

WRITTEN STATEMENT OF  
UNITED STATES REPRESENTATIVE ADAM SMITH  
OF THE  
9<sup>th</sup> DISTRICT OF WASHINGTON  
  
BEFORE THE  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
OF THE  
U.S. HOUSE OF REPRESENTATIVES

“MEMBERS’ DAY HEARING”  
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Chairman DeFazio, Ranking Member Graves, and distinguished Members of the Committee: Thank you for the opportunity to share some of the key infrastructure and transportation priorities that are of importance to the Ninth Congressional District of Washington, which I proudly represent. As the Committee develops its legislative agenda for the 116th Congress, I would like to highlight the importance of acting to stem the increasing impacts of aviation noise and emissions on communities surrounding airports. As a Member of Congress whose district is home to one of the busiest and fastest-growing hub airports in the country, Sea-Tac International Airport, I have a deep understanding of how this issue affects residents near this and other airports throughout the country.

Sea-Tac Airport is a vital economic engine for the Puget Sound Region. The growth of the airport has facilitated and been driven by economic expansion of the region. While air traffic at this and other airports has increased, new technologies have helped to mitigate,

and in some cases reduce, corresponding growth in aggregate airplane noise impacts. Unfortunately, the benefits of noise mitigation and reduction has not been enjoyed evenly throughout regions served by major airports, including the district I represent. The narrowing of departure and arrival routes has concentrated noise and other impacts over specific areas and those living under these pathways now bear an increased majority of the noise burden. Culturally and socioeconomically diverse communities like the Beacon Hill neighborhood in the Ninth District of Washington as well as the City of SeaTac, where I grew up, are located directly beneath increasingly tight flight paths and the noise impacts on these areas can seem nearly constant as planes fly overhead every few seconds.

Sadly my constituents and others living in similarly situated areas too often feel as though they have little or no recourse or remedy. The Federal Aviation Administration (FAA) has not always been responsive to their concerns, and while the FAA Reauthorization Act of 2018 included meaningful and positive provisions that will improve community engagement, I believe more can and must be done.

I will be reintroducing legislation that I first offered in the 115th Congress to improve the manner in which the FAA engages with noise-affected areas and to help bring some relief to those on the ground. The Aviation Impacted Communities Act will codify into law a formal process for localities to join together and constructively engage with the FAA through the work of Community Boards. These groups will have the ability to nominate civic leaders or elected officials to represent residents before the FAA. The Aviation Impacted Communities Act will also designate areas under flight paths as

“aviation impacted;” allowing residents to petition the FAA to study and create action plans to solve the problems they face.

I understand that changes such as these will place an additional burden on an agency charged with the daunting task of ensuring the safety and soundness of our air transportation network. However, the support provided by this legislation to those who are disproportionately impacted by the externalities of the aviation system that is vital to all of our communities and our country is both necessary and just. I look forward to working with you to improve and advance the provisions contained in this legislation.

In addition to noise impacts from aviation, ultrafine particles (UFPs) in the atmosphere pose an outsize threat to those living near airports and under flight pathways. These pollutants are miniscule particles of less than one hundred nanometers in size that are emitted as byproducts of petroleum fuel combustion in engines, such as those used on vehicles and aircraft.

In 2014, a first-of-its-kind study was conducted around the Los Angeles International Airport (LAX) to examine the levels of UFPs in the atmosphere surrounding the airport. That study determined that ultrafine particles were being emitted over a much larger area than previously thought and could be causing more serious and widespread harm.

According to the FAA’s own preliminary research, fine and ultrafine particles in the atmosphere are considered a health risk in humans because of their ability to penetrate deep into the human respiratory system. UFPs may be particularly dangerous as they may aggravate heart ailments, contribute to lung disease, and cause nervous system impacts.

Their wide dispersion could affect human health over large areas, lead to increased hospital admissions, and hurt children's performance in school. Additionally, it has been demonstrated that lower-income and minority communities tend to be exposed to higher levels of UFP pollution. However, the degree to which aviation contributes to UFP pollution exposure is not fully known and only a handful of studies have been conducted in the United States to begin to inform our scientific understanding of these particles.

In addition to gaps in scientific knowledge, there are also gaps in the federal government's approach to UFP regulation. The FAA regulates UFPs in the atmosphere no differently than considerably larger particles and presently only recognizes two still-sizable categories of particulate emissions. The first includes larger particles that are ten microns or less; identified as PM<sub>10</sub>. A second smaller set, designated as PM<sub>2.5</sub>, includes any particles below 2.5 microns. Though ultrafine particles are included within the lesser subset, UFPs tend to be considerably smaller than those in the upper limits of the classification. There are no specific guidelines for regulating or measuring the smallest particles because the FAA does not identify them separately from the PM<sub>2.5</sub> category. In order to properly regulate these particles, more analysis is needed of these pollutants, their attributes, dispersions, and effects on human health.

Given the potentially harmful health effects that UFPs may have on those who live near airports and the limited research on which to base regulation in this important area, it is time for a national study on this issue. Residents of impacted communities across the country, like those in the congressional district I represent, deserve to know how they are

affected by ultrafine particles in the atmosphere, where these particles originate from, and whether alternative fuels such as biofuels could be employed to reduce those impacts.

More must be done to understand how UFPs affect the areas around airports, to what extent aviation contributes to the creation and diffusion of UFPs, and whether or not sustainable aviation fuels could help reduce the number of these particles in the atmosphere. The Protecting Airport Communities from Particle Emissions Act, which I recently reintroduced in the 116<sup>th</sup> Congress, will help to answer many of these questions. This legislation seeks to improve the current science in this area by directing the Federal Aviation Administration (FAA) to partner with the National Academy of Sciences (NAS) to conduct a national study of UFP generation and dispersal around major hub airports, like Sea-Tac Airport in Washington state and others around the country.

Drawing from data provided by agencies like the FAA, the Environmental Protection Agency (EPA), and Health and Human Services (HHS), among others, a FAA-NAS study would investigate the characteristics, primary sources, and potential health effects of UFPs. Its scope would be national and examine UFP pollution surrounding several of the most significant airports serving some of the United States' most sizable metropolitan areas, including: Washington, D.C.; Los Angeles-Southern California; Seattle; San Francisco Bay Area; Phoenix; New York; Chicago; Boston; and Atlanta. It would also identify any information gaps in the current science on this issue in order to better inform the regulation of UFPs.

Communities have a right to know whether the air they breathe contains high levels of UFPs and how these particles affect their health. I would welcome the support and

expertise of Members on this committee to advance the scientific understanding of ultrafine particles through the research proposed in my legislation. It is crucial that we in Congress fight to reduce the impacts from aviation on surrounding areas while ensuring that our airports remain vital economic engines.

I appreciate the Committee's consideration of these priorities and its ongoing work to improve our nation's environment and infrastructure. As we focus restoring and improving our roads, bridges, ports, and water and aviation infrastructure, we must take care to mitigate the impacts that the movement of goods and people can have on the environment and Americans.