arrange for transportation from the Town parking garage to the Airport for \$20 each way. To facilitate this program, the Board entered into a Lease with the Town, effective September 1, 2018, under which the Board leased 141 parking spaces on Levels 3 and 4 of the Town garage from November 15 through the following April 15, and 71 parking spaces on Level 4 of the garage from April 16 through November 14. These spaces were for the exclusive use of Airport passengers.



TaxiPool is a ridesharing program under which passengers who agree to rideshare in a taxi will receive a \$10 discount on the posted fare for each destination. This helps reduce the number of vehicles on local roadways and congestion at the Airport and is aligned with the community Integrated Transportation Plan. It also includes reduced demand for parking at the Airport; greater efficiency and reduced carbon emissions through utilization of high occupancy vehicles; reduced noise along the Highway 89 corridor within the Park and alongside the National Elk Refuge; and reduced risk of vehicle and wildlife collisions.

## Energy & Power

**ENERGY AND POWER:** In 2011, JAC received LEED Silver Certification from the U.S. Green Building Council for the Terminal Building Expansion. Additional measures since then have reduced the Airport's energy consumption by 117,900 kilowatt hours per year. In 2018 and 2019, the Airport has made significant environmental improvements by working under the Dark Skies Initiative with Energy Conservation Works and Lower Valley Energy to convert the taxiway lighting and landside lights to LED. Power supplied to all airport owned and operated facilities is now 100% Green Power.





**MEMBERSHIP IN US EPA GREEN POWER PARTNERSHIP PROGRAM:** In 2019, the Airport became an official partner of the US EPA Green Power Partner Program. This program is a voluntary program that encourages organizations to use green power to reduce their environmental impact. The partnership currently has more than 1,700 partner organizations voluntarily using billions of kilowatt hours of green power annually. JAC procures 100% of their annual electric use through green power sources. Additionally, all power supplied to the airport is now 100% Green Power.

## Water

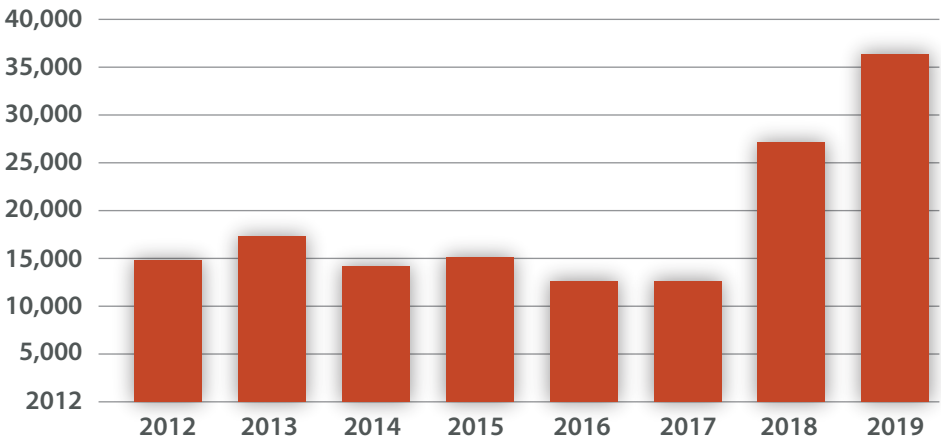
**COMPLETION OF STORMWATER DETENTION AND FILTRATION SYSTEM:** The largest success for 2018/2019 for JAC related to water was the completion of a stormwater detention and filtration system. In partnership with the Teton Conservation District, the Board approved a \$2.5 million investment in protecting water quality and continuing their legacy of environmental stewardship. Stormwater runoff from all landside impervious surfaces as well as all airside ramps will filter through the new system, removing oil, sediments and other materials before being released into the soil and eventually groundwater. This results in substantial protection to the local Class I aquifer. The new system will allow for a significant decrease in total suspended solids (80% minimum) and a decrease in total petroleum hydrocarbons (upwards of 90%) as a biologically active “filter cake layer” builds up in the system over time. Additionally, the system is even capable of capturing and filtering a 100-year storm event. It was completed in September 2019 and rolled out through a ribbon cutting ceremony with the Wyoming Governor, the Assistant Secretary for Fish, Wildlife and Parks of the Department of the Interior, and the Acting Superintendent of Grand Teton National Park.

**GLYCOL RECOVERY:** JAC has an aircraft de-icing pad at the north end and just to the east of Taxiway Alpha. The de-ice pad parking spots have been reconfigured and are large enough to handle two Boeing 757s or three 737s simultaneously. There are two spent glycol collection drains on the east and south sides of the pad which funnel the used glycol into a 30,000-gallon underground collection tank, which is just south of the concrete pad. There is also an underground valve that can be closed to divert rainwater and other precipitation away from the collection tank during times (or seasons) when de-icing of aircraft is no longer necessary.

Before the spent glycol is collected, it flows thru two oil-water separators which are 1,000 gallons, and 3,000 gallons respectively. The tank monitoring system is powered by four large solar panels, which supply power to a battery bank that sits next to the tank volume display panel. It has been estimated that as much as 50% of glycol applied to aircraft adheres to the aircraft when it exits the pad and into takeoff position. Although the concentration of glycol in the fluid collected at the pad is lower than historical levels, the

amount of glycol collected is significantly higher than in the past which can be due to many factors including airline deicing practices. The recovery data after construction of the deicing pad is included in the following graphic. The Board’s goal is to collect as much glycol as possible. This means that snow melt and other water is collected as well. When snow and other water is collected (depending on weather conditions), this leads to lower concentrations, but maximizes the glycol removed from the environment, which benefits overall water quality.

Deicing Gallons Recovered (2012-2019)



## Wildlife

Implementation of the WHMP alternatives and Greater Sage-Grouse Habitat Restoration Plan should enable the Board to minimize the risks of wildlife strikes within this environmentally sensitive ecosystem.

In May of 2018 the Park submitted a grant request that the Airport and National Park Service co-developed to start the implementation of this plan. The grant was from the Upper Snake River Basin Local Working Group. After presenting these materials, the National Park Service was awarded \$20,000 for that project and the remainder of the project funds will be from the Airport. The Park has been processing the sites to ensure they are weed and exotic plant free and reestablishing the native vegetation to better support birds moving into those areas. Additionally, the State Executive Order on ‘Greater Sage Grouse Core Area Protection’ has changed and the Airport, as part of the local sage grouse working group, is evaluating the changes and how it might affect these plans.

# Environment





## People are an integral part of any comprehensive sustainability program

This is why we seek to integrate the Jackson Hole community in our sustainability programs, initiatives, and environmental strategies. We strive to support our partners, our staff, and our broader community initiatives through the various programs highlighted below.



Certifications are one way to allow for progress and to take steps toward building a cycle of continuous improvement. JAC received the following certifications or awards in 2019.

- **Fodor's named JAC as the Best Tiny Airport in the World:** "Jackson Hole Airport may be small—boasting a grand total of nine gates—but the impression it makes is mighty," (Fodor's editorial team).
- **BEST Assessment and Certification (97%) through the River Wind Foundation:** This certification is described by the Riverwind Foundation: "The Jackson Hole Airport became the latest organization in Jackson Hole to reach the Business Emerald Sustainability Tier (BEST) level of sustainability performance. The standards in the BEST program are comparable to the world's most rigorous and comprehensive environmental, community, and economic sustainability criteria."
- **Jackson Hole Chamber of Commerce recognized JAC as the Large Business of the Year:** This award was given due to the Airport's growth, while reducing impacts, and supporting its employees and the community. The Jackson Hole Chamber stated, "The Jackson Hole Airport has been part of the foundation of Jackson Hole for over 50 years. They have grown their programming and service while reducing impacts and being fully integrated with the community's efforts and goals. They take care of their employees with excellent benefits and providing a great place to work. The Jackson Hole Airport and the Airport Board has taken great steps to be an environmental leader in our community. Commitments to 100% Green Energy, lower emissions vehicles, hydrating refilling stations, and recycling and composting are only some of the steps the Airport has taken to be a leader in sustainability."
- **JAC was awarded Honorable Mention - Balchen Post Award by AAAE at the 2019 Annual Snow Symposium and Kody Jeppson, JAC Operations Officer, was named Snowplow Operator of the year by the AAAE at the 2019 Snow Symposium:** for snow removal efforts. The award was given for emphasis on safety, management and creation of training for snowplow operators, leadership attributes, extensive technical knowledge and an ability to operate any type of snow removal equipment at JAC.

**EMPLOYEE RECOGNITION PROGRAM:** The Airport's employee of the month recognition program highlights key individuals that are supporting the overall mission of the Airport.

**EMPLOYEE HOUSING BENEFIT:** Located in a competitive and expensive housing market, JAC provides a housing and transportation stipend to full-time staff. This may allow some employees to live near Jackson while it assists others with their transportation expenses.

**PEOPLE HELPING PEOPLE:** "People Helping People" is the mission of the Jackson Hole Airport. We embrace this mantra in every aspect at the Airport. Whether we are helping guests, co-workers or partners, we operate as a team (or a big family) at JAC.

**HOLIDAY FOOD DRIVE:** Annually, the Airport holds a Holiday Food Drive. Non-perishable items are donated at the Airport in exchange for a free drink from Jedediah's. At the end of the drive, all items are donated to the Jackson Cupboard, which distributes these goods to local residents in need.

**AIRPORT HOST PROGRAM:** The Jackson Hole Airport has an Airport Host Program. The hosts greet arriving and departing guests, assisting with travel needs and questions about the facility and local area. The Jackson Hole Chamber assists the Host Program in partnership with the Airport. The Chamber staff provide guests with local knowledge and serve mimosas in the baggage claim area for arriving guests.

**EMPLOYEE STORM SUPPORT:** During adverse weather events, JAC provides staff with hotel rooms, supporting a sustainable and resilient work force providing a high level of service during storm events.

**VISUAL SCREENING:** To reduce the visual impacts and protect the picturesque surroundings, the Airport planted trees that help provide visual coverage of the Airport and unobstructed views of the Tetons. Additionally, the Airport works with the Dark Skies Initiative to reduce light pollution and protect the scenic night sky. In 2017, the public parking lot had the light poles lowered and LED lights installed. New in 2018 and 2019, the Airport worked with contractors to continue these principles of low light and screening to the new parking areas and changes to traffic flow in the terminal area.

**TSA PROGRAM:** JAC is one of only a few airports in the country that has a private security workforce for TSA. This program supports the community through employment of up to 58 screeners and allows the Airport to control the customers experience.

# Community





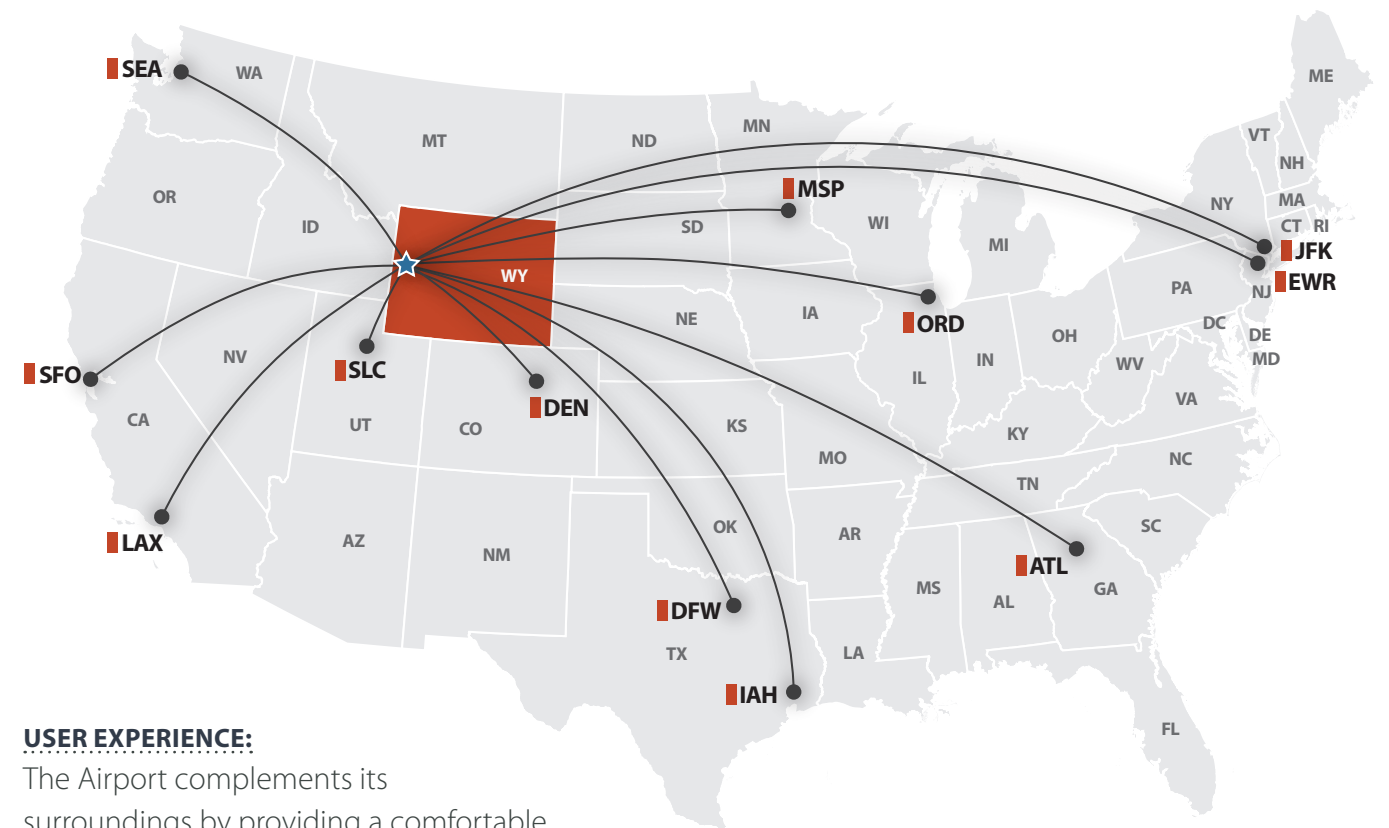
JAC provides access to some of the most iconic landscapes in the world, as well as a remarkable town, Jackson Hole Mountain Resort, the National Elk Refuge, among many other extraordinary venues



As a resource for the region, we continue to strive to serve the community as the mass transportation of the skies. Resiliency is the capacity to adapt and recover from changing conditions. In addition to our initiatives supporting our environment and our community, economic responsibility is an important part of this, and one that we embrace through providing exceptional service to JAC users while protecting the environment that draws the visitors in the first place. JAC prides itself on the fact that the Airport is self sustaining, with no use of local tax dollars. Below are some ways we are a resilient resource to the community.

**OPERATIONS:** JAC has over 350,000 passengers annually and provides direct service to 12 different cities across the U.S. Due to increased seating in aircraft, JAC has been able to serve a growing number of passengers while maintaining a stable level of operations.

# Resiliency



## USER EXPERIENCE:

The Airport complements its surroundings by providing a comfortable, aesthetic space for travelers. The 2010 renovation of the terminal provided an open space that retains the regional character of Jackson Hole. It is our goal to support our users from the moment they arrive. Currently, the airport has many measures in place to ensure a great user experience, including:

### Unique Traveler Amenities at JAC:

- ▶ Parking Webcams to Show Parking Space Availability
- ▶ Online Payment Options for Parking
- ▶ Water Bottle Filling Stations
- ▶ Teton County Library Bookshelf where Visitors can Take or Leave a Book for the Next Visitor
- ▶ Art Collection and Local Photography
- ▶ Information Desk
- ▶ Dog Friendly/Pet Areas
- ▶ Fireplace
- ▶ Free Wifi
- ▶ Seasonal Live Entertainment
- ▶ During Peak Travel Times, the Airport offers "Movie Stations" for Families in the Secure Hold Area.
- ▶ Seasonal Complimentary Mimosas



*It is our goal to support our users from the moment they arrive.*





JAC Community Art Program

**ART AND EXHIBIT PROGRAM:** JAC's community art program supports local artists and non-profits. The art showcased in and around the terminal adds to user experience and supports environmental conservation.

**SUPPORT OF LOCAL ORGANIZATIONS:** JAC recently supported an aviation related exhibit at the Jackson Hole Children's Museum, showcasing the importance of aviation in the community.

**TERMINAL BUSINESSES:** Jedediah's Restaurant, a local favorite, serves users in the secure passenger hold room and operates a snack bar in the non-secure lobby of the terminal building. Their choice to use local food products (such as the locally

sourced artisan snacks, beef and beverages) fits with our community-based values and we are looking forward to their planned expansion. Through the Grand Teton Association, NPS operates a natural history gift shop inside the passenger holding area. JAC strives to support local companies, strengthen community ties, improve user experience, and support the economic vitality of the Airport and the concessionaires.

**INTERAGENCY HELIBASE OPERATIONS:** The Bridger-Teton National Forest (BTNF)/NPS interagency helibase, co-located on the Airport, provides ample landing pad space and facilities for staff operations. In 2014 and 2015, the based crew responded to 42 wildland fires and conducted 14 short-haul rescue operations in GTNP and BTNF. The helibase directly serves 2.5 million acres of federal land and is available to assist in rescue and fire operations on 18 million acres across the greater Yellowstone area.

JAC serves as a gateway for this service that provides protection to the environment, the community, and promotes interagency cooperation.



Strong Airport Support for Local Companies



## Airport Planning

Planning is vital to having a facility which efficiently meets both current and future needs. Effective planning allows the Airport to adjust to changing conditions, meet tenant and user needs, reduce impacts and create a cycle of improvement. Since the Master Plan Update of 2011 (20-year planning document), several supplemental plans have been completed. The first three plans denote previously completed planning materials that help guide the airport improvements. The plans in boldface type below are new completions in 2019 and will assist with planning going forward.

- **A landside parking and traffic study was completed in 2012, the results of which will be included in the future Master Plan and were implemented in 2018/2019.**
- **An Updated Airport Layout Plan (ALP) was submitted to FAA in 2019 and approved by the FAA November 2019.**
- **A Conceptual Area Development Plan in 2015 identified a preferred development strategy to most efficiently utilize the space available on the Airport for future commercial aircraft operations, general aviation operations, Airport Rescue and Firefighting and Snow Removal operations, Rental Car Service Facilities and other facilities such as parking for airport users and rental cars.**
- **A Sustainability Management Plan (SMP) was completed in 2019, which is helping guide the Airport in their sustainability goals and implementation, creating a cycle of continuous improvement.**

The Sustainability Accomplishments Report was created and updated in 2019. In addition to the management plan, the Airport rolled out its sustainability accomplishments report which details those items completed under the sustainability management plan. This will help track sustainability progress over time.

# Resiliency