

AV030 – Environmental Impacts of Aviation

STRATEGIC PLAN

UPDATED January 2016

Mission and Strategic Plan: Since its establishment as a standing committee, AV030 has demonstrated that there is a real need for an interdisciplinary forum on environmental issues associated with aviation. The Committee has engaged a broad base of members and active friends, who bring together different expertise and perspectives on some of the most important challenges facing aviation today—such as noise, NextGen, climate change, and Safety Management Systems (SMS). The Committee works collaboratively with other TRB committees, Federal and State government agencies, and academic institutions to identify research and organize sessions on crosscutting environmental issues related to land, air, and water and draws on lessons from other modes and sectors to further our understanding of how aviation can meet these challenges. As we look forward to the next three years, the members and friends of AV030 anticipate continuing to fill this role of bringing together the best research and thinking on a wide range of environmental topics to inform future policy debates on aviation.

Mission Statement:

Our mission is to promote innovation and progress in identifying, evaluating, mitigating, and preventing the environmental impacts of aviation through research and collaboration.

Scope:

The Committee on the Environmental Impacts of Aviation focuses on environmental issues central to airport planning, design, construction and operation, as well as to related aviation system and aviation technology development issues. The committee fosters the integration of information developed in the wide range of scientific and professional practice disciplines that are relevant to airport/aviation environmental issues to support improved planning and decision-making. The Committee seeks through empirical research and policy analysis to facilitate and improve the "rigorous and objective" understanding and assessment of the environmental impacts of aviation required by NEPA and other federal, state, and local environmental statutes and regulations; to promote consideration of tradeoffs among the various potential environmental impacts generated by development alternatives in the airport planning process; and to encourage the integration of technically sound, effective impact monitoring and mitigation in the resulting development process. In addition to coordination with TRB's aviation committees, the Committee maintains active liaison with TRB's other environmental committees and recognizes that on many issues of basic science these other environmental committees have expertise that is pertinent and essential to the mission of this committee. To this end the Committee participates, whenever possible, in the activities of TRB's environmental section.

Goals:

1. **Foster Research:** To enhance the TRB's role in fostering and contributing significantly to research, development, and the implementation of new technologies, application of research, and innovative practices dealing with aviation and environmental issues in the U.S. and internationally.
2. **Promote Collaboration:** To create and promote intermodal and cross-aviation collaboration throughout the TRB community; addressing, identifying, and communicating common areas of concern and interest regarding environmental issues.

3. **Recognize Environmentally Beneficial Practices:** To support broad sustainability actions and ideas in equipment manufacturing and operation, as well as in airport development and operation, and to promote objective research.
4. **Identify Emerging Trends:** To create a forum for identifying, addressing and communicating emerging trends developing in the aviation-environmental community.

Strategies:

- a. Approach aviation environmental issues from a comprehensive perspective.
- b. Coordinate with and include members of other TRB committees and other stakeholders in planning annual meeting sessions, research, and other activities.
- c. Adopt long-term, global, and holistic approaches to address issues dealing with aviation and the environment.
- d. Encourage development of meaningful, consistent, and multi-modal environmental metrics.
- e. Develop a list of priorities for research in aviation and the environment.
- f. Act as a catalyst for identifying and disseminating information sources relevant to aviation and the environment.
- g. Create and facilitate a forum for communicating and disseminating objective research.
- h. Ensure that aviation environmental issues are well-represented in research programs and initiatives.
- i. Foster cooperation in optimizing research funding prioritization for aviation and environmental issues.
- j. Support the aviation industry's commitment to carbon-neutrality.

Action Plan:n Plan:

In each of the next three years, AV030 will:

- a. Sponsor at least two panels at the Annual Meeting, addressing aviation environmental issues. (Strategies a, b, and h)
- b. Solicit co-sponsors from the TRB Aviation Group, Environment and Energy Section, and other relevant committees and support the development of sessions by these committees that address issues of interest to AV030. (Strategies a, b, and h)
- c. Hold mid-year committee meetings that are structured to allow the free flow of ideas and sharing of information among members, friends, and guests. (Strategies a, b, c, e, f, and g)
- d. Extend invitations to annual AV030 committee meeting and sessions to other TRB committees with shared interests; and identify AV030 members and friends to act as liaisons to these committees. (Strategies a, b, and g)
- e. Develop and refine a series of social-network spaces for the purposes of information dissemination and the exchange of ideas among both professionals and non-professionals (students, youth, and laypersons). (Strategies a, b, f, and g)
- f. Identify and publicize research gaps in aviation and the environment. (Strategies d and i)
- g. Contribute to TRNews related to aviation aspects, including land, noise, air, and climate change issues. (Strategies a, b, f, and g).
- h. Encourage involvement of young and diverse membership to the committee. (Strategies a, b, f, and g).

Over the next three years, AV030 will:

- a. Follow up on past sessions with more in-depth or broader explorations of the issues through papers, additional sessions, and/or workshops where appropriate. (Strategies a, c, and f)
- b. Sponsor or co-sponsor at least one half-day Annual Meeting workshop on broad issues of major interest in aviation and the environment. (Strategies a, b, f, and g)
- c. Disseminate information about and provide input as appropriate to the Airport Cooperative Research Program. (Strategies d, f, g, and h)
- d. Identify committee members to serve as liaisons to participate on other TRB Aviation Group, Environment and Energy Section, or other committees to share research and updates to the Committee. (Strategies a, b, f, g, h, and i)
- e. Publicize the work of AV030 electronically and through a revision to "Critical Issues in Aviation and the Environment" publication, and various professional and academic avenues to ensure continued expansion of the pool from which members may be drawn in the future. (Strategies f, g, and h)