

11th National Aviation System Planning Symposium

May 15-18, 2023

Arnold and Mabel Beckman Center, Irvine, California

Draft Agenda (as of March 27, 2023)

Plenary and Concurrent Sessions will be eligible for AICP Credits

Monday, May 15, 2023

[Shuttle service from hotels to Beckman Center begins at 2:00PM on an hourly schedule]

- 10:00am Lyon Air Museum Tour (Optional)
Participants must register separately for this tour and provide their own transportation to and from the museum.
- 2:00PM Registration Opens
- 3:00 PM -5:00 PM Airport Cooperative Research Program (ACRP) Strategic Planning Workshop
All registrants are welcome to participate in this interactive workshop.
- 5:30 PM -7:30 PM Welcome Reception
[Shuttle service from Beckman Center to hotels ends at the conclusion of the day's events]

Tuesday, May 16, 2023

[Shuttle service from hotels to Beckman Center begins at 7:00AM on an hourly schedule]

- 7:30AM -8:30AM Breakfast
- 8:30AM – 10:00AM Welcome, Opening Remarks, Keynote Addresses
Welcome provided by Leah Whitfield, chair of the TRB Standing Committee on Aviation System Planning; and Fin Bonset, Symposium Planning Committee Chair
- Opening Remarks
 - Charlene Reynolds, John Wayne Airport, Orange County
 - Michelle Brantley, Ontario International Airport
 - Keynote Addresses
 - Eric Allison, Joby Aviation
 - Ben Murphy, Boom Supersonic
- 10:00AM-10:30AM Break
- 10:30AM - Noon Plenary Session I
Advancing the Practice of State Aviation System Planning
Moderated by Leah Whitfield, The Aviation Planning Group
This session highlights the findings of an ACRP report that provides insight best practices relevant to aviation system planning, and offers discussions on data collection in a big data world as well as enhanced tools for developing capital improvement programs.
- Regan Schnug and Georgia Twyerould, Kimley-Horn
 - Rebecca Douglas, Alaska Department of Transportation & Public Facilities
 - Rick Lucas, McFarland Johnson
- Noon - 1:00PM Lunch
- 1:00PM - 2:15PM Plenary Session II

Equitable Mobility in Aviation System Planning

Moderated by Clayton Stambaugh, Illinois Department of Transportation

An aviation system should have the capability of bringing together multiple modes of transportation to enhance not only overall multimodal efficiency, but also be easily available for all its citizens. An equitable system based on sustainability and resiliency goals should also include the well-being of all communities to achieve an equitable and balanced transportation system. Join a select panel of experts to explore the possibilities of an equitable system based on new technology and sustainability initiatives.

- Matthew Friedman, California Department of Transportation
- Liza Josias, Eve Air Mobility
- Aaron Ray, Port of Portland

2:15PM - 3:30PM

Plenary Session III

The Future of Aviation: Defining a New Landscape

Moderated by Zach Simons, Kimley-Horn

As a pillar of transport, aviation is at the very center of our socio-economic fabric and has been reshaped due to significant changes in this fabric over the past few years. As new transportation norms are being established, emerging trends such as the focus on sustainability, new data collection and analyzation technologies, and the development of AAM are beginning to take prominent stage. This session will discuss the emergence of these trends and the role they play in the defining the future landscape of the aviation industry and how to address this from an aviation system planning perspective.

- Greg Hilsenrath, Gray Matter, Inc.
- Dan Sloat, Volatus Infrastructure, LLC
- Liza Josias, Eve Air Mobility
- Adam Cohen, Mineta Transportation Institute, San Jose State University / Transportation Sustainability Research Center, UC Berkeley

3:30PM - 4:00PM

Break

4:00PM - 5:30PM

Concurrent Session A1

Modeling Aviation Activity Allocation in Airport System Planning

Moderated by Geoff Gosling, Aviation System Consulting

A central challenge in regional and state aviation system planning is projecting how the total forecast regional or state aviation activity, whether air passengers, air cargo, general aviation operations, or advanced air mobility activity, will be distributed among the airports and vertiports serving the region or state in response to market forces, policy decisions, and infrastructure investments. This session will review the current state of practice of modeling this activity allocation process, identify aspects that are not well understood or well handled by existing models, and discuss needed research to improve the state of practice.

- Yi Gao, Purdue University
- Emma Southall, United Kingdom Department for Transport
- Sonjia Murray, The Meehan Aviation Group

Concurrent Session A2

Integrating Emerging Air Transport Technologies with Aviation System Planning
Moderated by David Ballard

The biggest trends in the last two years in aviation are related to new types of aircraft that are now approaching full operational functionality and will soon have an impact on aviation systems. This session will explore how traditional system planning may have to be restructured, adjusted, and/or adapted to accommodate these new aircraft types whether they be vertical takeoff and landing aircraft, commercial space vehicles, supersonic aircraft, or emerging types of uncrewed aircraft systems.

- Jared Esselman, WSP
- Reiner Pelzer, AECOM
- Hiroshi Ishikawa, Southern California Association of Governments
- Brent Skorup, Mercatus Center at George Mason University

5:30PM

Adjourn

[Shuttle service from Beckman Center to hotels ends at the conclusion of the day's events]

Wednesday, May 17, 2023

[Shuttle service from hotels to Beckman Center begins at 7:00AM on an hourly schedule]

7:30AM-8:30AM

Breakfast

8:30AM– 10:00AM

Concurrent Session B1

Advanced Air Mobility Vertiport System Planning
Moderated by Nancy Mendonca, National Aeronautics and Space Administration

If in the near future many new types of Vertical Takeoff and Landing aircraft enter our aviation system(s) with high volume operations, how do we plan for the necessary supporting infrastructure? Join this panel of experts to discuss the challenges such as infrastructure planning, urban/city/community planning, airspace planning, and community outreach that will need to be better understood to accommodate these new users of shared airspace.

- Gabriela Juarez, City of Los Angeles
- Brandon Reed, San Diego International Airport
- Robert Bassey, Federal Aviation Administration
- John Brazil, City of San Jose

Concurrent Session B2

State Aviation Funding: Project Prioritization and Selection Processes
Moderated by Ryan Gaug, Minnesota Department of Transportation

This session will review the results from an ACRP Synthesis report concerning project prioritization and selection processes involved in state aviation funding. Hear from a state department of transportation representative and other subject matter experts on how this report has identified the differences and potential commonality to further state aviation system funding processes.

- Stephanie Green, Mead and Hunt, Inc.
- Laurie Cullen, Changeis, Inc.
- Bradley Brandt, Louisiana Department of Transportation and Development

10:00AM - 10:30AM

Break

10:30AM - Noon

Concurrent Session C1

Powering the Aircraft of Tomorrow

Moderated by Loup-Giang Nguyen, WSP

Beyond the popular industry trend discussions on new types of aviation vehicles entering aviation systems, it is also important to understand what will power these new vehicles and how to accommodate operator needs in terms of utility infrastructure. Join this select panel of experts on a deep dive into the technologies and fuels that will power the new vertical takeoff and landing and other new types of aircraft, including what energy needs are expected, and what type of fuel storage facilities will be needed (e.g. hydrogen or sustainable aviation fuels).

- Edward Yu, University of Tennessee
- Scott Cary, National Renewable Energy Laboratory
- Melinda Z. Pagliarello, Airports Council International-North America

Concurrent Session C2

Aviation Workforce Resiliency

Moderated by Katie Turnbull, Texas A&M Transportation Institute

The "Great Resignation" experienced since the COVID-19 pandemic has had an adverse effect on the aviation industry. Attracting and retaining talent has been a major challenge in all areas of aviation. This session addresses solutions and ideas to strengthen the aviation workforce based on experience and insight from aviation subject matter experts. This session will also address the importance of diversity, equity and inclusion initiatives and how to attract talent from underprivileged and minority communities.

- Steve Landau, EBP
- Courtney Beard, Mead and Hunt, Inc.
- Seth Young, DY Consultants
- Laurie Cullen, Changeis, Inc.
- Crystal Maguire, Aviation Technical Education Council

Noon - 1:00PM

Lunch

1:00PM - 2:15PM

Plenary IV

Addressing Sustainability and Resiliency in Aviation System Planning:

A Solution Based Approach

Moderated by Mia Held, C&S Companies

Sustainability and resiliency are not only related to environmental concerns but also social and economic issues. This session will bring a multi-faceted perspective on the changing needs of an aviation system and suggested approaches for viable and sustainable solutions for long-term system resiliency.

- Jennifer Maples, Phoenix Sky Harbor International Airport
- Justin Castagna, Aeroplex/Aerolease Group
- Curt Castagna, National Air Transportation Association

2:15PM – 3:30PM

Plenary V

Don't Let Your System Plan Sit on the Shelf

Moderated by Zach DeVeau, Kimley-Horn

As states and regions scope and develop system plans and economic impact studies, there has been a growing focus on developing them to be implementation-based; focusing on project and topic-specific tools and process flows to provide tangible and

implementable resources to state departments of transportation, regional planning agencies, and airports. This includes developing standard procedures for a variety of processes, education and training of professionals, as well as a more meaningful presentation of project findings - departing from traditional reports to more dynamic and data-driven visualizations. This session will explore a variety of cutting-edge solutions that states and regions have employed recently.

- Rylan Juran, Minnesota Department of Transportation
- Bob Brock, Kansas Department of Transportation
- Aaron Smith, Garver

3:30PM - 4:30PM

Poster Session

Facilitated by Jeffrey Borowiec, Jviation, A Woolpert Company

This session will showcase recent research conducted in aviation system planning.

- [Estimating Airport Leakage with Emerging Access Modes](#) – Shirya Karam, University of Pennsylvania
- [NFD-based Urban Air Mobility Network Planning](#) – Magdalena Peksa, Technical University of Munich
- [Technology and Policy Recommendations on Integration of Advanced Air Mobility Technologies into Existing Airport System – A Case Study of Ohio](#) – Jacob Shila, Bowling Green State University
- [Cross-Domain Data Sharing for Safety: The Public Digital Services Model](#) - John S. Eberhardt III, ATA, LLC
- [How Does Mobile Location of Airport Passengers Tell and Predict Airport Catchment Areas: A Case Study of the New York Metropolitan Multi-Airport Region](#) – Sen Wang, Purdue University
- [The Impact of Unleaded Fuel on a Collegiate Aviation Flight Training Environment](#) - Tanner Way and Irene Miller, Southern Illinois University
- [Airport System Planning and Airport Master Plan: Conflicts and Compromises](#) – Joel Shon, Tainan University of Technology, Taiwan
- [Estimating Electrical Energy and Capacity Demand for Regional Electric Flight Operations at Two Mid-Sized Airports in Washington](#) –Steffen Coenen, University of Washington
- [Airmail with Ivy: Aviation, Education, and Preservation](#) – Ivy Adams, Middle Tennessee State University

4:30PM - 5:30PM

Symposium Synthesis and Research Needs

Where Do We Go From Here?

Moderated by Fin Bonset, VHB

This will be an opportunity for all Symposium attendees to discuss session outcomes, principal findings, lessons learned, and to identify needed research and topics for continued discussion at future meetings.

5:30PM

Adjourn

[Shuttle service from Beckman Center to hotels ends at the conclusion of the day's events]

Thursday, May 18, 2023

[Shuttle service from hotels to Beckman Center begins at 7:00AM on an hourly schedule]

7:30AM - 8:30AM

Breakfast

- 8:30AM – 10:00AM **Concurrent Committee Meetings (*open to all registrants*)**
Aviation System Planning (AV020)
Chaired by Leah Whitfield, The Aviation Planning Group
The committee is focused on aviation planning activities at the local, regional, state, national, and global levels that take a systems approach to evaluating the interrelationships of aviation and airport infrastructure, as well as interactions with related and supporting infrastructure. The focus of the committee includes the relationships between aviation planning and other planning, policy, and regulatory processes.
- New Users of Shared Airspace (AV095)**
Chaired by Daniel Friedenzohn, Embry-Riddle Aeronautical University
The committee is concerned with emerging and growing aviation applications such as commercial space operations, uncrewed aircraft systems (UAS), and urban air mobility (UAM), as new participants in an already occupied airspace. The committee will address how the aviation ecosystem can support these emerging types of aerospace operations in harmony with the operations of established users in a safe and efficient manner.
- 10:00AM – 10:30AM **Break**
- 10:30AM – Noon **Concurrent Committee Meetings (*open to all registrants*)**
Aviation Administration and Policy (AV010)
Chaired by Clayton Stambaugh, Illinois Department of Aviation
The committee is concerned with intergovernmental and cooperative aspects of administration and policy as it relates to the operation and development of the aviation industry, including governance participation and stakeholder involvement.
- Airport Terminals and Ground Access (AV050)**
Chaired by Dr. I. Richmond Nettey, Kent State University
The committee is concerned with the planning, design, operation, and maintenance of the airport landside, which encompasses the area between points where passengers and goods enter airports to points, including terminals, where they board and disembark aircraft. The landside includes systems conveying passengers and baggage between landside and airside terminal buildings. The committee is also concerned with the transportation of passengers between their local origin or destination, and the airport.
- Noon-1:00PM **Lunch**
- PROGRAM CONCLUDES
[Shuttle service from Beckman Center to hotels ends at the conclusion of the day's events]