

UNITED STATES TRAVEL AND TOURISM ADVISORY BOARD

December 3, 2021

The Honorable Gina Raimondo
Secretary of Commerce
Washington, D.C. 20230

Dear Secretary Raimondo:

Thank you for the opportunity to participate in this process, specifically identifying the top three issues facing the tourism industry related to climate change, and how data collected by NOAA can be used to support the sector.

There's no question climate change is a profound threat to the stability of America's travel and tourism economy, potentially affecting how much tourists travel, when they travel, and how much they spend. Moreover, impacts of climate change ultimately will damage key transportation infrastructure that drives tourism and degrade the most important assets connected with traditional tourism activities – wildlife, natural resources, and historic and cultural landmarks.

At risk is an economic engine that generated \$1.1 trillion in visitor spending in 2019, supported 9 million jobs, and brought in \$180 billion in tax revenue for federal, state, and local governments.

The tourism industry recognizes that it is both victim of and contributor to climate change. Fossil fuels power the most common forms of tourism transport. Vigorous mitigation efforts are underway across much of the tourism industry, particularly with clean fuel development. Adoption of principles of sustainability and greenhouse gas reduction are not universal, however.

Unfortunately, the specific impacts of climate change on American tourism have not been well-studied. Data-driven investigation focused on tourism impacts not only would help the industry predict and adapt, it would strengthen the foundation of evidence to prompt change in some corners of the industry, among government decision-makers and consumers.

We recommend the Department prioritize three distinct climate change impacts on travel and tourism for future work to address these challenges.

Extreme Weather Events

Significant weather events are on the rise in the United States, costing hundreds of billions of dollars annually and threatening the tourism economy from coast to coast. Extreme heat, multi-year droughts, and thunderstorms render western destinations off limits for visitors with greater regularity. In California, the eight largest fires in state history have occurred since 2017. Tourism destinations are increasingly threatened: South Lake Tahoe barely escaped destruction in 2021, and fire and smoke impacts cost the tourism economy tens of millions of dollars. In Las Vegas, longer summers wrought with drought make desert destinations untenably hot and water scarce.

Meanwhile, heavy rainfall and floods from severe storms plague Texas and the southeast United States. As severe conditions continue, the nation's aging transportation infrastructure – highways, bridges and fragile causeways in some tourism destinations – will become more vulnerable to debilitating damage that threatens safety and the tourism economy. In California, for example, fire-scarred mountainsides have generated devastating mudslides from heavy rain. The events have washed out the coastal highway and connecting bridges, isolating communities for which tourism makes up almost all the economic activity.

Sea Level Rise

Increasing sea rise from climate change threatens one of America's greatest tourism assets – 95,471 miles of coastline that generate hundreds of billions of tourism dollars each year, supporting millions of jobs. Coastal counties in California alone generated more than \$102 billion in visitor spending in 2019. Unabated sea rise jeopardizes not only life and property, but mitigation stands to cost public and private entities billions of dollars. A [2019 report](#)¹ from the Center for Climate Integrity projected it will cost \$400 billion to protect America's coastal areas – including tourism assets and general infrastructure – by 2060. In Florida, sea level has risen 8 inches since 1950 and is expected to increase another two feet by 2060. Miami's stormwater master plan projects it will cost nearly \$4 billion to protect the city from rising seas over the next 40 years.

Changes in Seasonality

The rhythm of seasons affects tourism patterns, and climate change disrupts the natural seasons in the United States. The effects on the tourism economy range from ski seasons that don't materialize or are shortened, to significant changes in wildlife patterns that impact visitor experiences from Florida to Alaska. Simply put, summers are getting longer, and every other season is getting shorter, with implications on outdoor recreation and tourism. One study showed that the average annual ski season in Anchorage has shortened by nine days over the last 80 years, eliminating significant revenue for the industry and its workforce. Longer summers reduce water quality for wildlife and tourists, lengthen the allergy season and have the potential to increase mosquito-borne diseases – all detriments to tourism.

NOAA is well positioned to use its data to help the tourism industry address these challenges.

Risk Mitigation – More precise projections of future travel-related impacts of extreme weather events, sea level rise and changes in seasonality will help tourism companies, their investors and government infrastructure funders adequately prepare for short- and long-term impacts. Projections by region and sub-region will help key corporate and government decision makers reset operational approaches, particularly regarding seasonality impacts. Areas prone to extreme weather already face challenges obtaining affordable insurance coverage, and NOAA data would help mitigate that impact.

Education – Collating NOAA data on tourism impacts in plain language and aiming it at specific audiences will elevate the issue for the travel and tourism sector, individual tourism companies and younger generations of consumers. The data can help tourism businesses prepare

¹ https://img1.wsimg.com/blobby/go/cd8b5217-ae9e-4883-bfe9-eca0ae80b14e/downloads/ClimateCosts2040_Report-v5.pdf?ver=1561060134516

risk assessments and climate action plans. NOAA should also consider working with educational institutions to produce age-appropriate instructional materials describing the importance of conservation and what the impact of long-term destruction of the environment has on the planet and its climate.

Assessing Carbon Emissions – There is no universal method for pinpointing carbon emissions at the level of the destination, or the specific impacts of the travel and tourism sector, although individual sectors such as aviation and cruise lines can measure and address carbon outputs. Developing a set of basic tools that industry members can use to measure the level of carbon in the atmosphere at the destination level would be a first step. In the longer term, methodologies could allow individual businesses such as restaurants, hotels, and SMEs to access carbon markets to offset impacts.

In conclusion, new ways climate change threatens America's tourism economy surface regularly. We are heartened that you have initiated this process of priority action on behalf of the Department of Commerce. Focusing on these challenges will assist the travel and tourism industry to better understand, prepare for, and evaluate and ultimately address climate risk to this sector.

Respectfully submitted,



Brad Dean
Vice Chair