

May 17, 2019

The Honorable Peter DeFazio
Chairman, Committee on Transportation and Infrastructure
United States House of Representatives
2134 Rayburn House Office Building
Washington, DC 20515-3704

The Honorable Sam Graves
Ranking Member, Committee on Transportation and Infrastructure
United States House of Representatives
1135 Longworth House Office Building
Washington, DC 20515-2506

Dear Chairman DeFazio and Ranking Member Graves:

Thank you for reaching out to stakeholders for input on the important policy discussions that are occurring in your Committee regarding our nation's infrastructure needs. On behalf of our more than 11,000-member companies, the National Business Aviation Association (NBAA) is pleased to provide the following input on how to improve and modernize the aviation system.

The United States has the world's largest and most diverse aviation system, supporting more than 200,000 general aviation aircraft and 5,000 public use airports. Along with our aviation system, general aviation continues to adopt, invent and utilize new technologies, leading to an evolution in the types of infrastructure investments that are necessary. In addition, as is the case with other modes of transportation, we must build upon our investments in human infrastructure to make sure that our workforce is able to meet the evolving and growing needs of the aviation system.

To move forward with new investments, the method of funding is critical, and as you are aware, most FAA programs are funded by the Airport and Airway Trust Fund (AATF), established in 1970. The AATF is supported by taxes and fees, including a per gallon tax on jet fuel and gasoline used by general aviation operators, and a 7.5% tax on amounts paid for airline tickets and charter flights. According to the Joint Committee on Taxation, total AATF revenue in fiscal year 2017 was \$14.6 billion. The CBO projects that AATF revenue will exceed outlays for the 2019-2029 budget window, and cash balances in the fund are also expected to grow to nearly \$60 billion.

In addition to providing a growing and reliable revenue stream, the AATF taxes are simple to administer and collect. The fuel tax and 7.5% tax on airline tickets and charter flights do not require the government to issue invoices or institute complex recordkeeping systems that a per-flight user fee would require. However, over the years, there have been various proposals to eliminate the 7.5% tax in favor of a per-flight user fee, which would require significant costs to collect. Maintaining the AATF and associated taxes is the best approach to funding our future aviation infrastructure needs.

Airport Infrastructure and Greater Protections for Federally Funded Airports

The United States leads the world in having the most robust and diverse airport infrastructure capabilities, providing a critical foundation for general aviation to thrive. Transporting people and equipment, responding to natural disasters, providing air medical flights, offering a place for flight training and inspiring career paths essential for all sectors of aviation – general aviation relies on the

national network of airports. NBAA strongly supports continuing the federal commitment to investing in a robust national system of airports to meet the current needs and projected growth. We must maintain healthy funding mechanisms for airports of all sizes to meet changing demand and important safety and efficiency improvements.

General aviation relies on facilities of all sizes. Federal investment in airports – especially via federal grants through the Airport Improvement Program (AIP), which are drawn from the AATF and not taxpayer dollars – ensures their viability in multiple ways. Federal dollars allow for airports, especially smaller facilities, to remain affordable to general aviation use. Without this vital investment many local municipalities would not be able to maintain the infrastructure that links their community to the rest of the country and to the world. Aviation users and local sponsors may not be able to fund the costs to sustain these facilities through rents and fees alone. We support robust AIP funding levels and believe in the continued commitment to airports of all sizes.

Additionally, the requirements which accompany federal investment in airports protects our national aviation infrastructure from being shuttered. Unfortunately, there are an increasing number of communities that have made attempts to impose restrictions limiting access to their airports, such as curfews, weight and noise limits, attempting to gain what they call “local control.” However, airports are part of a national aviation-transportation system. Federal grant and deed obligations play an important role in preventing a local patchwork of operational restrictions and even complete closures.

As part of the Committee’s infrastructure discussions, we respectfully request that policies remain in place – and are enforced in practice – to protect both federal funds and interests at airports. Additionally, in the rare event that there may be a justification for the closure of an airport, federal statutes and regulations should require that all remaining proceeds be returned to the aviation system and not be allowed to be absorbed by the local municipality’s general fund, further disincentivizing any local motivation to close an airport. Adherence to these policies is a critical aspect in preserving our airport system which drives significant economic growth.

Expanded Airport Improvement Program Eligibility

Through passage of the FAA Reauthorization Act of 2018, the criteria to qualify for AIP funding has been broadened to reflect the evolving infrastructure needs of airports. For example, remote air traffic control towers that meet FAA guidelines are now eligible for AIP funds. Through this technology, cameras located at an airport provide controllers at a remote facility a 360-degree view of the airfield. Remote towers have the potential to provide air traffic control services, and added safety benefits, to airports that might not qualify to have a costly tower built. NBAA strongly supports allowing remote towers to qualify for AIP funding, and we look forward to an expansion of this technology to many airports in the coming years.

Another example of modernizing AIP eligibility is that future counter-drone technologies to be employed at airports will qualify for funding. Under the FAA bill, the agency is authorized to work with the Departments of Defense and Homeland Security to develop technologies that can mitigate the risk of unauthorized drones interfering with airport operations. As this technology is developed and certified, airports will be able to apply for AIP grants for its implementation.

These examples clearly demonstrate the importance of continually reviewing AIP eligibility guidelines as new technologies are developed. NBAA looks forward to working with the Committee to evaluate the success of these changes, and to partner with you in identifying other technologies that could qualify for AIP grants in the future.

Building on Successful NextGen Investments

NBAA commends the Committee for its continued commitment to investing in the next generation air transportation system (NextGen). While ATC technology is not as visible as a runway or airport terminal, it is equally important for a safe and efficient air transportation system. Through NextGen, which is one of the nation's largest infrastructure investments, the FAA is delivering tens of billions of dollars in direct benefits to aircraft operators and passengers.

For example, with investments in Automatic Dependent Surveillance Broadcast (ADS-B), the FAA is transitioning away from costly ground-based radar to a system that provides controllers with precise GPS position data for aircraft. Currently, ADS-B coverage is available across the U.S. and is being used to more accurately track aircraft while providing increased situational awareness to pilots.

With more accurate GPS position data, aircraft operators are also taking advantage of the 9,300 Performance Based Navigation (PBN) procedures that the FAA has introduced. Through PBN, aircraft follow precise satellite-based paths without the need for costly ground-based infrastructure to guide them. This technology has allowed the agency to introduce precision instrument approaches at more than 1,000 airports without deploying a single ground-based system. Before PBN and advanced GPS technology, the cost to install a new instrument landing system approach, which requires equipment on the ground, was out of reach for many airports. Through use of GPS and advanced avionics, thousands of airports now have safer approaches without any visible infrastructure.

To better utilize airport and airspace capacity, NASA is partnering with the FAA to leverage existing technologies and provide for improved coordination between aircraft operators and ATC. For example, through the Airspace Technology Demonstration 2 (ATD-2) effort, departures at busy airports are being managed more strategically to maximize capacity.

For general aviation, a mobile application is being developed as part of ATD-2 that will allow operators to communicate when they are ready to taxi and receive more precise departure time information from ATC. This type of mobile technology will allow for improved sequencing of general aviation departures into the airspace- reducing delays, saving fuel and increasing capacity.

As these examples illustrate, the definition of infrastructure investments for ATC purposes is evolving and requires that policymakers look beyond just investments in airport runways, taxiways or new control towers. Much of our needed ATC investments in the future will focus on technologies, mobile applications, systems, and equipment in the cockpit, instead of traditional ground-based assets.

Accommodating New Entrants

While the FAA is on-track to complete implementation of the key NextGen technologies by 2025, potential new entrants into the airspace will require additional infrastructure investment. The agency is projecting that the commercial unmanned aircraft system (UAS) fleet will have a 32.5% growth rate over

the next five years, and the fleet of non-commercial UAS is expected to double in size, to 2.4 million units by 2022. This significant growth in UAS operations will require FAA to dedicate additional resources to airspace integration, remote identification and other complex projects.

In addition, the development of urban air mobility (UAM) concepts will place new demands on the ATC infrastructure. Current projections indicate that by 2050, close to 100,000 passenger drones could be flying worldwide in what Morgan Stanley projects to be a \$1.5 trillion market. These autonomous vehicles will need to be integrated into the airspace, likely requiring new ATC management technologies and additional investments in ADS-B and PBN.

As the Committee considers aviation infrastructure investments, we respectfully request that in addition to critical airport improvements, you carefully review the future needs of our ATC system and potential investments required to accommodate new entrants.

Human Infrastructure

To take advantage of our growing aviation infrastructure, we need properly trained pilots, safety inspectors and aviation maintenance technicians, both of which are in short supply. Boeing now projects that over the next 20 years, there will be a worldwide requirement for 790,000 new pilots, and more than 600,000 technicians. With new entrants such as UAM, these needs will continue to grow.

One of the significant barriers to entry for those seeking a career in aviation is the cost of training. According to the Government Accountability Office, flight training costs at major collegiate aviation programs can range from \$51,000-\$81,000 in addition to annual tuition. With the maximum federal financial aid available to students well below the cost of flight training, this is a significant challenge. Not all students have the financial resources or ability to cover the high costs of additional private loans that may be required to pay for flight training, which puts the career out of reach for many.

We believe there are opportunities for the Committee to grow our human infrastructure by supporting the creation of a program that provides dedicated funding to educational institutions which have aviation education programs. This funding could be used to support acquisition of flight simulators, training aircraft and for scholarships. In addition, existing authorizations could be expanded to offer aviation education and training programs at community colleges, Historically Black Colleges and Universities and other institutions that seek to bring diversity to the workforce.

Finally, through a public service campaign, where government and industry are partners, we could offer compelling information about the benefits of a career in aviation. At a time when there is intense demand for STEM workers, a campaign that explains the significant opportunities available in the aviation industry would be effective in building our human infrastructure.

As part of the Committee's discussions, we respectfully request that barriers to growing our aviation human infrastructure be addressed. While these issues are likely under the jurisdiction of other Committees, we should use this opportunity to think about how to grow the aviation workforce.

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The leadership both of you displayed in passing a long-term FAA bill provided many of the tools our aviation industry needs to be successful, and we believe there is now a historic opportunity to build on this through modernizing our infrastructure policies to address future needs. As you focus on infrastructure legislation in the coming months, NBAA looks forward to participating in the discussion and we appreciate this opportunity to provide input.

Sincerely,

A handwritten signature in black ink, appearing to read "ED Bolen", with a long horizontal stroke extending to the right.

Ed Bolen
President and CEO