DOT Request for Information on Advanced Air Mobility (AAM) August 10, 2023



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Lauralyn Jean Remo Temprosa, Associate Director Office of Aviation Analysis, Office of the Secretary U.S. Department of Transportation Washington, DC

Dear Ms. Temprosa:

The attached comments on critical issues of importance for a national strategy on Advanced Air Mobility (AAM) are submitted by the Aviation-Impacted Communities Alliance (AICA). The AICA includes 70+ groups across the country protecting communities from harmful levels of aviation noise and pollution. An Advanced Air Mobility environment must work for all.

This comment is in addition to any previous comment.

- 1. The AICA fully supports the comment submitted by Studio City for Quiet Skies, Comment ID DOT-OST-2023-0079-0021: https://www.regulations.gov/comment/DOT-OST-2023-0079-0021
- 2. State¹ and local governments, not the federal government, should control
 - a. AAM airspace lease laws,
 - b. AAM avigation easement laws,
 - c. AAM laws that vest landowners with air rights,
 - d. AAM nuisance, privacy, trespassing, licensing, insurance requirements, land use, zoning, police operations, and operating unmanned aircraft under the influence or other policing laws.

State and local governments laws should control all aspects of AAM within their boundaries including locations of flights, low altitude airspace, electricity demands, land use, infrastructure, and aircraft operations (e.g., EVTOL helicopters and drones for local law enforcement, commercial and personal activities –passenger or packages). Federal regulations that conflict with state and local laws or that do not protect the well-being of residents should not be set by FAA and/or industry-dominated FAA committees. State and local government are best suited to balance decision making to include the impacts to their communities with industry interests.

¹We are against Uniform State Laws for Aeronautics that do not protect residents' privacy, security, health, and quality of life.

Absence of state or local government AAM airspace lease laws, AAM avigation easement law or landowners air rights law must default to the property-owner having the unquestionable right to deny AAM overflight in the airspace above or in the vicinity of the owner's property.

We define State or local government

- AAM airspace lease laws: laws that allow or that deny state and local authorities to lease airspace above public roadways,
- AAM avigation easement laws: laws that create or deny avigation easement over public or private property,
- AAM landowner air rights laws: laws that vest landowners with air rights.
- 3. Conduct rigorous, transparent, and independent research on the real and potential negative impacts of AAM to identify unacceptable environmental impacts to avoid altogether.² The perspective of directly and substantially affected communities who will or could experience the negative impacts of AAM must be adequately represented. We request the following research:
 - A National Academies peer-reviewed report to assess and determine a system to measure aviation noise impacts and annoyance to address the expected AAM environment.
 - O A noise exposure and contour study on multiple metrics (DNL, N-above Lmax, T-above Lmax) based on AAM early pilot implementations.
 - A cost benefit analysis of AAM.
 - O A study on the Environmental Impacts of AAM.
 - A study on the Governance options and implications for AAM.
 - A study on Communities' Security and Privacy Concerns of AAM.
 - O A National Academies study of the Public Health Impacts of AAM.
- 4. The evaluation and decision making for environmental impacts, including AAM, should relate to and represent the layperson's lived experience by using the realistic metric of N-Above in Lmax bands, some reasonable threshold(s) for significant impacts, some ambient noise consideration, and should include total noise and visual impacts. Pursuant to 49 U.S. Code (U.S.C.) 44715, the FAA has the responsibility to "protect the public health and welfare from aircraft noise." Total impacts (noise and visual) should include ALL current aviation impacts from:
 - o multiple airports/helipads/drone launching & landing pads
 - o multiple vehicle types (including new AAM),
 - o multiple flight paths procedure or vector, and
 - o multiple specialized vehicle operations (e.g., hovering).

²Comment to FAA Research, Engineering and Development Advisory Committee, November 10, 2022, https://aviationimpactedcommunities.org/wp-content/uploads/2022/11/REDAC_Meeting-Comments-11-10-22.pdf

Noise metrics and thresholds should penalize sensitive time of day occurrences using multiple tiers versus a single penalty for nighttime and must reflect local noise environments by including ambient noise in the calculation of noise impacts.

- 5. Changes to airspace design and/or new routes for AAM must be published, must require an environmental review, and cannot use a Categorical Exclusion. The AAM implementation plan states "I28 AAM routes may include non-published routes". All routes should be published and require an environmental review. For non-administrative changes, the minimum level of NEPA review for AAM must be an Environmental Assessment. (An example of an administrative change is renaming a waypoint.)
- 6. Do not use the NextGen implementation as a best practice model for AAM because NextGen excluded the community as a key stakeholder in all FAA processes and assessments. The community engagement was flawed. "The FAA is taking a holistic approach to the efforts required for AAM implementation. The I28 leadership team in the NextGen organization (ANG) established iTeams comprised of representatives across FAA lines of business (LOBs) to bring together expertise in different areas associated with AAM implementation and foster collaboration in the planning and execution of required activities. The iTeams represent the major workstreams associated with AAM implementation, including Certification, Airspace and Air Traffic Management, Infrastructure, Environment, Hazardous Materials Safety, and Community Engagement." In addition, the current DNL and thresholds for decision making do not reflect the laymen's experience of NextGen impacts, and will not either for AAM impacts.
- 7. Do not use the outdated and inadequate FAA's Community Involvement Manual (CIM), 2016 for AAM Community Engagement. "The FAA's Community Involvement Manual provides flexible guidance and best practices applicable to all FAA actions and will be leveraged for AAM operations and I28." The CIM has not delivered on its assertions "we are accountable to the American Public," "commitment to inform and involve the public and to give meaningful consideration to community concerns and views as the FAA makes aviation decisions that affect them". The NextGen community engagement underperformed and efforts over the last few years 2020-2022 has continued this underperformance. A survey to community groups on whether FAA Community Engagement for local topics has improved, reported 31% No Improvement, 28% Worse, 28% Improvement, and 13% No Engagement/Unknown. The AAM Implementation Plan states "It is important that the public understand how these new aircraft operations will impact their communities." The public does not want understanding, it expects meaningful dialogue to address

³Advanced Air Mobility (AAM) Implementation Plan, Version 1.0/July 2023, p 10 https://www.faa.gov/sites/faa.gov/files/AAM-I28-Implementation-Plan.pdf

⁴lbid, p 15

⁵Ibid. pg 27

⁶FAA Community Involvement manual, 2016 p II

⁷FAA Community Engagement Scorecard – Is the FAA's Community Engagement Improving?, ANE Symposium, May 2023\

⁸Advanced Air Mobility (AAM) Implementation Plan, Version 1.0/July 2023, p 27

negative impacts of past FAA actions and of future FAA actions before decisions are made. The iTeams represent the major workstreams associated with AAM implementation including Community Engagement⁹ and therefore Community Engagement should be updated and evolve to reflect the emerging aviation landscape.

- 8. Urgently include Community as a key stakeholder early and in all high-level activities of the AAM Integrated Master Schedule¹⁰ instead of excluding Community in all phases prior to and including implementation. The current plan involves Community only in "Phase 5: Post -implementation".¹¹ The messaging to include the community does match the plan, "The FAA encourages communities to get involved now in these early phases, and to stay engaged"¹² and "Public engagement and education through involvement of all stakeholders will be necessary to ensure that communities understand the benefits and impacts of AAM operations, and to address any concerns they may have."¹³ The Integrated Master Schedule document shows "Community/Stakeholder Engagement"¹⁴ as a combined line item that starts at the beginning of the schedule. In fact, industry stakeholder engagement starts at the beginning, not the Community engagement. The Community engagement is only at the end of the schedule, after procedure development, evaluation and implementation per the "Detailed List of Activities in the Integrated Master Schedule Version 1.0"¹⁵.
- 9. Abandon the community engagement model of "Decide, announce, defend" ¹⁶ and instead practice "...meaningful dialogue to address negative impacts of past FAA actions and of future FAA actions before decisions are made." ¹⁷ "Formal research on airport public involvement, research on other transportation modes, and research on other institutions that deal with the public all confirm that the "we vs. they" or "decide, announce, defend" (11, p. 3) approach has failed and must transition to strengthened two-way communications to have a better chance for long-term success." ¹⁸
- 10. Innovate 28 (I28) should require that "collecting data" include environmental impacts, the type of AAM uses, and community engagement reports. There should be monitoring reports for counts of AAM events using Lmax bands in 5dB increments between 45 dB and 80 dB. The T-Above metric needs to be reported as well to capture the duration of AAM "hovering" events. Reports on community engagement activities should include the type of outreach, # and type of attendees, timing relative to the decision-making process, level of transparency, feedback on whether

⁹lbid. p 15

¹⁰Advanced Air Mobility (AAM) Implementation Plan, Version 1.0/July 2023, p 29 https://www.faa.gov/sites/faa.gov/files/AAM-I28-Implementation-Plan.pdf

¹¹Ibid. p 30

¹²Ibid. p 4

¹³lbid. p 4

¹⁴Ibid. p 29

¹⁵Ibid.

¹⁶Jackson, Margaret Campbell. Public Involvement in Transportation: Collaborating with the Customers TR New, Number 220, May-June 2002, p. 3.

¹⁷Community Engagement and DISEngagement, ANE Symposium, May 2022

¹⁸Aircraft Noise: A Toolkit for Managing Community Expectations (2009), National Academies, ACRP Report 15

information shared reflects the laymen's experience of noise and visual pollution impacts. Information on the type of AAM uses should include the number and % of operations for transporting non-medical passengers, medical personnel and patients, goods, etc. Given that AAM is an emerging aviation ecosystem, detailed data is needed for I28 implementations to increase understanding to inform advanced regulations and processes, and create a cost & benefits profile.

- 11. Require at least one Community member to serve as an Environmental representative on the FAA Advanced Aviation Advisory Committee. Such Community member, or direct relatives, must not be affiliated with, receive funds from, or provide services to the FAA or aviation industry including but not limited to airlines, airports, aircraft manufacturers, pilots' associations, flight training schools, and aviation industry consultants. An Environmental representative for the Community should not have conflict of interests and provide the voice of the Community stakeholder.
- 12. Set up a "Questions & Answers" task force in 2023, with adequate representation of potentially impacted communities, to identify and answer the common AAM concerns of the general public. "However, for this emerging industry to reach its fullest potential, it must gain the support of the general public". AAM can fundamentally alter the character of neighborhoods, cities, states, and the nation, impacting the quality of life for all. Public rejection will be a barrier to AAM implementation.
- **13.** Regulations should provide strict operational limits during sensitive hours for flyovers over any residences and should be governed by local noise ordinances set by cities. For example, package delivery or overflights should not be permitted between 6pm and 8am.
- 14. Address the issues of the Scorecard on FAA Community Engagement that are relevant to AAM¹⁹
 - Overweighting of aviation efficiency and underweighting of environmental Impacts.
 - O Community engagement is constrained because FAA's interpretations are limited to the DNL 65 threshold for Significant Impact.
 - O Communities are not co-equal with other key external stakeholders not represented, underrepresented, or questionably represented ²⁰.
 - O Current community engagement policies and processes restrict problem solving and instead the focus is on the outcome of "understanding and acceptance".
 - Deficient Collaboration such as a presentation without dialogue, shared information on impacts that is not understandable and misleading, and not notified and engaged up front.
 - Some communities are excluded: not all roundtables are engaged, some communities
 do not have roundtables, and some roundtables restrict membership based on criteria
 that have nothing to do with aircraft impacts.

¹⁹FAA Community Engagement Scorecard – Is the FAA's Community Engagement Improving?, ANE Symposium, May 2023

²⁰Community Engagement and DISEngagement, ANE Symposium, May 2022

0	Need to build trust: check the box mindset, over focus on process versus outcomes, and actions, research and presentations do not adequately address and/or represent community concerns.