April 14, 2021

TO: Veronica Bradley, Director, Environmental Affairs
Nancy N. Young, Vice President, Environmental Affairs
Airlines for America
1275 Pennsylvania Avenue, NW Suite 1300
Washington, DC 20004

CC: The Honorable Pete Buttigieg, Secretary of Transportation Department of Transportation 1200 New Jersey Ave, SE Washington, DC 20590

Members of the Congressional Quiet Skies Caucus

Airlines for America Members: Alaska Airlines, Inc., American Airlines, Inc., Atlas Air, Inc., Delta Air Lines, Inc., Federal Express Corporation, Hawaiian Airlines, JetBlue Airways Corp., Southwest Airlines Co., United Airlines Holdings, Inc., and United Parcel Service Co. Air Canada, Inc. is an associate member.

Dear Ms. Bradley and Ms. Young:

Our groups represent airline customers and communities impacted by aviation noise nationwide (see list below of supporting organizations). We are responding to your organization's (A4A's) National Environmental Survey (NES) comments submitted to the National Register dated April 2, 2021. We welcome your reply to info@AviationImpactedCommunities.org.

Below is a list of specific responses to A4A's comment letter on the FAA's Neighborhood Environmental Survey (NES), dated April 2, 2021.

#### A4A Comment - #1

Airlines for America<sup>1</sup> (A4A) appreciates the opportunity to comment on FAA's aircraft noise research activities to inform aircraft noise policy. With a strong track record of deploying new, quieter technology and implementing noise abatement operational procedures, the U.S. airlines have played a critical role in the tremendous reductions in aircraft noise exposure achieved in the United States to date.

<sup>&</sup>lt;sup>1</sup>A4A's members are: Alaska Airlines, Inc., American Airlines, Inc., Atlas Air, Inc., Delta Air Lines, Inc., Federal Express Corporation, Hawaiian Airlines, JetBlue Airways Corp., Southwest Airlines Co., United Airlines Holdings, Inc., and United Parcel Service Co. Air Canada, Inc. is an associate member.

#### Impacted Communities Response - #1

Quieter aircraft engines alone do not offset the increased levels of noise generated by ever larger aircraft frames and the way that aircraft fly at high frequency using highly concentrated flight tracks at low altitudes. Flight Management Systems also play a role as they are not designed to minimize noise over residential communities.

We would like to request that A4A share examples to illustrate its statement that its members have "... *a strong track record of...implementing noise abatement operational procedures.*" Please verify where and when noise abatement solutions were implemented, particularly in communities outside the 65 DNL contour that are not in the immediate airport vicinity. Please mention what results were achieved and whether such procedures are still in place today given that NextGen procedures have routinely eliminated noise abatement procedures that had been in place for decades.

### A4A Comment - #2

Indeed, FAA data confirm that the number of people exposed to significant levels of aircraft noise in the United States has dropped by 94 percent between 1975 and 2019, even as enplanements increased by 379 percent. At the same time, A4A and our members appreciate that any particular person experiencing aircraft sound may have a negative experience, and we strongly support the array of aircraft noise management regulations and procedures in place to address this.

### Impacted Communities Response - #2

Given the NES results, we urge the FAA, A4A, and others to retire the use of the misleading and unsupported claim that "...the number of people exposed to significant levels of aircraft noise in the United States has dropped by 94 percent between 1975 and 2019, even as enplanements increased by 379 percent." This statement is misleading for many reasons, including the fact that it is based on the definition of 65 DNL as a "significant level of noise," which the NES has now debunked.<sup>2</sup> We encourage the airline industry to update their communications to acknowledge and accurately represent the NES results, which the FAA does not refute. The NES study captures an accurate and up-to-date representation of aircraft noise impacts for people on the ground. Comparing the Schultz curve to the new National Curve establishes that a *much* greater proportion of people are highly annoyed by aircraft noise across all levels of DNL than was previously thought. Although fewer people may be exposed to the FAA's permissive, outdated interpretation of a "significant level" of aircraft noise, what really matters is that people are more highly annoyed at every level of DNL than previously thought.

<sup>&</sup>lt;sup>2</sup>For transparency purposes, we have asked the FAA to provide data to substantiate A4A's claim that, "FAA data confirm that the number of people exposed to significant levels of aircraft noise in the United States has dropped by 94 percent between 1975 and 2019, even as enplanements increased by 379 percent."

#### A4A Comment - #3

In addition to taking action to further reduce aircraft noise, as FAA is aware, A4A and our members have and continue to be active participants in the NextGen Advisory Committee and supported the task group that developed recommendations and best practices for community engagement for large and small NextGen projects, much of which centered on engaging with the community regarding aircraft noise exposures.

### Impacted Communities Response - #3

The NextGen Advisory Committee (NAC) consists of thirty members and one member who is referred to as an "environment" representative.<sup>3</sup> The NAC, in short, includes only token representation from communities at best. For example, the NAC Report *Blueprint for Success to Implementing Performance Based Navigation, October 2014*,<sup>4</sup> involved one community representative and 37 industry-affiliated representatives. Given its stated support for community engagement, we urge A4A to advocate for an expanded number of NAC members to represent community interests. The implementation of NextGen around the country has caused noise complaints to increase by orders of magnitude and lawsuits to proliferate. Strategies to reduce noise impacts continue to be underused. We urge the A4A to take more meaningful actions to reduce noise impacts and change noise policy in all of its collaborations with the FAA.

### A4A Comment - #4

We appreciate the effort FAA has put in to updating its community engagement policies to reflect these recommendations and understand the many facets of aircraft noise impacts that must be weighed against the myriad benefits aviation brings to society when addressing these issues at a local level and also when used to help inform and develop national policy.

#### **Impacted Communities Response - #4**

A4A touts "...the many facets of aircraft noise impacts that must be weighed against the myriad benefits aviation brings to society...". This is a highly questionable assertion, considering the DOT's March 30, 2021 report, NextGen Benefits Have Not Kept Pace With Initial Projections, but Opportunities Remain To Improve Future Modernization Efforts.<sup>5</sup> Note that the DOT report does not mention or quantify the negative health and environmental impacts caused by NextGen, which further undermine the net benefits of aviation to society. "Over the last decade, FAA and industry have invested significantly in NextGen and achieved a relatively small percentage of the expected benefits from new capabilities."<sup>6</sup>

<sup>&</sup>lt;sup>3</sup>https://www.faa.gov/about/office\_org/headquarters\_offices/ang/nac/media/NAC\_Membership.pdf <sup>4</sup>http://jetstream.jetcraft.com/wp-content/uploads/2014/10/FINAL-Recommendation-Blueprint-for-Success-to-Implementing-PBN.pdf

<sup>&</sup>lt;sup>5</sup>https://www.oig.dot.gov/sites/default/files/FAA%20NextGen%20Delivery%20Study\_03.30.2021.pdf <sup>6</sup>ibid.

Given the tradeoff between the well-established noise and health impacts to people on the ground versus the benefits to industry and society, how does A4A account for NextGen's underachievement of benefits for all the Metroplexes, and in particular the net negative benefit for the NorCal Metroplex, at the public expense? Displayed below are the estimated NextGen benefits from the Inspector General Department of Transportation Report on FAA's NextGen implementation dated August 27, 2019.<sup>7</sup>



Figure 4. Metroplex Implementation Sites Pre- and Post-Implementation Estimated Annual Benefits (in Millions)

## A4A Comment - #5

A4A and its members continue to support and actively engage with the FAA and communities when airspace modifications are being considered and believe it is an effective process for addressing all stakeholder concerns and developing solutions to help mitigate noise impact.

#### **Impacted Communities Response - #5**

We request A4A to provide examples to support its statement. Please specify public and community groups (not affiliated with the aviation industry) who were engaged, where and when such activities occurred, and what noise mitigation results were achieved.

<sup>&</sup>lt;sup>7</sup>https://www.oig.dot.gov/sites/default/files/FAA%20Metroplex%20Program%20Final%20Report%5E08-27-19\_0.pdf

#### A4A Comment - #6

First, the NES does not include a "control group" in its survey methodology. In scientific experiments, control groups are used to ensure the independent variable being tested does not influence the results. This is done to assist in ruling out alternative explanations for the experimental results. It is well established that control groups can also be important in survey research intended to assess potential correlation and/or causation between survey recipients' exposures or experiences with their psychological impact. As noise exposures are myriad throughout the country, the NES should have included a control group outside an area in the vicinity of an airport to understand how the independent variable, here aircraft noise exposure expressed as DNL, affects a population's annoyance level, and the degree to which other factors – including preconceived notions or perception – may influence the public's annoyance level.

#### **Impacted Communities Response - #6**

The Neighborhood Environmental Survey was not an experimental study. A control group of people who do not experience aviation noise would add nothing to the ability to predict the percentage of Highly Annoyed people (%HA) relative to a location's DNL value. Control groups are not used in survey designs unless the purpose is to determine factors that might affect response rates. The NES included a rigorous analysis for potential survey response bias and found none. This was an "observational" study that used a survey to obtain the dependent variable for the regression model. Consistent with this, the FICON 1992 project did not have a control group and neither did the Shultz curve methodology.

The range of observed %HA for a given DNL is not surprising given the FAA's chosen airport sampling frame, which identified 95 airports for possible inclusion, and the balancing factors that were used to select the final 20 airports. The narrowness of the confidence interval indicates that DNL accounts for a large proportion of the variance in responses. The NES analyses produced a regression model that indicates with 95% confidence the percent of individuals who are highly annoyed by aircraft noise at DNL values starting at 50 dB, which is the lowest DNL value studied in the NES. As an example of the precision of the regression model's predictions, when DNL is 55, the estimated percent of those who are highly annoyed is 32.1 with a margin of error of only 4.5%. Although the margin of error changes slightly at other levels of DNL, it is never more than 5%. In short, the NES results are quite robust.

The assumption that locations that are not in the vicinity of the airport do not have airplane noise is outdated. The NES included participants located in 50 dBA DNL noise exposure locations, but did not distinguish between locations near airports or further away from airports. Away-from-airport communities would typically be the ones exposed to 50 dBA DNL noise levels. For example, 244 noise events per day were reported on average over a 2-month period in Palo Alto, CA, which, at its closest, is 16 miles from the SFO airport. The Aircraft CNEL was 52 dBA, which is almost 10x more sound energy than the average ambient noise level of 42 dBA. Although not included in the NES survey (because SFO was not part of the sample), residents of this away-from-airport city are "highly annoyed" by aircraft

noise. Indeed, the NES predicts 23.7% are "highly annoyed" at 52 DNL - almost twice as many as were previously thought to be annoyed at 65 DNL.

### A4A Comment - #7

Notably, the reported results of the NES appear to confirm that aircraft noise exposure alone cannot account for reported annoyance as the difference in the percent of the population determined to be highly annoyed varies widely (anywhere from 5 to 40 percent of the population) at the same noise exposure level across the airports surveyed. It is particularly important to be able to assess how much factors aside from actual aircraft noise exposure may influence the public's annoyance level.

### Impacted Communities Response - #7

We agree that aircraft noise exposure and reported annoyance cannot alone account for the differences in the percent of the population annoyed between the recent NES results and decades-old results. Previous studies (Schultz curve, FICON study)<sup>8</sup> underestimated aircraft annoyance because they included all transportation noise (e.g., road and rail) and used a mix of older, less robust methodologies. The NES study is specifically about aircraft noise annoyance and uses state-of-the-art methodologies for its design and modeling. The NES results show that a *much* greater proportion of people are highly annoyed by aircraft noise across all levels of DNL than was previously thought. It does not show that people are more sensitive to noise than in the past.

The variations in annoyance levels in the 50 dB exposure areas that A4A is mentioning could be due, in whole or in part, to the lack of accuracy of the noise model for locations impacted by aircraft noise further away from airports. Dr. Hileman, Chief Scientific and Technical Advisor for Environmental at the FAA, has acknowledged the limitations of the noise model in the current AEDT 3b version, which was released in September 2019. Note that the NES did not even use AEDT. Instead, it used version 7.0d of the Integrated Noise Model (INM), which was the model in place before AEDT. Needless to say, that if AEDT 3b has limitations, then INM had even more severe limitations. Furthermore, the FAA noise model to calculate noise exposure does not fully account for critical factors such as aircraft configuration and has not been validated against actual noise measurements for away-from-airport locations. Calibrations of the model have been done based on tests for engine noise certifications that are conducted in areas that are less than 4 miles from a runway.

It is also worth noting that since the NES study was completed prior to the implementation of Performance Based Navigation in most of the study areas, additional annoyance over and above that found by the study is now to be expected, given the high concentration of aircraft from multiple procedures and vectoring paths flying in "dirty" configurations at low altitudes over cities and formerly

<sup>&</sup>lt;sup>8</sup>https://www.faa.gov/airports/environmental/airport\_noise/

quiet communities. In many cases, noise has been moved to areas that are highly incompatible (such as hillside terrain where noise from aircraft is amplified and exacerbated by echo) and to areas that never had aircraft noise issues before.

#### A4A Comment - #8

Second, we question FAA's use of the five-point scale and the significant weighting of the top 40% of it as "highly annoyed."

### Impacted Communities Response - #8

It is common scientific practice to dichotomize a five-point (Likert) scale by grouping the top two or bottom two categories, basing the decision on which to combine on the wording for the five possible responses. For this study, respondents had the choice of "Not at All," "Slightly," "Moderately," "Very," and "Extremely." It could be argued that "Moderately" is more like "Very" and "Extremely" than it is like "Not at All" and "Slightly," but the researchers took a more conservative definition of annoyance and only included the top two categories. It is reasonable to include "Very" annoyed in the definition of Highly Annoyed, and, of course, "Extremely" annoyed belongs there too.

## A4A Comment - #9

Third, while appreciating that FAA will consider the implications of the NES results relative to potential changes to the long-established thresholds for noise exposure policy response in a later step, we note that none of the NES's dose-response curves that FAA postulated contain natural inflection points that could assist FAA in assigning thresholds of significance in national noise policy. As such, any determination of a significance threshold could be arbitrary without additional research into co-determinants of adverse community response to aircraft noise exposure or research that could otherwise provide evidence of an appropriate threshold.

#### Impacted Communities Response - #9

Respectfully, we see this logic as flawed. Annoyance and adverse health outcomes are the relevant human factors for determining policies affecting the public health and welfare. For more than four decades, the FAA has defined significant noise impact as 65 DNL based on the observation that 12.3% of respondents were thought to be highly annoyed by **transportation** noise at 65 DNL or greater. The FAA has never documented its reasons for defining significant noise impact as 65 DNL. If the 12% threshold was acceptable to define significant impact for more than 40 years, then surely it must be acceptable now and applicable to the NES results. If the same 12% threshold is applied to aviation noise and the prediction curve from the NES study is used, significant noise impacts occur well below 50 DNL. The raw data from the NES study also do not show an inflection point and indicate that if one exists, it is well below 50 dB. And, like the prediction model, the raw data indicate that the DNL value at which only 12% of respondents are Highly Annoyed is much less than 50 dB. Therefore, the important take-away

message is that significant aviation noise occurs at DNL values much less than 50dB, with or without an observed inflection point.

## A4A Comment - #10

While it may be logical to use an aviation-specific dose-response relationship between noise exposure and individual annoyance in setting aviation noise policy, there remains a question how FAA should assign an aviation-specific threshold of significance for noise exposure, which could inappropriately penalize aviation activity relative to other modes of transport.

## Impacted Communities Response - #10

The FAA has an ethical obligation to change regulations that are detrimental to the public, that are under its authority, and that do not require new legislation. Setting an aviation-specific threshold of significance for noise exposure is about finding the right balance for significantly affected stakeholders, which the NES survey has shown to include far more members of the general public than had previously been assumed. Rebalancing policy is not about penalizing or rewarding aviation activity. NextGen and other aviation changes have fundamentally changed the impacts to people on the ground. The aviation industry should not ask for favoritism if it is uniquely causing harm.

# A4A Comment - #11

Regulatory policy is intended to balance societal interests.

# Impacted Communities Response - #11

We agree that regulatory policy is intended to balance societal interests. However, the current systems used by the FAA to assess, report, and address aviation-caused noise and health impacts do not balance societal interests and do not reflect the state of aviation operations in the 21<sup>st</sup> Century. FAA noise policy changes are long overdue. The disconnect between the Shultz curve and the new National Curve shows, in stark terms, that we have a long way to go to restore the balance that was previously thought to exist.

## A4A Comment - #12

Additional research is needed to support a more reliable system that demonstrates the relationship between noise exposure and community response, thereby allowing for a data-driven rationale for FAA decision making.

## Impacted Communities Response - #12

We do not need research for new metrics, or other areas of study, in order to immediately change noise policy in ways that finally begin to address the harm that has been substantiated by the new NES data. We ask that the airlines not stand in the way of relief from noise and emissions for people on the ground. It is time to make policy changes instead of delays, deflections, or denials.

Concurrently with immediate changes to noise policy made in accordance with the NES study, we advocate and respectfully ask A4A to support the convening of a National Academies panel of multidisciplinary experts to explore existing metrics or recommend a new *system* of metrics and thresholds to define "significant impact" from aircraft noise. The panel should include noise experts, public and medical health professionals, sleep experts, and acoustical engineers, among others. The panel should take into consideration, among other things: the NES results, the difference between local noise environments (ambient noise) and aircraft-induced noise, and nighttime noise. At a minimum, the panel should investigate the following metrics: N-Above, C-weighted dB, and DNL from 40-75+. It is imperative that the panel be independent and the results be peer-reviewed, and completed by the end of 2022.

#### A4A Comment - #13

As the industry has made tremendous strides to reduce aircraft noise exposure through technological and operational advances, haphazard development of incompatible land uses near airports allowed through poor land use planning has unfortunately eroded these gains. Airline and passenger charges have provided several billion dollars over the last several years for sound insulation and other noise mitigation for those in the vicinity of airports; however, studies show that individuals continue to move into existing noise contours around airports. As FAA considers its national noise policy, it should therefore ensure proper integration of the role more effective land use management and zoning provisions can play in preventing aircraft noise exposure in the first place.

## Impacted Communities Response - #13

The Airline industry is a recipient of taxpayer support to a degree that trivializes taxpayer investments in sound insulation and noise mitigation. Three multi-billion dollar packages have been approved in the last year alone: the American Rescue Plan Act of 2021 allocates \$15 billion, including \$14 billion to workers of carriers and \$1 billion for contractors to the air carriers until September 2021; the CARES Act in March 2020 provided \$58 billion in grants and loans to passenger air carriers and secured jobs through a payroll support program; and in December 2020 the US Government approved a program, "PSP2," which gave another \$15 billion for payroll aid to run through March 2021.<sup>9</sup>

These recent taxpayer subsidies of the airline industry are over and above the pre-existing and substantial subsidies that the airline industry receives. At the same time, the airline industry does not bear the cost of the noise and air pollution that it emits upon American communities and their residents each and every day.

While it is true that some people continue to move into areas in the immediate vicinity of airports, it is also true that a significant amount of airplane activity has moved into neighborhoods far from airports that never wanted, anticipated, or agreed to it. A4A's statement that "the industry has made tremendous strides to reduce aircraft noise exposure through technological and operational advances" should be qualified: aircraft noise exposure may have been reduced within 65 DNL contours, mainly

<sup>&</sup>lt;sup>9</sup>https://www.flightglobal.com/strategy/us-government-considers-third-aid-package-for-airlines/142378.article

because of quieter engines, but aircraft noise exposure has increased significantly for residents of many communities outside the 65 DNL contours who are under the newly designed PBN flight paths and associated vectoring.

# A4A Comment - #14

Lastly, A4A would like to express support for FAA's determination that DNL continues to be the appropriate single system for setting noise policy pursuant to the Aviation Safety and Noise Abatement Act of 1979 and per FAA's 2020 Report to Congress.<sup>10</sup>

# Impacted Communities Response - #14

The FAA's April 2020 Report to Congress on alternative noise metrics and the 65 DNL standard for airplane noise failed to fulfill the requirements of sections 173 and 188 of the FAA Reauthorization Act of 2018.<sup>11</sup> The report merely describes DNL and a number of alternative metrics while offering a biased, incomplete, and at times scientifically inaccurate comparison of DNL to those alternatives. A credible evaluation of alternative noise metrics and the 65 DNL standard would address the correlation between each metric and the known noise impact on communities. Twenty-nine members of Congress sent a letter dated September 23, 2020 to FAA Administrator Dickson stating that, "After conducting a detailed review of the FAA's report, we find it wholly inadequate, failing to meet the mandate in the law."<sup>12</sup>

# A4A Comment - #15

DNL is appropriate for use in national policy as a tool to predict an individual's cumulative noise exposure. And, by its very definition DNL incorporates a penalty for effects associated with noise exposure during nighttime hours. Improved understanding of the impacts of aircraft noise exposure on human health may not therefore necessitate a complete overhaul of FAA's national noise policy where research outcomes provide further support of current policies, like the use of DNL.

## Impacted Communities Response - #15

The NES casts serious doubt on using 65 dB DNL to determine "significant impact," given that the NES establishes that the number of highly annoyed people is an order of magnitude higher than previously thought.

Congress asked for a single *system*, not a single *metric* (DNL) (<u>US Code 49, Section 47502</u>).<sup>13</sup> That system is supposed to have a highly reliable relationship between projected noise and people's reactions to

<sup>&</sup>lt;sup>10</sup>Federal Aviation Administration, Report to Congress: FAA Reauthorization Act of 2018 (Pub. L. 115- 254) Section 188 and Sec 173 (Apr. 14, 2020).

<sup>&</sup>lt;sup>11</sup>https://www.faa.gov/about/plans\_reports/congress/media/Day-

Night\_Average\_Sound\_Levels\_COMPLETED\_report\_w\_letters.pdf

<sup>&</sup>lt;sup>12</sup>https://norton.house.gov/media-center/press-releases/norton-bass-and-27-house-members-send-letter-to-federal-aviation

<sup>&</sup>lt;sup>13</sup>https://uscode.house.gov/statutes/pl/96/193.pdf

noise. **DNL alone meets neither of these criteria.** In addition, the current FAA DNL threshold is fixed at 65 dB. It is the same for everyone, regardless of a community's ambient noise levels. Away-from-airport residential communities that are typically quiet will never be able to reach 65 dB DNL levels due to aircraft noise. For example, in Palo Alto, CA, reaching 65 dB CNEL would require almost 5,000 noisy planes *per day* versus the roughly 250 it currently has. This would be an airplane every 17.7 seconds in a 24-hour period. This example shows that the current definition of "significant impact" at 65 dB DNL is fundamentally flawed, especially for communities outside the 65 DNL contour. It does not come anywhere close to protecting public health and welfare.

Setting aside the question of whether DNL could be used as the sole noise metric to determine impact in the immediate vicinity of an airport, DNL alone probably is not enough two miles away from the airport, and DNL alone definitely does not work far away from airports in communities that nonetheless experience life-altering noise impacts from aircraft. DNL does not accurately reflect how people experience noise because DNL averages noise: 1 very loud airplane and 100 less loud airplanes have the exact same DNL. **People do not hear noise averages**. People hear individual noise events that exceed the ambient noise level, and they are affected by the loudness, frequency, and duration of the noise events. Well-established, non-DNL metrics, such as N-Above and Time-Above, can capture these important characteristics. DNL as a single metric for measuring aircraft noise was adopted in the early 1970s. Since that time, NextGen has fundamentally altered how and where aircraft are flown, creating a wholesale transformation in the way aircraft depart and approach airports -- transformations which have discredited the FAA's continued reliance on the DNL metric as the only metric for conducting environmental reviews and FONSIs.

## Conclusion

The magnitude of the shift in understanding of human annoyance caused by aircraft noise conveyed by the new National Curve relative to its predecessors presents an imperative call for immediate action. Research is not needed to tell us that much higher volumes of operations, aircraft concentration, and the use of PBN and Flight Management Systems have greatly amplified the aircraft noise problem.

We ask A4A to support and encourage the FAA to immediately take common-sense actions based on the NES results, in order to relieve the harm caused by aircraft noise to our communities. Such immediate, common-sense actions include, but are not limited to:

- Acknowledge that the NES results replace the Schultz and FICON numbers.
- Provide a timeline to address the FAA's current interpretation of "significant impact" and its associated implications on FAA noise policies, processes, and regulations.
- Commission the National Academies to recommend a reliable system of metrics and thresholds to represent "significant impact" for all communities (at the airport, near the airport, and away from the airport), with the results to be available by the end of 2022.
- Adopt interim metrics and thresholds for significant impact while developing a revised framework on noise policies, processes, and regulations.

 Report additional metrics and improve data reporting to better capture the true impacts of noise in all noise impact analyses. Reports should include metrics such as N-Above, utilize Cweighted dB not just A-weighted, display results in 5 dB increments between 45 and 80 dB, and show results in 6-hour blocks and during peak traffic periods in addition to 24-hour averages.

A4A plays an important role in the aviation noise policy space, and we thank you for considering our comments on behalf of aviation-impacted communities.

#### Signatories:

#### **National Organizations**

aiREFORM Aviation-Impacted Communities Alliance (AICA) National Quiet Skies Coalition NextGenNoise.Org NextGenRelief Sky Justice National Network Special Metro Airports Analysis Center (SMAAC)

#### **State/Local Organizations**

Advocates for Viable Airport Solutions, CA Bay Area Jet Noise, CA **BOS Fair Skies, MA** Bucks County Residents for Responsible Airport Management (BRRAM) Burbank for Quiet Skies, CA Citizens Against Gillespie Expansion and Low Flying Aircraft (C.A.G.E.L.F.A), CA Citizens Against Runway Expansion (C.A.R.E.), CA Citizens for Quiet Skies, CO Concerned Residents Against Airport Pollution (C.R.A.A.P.), CA Concerned Residents of Brisbane, CA Concerned Residents of Palo Alto, CA Culver City for Quiet Skies, CA FAiR Chicago, IL Hull Neighbors for Quiet Skies, MA Keep It Down Up There, CA Logan Aircraft Noise Working Group, MA Montgomery County Quiet Skies Coalition, MD Montgomery-Gibbs Environmental Coalition, CA Oregon Aviation Watch, OR Quiet Skies Boulder County, CO Quiet Skies La Jolla, CA Quiet Skies Maui, HI

Quiet Skies Northeast Miami-Dade County, FL Quiet Skies Puget Sound, WA Quiet Skies Santa Monica Mountains, CA San Francisco's Concerned Residents Experiencing Annoying Aircraft Maneuvers (S.C.R.E.A.A.M.), CA Santa Clarita for Quiet Skies, CA SCANA (Scottsdale Coalition for Airplane Noise Abatement), AZ Sherman Oaks & Encino for Quiet Skies, CA Sky Justice Miami, FL Sky Posse Los Altos, CA Southern Maryland Fair Skies Coalition, MD Stop the Chop NY/NJ Studio City for Quiet Skies, CA Sunnyvale / Cupertino Airplane Noise Group - Save My Sunny Skies, CA Trenton Threatened Skies, NJ UproarLA, CA Vashon Island Fair Skies, WA West Adams for Quiet Skies, CA