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28 pages | 8.5 x 11 | PAPERBACK
ISBN 978-0-309-49063-4 | DOI 10.17226/25398

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Conference Proceedings on the Web 24

Challenges to Implementing Successful Land Use Strategies at Airports

Proceedings of an ACRP Insight Event

Mary Vigilante
Synergy Consultants, Inc.
Rapporteur

April 10–11, 2018
National Academies of Sciences, Engineering, and Medicine
Washington, D.C.

Organized by the
Airport Cooperative Research Program

Sponsored by the
Federal Aviation Administration

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This conference was organized through TRB's Airport Cooperative Research Program (ACRP) and sponsored by the Federal Aviation Administration. Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project.

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Printed in the United States of America.

Suggested citation: Transportation Research Board. *Conference Proceedings on the Web 24: Challenges to Implementing Successful Land Use Strategies at Airports*. Proceedings of an ACRP Insight Event, April 10–11, 2018. Washington, D.C.: The National Academies of Sciences, Engineering, and Medicine, 2019.

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Contents

Preface	viii
Abbreviations	x
Introduction	1
Plenary Sessions	3
Plenary Session 1: Airport Context.....	3
<i>Jackie Sweatt-Essick, Federal Aviation Administration</i>	
Plenary Session 2: Planning Jurisdiction Context	5
<i>Janet Bednarek, University of Dayton</i>	
Keynote Addresses	7
Keynote Address 1: Elusive Perspectives—How Hard Can This Be?	7
<i>Bill Lebegern, HNTB Corporation</i>	
Keynote Address 2: Land Use Policy Considerations	8
<i>Stephen Van Beck, Steer Davies Cleave</i>	
Keynote Address 3: The Dallas–Fort Worth Experience.....	9
<i>John Terrell, Dallas–Fort Worth International Airport</i>	
Breakout Sessions	10
Wrap-Up	11
Appendix A: List of Registrants	12
Appendix B: Program Agenda	15
Appendix C: Logistics Instructions and Prompt for Breakout Sessions	19

Preface

“Challenges to Implementing Successful Land Use Strategies at Airports” (ACRP Project 11-08/16-01), held April 10–11, 2018, at the Keck Center of the National Academies of Sciences, Engineering, and Medicine (the National Academies) in Washington, D.C., brought together airport representatives and community planners to discuss effective strategies for improving their ability to partner on land use issues in the vicinity of airports. The Transportation Research Board’s (TRB’s) Airport Cooperative Research Program (ACRP) organized the event as part of its series of convening activities titled “ACRP Insight Events.” ACRP Insight Events are forums that foster dialogue among professionals across sectors, institutions, and industries. ACRP Insight Events convene airport industry leaders and subject matter experts in various fields to encourage discussion and promote broader and deeper insight on topics of significance to airport operators. These in-depth, face-to-face gatherings are designed to promote communication and collaboration, foster innovation, and help identify areas of future interest and research, especially for topics of emerging importance.

This proceedings, prepared by rapporteur Mary Vigilante of Synergy Consultants, Inc., is a compilation of the presentations and a factual summary of the ensuing discussions at the event. The planning committee for the event was solely responsible for organizing “Challenges to Implementing Successful Land Use Strategies at Airports,” identifying speakers, and coordinating activities during the event. The views contained in this proceedings are those of individual ACRP Insight Event participants and do not necessarily represent the views of all participants, the planning committee, TRB, or the National Academies.

This document was reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purposes of this independent review are to provide candid and critical comments that will assist the National Academies in making the published proceedings as sound as possible and to ensure that the document meets institutional standards for clarity, objectivity, and responsiveness to the project charge. The review comments and draft manuscript remain confidential to protect the integrity of the process.

TRB thanks the following individuals for their review of this proceedings: Frederick Busch, Jviation, Inc.; Kitty Freidheim, Freidheim Consulting; Peter Kirsch, Kaplan, Kirsch, & Rockwell, LLP; Diana Lewis, Roanoke Regional Airport Commission; and Stephanie Ward, Mead & Hunt.

Although the reviewers listed above provided many constructive comments and suggestions, they did not see the final draft of this proceedings before its release. The review of this proceedings was overseen by Chris Hendrickson of Carnegie Mellon University. He was responsible for making certain that an independent examination of this

proceedings was performed in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content rests entirely with the author and the institution.

Abbreviations

ACRP	Airport Cooperative Research Program
APA	American Planning Association
APM	automated people mover
BOS	Boston Logan International Airport
CAV	connected automated vehicle
CLT	Charlotte Douglas International Airport
CNEL	community noise equivalent level
CVG	Cincinnati/Northern Kentucky International Airport
dB	decibel
DEN	Denver International Airport
DFW	Dallas–Fort Worth International Airport
DNL	day–night average sound level
FAA	Federal Aviation Administration
GA	general aviation
GIS	geographic information systems
GSP	Piedmont Triad International Airport
IAD	Dulles International Airport
MPO	metropolitan planning organization
MWAA	Metropolitan Washington Airports Authority
NASAO	National Association of State Aviation Officials
PDX	Portland International Airport
The National Academies	The National Academies of Sciences, Engineering, and Medicine
TNC	transportation network company
TRB	Transportation Research Board
VALE	Voluntary Airport Low Emissions Program
VTOL	vertical takeoff and landing

Introduction

“Challenges to Implementing Successful Land Use Strategies at Airports” (ACRP Project 11-08/16-01) was organized by the Transportation Research Board’s (TRB’s) Airport Cooperative Research Program (ACRP) as part of its series of convening activities, “ACRP Insight Events.” This event focused on the topic of land use planning around airports, which is typically done by local governments, with the nearby municipalities often having no connection to the airport’s management. However, because development of nearby entities may affect an airport and, conversely, an airport’s development may impact other nearby entities, both airport operators and local jurisdictions have much to gain from collaboration with each other. “Challenges to Implementing Successful Land Use Strategies at Airports” sought to bring together airport planners with a direct connection to airport management and community planners to discuss land use planning around airports. Preparations for this ACRP Insight Event included a thorough literature review, which served to define the state of the practice of land use planning surrounding airports and identify notable thought leaders and practitioners in the industry. Several of these thought leaders and practitioners were then selected to serve on the planning committee for the event.

“Challenges to Implementing Successful Land Use Strategies at Airports” took place April 10–11, 2018, at the Keck Center of the National Academies of Sciences, Engineering, and Medicine (the National Academies) in Washington, D.C. More than 70 people registered for the event. Registrants’ professional affiliations included airports, airlines, academic institutions, local and regional government, consulting, and more. The full list of registrants is provided in Appendix A.

The event led off with two plenary sessions, each one including both a presentation and a discussion participated in by session panelists and audience members. The first plenary session focused on the airport planning context and the second plenary session focused on the planning jurisdiction context. The remainder of the event included three keynote speakers and breakout sessions in which participants worked together to develop a strategy to address the land use challenges of a fictional airport and jurisdiction. The program agenda for the event is provided in Appendix B.

Presentations from “Challenges to Implementing Successful Land Use Strategies at Airports” are available on the ACRP Insight Event web page at <http://www.trb.org/ACRP/ACRP-Insight-Events.aspx>. The literature review prepared for the event is available at <http://onlinepubs.trb.org/onlinepubs/acrp/docs/ACRPInsightEvent-LandUse-AnnotatedBibliography.pdf>. Readers who are interested in more information can e-mail the ACRP senior program officer for the event, Sia Schatz, at TSchatz@nas.edu.

ACRP is an industry-driven, applied research program that develops near-term, practical solutions to problems faced by airport operators. ACRP is managed by TRB, a part of the National Academies, and is sponsored by the Federal Aviation Administration (FAA).

ACRP Insight Events are forums that foster dialogue among professionals across sectors, institutions, and industries. ACRP Insight Events convene airport industry leaders and subject matter experts in various fields to encourage discussion and promote broader and deeper insight on topics of significance to airport operators. These in-depth, face-to face gatherings are designed to promote communication and collaboration, foster innovation, and help identify areas of future interest and research, especially for topics of emerging importance.

Plenary Sessions

Plenary Session 1

Airport Context

Jackie Sweatt-Essick, *Federal Aviation Administration*, presenter

Panelists

Jamie Abbott, *Chicago Executive Airport*

Catherine M. van Heuven, *Kaplan Kirsch & Rockwell, LLP*

Kelly Moulton, *Sacramento County Department of Airports*

Jackie Sweatt-Essick opened the first session by summarizing the role of the FAA and airport operators in land use planning. She noted that the FAA is currently working on revisions to the Advisory Circular on height zoning around airports and working with the American Planning Association (APA) and metropolitan planning organizations (MPOs) that have a role in land use planning around airports. Sweatt-Essick then introduced the session panelists. She asked each panel member to provide their perspective on land use.

Jamie Abbott noted that airport operators typically are in one of two modes, given the maturity of the airport: reactive mode to conditions, or preventive mode (preventing conflicts). He has found that airport representatives spend a lot of time educating community leaders about land use issues, such as the effects of cranes or tall buildings on aircraft operation. Abbot also remarked on the importance of being clear about safety requirements and their meaning. Often neither airport operators nor communities have enough staff to address land use issues. Catherine van Heuven added a similar comment, remarking that attorneys spend time educating involved parties about what can and cannot be done from the airport operator's perspective (such as grant assurances). She elaborated that educating parties is cyclical: when there is a change in leadership, the cycle starts again. Kelly Moulton noted that California and, in particular, Sacramento, has a process that requires extensive collaboration. This is important because in communicating externally, representatives from the city, county, or state must speak with one voice, presenting information in unison with their entity.

In response to a question about airports and intermodal land use planning, Abbott noted that there were several barriers to airport intermodal facilities due to the mature nature of many facilities and limited space. Sweatt-Essick said that Charlotte Douglas International Airport (CLT), in North Carolina, is looking at an intermodal facility not far from the airport and that she was involved with the rail connection to Atlanta from the airport.

In a question about spending money on land use issues off airport, the issue of revenue diversion was raised. Sweatt-Essick responded that this is a big issue for the FAA. There

have been concerns with FAA programs such as the Voluntary Airport Low Emission Program (VALE) and use of those monies to purchase vehicles that would be used off airport, which conflicts with FAA revenue policies. Van Heuven noted that revenue diversion issues come up on intermodal facilities and non-aeronautical development and require creative approaches. In addition, she remarked that Denver International Airport (DEN) had a complicated process getting light rail extended to the airport.

Kitty Freidheim, of Freidheim Consulting, asked the panel to comment on the power of local zoning. Van Heuven noted that the primary example of local zoning is for height zoning. Project sponsors submit FAA Form 7460-1 (Notice of Proposed Construction or Alteration), indicating proposed construction or alterations that might represent hazards to navigation. Abbott stressed the importance of educating parties about safety. Van Heuven noted that issues of safety are much easier to address than noise. She also stated that the FAA is currently reexamining its noise metrics for this reason.

Moulton said that most land use planning for noise is limited to areas exposed to the 65 decibel (dB) day-night average sound level (DNL)/community noise equivalent level (CNEL) in California. But many airport operators are doing land use planning out to the 60 dB DNL/CNEL. She also noted that most land use jurisdictions plan for 40 to 50 years, whereas airports have a much shorter planning timeframe (10 to 20 years). She went on to say that most of the land in California in the 60 dB DNL/CNEL is county-owned land that many view as available, but then could conflict with the airport operation. It was suggested by an audience member that case studies showing what works and what does not work for land use planning would be helpful.

An audience member asked if panelists had experience with local jurisdictions wishing to conduct stormwater mitigation on airports. Panel members responded that they had received such requests as well as requests for other resource mitigation that would be a wildlife hazard, so that they had to explain why those types of mitigation were a problem for safety. Moulton noted a similar issue with shade requirements and wildlife issues.

There was a discussion about involving local municipalities with land use control in the airport planning process and airport planners in the municipality planning process. Examples that were cited included Sacramento, where communities are invited into the planning process, as was done for a recent highway project. Sweatt-Essick noted that Cincinnati/Northern Kentucky International Airport (CVG) is an airport that participates with local jurisdictions in project planning. Van Heuven remarked that a general aviation (GA) airport had worked with its surrounding community and had a developer retain special expertise in areas that it might not otherwise have and then helped with a project understanding.

An audience member asked about leveraging geographic information systems (GIS) developed by either the airport operator or community to support planning. There was a discussion about whether the parties all had a common GIS platform, and several panel members said that they do share with each other. Others noted that some platforms do not communicate well with other platforms.

One audience member noted that while most airport operators spend a lot of time on height issues, they also must address compatibility issues with the lands surrounding their airports. However, some said that when the community is involved, the community asks the airport operator to solve some of its local municipal issues. This again raised the issue of revenue diversion challenges.

An audience member asked what the FAA could do better to help airport operators. Issues that were raised included revenue diversion, having one side of FAA (Airports) talk with another (such as Air Traffic Organization), being consistent in its approach, and reducing the length of time that it takes to complete non-aeronautical development projects. A timeframe of 2 years was cited as an example, and developers can go elsewhere quicker.

Plenary Session 2

Planning Jurisdiction Context

Janet Bednarek, *University of Dayton*, presenter

Panelists

Tom Armstrong, *City of Portland Bureau of Planning and Sustainability* (Oregon)

Steven Rother, *Essex County Improvement Authority*, (New Jersey)

Chris Cramer, *City of Commerce City, Colorado*

Janet Bednarek gave a presentation titled “Airport Jurisdictional Issues—Everything Has a History.” This presentation opened the session with a historical perspective on how land use evolved around airports. Her presentation provided photographs of airport settings in Atlanta, Cleveland, Chicago Midway, and others that showed how undeveloped these settings were when the airports were formed and how much development has occurred around them in the meantime. Bednarek noted that during the 1920s and 1930s, planners were showing interest in airports and the need to plan for integrating them into the region. However, cities focused primarily on urban and residential zoning at the time. She said that during the 1930s, most cities defunded city planning and that the courts were hostile to airport zoning. The lack of zoning created significant airport encroachment following post-World War II suburbanization. Bednarek noted that during the 1970s and 1980s, airport operators learned that the best solution was ownership of land or placement of other controls. In recent years, the “aerotropolis” concept has attracted attention, but it is basically what was being discussed in the 1930s and 1940s.¹

Bednarek introduced the Plenary Session 2 panel. Tom Armstrong provided a community planner perspective on how land use developed around Portland International Airport (PDX). Steven Rother provided an overview of how land use in Essex County evolved and

¹ “Aerotropolis” is a term that refers to a new urban form in which the airport acts as the center of a city with multimodal connections to an urban core around it.

the relationship to multiple airports in New Jersey. Chris Cramer provided the perspective of development near DEN.

Amber Woodburn, of Ohio State University, asked how communities and airport operators address issues of waterways and natural areas. It was noted by a panel member that many airports have waterways and other types of natural areas nearby and that communities and airports work together to address any issues. Communication was discussed as a key ingredient to these efforts. It was also cited that in the past, industrial uses were placed near airports due to compatibility issues and that now those industrial areas are being redeveloped. An audience member observed that the older industrial areas may have been dirty, whereas the newer industrial areas, in general, are cleaner. Also, owners of natural resource areas often work with the airport operators in the planning process.

The concept of the aerotropolis was raised, and there was discussion of how the concept was progressing toward becoming a reality. It was noted that in Denver, there are some challenges and opportunities from an aerotropolis perspective, particularly because of how far the airport is from the city center. One commenter remarked that John Kasarda, the lead spokesperson for the aerotropolis concept, believes that in the United States the concept has not yet been as successful as it could be because airports are too small and don't have enough land to support the broader development reflected in the aerotropolis concept. One audience member thought that one of the issues with the aerotropolis concept is that it embraces residential development, which airport operators currently discourage or prevent from occurring in proximity to airports.

There was a question as to whether GA airports were less economically valuable to a community than major air carrier airports. Panel members indicated that from an economic impact perspective, the dollar value of GA airports may be less, but that some GA airports serve as relievers, and their presence enables major air carrier airports to provide the economic benefits that they do. **Kitty Freidheim** asked if privately owned airports were being redeveloped in communities. Rother noted that some private GA airports have 9,000-foot runways and serve an important aviation function. He also said that there are development pressures on smaller airports in New Jersey because the land is so valuable. An audience member remarked that PDX is experiencing redevelopment of a nearby golf course and challenges of compatibility with the airport.

A question was raised about sustainability in the context of the levee at PDX. Armstrong noted that following Hurricane Katrina PDX learned to consider new and innovative approaches to floodplain development. A question was raised about social equity in the context of land use planning in local communities and how that might affect airports. Individual panel members stated concerns with issues such as programs for those working at the airport, their wages, vendors and equity, affordable housing, and so forth. **Jackie Sweatt-Essick** noted that the FAA has issues with residential encroachment, which has been a major focus for more than 40 years.

Keynote Addresses

Keynote Address 1

Elusive Perspectives—How Hard Can This Be?

Bill Lebegern,² *HNTB Corporation*

Bill Lebegern’s presentation provided an overview of the contextual differences of local community planning and airport planning. Lebegern noted that a key issue is the difference in how aviation and land use are regulated: aviation is federally regulated and land use is locally regulated. Airport operators must provide grant assurances to FAA, have an Airport Layout Plan (and meet its associated requirements), prevent revenue diversion (airport monies must be used on the airport), and comply with rules related to market value, residential development, and lease limits. Airport compatibility requirements include, among other things, Part 77, radar and light emissions, wildlife hazards, and so forth. Community compatibility with the airport reflects local needs (setting, tax base, market shifts, civic use, etc.). Lebegern presented a graphic showing how density near Dulles International Airport (IAD) has changed between 1970 and 2018. Lebegern explained that it is important to manage the expectations of all parties. As an example, he noted that airport operators and adjacent communities often compete for the same development projects but have very different regulatory settings. Airport operators are now considering non-aeronautical revenue sources and trying to meet local and regional development needs on land that is not needed for aeronautical purposes. Lebegern also said that the Metropolitan Washington Airports Authority (MWAA) has a staff of one person to address commercial development/non-aeronautical land uses, whereas the Dallas–Fort Worth International Airport (DFW) has 14. Lebegern concluded by saying that it was important to keep compatibility policies up to date, even though it can be challenging given the rapid changes in the industry.

² Bill Lebegern filled in for Thella Bowens, the originally slated keynote speaker, who was unable to attend the event.

Keynote Address 2

Land Use Policy Considerations

Stephen Van Beek, *Steer Davies Gleave*

Stephen Van Beek opened his presentation with the observation that airport operators have various project needs that drive how they use their land. The aviation business model is now focused more on airport land use. While individual airport needs vary, the business model is shifting, requiring airport operators to consider more flexible facilities, new funding sources, and commercial options. Specifically, planning at airports has shifted away from airfield needs to focus more on landside and terminal needs. Van Beek noted that by 2014, only six airports had more activity (operations) than they had accommodated in 2005, but that enplanements had been increasing significantly. He gave examples of how DEN, Piedmont Triad International Airport (GSP) in Greensboro, North Carolina, and Boston Logan International Airport (BOS) were evolving their planning to address greater demands in the terminal and landside. Van Beek discussed challenges such as costs of development, lack of funding sources (and issues between airport operators and carriers that are not willing to fund development), infrastructure flexibility needs, and the ability to bring new funding sources to the table. He noted that public-private partnerships are increasingly being considered. With technological changes and behavioral shifts, changes in on-airport and off-airport land uses are occurring that could provide new sources of support for an airport. Van Beek gave multiple examples, such as transportation network companies (TNCs) (e.g., Uber, Lyft) and their influence, connected automated vehicles (CAVs), and remote terminals.

A question was asked about the tension between grant assurances and funding non-aeronautical, off-airport land uses. It was acknowledged (as of April 2018) that this continues to be an issue and is one that needs to be addressed. An audience member asked about the differences between automated people movers (APMs) and CAVs. Van Beek offered that, particularly on the landside, technological advances have developed very rapidly and will likely continue to do so: CAVs are expected to be fully operational by 2028 to 2030, and aircraft capable of vertical takeoff and landing (VTOL) are expected to be in operation by 2022. These technological developments are relaxing certain land use pressures but creating others.

Keynote Address 3

The Dallas–Fort Worth Experience

John Terrell, *Dallas–Fort Worth International Airport*

John Terrell gave a keynote presentation in which he provided an extensive overview of the innovative approach that Dallas–Fort Worth International Airport (DFW) is using to develop projects. He noted that DFW completes a land use plan update every 5 years to be responsive to changes at the airport and in the economy. To stay aware of development needs, DFW participates in regional development discussions. DFW’s leases are usually 40 years, which requires FAA and host city approvals. DFW has a development vision for all its parcels and does tax sharing through an interlocal³ agreement for development. Terrell encouraged airport operators to think of their tenants not as tenants, but rather as potential partners whose technology they might use. He noted that DFW is working with Amazon to use Amazon technology to help with moving baggage and will be partnering with Uber as one of the launch cities for Uber’s Uber Elevate service. Terrell concluded by saying that DFW is considering residential development on airport and that the airport realizes that it will have to work with the FAA on the development issues.

³ “Interlocal” refers to a collaborative contract between public entities for providing more efficient, less costly public services.

Breakout Sessions

In addition to the plenary sessions and keynote addresses, the ACRP Insight Event included breakout sessions in which participants worked in groups to analyze and develop hypothetical solutions to land use planning issues that an airport operator and municipal planning jurisdiction might face. The solutions proposed by participants may not be applicable to all communities, but they were solutions that participants thought could possibly work in the hypothetical situations they were given. The breakout sessions included two rounds, with participants grouped with peers from similar backgrounds in the first round and with people from a varying set of backgrounds for the second round. The scenario prompt given to participants described a fictional airport and jurisdiction facing land use challenges and is included as Appendix C.

Takeaways and observations from individual participants included that when tackling land use challenges, it is vital to bring all parties together. This helps to identify the needs and the implications of all decisions. In the breakout session prompt, there were conflicts within land ownership. As is typical for most challenging land use issues, there was a lack of understanding of the information that was available, such that taking active measures to collect or solicit other information or preparing to solve some problems with limited information was needed. Especially in land use planning, everything is not “black and white,” and one often has to make things fit given less-than-ideal constraints.

Other observations included that any studies need to include identification of the benefits to the community. Opportunities from land use planning are in the current timeframe, but the risk is long-term, so it is important to understand the benefits. Inclusive involvement of all parties is especially vital because of the long-term risk. Expanding or broadening stakeholder involvement would be beneficial, particularly in a time of growth. It is best if the airport operator, developer, and community are using the same timeframes and project timeline. Airport operators should be thinking in 50-year timeframes, like communities. In carrying out planning, developers need to be responsive to FAA concerns.

Wrap-Up

Rapporteur Mary Vigilante provided closing remarks for the event, offering a summary of what she considered to be major takeaways. Vigilante noted challenges, innovations, and potential areas for research. Vigilante's closing summary should not be construed as reflecting a consensus of the planning committee, the conference participants, TRB, ACRP, or the National Academies.

Major challenges observed by Vigilante include the following:

- Challenges with the limited authority of airport sponsors are hindering progress.
- Conflicts can arise between the dynamic and shifting environments in which airports operate and the heavy regulation under which they operate. Resolving these conflicts requires outside-the-box thinking.
- There is a general lack of funding (for land use planning, implementation, monitoring, and enforcement).
- There is a lack of time and resources for reviewing and understanding issues.
- Airport planning is short term and land use planning is 50 years or more.

Types of innovations observed include the following:

- Using technology in creative ways.
- Employing unique communication and education strategies.
- Working outside the box.
- Utilizing a third-party facilitator on challenging issues.

Examples of research that Vigilante thought would be helpful include the following:

- Synthesis of case studies showcasing what has worked well and what has not, to give examples of alignment between airport operators and land use jurisdictions. States might take different approaches from each other, and understanding these differences could be valuable.
- Survey of National Association of State Aviation Officials (NASAO) and other aviation groups to ascertain what is done to make land use planning required by communities affected by airports.
- Synthesis or toolkit of FAA regulations relative to land use. Such a resource would note any conflicts between FAA requirements and local land use rules and policies.
- Development of a search engine so practitioners can better find ACRP resources and information, since attendees seemed to be unaware of many relevant ACRP reports.

APPENDIX A

List of Registrants

Jamie Abbott
Chicago Executive Airport

Steven Alverson
ESA

Eric Anderson
Indianapolis Airport Authority

Tom Armstrong
City of Portland Bureau of Planning
and Sustainability

Ryan Bauer
Fort Wayne Allen County
Airport Authority

Janet Bednarek
University of Dayton

John Bergener
San Francisco International Airport

Grant Bishop
Moy Bishop & Associates

Thella Bowens
San Diego County Regional
Airport Authority

Veronica Bradley
Airlines for America

Christopher Brimo
Calvin, Giordano & Associates

Frederick Busch
Aviation, Inc.

Wen Chen
Chens Investment Corp

Patty Clark
Port Authority of New York
and New Jersey

Christopher Cramer
City of Commerce City, Colorado

Tony Davis
Aviation

Rebecca Didio
Federal Aviation Administration

Sean Doyle
Federal Aviation Administration

Yangbo Du
Sustainable Development Investment
Finance Partnership for New York

Ryk Dunkelberg
Mead & Hunt

Cristina Finch
Roanoke Valley–Alleghany Regional
Commission

Kitty Freidheim
Freidheim Consulting

Clare Gallagher
Port of Seattle

Carmelo Garcia
City of Newark, Economic Development

Ed Gowens
San Diego County Regional
Airport Authority

Donald Guffey
Federal Aviation Administration

Kate Iverson
Denver International Airport

Jan Ashraf
Federal Aviation Administration

Mark Johnson
Ricondo & Associates, Inc.

Dana Keith
Berkeley County

David Keuhn
Federal Highway Administration

Peter Kirsch
Kaplan Kirsch & Rockwell LLP

Neil Kumar
Federal Aviation Administration

Bill Lebegern
HNTB Corporation

Diana Lewis
Roanoke Regional Airport Commission

Sean Loughran
Port of Portland

Laura McKee
Airlines for America

Simon Mosbah
WSP

Kelly Moulton
Sacramento County Department
of Airports

Julia Nagy
HMMH

Steven Nakana
Port of Portland

Gil Neumann
Arora Engineers, Inc.

Aidan O'Donnell
Port Authority of New York
and New Jersey

Christopher Oswald
Airports Council International-
North America

Clyde Otis
Post, Polak, Goodsell, & Strauchler, P.A.

David Popko
Moy Bishop & Associates

Bradley Rolf
Mead & Hunt

Steven Rother
Essex County Improvement Authority

Mark Rutyna
Metropolitan Washington
Airports Authority

Enrique Sanabria
Port Authority of New York
and New Jersey

Upendra Sapkota
City of Newark, Planning

Barbara Schalmo
C&S Companies

Theresia Schatz
TRB/The National Academies

Regan Schnug
Kimley Horn

Mihir Shah
Arora Engineers, Inc.

Stanley Shepherd
Port of Seattle/Sea-Tac Airport

David Storer
Allegheny County Airport Authority

Jackie Sweatt-Essick
Federal Aviation Administration

John Terrell
Dallas-Fort Worth International Airport

Stephen Van Beek
Steer Davies Gleave

Catherine Van Heuven
Kaplan Kirsch & Rockwell, LLP

Stephanie Ward
Mead & Hunt

Ray Wassel
Division on Earth and Life Studies/
The National Academies

Jeffrey Williams
C&S Engineers

Jen Wolchansky
Mead & Hunt

Louis Wolinetz
WSP

Amber Woodburn
Ohio State University

Kathleen Yodice
Yodice Associate

APPENDIX B

Program Agenda



Program Agenda

Tuesday, April 10, 2018

<i>Time</i>	<i>Topic</i>	<i>Speaker(s)</i>
8:30am- 9:00am	Breakfast	
9:00am- 9:15am	Welcome Address	<p>Neil Pedersen, Executive Director, Transportation Research Board</p> <p>Kitty Freidheim, Chair, ACRP Oversight Committee</p> <p>Frederick R. Busch, Planning Committee Chair</p>
9:15am- 10:30am	<p>Plenary 1: Airport Context</p> <p>Featuring a presentation and panel discussion among airport industry leaders establishing the main topics of interest, and the legal and regulatory context of land use around airports.</p>	<p><i>Presenter</i></p> <p>Jackie Sweatt-Essick, Environmental Protection Program Manager, Federal Aviation Administration</p> <p><i>Panelists</i></p> <p>Jamie Abbott, Executive Director, Chicago Executive Airport</p> <p>Catherine M. van Heuven, Partner, Kaplan Kirsch Rockwell</p> <p>Kelly Moulton, Senior Airport Planner, Sacramento County Department of Airports</p>
10:30am- 10:45am	Break & Refreshments	
10:45am- 12:00pm	<p>Plenary 2: Planning Jurisdiction Context</p> <p>Featuring a presentation and panel discussion among planning experts providing insight on urban planning and economic development topics of interest around airports.</p>	<p><i>Presenter</i></p> <p>Dr. Janet Bednarek, Professor, University of Dayton</p> <p><i>Panelists</i></p> <p>Tom Armstrong, Supervising Planner, Bureau of Planning and Sustainability, City of Portland</p> <p>Steven Rother, Executive Director, Essex County Improvement Authority</p> <p>Chris Cramer, Director of Community Development, City of Commerce City, Colorado</p>

Tuesday, April 10, 2018

<i>Time</i>	<i>Topic</i>	<i>Speaker(s)</i>
12:00pm- 1:00pm	Networking Luncheon	
1:00pm- 1:40pm	Keynote Address: The San Diego Experience Featuring a presentation by Thella Bowens about tough land use decisions that led to wide-ranging economic development successes.	<i>Keynote Speaker</i> Thella Bowens , Former President/CEO, San Diego County Regional Airport Authority
1:40pm- 2:00pm	Introduction to Breakout Session Discussions/Transition to Breakout Rooms	
2:00pm- 3:00pm	Breakout Session: Common Perspective Broken into small groups with common perspectives, participants will work together to propose solutions to airport land use scenarios, learning from each other along the way.	
3:00pm- 3:15pm	Break & Refreshments	
3:15pm- 4:15pm	Breakout Session: Mixed Perspective Broken into small groups with mixed perspectives, participants will work together to propose solutions to airport land use scenarios, learning from each other along the way.	
4:15pm- 4:30pm	Day 1 Recap	<i>Rapporteur</i> Mary Vigilante , President, Synergy Consultants, Inc.

Wednesday, April 11, 2018

<i>Time</i>	<i>Topic</i>	<i>Speaker(s)</i>
8:30am- 9:00am	Breakfast	
9:00am- 9:45am	Keynote Address: Land Use Policy Considerations Featuring a presentation by Dr. Stephen Van Beek discussing aviation land use, near-airport economic development, and other regulatory and policy issues.	<i>Keynote Speaker</i> Dr. Stephen Van Beek , Director and Head of North American Aviation, Steer Davies Gleave
9:45am- 10:30am	Report Back: Common Perspective Breakouts Facilitators will lead a plenary discussion synthesizing lessons learned and main themes from the common perspective breakout session.	Breakout Session Facilitators
10:30am- 10:45am	Break & Refreshments	
10:45am- 11:15am	Report Back: Mixed Perspective Breakouts Facilitators will lead a plenary discussion synthesizing lessons learned and main themes from the mixed perspective breakout session.	Breakout Session Facilitators
11:15am- 12:00pm	Keynote Address: The Dallas-Fort Worth Experience Reflecting on Dallas-Fort Worth's land use experience, especially as it relates to topics discussed in the Breakout Sessions.	<i>Keynote Speaker</i> John Terrell , Vice President, Commercial Development, Dallas-Fort Worth International Airport
12:00pm- 12:30pm	Looking Forward Rapporteur Mary Vigilante will identify innovative best practices and future research needs in the airport land use arena.	<i>Rapporteur</i> Mary Vigilante , President, Synergy Consultants, Inc.

APPENDIX C

Logistics Instructions and Prompt for Breakout Sessions

Facilitator Instructions—PART A and PART B

During PART A, groups will be arranged so that participants are with others who have common background perspectives (small airport, large airport, municipal planner, etc.). For PART B, participants will be grouped with other participants who have mixed background perspectives. The Airport Land Use Scenario Background is the basis for both PART A and PART B, but for PART B, the Twist for Part B is added for consideration.

Facilitators should:

- Lead their group through analyzing and discussing the scenario and answering the questions listed below.
- Guide and prompt the discussion, but not control or dominate the direction of the responses.
- Focus on determining best practices and the exchange of information about need-to-know facets of airport practitioners' versus municipal planners' work.
- Document main points of discussion, best practices, lessons learned, and “aha” moments of exchange between municipal planners and airports, in order to be able to provide a report back to the plenary group. Feel free to ask another participant for assistance with documenting, if need be.
- Keep participants on track, loosely following the timeline set below. There will be 15 minutes between PART A and PART B for participants to take a break, and find their new, mixed grouping.

Timeline for PART A—Common Perspective (4/10/18, 2:00–3:00pm) is the following:

- 5 minutes for introductions
- 5 minutes to review the scenario
- 40 minutes to discuss the questions
- 10 minutes to agree on summary, main takeaways, lessons learned, best practice approaches, etc.

Timeline for PART B—Mixed Perspective (4/10/18, 3:15–4:15pm) is the following:

- 10 minutes for introductions (might take longer because of diverse backgrounds)
- 5 minutes to review the scenario

- 35 minutes to discuss the questions
- 10 minutes to agree on summary, main takeaways, lessons learned, best practice approaches, etc.

Airport Land Use Scenario Background

“Insight Event Airport,” a small commercial service reliever airport, is located about 20 miles from a large metropolitan airport. The Airport recently completed an extension of its primary runway from 6,500 feet long by 150 feet wide, to 8,500 feet long by 150 feet wide. The runway extension required acquisition of 10 acres of farmland. The Airport land encompasses 3,200 acres in total, which is owned by the County. The Airport is operated by an Airport Authority established by the County. During the studies leading to FAA’s approval of the runway extension, the County established an Airport and County Development Planning Commission, made up of Airport staff, County planners, and other community stakeholders, that provides oversight and guidance for development of airport land and surrounding areas. The Airport and County Development Planning Commission is now also engaging and working with the Airport to support completion of its 20-year Master Plan, which anticipates construction of an additional, 10,000-foot-long, parallel runway in the next 10 years. Simultaneously, the Airport and County Development Planning Commission is overseeing the County’s completion of a Comprehensive Plan to guide development in the County over the next 50 years.

The County was recently approached by a local commercial real estate company that wants to develop 500 acres adjacent to the Airport boundaries for commercial/non-aeronautical uses (e.g., “big box” development or a shopping mall, including a tall hotel). These 500 acres are currently zoned for agricultural use. The purpose of this commercial development is to satisfy growing demand for retail in a region that is constrained, except for the land near the Airport. Initial analysis indicates that the proposed non-aeronautical uses of this land may establish obstructions in the Airport’s navigable airspace.

For this scenario, you are members of the Airport and County Development Planning Commission. In your consideration of the commercial real estate company’s request, you must recognize that the development proposal should be compatible with the Airport’s long-term plan, the regional transportation plans, land use plans, FAA airspace surfaces and land use planning compatibility guidelines, economic development initiatives, and the County’s Comprehensive Plan. Also, the State has its own airport zoning regulations that must be considered. The County prefers that the development of the area surrounding the Airport potentially enhance airport revenue streams and the status of the Airport and the area it serves.

It is assumed the Airport and County Development Planning Commission will work with the commercial real estate company, the County, and the Airport Authority, as well as community members, business owners, and local leaders to maximize the effectiveness of the growth and development and meet all federal, state, and local regulations and laws.

Goal

Your goal as members of the Airport and County Development Planning Commission is to consider answers to the following questions:

1. What studies should be reviewed or procured to inform your decision on the proposed non-aeronautical development?
2. What navigable airspace might be affected by potential obstructions and what is the importance to the Airport and its operation? Which surfaces must be protected under regulations, and what other surfaces might also be considered to protect the Airport's ability to grow and attract commercial airline service? How should the future runway be considered?
3. What does this development mean to the City/County? Why it is important/what is its benefit? What are the costs/disbenefits to the City? (Why would a city/county seek development in close proximity to an airport?)
4. What is the process that the County would have to go through to gain approval for the retail uses? What could be done to improve that process for the Airport and the community? (What are obstacles to both parties both having what they need?)

Twist for Part B

There is a second County very close to the other runway end that the Airport Authority does not have zoning authority over. How might the Airport and County Development Planning Commission work with that second County to establish height and density controls?