U.S. Department
of Transportation

**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., S.W.
Washington, D.C. 20591

November 25, 2014

The Honorable Grace Meng
House of Representatives
Washington, DC 20515

Dear Congresswoman Meng:

Thank you for your September 12 letter, cosigned by your congressional colleagues, requesting the Federal Aviation Administration (FAA) expedite noise research and lower the Day-Night Average Sound Level (DNL) standard from 65 to 55 decibels (dB), as well as to use the Next Generation Air Transportation System (NextGen) to minimize airplane noise.

The FAA established the DNL 65 dB noise metric and related land use compatibility guidelines in 14 CFR part 150 in 1981 in response to the Aviation Safety and Noise Abatement Act of 1979 (ASNA). In ASNA, Congress directed the FAA to establish by regulation a single system for measuring noise for which there is a highly reliable relationship between noise exposure and surveyed reactions of people to noise and to identify land uses that are normally compatible with various exposures of individuals to noise. The DNL metric was recommended to the FAA by the Environmental Protection Agency (EPA). The scientific underpinnings of the DNL 65 dB level are the result of social surveys in the 1970s of community reactions to transportation noise. This data was updated, enhanced, and re-analyzed in the late 1980s and early 1990s, producing the same results.

The FAA is sensitive to the growing public concerns about aircraft noise, however, it cannot make a change to a metric without a sufficient body of scientific support. Accordingly, we are currently undertaking an ambitious research project to update the scientific evidence of the relationship between aircraft noise exposure and its effects on communities around airports in today's context of quieter aircraft, but with more aircraft operations than in the 1980s and 1990s and heightened environmental awareness. Furthermore, while we understand the interest in completing this research quickly, compressing the time scale is challenging given that much of the work is necessarily sequential.

The framework for the FAA's national study was developed through the Transportation Research Board Airport Cooperative Research Program (ACRP). The ACRP project, which developed a noise survey methodology and draft questionnaire, was completed in July. The FAA is currently engaged in the Federal approval processes required for proposed surveys. Once approved, the national survey will be carried out by telephone and mail around selected U.S. airports. The survey will span 1 year to capture seasonal effects on noise exposure resulting from weather related variations in aircraft operations and residents' habits. We anticipate completing the analysis of survey results in mid-2016. These results will then be used to determine whether

changes to the FAA's use of the DNL 65 dB noise metric are warranted. If changes are determined to be warranted, revised policy and related guidance will be proposed and will be subject to interagency coordination and public review.

This methodical approach is important to ensure the scientific and policy integrity of the FAA's determination of significant noise impact, consideration of the compatibility of land uses with aircraft noise levels, and justification for Federal expenditures on noise mitigation measures such as sound insulation. For these purposes, the FAA cannot rely on the 1974 report by the EPA, which was not specific to aircraft noise or the factors of interest to the FAA and emphasized that the noise levels in the report are not to be construed as standards, criteria, or regulatory goals.

It is important to emphasize that the FAA is continuing robust efforts to reduce aircraft noise nationwide and that these efforts produce substantial benefits not only at DNL 65 dB, but also at DNL 55 dB. Most of the 90 percent reduction in the number of people exposed to significant aircraft noise in the U.S. since 1975 has been due to quieter aircraft. Quieter aircraft have reduced all noise levels around airports, and this has been accomplished despite substantial growth in aviation activity.

Your letter encourages us to utilize NextGen to minimize noise. The FAA's Continuous Lower Energy, Emissions and Noise (CLEEN) program is a component of NextGen to accelerate development and commercial deployment of environmentally promising aircraft technologies and sustainable alternative fuels. The CLEEN noise technology goal is to develop and demonstrate certifiable aircraft technology that can reduce aircraft noise levels by 32 dB cumulative, relative to the most recent Stage 4 noise standard. Again, the noise benefits are broad and are not specific to the DNL 65 dB noise level. With respect to the implementation of NextGen operational procedures, the FAA considers potential noise impacts, as well as emissions and other environmental concerns, in reviews under the National Environmental Policy Act. Procedures such as continuous descent approaches that you mention produce benefits at noise levels below DNL 65 dB.

In summary, the FAA is taking the necessary steps to review and update the scientific underpinnings that guide the selection of the appropriate noise metric threshold, and we are strongly committed to continuing to reduce aircraft noise in ways that provide benefits to communities both above and below DNL 65 dB.

We have sent an identical letter to each of the cosigners of your letter.

If I can be of further assistance, please contact me or Roderick D. Hall, Assistant Administrator for Government and Industry Affairs, at (202) 267-3277.

Sincerely,

Michael P. Huerta
Administrator