



## ABOUT PARTNER

PARTNER — the Partnership for AiR Transportation Noise and Emissions Reduction — is a leading aviation cooperative research organization, and an FAA/NASA/Transport Canada-sponsored Center of Excellence. PARTNER fosters breakthrough technological, operational, policy, and workforce advances for the betterment of mobility, economy, national security, and the environment. The organization's operational headquarters is at the Massachusetts Institute of Technology; Professor Ian Waitz, head of the MIT Aeronautics and Astronautics Department, is the director.

PARTNER comprises 10 collaborating universities, and approximately 50 advisory board members. One of PARTNER's greatest strengths is the advisory board's diversity and inclusiveness. Its members include aerospace manufacturers, airlines, airports, national, state and local government, professional and trade associations, non-governmental organizations and community groups. They have united as an international consortium to foster collaboration and consensus among some of the best minds in aviation, jointly advancing environmental performance, efficiency, safety and security.

As an incentive to collaboration, equal matches are required for federal dollars granted to PARTNER. The universities provide some of these matching funds, but most are obtained from the organizations represented on the advisory board. This collaborative process has fueled unique research efforts involving a wide spectrum of participants.

PARTNER research and activities have included:

- a landmark aviation and environment report to the U.S. Congress proposing a national vision statement, and recommended actions
- successfully testing alternate descent patterns as a no/low-cost means to reduce aircraft landing noise, fuel consumption, and pollutant emissions
- three significant measurement campaigns at U.S. airports to assess and understand the formation of particulate matter from aircraft
- collaborating with NASA and industry studying noise acceptability of supersonic flight over land
- examining land use, noise, and local development dynamics related to airport encroachment
- assessment of the human health and welfare risks of aviation noise, local air quality, and climate change impacts
- development of aircraft and air transportation system simulations to assess policies, technologies and operational options for enabling environmentally responsible air transportation growth
- examining the potential of different alternative fuels for aviation

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## COLLABORATING UNIVERSITIES

Boise State University  
Georgia Institute of Technology  
Harvard University  
Massachusetts Institute of Technology  
Pennsylvania State University

Purdue University  
Stanford University  
University of Missouri at Rolla  
University of North Carolina  
York University

Research is also funded at Reading University.

## ADVISORY BOARD

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