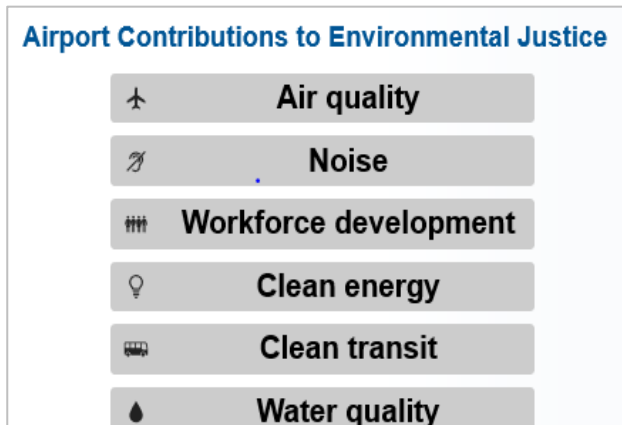


Equity and Environmental Justice in Aviation

Disproportionate, negative impacts on disadvantaged, underserved, and marginalized communities is and has been a known fact. Equity is the quality of being fair and impartial, and it helps us provide what is needed so that people can be comfortable and have a decent quality of life, no matter what demographic they fit in. The health and safety of communities is empowered when equity is realized through environmental justice (EJ). An impactful definition of environmental justice comes from Bunyan Bryant from the University of Michigan, the first African American member of the School for Environment and Sustainability faculty. He starts by defining a baseline condition:

“Environmental justice are those cultural norms and values, rules, regulations, behaviors policies, and decisions that support sustainable development, so that people can interact with confidence that their environment is safe, nurturing, and productive. Environmental justice is served when people can realize their highest potential, without experiencing the ‘isms’.”

Bryant is referring to racism, classism, ageism, etc.



He goes on to show how we get there: “Environmental justice is supported by decent-paying and safe jobs; quality schools and recreation; decent housing and adequate health care; democratic decision-making and personal empowerment; and communities free of violence, drugs, and poverty.” He finishes by saying who is entitled. “Environmental justice communities are where both cultural and biological diversity are respected and highly revered and where distributive justice prevails.” Distributive justice is similar to equity in that it involves the fair and equitable distribution of resources and burdens throughout a society. This definition does well to illustrate the problem as well as provide solutions.

Historically, it is evidentially quantifiable fact that there are disproportionate impacts to minority, low-income, tribal, and indigenous people in our country. One of the first studies in 1983 revealed that there were states in the southeast that hazardous wastes sites were disproportionately located near black communities. In 1987, 3 out of 5 black and Latino Americans were living near a toxic waste site. What was once privileged information, people are now armed with the knowledge of how sites like landfills, oil refineries, chemical manufacturers, and even airports can exacerbate health issues and degrade quality of life. The unfortunate reality is that racism and classism forced those without the resources to learn about the hazards or power to litigate against the agendas of big corporations to live in these dangerous, unhealthy conditions, while simultaneously stifling communities and their economic growth.

Airports and their operations can have the same negative impacts; unless an airport has optimized equitable employment, inclusive policies and contracting, zero waste, and zero emissions, it could also be contributing to a community’s problems. Without engaging the community to hear their concerns, airport operations can

have a very real, serious, and negative impact on both the surrounding community and the airport. Our current challenge is to identify a path forward that starts with a foundation of equitable principles so that we do not continue to repeat historical inequities. This starts with identifying the root of the issues.

Systemic vs. Systematic Change in Airports

It is important to understand the layers of what an airport is up against when trying to impact equity and environmental justice. Two words that help define contributions to inequities are systemic – meaning that the issue is rooted in the entire system – and systematic – meaning the individual, methodical, and intentional practices of individual contributors to the system. The collective group of airports in the US make up the system. Those under the same leadership (states, local municipalities, etc.) or individual entities are responsible for the

Current Equity and EJ Challenges

- Politics
- Knowledge sharing and synergies
- Definition of barriers
- Resource allocation
- Numerous focal points
- Vulnerable party burnout
- Accountability
- Tokenism vs representation
- Generational perspectives



systematic inputs. This is important because the layers of rules, politics, and even personalities that are responsible for the outcomes of airports are very complex. The hope would be for the entire system to enact change and prioritize equitable principles. But what is more feasible is taking the systematic approach and homing in on the strategies that can be tailored to the local needs and requirements for each airport. Widespread systematic change can then influence enhancements to the system.

This strategy of evaluating systemic vs. systematic issues and inequalities will allow practitioners to start to better understand the root of the issues. Evaluations of equity and EJ are often lacking context and try to force a one-size-fits-all solution to problems that are very diverse depending on location, resources, history, and a host of other factors. Thorough analysis of historical community context, contracting, hiring practices, environmental considerations, and others can only be done by evaluating the individual airport contributors. Once this has been performed, responsible parties and their support teams can take a look at the data to better understand any trends, and then set scalable, replicable strategies to help address what has been found.

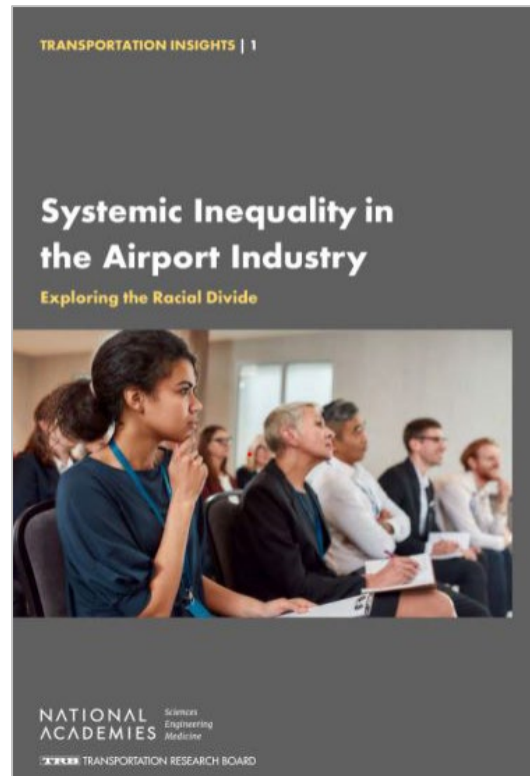
This is where we are today with US airports. We know that the system is not perfect. But where do we start to make changes? And how confident are we in the ability to successfully implement new pushes for stakeholder engagement, small and disadvantaged business participation, inclusive contracting and projects, or enhanced environmental considerations? The Airports Council International’s Diversity Equity and Inclusion (ACI DEI) Working Group exists help answer these questions and developing the case studies to offer to airports as recommended practices. Our challenge is to keep pushing towards equity and environmental justice in a way that influences the sustainability and resilience of our airports, while also appealing to many layers of influence regarding what is best for an airport. Without airports pushing the envelope to challenge their stakeholders and suppliers to be more equitable, neither the systemic nor systematic issues will go away. It’s the

responsibility of airport leadership to prioritize the health and safety of their constituents by finding the budget, staff, and resources to evaluate needs and plan for social, economic, and environmental equity.

Operationalizing Equity and EJ

With all other elements considered, equity – including performing stakeholder engagement and other inclusive planning/design concepts – is not typically scoped into project work up front unless requested. As airports plan for socially and environmentally sustainable futures, it is the responsibility of the airport to prioritize the efforts to address the airport’s resilience. Airports are now creating sustainability and social equity plans to hold their stakeholders accountable for social and environmental stewardship. Leadership disseminates the mission, and it’s important that airport leaders understand that they are only one voice. Their decisions should consider the community that’s directly impacted and will continue to be impacted whether leadership and staff change. Operationalizing EJ and equity at airports, at a minimum, requires the following steps:

- Resilience and strategic planning, preferably documented and updated regularly
- Tenant, employee, contractor, and consultant accountability
- Leadership buy-in and direct participation with stakeholders



Some of the more advanced airports like ATL, SFO, DEN, and SEA have taken historically progressive stances on equity and environmental justice. Bold equity initiatives, stricter terms for equity in proposals and project work, and reinventing standard airport projects like master plans and environmental studies with a focus on impacts and engagement with communities are blazing a trail for a new model for our airport system. The problem is that airports are stretched and need resources in order to evaluate, strategize for, and perform actions that advance equity and EJ. Starting with a baseline inventory and stakeholder engagement to make sure an airport is on the right track will empower documenting their equitable path forward.

A start is learning basic steps from industry organization trainings from organizations like ACI, Airport Consultant Council (ACC), Airport Minority Advisory Council (AMAC), and Conference of Minority Transportation Officials (COMTO), or from best practice documents from the Airport Cooperative Research Program (ACRP). Working with consultants and suppliers that will align with equity and EJ goals is not only imperative, but also strengthens the toolkits of those practitioners. And there’s no issue with looking to other industries for best equity practices too! For example, Race Forward and the Othering and Belonging Institute

have created the Government Alliance on Racial Equity (GARE) to support a consortium of people from numerous industries in their equity endeavors.

Here are some examples of how several of our current airport clients are demonstrating their desire to create equitable outcomes in the planning process:

- Austin Bergstrom Airport (AUS) is creating an Economic Social Governance plan to help make their operations more sustainable, socially responsible, and rooted in airport policy.
- San Luis Obispo County Regional Airport (SBP) has completed a strategic plan and, as a follow-up to that exercise, created an equity learning series that will bring together airport staff and tenants to learn about options to equitably enhance the customer experience.
- Portland International Airport (PDX) is embarking on a first-of-its-kind Master Plan that focuses on Shared Prosperity. Through this effort, PDX will strategize for the human elements of the Master Planning process in concert with strong community engagement.
- King County International Airport (BFI) requires all projects to complete an Equity Impact Review Tool and sustainability scorecard. This empowers the consultant to work with the airport to unveil ways that the project will consider the community first, keep them informed of the relevant details of the project process, and use the materials with the least impact.
- Another first, Seattle-Tacoma International Airport (SEA) is proposing to do a Part 150 Study update that focuses on the communities surrounding the airport. This effort will go beyond noise monitoring and mapping and illustrate the lived experience of people that encounter aircraft noise.
- Mead & Hunt has completed several key research projects with ACRP including the Insight Event – Systemic Inequalities in the Aviation Industry and Successful Community Inclusion in Advanced Air Mobility.

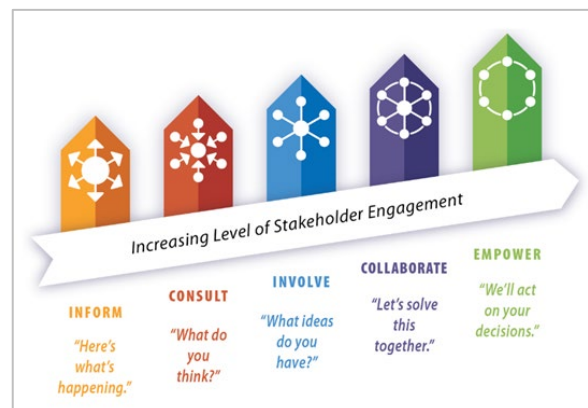
Lessons Learned

It's important to acknowledge that there will not be a universal solution to EJ or equity in airports. The strategies that are being implemented are intricate and require a lot of energy to carry forward. Airports have a responsibility to be transparent about their vision and mission while empowering people to realize equity without being tokenized. The following are lessons learned in airport equitable practices.

Engagement

To properly account for those who will be impacted by an airport project, it may be necessary to engage with various stakeholders, including community members, project teams, and other interested parties.

- Start planning early, make sure that the interactions will be relevant for all participants, and carve out budget for planning and engagement.



- Identify all impacted stakeholders and ensure there is representation from each entity in the collective when possible to prevent oversight of issues or needs.
- Consider compensating and incentivizing all parties fairly, including community members who are helping contribute to airport stewardship.
- Try to use local resources and engagement firms to promote local participation and get the most relevant information from those with relevant lived experience.

Planning

Planning at airports is taking on a lot of responsibility for the customer experience and reputation of the facility. Working with local practitioners helps to strengthen communication about local issues. Also, including a national perspective is a well-rounded way to approach understanding the needs of an airport and their community.

- Building trust is key. The airport's reputation relies on public perception, so use strategies that meaningfully show care and concern for the health and safety of the community, traveling public, and all stakeholders.
- Start with the standards set forth by the FAA for equity and EJ, but also look at ways to exceed these standards so that the bar can be set higher.
- Right-size solutions based on resources, community make-up, project opportunities, and gradual, comprehensive change.
- Engage with small and disadvantaged businesses to help influence their independence in the aviation marketplace. Local firms are especially helpful with creating connectivity between communities and airports.

Engineering and Design

While airports are unique in many ways, we can still learn from the examples in other facets of the built environment to create resilient and sustainable facilities.

- Human-centered designs centrally focus on health and safety impacts on people. Making this a standard ensures consideration of how project elements will ultimately work together over time and make a more resilient project.
- Look for project certifications to help guide efforts. Partner with consultants that are certified in areas of interest, including equity, sustainability, and resilience.
- Evaluate the project process for the key milestones that will be of most interest or impact to stakeholders. When disseminating information, be sure to share in terms that are understandable so that feedback can be significant to the project.
- Consult local organizations for inclusive project opportunities based on client and community demographics. Some focal points are neurodiversity, disabilities, caregivers, families, and limited English proficiency, among others.

Other Resources and Tools

There is power in information. Many of the options we have to advance equity and EJ already exist, but just haven't been mainstream enough to become the status quo.

In addition to the FAA and the US Department of Transportation, the following organizations are very helpful to inform airport equity and EJ strategy:

- FAA Office of Civil Rights
- United States Access Board
- Transportation Research Board
- White House Initiatives
- US Department of Transportation Office of Civil Rights
 - Disability Resource Center
 - Equity Task Force
- Federal Transit Administration
 - Environmental Justice Standard Operating Procedure (SOP)

It's also great to be involved with national chapters of airport industry organizations, but the real impact occurs with local participation. There are countless regional or state chapters of national professional organizations that exist to empower local collaboration and resource sharing.

Airport/ Consultant Activities to Address Community Engagement	
Understanding	Understanding project impacts
Defining	Defining the impacted community for the client
Explaining	Explaining the client's project to the community
Determining	Determining when and how to engage stakeholders
Setting	Setting the parameters for inclusive engagement

The following resources can help illustrate baseline data for an airport. It is important to note that some of these resources include studies that are historical in nature, that are not completely inclusive of all current community members, and that do not account for future projections for local demographics. These tools should be used for preliminary data collection rather than decision-making because they need to be evaluated for underlying complications.

- White House Climate Economic Justice Screening Tool (CEJST) - <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>
- EPA EJScreen - <https://www.epa.gov/ejscreen>
- EPA NEPAassist - <https://nepassisttool.epa.gov/nepassist/nepamap.aspx>
- EPA Enviromapper - <https://enviro.epa.gov/enviro/em4ef.home>
- CDC Public Health Mapper for community health impacts - <https://www.cdc.gov/gis/public-health-maps.htm>
- Climate Mapping for Resilience and Adaptation (CMRA) - <https://resilience.climate.gov/>

It is also imperative to check state and local mappers as available. There are many regulations that begin to help frame equity and EJ efforts:

- Bipartisan Infrastructure Law (BIL) and Justice40
- EO 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government”
- Federal Government’s Commitment to Tribal Sovereignty and Consultation
- US DOT Sustainability Plan
- US DOT Title VI Program
 - DOT 1000.12C and Community Participation Plans
- Rehabilitation Act of 1973
 - Section 508: Accessibility of Federal Electronic and Information Technology to Congress and the President
- Architectural Barriers Act
- Americans with Disabilities Act
- Guidelines for Pedestrian Facilities in the Public Right-of-Way
- Air Carrier Access Act (ACAA)
 - Airline Passengers with Disabilities Bill of Rights
 - Traveling by Air with Service Animals

Again, airports are challenged to meet and exceed these options in order to optimize outcomes.

How Mead & Hunt is Leaning into DEIB

Diversity, equity, inclusion, and belonging (DEIB) are words that we are hearing a lot in the industry, and aviation is also in line with proposing solutions to systemic and systematic issues that have led to marginalization and barriers for underrepresented groups. Mead & Hunt has been involved in the aviation industry since the 1940s. We understand each airport and community is unique and we are passionate about delivering innovative solutions to address a wide range of opportunities. We have developed a project review process that allows us to measure our impact on communities that have historically been marginalized or forced to carry a disproportionate burden of project impacts. This process includes a preliminary review of client and community concerns, interviews with stakeholders, and reaching back after projects to be accountable to our work.

We encourage employees to present at national conferences, including AMAC, National Organization of Minority Architects (NOMA), or the Society of American Military Engineers (SAME), to share our best practices in equity and environmental justice and to grow those discussions within the industry. Mead & Hunt has taken an active role in guiding airports through regulation updates, community outreach techniques, and emerging technologies that will encourage a thriving and diverse aviation workforce.

We shape the future by **Engaging** with people first
Mead & Hunt **Planning**
Designing
Engineering

At Mead & Hunt, our motto is to put people first, do the right thing, and do what makes sense. Our DEIB program was officially started in 2018 when our Employee Resource Group (ERG) was formed to help shape and execute DEIB initiatives within the

company. Over time, the efforts of our ERG have expanded to include our communities and our clients. We now have two full-time positions dedicated to DEIB – one focused on leading the ERG and our workforce DEIB initiatives, and a Transportation Equity Strategist that optimizes equitable outcomes for our projects, partnerships, communities, and clients.

Mead & Hunt has a history in aviation that comprises a diverse and nationwide client base from rural general aviation airports to large hubs. We invest human and financial resources to build inclusive, adept teams and engage relevant technologies that provide optimized outcomes for our clients. We make strides to enhance accountability for our policies and work products, remove all barriers to equitable access to opportunities, and place increased attention on our clients’ unique circumstances in their airports and surrounding communities.

Our staff is evolving to address the positive changes in the industry. We support over 60 airport clients in setting goals, documenting, and performing work on their Disadvantaged Business Enterprise/Airport Concessions Disadvantaged Business Enterprise (DBE/ACDBE) Programs and have several staff that are trained DBE liaison officers. We have an entire department and a cross-disciplinary sustainability and resilience team dedicated to environmental justice. We have individuals who are certified in areas including LEED and Envision, two certification programs that help us start with an equity framework.

We also focus on DEIB in our projects, where we strive to produce equitable and inclusive outcomes for all the communities we serve. We have a particular review of how our projects impact communities that have historically carried disproportionate project impacts or have been left out of the conversation. This approach has two overarching benefits – not only does it support and invest in underserved communities, but folks in these communities will have firsthand, positive exposure to careers in STEM, and will hopefully be encouraged to explore this field.

Last year, Mead & Hunt partnered with professors and academics from a few universities, including Arizona State and Carnegie-Mellon, to develop a pilot program for an eight-week professional development course to help engineers, planners, and architects incorporate



environmental justice into their project planning and design. This approach not only produces better and more inclusive outcomes for our clients and communities, but we also believe that underrepresented groups in the AEC industry will be more passionate and fulfilled if they are working on projects that do not place or perpetuate unfair burdens on communities they associate with. We believe that this approach around integrating social and environmental justice into our work will have a positive impact on our field’s ability to

recruit and retain professionals from minority backgrounds by facilitating more personal connections to the work and creating pathways for folks to address historic harms through their work. We know that increasingly, early career professionals are seeking opportunities to support positive social change in their work.

Since completion of the course, participants have been empowered to pursue new types of projects in not only aviation, but transportation, water resources, and architecture. Some participants have even submitted abstracts to share what they've learned at upcoming industry conferences. We are encouraging employees to share resource, ideas, and project examples so that all employees can approach projects with an equitable and human-centric approach.

Conclusion

It is imperative for airports to create the funds, time, and space to address equity and environmental justice. Airports are responsible for their individual contributions to systematic issues and for helping the entire system acknowledge and adopt standards for equitable outcomes. Through modifying how we engage, plan, engineer, and design airport projects, we can start to build a sustainable, resilient system with a foundation that will prevent marginalization and discrimination.