

Chair & Co-Chair Report on Sustainability

March 2021 | Issue 19

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Chair & Co-Chair Message

Hello Everyone from your new Chair and Co-Chair!

My name is Bridget. I have been honored with being selected as the new Sustainability Working Group chair. While I may not be widely known throughout ACI-NA, I have been involved with aviation for nearly 30 years. In my role at the Metropolitan Airports Commission, I oversee our capital improvement program development and implementation, facility planning and environmental affairs. I am also the co-chair of the MAC executive sustainability committee. The best part of it all is the partnership aspect, with coworkers, agency cohorts, municipalities, consultants, and airport colleagues.

Hi, I'm Chad. I'm an Environmental Affairs Manager at the San Diego County Regional Airport Authority (SDCRAA), and the new Co-Chair. I have a history in cleantech project management, and I currently manage projects and policy related to the SDCRAA's Sustainability Management Program. My focus areas include air quality and emissions, transportation electrification, energy efficiency and renewable energy, and waste reduction. I'm also involved in the management of The Good Traveler, a carbon offset program developed and owned by the SDCRAA. And, like Bridget, I'm a big fan of collaboration.

As 2021 begins, feeling much like 2020 for now, we want to keep our eyes and minds looking forward. Our work plan for 2021 includes many ongoing efforts, with a focus on partnering with other working groups. Sustainability touches so many other areas; we will make our biggest leaps forward working as a whole. That includes working with former Co-Chair Tami McCrossen-Orr in her new role as Chair of the ACI-NA Sustainability Integration and Advisory Council. You can find the work plan at: <https://airportscouncil.org/committees-programs/environmental-affairs/environmental-affairs-committee-work-plan/#1555421790716-d3bf9292-fdb2>.

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ACI-NA UPDATE

What's This New "Sustainability Council" all About?



Contributed by Brendan Reed, Director of Planning & Environmental Affairs at San Diego International Airport & Tami McCrossen-Orr, Director of Environmental Sustainability and Compliance, Los Angeles International Airport

You may have heard about ACI-NA's Sustainability Integration & Advisory Council (Sustainability Council) but are still wondering what it is and what it does.

Tami McCrossen-Orr, who is the Los Angeles International Airport's Director of Environmental Sustainability and Compliance, serves as the Chair of the Sustainability Council, so we asked her some questions about it...

How did the Sustainability Council begin?

It was actually a group of thought leaders from the ACI-NA Environmental Affairs Committee who recognized that in order to move ACI-NA and the broader industry further towards the four sustainability pillars (EONS: economic vitality, operational efficiency, natural resource conservation, and social responsibility), more cross-committee dialogue and collaboration must occur. The ACI-NA Board supported this approach when it adopted the organization's formal Sustainability Policy in 2017 and approved the Council in 2018.

Who is on the Sustainability Council?

Before COVID, we had a diverse roster of liaisons as designated by the Steering Groups of numerous established ACI-NA committees such as Operations & Technical Affairs, Human Resources, Business Diversity, Risk Management, Finance, Marketing, and of course Environmental Affairs. We are looking for additional and new representatives that will help serve as a conduit of information and ideas between the Sustainability Council and their respective committees.

Why is it called a Council?

In creating the new group, we wanted to differentiate it from the established ACI-NA committee structure. The new Sustainability Council is not meant to replace or duplicate other committees' important work. Rather, it is meant to facilitate an integrated approach across committees for solving the complex issues

facing airports today.

What are the Sustainability Council's priorities in the coming year?

Over the next 10-12 months, our primary goals will be increasing the understanding of the Council's purpose and role throughout ACI, enhancing ACI-NA's conference programming with sustainability-related topics, advocating for implementation of the Sustainable Conference guidelines, and continuing to develop the Council's guidance documents. One of the initial topic areas that we have identified that would benefit from a multi-disciplinary, EONS-type approach is Sustainable Aviation Fuels (SAF).

As an environmental professional, what inspired you to serve as the Chair of the new Sustainability Council?

At the Los Angeles International Airport, we have recognized that sustainability is much more than just environmental stewardship and cuts across all aspects of airport operation. It is a valuable tool for the airport to meet its strategic goal of operating sustainably and achieving the vision of our Board of Airport Commissioners in our Sustainability Action Plan. As such, sustainability is an important driver in everything that we do. For example, our multibillion-dollar airport modernization program focuses not only on building sustainable, resilient facilities, but also on promoting inclusivity and social equity in our communities via programs such as aggressive local and small business participation goals, the HireLAX apprenticeship program, and the First Source Hiring program for LAX businesses. When we look at issues in a more integrated way, we can find better long-term solutions.



To learn more, contact Tami McCrossen-Orr:
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Industry Updates

TRB Annual Meeting

Takeaways



Contributed by Carly Shannon (C&S Companies; left photograph) & Kate Andrus (Mead & Hunt; right photograph) – Co-chairs of AV030's Aviation Climate Change & Sustainability Sub-Committee

If there is a silver lining to the pandemic, it is that we have all become more connected in this virtual world. This was certainly the case with the Transportation Research Board's (TRB) Annual Conference that went virtual for the first time ever. For those of us who've been to the event in Washington, D.C., you can imagine the complexities of shifting this packed program online – but it was well worth it! Here were a few highlights:

- 1) Kicked off the aviation events with the new Aviation Air Quality Sub-Committee's inaugural meeting that included presentations on electric aircraft and commercial space emissions modeling.
- 2) Our sub-committee heard from Sea-Tac's Stephanie Meyn on her use of the Airport Cooperative Research Program (ACRP)-produced Airport Climate Risk Operational Screening (ACROS) Tool. We also had presentations on two very different types of carbon capture innovations from Solidia Technologies and United Airlines.
- 3) The Aviation Noise and Vibration Sub-Committee covered – you guessed it – noise and vibration, but with some exciting updates including modeling improvements related to urban air mobility.
- 4) The Aviation Water Resources Sub-Committee addressed the U.S. Environmental Protection Agency's (USEPA's) Multi-Sector General Permit, tips and tricks for research proposals, and – of course – PFAS! (Perfluoroalkyl and polyfluoroalkyl substances, or "PFAS," are a potentially hazardous group of chemicals found in firefighting foams used at airports).

TRB has dozens of standing committees. AV030 is the Standing Committee on Environmental Issues in Aviation, under which Kate and Carly's Sub-Committee falls.

In 2020, Jenn Salerno (Booz Allen Hamilton) transitioned her role as AV030 Chair to Arlyn Purcell at Port of Seattle. Arlyn has done an excellent job stepping (or diving) into the position, particularly in a year like no other.

Arlyn provided an excellent wrap-up with the AV030 Committee Meeting that included, among many topics, a presentation from RMI on mobilizing voluntary contributions for aviation carbon. And this doesn't even cover the many poster and lectern sessions, workshops, and more! With 2020 behind us, TRB Annual was the perfect way to look forward and feel optimistic about the innovation, enthusiasm, and partnerships that will propel our industry. You can help by submitting research ideas on [IdeaHub](#) – due April 5th (or reach out to us if you have ideas related to climate change and sustainability!).

If you missed Annual, check out the AV030 Committee and Subcommittee Meeting slides and notes [available on the AV030 Committee Website](#).

Hope to see you all at TRB's (virtual) Mid-Year in the spring!
- Carly & Kate



THERESA SAMOSIUK

Championing Sustainability at Detroit Metro Airport

Contributed by Theresa Samosiuk, P.E., CM, Deputy Director of Airfield Facilities



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

Want to integrate sustainability effectively into your capital projects? “Start early in the design process and get all stakeholders at the airport involved in the decisions,” says Theresa Samosiuk, P.E., CM, Deputy Director of Airfield Facilities at the Wayne County Airport Authority. In her 12 years at Detroit Metropolitan Wayne County Airport (DTW), Theresa has overseen numerous large-scale airfield improvement programs, including the complete reconstruction of three primary runways, and has seen the benefit that sustainability brought to these projects. In 2016, the reconstruction of Runway 4L/22R and associated taxiways project received one of the country’s first Envision awards for an airfield project. Since then, DTW’s commitment to sustainability has continued to grow, with Theresa pushing new initiatives and opportunities. As a result, her next runway reconstruction project, 3L/21R and associated taxiways reconstruction project achieved Envision Gold in 2019.

A civil engineer by training, Theresa credits the experience of the 4L reconstruction project and the collaborative relationship with one of the design firms, C&S Companies, for inspiring her to take the sustainability concept and run with it. “The 4L project team held a sustainability charrette to vet out as many options as the team could think of and then ranked them as to which were the most feasible for the project.” One thing she learned was “the Airport Authority was already incorporating sustainability initiatives into many construction projects.”

Building on the lessons learned from the 4L reconstruction project, Theresa subsequently completed the reconstruction of DTW’s primary departure runway, 3L/21R, and its associated taxiways. This \$256 million capital improvement project also included a new connector taxiway and a Centralized Deicing Facility. The primary difference between the two projects was initiating the sustainability charrette at the onset of design (earlier in the process) in order to engage more stakeholders

and ultimately bid more initiatives. One significant initiative added to the 3L reconstruction project was the requirement that all existing concrete removed be crushed and reused in the new shoulders and taxiway/taxilane bases. This effort reduced waste material, eliminated the need for virgin materials, and saved emissions from transporting material – with substantial costs savings to the Airport Authority.

Theresa emphasizes that sustainability initiatives not only benefit projects, but they are incorporated into the airport’s dynamic Sustainability Management Plan (SMP). Her team works closely with the Airport Authority’s Department of Environment & Sustainability to ensure tracking mechanisms are in place to capture benefits. In 2018, Theresa earned an Airports Going Green® Award for her leadership in pursuit of sustainability within the aviation industry.

Theresa’s primary recommendation to other airports is to start early and maintain regular communication with all stakeholders throughout the entire design and construction process. When the pandemic hit, many efforts across DTW were stalled like other airports. Embedding sustainability into the 3L reconstruction project aided the Airport Authority’s decision to proceed with construction without having to value engineer “add-on” initiatives and helped accommodate the late start. Both reflect the value of early and continual integration.



FAA UPDATE

Voluntary Airport Low Emission and Zero Emission Vehicle Program Updates



Contributed by Michael Lamprecht, Environmental Protection Specialist at the Federal Aviation Administration

FAA Reauthorization Act of 2018

Through the FAA Reauthorization Act of 2018, Congress enhanced the Voluntary Airport Low Emission (VALE) Program and the Airport Zero Emissions Vehicle (ZEV) and Infrastructure Pilot Program by:

- Increasing the ZEV Program's federal share from 50% of project cost to standard Airport Improvement Program (AIP)/local share;
- Refining purchasing options, off-airport use, and technological assistance and management; and
- Creating a new pilot program for ZEV technology, which calls for the FAA to fund "three geographically diverse, eligible organizations to conduct zero emission airport technology and infrastructure projects."

The FAA is reviewing the legislation's changes and requirements prior to launching this program. The FAA will be issuing revised VALE and ZEV program technical reports that incorporate the new information. The FAA has issued the fiscal year 2020 grants and is now reviewing the 2021 applications. To view the list of grants already issued under this program, see the following link:

<https://www.faa.gov/airports/environmental/vale/media/VALE-grant-summary.pdf>

Energy Efficiency Update

The FAA Reauthorization also resulted in enhancements to the FAA's Airport Energy Efficiency Program. Generators and components necessary to implement a microgrid are now AIP eligible. This rounds out the program which, when initiated in 2012, allowed for funding of energy assessments and select airport energy efficiency/renewable energy projects.

What is the Voluntary Airport Low Emissions (VALE) Program?

VALE is a national program to reduce airport ground emissions at commercial service airports located in designated air quality nonattainment and maintenance areas. The program provides sponsors with financial and regulatory incentives to increase the use of low-emission technologies suited to the airport environment.

[\(www.faa.gov/airports/environmental/vale/\)](http://www.faa.gov/airports/environmental/vale/)



What is the Airport Zero Emission Vehicle (ZEV) and Infrastructure Pilot Program?

The ZEV program provides funding to airports for up to the standard local cost to acquire ZEVs and install or modify supporting infrastructure for acquired vehicles. Grant funding must be used for airport-owned, on-road vehicles used exclusively for airport purposes.

[\(www.faa.gov/airports/environmental/zero-emissions-vehicles/\)](http://www.faa.gov/airports/environmental/zero-emissions-vehicles/)



For more information, please contact: Michael Lamprecht at Michael.Lamprecht@faa.gov

A4A SUSTAINABLE AVIATION FUEL UPDATE

Deployment of Sustainable Aviation Fuel in the U.S.



Airlines for America®
We Connect the World



Shared by Aaron Robinson, Senior Manager - Environmental Strategy and Sustainability, United Airlines

The aviation industry is a leading force in the development and use of sustainable aviation fuel (SAF), which emits less carbon dioxide (CO₂) from a lifecycle perspective than traditional jet fuel while still meeting the rigorous specifications required to ensure safety of flight. The aviation industry is committed to advancing use of SAF to help meet its emissions reduction goals, diversify fuel supply, and enhance energy security. SAF feedstocks often are biomass-based (e.g., oil-seed crops, woody waste, municipal solid waste, inedible waste oils and fats), although capturing and recycling CO₂ off of other industrial production processes and uses of renewable electricity for hydrogen production combined with recycled CO₂ also can be sources of renewable feedstocks.



Airlines for America recently prepared a primer on SAF, which can be found here:

www.airlines.org/media/deployment-of-sustainable-aviation-fuel-in-the-united-states/. The primer is intended to serve as a reference on the state of SAF development and deployment in the U.S., the challenges to making SAF more commercially viable, and ways that airlines, airports, and other stakeholders can work together to overcome those challenges. It identifies five ways airports can support SAF deployment:

- 1) Promote collective understandings and collaboration;
- 2) Advocate to maintain and expand positive incentives for SAF;
- 3) Collaborate with airlines on regional SAF strategies and/or potential airport-specific opportunities;
- 4) Support airlines and their fuel producers during initial SAF deployment at an airport; and
- 5) Celebrate volunteerism.

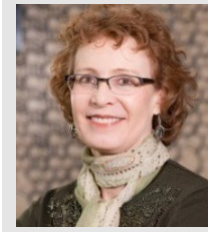
To date, there have been several comprehensive, collaborative, regional studies on how to advance SAF in specific regions or at specific airports that provide more detailed examples of how airports can help advance SAF. These include:

- 2011: Sustainable Aviation Fuels Northwest (SAFN);
- 2013: Midwest Aviation Sustainable Biofuels Initiative (MASBI);
- 2016-2020: Three reports on infrastructure, funding models, and feedstocks commissioned by the Port of Seattle;
- 2019: San Francisco International Airport's SAF Feasibility Study; and
- 2020: Sustainable Aviation Fuel Opportunities for Washington, a follow-up to the 2011 study.

TRANSPORTATION RESEARCH BOARD

Airport Cooperative Research Program (ACRP) Project Updates

Contributed by Gail Staba, ACRP, Transportation Research Board



The ACRP is an excellent source for the latest research and practical guidance. Recently published sustainability-related ACRP reports are summarized below. These reports are useful in professional development and research within the world of transportation. Additional sustainability-related ACRP reports and resources are available at: www.trb.org/Publications/PubsACRPPublications.aspx.

Thank you to all expert panelists and researchers whose efforts resulted in these excellent guidebooks!

	<p>Visual Arts Programs at Airports Synthesis 114 [2020] Provides practices that airport arts professionals use for understanding the operations, management, and benefits of temporary visual arts programs at their airports. Case studies, passenger surveys, and questions used for arts program manager interviews are included. www.trb.org/Publications/Blurbs/181488.aspx</p>		<p>Guidebook for Developing a Zero- or Low-Emissions Roadmap at Airports Report 220 Pre-Publication [2020] Covers roadmap development using diagrams, examples, best practices, and links to external tools and resources. Discusses airport-influenced emissions from airlines, concessionaires, and passengers. www.trb.org/Publications/Blurbs/180127.aspx</p>
	<p>Airport Workforce Programs Supporting Employee Well-Being Synthesis 113 [2020] Details well-being programs at airports that reduce health care costs, improve productivity, decrease absenteeism, improve employee recruitment and retention, and camaraderie and teamwork among employees. www.trb.org/Publications/Blurbs/181166.aspx</p>		<p>Guidance for Diversity in Airport Business Contracting and Workforce Programs Report 217 [2020] Provides a benefit-cost analysis for diversity contracting programs and their impact on the workforce. Includes guidelines to identify and quantify the benefits, costs, and economic impact of diversity contracting. www.trb.org/Publications/Blurbs/181066.aspx</p>
	<p>Airport Renewable Energy Projects Inventory and Case Examples Synthesis 110 [2020] Presents the state of practice for airport renewable energy projects—including solar PV, geothermal, bioenergy, solar thermal, and small wind—into airport development and operations and the drivers behind those efforts. www.trb.org/Publications/Blurbs/181255.aspx</p>		<p>Permissible Uses of Airport Property and Revenue Legal Research Digest [2020] Updates the background of economic and legal information in <i>Legal Research Digest 2: Theory and Law of Airport Revenue Diversion</i>. Focuses on the application of federal law and policy to specific categories of expenditures and uses. www.trb.org/Main/Blurbs/181529.aspx</p>
	<p>Measuring Quality of Life in Communities Surrounding Airports Report 221 [2020] Addresses an emerging need for airports to take a more holistic look at how they affect their neighbors and how they can build stronger community relationships. Helps airports understand the variables affecting their surrounding communities, over which they may have little to no control. www.trb.org/Publications/Blurbs/181139.aspx</p>		<p>Evaluating the Use of Spatially Precise Diurnal Population Data in Aviation Noise Studies Web-Only Document 48 [2020] Examines a potential role of spatiotemporal population data in aviation noise studies. Knowing where people are at different times of the day may enable the design of airspace routes that minimize the impact to a shifting population on the ground. www.trb.org/Publications/Blurbs/180987.aspx</p>

ACRP Project Updates (Continued)

Sustainability-Related ACRP Projects Underway	
S10-18	Considerations for Establishing and Maintaining Successful Bee Programs on Airports
S01-24	Examples of Airports Providing Facility Space for Community Use
02-89	A Primer and Framework for Considering an Airport Noise and Operations Monitoring System (NOMS)
02-90	Development of Airport Construction Emission Inventory Tool (ACEIT) Version 2.0
02-91	Development of PFAS Source Differentiation Guidelines at Airports
02-92	General Aviation Airports and Resilience: Complete Toolkits for Self-Directed Planning
02-93	Guidebook for PFAS Management at Airports
03-59	Strategies to Address Homelessness at Airports
03-60	Incorporating Shock Events into Traffic and Forecasting and Airport Planning
03-61	Assessing and Improving Data Analytic Capabilities in Airports
03-62	A Toolkit for Establishing Airport Catchment Areas
03-63	Modernizing Air Cargo Operations and Infrastructure at U.S. Airports
10-32	Airside Automated Ground Vehicle Technology (AGVT) Demonstration to Support Airport Operations



Thanks to our former Chair Danielle Buehler (formerly PHL) [far left] and former Co-Chair Tami McCrossen-Orr (LAWA) [left] for all their hard work and efforts with the working group

Many thanks to our newsletter contributors, especially Brendan Reed (SAN) [right] and Carly Shannon (C&S) [far right], who went the extra mile this edition



Kudos to Chief Editor Gene Peters [right] and the Ricondo team for preparing the newsletter



Thank you to our SWG Newsletter team and contributors!

The Sustainability Working Group newsletter is a 100% volunteer effort, thanks to stories provided by you. Amazingly, this marks the 19th edition and 10th year for the Sustainability newsletter! To-date, more than 35 airports have been featured in the newsletter's stories and highlights, along with more than double that in the number of individual contributors! Starting with the first issue in June 2011, the newsletter serves as a forum to share our stories in our own words; to inspire and learn from one another and foster creativity; and, to connect us as indispensable resources to one another!

True to the complex and multi-faceted nature of airports, airport sustainability covers a wide range of topics and involves many stakeholders. Airports continue to embrace sustainability, are champions for change, and serve as leaders and examples for other industries.

The SWG newsletter reaches a wide audience via Centerlines Today and is sent directly to the Environmental Affairs, Operations & Technical Affairs, Small Airport, Finance, Commercial Management, Human Resources, and Business Diversity Committees, as well as the ACI World Environmental Committee. The newsletter is also posted on the Environmental Affairs Committee website and the "news" tab on the ACI-NA website.

Many thanks to all those who have contributed to the newsletter. **Gail Staba** and the TRB have been with us since the beginning. Congratulations to Gail, who is now officially retired! Thank you, Gail, for being part of the team and we wish you the very best.

Special thanks to Casey Venzon and the entire Ricondo team for their continued efforts in preparing the newsletter and also for the shiny new newsletter format!

- Gene Peters

We couldn't do this without you!



Send your ideas to:

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