

On behalf of the National Organization to Insure a Sound-Controlled Environment (N.O.I.S.E.), we thank the FAA for the opportunity to provide comment on the historic, long awaited Neighborhood Environmental Study (NES), released in January 2021.

N.O.I.S.E. has served for over five decades as America's only nationwide, community-based organization committed to reducing the impact of excessive aviation noise on local communities. Our member communities are diverse in size and geography, but are all dedicated to working with their residents, airports, and the FAA to find reasonable solutions to the impacts of aviation noise. We believe the release of this study and its finding, that an increased percentage of people are highly annoyed by aviation noise, is a vital first step in that important task.

Our organization has long supported NextGen and its goal of modernizing the air traffic control system. We understand the need to improve the efficiency and capacity of the national airspace while decreasing emissions and the impact on our environment. However, with increased air traffic volume over the last decade as well as the enhanced navigational capabilities that enable aircraft to fly more precisely, the resulting concentrated traffic corridors have a more noticeable effect on the ground that must be considered thoroughly and as a priority concern.

Aviation noise impacts are a health and an economic issue. In order to adequately understand and address the impacts of aviation noise on residents, the FAA must first establish adequate metrics to measure those impacts. N.O.I.S.E. has maintained that DNL does not represent and account for additional factors resulting from today's aircraft operations that add to annoyance. Thus it appears that residents today are more sensitive to average noise (as measured by DNL) when in reality they are also reacting to new annoying factors. The recently released NES supports this assertion in the strongest terms.

N.O.I.S.E. would like to offer considerations for the types of metrics that should be evaluated to adequately measure true noise impacts.

As DNL is an average and humans do not perceive noise in averages but rather as individual events, we believe it is time to investigate alternative metrics that could measure impacts such as:

- The psychological impact of concentrated, extended noise
- The physiological /cardiovascular impact of infrequent, significant noise spikes during nighttime hours
- Impact of less audible low frequency noise who's vibration induces audible noise
- The length of each period of frequent, regular noise spikes "rush hours" due to over-flights
- The number of rush hours per day
- The average dB of a rush hour's noise—not day-night average
- The intensity of spikes above the ambient dB during rush hour noise
- The intensity and number of spikes above the ambient, for non-rush hours from 10 PM to 7 AM

Investigating a more appropriate metric to measure aviation noise impacts is crucial and will supplement efforts to greater engage the community to understand their concerns. We believe the FAA has taken strong measures to improve community engagement when implementing NexGen and other NAS changes. This culture should extend to each regional office and control tower in the most robust manner. In relation to the next steps of this study, this public comment period should represent the first step in a public engagement process. We know that the FAA sees value in communicating with airport noise roundtables and we also have long advocated for the establishment and support of functioning roundtables. We believe the FAA should invest resources and transparent communication practices with healthy roundtables and empower communities to create frameworks that represent the real needs of their unique local dynamics and experiences. This sets up the FAA-Community engagement efforts to become successful.

We know our National Airspace System is very large and complex and understand that the study, testing, and implementation of new metrics to measure noise impact is a large-scale, expensive undertaking. We do not ask lightly that this be a main focus of the FAA over the next decade and beyond because we believe that now is time to shape the next 50 years of federal policy that includes noise mitigation and abatement as a strong pillar. The stakeholder community should not miss this opportunity to address this very serious need.

Our members and Board wish to be an ally and partner to the FAA in this endeavor. We believe that communication and transparency will only aid this effort, not slow it down. We understand and are ready to advocate to Congress to fully fund the study and use of new metrics and look forward to a meaningful partnership as the FAA contends with the next steps of this policy change.