



**AIRPORTS COUNCIL  
INTERNATIONAL**

ENVIRONMENT, SOCIAL AND GOVERNANCE:  
**AN INTRODUCTION TO PERFORMANCE AND  
RISK MANAGEMENT METRICS FOR  
NORTH AMERICAN AIRPORTS**

APRIL 2024

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## About ACI-NA

Airports Council International-North America (ACI-NA) represents local, regional, and state governing bodies that own and operate commercial airports in the United States and Canada. ACI-NA member airports enplane more than 95 percent of the domestic and virtually all the international airline passenger and cargo traffic in North America. Approximately 380 aviation-related businesses are also members of ACI-NA, providing goods and services to airports. Collectively, U.S. airports support more than 11.5 million jobs and account for \$1.4 trillion in economic activity – or more than seven percent of the total U.S. GDP. Canadian airports support 405,000 jobs and contribute C\$35 billion to Canada's GDP.

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# 1.0 Introduction and Executive Summary

## 1.1 Introduction

Environmental, Social, and Governance (ESG) performance and risk management is becoming increasingly important to North American (NA) airports and their stakeholders, including rating agencies, investors, insurance companies, federal regulators, state regulators, airlines, community stakeholders, and employees. This is even truer in Europe where the ESG regulatory environment is well established and there is a much greater focus on environmental issues such as carbon net zero. A June 2021 EY report on the Future of Sustainability Reporting Standards states that “there are currently over 600 ESG reporting provisions globally, with many having differing interpretations of sustainability.”<sup>1</sup> In an effort to provide information to ACI members worldwide, ACI World published an “Environmental, Social, and Governance (ESG) Management” guidance in 2022. However, none of these apply directly to NA airports. Given this hodge-podge of conflicting non-NA airport frameworks, how should NA Airports decide what ESG information to track and then potentially disclose?

ACI-NA recognized this situation and formed the ESG Reporting and Metrics Task Group (the “Task Group”) to accomplish the following:

- Research existing ESG frameworks and regulations
- Interview key stakeholders including rating agencies, investors, insurance companies, airlines, and data aggregators to determine the types of ESG information they need and desire
- Develop an ACI-NA ESG White Paper (the “White Paper”) to help NA airports understand the changing ESG landscape
- Develop an ACI-NA ESG framework with recommended and optional disclosures and metrics for NA airports to use as a reference guide to help them understand if they should be tracking ESG information, what information they should track, and how to report that information, if they decide to do so
- For the recommended and optional disclosures and metrics, identify which could be financially material to an airport so that the airport can decide if they should include this information in their Official Statement when they issue debt
- Provide background and considerations for preparing ESG reports to help NA airports determine if they wish to issue an ESG report

The Task Group was formed in March 2023 and is publishing this White Paper in April 2024. Each of the items above are addressed in this document and the appendices. The full ACI-NA ESG framework for NA airports is included in [Appendix 1](#).

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<sup>1</sup> EY, The Future of Sustainability Reporting Standards; June 2021 ([https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_gl/topics/sustainability/ey-the-future-of-sustainability-reporting-standards-june-2021.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/sustainability/ey-the-future-of-sustainability-reporting-standards-june-2021.pdf)). Saved in the reference section.



ACI-NA plans to collect feedback as NA members and the industry begin to use this document and the framework. In 2025 we will evaluate the collected feedback and consider needs and plans for a second issue. At that time, we will also consider the on-going work being conducted by ACI World for elements that are global in nature. Any feedback related to the NA framework can be sent to [esg@airportscouncil.org](mailto:esg@airportscouncil.org).

## 1.2 Executive Summary

There is a significant and growing demand for ESG information from financial stakeholders including rating agencies, investors, and insurance companies. In addition, the U.S. Securities and Exchange Commission (SEC) has now proposed new ESG reporting requirements on private sector organizations; with some states such as California, legislating reporting requirements for greenhouse gas emissions for the largest public and private organizations, including larger airports. Finally, other stakeholders, the airlines, and employees are also interested in what an airport is doing with respect to other ESG factors.

Europe is more progressive than the United States or Canada with respect to ESG regulation. While it is debatable how far the regulatory environment in NA will go, it is clear from Task Group interviews that the financial community in NA and Europe wishes to have increasingly more ESG information to help it understand and manage risk. Of note, a significant portion of the insurance coverage provided for NA airports – particularly large airports – comes from European-based insurance companies (primarily in London). The needs of these stakeholders require airport Chief Financial Officers to ensure that material ESG information is available, accurate, and consistently reported. This is especially true for the largest airports with significant capital programs that need to be financed and insured.

ACI-NA formed the ESG Reporting and Metrics Task Group to develop this White Paper to help NA airports better understand ESG and the types of ESG information NA airports may want to track and report. It is important to note that this White Paper was developed as a tool for guidance only. It is not a best practice manual. The decision to track ESG information and whether to report that information in any way is a decision to be made by each individual airport (see [Section 2.0](#)).

The White Paper addresses ESG materiality, both from an “impact” and “financial” perspective, also known as double materiality (see [Section 4.3](#)). Impact refers to how an airport’s policies and practices impact the environment or the local community. This includes areas such as greenhouse gas emissions, waste and water management, minority contracting, noise reduction, and an airport’s economic impact on a region. Financial materiality refers to how environmental and/or governance factors may affect an airport’s ability to operate, pay its debt, and/or be material to its financial statements. Financially material items include climate change (i.e., flooding, major storms, rising seas), governance structure, management’s approach to risk management, transparency, cyber security, and ethics.

There are elements of ESG that can be material from both an impact and financial perspective. For example, when an airport announces a specific goal to achieve carbon neutrality (an impact metric), it becomes financially material because investors may rely on that announcement to make their investment decisions. Once a goal is formally announced, the airport needs to report the goal, when it expects to achieve it, how it will be achieved, and the cost to achieve it, if known. Financial materiality can also differ significantly between U.S. and non-U.S. airports due to the cost-recovery nature of U.S. airports. Refer to [Section 4.4](#) of this report for a discussion of this issue.

The Task Group reviewed the prominent ESG frameworks (see [Section 4.0](#)) as a baseline for developing its ESG measuring and reporting framework for NA airports. The Task Group also interviewed financial stakeholders including rating agencies, investors, insurance companies, airlines, and ESG ratings and research organizations to gain an understanding of their ESG needs and to explain the Task Group’s plans to develop an ESG framework for NA airports that elect to track and potentially report ESG information.

All of the five rating agencies interviewed stated that they consider ESG factors, but ESG has not yet had an impact on NA airports’ bond ratings to date (other than some elements of governance). However, it is possible (maybe even probable) that this will change in the future. Investors and insurance companies reported mixed positions on ESG. Some were just starting to evaluate how ESG might impact their business decisions, while others were

well-advanced. Many investors have ESG funds for green bonds, or for organizations with advanced ESG initiatives. Investors were vocal that their customers were asking them ESG questions about the bonds they purchase for their “green” funds. Some insurance companies stated that they might not insure organizations (e.g., airports) that were not moving forward with ESG reporting in the next five to ten years, while others plan to choose the “carrot” approach of providing more favorable terms or additional layers of coverage for organizations with advanced ESG initiatives. Stakeholder views are discussed in more detail in [Section 5.0](#). It is important to note that all stakeholders appreciate the difference in the regulatory environments between Europe and NA and do not expect NA airports to be at the same level of ESG tracking and reporting as Europe.

The Task Group used the feedback from these stakeholders and its review of ESG frameworks to develop an ESG reporting framework specifically for NA airports. The Task Group then shared this ESG framework with the financial stakeholders for further comment. Without exception, each stakeholder group enthusiastically embraced the Task Groups efforts and were supportive of the ESG framework included in [Appendix 1](#). They also expressed an interest in continuing to work with the Task Group in the future as the ESG environment evolves.

The ESG framework summarized in [Section 6.0](#) and fully documented in [Appendix 1](#) consists of 20 recommended disclosures and 39 optional disclosures. A disclosure can take the form of a metric or a narrative (i.e., “telling the story”). Stakeholders were vocal about desiring to obtain five years of data for metrics so that they can determine if an airport is progressing or regressing. ESG metrics should also be accompanied by a narrative to help stakeholders understand the context of the numbers. A summary of recommended and optional disclosures by ESG category are shown in the following table.

ESG Category	Recommended		Optional	
	Narrative	Metric	Narrative	Metric
Environmental	3	6	4	8
Social	0	4	3	15
Governance	5	2	1	8
<b>Total</b>	<b>20</b>		<b>39</b>	

The Task Group learned during follow-up discussions that many financial stakeholders felt strongly that some of the optional disclosures should have been classified as recommended. These requests have been noted in [Appendix 1](#). Large hub airports with large capital programs should be aware of these requests as they decide what to track and report.

The White Paper also includes tips on how to decide what ESG information to track and potentially report (see [Section 7.0](#)), what information is common in a typical ESG report (see [Section 8.0](#)), how to prepare an ESG report (see [Section 9.0](#)), and some of the legal considerations for reporting ESG information (see [Section 10.0](#)).

Although airports of all sizes should be aware of the ESG data desires of financial stakeholders, ESG reporting appears to be more of a large airport issue as of the date of this White Paper. The investor community, for example, is only asking large airports about ESG when they sell bonds. U.S. medium hubs are only beginning to be asked these questions. The reason for such a distinction is not clear but may be simply due to the fact that larger airports are in the bond market more frequently. Regardless, airports of all sizes should be aware of the ESG environment and anticipate that it may become a broader issue in the future.

The development of an ACI-NA airport ESG reporting framework will provide airports with more consistent expectations from stakeholders, as well as the consistency of ESG disclosures across the industry, and has been

strongly supported by stakeholders. Although comparability between airports may be triggered as airports adopt the framework, the Task Group stressed to financial stakeholders, and they agreed, that it's really about each airport's efforts to begin to track ESG information and to improve ESG performance relative to a base level over time.

ESG regulations and practices will continue to evolve in the future, and it is important for ACI-NA airport members to stay abreast of the changing environment. The Task Group plans to continue to monitor these ESG changes and periodically update this White Paper as appropriate.



## **2.0 Disclaimer Statement**

Neither the White Paper nor any portion thereof constitutes legal advice from ACI-NA or any of the authors or contributors. The White Paper contains information and recommendations for use by individuals and entities in consultation, as may be appropriate, with legal counsel in the relevant jurisdiction. Further, neither the White Paper nor the ACI-NA ESG reporting framework are intended to establish best practices but rather an industry driven guide. In considering whether to measure or report ESG factors, or whether to utilize the ACI-NA ESG framework in doing so, please consult your organization's attorney for advice.

### 3.0 Need for this White Paper

ESG is a complex and evolving topic with varying approaches and reporting frameworks, and organizations from many industries are at different points of determining their ESG approaches. While ESG reporting was initially seen as a vehicle for change on climate and social issues (e.g., climate transition, DEI and labor practices, corporate governance), interest has evolved as stakeholders (ratings agencies and insurers) are pushing organizations to track and demonstrate how they are managing the risks and opportunities related to these social and climate issues. At its most basic, ESG is about tracking progress and disclosure. The Task Group believes that the NA airport industry will benefit from a standardized framework that addresses ESG risk factors. Each airport can then assess if any of these risk factors are potentially material to its stakeholders and financial position.

ESG reporting in North America differs from sustainability reporting which is more limited. ESG reporting discloses the effectiveness of an airport's efforts to manage a broader range of ESG risks and the impact these may have on the business, environment, or community, while sustainability reporting is focused primarily on an organization's sustainability performance and progress towards reducing its environmental impact.

An organization with a mature ESG focus has a comprehensive internal ESG practice that identifies material ESG risks through regular materiality assessments, is grounded in sound governance, sets targets to mitigate those risks, and reports on how it is achieving the stated targets. When ESG is viewed through this lens, ESG is simply good business practice. However, many airports are just starting to determine their ESG approach. The good news is that financial stakeholders, based on their feedback during interviews, understand this and say they will react positively knowing that an airport is beginning to track and report ESG metrics and implement sustainable business practices. The financial stakeholders interviewed also told the Task Group that they endorse the NA airport industry establishing its own framework.

The concepts included in this White Paper were developed from a multi-stakeholder perspective to establish an ESG framework to help airports get started on their ESG work if they chose to do so. For airports that have already started, the proposed ESG framework may help them fine-tune their approach and disclosures. Once an airport begins tracking ESG data, it may decide to issue an ESG report. This White Paper also includes tips on how to get started with the process, the elements that may be included in an ESG report, and some legal considerations with respect to ESG reporting.

One thing is certain with respect to ESG; it will continue to evolve. The Task Group plans to continue to monitor these trends and provide feedback to the industry through future updates to this White Paper, as appropriate.

## 4.0 Background Information

The Task Group relied on several resources, best practices, and foundational principles in developing this White Paper. This section of the White Paper outlines the primary resources and reference materials considered, highlights the primary ESG differences between Europe and NA, defines key terms such as “double materiality,” describes the impact of FAA regulations in the United States and its effect on determining what is financially materiality, and provides an overview of legal considerations related to reporting.

### 4.1 Key Resources and Reference Materials

The Task Group conducted a review of the sustainability- and ESG-related disclosure guidance encompassed in the international frameworks and standards issued by the following organizations:

- Global Reporting Initiative (GRI)
- CDP (formerly known as Carbon Disclosure Project)
- Sustainability Accounting Standards Board (SASB)
- International Financial Reporting Standards (IFRS)
- Climate Disclosure Standards Board and the Task Force on Climate-Related Financial Disclosures (TCFD)
- IFRS International Sustainability Standards Board (ISSB)
- European Sustainability Reporting Standards (ESRS)

Each organization’s approach to materiality and scope of information addressed varies based on the information’s intended audience. The disclosure guidance reviewed is summarized in the table below.

Organization	Disclosure Guidance
<b>GRI</b>	<p><i>GRI Standards 2021</i></p> <p><i>GRI G4 Airport Operators Sector Disclosures (2014)</i> This G4 Sector Disclosure was developed for use with GRI G4 Guidelines. As of this writing, the Global Sustainability Standards Board (GSSB) is in the process of developing Sector Standards for use with the GRI Standards. It is working through a prioritized list, and currently working on the Sectors classified in Group 1. Airports have been classified in Group 3.</p>
<b>CDP</b>	<p><i>CDP Climate Change 2023 Questionnaire</i></p> <p><i>2023 Public Authorities Questionnaire</i></p>
<b>SASB</b>	<p><i>SASB Standards (including 2018 industry standards for Air Freight and Logistics, Airlines, Car Rental and Leasing, Engineering and Construction Services, Hotels and Lodging, Real Estate, Restaurants, Water Utilities and Services).</i></p> <p>Responsibility for SASB has been absorbed by the ISSB and SASB is referenced in IFRS S1 discussed below.</p>
<b>TCFD</b>	<p><i>Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017.</i></p> <p>TCFD has been transitioned to the ISSB as part of the development of IFRS S2 discussed below.</p>
<b>IFRS S1 and S2</b>	<p>As described in the Airport Cooperative Research Program (ACRP) <i>First Look on How New Corporate Environmental Standards Will Impact Airports</i> report (2023), “IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information, asks for disclosure of material information about sustainability-related risks and opportunities...[and incorporates] SASB...IFRS S2: Climate-Related Disclosures...outlines disclosure of material information about climate-related risks and opportunities. IFRS S2 is based on the...TCFD...Recommendations and outlines disclosures for climate resilience and Scope 1, 2, and 3 emissions.”</p>
<b>ESRS</b>	<p>November 2022 – Consulted ESRS 1 and ESRS 2 primarily for the information and disclosure requirements for double materiality, including definitions and process around reporting on double materiality</p>

A detailed summary of major reporting frameworks is included in the 2023 Airport Cooperative Research Program (ACRP) report, *First Look on How New Corporate Environmental Standards Will Impact Airports*. Other key resources consulted are included in [Appendix 4](#).

#### 4.2 European vs North American Airport (NA) Perspective

Airports in Europe and NA share common functionalities and may even have similar ESG priorities, but the differences between Europe and NA in terms of mandatory or voluntary sustainability reporting reflects distinct regulatory approaches, societal norms, and corporate practices. In Europe, there is a notable emphasis on mandatory sustainability reporting, with regulations such as the Corporate Sustainability Reporting Directive (CSRD) requiring

large organizations to disclose non-financial information, including environmental and social impacts. Only listed European airports are required to report under the CSRD. However, many European airports prepare and publish ESG/sustainability reports as a normal part of business given the greater focus on transparency and social pressures on sustainability.

NA organizations (particularly in the United States) have traditionally leaned towards voluntary sustainability reporting since the regulatory landscape is not as prescriptive. Many NA organizations engage in voluntary sustainability reporting efforts that are driven by market demands, investor expectations, and corporate responsibility. It should be noted that many large NA airports prepare internal ESG or sustainability reports but have not historically published them (with only nine formally publishing in 2023). This highlights the diverse approaches to sustainability reporting, with Europe emphasizing regulatory compliance, and NA relying more on market- or community-driven incentives.

Airport ownership differences between European and NA airports is another reason for differing approaches to ESG reporting. Airports in Europe were historically government owned and operated; however, today approximately 80% of European airport operators are privatized or corporatized. This brings an elevated focus on ESG reporting. Conversely, NA airports are mostly departments of local governments (with Canadian and some US airports operating as authorities with appointed Boards of Directors) where there is limited regulation or community pressure requiring ESG disclosures. Even if the SEC promulgates new ESG regulations, NA airports are not expected to be subject to such rules.

Other differences include the severity of certain issues or differences in non-ESG regulations across the world versus NA. For example, social factors like child labor issues are much more prevalent around the world than in NA, so an NA airport is not as likely to address this issue in an ESG report. Another example would be differences in impacts of unionized labor between NA and other parts of the world. Finally, the determination of what is financial materiality is significantly different in the U.S. compared to Europe and the rest of the world due to the cost recovery nature of U.S. airports. See further discussion of this topic in [Section 4.4](#). Also refer to [Section 10](#) which discusses NA legal considerations.

### 4.3 Double Materiality

Materiality is a fundamental concept in both sustainability reporting and financial reporting, and it was included in the sustainability reporting guidance first released by the Global Reporting Initiative (GRI) in the early 2000s. The concept of “double materiality” was first referenced by the European Commission in 2019 and later promulgated in the European Union’s Corporate Sustainability Reporting Directive (CSRD) in 2021. The methodology underpinning the CSRD is the European Sustainability Reporting Standards (ESRS), a set of 12 standards covering general reporting requirements, and a range of environmental, social, and governance topics. The concept of double materiality has gained significant attention in the last few years due to its legal codification, the complexity of the concept, and ramifications in terms of transparent corporate reporting. Any current ESG guidance would be incomplete without a discussion on double materiality.

Double materiality essentially addresses the question: what should be a priority issue to an organization, given its most significant impacts on the environment and society, and the significance of sustainability risks and opportunities on the operation? Double materiality can be further explained in the following manner:

- Impact materiality, or ‘inside out’ perspective, addresses how an organization impacts the environment and society and should cover both positive and negative impacts. The ESRS defines material ESG issues from an impact perspective as those caused or contributed to by the organization and those which are directly linked to the organization’s own operations, products, or services through its business relationships<sup>2</sup>.
- Financial materiality, or ‘outside in’ perspective, addresses sustainability issues or ESG factors that may impact the financial performance and financial position of the organization. The ESRS defines

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2 Draft ESRS 1 General Requirements, November 2022.

material ESG issues from a financial perspective as those that trigger or may trigger a material financial effect on the organization that has a material influence on the organization's cash flows, development, performance, position, and cost of capital or access to finance in the short, medium, or long-term time horizons<sup>3</sup>. It should be noted however that in the United States, the Supreme Court has broadened this definition stating that information is material if there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision. See [Section 10.0](#)

The two perspectives are often interconnected, with many ESG issues important on both dimensions or evolving over time as impacts and risks are better understood. Given this broad view, what is material needs to be contextualized to the reporting organization and its priority stakeholders. The increased attention to double materiality reflects a growing awareness of the intersection between corporate performance and broader environmental and social concerns. Note that the ESG framework in [Appendix 1](#) denotes which recommended and optional disclosures and metrics are “impact” (e.g., the organization’s impact on the environment and society) and “financial” (e.g., where an ESG issue, such as climate change and rising sea levels, could have a material impact on an airport’s financial health and ability to operate). Further, while the list of material ESG issues may be largely the same for many NA airports, there will ultimately be some variation between airports due to geographic context, size, business partners, etc. To answer what is material, organizations typically embark on a strategic planning exercise that involves researching potential ESG issues, identifying and assessing the organization’s most significant ESG impact, risks, and opportunities, and conducting internal and external stakeholder engagement. Stakeholder engagement can be conducted in a variety of manners, from in-person user groups and forums to surveys and individual interviews. There are a variety of resources on conducting a materiality assessment including guidance provided in the ESRS (see specifically ESRS 1 Section 3 and Appendix B and ESRS 2 IRO-1)<sup>4</sup>.

The results of the research and stakeholder engagement are then evaluated by key decision makers in the organization and used to establish the organization’s ESG priorities. This process allows the organization to identify, assess, and prioritize ESG issues in a holistic manner.

Materiality assessments have historically been visualized in the form of a materiality matrix, presenting the identified ESG issues on a two-dimensional chart, with one axis representing the organization’s impact and the other representing the level of interest or concern for stakeholders. However, given the complexity of ESG issues and stakeholder views, as well as the increasing emphasis on double materiality in disclosures, organizations are using different approaches – some opting to use a form of matrix and others opting for a more straight-forward approach such as tables that can present the results in a more detailed manner. It should be noted that the established ESG standards (i.e., IFRS and GRI) do not require a matrix or visual to present material ESG issues.

#### **4.4 FAA Regulatory Environment in United States and its Impact on Financial Materiality**

One of the biggest differences between U.S. airports and European and Canadian airports from a financial perspective is the cost recovery nature of U.S. airports under FAA regulations. The FAA does not allow airports to make a profit from the services provided to the airlines such as landing planes and renting certain terminal space. However, U.S. airports are allowed from a regulatory standpoint to recover all applicable operating expenses, debt service, debt service coverage, imputed interest costs, and certain reserves from the airlines to fully recover an airport’s costs for these services.

*This is very important from a financial materiality standpoint* because, if a U.S. airport must close for a period of time (e.g., for a week) due to inclement weather or floods, U.S. airports can still recover these lost revenues by raising landing fees (after the event) and continuing to charge terminal rents even though the airport is closed. The airport may be at risk for losing some passenger related revenues (e.g., parking and concessions), but in many circumstances, the airlines would still be responsible for a portion, or at fully residual airports, all of the airport costs. Each U.S. airport has different business relationships with its airlines. This relationship is normally memorialized in a Use and Lease Agreement.

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<sup>3</sup> Ibid.

<sup>4</sup> Draft ESRS 1 General Requirements, November 2022 and Draft ESRS 2 General Disclosures, November 2022.



This regulatory and contractual environment is unique to the U.S. and has a significant impact on a CFO's and General Counsel's decision with respect to what a climate-related event, for example, might have on the airport's ability to repay its debt; and accordingly, what is financially material. It should be noted that in this example, the regulatory environment may provide comfort to a rating agency or an investor because the airport's debt will be repaid, but it may not provide comfort to an insurance company that would have to pay for property damage.

#### 4.5 Climate-Related Risks

The global attention on climate change – both anthropogenic contributions to global warming and the need to adapt to induced effects – has elevated climate-related data and information to become the most regulated and widely reported of ESG issues. Disclosures on climate change may include an organization's greenhouse gas (GHG) emissions; climate transition plans, targets, and progress; and climate-related risks and opportunities.

Climate-related disclosures are the most likely environmental factors to be deemed financially material given the potential scale and severity of risk from climate change and the impact on an organization's ability to operate or perform. Additionally, there is an economic opportunity/upside resulting from an effective climate change strategy. Because of these implications, financial stakeholders have an obligation to review an organization's relevant information.

Although often considered an "impact" metric, even GHG emissions are considered financially material by (and thus required disclosures under) IFRS's S2 *Climate-Related Disclosures*. This standard mandates the reporting of "information about climate-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium, or long term."<sup>5</sup> [The language used in IFRS is employed here for information purposes only to better explain the financial materiality associated with climate risks. It is worth noting that NA airports are not required to report on IFRS S1 or S2 \(though other countries and jurisdictions have begun to adopt these standards\). See Section 4.4 for a discussion on U.S. airport cost recovery mechanisms.](#)

Climate-related risks are commonly categorized as either physical or transition, a delineation initially popularized by the Task Force on Climate-related Disclosures (TCFD) and subsequently embedded in IFRS S2 and ESG rulemaking. IFRS defines **climate-related physical risks** as "risks resulting from climate change that can be event-driven (acute physical risk) or from longer-term shifts in climatic patterns (chronic physical risk). Acute physical risks arise from weather-related events such as storms, floods, drought, or heatwaves, which are increasing in severity and frequency. Chronic physical risks arise from longer-term shifts in climatic patterns including changes in precipitation and temperature which could lead to sea level rise, reduced water availability, biodiversity loss, and changes in soil productivity."<sup>6</sup>

**Climate-related transition risks** are "risks that arise from efforts to transition to a lower-carbon economy. Transition risks include policy, legal, technological, market, and reputational risks. These risks could carry financial implications for an entity, such as increased operating costs or asset impairment due to new or amended climate-related regulations. The entity's financial performance could also be affected by shifting consumer demands and the development and deployment of new technology."<sup>7</sup>

While such examples represent existing or potential downsides to an organization, climate change can also present opportunities, or upsides. For example, an entity's leadership in the clean energy economy may attract new customers or help retain talent given changing expectations for businesses; new decarbonization-focused grants and financing mechanisms may be used to implement valuable projects (e.g., through green bonds); and successful emission reduction or adaptation efforts can lead to lower operating and maintenance costs.

Due to the potential financial implications on airport operations, many of the climate-related disclosures included in this White Paper are recommended for those airports publishing ESG reports.

5 [IFRS - IFRS S2 Climate-related Disclosures.](#)

6 Ibid.

7 Ibid.

## 5.0 Stakeholder Perspectives

In addition to researching organizations that have developed ESG frameworks, the Task Group interviewed a diverse group of stakeholders who request ESG information from airports including rating agencies, investors, insurance companies, airlines, and ESG research and rating organizations. This section provides an overview of the feedback the Task Group received from, and information published by these organizations.

### 5.1 Rating Agencies

The Task Group reviewed ESG guidance and methodologies published by Standard and Poor's (S&P), Fitch Ratings (Fitch), Moody's, Kroll Bond Rating Agency (Kroll), and Morningstar DBRS to ascertain their views on ESG factors and how those factors might influence bond ratings for airports. All rating agencies have developed ESG frameworks for a variety of industries. The comparative table below reflects the ESG elements from the rating agencies that apply to U.S. airports (excluding DBRS, which rates Canadian airports, but not U.S. airports). There is significant overlap in the frameworks of this rating agencies with respect to airports. S&P places airports within their public sector framework with additional guidance for Transportation entities<sup>8</sup>. Airports fall under Fitch's Global Infrastructure Sector – Transportation methodology<sup>9</sup> which also includes ports, toll roads, general transport, transport-available-backed, and grant anticipation revenue vehicle bonds (GARVEES). Fitch has “sector default scoring” for airports that considers the financial materiality of ESG issues for that sector. Moody's evaluates airports under its public sector methodology for environmental and private sector for the social and governance sections because of the business-like nature of the airport sector<sup>10</sup>. Kroll has published a global criterion for all three ESG categories that apply to governments, financial institutions, and corporations. The following tables compare these frameworks and the main ESG elements and summarized subcomponents that apply to airports within each category. Morningstar DBRS' ESG approach is described below. **The rating agency frameworks were important components used by the Working Groups when developing the ESG framework described in [Section 6](#) and detailed in [Appendix 1](#).**

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8 S&P Global Ratings, Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

9 Fitch Ratings, Where ESG Matters for Credit Ratings in Global Infrastructure and Project Finance, July 7, 2022

10 Moody's Investor Services, General Principles for Assessing Environmental, Social and Governance Risks Methodology, December 14, 2020

Rating Agency ESG Frameworks for US Airports and the Public Sector

<p><b>S&amp;P – Public Sector Framework</b> <i>Environmental</i></p>	<p><b>Fitch – Global Infrastructure Framework</b> <i>Environmental</i></p>	<p><b>Moody’s – Public Sector ESG Framework</b> <i>Environmental</i></p>	<p><b>Kroll – Global ESG Framework</b> <i>Environmental</i></p>
<p><b>Climate Transition Risks</b> Includes scopes 1 and 2 GHG emissions intensity per passenger; energy intensity per passenger</p>	<p><b>GHG Emissions and Air Quality</b> Emissions of assets or users</p>	<p><b>Carbon Transition</b> Actions to mitigate risk, positioning for carbon transition, long term resilience to risk of accelerated carbon transition</p>	<p><b>Greenhouse Gas Emissions</b> Efforts to reduce, stakeholder pressures and policy responses</p>
<p><b>Physical Risks</b> Severity of extreme weather, chronic shifts in weather, and natural disasters</p>	<p><b>Exposure to Environmental Impacts</b> Exposure to extreme weather events, resulting in loss of revenues, increased cost, and project construction delay</p>	<p><b>Physical Climate Risks</b> Impact of climate change, exposure to heat stress, water, floods, hurricanes, rising sea level, and wildfires</p>	<p><b>Physical Climate Risks</b> Impacts of extreme weather and sea-level rise, including impact on revenue generating assets and operations</p>
<p><b>Natural Capital</b> % of assets in sensitive or protected areas, incidents of non-compliance with environmental permits, standards or regulations</p>	<p><b>Energy Management</b> Energy consumption by assets or users</p>	<p><b>Natural Capital</b> Impact and dependency on natural systems: soil, biodiversity forest, land, oceans</p>	
<p><b>Water (subset of Waste and Pollution below)</b> Water use intensity per passenger</p>	<p><b>Water and Wastewater Management</b> Water used in operations</p>	<p><b>Water Management</b> Availability, access, consumption, innovations to enhance water use efficiency, risk of pollution violations</p>	
<p><b>Waste and Pollution</b> Waste intensity per passenger, air pollution</p>	<p><b>Waste and Hazardous Materials Management; Ecological Impacts</b> Waste disposal, pollution incidents</p>	<p><b>Waste and Pollution</b> Land-based accidents, spills, and leaks; hazardous/non-hazardous waste, circular economy</p>	

<p style="text-align: center;"><b>S&amp;P – Public Sector Framework</b> <i>Social</i></p>	<p style="text-align: center;"><b>Fitch – Global Infrastructure Sector</b> <i>Social</i></p>	<p style="text-align: center;"><b>Moody's – Private Sector</b> <i>Social</i></p>	<p style="text-align: center;"><b>Kroll – Global ESG</b> <i>Social</i></p>
<p><b>Human Capital</b> Attract/ retain, labor unrest, diversity, succession planning</p>	<p><b>Labor Relations and Practices</b> Impact of labor negotiations and employee (dis) satisfaction; quality of contractors</p>	<p><b>Human Capital</b> Labor relations, human resources, diversity and inclusion</p>	<p><b>Stakeholder Preferences</b> Changes in stakeholder preferences, including customers/users, could impact demand trends</p>
<p><b>Social Capital</b> Demographic trends, income inequality, affordability, political unrest</p>	<p><b>Exposure to Social Impacts</b> Social resistance to major projects or operations that leads to delays and cost increases and/or unfavorable regulatory regimes</p>	<p><b>Demographic and Societal Trends</b> Demographic change, access and affordability, social responsibility, consumer activism</p>	
<p><b>Health and Safety</b> Events that alter social behavior, contaminants in water supply could affect residents in service area</p>	<p><b>Employee Wellbeing</b> Worker safety and accident prevention</p>	<p><b>Health and Safety</b> Accidents and safety management, employee health and well-being</p>	
	<p><b>Customer Welfare – Fair Messaging, Privacy and Data Security</b> User safety, data security</p>	<p><b>Customer Relations</b> Data security and customer privacy, fair disclosure and labeling, responsible marketing</p>	
	<p><b>Human Rights, Community Relations, Access and Affordability</b> Product affordability and access</p>	<p><b>Responsible Production</b> Product quality, supply chain management, community and stakeholder engagement, bribery and corruption, waste management</p>	

<b>S&amp;P – Public Sector Framework Governance</b>	<b>Fitch – Global Infrastructure Sector Governance</b>	<b>Moody’s – Private Sector Governance</b>	<b>Kroll – Global ESG Governance</b>
<p><b>Governance Structure</b> Fed, state framework, board</p>	<p><b>Governance Structure</b> Board independence and effectiveness, ownership concentration, ring fencing</p>	<p><b>Board Structure, Policies, and Procedures</b> Ownership and control, management compensation, Board oversight and effectiveness, financial oversight, and capital effectiveness</p>	<p><b>Governance Structure</b> Business model, management profile, strategy, internal policies</p>
<p><b>Risk Management, Culture, Oversight</b> Management control framework and systems, cyber, pension/OPEB, headline risk</p>	<p><b>Management Strategy</b> Operational implementation of strategy informed by sponsor strength / experience and ability to effectively manage risks, involvement of local parties</p>	<p><b>Financial Strategy/Risk Management</b> Leverage policy, capital modeling and stress testing, risk management and controls, internal controls</p>	<p><b>Cybersecurity</b> Systems and resources to mitigate data breaches and malware/ransomware attacks</p>
<p><b>Transparency and Reporting</b> Adherence to standards, transparency, timeliness</p>	<p><b>Financial Transparency</b> Quality and timeliness of financial disclosure, reliability and level of detail and scope of information – informed by data sources, use of expert reports</p>	<p><b>Compliance and reporting</b> Regulatory violations, accounting policies and disclosures, consistency, and quality of financial reporting, bribery and corruption, security lawsuits and investigations</p>	
	<p><b>Group Structure</b> Complexity, transparency of related party transactions</p>	<p><b>Organizational Structure</b> Legal and ownership structure, organizational complexity, capital structure</p>	
		<p><b>Management Credibility and Track Record</b> Earnings and guidance accuracy, regulator relationships, management quality and experience, succession planning and key person risk</p>	

**ESG Methodology Overview.** All rating agencies have published ESG methodologies. The methodologies describe how ESG factors are evaluated and incorporated in each respective agency's credit analysis and rating report. Generally, there are some differences across methodology in how ESG factors are defined, which factors are deemed most important (as illustrated above) and how those factors are included in the analysis and credit report. For example, Moody's provides separate ESG-related credit impact scores and issuer profile scores, S&P and Kroll provide ESG qualitative assessments (with no ESG-specific rating scores), and Fitch provides issuer ESG relevance scores derived from sector guidance for the particular industry and provides issuer assessments in their ESG Navigators. Despite these differences, it appears that ESG factors are not materially impacting the credit quality or bond ratings of U.S. airports from any of the rating agencies at the time of publication of this document in early 2024. A brief overview of the methodologies from S&P, Fitch, Moody's, Kroll, and DBRS follows. Links to the specific publications and related publications by each of the rating agencies are included in [Appendix 4](#).

**S&P ESG Ratings Methodology.** S&P published its updated criteria, "Environmental, Social, and Governance Principles in Credit Ratings" on December 20, 2023. S&P's methodology makes a distinction between broader ESG factors, and those that can materially impact an issuer's rating, which S&P calls "ESG credit factors." ESG credit factors particularly include those that can impact an issuer's revenue base, operating costs, risk planning, governance controls, cash flow / liquidity, or financial commitments. S&P also indicates its focus on issuer assets that may be exposed to severe weather events, as well as debt leveraging impacts of climate adaptation plans. S&P notes the extent to which ESG credit factors can impact credit ratings varies by sector and geography and can be expected to change over time.

Within an issuer's credit report, S&P typically provides a qualitative assessment of ESG factors, identifies the specific risks S&P believes the issuer is exposed to, and whether risks are "elevated" or "neutral". Specific to U.S. airports, S&P has noted that environmental factors include carbon transition risks and costs, physical risks (sea level rise, extreme weather), and costs of adaptation and resiliency efforts; social factors include health and safety, including pandemics; and governance factors include financial metrics, including level of pension funding, and cybersecurity. However, it does not appear that credit ratings issued by S&P have been materially impacted by these credit factors.

Of note, S&P released a commentary, "The Evolving Impact of Environmental and Social Factors on Credit Ratings," on October 25, 2023, in which the credit rating agency addressed ESG health and safety considerations regarding airports, including the rapid traffic decline during the COVID-19 pandemic and the various rating downgrades by S&P for airports. S&P noted that the traffic experience for airports during the pandemic served to highlight the key principles outlined within its ESG methodology, including the perspective that ESG credit risks (and impact on credit ratings) do not have a pre-determined time horizon, remain uncertain, and can change rapidly. S&P added that it believes "aviation-related sectors could be more vulnerable to credit rating deterioration following a significant health and safety event."

**Fitch ESG Scoring Methodology.** Fitch provided its methodology, "Introducing ESG Relevance Scores for Public Finance/Infrastructure" on May 16, 2019. Fitch's ESG approach provides "Relevance Scores" to its entire portfolio of public and internationally rated issuers. The Relevance Scores reflect the degree to which ESG factors impact credit ratings for an issuer or a transaction; the scores are not inputs in the rating process.

Fitch's ESG Relevance Scores range from 1 "no credit impact" to 5 "highly material credit impact." Under Fitch's initial assessment in May 2019, less than 1% of public finance and global infrastructure issuers scored a 5, and only 5% scored either a 4 or 5. A subsequent Fitch report on May 16, 2022, indicated that 7% of U.S. public finance ratings are affected by ESG considerations (with a score of 4 or 5). Under Fitch's analysis, governance factors drove a score of 4 or 5 more than environmental or social factors. Specific to U.S. airports, Fitch has generally assigned up to a score of 3, which indicates that ESG factors are minimally relevant to the issuer's credit ratings and/or the issuer has actively mitigated those ESG risks.

**Moody's Ratings Methodology.** Moody's rating methodology, "General Principles for Assessing Environmental, Social, and Governance Risks," was most recently updated on September 28, 2023. Moody's indicated that its rating methodology seeks to incorporate all material credit considerations, including ESG issues, into ratings, and to take the most forward-looking perspective that visibility into these risks and related mitigations permits. Moody's places



particular focus on climate risks such as carbon transition and physical climate risks, including sea level rise and extreme weather events, as well as the related increased costs of climate adaptation plans. Moody's also notes that ESG factors can impact the credit analysis in a variety of ways, whether incorporated analytically through pro-forma analysis or credit metrics, or more qualitatively.

To provide an assessment of ESG risks for each issuer, Moody's provides an Issuer Profile Score (IPS), which is expressed on a five-point scale ranging from 1-“Positive” to 5-“Very Highly Negative”. For airports specifically, Moody's has typically assigned an Environmental IPS Score of E-3 (Moderately Negative), which reflects Moody's assessment that airports face “moderate carbon transition risk”, and that the agency sees the potential that evolving policies and regulations related to carbon mitigation may increase costs for airports and airlines. Regarding Social and Governance scores, most airports have been assigned S-2 “neutral-to-low” and G-2 “neutral-to-low”, respectively, indicating that Moody's views both Social and Governance factors as having very limited negative impacts to the credit analysis of airports.

Moody's also provides issuers a Credit Impact Score (CIS), which provides to what degree ESG attributes impact the current rating and is similar in concept to the relevance scores provided by Fitch. The majority of airports received a CIS-2, which indicates that ESG factors generally have a “neutral-to-low” impact on current airport ratings. While airports are generally exposed to ESG risks, those risks are not material to airport ratings at this point.

**Kroll Ratings Methodology.** Kroll released its “ESG Global Rating Methodology” on June 16, 2021. Kroll does not provide separate ESG scores or ratings. Instead, it provides an assessment of those ESG factors that it considers to have a meaningful impact on credit quality. As with other agencies, Kroll acknowledges that ESG risks vary materially across sector and geography, and these risks carry a high level of uncertainty and may change over time. Kroll also indicates that it maintains a particular focus on an issuer's strategy to mitigate ESG risks, referred to as “ESG Management”. Kroll notes the importance of management's level of awareness of their ESG related risks, level of planning, and ability to execute on remediation efforts and absorb economic costs. Kroll also notes that it maintains a particular focus on considerations surrounding climate change with focus on GHG, stakeholder preferences that can impact demand, and reputational risk and cyber security risk. Within each rating report, including for airport ratings, Kroll typically provides a summary of ESG factors separately.

**Morningstar DBRS ESG Methodology.** Morningstar DBRS does not rate U.S. municipal debt, but the agency is the largest credit rating agency in Canada and the fourth largest globally. Morningstar DBRS rates more than 4,000 issuers and 60,000 securities globally, including airports in Canada and Europe. The agency's ESG methodology is set out in “Morningstar DBRS Criteria: Approach to Environmental, Social and Governance Risk Factors in Credit Ratings”, most recently published in January 2024. Generally, Morningstar DBRS considers 17 ESG factors and qualitatively determines how each factor may affect the credit analysis and credit rating. The criteria do not assess ESG factors from the viewpoint of how sustainable, ethical, or responsible an issuer's operations or policies are. Rather, they consider ESG factors in the context of an issuer's credit profile where they may have a material impact on that issuer's financial profile, such as its revenues, expenses, cash flows, asset value, refinancing flexibility, etc. The credit factors are grouped into separate environmental, social, and governance factors. For airports, the relevant environmental factors include carbon and greenhouse gas costs, land impact and biodiversity, and climate and weather risks. Social factors include human capital and human rights, occupational health and safety, and access to basic services. Most relevant governance factors are business ethics, corporate governance, and bribery, corruption and political risks. Similar to the other credit rating agencies, Morningstar DBRS ESG factors have not, to date, had a significant impact on the credit rating outcome of airport ratings.

## 5.2 Investors

Municipal bond investors are a key external stakeholder for airports. Airports finance capital improvements through the issuance of tax-exempt, and in some cases, taxable bonds. Airports issue debt with maturities of up to 30 years because the assets being financed have long lives. Accordingly, investors take a long-term perspective when they evaluate the investment risk of an airport bond. This is where ESG risks, especially climate-related risk, can impact investors' decisions.

The Task Group did a survey of large and U.S. medium hub airport CFOs in July 2023 to determine if ESG questions were being asked by investors before bond sales in the last two years. Of the 20 large airports responding and issuing debt in the last two years, 18 had been asked ESG questions. Interestingly, none of the four U.S. medium hubs that had issued debt had been asked ESG questions through 2023. The survey also revealed that there is good CEO awareness of investors' interest in ESG, with 25 of 29 CEOs being aware of ESG issues.

Institutional investors invest in bonds that span a wide range of industries, which can impact how these investors may approach ESG issues with respect to airport investments. There has been a significant growth of investments in securities issued to finance sustainable infrastructure and/or in entities that are working to achieve socially driven goals. As of June 2023, assets within sustainable funds exceeded \$3.1 trillion globally, doubling the assets from \$1.6 trillion in June 2018<sup>11</sup>. According to another estimate, there were \$30.3 trillion in 2022 in total sustainable investing assets globally (including funds and all other investment alternatives)<sup>12</sup>. The largest portion of sustainable assets is held in Europe at \$14.1 trillion, versus \$8.4 billion in the United States, reflecting Europe's higher level of interest in socially conscious investing. The sustainable investing market grew at an estimated 20% from 2020-2022 and reflects a maturing industry, with evolving expectations on how sustainable investments are defined, more consistent and transparent standards, and tightening regulatory frameworks and industry standards.

**Approach.** Members of the Task Group arranged 14 separate calls, including 12 investors and two ESG second-party opinion providers, to solicit feedback on three principal questions:

1. How are ESG metrics used to make investment decisions?
2. What ESG metrics do you want airports to provide?
3. How and where do you want to see ESG information presented?

The responses from investors were quite diverse. Some were just getting started with ESG, others were further along, while others had fully included ESG into their investment analyses. Investors with international operations subject to ESG regulation in those countries (e.g., Europe) had more robust and closely aligned feedback. This could be a preview of how U.S. investors might respond if new regulations like the SEC's proposed climate-related disclosure rule changes are adopted.

**Impact of ESG Factors on Investment Decisions.** The Task Group received a wide range of responses from investors on how, if at all, ESG factors impact investment decisions. This ranged from the use of sophisticated ESG models designed to integrate a large amount of data and arrive at an adjusted issuer credit score to the use of a qualitative assessment of an issuer's ESG maturity. Many investors use ESG factors as a qualitative "gating" consideration for including an investment in an ESG-type funds.

Investors, similar to the rating agencies, stated that they look at financially material ESG factors to determine if those factors could impact an airport's ability to repay its debt obligations over time. Some investors went further and noted that many factors now grouped under the "ESG umbrella" (especially in the G section) have always been part of their credit assessment. A couple of investors noted the growing use of third-party ESG data aggregators to obtain their ESG data (see [Section 5.5](#)). Almost all investors agreed that ESG was becoming more prominent in the investment arena and likely to become more important in the future.

**ESG Data Desired by Investors.** The most concrete and overlapping feedback from investors with respect to the ESG data was in the environmental and governance areas. Feedback on social factors was mixed or limited. The Task Group used the feedback from investors to develop the ESG framework in this White Paper. Scope 1 and 2 greenhouse gas emissions (GHG) were the most common metrics requested. This was also the most common "impact" consideration for investors constructing an ESG portfolio. Many investors would like to see airports report Scope 1, 2, and 3 emissions. Diversity, Equity, and Inclusion (DE&I) was the most common social metric requested,

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11 Sustainable Reality: Sustainable Funds Return to Outperformance in First Half of 2023", Morgan Stanley Institute for Sustainable Investing, August 2023

12 Global Sustainable Investment Review, 2022", Global Sustainable Investment Alliance

although customer satisfaction and safety metrics were also mentioned frequently. The following table summarizes the most frequent ESG metrics mentioned.

Environmental	Social	Governance
<ul style="list-style-type: none"> <li>• GHG Emissions (Scope 1 and 2)</li> <li>• Water usage and wastewater generated</li> <li>• Identification of physical risks, how they are being managed, and associated costs</li> <li>• Changes in insurability due to environmental factors (availability, cost, policy term, coverage limit)</li> <li>• Environmental remediation obligations</li> </ul>	<ul style="list-style-type: none"> <li>• Management, workforce, and contractor demographics relative to the local community (DEI)</li> <li>• Customer satisfaction (e.g., passenger ASQ scores; noise complaint rates)</li> <li>• Safety performance</li> </ul>	<ul style="list-style-type: none"> <li>• Board structure: appointment, oversight, efficacy, and independence</li> <li>• Details of any investigations (Federal, State, or Local)</li> <li>• Timeliness and completeness of year-end disclosures and budget information</li> <li>• Approach to risk management (including cyber)</li> </ul>

**ESG Reporting.** Investors were agnostic in terms of how an airport disseminates its ESG information (e.g., stand-alone ESG report, Official Statement, website). Their primary request was to make the data easily accessible. Most investors expressed interest in having a consolidated statistical appendix to an ESG Report to make the extraction of key data points less burdensome, with a link to a data table spreadsheet underscored as the most user-friendly option.

Investors indicated a strong preference for five years of historical data for metrics to provide context as to whether things were improving or getting worse. Also, if an airport has identified targets for a metric (whether an absolute level or change relative to a base year), embedding those targets in the report is most helpful. Investors also expressed interest in unit-adjusted metrics (e.g., intensity metrics such as carbon emissions per enplanement or per square foot) to allow for easier comparability across airports of differing size.

Investors were asked if it was valuable to align airport disclosures with international ESG disclosure regimes such as GRI or SASB. The feedback was decidedly mixed, with the only consensus being that such disclosure alignment could be most valuable for issuers intending to market debt to overseas investors. All investors interviewed strongly supported the NA airport industry developing a common measurement and reporting framework stating that this had worked for other industries. They stated that knowing what airports would be tracking would help them ask the right ESG questions and assist with comparability. The Task Group stressed that its focus was on enabling interested individual airports to use a common set of metrics rather than comparability.

**Investor Feedback after Completion of ACI-NA ESG Framework.** The Task Group did a follow-up interview with the 12 investors to determine if the ESG framework shown in [Appendix 1](#) met their needs. The response was enthusiastically, “yes.” They felt that the framework was comprehensive, and generally agreed with the breakout of recommended and optional disclosures at this initial stage. Some stated that they would like to see more of the optional disclosures shifted to Recommended. The narrative discussion in [Appendix 1](#) highlights where investors made this request and large airports may want to consider whether to track these metrics also.

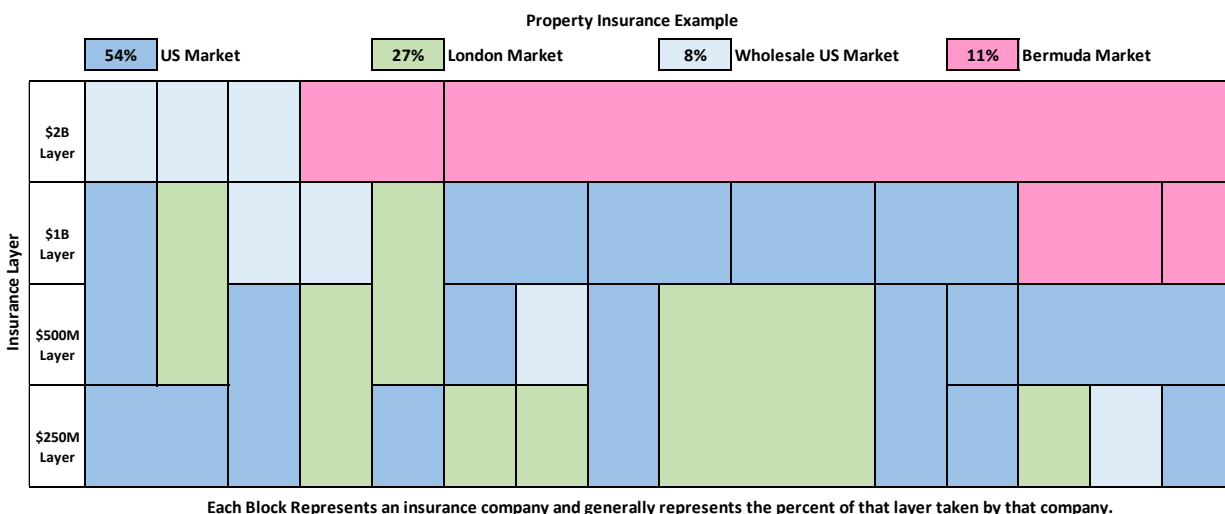
Investors wanted to know how airports would report this information in the future. The Task Group responded that this was an airport-by-airport decision. Larger airports are more likely to issue ESG reports and include financially material information in their Official Statements in the future. Other airports are more likely to begin to track now that they know what to consider tracking and have this information available when asked. See discussion on reporting options in [Section 7.0](#).

### 5.3 Insurance Companies

Insurance carriers are another key stakeholder of the airport industry. Airports of all sizes require multiple types of insurance to manage risks. A few examples of the key types of insurance coverage required by airports include property and casualty, liability, and owner-controlled insurance programs for major capital programs.

The insurance industry is a complex system with multiple players working together to manage and mitigate risks. Direct insurers play a pivotal role in providing coverage directly to airports. These insurers assume the responsibility of evaluating risks, setting premiums, and directly interacting with policyholders. However, these direct insurers, particularly in specialty sectors such as aviation, rely on reinsurance (insurance of insurers) to provide additional layers of protection. This also helps provide direct insurers with financial stability allowing them to maintain the capacity to handle large and unexpected losses and ensure they can honour their commitments to policyholders even in the face of unforeseen and catastrophic events.

The following diagram is a graphic representation of recent property insurance placement for a large U.S. airport. The chart shows that 32 insurers from four different markets: U.S. (54%), U.S. wholesale (8%), Bermuda (11%), and London (27%), bid on coverage in different layers to spread the risk. It also demonstrates the complexity of a single insurance procurement, albeit for a large airport. It should be noted that each of these insurance companies has a unique ESG perspective.



**Approach.** The Task Group interviewed eight different insurance companies after the ESG framework, shown in [Appendix 1](#), had been developed. Each of the insurers interviewed are multi-national insurers (by nature most insurers are) with a global reach and, therefore, capable of participating in insurance risks both in Europe and the United States. There is a high level of communication and coordination among the various international branches of insurance companies. So, despite the geographic differences, the implementation of ESG policies will likely be developed as part of a global strategy and be managed centrally.

Of the eight insurers interviewed, three were U.S. based underwriters focused on U.S. clients and five were European insurers able to write U.S. risks as well as risks throughout the rest of the world. The Task Group’s questions were centered on the insurers’ business model (e.g., the types of insurance products offered, their primary customers within the aviation industry); how the insurer utilizes ESG as part of their decision process; where they obtained their ESG information; and their thoughts on the ESG framework are included in [Appendix 1](#).

**Impact of ESG Factors on Insurance Decisions.** Similar to investors, there was a wide range of feedback from insurance companies. In general, investors are further along the ESG journey than insurers, but ESG is clearly on the industry’s radar. Some are just beginning to focus on ESG while others are quite advanced. Most insurers are

primarily interested in the environmental elements of ESG, especially reductions in carbon emissions. They want to understand how airports are mitigating climate-related risks with a focus on resiliency under the theory that more resilient airports are better risks. Most are also focused on key safety metrics for employees, customers, and construction workers. One insurer stated that the U.S. was generally more advanced on the social and governance elements, while Europe has been more progressive in the environmental area.

Insurers have a shorter-term focus than investors due to the shorter life of an insurance policy. Most said that they are beginning to look at ESG, but it is not impacting their decisions to insure today. One insurer was attempting to link ESG factors to loss information to provide a basis for using ESG in the future. It's currently challenging for insurers to make this purely a financial decision given the information available. A few mentioned that they were avoiding specific industries for climate concerns or due to social reasons.

Some insurers are taking a benevolent approach to help the insured organizations advance their ESG efforts stating, "they want to be conversational," and help organizations develop ESG metrics; a few stated they prefer to take a "carrot" approach and may make additional layers of insurance available or offer better pricing for organizations that had advanced ESG efforts; and a few others stated that they see a time (five to ten years from now) when they might take the "stick" approach and not insure organizations or reduce capacity for organizations that are not making efforts to improve ESG performance. The insurers fully appreciated the difference between ESG adoption in Europe and North America.

**Current Source of ESG Data.** Some insurers had internal teams that gathered ESG data. Others obtained ESG information from third party data aggregators such as Moody's Analytics, S&P Sustainable Plus, or Sustainalytics (see [Section 5.5](#)). Some insurers have formed a consortium to gather ESG information. Others rely on their insurance brokers to gather the data directly from the organizations being insured.

**Feedback to ESG Framework and Disclosures.** The feedback from the interviewed insurance companies was very positive. All were supportive of the ACI-NA effort and expect that it will provide guidance to airports and result in better ESG information in the future. Some were interested in additional data regarding PFAS (see [Section 6.0](#)), deicing, and airport participation with airlines to develop sustainable aviation fuels.

## 5.4 Airlines

Airlines are a vital business partner and a key stakeholder for engagement on sustainability with airports. Airlines are the airports' largest customers and, often, the primary source of revenue. Most airports derive the majority of the rest of their revenue from airline passengers.

There are many areas of operational and data tracking overlap between airlines and airports on complex, system-wide sustainability issues like climate change. For example, since airports provide the primary infrastructure from which airlines operate (in addition to their aircraft maintenance, fueling, and training facilities), airlines are very focused on how climate risk could impact their primary operating locations. Airlines contribute to airports' Scope 3 emissions and, conversely, airports contribute to the airlines' Scope 3 emissions. Both parties are interested in reducing waste and water consumption and share other environmental priorities.

Airlines want to enhance their ESG reporting by integrating more ESG data from their key business partners (e.g., airports) and their supply chain. This has the short-term benefit of enhancing the airlines' ESG disclosures but also brings a longer-term benefit of increased collaboration with those same partners and suppliers to address mutual risk and opportunities. Airports and airlines are recognizing the need to work more collaboratively on these initiatives and the Task Group supports these efforts.

**Approach.** To get a better sense of the current state of ESG reporting and approaches being used by airlines, members of the Task Group arranged calls with the ESG leads at American Airlines, Delta Air Lines, Southwest Airlines, and United Airlines. The Task Group members were also invited to participate in an Airlines for America (A4A) Sustainability Committee meeting to present the Task Group's mission and a summary of the key disclosures. The primary purpose of the calls and meeting was to obtain answers to the following questions:

1. What airport ESG information (disclosures and metrics) is the airline including in their ESG report today, if any, and which airports are included, if any?
2. What additional airport ESG information (disclosures and metrics) would they like add to their ESG report in the future?

**Interest in Airport ESG-Related Information.** Airlines have primarily focused on climate-related information about airports but also include or reference other ESG-related information from airports such as terminal construction and renovation projects, waste reduction efforts, and safety. A summary of the six largest U.S. airlines' ESG disclosures about climate impacts on airports in their ESG Reports is included in [Appendix 2](#). American, Delta, and United specifically mention climate impact on their largest hubs, while Southwest, Jet Blue, and Alaska write more generally about it. Some of the airlines also discuss transition risk, which covers risks to the airline business model resulting from the transition to a low-carbon economy. Some use third party consultants and climate risk modeling platforms to quantify the risks, while others do qualitative reviews. Each airline discusses and reports potential climate impacts on a near-term, mid-term, and long-term basis and several discuss the risks using scenario analyses, contrasting various emissions (e.g., low vs. high), policy, and development scenarios.

Given the sensitive nature of some of this information, it is critical for airports to know what narratives are being included in the airlines' ESG reports, because this information is publicly available to financial stakeholders. Those stakeholders may read the airline ESG report and then ask questions of the airport regarding the information included in an airline's ESG report. Airports and airlines should share this information to ensure uniformity in the reporting and to avoid possible conflicts. For example, an airline could report a flooding risk at an airport, while the airport has a flood study that shows there is no risk. Airlines are most interested in what airports are doing to mitigate climate risk. All parties agreed that closer cooperation between airports and airlines on ESG would be beneficial.

**Priority ESG Data and Metrics.** Given the industry and regulatory trends towards greater disclosure, there will be increasing interest from airlines in ESG data that is material to the airlines' business and intrinsically connected to airport operations. The airlines stated that if the proposed SEC regulation on climate disclosure is promulgated, the regulations will require airlines to report climate-related information. This will certainly have a major impact on the data airlines will need from airports of all sizes. The SEC's proposed regulations are modeled in part on the TCFD and its 11 recommended disclosures. The airlines use the TCFD disclosure recommendations as a framework for their climate planning and climate risk reporting including how they review climate impact on airports.

From an environmental perspective, the airlines are interested in GHG emissions and intensity, energy consumptions and intensity usage, waste reductions, waste diverted, water management, significant spills, and enforcement actions, if applicable. Airlines would like airports to provide Scope 1 and 2 emissions by airline, where possible, since these are the airlines' Scope 3 emissions. It was pointed out during the A4A meeting that California recently passed Senate Bill 253 that will require California airports with over \$1 billion in revenue to report Scope 1 and 2 emissions beginning in 2026 and Scope 3 emissions beginning in 2027.

Several airlines were also interested in how airports are dealing with extreme heat from an employee perspective (e.g., mandatory breaks and providing water) and how airports are thinking about biodiversity. A few airlines mentioned pay equity, labor relations, customer satisfaction scores, safety, and employee engagement as good social metrics. Cyber security, Board diversity, and ESG involvement were most important from a governance perspective.

Airlines are very supportive of ACI-NA developing an ESG framework for NA airports and would like to continue to work together on this in the future.

**Other Priority ESG Information - Sustainable Aviation Fuel.** Sustainable aviation fuel, or SAF, is an alternative fuel source to conventional jet fuel and is currently produced from various organic materials such as fat, oil, and grease. Over the lifecycle of the fuel, referred to as well-to-wake or from extraction/feedstock processing to engine combustion and exhaust, SAF has the potential to reduce GHG emissions by up to 80% or more depending on the



feedstock and production methods. As such, SAF is critical to the decarbonization strategies of airlines. In addition to working with airports, fuel consortiums, and other fueling business partners, airlines will be interested in accurate and timely reporting of SAF-related expenditures and emissions saving potential. The timely and accurate reporting of SAF usage is crucial for airlines in their climate communications and to control for any erroneous or potentially misleading concerns as it relates to the climate benefits of SAF. Although SAF development is primarily an airline issue, airports will need to think about how this fuel is stored and used in fueling in the future. This is a topic the Task Group will continue to follow.

## 5.5 ESG Ratings and Research Organizations

There are over a dozen firms that conduct ESG research, aggregate ESG data from publicly available information (or surveys), and develop ESG ratings. Several investors and insurance companies mentioned that they use one or more of these aggregators to obtain ESG information. The Task Group interviewed representatives from five of these firms including Sustainalytics, Standard & Poor's Global ESG, Moody's ESG, Sustainable Fitch, and Carbon Disclosure Project (CDP). These firms are primarily focused on the top 5,000 publicly traded companies. Most stated that they were not actively looking to add airports, although they might in the future. All firms were supportive of the White Paper and the ACI-NA Airport framework. Airports should be aware that these organizations exist and may begin to aggregate airport ESG information in the future. The Task Group will continue to monitor these firms and the roles they play in the ESG ecosystem.

Some of these firms or "sister organizations" also provide third-party opinions for green bonds. Investors prefer to see a third-party opinion included when airports issue green bonds. The subject of third-party opinions on green bonds is beyond the scope of this White Paper, but the Task Group will continue to monitor these firms in the future.

## 5.6 Other ESG Stakeholders

There are many other stakeholders that may be interested in an airport's ESG information or ESG reports including:

- Local council of governments, cities, and states
- Organizations – corporate relationships
- Vendors
- Concessionaires and other business partners at the airport for ESG elements such as GHG emissions or waste management
- Employees and potential employees
- Passengers
- Local Communities

These stakeholders are most likely more interested in the ESG impact factors, rather than the financial factors. In more activist communities, ESG reports can become part of a social license to operate (SLO) conversation. SLO refers to the ongoing acceptance of an organization or industry's standard business practices and operating procedures by its employees, stakeholders, and the public. The concept of social license is closely related to the concept of sustainability. See the discussion on double materiality in [Section 4.3](#) for ways to gather information from stakeholders.

## 6.0 ESG Framework for North American (NA) Airports

One of the key deliverables for the Task Group is the development of an ESG framework that includes recommended and optional ESG disclosures that NA airports should consider tracking and reporting. Disclosures can take the form of narrative discussions and/or metrics. Most stakeholders are interested in metrics, but some ESG factors are best handled through narratives of the ESG actions taken by the airport. Where metrics are suggested, the airport should also include narrative discussions to “tell the story.” Some stakeholders prefer to see the data (e.g., rating agency or bond analysts) whereas others prefer to know the story (e.g., impact analysts). Stakeholders prefer five years of data where possible so they can understand if an airport’s performance is improving or not. If an airport has a published goal for an ESG disclosure element, the airport should also address how and when it plans to achieve the goal, the estimated cost to achieve the goal, progress to date, and the cost to achieve the goal, if known.

The framework includes a total of 59 disclosures, 20 of which are recommended and 39 are optional as shown in the table below.

ESG Category	Recommended		Optional	
	Narrative	Metric	Narrative	Metric
Environmental	3	6	4	8
Social	0	4	3	15
Governance	5	2	1	8
<b>Total</b>	<b>20</b>		<b>39</b>	

The Task Group is cognizant that ESG tracking at most airports is in its infancy, especially for smaller airports. The Task Group made an effort to keep recommended disclosures at a minimum for the early years of this ESG effort. However, larger airports with significant capital programs to be financed should be aware that stakeholders are also interested in many of the optional disclosures, and they should consider tracking these. [Appendix 1](#) contains more information on the optional disclosures that stakeholders requested be included in the recommended category. The following table includes a brief description of the various ESG elements within each category of the framework. A more detailed discussion of each disclosure is included in [Appendix 1](#), including the calculation definitions for metrics and whether the disclosure is material from a financial or impact perspective.

<b>Environmental Disclosures</b>	
<b>Recommended</b>	<b>Optional</b>
Energy consumption	Energy consumption by source
Energy intensity	Energy management*
Greenhouse gas emissions (GHG) Scope 1 and 2	GHG from other sources – Scope 3
GHG intensity – Scope 1 and 2	GHG reduced from base year
Climate risk exposure and adaptation*	Decarbonization strategy and initiatives*
Environmental commitments and progress	Total waste generated
Environmental non-compliance	Waste diversion
Waste management*	Waste disposal
Water management*	Water withdrawal by source
	Biodiversity management*
	Noise complaints
<i>*Narrative only</i>	Noise actions taken*

<b>Social Disclosures</b>	
<b>Recommended</b>	<b>Optional</b>
Diversity, equity, and inclusion (DEI) – workforce ethnicity and gender	DEI – by age bracket (added to the ethnicity and gender information, and not standalone)
Business supplier diversity (DBE/MWBE)	DEI – by new hires
Concessionaire diversity (ACDBE)	Labor management – focus on unions*
Workplace/employee safety	Labor management – percent in unions
	Employee engagement
	Employee training – programs offered
	Employee training – annual hours
	Environmental justice*
	Community – charitable contributions
	Community – employee volunteer hours
	Community outreach activities*
	Economic impact of airport on region (\$s)
	Economic impact – jobs created
	Customer satisfaction
	Construction/safety accidents
	Employee participation in wellness programs
	Health and safety practices
<i>*Narrative only</i>	Human trafficking initiatives

Governance Disclosures	
Recommended	Optional
Governance/organizational structure*	Leadership system – strategic planning and business results
Board of directors' background/diversity	Leadership system – incentive compensation
Executive management background/diversity	Cyber security – specific discussion*
Approach to risk management*	Risks, financial – days cash on hand
Cyber security – general discussion*	Risks, financial – debt service coverage
Reporting and transparency*	Risks, financial – pension plan funding
Ethics and compliance*	Risks, financial – budget accuracy
	Risks, financial – capital projects on budget
<i>*Narrative only</i>	Risks, financial – capital projects on schedule

**PFAS.** The ESG framework does not specifically address per- and polyfluoroalkyl substances — commonly referred to as PFAS — in this version of the White Paper, given the uncertain status of legislation on this topic in the U.S. and Canada. PFAS have been used in a variety of materials from clothing to cookware to firefighting foam. The same properties that made PFAS effective in a variety of products and materials have also made them toxic and pervasive in the environment. While PFAS-containing foams have been required in emergency situations at Part 139 airports, the Department of Defense recently released a new fluorine-free foam (F3) military specification and alternatives are becoming available. However, many unknowns remain and there are significant challenges associated with transitioning to F3. Airports may choose to acknowledge the state of PFAS in their ESG reports and note that they are continuing to monitor relevant regulatory updates. As the legislative landscape evolves, the Task Group will more thoroughly address the issue in future iterations of this White Paper.

## 7.0 Considerations for Tracking and Reporting ESG Information

One of the primary purposes of this White Paper is to provide NA airports with background and guidance on the types of information that is being requested by the airport industry's financial stakeholders, including credit rating agencies, investors, and insurance companies. At a minimum, airport operators should consider tracking the disclosure information suggested in this White Paper (see [Section 6.0](#) and [Appendix 1](#)) so they can have the information available if one of these stakeholders asks for the data during a bond sale or when the airport is acquiring insurance coverage. This may be a more important consideration for large airports that are frequently in the bond market or needing billions of dollars in property insurance. However, given current trends and potential SEC and state regulations or laws, it is reasonable to assume that smaller airports may be asked for some of this information in the near future.

The first question to be answered is whether your airport will begin to track the data. If yes, then the next question is if your airport should report this information. Some of the options, along with some of the pros and cons, are highlighted in the following table. Also refer to the following [Section 8.0](#), [Section 9.0](#), and [Section 10.0](#) on developing ESG Reports and legal considerations.

Options for Reporting ESG Information		
Option	Pros/Thoughts	Cons
Internal reporting only – track the data and provide when asked	<ul style="list-style-type: none"> <li>• Simplest method</li> <li>• Lowest cost</li> <li>• Data is often tracked in multiple departments, so focus on keeping key data in central location (maybe Finance) for quick access</li> </ul>	<ul style="list-style-type: none"> <li>• May not have sufficient information to be able to answer ESG-related questions from stakeholders</li> <li>• Information may not be tracked or reported to stakeholders on a consistent basis</li> <li>• Missed opportunity to share ESG accomplishments</li> <li>• Stakeholders prefer easily accessible information and five years of trended data</li> <li>• Still requires due diligence from CFO and General Counsel</li> </ul>
Post ESG data/metrics on airport web site	<ul style="list-style-type: none"> <li>• Easy access to information by all stakeholders</li> <li>• Less concern about providing inconsistent data based on individual requests</li> <li>• Focus should be on available, consistent, and trended metrics</li> <li>• Lowest cost method to communicate ESG information externally</li> </ul>	<ul style="list-style-type: none"> <li>• May be more challenging to include story-telling narratives</li> <li>• Metrics are important, but sometimes the story is better than the results</li> <li>• Information may not be tracked consistently so a detailed review of the data and data collection is appropriate. Similar process / controls and rigor should be applied as with formal report.</li> <li>• Still requires due diligence from CFO and General Counsel</li> </ul>
Prepare and issue an ESG or Sustainability Report	<ul style="list-style-type: none"> <li>• Allows for more comprehensive story telling</li> <li>• Stakeholders like to see narratives with metrics</li> <li>• Metrics in ESG Report will likely be relied upon by stakeholders</li> <li>• Is considered best practice and required in many jurisdictions outside the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• Most expensive and timely option</li> <li>• Requires substantial coordination of multiple departments with executive oversight (note this could also be a pro because of the awareness this brings to ESG)</li> <li>• Takes many months to complete report</li> <li>• Requires due diligence from CFO and General Counsel</li> </ul>
Include in Official Statement (OS)	<ul style="list-style-type: none"> <li>• If ESG information is financially material, it should be reported in your OS (see discussion in <a href="#">Section 10</a> below)</li> <li>• Less costly than an ESG report</li> <li>• Consider drafting ESG section of OS at same time as OS development</li> </ul>	<ul style="list-style-type: none"> <li>• Requires rigorous due diligence (including outside disclosure counsel) for accuracy and consistency of data</li> <li>• Focus will be less on impact metrics</li> <li>• May still get impact metric questions from stakeholders</li> </ul>

## 8.0 Contents of Typical ESG report

ESG reports are published documents that summarize important, primarily non-financial information. Comprehensive and impactful ESG reports strike a balance between a financial report, such as audited financial statements/annual report (extensive discussion of financial performance) and a sustainability report (historically including stories, trends, and dashboards, and heavier emphasis on infographics and visuals). ESG reports are typically completed on an annual basis and intended to provide a disclosure of crucial environmental, social, and governance information with key focus on performance, value creation, and management of risks and opportunities. A robust ESG report will contain the following:

- Coverage of material ESG information (either financial or impact) - Are environmental, social, and governance topics deemed material to the organization sufficiently managed and reported on?
- Evidence of sound governance and oversight - Are appropriate policies, processes, and controls in place and is there an effective management structure and accountability as well as oversight from commissioners, board, or equivalent?
- Evidence of robust risk and performance management - Are proper management procedures in place to address and manage risk and drive performance on the organization's material issues?
- Data and performance indicators - Is there comprehensive and accurate data for the ESG topics included in the report with key performance indicators (KPIs) that are appropriate for the organization and sector? Have you provided five years of data as desired by financial stakeholders? Is it in an easy to access location?
- Alignment to selected ESG standard(s) - Is the report aligned to the appropriate ESG standards for the organization<sup>13</sup>?
- External assurance – If necessary, has the report or priority performance areas been verified by a third party? [A common example of this for airports is the pursuit of third-party verification of their GHG data (i.e., carbon footprint) to achieve Airport Carbon Accreditation or other certifications. Note - other than GHG emissions, assurance is not required for ESG data, nor is it a common practice, and should be considered optional for airports.]

ESG reports can be written for a wide variety of audiences. Many reports also serve as a communication to non-financial stakeholders (e.g., employees and potential employees, customers, community stakeholders) and contain stories that may resonate with an audience more concerned with external impact. This information tends to be less structured, including reporting content such as industry or topical spotlights, employee or community stories, and other visual content (photos and infographics). It could also include deep dives into key topics such as climate change. Ideally this process is used by the organization to spot challenges and opportunities and to iterate on performance (and not just as marketing material).

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<sup>13</sup> For US-based organizations, the primary standards for aligning an ESG report are IFRS/SASB and GRI. For organizations obligated to report under the European Commission's Corporate Sustainability Reporting Directive (CSRD), the reporting needs to also align to the European Sustainability Reporting Standards (ESRS). Industry-specific guidance often exists that may align with the primary standards or contain more nuanced industry information. As noted in [Section 4.1](#), the primary standards were consulted in the development of this White Paper. Further, while it is common practice for corporations and other reporting entities to include an index summarizing alignment to the ESG standard(s), airports are not required nor obligated to include such an index in their ESG reports.



## 9.0 Considerations for Preparing an ESG Report

There are several factors that airports should consider when developing an ESG report. The following provides overarching guidance and considerations to assist airport planners and decision makers to ensure that ESG reports are comprehensive, transparent, and align with stakeholders' expectations.

**Why is the ESG report being developed?** There are numerous reasons for developing an ESG report, ranging from pure communication benefits to using the information as part of an airports' debt financing efforts. As such, airports should begin any reporting process by asking the question: "Why are we developing an ESG report?" A focused and deliberate answer to this question will provide the necessary motivation and direction to the effort. It will also identify key operational considerations and stakeholders to engage. The following are just a few of the many reasons to develop an ESG report.

Engage stakeholders. Whether done through a formal materiality assessment or other means, a report provides a regular opportunity for the airport to engage with key stakeholders, including investors, employees, community, business partners, and traveling public to understand their expectations and concerns related to ESG issues. This may help the airport identify the primary audience for the ESG report, although there may be several.

- *Business integration and management oversight.* Developing an ESG report is a cross-functional effort that requires an organization to understand performance on ESG risks and issues. Naturally, this leads to a focus on information systems, data quality, and comparability (by using standardized metrics and benchmarks), and awareness of programs and initiatives, as well as connection of ESG issues with the overall business strategy and long-term goals of the airport.
- *Benchmark performance.* Given an ESG report focus on data, standardized metrics, and trends, it can be used to compare an airport's performance year over year.
- *Attract financing, insurance, and supplement financial reporting.* Whether developing a stand-alone ESG report or including sustainability information as a complement to financial reports or official statements, ESG information is increasingly being incorporated into airport disclosures as part of bond issuances (see [Section 5.2](#)) and when obtaining various types of insurance coverage (see [Section 5.3](#)). ESG reporting also gives airports an opportunity to showcase commitments and performance to funding agencies when pursuing grants.
- *Prepare for regulatory reporting.* While an ESG report is not a mandatory disclosure for NA airports, the effort involved in developing an ESG report prepares the organization for potential mandatory disclosure of ESG issues in the future.
- *Transparency and leadership.* An ESG report provides opportunity for the airport to be transparent about the organization's ESG performance, initiatives, and challenges, provide context to help stakeholders understand the organization's approach, and convey leadership to employees, community, and industry peers on ESG issues.

Any one of these (and more) reasons may justify developing an ESG report. However, airports that have fewer compelling reasons to develop an ESG report or lack the resources should still consider starting the process of understanding the importance of ESG issues for the organization, and consider tracking pertinent information and getting a handle on the data that informs performance on those ESG issues.

**Who should be involved?** Given the profile and breadth of issues included in an ESG report, almost all areas of the airport can play a role because every department has some level of responsibility in some aspect of ESG. The following functions should be considered for planning and development of the document: marketing/communications, finance, legal, risk management/safety, human resources, environmental, operations, maintenance, planning, design and construction, business diversity, and public affairs. It is good practice to identify a project team and key report contributors from these functions as well as a steering committee to help provide direction. Reports tend to go through multiple rounds of review and signoff, including legal, finance, and executive. Airports may also consider using third parties for graphical design and report layout given the need for special graphics and pictures.

**How important is data?** The largest effort and challenge in preparing an ESG report often involves data that must be accurate, consistent, repeatable, and, in some cases, auditable. The ESG data should be important to stakeholders from either an impact or financial perspective and be focused on ESG risks, oversight, and performance. Ideally the data should be aligned with the organization's financial reporting period (i.e., fiscal year). The benefit of fiscal year is that it will align with the organization's financial reports. Financial stakeholders prefer five years of data to allow them to determine how an organization is performing, but a shorter period is acceptable if the organization does not have consistent or accurate data for that period. For first-time reporters, ESG data may be collected for the first time, so it is understood that only one or two years of data may be available.

The primary considerations around data include:

- *Availability of data.* Is data available that supports comprehensive reporting of ESG metrics and KPIs?
- *Quality and accuracy of data.* Is the data included in the report accurate, from a reliable resource, and consistent to support year over year reporting? Is the airport following robust data collection processes? Airports may want to request an internal audit to review the accuracy of information and the consistency of data collection processes.
- *Verification of data.* If required, has a rigorous verification process been implemented, either by independent verification or a third-party assurance provider, on appropriate ESG data to ensure the accuracy and reliability of the data?
- *Unintended use of data.* To address potential risks associated with unintended use of the data, the airport should clearly communicate the intended purpose of the data to avoid misinterpretation and ensure stakeholders understand the context and limitations of the information provided. Further, airports should clearly communicate the data sources, methodologies, and any limitations associated with the reported information.

Given the scope of data needs for ESG reporting, many organizations establish more formal systems of record for ESG data, either through enterprise software platforms, software subscriptions, or robust spreadsheets. It is advisable to have a process for data and information tracking and maintaining a log of what should be included in "next year's ESG report."

**What is an appropriate timeline and frequency?** When undertaking the development of an ESG report, it is advisable for airports to allocate sufficient time, ranging from a minimum of three months up to nine months or more. These reports are typically published on an annual, or semi-annual, basis and, ideally, should align or coincide with financial reporting. Given the importance of data and other aspects of the report, it is good practice to consider data collection needs, performance indicators, and desired performance goals at the start of the period, and to compile data and information during the year – organizations should not wait until the end of the year or a few months prior to publication to start gathering data. The following provides a generic, illustrative timeline for development of an ESG report.

ESG Report Activity	Timeline*
Pre-planning (data and resourcing needs, KPIs, goals, publication, and other key dates)	Start of FY/CY
Kick-off, report outline, establish project plan including quality controls and internal review	-6 to -9 months
Active data collection and information sourcing, review, and refinement	-3 to -6 months
Content and design development (involves multiple draft rounds)	-1 to -4 months
Final reviews and signoffs	-0 to -1 months
	Publication

\* Timelines are in months preceding the desired publication date, unless noted otherwise.

It is crucial to recognize that crafting any ESG report demands a significant investment of time. Particularly, inaugural reports, being the first of their kind, require even more dedication as organizations develop and establish novel procedures, controls, templates, and workflows. This period involves a learning curve as the organization adapts to the compilation and collation of information that was not previously communicated externally. By allowing this extended timeframe, airports can ensure a thorough and meticulous approach to the development of their ESG reports, fostering accuracy and adherence to best practices in sustainability reporting.

**Are there risks associated with ESG reporting?** Airports engaging in ESG reporting should also consider potential risks, such as those related to fraud (including untrue statements or failing to include material information), greenwashing (exaggerating or making false claims around environmental or social gains knowingly or unknowingly), or other reputational concerns once ESG information is made public.

Further, given the likely scrutiny on ESG information from some stakeholders and resistance to ESG policies and information from other stakeholders, airports should consider carefully managing and reporting this information in a manner that protects the organization from legal challenges. Striking a balance between investor or rating agencies' demands for ESG information and adherence to local or regional anti-ESG policies and sentiments requires prudent management of data use, controlled or limited dissemination, and potentially opting for selective disclosure.

## 10.0 Legal Considerations Regarding What Information to Report

**Application of U.S. Securities Laws.** The applicability of U.S. securities laws should be instructive to airports on both sides of the border. The United States Securities and Exchange Commission (SEC) has stated that, “all statements of a municipal issuer that are reasonably expected to reach investors in the trading markets are subject to the antifraud provisions” of the federal securities laws.<sup>14</sup> In general, the primary requirement under U.S. securities laws is that issuers not make false or misleading statements or omit material facts in connection with the offer, purchase, or sale of securities.<sup>15</sup> For purposes of U.S. federal securities law, a fact is “material” if, in light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.<sup>16</sup> This is generally consistent with the half of double materiality that corresponds to financial materiality.

The preceding paragraph contains a complex set of facts; let’s examine them separately. The fundamental underlying concept is that statements made or omitted in connection with the offer, purchase, or sale of securities can influence the decisions of investors and, when such statements do so, they are “material”. Most large NA airports have issued or will issue debt, typically in the form of general airport revenue bonds, but also in other forms, that are sold in the public capital markets to investors. In the U.S., this publicly sold airport debt is considered to be a security subject to the antifraud provisions of federal law. Thus, the disclosure document provided to investors in connection with the initial offering of an airport’s bonds, typically the Official Statement, is subject to the anti-fraud provisions of federal law.

Debt issued by an airport will also typically continue to be traded on the secondary market after the initial offering, however. As a result, investors are often seeking on-going information about an airport when determining whether to buy, sell, or hold the airport’s debt, and the appropriate price to pay for such debt. Federal securities regulations through Rule 15c2-12<sup>17</sup> (applicable to underwriters) indirectly require U.S. municipal issuers, such as airports, to contractually agree to provide both initial disclosure upon the issuance of publicly offered debt, but also continuing disclosure. Underwriters must obtain a contractual undertaking that the issuer will provide certain annual financial and operational data, and promptly disclose the occurrence of certain material events.

Some issuers, however, have historically not met their contractual obligations under Rule 15c2-12, thus depriving investors of up-to-date, accurate information on which to make investment decisions. As a result, such investors have looked to other sources for such information, including an issuer’s website, statements made by public officials, and reports issued by the issuer, not all of which may have been intended to influence investment decisions.

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<sup>14</sup> SEC (Feb. 7, 2020) “Application of Antifraud Provisions to Public Statements of Issuers and Obligated Persons of Municipal Securities in the Secondary Market: Staff Legal Bulletin No. 21 (OMS)”, available at [https://www.sec.gov/municipal/application-antifraud-provisions-staff-legal-bulletin-21#\\_ednref21](https://www.sec.gov/municipal/application-antifraud-provisions-staff-legal-bulletin-21#_ednref21) (accessed December 21, 2023).

<sup>15</sup> U.S. Code, Title 15, § 77q; see also Rule 10b-5, Code of Federal Regulations (CFR), Title 17, § 240.10-5 (“It shall be unlawful ... (b) to make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading.”)

<sup>16</sup> See, e.g., TSC Industries, Inc. v. Northway, Inc., 426 U.S. 438 (1976).

<sup>17</sup> CFR, Title 17, § 240.15c2-12.

The SEC's position that all statements of an issuer that are reasonably expected to reach investors are subject to the antifraud provisions arises, in part, from those situations where investors must rely on secondary or tertiary information, as well as where information is intentionally made available to investors, such as through the Municipal Securities Rulemaking Board's Electronic Municipal Market Access (EMMA) site.<sup>18</sup>

As more investors consider ESG factors in their investment decisions, it becomes more and more likely that such ESG information may be determined to be material. The fact that an issuer collects and disseminates data regarding its ESG efforts may be a threshold investment decision for certain investors that maintain socially relevant investment funds. The number of funds that overtly consider ESG factors in the investments that they purchase has increased dramatically in the recent past. Other investors may review such materials to determine how an issuer is evaluating and addressing ESG risks, while others may seek information on the financial impacts of an issuer's ESG efforts. Thus, it is increasingly likely that ESG reporting, in whatever form it may take, may be relied upon by at least some investors and, accordingly, be deemed to include information that is material and must comply with federal securities laws.

The definition of what is "material" in securities law terms can also change over time as new information and new factors affect decisions to invest in specific securities. Further, although the municipal securities market in the U.S. is not subject to direct regulation in the same manner as corporate securities due to the prohibition of such direct regulation by the Tower amendment,<sup>19</sup> there is a clear trend for municipal disclosures to follow, but lag, those of the corporate market. In March 2022, the SEC issued its proposed rule applicable to the corporate market that would require climate-related disclosures.<sup>20</sup> Although this proposed rule is controversial and has yet to be finalized, corporate issuers, including most U.S. airlines, are nevertheless beginning to provide disclosures regarding climate-related issues and other ESG factors. (Note, this rule was formally published by the SEC in March 2024. This White Paper was finalized before it was published.) Similarly, some airport issuers have begun to include ESG disclosures in their Official Statements, determining that this information is – or may be – material to their investors.

The SEC has taken other steps that also indirectly affect the municipal market and heighten investor focus on ESG reporting. The SEC has adopted an amendment to the so-called "names rule" that imposes requirements on funds whose names suggest a focus on ESG.<sup>21</sup> Under the amendment, funds with ESG terminology in their name must be "ESG-focused" funds and provide disclosure regarding their investment in ESG-focused securities and their investment philosophy. So-called "impact funds," established to pursue a specific ESG purpose, are required to disclose such goals and how they are expected to be met, including their investments in securities that further such ESG-measured goals. The disclosure provided by an issuer regarding its ESG efforts is critical to these investors and to their continued compliance with the SEC's guidance.

As a result of the foregoing, it is increasingly likely that ESG data disclosed by an airport issuer of debt securities may be material to an investor and thus subject to the anti-fraud requirements of securities law. Accordingly, it is important for issuers disclosing ESG data to ensure that such disclosures are accurate and complete – that no material fact is misstated or omitted. The ESG disclosure matrix included in this White Paper is intended to help airport issuers by providing some guidance on ESG information that may be financially material to an investor.

**State Laws Regulating ESG Reporting.** In the U.S., ESG has become something of a political lightning rod within the past few years. This has resulted in enactment of various state laws that attempt to regulate investing and reporting by public entities. In some cases, states require some form of ESG reporting or consideration. For example, Illinois requires that all public entities affirmatively consider the ESG impacts by, "develop[ing], publish[ing], and implement[ing] sustainable investment policies applicable to the management of all public funds under its control."<sup>22</sup> California has approved a bill (Senate Bill 253) and New York has introduced a bill that requires "reporting

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18 <https://emma.msrb.org>

19 U.S. Code, Title 15, § 78o-4

20 <https://www.sec.gov/rules/proposed/2022/33-11042.pdf> ("The Enhancement and Standardization of Climate-Related Disclosures for Investors").

21 See SEC Press Release "SEC Adopts Rule Enhancements to Prevent Misleading or Deceptive Investment Fund Names" (available at <https://www.sec.gov/news/press-release/2023-188>, accessed December 21, 2023).

22 <https://www.ilga.gov/legislation/publicacts/101/PDF/101-0473.pdf> (the "Illinois Sustainable Investing Act").

entities”, which can include large airports, to disclose publicly their Scope 1, 2, and 3 GHG emissions<sup>23</sup> and, in California, to disclose climate-related financial risks and measures adopted to reduce and adapt to disclosed risks.<sup>24</sup>

Other states, such as Florida, are taking the opposite approach and barring public entities from considering ESG factors in procurement or contracting processes, prohibiting use of ESG factors when issuing bonds, and prohibiting banks that engage in “corporate activism” from holding public deposits. Other states have prohibited public entities from doing business with organizations engaged in what is defined as economic boycotts or discrimination against certain industries, based on ESG factors.<sup>25</sup>

Although the collection of ESG data is unlikely to run afoul of most, if not all, of the current legislation, airports should consult with counsel to analyze any laws applicable to ESG matters in force in their state and take care to ensure compliance with such requirements. In some cases, airports may be presented with a difficult choice, since certain investors, insurers, and rating agencies are increasingly seeking data on ESG issues from municipal issuers such as airports, while in certain states the collection and dissemination of such data is either explicitly or, more typically, implicitly discouraged, if not prohibited. At this time, it remains an open question if federal securities laws will be found to overrule conflicting state laws where ESG information is determined to be material to investors, thus requiring its disclosure, or if restrictive state laws prohibiting such disclosure will be upheld.

**Other Legal Requirements That May Affect ESG Reporting.** Similar to the laws in force in California and New York, the U.S. Environmental Protection Agency currently requires certain facilities, generally those emitting at least 25,000 tons of CO<sub>2</sub> per year, to monitor, verify, and keep records of their GHG emissions.<sup>26</sup> In addition, in November 2022, several federal agencies proposed a rule requiring “major contractors” to disclose Scope 1, 2, and certain Scope 3 emissions, assess climate-related financial risks, and set emissions reduction targets.<sup>27</sup> Contractors with smaller annual federal contracts are required to disclose Scope 1 and 2 emissions. This rule does not currently apply to state or local governmental entities, but it is another indication of how various governmental entities are beginning to require disclosures of ESG data. Additional data collection and reporting obligations may well be imposed by federal, state, and local entities in the future.

**ESG Disclosure Considerations for Official Statements.** For airports that decide to include ESG data in their Official Statement, the disclosure document prepared in connection with the issuance of airport debt, there are a number of additional considerations. The threshold question is: why does the airport want to include ESG information? As discussed in this White Paper, information that could sway an investor’s decision to purchase the airport’s bonds is generally considered to be material and thus subject to the SEC’s anti-fraud rules. Further, *all* information included in an Official Statement is presumptively considered to be material, although airports often also include information that, standing alone, might not be considered to be material to provide greater context to the other information reported. Thus, airports should fully consider the implications of including such information since the ESG information included in an airport’s Official Statement, as with all such information disclosed, must be both accurate and complete in order to comply with applicable anti-fraud rules.<sup>28</sup>

An additional issue that airport issuers should consider is that the inclusion of information in an Official Statement creates a public record in the financial community that can be used in ways that could be detrimental to an airport. For example, disclosure of safety data is sometimes recommended as part of the social section of an ESG report; however, trending data showing that an airport workplace is not addressing specific safety issues could be used by an injured plaintiff to demonstrate negligence by the airport. In addition, by publishing summarized data, an airport may find that its detailed backup information from which such a summary was derived is subject to a state “sunshine law” request. It is recommended that airport counsel be consulted with respect to such issues.

23 California SB 253; New York A 4123 (in each case defining “reporting entities” as any business entity with total annual revenues exceeding one billion dollars that operates in the state).

24 California SB 261

25 See, e.g., <https://www.flsenate.gov/Session/Bill/2023/3/BillText/er/PDF> (Florida “act relating to government and corporate activism”).

26 CFR, Title 40, Chapter I, Subchapter C, Part 98, § 98.2(a)(2); available at <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-98?toc=1>

27 <https://www.federalregister.gov/documents/2022/11/14/2022-24569/federal-acquisition-regulations-disclosure-of-greenhouse-gas-emissions-and-climate-related-financial>.

28 U.S. Code, Title 15, § 77q; see also Rule 10b-5, CFR, Title 17, § 240.10-5.

Once an airport has decided to include ESG information in its Official Statement, then several additional questions should be answered. The first is determining what information will be presented. As discussed above, creating a materiality matrix is a good initial step to determine what information investors would want to consider in making a decision to purchase the airport's bonds. The materiality matrix and the ESG disclosure matrix discussed in this White Paper is a helpful place to start, but each airport will have differing abilities to capture and report ESG data and the importance of various factors will also vary by airport. In addition, as ESG reporting, and investor expectations, evolve, the information that is considered to be material by investors is likely to change, so that the determination of what ESG information is material and will be reported will likely not be static and will need to be reevaluated with regularity, ideally with the preparation of each new Official Statement. Lastly, the airport should consider whether the ESG information it proposes to report should or must be updated annually on a timely basis and, if so, whether the airport has the means to do so.

Airports should also consider the timeliness of ESG reporting. The data aggregation and narratives in an ESG report are often not developed until well after the end of the fiscal year and many times after the financial audits are complete and annual reports are issued. Airport management teams should consider gathering ESG data and developing ESG reports coincident with their financial processes. This also makes it easier to remember what ESG activities occurred in the fiscal year being reported, allowing for consistent and timely reporting of material ESG and financial information in the ESG Report, Audited Comprehensive Financial Report, and Official Statement, especially if bonds are sold shortly after the audited financial statements are complete.

The second consideration is whether the airport has the ability to accurately and completely gather the ESG information that may be material to an investor, especially if that information should be gathered over time to create trend data. Regular issuers of airport debt will need the capacity to update their ESG disclosure, just as passenger, landed weight, and cargo data is regularly gathered and updated, and trends reviewed and analyzed. Also, under Rule 15c2-12,<sup>29</sup> material ESG data may need to be updated annually, even if no additional debt is issued, as part of the issuer's mandated annual report. The airport's legal counsel, along with members of the financing working group, should be consulted regarding which data will need to be updated annually to meet the requirements of Rule 15c2-12 and, if so, how that data will be gathered and reported.

Lastly, to ensure that the ESG data reported is accurate and complete, the airport should consider how it can be assured that the data can be verified and as noted above, replicated. Some airports will look to third parties to provide comfort, such as an external audit of the data provided. Others will look to their staff to gather and verify the data reported on a regular basis. Some may choose to have their internal audit departments review their data aggregation processes. As discussed in more detail below, involving airport staff from many different areas of expertise is a good way to help ensure that data is accurate and complete. Thus, having a multi-disciplinary team helping to prepare the Official Statement can be quite beneficial to ensure not only the accuracy of ESG reporting, but that of other information that is included.

It is worth considering having a formal review process that includes airport staff from multiple areas of expertise, including, for example, finance, environmental, legal, operations, human resources, community outreach, minority business programs, capital programs, and executive management to ensure that the data that is reported undergoes scrutiny from a wide range of disciplines and viewpoints. Formally documenting that review is also a good practice; if questions later arise regarding the sourcing and review of data, a written record can avoid faulty memories and staff transitions that are inevitable over time. Finally, a final review by executive management is generally a very good practice to ensure both accuracy of reporting, and consistency with management's external and internal goals.

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<sup>29</sup> CFR, Title 17, § 240.15c2-12



## 11.0 Conclusion

There is a significant and growing demand for ESG information from financial stakeholders including rating agencies, investors, and insurance companies. In addition, the U.S. SEC has implemented ESG reporting requirements on private sector organizations with some states, such as California, legislating reporting requirements for greenhouse gas emissions and climate risks for the largest public and private organizations. Finally, other stakeholders including the airlines and employees are also interested in what an airport is doing with respect to ESG.

This White Paper was prepared to help NA airports understand the changing ESG landscape from Europe and NA; to develop an ESG framework for recommended and optional disclosures based on feedback from financial stakeholders and researching prominent ESG frameworks; to provide airports with information on the typical contents of an ESG report and considerations for preparing an ESG report; and, finally, to summarize legal issues to consider when disclosing ESG information.

The ESG framework in [Appendix 1](#) provides recommended and optional disclosures for airports to consider tracking and possibly reporting. Disclosures can take the form of narratives or metrics depending on the ESG topic. Notably, financial stakeholders have a strong preference for five years of data when it is reported. The framework also identifies if an ESG factor is material from an impact or financial perspective. Impact means that the issue is material based on an airport's impact on the environment or community/society (inside looking out), while financial relates to ESG factors (like climate change) that may affect an airport's ability to repay its bonds or continue operations (outside looking in).

The decision to track and possibly report ESG information rests solely with each airport. Today, this appears to be primarily a large airport issue from an investor standpoint. Eighteen of twenty NA large airports that have issued debt in the past two years were asked ESG questions per a CFO survey. Large airports are also closely tracking ESG-focused legislation that may directly or indirectly impact them, such as California's Senate Bill 253 that applies to organizations with revenues over \$1 billion per year and the state's Senate Bill 261 that applies to organizations with over \$500 million annually. Despite the current focus on large airports, it is important that smaller airports remain aware of the ESG landscape as it changes and evaluate if they should begin tracking and/or reporting some of the information.

The Task Group would like to thank ACI-NA for supporting this project. The Task Group will remain in place to periodically update this White Paper as NA ESG compliance requirements evolve.

# Appendix 1

## ACI-NA ESG Framework and Disclosure Matrix

Appendix 1 provides an overview of the ACI-NA ESG Framework. The framework includes recommended and optional disclosures and metrics for the Environmental, Social, and Governance categories; followed by a narrative for each disclosure or metric to help the reader understand some of the nuances of each particular disclosure or metric.

### Environmental Framework and Disclosures

The Environmental section of an ESG report discusses an organization's approach to managing its environmental performance and impacts. This can include factors overseen by traditional environmental programs with a regulatory compliance focus (e.g., stormwater/air/water rights permits, remediation activities), asset management, and facility operations staff (e.g., energy procurement, water utilities, waste disposal), sustainability managers (e.g., greenhouse gas [GHG] emissions tracking, target setting), or any number of other airport departments and functions (e.g., risk management, noise office). From a double materiality perspective, stakeholders are interested in both an organization's impact on the environment and the organization's operations and business performance – including how external factors may impact these. For example, an airport's high waste generation may negatively impact the surrounding community through diminished landfill capacity and increased pollution. It may also impact the airport's operating budget through increased contract hauling costs and landfill tipping fees.

In general, investors, rating agencies, and insurance companies are most heavily interested in climate-related disclosures, such as an organization's GHG emissions, decarbonization strategy, and climate change adaptation plans. Nevertheless, there is an expectation that several core categories are addressed and tracked by an airport. Reflecting this broad focus, the Environmental section consists of the following nine categories:

1. Energy
2. Greenhouse Gas (GHG) Emissions
3. Climate Change Adaptation/Exposure to Environmental Impacts
4. Environmental Commitments, Strategies, and Progress
5. Regulatory Noncompliance
6. Waste Management
7. Water Management
8. Biodiversity and Natural Resources
9. Noise

# Energy

Recommended Disclosures in bold font / Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'/Impact Materiality
Energy Consumption	Total energy consumption	Metric	All forms of energy consumed, including self-generated and purchased. Calculation includes fuel, purchased electricity, purchased heat, purchased steam, purchased cooling, self-generated renewable energy.	Joules (preferred), watt-hours, British thermal units, multiples thereof	Impact
Energy Intensity	Ratio of energy consumption and an organization-specific metric. The key is to be consistent over the years with the same intensity metric.	Metric/Narrative	Energy intensity ratio for the organization. Flexibility for the unit of measure to include passengers or building area. Passengers preferred.	Joules (preferred), watt-hours, British thermal units, or multiples thereof per passenger, square foot, or square meter  e.g., megajoules/passenger	Impact
Energy Source*	Total energy consumption by source (renewable vs. non-renewable) and breakdown by type	Metric	Total energy consumption from non-renewable sources and from renewable sources. The breakdown by type should include fuel, purchased electricity, purchased heat, purchased steam, purchased cooling, self-generated renewable energy.	Joules (preferred), watt-hours, British thermal units, multiples thereof	Impact

Energy Management	Strategy to manage energy consumption and costs	Narrative	Description of energy efficiency initiatives, procurement practices, approach to resilience, and formal energy management plans. Includes reductions in consumption achieved as a result of conservation and efficiency measures.	n/a	Impact
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*\*Multiple investors expressed interest in seeing these metrics moved from optional to recommended, and so larger airports should consider including this data in their reports.*

**Energy Consumption (Recommended).** This metric includes all forms of energy consumed by the airport, whether self-generated or purchased. The calculation should include consumption of fuel, purchased electricity, purchased heat, purchased steam, purchased cooling, and self-generated renewable energy. Energy consumption should be converted to a standard unit of measure, megawatt-hours (MWh), using conversion factors from recognized sources such as the U.S. Energy Information Administration or Canada Energy Regulator. Publication of five-year trend data will enable airports to demonstrate absolute reductions in energy consumption. The information reported in this metric can be used to form the basis of the scopes 1 and 2 GHG emissions inventory.

**Energy Intensity (Recommended).** This metric includes the organization’s energy consumption normalized by passengers or building area. A brief narrative should be included to explain the unit of measure chosen and provide context on changes over time. If building area is chosen, the narrative should describe the facilities included in the calculation (e.g., terminals only or all airport buildings).

**Energy Source (Optional).** This metric includes a breakdown of total energy consumption by source (i.e., renewable versus non-renewable) and by type. The breakdown should include consumption of fuel, purchased electricity, purchased heat, purchased steam, purchased cooling, and self-generated renewable energy. Energy consumption should be converted to a standard unit of measure, megawatt-hours (MWh), using conversion factors from recognized sources such as the U.S. Energy Information Administration or Canada Energy Regulator. The investor community is highly interested in this data point, so larger airports should consider including this optional metric.

**Energy Management (Optional).** This section should include a narrative of the airport’s strategy to manage both energy consumption and energy costs. Topics may include the airport’s energy efficiency initiatives, procurement practices, approach to resilience, and formal energy management plans. Examples of energy efficiency initiatives include facility retrofits, standards for energy efficient equipment in new construction, retro-commissioning activities, and requirements for LEED certification or adherence to other green building standards, such as ParkSmart and the Institute for Sustainable Infrastructure’s Envision frameworks. Reductions in energy consumption achieved through energy efficiency or conservation measures should be included if data is available. A description of innovative procurement practices used to reduce costs and/or transition to renewable sources should be included as well. For airports that have communicated electrification plans, it may be appropriate to address the airport’s strategy to address the expected increase in electricity consumption (e.g., time of use adjustments, energy storage projects). Airports should also consider discussing their strategy to improve energy resilience in this section.

# Greenhouse Gas (GHG) Emissions

Recommended Disclosures in bold font / Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'l / Impact Materiality
GHG Emissions	Scope 1 GHG Emissions	Narrative/Metric	Direct (Scope 1) GHG emissions	metric tons CO2e	Impact and maybe Financial
	Scope 2 GHG Emissions	Narrative/Metric	Energy indirect (Scope 2) GHG emissions, market-based and location-based	metric tons CO2e	Impact and maybe Financial
GHG Emissions Intensity	Ratio of GHG emissions and an organization-specific metric	Narrative/Metric	Scope 1 and 2 GHG emissions intensity ratio. Flexibility for the unit of measure to include passengers or terminal sq. ft.	metric tons CO2e/passenger or metric tons CO2e/passenger or sq.ft.	Impact
GHG Emissions	Scope 3 GHG Emissions*	Narrative/Metric	Other indirect (Scope 3) GHG emissions	metric tons CO2e	Impact
Reduction of GHG Emissions	Impact of GHG emission reduction strategy and initiatives	Narrative/Metric	GHG emissions reduced as a direct result of reduction initiatives, baseline year used for calculation	% change from base year	Impact
		Narrative	Decarbonization strategy and initiatives	n/a	Impact

\*Multiple investors expressed interest in seeing these metrics moved from optional to recommended, and so larger airports should consider including this data in their reports.

**GHG Emissions, Scopes 1 and 2 (Recommended).** This metric includes an airport’s total scope 1 and scope 2 GHG emissions, reported in units of carbon dioxide equivalent (CO2e). See [Appendix 3– Definitions](#) for a description of scopes. Scope 2 emissions should include both location- and market-based (if applicable) methods. Airports should also consider including the breakdown of emissions by source category.

Compilation of a scope 1 and 2 GHG inventory, also known as a carbon footprint, is a foundational requirement for entry into the Airport Carbon Accreditation (ACA) program at Level 1. Airports should follow the guidance outlined in the Airport Carbon Accreditation Application Manual and Greenhouse Gas Protocol when compiling their GHG inventory.

Since independent third-party verification is a requirement of ACA, airports should consider including verification status. Airports that choose to voluntarily offset their emissions should also consider sharing the offset program (e.g., Clean Development Mechanism, Climate Action Reserve, Verified Carbon Standard), project type, and label used for offset credit (e.g., CER, CRT, VCU). Publication of five-year trend data will enable airports to demonstrate absolute reductions in emissions, which is an item of key interest to stakeholders.

**GHG Emissions Intensity (Recommended).** This metric is a ratio of the organization's Scope 1 and Scope 2 emissions and a business metric. See [Appendix 3- Definitions](#) for a description of scopes. Following Airport Carbon Accreditation (ACA), airports should express this ratio using passengers or traffic units, defined as one passenger movement or 100 kilograms of cargo arriving or departing. Investors are generally most interested in absolute GHG emissions reductions; however, reporting an intensity metric allows airports to provide additional context on their activities. Airports should also consider including the breakdown of Scope 1 and Scope 2 emissions by source category.

**GHG Emissions, Scope 3 (Optional).** This metric includes an organization's Scope 3 GHG emissions reported in units of carbon dioxide equivalent (CO<sub>2</sub>e). See [Appendix 3- Definitions](#) for a description of scopes. Airports should also consider including the breakdown of Scope 3 emissions by source category.

Compilation of a Scope 3 GHG inventory is a requirement beginning at Level 3 of the ACA program. Aircraft emissions (included within the GHG Protocol's Category 11 – Use of Sold Products) will likely represent the bulk of Scope 3 emissions for most airports. As airports progress through the ACA program, the requirements for the level of detail included are strengthened. For example, airports at Level 3/3+ are required to report emissions from the aircraft landing and take-off (LTO) cycle, aircraft auxiliary power unit (APU), and aircraft engine testing (MRO), while airports at Levels 4/4+/5 are required to add aircraft full-flight emissions.

In the most recent Airport Carbon Accreditation Application Manual (Issue 14, December 2023), a new requirement was instituted to require airports at Level 5 to quantify all relevant categories of Scope 3 emissions in alignment with GHG Protocol Scope 3 Guidance and provide justification for decisions on Scope 3 category relevance. Airports should consult the application manual for a more detailed explanation of common airport Scope 3 emissions sources.

**Reduction of GHG Emissions (Optional).** This section should include the percent reduction in an airport's Scope 1 and 2 GHG emissions from its baseline year as well as a description of its decarbonization strategy and initiatives.

The baseline year refers to quantified emissions at a specified year against which assessment of progress to a target can be performed. This definition is used by Airport Carbon Accreditation (ACA) and adapted from ISO 2022, "Net Zero Guidelines, Accelerating the Transition to Net Zero," IWA 42:2022(E) (page 6). In line with the latest Intergovernmental Panel on Climate Change (IPCC) report (AR6 Synthesis Report, 2023), which relies on 2010 as a baseline, it is recommended that airports also use 2010 as a baseline; however, an airport may use a different baseline year, provided that the choice is explained.

ACA requires airports at Level 2 and above to develop a Carbon Management Plan. The Plan's purpose is to show the airport's meaningful efforts to reduce its emissions in line with the set target. The contents of the Carbon Management Plan can form the basis for the narrative of the airport's decarbonization strategy and initiatives.

# Climate Change Adaptation / Exposure to Environmental Impacts

## Recommended Disclosures

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'/Impact Materiality
Climate Risk and Adaptation	Climate change risk exposure analysis and strategies for mitigating risks <u>if determined financially material</u>	Narrative	Process for identifying, assessing, and responding to climate risk. General comments about management's awareness and actions taken. If financially material, then description of actions taken to address the risks. If formal climate adaptation plan announced, then update on implementation.	n/a	Financial, assuming material

**Climate Risk and Adaptation (Recommended if financially material).** This narrative should include the airport's process for identifying, assessing, and responding to climate risk and define the time horizons used (i.e., short-, medium-, long-term). The narrative should provide details on risks with the potential to have a financial impact on the business. If a formal climate adaptation plan has been announced, the airport should provide an update on actions taken and implementation.



# Environmental Commitments, Strategies, and Progress

Recommended Disclosures

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'l/Impact Materiality
Environmental Commitments, Strategies, and Progress	Describe formally announced environmental commitments, plans, strategies, and/or targets related to various environmental topics. Such topics may include but are not limited to greenhouse gases (e.g., emission reduction goals and net zero roadmaps), zero waste/circular economy, water reuse/conservation, climate resilience and adaptation, etc. Track and report progress toward these commitments.	Narrative/ Metric	Metric should be linked to the announced goal, actual status, and progress against the plan	Metric should be linked to the announced goal, use metrics defined above as appropriate	Financial

**Environmental Commitments, Strategies, and Progress (Recommended).** This narrative should include an overview of the airport’s environmental commitments, goals, and ambitions. Net zero goals are of particular interest to investors. Investors have emphasized that published commitments should be backed by action, and so the narrative should include the airport’s strategy to meet its goals. This may include references to sustainability management plans, environmental management systems, roadmaps, and strategy documents. It is also important to demonstrate progress toward stated goals, and so airports should consider sharing any key performance indicators (KPIs) or interim milestones as well.

## Regulatory Non-Compliance

*Recommended Disclosures*

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'l/Impact Materiality
Environmental Non-Compliance	Instances of non-compliance with environmental laws and regulations including spills and pollution <u>if determined financially material</u>	Narrative/ Metric	Total number of significant instances of non-compliance with laws and regulations (i.e., instances for which fines or non-monetary sanctions were incurred) during the reporting period	Description of incident, number of incidents, dollar amount of fines or clean-up required	Impact and maybe Financial

**Regulatory Compliance and Non-Compliance (Recommended, *if financially material*)**. This section describes instances of non-compliance with environmental laws and regulations. The metric should include the total number of significant instances of non-compliance with laws and regulations during the reporting period. Significant instances of non-compliance include enforcement actions by a federal or state agency, litigation, or other instances for which fines or non-monetary sanctions were incurred. A narrative description should be included for any significant instances of non-compliance.

## Waste Management

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'l/Impact Materiality
Waste Management	Activities leading to waste generation and initiatives to address these impacts	Narrative	Description of sources of waste generation and actions taken to prevent waste generation in the organization's own activities and its value chain, and to manage significant impacts from waste generated	n/a	Impact

Total Waste Generation*	Total weight of waste generated, including both waste diverted from disposal and waste directed to disposal	Narrative/ Metric	Total weight of waste generated and a breakdown of this total by category or composition of the waste	short tons	Impact
Waste Diversion	Waste diverted from disposal through waste prevention, reuse, recycling, and other recovery operations	Narrative/ Metric	Total weight of waste diverted from disposal and a breakdown of this total by category or composition of the waste	short tons	Impact
Waste Disposal	Waste directed to disposal by landfilling, incineration (with or without energy recovery), and other disposal operations	Narrative/ Metric	Total weight of waste directed to disposal and a breakdown of this total by category or composition of the waste	short tons	Impact

*\*Multiple investors expressed interest in seeing these metrics moved from optional to recommended, and so larger airports should consider including this data in their reports.*

**Waste Management (Recommended).** This narrative should describe the airport’s approach to managing waste, including activities leading to waste generation and initiatives to address these impacts. Note that waste can refer to a variety of materials; the Resource Recovery and Remediation Act (RCRA) “states that “solid waste” means any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities.”<sup>30</sup> For the description of waste generation activities, consider including terminals, administrative buildings, and tenant facilities. Examples of activities to address the impact of waste may include recycling, composting, procurement practices, food donation programs, or various other circularity measures.

**Total Waste Generation (Optional).** This metric represents all waste generated by the airport, including both waste directed to disposal by landfilling, incineration (with or without energy recovery), or other methods and waste diverted from disposal. This total should be broken down by category or composition (e.g., municipal solid waste [MSW], construction and demolition [C&D] waste, and various regulated waste streams). Regulated waste streams could include hazardous waste (regulated by the U.S. EPA under the Resource Conservation and Recovery Act), regulated garbage (regulated by U.S. Department of Agriculture-Animal and Plant Health Inspection Service and enforced by U.S. Customs and Border Protection), and other sources, depending on federal or state regulations.

The ACI-NA Task Group chose to list this metric as optional due to concerns about data availability, particularly at smaller airports. *Multiple investors expressed interest in seeing this metric moved from optional to recommended, and so larger airports should consider including this data in their reports.*

<sup>30</sup> Sourced from: <https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions> on March 5, 2024

**Waste Diversion (Optional).** This metric includes waste diverted from disposal. Diversion activities may include recycling, reuse, composting, and other recovery practices. As noted for Total Waste Generation, airports should consider reporting on this metric if data is available.

**Waste Disposal (Optional).** This metric includes waste directed to disposal by landfilling, incineration (with or without energy recovery), or other methods. As noted for Total Waste Generation, airports should consider reporting on this metric if data is available.

## Water Management

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric or Narrative</b>	<b>Metric Description</b>	<b>Unit of Measure/ Calc</b>	<b>Fin'/Impact Materiality</b>
Water Management	Activities impacting both water quality and water use and strategy for management of these impacts	Narrative	Description of the organization's approach to managing water quality and water use. Includes how and where water is withdrawn, consumed, and discharged as well as the stormwater and surface water impacts linked to its operations.	n/a	Impact
Water Withdrawal*	Total water withdrawal and breakdown by source	Narrative/ Metric	Total water withdrawal from all areas and a breakdown of this total by source (surface water, groundwater, seawater, third-party water)	ML	Impact

*\*Multiple investors expressed interest in seeing these metrics moved from optional to recommended, and so larger airports should consider including this data in their reports.*

**Water Management (Recommended).** This section includes a description of the airport's activities that impact water use and water quality and its strategy for managing these impacts. The water use narrative should include how and where water is withdrawn, consumed, and discharged (i.e., water rights permits, contracts to purchase potable water, water reuse measures, treatment facilities). Airports located in regions facing drought stress should consider including an overview of any water use restrictions faced, conservation strategies, and mitigation activities. The narrative should also provide a description of the airport's strategy to manage stormwater and surface

water impacts linked to its operations (e.g., stormwater permits, watershed monitoring). Airports should consider addressing specific practices for stormwater protection during aircraft deicing and spills.

**Water Withdrawal (Optional).** This metric includes total water withdrawal and a breakdown by source (e.g., surface water, groundwater, seawater, or third-party water). Following GRI's definition, third party water includes municipal water suppliers and municipal wastewater treatment plants, public or private utilities, and other organizations involved in the provision, transport, treatment, disposal, or use of water and effluent. The ACI-NA Task Group chose to list this metric as optional due to concerns about data availability, particularly at smaller airports. Multiple investors expressed interest in seeing this metric moved from optional to recommended, and so larger airports should consider including this data in their reports.

## Biodiversity Management

*Optional Disclosures shaded in gray*

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'/Impact Materiality
Biodiversity Management	Governance, strategy, risk and impact management, metrics and targets	Narrative	Description of the airport's governance, strategy, risk and impact management, and metrics and targets for nature-related dependencies, impacts, risks, and opportunities.	n/a	Impact

**Biodiversity Management (Optional).** Biodiversity has emerged as a key sustainability issue on the global scale, and changes in expectations for disclosure are likely to evolve over time. Airports should consider addressing the four pillars established in the recently released *Taskforce on Nature-related Financial Disclosures (TNFD) Recommendations*: (1) governance, (2) strategy, (3) risk and impact management, and (4) metrics and targets for biodiversity. For airports, measures to prevent wildlife trafficking and on-airport wildlife management activities may be key topics to discuss.

# Noise

Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'l/Impact Materiality
Noise	Impact of noise on surrounding communities	Narrative / Metric	Complainants	Number of complainants or number of households with a complaint	Impact
			Description of activities taken by the organization to manage or respond to noise impacts	n/a	Impact

**Noise (Optional).** This section describes the impact of noise on surrounding communities. The metric should include the number of complainants (i.e., unique individuals) or number of households that submitted a complaint during the reporting period. A narrative should be provided to add context to the number of complainants, temporal trends, and the root cause(s) of complaints. The narrative should also describe the airport’s strategy to proactively manage noise impacts and respond to noise impacts.

## Social Framework and Disclosures

The Social section of an ESG report describes how the airport delivers social value to stakeholders, which is gaining importance and prominence given increasing awareness of inequality, the value of inclusiveness to attract talent, the goodwill created by providing community benefits (including securing buy-in for airport development projects), and the ability to enhance an airport’s reputation and brand value. When done methodically, social value can contribute to improved decision making.

In addition, an airport’s attention to labor management, employee satisfaction and health, customer safety, and airline, vendor, and community relations can affect its reputation, competitive position, and financial performance.

The best way to develop a robust social program is through extensive coordination internally and externally. Stakeholder input creates both employee and community goodwill, fosters workforce opportunities, promotes employee well-being, and provides underserved populations with educational training.

Social value activities can be difficult to measure. Therefore, it is important to develop metrics that are relevant, achievable, and measurable as well as to track these metrics to evaluate success and identify areas for improvement.

The suggested social metrics framework for North American airports consists of the following three categories:

- Human Capital Management
- Community/Customer Relations
- Health, Safety, and Security

Unlike Environment and Governance issues, Social issues that are material to airports will vary more based on the circumstances. Therefore, each airport should consider which initiatives and metrics are most appropriate for its operations and development.

The following pages show the recommended and optional disclosures, followed by narratives of each disclosure to provide more context.

## Human Capital Management

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric or Narrative</b>	<b>Metric Description</b>	<b>Unit of Measure/ Calc</b>	<b>Fin'l/Impact Materiality</b>
Diversity, Equity, & Inclusion	Describe the airport's workforce diversity and DE&I practices (e.g., staff training, hiring practices, participation of minorities in leadership positions, etc.)	Narrative / Metric	Workforce diversity	Percent of workforce by ethnicity and gender brackets	Impact
				Add percent of workforce by age bracket to the ethnicity and gender table	Impact
	Describe the airport's workforce diversity and DE&I practices for recruiting	Narrative / Metric	Recruiting diversity	Percent of new hires, minority and under-represented individuals	Impact



Labor/ Management Relations*	Discuss collective bargaining for airport employees. Discuss potential impacts for key suppliers or airlines. Describe impact of poor / bad labor relations only if it impacts airport's ability to operate.	Narrative	n/a	n/a	Financial only if labor issues impact airport's ability to operate
	Describe quality of labor relations, including extent of collective bargaining agreements	Narrative / Metric	Percent of employees covered by bargaining agreements	Percent of employees	Impact
Employee Engagement	Describe approach to Employee Engagement, methodology used, and scores. Explain changes from prior years. Disclosure can include the use of Employee Research Groups and other engagement activities.	Narrative / Metric	Overall Employee engagement score	Engagement score	Impact
Employee Education & Training	Describe training programs, career/professional development, etc.	Narrative / Metric	Career development opportunities	Number of programs offered	Impact
			Training hours	Annual training hours	Impact

*\*Multiple investors expressed interest in seeing these metrics moved from optional to recommended, and so larger airports should consider including this data in their reports.*

Airports compete with the private and government sectors for talented employees. Employees need to feel part of the overall organization, see pathways to promotion, feel valued, and be rewarded in order to retain the most talented people.

The Human Capital section of an ESG report covers human capital issues, including team member compensation and benefits and engagement, talent development and diversity, equity, and inclusions or DEI. It typically includes four elements as described below.

**Diversity, Equity, and Inclusion (DEI) (Recommended).** The DEI section should include both narrative and metrics

depending on the airport's monitoring capabilities. The narrative section should describe the airport's approach to hiring, recruiting, promoting, and retaining employees as well as opportunities for minority participation in leadership positions. The metrics section illustrates the airport's successes in developing a diverse workforce, including the percent of minorities other underrepresented employees and (as well as new hires). It could also include metrics on the age diversity of staff. Note that metrics on diversity in the airport's leadership, including the governing body, could also be included in this section, but can also be covered under the Governance section of the ESG report.

**Labor/Management Relations (Optional).** This section should describe any collective bargaining agreements that might exist, the proportion of employees covered, the dates major agreements expire, and the quality of labor relations. Investors are interested in seeing metrics on the number of covered employees and understand if there is the potential for poor labor relations to impact or disrupt airport operations. This also applies to suppliers and airlines serving the airport. Metrics could include the percentage of employees under collective bargaining agreements. Other metrics could include employee turnover rates.

The labor management section could also describe specific initiatives undertaken by the airport to augment labor relations. For example, an increasing number of airports are developing convenient, affordable, on-site day care facilities to attract and retain employees. These facilities can be open only to the airport's employees or expanded to include employees of tenants on the entire airport campus. This is especially helpful in a tight labor market as airports try to expand access to a service that remains a costly barrier for many caregivers in their prime working years. Also, some airports have entered into Project Labor Agreements (PLAs) for major construction programs to maintain labor harmony and eliminate project delays from labor unrest such as strikes.

*Note, this disclosure element was commonly mentioned by investors, so larger airports should consider tracking and reporting this information.*

**Employee Education and Training (Optional).** The narrative section should describe the training, mentoring, and other programs offered by the airport to promote opportunities for career and professional development.

**Employee Outreach and Engagement (Optional).** The narrative section should describe the airport's approach to soliciting feedback from and engagement with employees. Some airports administer regular engagement surveys with staff and report on the level of participation.

## Community/Customer Relations

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin'/Impact Materiality
Business Supplier Diversity	Describe airport's business diversity practices (e.g., U.S. DBE, MWBE, on-the-job training programs, networking events, etc.)	Narrative / Metric	Dollars spent with M/WBE, SBE or DBE businesses compared to airports aspirational goals and percent of total spend.	Percent (dollars optional)	Impact

Concessionaire Diversity	Describe airport's business diversity practices (U.S. ACDBE, on-the-job training programs, networking events, etc.)	Narrative / Metric	ACDBE sales by ethnicity and gender and percent of total concessionaire sales.	Percent (dollars optional)	Impact
Environmental Justice	Discussion of environmental justice efforts; may be covered under other topic-specific disclosures (Environmental Assessment Act in Canada)	Narrative	n/a	n/a	Impact
Community Support and Engagement	Describe airport's efforts to support the needs of the local community, partnerships with local organizations, employee volunteerism, other	Narrative / Metric	Charitable contributions by airport (Canada) and employees	Dollars raised for charitable organizations	Impact
			Employee volunteer hours	Hours	Impact
			Community partnerships with business and civic associations, elected officials, local schools, nonprofit organizations, and other key stakeholders	n/a	Impact
Supporting Local Economic Growth	Describe airport's efforts as a catalyst to support the local economy and job creation. Describe source of study that determined the impact.	Narrative / Metric	Economic impact of airport system and/or major construction projects on the local economy	Dollars	Impact
				Jobs created	Impact

Customer Satisfaction*	Describe efforts to provide high level of customer satisfaction and services for passengers. Focus is on the overall score, but can also discuss average wait times, ADA/ACA compliance, and accessibility. Include awards won. Describe survey used (e.g., ACI).	Narrative / Metric	Customer satisfaction score if available	Score	Impact
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*\*Multiple investors expressed interest in seeing these metrics moved from optional to recommended, and so larger airports should consider including this data in their reports.*

Airports play a valuable role in job creation and economic growth for their local community by providing local businesses with access to the global market, attracting new businesses and jobs, and providing economic prosperity and improved quality of life. Airports also operate in an increasingly competitive environment. Reputational risks could impact the degree to which airlines, tenants, and passengers choose to use the airport.

Because airports compete for airline service, passengers, and other business activity, and as highly visible organizations in the community, airports strive to portray a positive reputation while offering good customer service. Airports must maintain strong goodwill with their community stakeholders to support operations, growth, and development and to avoid confrontations that could negatively affect creditworthiness. When contracting with vendors to manage operations, U.S. airports provide equitable competition for disadvantaged business enterprises and women and minority-owned businesses.

The Community/Customer Relations section of an ESG report addresses perceptions of quality, safety, fairness of business practices, customer service, and contribution to the local economy and community. It typically includes the elements described below.

**Business Supplier Diversity (Recommended).** This section should include a narrative (and to the extent available metrics) regarding the airport’s approach to procuring goods, services, and infrastructure to ensure diversity for both businesses and employees. The narrative section should describe the airport’s levels of, and approach to establishing goals for minority participation in its contracts with suppliers and means for soliciting minority participation such as through job fairs and on-the-job training or apprenticeship programs. The metrics section, which is considered optional, would include the dollar value of contracts with minority suppliers.

**Concessionaire Diversity (Recommended).** For U.S. airports, this section should include a narrative on the Airport’s Concessionaire Disadvantaged Business Enterprise (ACDBE) program as mandated by 49 U.S.C. 47107(e) for primary airports that are or have been recipients of USDOT Federal financial assistance. It should also describe the airport’s levels of and approach to establishing goals for ACDBE participation. Some airports are enhancing concessionaire diversity by hosting job fairs and on-the-job training. The metrics section, which is considered optional, would include the value of contracts with minority concessionaires with respect to the airport’s goal and spend achieved.

**Environmental Justice (Optional).** This section should include a narrative on the airport’s approach to increase environmental protection and safety and promote environmental education within disadvantaged communities.

**Community Support and Engagement (Optional).** Community stakeholder engagement and partnering with community organizations can enhance an airport's reputation. The narrative should describe the airport's efforts in community outreach and support for business and civic associations, local schools, nonprofit organizations, etc. Metrics could include volunteer hours and charitable donations.

**Supporting Local Economic Growth (Optional).** Creating awareness of an airport's positive impact on the local economy can build support for projects and mitigate negative perception of airport impacts on the environs. The narrative section should describe the airport's efforts to support the local economy and create and retain jobs. Metrics could include the airport's economic impact on the local economy (dollars and jobs created), including the economic impact of major construction programs and other aeronautical and commercial development initiatives. Larger airports should consider tracking and reporting this information.

**Customer Service Quality and Accessibility (Optional).** A growing number of airports are creating customer innovation and experience departments to highlight the increasing importance of the passenger experience. The narrative to this section should describe the airport's efforts to elevate customer service and satisfaction for all passengers. It should also describe the airport's efforts to provide access for all users, including accommodating passengers with disabilities through applicable American with Disabilities Act or Accessible Canada Act compliance and other accessibility initiatives (e.g., parking spaces, loading zones, buses, service animals, nursing rooms, communication devices, etc.) as well as English-speaking (and French speaking in Canada) assistance. It can also note the awards received by the airport for customer service.

Investors expect larger airports in particular to solicit feedback from the traveling public, which could include periodic customer service surveys or the more formal ACI Airport Service Quality (ASQ) program that benchmarks customer satisfaction of services at the airport over time. Metrics could include customer satisfaction and ASQ scores to measure and benchmark progress. It could also include numbers of customer experience specialists in the workforce. Note that many investors suggested that this is a very important metric and should be recommended. So, larger airports should consider tracking and reporting this information.

# Health, Safety and Security

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric or Narrative</b>	<b>Metric Description</b>	<b>Unit of Measure/Calc</b>	<b>Fin'l/Impact Materiality</b>
Safety Measures	Describe the airport's workplace safety practices, including Safety Management System (SMS) and any accreditations and certificates earned.	Narrative / Metric	Workplace safety metrics, lost time, workers compensation cases	Lost time injury rate, worker compensation cases	Impact
			Construction safety accident/incident rates (for employees, temporary workers, and sub-contractors), OSHA recordable incident rates, and lost time injury frequency rate	Various rates	Impact
Employee Health & Wellness	Describe the airport's efforts to maintain a healthy and vibrant workforce, including specific wellness programs, education, and training	Narrative / Metric	Percent of employees participating in wellness programs	Percent	Impact

Health Safety	Describe the airport's health safety practices, including pandemic-related initiatives for employees, passengers, and tenants; and creating a culture that emphasizes employee safety and wellbeing. Include any accreditations and certificates earned.	Narrative	Initiatives to ensure health and wellbeing of airport users: briefings on health safety measures	n/a	Impact
Human Trafficking	Describe airport's human trafficking awareness initiatives	Narrative / Metric optional	Employee training sessions	Number of sessions taken	Impact

Airports are establishing business strategies that prioritize and promote the health and safety of customers and employees and minimize exposure to physical risks. Safety is a core mission for airports. Health and safety have taken on more prominence in the aftermath of the COVID-19 pandemic as airports are more proactive in securing health safety for passengers, employees, and tenants while promoting a culture to emphasize safety and wellbeing. Cybersecurity risk can sometimes be included in this section of an ESG report or alternatively discussed under risk management in the Governance section.

**Safety Measures (Recommended/Optional).** Airports can expose people to a wide range of hazards, many of which are unique to the industry. In this section, include a narrative describing the airport's workplace safety practices, including the airport's Safety Management System (SMS) as well as accreditations and certificates earned. Workplace metrics could include the number of work-related accidents, lost time, and worker's compensation cases. Optional additional metrics could be broken down into workplace safety, construction safety, and include the number of fatalities, safety accident/incident rates, OSHA recordable incident rates, and lost time injury frequency rate. *Larger airports might consider tracking both as this was commonly requested by investors during interviews.*

**Employee Health and Wellness (Optional).** This section should include narrative describing the airport's efforts to maintain a healthy and energetic workforce, including specific wellness programs, health education, and wellness training. The metrics section, to the extent applicable, could include the percentage of employees participating in wellness programs, receiving an annual physical, and/or completing a health risk assessment.

**Health Safety (Optional).** A top priority for airports is protecting the health and welfare of passengers, staff, and tenants. Faced with the global COVID-19 health crisis, airport operators moved swiftly to implement new health measures based on recommendations from international health authorities to reduce the spread of the highly communicable disease and keep passengers and employees safe. A number of airports have also implemented mental health programs to assist employees with stress and other pressures. In this section, describe the airport's health safety practices, including pandemic-related initiatives (for employees, passengers, and tenants) and the airport's efforts to create a culture that emphasizes employee safety and wellbeing. It should also include a summary of any health and safety measures, and annual accreditations and certificates earned.

**Human Trafficking (Optional).** Operating as world gateways, airports unknowingly can facilitate human trafficking. As such, a number of airports have implemented anti-human trafficking programs. This section should describe the initiatives taken to combat human trafficking, including posting of signage and training of employees to recognize the indicators of human trafficking. Metrics could include the number of briefings on employee training sessions.

## Governance Framework and Disclosures

The Governance section of an ESG report typically discusses the diversity and expertise of the governing Board and the executive management team; how the airport team makes decisions, how the management team approaches risk management, and the organization’s commitment to ethical and transparent business practices including reporting. Stakeholders are also interested in how ESG strategy and decisions are made.

Rating agencies and many investors state that this is a critical section of the ESG report and that they have always looked at the elements reported in this section when assessing an airport (or any organization) from an investment risk standpoint. Most of the components of the Governance section are considered financially material by rating agencies and investors.

The Governance section of the ACI-NA Airport framework consists of three Governance categories:

1. Governance/Organizational Structure
2. Risk Management
3. Reporting and Transparency

## Governance

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric or Narrative</b>	<b>Metric Description</b>	<b>Unit of Measure/ Calc</b>	<b>Fin’l/Impact Materiality</b>
Governance/ Organizational Structure	Describe legal structure (organization’s enabling act or other statutory authority), use agreement, regulatory requirements.	Narrative	n/a	n/a	Financial



Board of Directors	List board or governance body members, how appointed, Board committee structures, frequency of meetings, Board responsibilities/ approvals, ethnic diversity and types of business experience, and financial management and controls policies approved by Board. (Note that could be added to Social section with Airport DEI stats.)	Narrative/ Metric	Board member diversity	Percent of total	Financial
Executive management	List executive management name and position, diversity, and years of experience (note that diversity could be added to Social section).	Narrative/ Metric	Management diversity, years of industry experience	Percent of total and years of experience	Financial
Leadership System and Business Results	Describe leadership system, how decisions are made. Include business results for key metrics. Five-year trending is desirable, with variance explanations as appropriate.	Narrative/ metric optional	Examples: passengers, operations, non-airline revenues and net revenues, CPE, other as appropriate	Examples: passengers, operations, non-airline revenues and net revenues, CPE, other as appropriate	Financial

Leadership System Incentive Compensation	Describe incentive compensation program (if applicable) and if the Board approves the plan.	Narrative/ Metric	Incentive compensation results	Percent of payout goals achieved	Financial
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**Governance/Organizational Structure (Recommended).** The narrative section should help the reader understand the legal structure of the airport. Is the airport part of a local, state or provincial government, or an independent authority? What type of use agreement does it have? Is the organization compensatory, residual, or hybrid from a business standpoint? It should also describe the regulatory environment of the airport in some detail. This section could be considered an introduction to the airport.

**Board of Directors (Recommended).** The narrative component of this section should explain how the governing body is structured and whether it is selected or elected. The section also should include information about the governing body committee structures, frequency of meetings, and the type of airport-related items that are approved by it. The ESG disclosure should also address the involvement of the governing body in setting ESG policy. The metric portion of this disclosure should include a list of the governing body’s members and their diversity, including business diversity. Note that the diversity information could also be included in the Social (or “S”) section of the report.

**Executive Management (Recommended).** This section should include the names and titles of the executive management team. It should also include diversity information (possibly compared to the rest of the organization) and some discussion of the team’s years of experience in executive management and or airport/airline industry. This could be done in a table. Note that the diversity information could also be included in the Social (or “S”) section of the report.

**Leadership System (Optional).** This section should include a narrative of the airport’s leadership system and how management makes decisions. It should describe the airport’s strategic plan, and how management aligns the strategic plan with annual goals and objectives. This section could also include a summary of some of the airport’s key performance indicators. Investors have expressed a strong desire to get five years of trended data. KPIs might include passengers, airline cost, cost per enplanement, total non-airline revenues and profits (net revenues), etc. Note that the KPIs are probably also reported in the airport’s Audited Comprehensive Financial Report (ACFR) and its Official Statements. Reference can be made to these documents if the airport does not want to also have them in an ESG report. Consideration should be given to adding KPIs to the ESG report because it is beneficial for readers to understand the successes of the governance structure.

**Incentive Compensation Program (Optional).** Some airports have an incentive compensation program. If so, the program should be described, if approved by the Board, who it applies to (i.e., management only or all employees), and a summary of the results (possibly the percent of payout achieved).

# Risk Management

Recommended Disclosures in bold font /Optional Disclosures shaded in gray

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric or Narrative</b>	<b>Metric Description</b>	<b>Unit of Measure/ Calc</b>	<b>Fin'l/Impact Materiality</b>
Approach to Risk Management	Describe airport's approach to enterprise risk management. Discuss major risks and how the airport is mitigating those risks, including ESG risks.	Narrative	n/a	n/a	Financial
Cyber Security	Describe airport's approach to cyber security. Include discussion of phishing testing, penetration testing, tabletop exercises, insurance (not stating amount), and outside assistance to monitor network. Discuss if airport complies with Payment Card Industry (PCI) security standards and if it stores any customer credit card information (should be none).	Narrative	n/a	n/a	Financial

Cyber Security	Describe cyber staffing, budgets, cyber maturity scores if applicable. Also, could include details around external verification such as ISO 27001 etc.	Narrative	n/a	n/a	Financial
Risk Management - Financial Risks*	Include five-year trending of key financial risk metrics with discussion of material variances. NOTE - these metrics may be included in other documents like Official Statements or ACFRs. Airport may choose to just reference this.	Primarily metric, unless variances	Days cash on hand*	Number of days	Financial
			Debt service coverage ratio*	Net revenues divided by debt service	Financial
			Defined benefit and OPEB plan funding ratios*	Percent funded	Financial
Risk Management - Budget Accuracy	Describe operating budget processes and accuracy of “actuals” results to budget. Discuss variances as appropriate.	Narrative/ Metric	Accuracy of operating expenses, non-airline revenues, and passenger budgets	Percent variance actual results vs. approved budget	Financial
Risk Management - Capital Programs	Describe capital budget processes and how airport mitigates capital project risks from a financial and scheduling standpoint. May include a table of major capital project budgets and actual results.	Narrative/ Metric	Accuracy of capital project budgets	Percent variance from capital budget	Financial
		Narrative/ Metric	Compare actual completion to scheduled completion	Variance in months	Financial

\* Note – These financial metrics are often included in the airport’s audited financial reports or Official Statements. The ESG Report may simply reference the other reports, rather than repeating them in the ESG Report

**Approach to Risk Management (Recommended).** This is one of the most important parts of the Governance section from a financial materiality standpoint. All financial stakeholders want to understand how the airport management team approaches risk management. This narrative disclosure should discuss if the airport uses an Enterprise Risk Management (ERM) approach, the major risks facing the airport, and how the airport mitigates the major risks. Some of the elements of risk management can and should be described in other sections of the report such as Climate Related risks in the E section and/or possibly Attracting and Retaining Employees in the Social section. However, how the airport addresses the optional financial and budget risks described below should be in the Governance section.

**Cyber Security (Recommended).** Cyber security is a very important risk management issue today. All stakeholders want to know what the airport is doing from a cyber security standpoint, and it is important to provide a narrative discussion of the airport's mitigation actions in the Governance section. The key in this section is to disclose enough to comfort stakeholders without giving away too much information to the "bad guys." Airports should consider including a discussion of phishing testing, penetration testing, and table-top exercises performed; whether the airport has insurance (without stating amount) and outside assistance to monitor networks; and if it is complying with Payment Card Industry (PCI) security standards and if it stores any customer credit card information. (Note that some external frameworks have Cyber in the Social section.)

Cyber Security (Optional). Optional cyber disclosures might include operating and capital budgets dedicated to cyber security, and cyber maturity scores (either self-assessed or by third parties). Note that there are several companies that benchmark cyber progress including Bitsight.com and Securityscorecard.com. The European Union requires airports to disclose material breaches. This is currently not required of airports in North America; however, many local, state, and provincial governments have had breaches disclosed in the newspapers. Airport management should consult with legal counsel to determine whether to make disclosures regarding how a cybersecurity breach may have impacted the airport.

**Risk Management, Financial Risks (Optional).** The three key financial metrics from a risk standpoint are debt service coverage, liquidity (measured by days cash on hand), and the funding status of defined benefit and other post-employment benefits (OPEB) plans. Rating agencies and investors are very focused on these metrics and find them to be financially material. For the most part, airports have well mitigated these financial risks, and already disclose this information in their Annual Comprehensive Financial Report (ACFR) and Official Statements. Airports can either provide this information again in the ESG report or inform the readers where to find this information in their ACFR or Official Statement.

**Risk Management, Budget Accuracy (Optional).** Rating agencies are interested in knowing how accurate an airport is at budgeting such items as total expenditures, revenues, and passengers. Since accurate and slightly conservative budgeting is viewed positively by financial stakeholders, an airport might consider adding this information into its ESG report. A good metric for these items is percent variance actual versus budget.

**Risk Management, Capital Programs (Optional).** Given the recent rise in inflation, supply chain issues, and labor shortages, it has been very challenging for many airports to keep capital projects within budget. An optional disclosure to consider is a narrative on how the airport mitigates this risk where possible and the impact of cost increases on the airport and airlines. The ability to finish projects on schedule is also something financial stakeholders evaluate. Metrics may include a summary of major capital projects that highlights actual-to-budget variance for cost and schedule.

# Reporting and Transparency

Recommended Disclosures in bold font

Disclosure Element	Disclosure Element Description	Metric or Narrative	Metric Description	Unit of Measure/ Calc	Fin’l/Impact Materiality
Reporting and Transparency	Describe investor disclosure practices, timeliness, and accuracy of reporting to governing body, transparency of information including applicable open records processes.	Narrative	n/a	n/a	Financial
Ethics and compliance	Describe ethics practices, hotlines, Foreign Corrupt Practices Act compliance, regulatory requirements (if applicable), and training.	Narrative	n/a	n/a	Financial

**Reporting and Transparency (Recommended).** The purpose of this section of the report is to describe disclosure practices of important financial and businesses information to the Board and the financial community. This section should also describe how the airport deals with State and local open records requests.

**Ethics and Compliance (Recommended).** This section should include a narrative on the airport’s ethics practices including hotlines, and training and compliance with the U.S. Foreign Corrupt Practices Act and Canadian Corruption of Foreign Public Officials Act, and any other regulatory requirements with which the airport must comply.

## **Appendix 2**

# **Summary of Airport Information Included in Airline ESG Reports**

Airline	Report	Physical Climate Risk Assessment	Airports Considered in Assessment?	Summary of Physical Climate Risk Assessment	Time Horizon	Climate Scenarios Evaluated
American Airlines	Sustainability Report 2022	19-21	Yes A table summarizes the primary hazards identified at 12 hubs, ranked in order of total potential modeled average annual loss	Climate risk screening was conducted in alignment with TCFD recommendations for AOP, AIA facilities and suppliers, including airports, cargo facilities, data centers, maintenance facilities, jet fuel supplier plants, offices, and training centers. The assessment considered the risk associated with temperature, coastal flooding, river flooding, tropical cyclones, water stress, drought, and wildfire.	2020s, 2030s, 2050s	1.5 degrees C (RCP 2.6), medium emissions (RCP 4.5), high emissions (RCP 8.5)
United Airlines	Corporate Responsibility Report 2022, Environmental Sustainability (online report; section download available)	<a href="https://corpreport.united.com/environmental-sustainability/climate-risk-and-opportunities">https://corpreport.united.com/environmental-sustainability/climate-risk-and-opportunities</a>	Yes A table discusses climate risks at airports in general terms with examples at specific airports (e.g., tornadoes at DEN; windstorm at IAD; hail and tornadoes for IAH; cold stress at ORD; extreme heat at PHX; flooding at EWR, LAX, and IAH; sea level rise at SFO, EWR, and LGA; shift in transatlantic travel at EWR due to changing weather patterns). The Texas winter weather events of 2021 and 2022 are mentioned. Employee safety is briefly discussed in the context of extreme winter temperatures and heat stress. Full site-specific results for all locations included in the climate risk assessment are not published in the web report. United mentions that hardening of airport infrastructure by airport authorities, which could bypass those costs down to United through lease agreements or rates and charges, is a risk.	United conducted a qualitative assessment to identify physical (acute and chronic) risks consistent with leading industry practices and in conjunction with United's existing enterprise risk management (ERM) program and procedures. The assessment was informed by TCFD recommendations.  To understand potential physical risks, United evaluated 119 of its operating locations using a third-party modeling platform that employs historical data to forecast potential climate-related risks associated with various physical perils or hazards in different geographical areas. Hazards considered included tropical cyclone, drought, hail, flood, wind gust, wildfire, heat stress, tornado, wind storm, and storm surge.	short (0-2 yrs), medium (2-10 yrs), and long (10-30 yrs) in five-year increments through 2050	low emissions (PCCS SPS1-2.6) and high emissions (PCCS SPS5-8.5)
Southwest Airlines	2022 One Report	49-55, 131	Somewhat A table discusses climate risks at airports in general terms. Analysis was completed by Southwest region, not for individual sites.	Southwest evaluated present day climate-related impacts as well as potential future exposure to acute and chronic physical climate hazards for each of its regions and provided an index showing completion of TCFD disclosure requirements. Hazards included were coastal flooding, drought, increasing temperatures, extreme tropical storms, heat waves, inland flooding, precipitation, wildfires, winter storms/cold snaps. Projections were summarized by Southwest region (Desert Mountain, Midwest, Northeast, South Central, Southeast, West Coast, Puerto Rico, and International). Exposure to impacts was rated as low, medium, or high.	present day, 2030 (mid-term), and 2050 (long-term)	low emissions (RCP 4.5) and high emissions (RCP 8.5)
Delta Air Lines	2022 ESG Report	45, 48-49, 83	Yes 21 airports assessed. Site-specific details for each are not included in the report, with the exception of LGA. The risk analyst indicated that, with the exception of LGA, potential physical impacts from the risks identified under the scenarios used were projected to be negligible.	Delta's risk analyst assessed 21 of their most strategically important domestic and international airport locations. Physical risks considered included acute flooding, sea level rise, extreme weather events, and increased temperature. A TCFD index showing alignment with TCFD disclosure recommendations was included.	short-term (before 2025), medium-term (2025-2035), long-term (2035 and beyond)	high emissions (RCP 8.5) was baseline scenario; low emissions (RCP 4.5) was used for certain risks
Alaska Airlines	2021 Care Report (not addressed in 2022 Care Report)	41-42	Somewhat It is unclear if site-specific assessments were conducted for individual airports. A few examples of impacts to airports are provided in the report (wildfires for California hubs, sea-level rise for coastal airports, melting permafrost in Alaska), but specific airports are not identified by name. Alaska states that their approach to physical risk emails working closely with airport partners to understand and mitigate risks to infrastructure and protect assets (e.g., upgrading HVAC, exploring alternative power sources). Alaska states that they have a multi-year airport investment plan for infrastructure in the state of Alaska.	Alaska's climate risk disclosures are provided in as an appendix in a TCFD index (not the main body of the report). Extreme weather events such as wildfires, winter storms, heat waves, coastal flooding, and melting permafrost are listed as physical risks that may impact operations and assets.	Short-term (0-3 years), medium-term (3-10 years, aligning with strategic planning for their 2025 goals), and long-term (>10 years, aligning with their 2040 net zero goal and the industry's 2050 commitments)	unknown
JetBlue	2021 ESG Report	37, 41, 59	Not directly Proactive engagement with airports is listed as a business continuity/mitigation/adaptation activity.	A climate scenario analysis was conducted by a third party, but details available in the ESG report are limited. Acute and chronic physical climate risks were evaluated, and two main categories are identified in the report: extreme weather (acute) and climate change (chronic). In a table of top risks identified, temperature extremes and coastal flooding are listed due to the financial impact of business interruption. A TCFD index showing alignment with TCFD disclosure recommendations was included.	Short to long term (no specific time frame provided)	unknown



## Appendix 3 Definitions

### Glossary (Acronyms and Definitions)

The topic of ESG involves the use of many phrases and acronyms. The following is a guide to some of the jargon and key acronyms and concepts being used for ESG reporting.

Term	Definition
ACA - Airport Carbon Accreditation	<p>A voluntary program designed by ACI-Europe to help airports measure, track, reduce, and eventually eliminate their carbon emissions. To achieve accreditation, airports must adhere to certain requirements of the program, report specific information, receive third-party verification of their data, and develop annual emissions reports.</p> <p>Airports can participate at one of five progressively ambitious levels of accreditation: Level 1. Mapping; Level 2. Reduction; Level 3. Optimisation; Level 4. Transformation; and Level 5*. In addition, airports at Levels 3 and 4 can choose to offset their emissions, thereby achieving Level 3+ (Neutrality), 4+ (Transition) respectively.</p> <p>*In 2023, Level 5 was added to align with ISO Net Zero Guidelines IWA 42:2022 and existing Net Zero sector frameworks or commitments where applicable. Airports at Level 5 must demonstrate that they have reduced their Scope 1 and 2 CO<sub>2</sub>e absolute emissions by ≥90% and that any remaining residual emissions have been addressed using approved offset removals.</p> <p>Airport Carbon Accreditation 2023, <a href="#">Airport Carbon Accreditation Application Manual (Issue 14)</a>.</p>
Airports Council International – North America (ACI-NA)	<p>ACI-NA advocates policies and provides services that strengthen the ability of commercial airports to serve their passengers, customers and communities. ACI-NA professional staff in the government affairs, legal, environment, safety, security, operations and technical departments, works to ensure that legislation and regulations enacted in Washington, D.C., and Ottawa, help airports operate more safely and efficiently.</p> <p>ACI-NA works with the other ACI Regions, as well as ACI World through a cooperative federation-type relationship.</p>

Airports Council International – World (ACI)	<p>Airports Council International (ACI) represents the collective interests of airports around the world to promote excellence in the aviation industry. ACI World is the primary interface to international organizations like ICAO to develop policies and programs that advance airports globally.</p> <p>ACI World works with the ACI Regions, including ACI-NA through a cooperative federation-type relationship.</p>
ACRP - Airport Cooperative Research Program	<p>The research program administered by the Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine. ACRP's work is sponsored by the Federal Aviation Administration.</p>
AOSS - Airport Operator Sector Supplement (GRI)	<p>The GRI document that contains a set of disclosures for use by all organizations in the Airport Operators sector, which cover key aspects of sustainability performance that are meaningful and relevant to the Airport Operators sector, and which are not sufficiently covered in the G4 Guidelines.</p>
A4A	<p>Airlines for America (A4A) advocates on behalf of its members to shape crucial policies and measures that promote safety, security and a healthy U.S. airline industry.</p>
Carbon Neutral	<p>Condition in which during a specified period there has been no net emission of greenhouse gases (GHGs) to the atmosphere as the carbon footprint of the subject has been counterbalanced by offsetting.</p> <p><a href="#">ACA, Offset Guidance Document (December 2023)</a></p>
CDP	<p>CDP, formerly known as the Carbon Disclosure Project, is a not-for-profit organization that runs a global disclosure system for investors, organizations, cities, states, and regions to measure and manage their risks and opportunities on climate change, water security, and deforestation.</p>
Climate Change	<p>Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural, due to changes in the sun's activity or large volcanic eruptions. Since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil, and gas.</p> <p><a href="#">United Nations, Global Issues: Climate Change</a></p>
CORSIA - Carbon Offsetting and Reduction Scheme for International Aviation	<p>Market-based mechanism developed by ICAO to help the international aviation industry reach its goal of carbon neutral growth after 2020.</p>
CSR - Corporate Social Responsibility	<p>The strategy taken by an organization to take an active and positive role for its stakeholders and the community, which might include responsibilities for environmental social, ethical and human rights, philanthropic, and economic.</p>
CSRD - Corporate Sustainability Reporting Directive	<p>The directive passed by the EU commission in line with the commitment made under the European Green Deal that requires organizations to report on the impact of corporate activities on the environment and society and requires the audit (assurance) of reported information.</p>

Decarbonization	Process of reducing or eliminating emissions of carbon dioxide and other greenhouse gases.
DEI - Diversity, Equity, and Inclusion	A strategy to cultivate a diverse workforce where all team members can feel included and perform at the highest levels, which is typically integrated into talent recruitment and development efforts.
Disclosure	In the context of ESG reporting, the means of providing transparent information regarding an organization’s performance.
Double Materiality	Priority issues for an organization, which affect both environmental and social impacts as well as financial performance.
Environment	This aspect focuses on how an organization impacts, is impacted by, and addresses issues such as its natural resource usage, pollution control, biodiversity management, land use practices, and climate change.
Envision Rating System	The Envision sustainability framework and rating system was designed to help infrastructure stakeholders implement more sustainable, resilient, and equitable projects.
EONS - Economic Vitality, Operational Efficiency, Natural Resource Protection, Social Responsibility	The “EONS” definition of sustainability for airports recognizes the need to incorporate operational efficiency in addition to the traditional “triple bottom line” of economic vitality, natural resource conservation, and social impact adopted by other industries.  <a href="#">ACRP, Airport Sustainability: A Holistic Approach to Effective Airport Management</a>
ERM - Enterprise Risk Management	The process of identifying and addressing methodically the potential events that represent risks to the achievement of strategic objectives, or to opportunities to gain competitive advantage such as technology failures, employee errors, supply chain disruptions, etc. that arise from an organization’s financial, operations, and management.
ESG - Environmental, Social, Governance	The framework and evaluation criteria used to describe and measure how an organization is managing risks and opportunities related to environmental, social, and governance factors.
ESG Disclosure/ESG Reporting	Within the ESG reporting process, disclosure refers to the practice of providing transparent information about an organization’s ESG performance and progress towards ESG goals.
Frameworks	Frameworks offer flexible, high-level structures for activities and processes, allowing customization to fit unique circumstances. They provide principles, practices, and guidelines that can be tailored to specific requirements. Example: Global Reporting Initiative (GRI)
GASB - Governmental Accounting Standards Board	The independent, private-sector organization that develops and issues accounting and financial reporting standards for U.S., state, and local government.

<p>GHG - Greenhouse Gas</p>	<p>Greenhouse gas refers to gases that trap heat in the atmosphere, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases (hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride).</p> <p>Some GHGs occur naturally in the atmosphere, while others result from human activities. Certain human activities can also add to the levels of naturally occurring gases. GHGs that are not naturally occurring include byproducts of foam production, refrigeration, and air conditioning as well as gases generated by industrial processes.</p> <p>Carbon dioxide is the primary GHG emitted through human activities and is released from the combustion of fossil fuels (e.g., coal, natural gas, and oil), solid waste, and wood products.</p> <p><a href="#">U.S. Environmental Protection Agency 2023, Overview of Greenhouse Gases</a>  <a href="#">U.S. Department of Transportation 2016, What are Greenhouse Gases?</a></p>
<p>GHG Emissions Intensity</p>	<p>A ratio of emissions and a business metric over time. Under the ACA program, airports shall express this ratio either as tonnes of CO<sub>2</sub>e per passenger or as tonnes of CO<sub>2</sub>e per Traffic Unit (TU). A TU is defined as 1 passenger movement or 100 kg cargo arriving or departing.</p> <p><a href="#">ACA 2023, Airport Carbon Accreditation Application Manual (Issue 14)</a></p>
<p>Governance</p>	<p>This aspect focuses on how an organization impacts, is impacted by, and addresses factors such as internal policies, procedures, and structures that govern an organization's operations. It also examines aspects like risk management, board composition, executive compensation, transparency, and adherence to ethical and legal standards.</p>
<p>Green Bonds</p>	<p>Green Bonds are debt instruments in which proceeds are exclusively applied to finance or re-finance projects with clear environmental benefits and which are aligned with the Core Components of the Green Bond Principals (GBP). Eligible Green Project categories include (but are not limited to): renewable energy, energy efficiency, pollution prevention and control, environmentally sustainable management of living natural resources and land use, terrestrial and aquatic biodiversity conservation, clean transportation, sustainable water and wastewater management, climate change adaptation, circular economy and/or ecoefficient projects, and green buildings.</p> <p><a href="https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/The-Principles-Guidance-Handbook-November-2023-291123.pdf">https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/The-Principles-Guidance-Handbook-November-2023-291123.pdf</a></p>
<p>GRI - Global Reporting Initiative</p>	<p>The independent, international organization that helps businesses and other organizations understand, take responsibility for, and communicate their impacts on issues by providing them with the global common language to communicate those impacts. GRI is the longest-running sustainability reporting framework with the intent to reflect an organization's significant impacts on the economy, environment, and people.</p>

eGSE - Electric Ground Support Equipment	<p>Airport ground support equipment (GSE) is used to service aircraft between flights. Services include refueling, towing airplanes or luggage/freight carts, loading luggage/freight, transporting passengers, loading potable water, removing sewage, loading food, and de-icing airplanes. Six of the most common pieces of GSE have electric options available: pushbacks, belt loaders, container loaders, luggage tugs, lavatory trucks, and water trucks.</p> <p><a href="#">National Renewable Energy Laboratory 2017, Electric Ground Support Equipment at Airports</a></p>
Guidance	<p>Guidance documents offer advice, recommendations, and suggested practices for achieving specific goals. They are non-binding references from various sources like government agencies, experts, and associations, providing valuable insights and practical suggestions without legal obligations.</p>
ICAO - International Civil Aviation Organization	<p>An agency of the United Nations supporting regulatory development and standardization for international civil aviation.</p>
IEA - International Energy Agency	<p>The Paris-based autonomous intergovernmental organization that provides policy recommendations, analysis, and data on the entire global energy sector comprised of 31 member countries and 13 association countries which represent 75% of global energy demand.</p>
IASB - International Accounting Standards Board	<p>The independent, private-sector body that develops and approves International Financial Reporting Standards (IFRSs).</p>
IATA - International Air Transportation Association	<p>The trade association for the world's airlines.</p>
IFRS - International Financial Reporting Standards	<p>The set of accounting rules for the financial statements of public organizations that are intended to make them consistent, transparent, and easily comparable around the world, which is issued by the International Accounting Standards Board (IASB).</p>
IPCC - Intergovernmental Panel on Climate Change	<p>The IPCC is a UN organization charged with assessing the science related to climate change and its impacts. IPCC's assessments and the model results are typically used for policymaking.</p>
ISSB - International Sustainable Standards Board	<p>The independent, private-sector body that develops and approves IFRS Sustainability Disclosure Standards (IFRS SDS).</p>
LEED - Leadership in Energy and Environmental Design	<p>LEED is the most widely used green building rating system. LEED certification is granted by the Green Building Certification Institute (GBCI), which arranges third-party verification of a project's compliance with the LEED requirements.</p>
LTAG (Long term global aspirational goal for international aviation)	<p>The 41st ICAO Assembly (September 2022) adopted a long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050 in support of the UNFCCC Paris Agreement's temperature goal.</p> <p><a href="https://www.icao.int/environmental-protection/Pages/LTAG.aspx">https://www.icao.int/environmental-protection/Pages/LTAG.aspx</a></p>

Material Issues / Topics	An organization's prioritized, or most important, ESG topics and issues.
Materiality	In the context of ESG, refers to the effectiveness and financial significance of a specific measure as part of an organization's overall ESG analysis. Material factors are financial elements deemed fundamental to the long-term success of the organization's financial performance and risk management, and important to the intended audience.
Materiality Assessment	In the context of ESG, an assessment to determine the environmental, social, and governance topics that matter most to an organization and its stakeholders. This typically involves initial research to identify relevant topics, then stakeholder outreach to determine their perspectives on the most critical issues, and prioritization of material ESG topics. Under a double materiality approach, issues will be prioritized based on the severity of their impact on the organization and the degree of the organization's impact on the issues.
Mitigation	Reducing greenhouse gas emissions to slow, if not halt, global warming, which is the focus of the global energy transition away from fossil fuels to renewable energy sources.
Net Zero	Condition in which human-caused residual GHG emissions are balanced by human-led removals over a specified period and within specified boundaries. <a href="#">ISO 2022, Net Zero Guidelines</a> <a href="#">ACA 2023, Offset Guidance Document (December 2023)</a>
Offset	Emissions reduction or removal resulting from an action outside the organization's boundaries, used to counterbalance the organization's residual emissions. Offsets are usually represented by a credit (i.e., tradeable certificate representing the mitigation of a specified amount of GHG emissions) that that has been retired or cancelled in a registry by or on behalf of the organization that is seeking to counterbalance residual GHG emissions. A registry is a platform that allows organizations to track, manage, and trade GHG emissions. Only offsets that are removals can be used to counterbalance residual emissions to achieve net zero. <a href="#">ACA 2023, Offset Guidance Document (December 2023)</a> <a href="#">ISO 2022, Net Zero Guidelines</a>
Regulation / Directives	Regulations and directives, often issued by government authorities or international organizations, set mandatory rules and requirements for individuals and organizations within a jurisdiction, with potential legal consequences for non-compliance.  Example: Corporate Sustainability Reporting Directive (CSRD).
Residual Emissions	Unabated GHG emissions remaining after implementing all technically and economically feasible GHG emission reductions. To achieve net zero, residual emissions cannot exceed 10% of baseline emissions.  <a href="#">ISO 2022, Net Zero Guidelines</a>

RCP - Representative Concentration Pathways	<p>Representative Concentration Pathways is a framework used by climate scientists to model four theoretical scenarios for greenhouse gas concentrations that have varying outcomes on climate change.</p>
SAF - Sustainable Aviation Fuels	<p>Renewable or waste-derived aviation fuels that meet sustainability criteria established under CORSIA. Technical analysis done at ICAO shows that SAF has the greatest potential to reduce CO2 emissions from international aviation. SAF is an alternative fuel source to conventional jet fuel.</p> <p><a href="#">ICAO, Sustainable Aviation Fuel</a></p>
SASB - Sustainability Accounting Standards Board	<p>The non-profit organization founded in 2011 to develop sustainability accounting standards or “industry-specific disclosure standards across ESG topics that facilitate communication between organizations and investors about financially material, decision-useful information. Such information should be relevant, reliable, and comparable across organizations on a global basis.” SASB standards are used by organizations around the world in a variety of disclosure channels, including their annual reports, financial filings, company websites, sustainability reports, etc.</p>
Scope 1	<p>A reporting organization’s direct GHG emissions.</p> <p>For airports, Scope 1 emissions from airport-owned and/or controlled sources can include: vehicles/ground support equipment, boilers, furnaces, firefighting exercises, deicing substances, refrigerant losses, onsite power generation, onsite waste management, and onsite wastewater management.</p> <p><a href="#">WRI and WBCSD 2004, GHG Protocol: A Corporate Accounting and Reporting Standard</a></p> <p><a href="#">ACA 2023, Airport Carbon Accreditation Application Manual (Issue 14)</a></p>
Scope 2	<p>A reporting organization’s emissions associated with the generation of electricity, heating/ cooling, or steam purchased for its own consumption.</p> <p><a href="#">WRI and WBCSD 2004, GHG Protocol: A Corporate Accounting and Reporting Standard</a></p> <p><a href="#">ACA 2023, Airport Carbon Accreditation Application Manual (Issue 14)</a></p>
Scope 3	<p>A reporting organization’s indirect emissions other than those covered in Scope 2. These include emissions from sources not owned and/or controlled by the company. Such sources can be located inside or outside the airport’s geographic boundary and include both upstream and downstream value chain emissions.</p> <p>For airports, emissions associated with aircraft operations (or Category 11, as defined under the GHG Protocol) generally represent the bulk of Scope 3. Depending on the ACA accreditation level, aircraft are assessed in the LTO cycle or full flight, and APU and engine testing added.</p> <p><a href="#">WRI and WBCSD 2004, GHG Protocol: A Corporate Accounting and Reporting Standard</a></p> <p><a href="#">ACA 2023, Airport Carbon Accreditation Application Manual (Issue 14)</a></p>

SDGs - Sustainable Development Goals	<p>SDGs are a collection of 17 objectives designed to serve as a “shared blueprint for <a href="#">peace</a> and prosperity for people and the planet, now and into the future.” The short titles of the 17 SDGs are: No poverty (<a href="#">SDG 1</a>), Zero hunger (<a href="#">SDG 2</a>), Good health and well-being (<a href="#">SDG 3</a>), Quality education (<a href="#">SDG 4</a>), Gender equality (<a href="#">SDG 5</a>), Clean water and sanitation (<a href="#">SDG 6</a>), Affordable and clean energy (<a href="#">SDG 7</a>), Decent work and economic growth (<a href="#">SDG 8</a>), Industry, innovation, and infrastructure (<a href="#">SDG 9</a>), Reduced inequalities (<a href="#">SDG 10</a>), Sustainable cities and communities (<a href="#">SDG 11</a>), Responsible consumption and production (<a href="#">SDG 12</a>), Climate action (<a href="#">SDG 13</a>), Life below water (<a href="#">SDG 14</a>), Life on land (<a href="#">SDG 15</a>), Peace, justice, and strong institutions (<a href="#">SDG 16</a>), and Partnerships for the goals (<a href="#">SDG 17</a>).</p> <p><a href="#">United Nations Department of Economic and Social Affairs, The 17 Goals</a></p>
SEC - Securities and Exchange Commission	The U.S. government agency in charge of the nation's securities industry.
SBTi - Science Based Targets initiative	The Science Based Targets initiative was established in 2015 to help companies to set emission reduction targets in line with climate science and Paris Agreement goals. SBTi has developed separate sector-specific methodologies, frameworks, and requirements for different industries, including aviation.
Social	This aspect focuses on how an organization impacts, is impacted by, and addresses factors affecting employees, customers, suppliers, and the broader community such as equity, diversity and inclusion, labor practices, health and wellness, and community engagement.
SMS - Safety Management System	FAA Part 39 regulations now requires certain certified airports to develop and implement a safety management system. SMS is a systematic and proactive approach that integrates safety into business management. It is the next step in the continuous cultivation of aviation safety by making risk-based and data-driven decisions to prevent accidents.
SSP - Shared Sociographic Pathways	Shared Sociographic Pathways is similar to the RCP, but instead is used to model and predict changes in socioeconomic and demographics over the next 100 years.
Standards	Standards, often created by industry groups, standardization bodies, or government agencies, define criteria and requirements for products, services, and processes. While adherence to standards is typically voluntary, they are widely adopted to enhance quality, safety, compatibility, and customer trust.
Sustainability	The approach to decision-making to meet the needs of current and future generations by fostering social equity, minimizing environmental impact, promoting ecological health, and simultaneously ensuring economic viability and responsible business practices.
TCFD - Task Force on Climate-Related Financial Disclosures	The global organization created by the Financial Stability Board (FSB) to develop a set of recommended climate-related disclosures that organizations and financial institutions can use to better inform investors, shareholders, and the public of their climate-related financial risks. On October 12, 2023, the TCFD disbanded, and the FSB has asked the IFRS Foundation to take over the monitoring of the progress of organizations' climate-related disclosures.



VALE - Voluntary Airport Low Emissions Program	FAA grant program to encourage and support airport sponsors to implement clean technology projects that improve air quality. VALE is available to commercial service airports located in areas that are in non-attainment or maintenance of National Ambient Air Quality Standards (NAAQS). Eligible project types include mobile and stationary equipment that reduce on-airport emissions, such as low-emission vehicles and infrastructure upgrades.
WRI - World Resources Institute	The global research non-profit organization that studies sustainable practices for business, economics, finance, and governance and encourages initiatives for monitoring, data analysis, and risk assessment, including global and open-source projects
ZEV - Airport Zero Emissions Vehicle and Infrastructure Pilot Program	FAA grant program allows airports that are eligible for AIP grants to purchase zero-emissions airport vehicles and the infrastructure required to operate them. Priority consideration will go to applications that will achieve the greatest air quality benefits measured by cost per ton of emissions reduced.

## Appendix 4

### Resources

Airport Carbon Accreditation (2023). Airport Carbon Accreditation Application Manual (Issue 14). Accessed at <https://www.airportcarbonaccreditation.org/technical-documents/>.

Airport Cooperative Research Program (ACRP) (2023). First Look on How New Corporate Environmental Standards Will Impact Airports. Accessed at <https://nap.nationalacademies.org/catalog/27398/how-new-corporate-environmental-standards-will-impact-airports>

CDP. Public Authorities Questionnaire. Accessed at <https://www.cdp.net/en/public-authorities#5dbfad9259fe9f905dd91b1b9b5486db>

Canada Energy Regulator (2023). Energy conversion tables. Accessed at Energy conversion tables - Canada.ca ([cer-rec.gc.ca](https://www.cer-rec.gc.ca)).

European Sustainability Reporting Standards (ESRS). Accessed at <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32023R2772>

European Union Corporate Sustainability Reporting Directive (CSRD) Accessed at [https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting\\_en](https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en)

Fitch Ratings (2019). Introducing ESG Relevance Scores for Public Finance/ Infrastructure. Accessed at <https://www.fitchratings.com/research/us-public-finance/introducing-esg-relevance-scores-for-public-finance-infrastructure-16-05-2019>

Global Reporting Initiative and Sustainability Accounting Standards Board (2021). A Practical Guide to Sustainability Reporting Using GRI and SASB Standard. Accessed at <https://www.globalreporting.org/media/mlkjpnl/gri-sasb-joint-publication-april-2021.pdf>.

Global Reporting Initiative and United Nations Global Compact (2018). Integrating the Sustainable Development Goals into Corporate Reporting: A Practical Guide. Accessed at <https://unglobalcompact.org/library/5628>.

IFRS International Sustainability Standards Board (ISSB)S-2 Climate-related disclosures (2023). Accessed at <https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures.html/content/dam/ifrs/publications/html-standards-issb/english/2023/issued/issbs2/>

Kroll Bond Rating Agency (2021). ESG Global Rating Methodology. Accessed at <https://www.kbra.com/publications/mZnHHtcQ/esg-global-rating-methodology>

Morningstar DBRS (202). DBRS Morningstar Criteria: Approach to Environmental, Social, and Governance Risk Factors in Credit Ratings. Accessed at <https://dbrs.morningstar.com/research/416785/dbrs-morningstar-criteria-approach-to-environmental-social-and-governance-risk-factors-in-credit-ratings>.

Moody's Investors Service (2023). General Principles for Assessing Environmental, Social, and Governance Risks Methodology. Accessed at <https://ratings.moodys.com/api/rmc-documents/408512>.

National Research Council (2023). How New Corporate Environmental Standards Will Impact Airports. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27398>.

Standard & Poor's (2022). Environmental, Social, and Governance Principles in Credit Ratings. Accessed at <https://www.spglobal.com/ratings/en/research/articles/211010-general-criteria-environmental-social-and-governance-principles-in-credit-ratings-12085396>.

Taskforce on Nature-Related Financial Disclosures (2023). Recommendations of the Taskforce on Nature-Related Financial Disclosures. Accessed at <https://tnfd.global/publication/recommendations-of-the-taskforce-on-nature-related-financial-disclosures/#publication-content>.

U.S. Energy Information Administration (2023). Energy conversion calculators. Accessed at Energy conversion calculators - U.S. Energy Information Administration (EIA).

World Resources Institute and World Business Council for Sustainable Development (2004). Corporate Accounting and Reporting Standard (). Accessed at <https://ghgprotocol.org/corporate-standard>.

World Resources Institute and World Business Council for Sustainable Development (2011). GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Accessed at [https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard\\_041613\\_2.pdf](https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf).

## Appendix 5

### ACI-NA ESG Metrics mapped to GRI 2021 Standards

As a resource for airports who have been working with the GRI Standards, this appendix provides a mapping of the ACI-NA ESG disclosures against the GRI 2021 Standards, particularly the GRI Topic Standards and associated disclosures. It is assumed that individual airport reporters will determine the extent to which full compliance with the GRI Topic Standard is addressed by the reported information as well as which of the disclosures from the Universal Standards GRI 2 and GRI 3 apply and will be used in their own reports (noting that GRI directs reporters to include all disclosures in GRI 2 and GRI 3, except where exceptions are allowed per GRI guidance). Therefore, disclosures from the Universal Standards are not the specific focus of this appendix. A listing of the GRI Topic Disclosures that were not incorporated or included in the ACI-NA ESG disclosures is provided at the end of this appendix.

## Energy

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure <sup>31</sup>
Energy Consumption	Total energy consumption	All forms of energy consumed, including self-generated and purchased. Calculation includes fuel, purchased electricity, purchased heat, purchased steam, purchased cooling, self-generated renewable energy.	302-1 Energy consumption within the organization
Energy Intensity	Ratio of energy consumption and an organization-specific metric. The key is to be consistent over the years with the same intensity metric.	Energy intensity ratio for the organization. Flexibility for the unit of measure to include passengers or building area. Passengers preferred.	302-3 Energy intensity

31 GRI has published a new Energy exposure draft and is currently in a public comment period. The final standard is expected to be approved in Q4 2024 and is intended to replace GRI 302: Energy 2016. <https://www.globalreporting.org/standards/standards-development/project-for-climate-change-standards/>

Energy Source*	Total energy consumption by source (renewable vs. non-renewable) and breakdown by type	Total energy consumption from non-renewable sources and from renewable sources. The breakdown by type should include fuel, purchased electricity, purchased heat, purchased steam, purchased cooling, self-generated renewable energy.	302-1 Energy consumption within the organization
Energy Management	Strategy to manage energy consumption and costs	Description of energy efficiency initiatives, procurement practices, approach to resilience, and formal energy management plans. Includes reductions in consumption achieved as a result of conservation and efficiency measures.	302-1 Energy consumption within the organization; 302-4 Reduction of energy consumption

## Greenhouse Gas (GHG) Emissions

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric Description</b>	<b>GRI Disclosure</b>
GHG Emissions	Scope 1 GHG Emissions	Direct (Scope 1) GHG emissions	305-1 Direct (Scope 1) GHG emissions
	Scope 2 GHG Emissions	Energy indirect (Scope 2) GHG emissions, market-based and location-based	305-2 Energy indirect (Scope 2) GHG emissions
GHG Emissions Intensity	Ratio of GHG emissions and an organization-specific metric	Scope 1 and 2 GHG emissions intensity ratio. Flexibility for the unit of measure to include passengers or building area.	305-4 GHG emissions intensity
GHG Emissions	Scope 3 GHG Emissions*	Other indirect (Scope 3) GHG emissions	305-3 Other indirect (Scope 3) GHG emissions
Reduction of GHG Emissions	Impact of GHG emission reduction strategy and initiatives	GHG emissions reduced as a direct result of reduction initiatives, baseline year used for calculation	305-5 Reduction of GHG emissions
		Decarbonization strategy and initiatives	

# Climate Change Adaptation / Exposure to Environmental Impacts

Recommended Disclosures

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Climate Risk and Adaptation	Climate change risk exposure analysis and strategies for mitigating risks if determined financially material	Process for identifying, assessing, and responding to climate risk. General comments about management's awareness and actions taken. If financially material, then description of actions taken to address the risks. If formal climate adaptation plan announced, then update on implementation.	201-2 Financial implications and other risks and opportunities due to climate change New GRI Climate Change Standard <sup>32</sup>

# Environmental Commitments, Strategies, and Progress

Recommended Disclosures

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Environmental Commitments, Strategies, and Progress	Describe formally announced environmental commitments, plans, strategies, and/or targets related to various environmental topics. Such topics may include but are not limited to greenhouse gases (e.g., emission reduction goals and net zero roadmaps), zero waste/circular economy, water reuse/conservation, climate resilience and adaptation, etc. Track and report progress toward these commitments.	Metric should be linked to the announced goal, actual status, and progress against the plan	2-22 Statement on sustainable development strategy; 2-23 Policy commitments; 2-24 Embedding policy commitments

<sup>32</sup> GRI has published a new Climate Change exposure draft and is currently in a public comment period. The final standard is expected to be approved in Q4 2024. <https://www.globalreporting.org/standards/standards-development/project-for-climate-change-standards/>

## Regulatory Non-Compliance

*Recommended Disclosures*

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Environmental Non-Compliance	Instances of non-compliance with environmental laws and regulations including spills and pollution if determined financially material	Total number of significant instances of non-compliance with laws and regulations (i.e., instances for which fines or non-monetary sanctions were incurred) during the reporting period	2-27 Compliance with laws and regulations; 306-3 Significant spills

## Waste Management

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Waste Management	Activities leading to waste generation and initiatives to address these impacts	Description of sources of waste generation and actions taken to prevent waste generation in the organization's own activities and its value chain, and to manage significant impacts from waste generated	306-1 Waste generation and significant waste-related impacts; 306-2 Management of significant waste-related impacts; 306-3 Waste generated
Total Waste Generation*	Total weight of waste generated, including both waste diverted from disposal and waste directed to disposal	Total weight of waste generated and a breakdown of this total by category or composition of the waste	306-3 Waste generated
Waste Diversion	Waste diverted from disposal through waste prevention, reuse, recycling, and other recovery operations	Total weight of waste diverted from disposal and a breakdown of this total by category or composition of the waste	306-4 Waste diverted from disposal
Waste Disposal	Waste directed to disposal by landfilling, incineration (with or without energy recovery), and other disposal operations	Total weight of waste directed to disposal and a breakdown of this total by category or composition of the waste	306-5 Waste directed to disposal

## Water Management

Recommended Disclosures in bold font /Optional Disclosures shaded in gray

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric Description</b>	<b>GRI Disclosure</b>
Water Management	Activities impacting both water quality and water use and strategy for management of these impacts	Description of the organization's approach to managing water quality and water use. Includes how and where water is withdrawn, consumed, and discharged as well as the stormwater and surface water impacts linked to its operations.	303-1 Interactions with water as a shared resource; 303-2 Management of water discharge-related impacts
Water Withdrawal*	Total water withdrawal and breakdown by source	Total water withdrawal from all areas and a breakdown of this total by source (surface water, groundwater, seawater, third-party water)	303-3 Water withdrawal

## Biodiversity Management

Optional Disclosures shaded in gray

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric Description</b>	<b>GRI Disclosure<sup>33,34</sup></b>
Biodiversity Management	Governance, strategy, risk and impact management, metrics and targets	Description of the airport's governance, strategy, risk and impact management, and metrics and targets for nature-related dependencies, impacts, risks, and opportunities.	304-2 Significant impacts of activities, products and services on biodiversity

<sup>33</sup> Airport reporters may also choose to include other GRI 304 disclosures under Biodiversity Management (i.e., 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas; 304-3 Habitats protected or restored).

<sup>34</sup> GRI has published a new biodiversity standard, GRI 101: Biodiversity 2024. The standard will become effective in January 2026.



## Noise

Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Noise	Impact of noise on surrounding communities	Complainants Description of activities taken by the organization to manage or respond to noise impacts	2-16 Communication of critical concerns; 2-25 Processes to remediate negative impacts; 2-29 Approach to stakeholder engagement; 413-2 Operations with significant actual and potential negative impacts on local communities

## Human Capital Management

Recommended Disclosures in bold font /Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Diversity, Equity, & Inclusion	Describe the airport's workforce diversity and DE&I practices (e.g., staff training, hiring practices, participation of minorities in leadership positions, etc.)	Workforce diversity	405-1 Diversity of governance bodies and employees
	Describe the airport's workforce diversity and DE&I practices for recruiting	Recruiting diversity	405-1 Diversity of governance bodies and employees

Labor/Management Relations*	Discuss collective bargaining for airport employees. Discuss potential impacts for key suppliers or airlines. Describe impact of poor / bad labor relations only if it impacts airport's ability to operate.	n/a	2-6 Activities, value chain and other business relationships; 2-30 Collective bargaining agreements; 402-1 notice periods regarding operational changes; 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk
	Describe quality of labor relations, including extent of collective bargaining agreements	Percent of employees covered by bargaining agreements	2-30 Collective bargaining agreements
Employee Engagement	Describe approach to Employee Engagement, methodology used, and scores. Explain changes from prior years. Disclosure can include the use of Employee Research Groups and other engagement activities.	Overall Employee engagement score	N/A
Employee Education & Training	Describe training programs, career/professional development, etc.	Career development opportunities	404-2 Programs for upgrading employee skills and transition assistance programs
		Training hours	404-1 Average hours of training per year per employee

## Community/Customer Relations

*Recommended Disclosures in bold font /Optional Disclosures shaded in gray*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric Description</b>	<b>GRI Disclosure</b>
Business Supplier Diversity	Describe airport's business diversity practices (e.g., DBE, MWBE, on-the-job training programs, networking events, etc.)	Dollars spent with M/WBE, SBE or DBE businesses compared to airports aspirational goals and percent of total spend.	203-2 Significant indirect economic impacts; 204-1 Proportion of spending on local suppliers

Concessionaire Diversity	Describe airport's business diversity practices (ACDBE, on-the-job training programs, networking events, etc.)	ACDBE sales by ethnicity and gender and percent of total concessionaire sales.	N/A
Environmental Justice	Discussion of environmental justice efforts; may be covered under other topic-specific disclosures (Environmental Assessment Act in Canada)	n/a	413-2 Operations with significant actual and potential negative impacts on local communities
Community Support and Engagement	Describe airport's efforts to support the needs of the local community, partnerships with local organizations, employee volunteerism, other	Charitable contributions by airport (Canada) and employees	201-1 Direct economic value generated and Distributed (includes community investments)
		Employee volunteer hours	N/A
		Community partnerships with business and civic associations, elected officials, local schools, nonprofit organizations, and other key stakeholders	413-1 Operations with local community engagement, impact assessments, and development programs
Supporting Local Economic Growth	Describe airport's efforts as a catalyst to support the local economy and job creation. Describe source of study that determined the impact.	Economic impact of airport system and/or major construction projects on the local economy	203-1 Infrastructure investments and services supported; 203-2 Significant indirect economic impacts; 201-1 Direct economic value generated and distributed
Customer Satisfaction*	Describe efforts to provide high level of customer satisfaction and services for passengers. Focus is on the overall score, but can also discuss average wait times, ADA compliance, and accessibility. Include awards won. Describe survey used (e.g., ACI).	Customer satisfaction score if available	N/A

# Health, Safety and Security

Recommended Disclosures in bold font /Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Safety Measures	Describe the airport's workplace safety practices, including Safety Management System (SMS) and any accreditations and certificates earned.	Workplace safety metrics, lost time, workers compensation cases	403-1 Occupational health and safety management system; 403-8 Workers covered by an occupational health and safety management system; 403-9 Work-related injuries; 403-10 Work-related ill health
		Construction safety accident/incident rates (for employees, temporary workers, and sub-contractors), OSHA recordable incident rates, and lost time injury frequency rate	403-9 Work-related injuries
Employee Health & Wellness	Describe the airport's efforts to maintain a healthy and vibrant workforce, including specific wellness programs, education, and training	Percent of employees participating in wellness programs	401-2 Benefits provided to full-time employees that are not provided to temporary or parttime employees; 403-6 Promotion of worker health
Health Safety	Describe the airport's health safety practices, including pandemic-related initiatives for employees, passengers, and tenants; and creating a culture that emphasizes employee safety and wellbeing. Include any accreditations and certificates earned.	Initiatives to ensure health and wellbeing of airport users: Briefings on health safety measures	403-1 Occupational health and safety management system; 403-3 Occupational health services; 403-4 Worker participation, consultation, and communication on occupational health and safety; 403-5 Worker training on occupational health and safety
Human Trafficking	Describe airport's human trafficking awareness initiatives	Employee training sessions	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor

# Governance

Recommended Disclosures in bold font /Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Governance/ Organizational Structure	Describe legal structure (organization's enabling act or other statutory authority), use agreement, regulatory requirements.	n/a	2-1 Organizational details; 2-2 Entities included in the organization's sustainability reporting; 2-9 Governance structure and composition; 2-13 Delegation of responsibility for managing impacts
Board of Directors	List board (governance group) members, how appointed, Board committee structures, frequency of meetings, Board responsibilities/ approvals, ethnic diversity and types of business experience, and financial management and controls policies approved by Board. (Note that could be added to Social section with Airport DEI stats.)	Board member diversity	2-9 Governance structure and composition; 2-10 Nomination and selection of the highest governance body; 2-11 Chair of the highest governance body; 2-12 Role of the highest governance body in overseeing the management of impacts; Disclosure 405-1 Diversity of governance bodies and employees
Executive management	List executive management name and position, diversity, and years of experience (note that diversity could be added to Social section).	Management diversity, years of industry experience	2-9 Governance structure and composition; 405-1 Diversity of governance bodies and employees
Leadership System and Business Results	Describe leadership system, how decisions are made. Include business results for key metrics. Five-year trending is desirable, with variance explanations as appropriate.	Examples: passengers, operations, non-airline revenues and net revenues, CPE, other as appropriate	201-1 Direct economic value generated and distributed; 2-13 Delegation of responsibility for managing impacts
Leadership System Incentive Compensation	Describe incentive compensation program (if applicable) and if the Board approves the plan.	Incentive compensation results	2-19 Remuneration policies

# Risk Management

Recommended Disclosures in bold font /Optional Disclosures shaded in gray

Disclosure Element	Disclosure Element Description	Metric Description	GRI Disclosure
Approach to Risk Management	Describe airport's approach to risk management, including Enterprise Risk Management if applicable. Discuss major risks and how the airport is mitigating those risks, including ESG risks.	n/a	403-2 Hazard identification, risk assessment, and incident investigation; 201-2 Financial implications and other risks and opportunities due to climate change
Cyber Security	Describe airport's approach to cyber security. Include discussion of phishing testing, penetration testing, tabletop exercises, insurance (not stating amount), and outside assistance to monitor network. Discuss if airport is complying with Payment Card Industry (PCI) security standards and if it stores any customer credit card information (should be none).	n/a	N/A
Cyber Security	Describe cyber staffing, budgets, cyber maturity scores if applicable. Also, could include details around external verification such as ISO 27001 etc.	n/a	N/A
Risk Management - Financial Risks*	Include five-year trending of key financial risk metrics with discussion of material variances. NOTE - these metrics may be included in other documents like Official Statements or ACFRs. Airport may choose to just reference this.	Days cash on hand*	N/A
		Debt service coverage ratio*	N/A
		Defined benefit and OPEB plan funding ratios*	N/A

Risk Management - Budget Accuracy	Describe operating budget processes and accuracy of "actuals" results to budget. Discuss variances as appropriate.	Accuracy of operating expenses, non-airline revenues, and passenger budgets	N/A
Risk Management - Capital Programs	Describe capital budget processes and how airport mitigates capital project risks from a financial and scheduling standpoint. May include a table of major capital project budgets and actual results.	Accuracy of capital project budgets	203-1 Infrastructure investments and services supported
		Compare actual completion to scheduled completion	N/A

## Reporting and Transparency

*Recommended Disclosures in bold font*

<b>Disclosure Element</b>	<b>Disclosure Element Description</b>	<b>Metric Description</b>	<b>GRI Disclosure</b>
Reporting and Transparency	Describe investor disclosure practices, timeliness, and accuracy of reporting to Board, transparency of information including State and Local open records processes.	n/a	2-3 Reporting period, frequency and contact point (specific to sustainability reporting); 2-5 External assurance; 2-14 Role of the highest governance body in sustainability reporting
Ethics and compliance	Describe ethics practices, hotlines, Foreign Corrupt Practices Act compliance, regulatory requirements (if applicable), and training.	n/a	2-16 Communication of critical concerns; 2-26 Mechanisms for seeking advice and raising concerns; 205-2 Communication and training about anti-corruption policies and procedures

GRI Topic Disclosures not incorporated or included in the ACI-NA ESG disclosures include:

### Environmental

- Disclosure 301-1 Materials used by weight or volume
- Disclosure 301-2 Recycled input materials used
- Disclosure 301-3 Reclaimed products and their packaging materials
- Disclosure 302-2 Energy consumption outside of the organization
- Disclosure 303-4 Water discharge

- Disclosure 303-5 Water consumption
- Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
- Disclosure 304-3 Habitats protected or restored
- Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations
- Disclosure 305-6 Emissions of ozone-depleting substances (ODS)
- Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant
- Disclosure 308-1 New suppliers that were screened using environmental criteria
- Disclosure 308-2 Negative environmental impacts in the supply chain and actions taken

## Social

- Disclosure 401-1 New employee hires and employee turnover
- Disclosure 401-3 Parental leave
- Disclosure 402-1 Minimum notice periods regarding operational changes
- Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships
- Disclosure 404-3 Percentage of employees receiving regular performance and career development reviews
- Disclosure 405-2 Ratio of basic salary and remuneration of women to men
- Disclosure 406-1 Incidents of discrimination and corrective actions taken
- Disclosure 408-1 Operations and suppliers at significant risk for incidents of child labor
- Disclosure 410-1 Security personnel trained in human rights policies or procedures
- Disclosure 411-1 Incidents of violations involving rights of indigenous peoples
- Disclosure 414-1 New suppliers that were screened using social criteria
- Disclosure 414-2 Negative social impacts in the supply chain and actions taken
- Disclosure 415-1 Political contributions
- Disclosure 416-1 Assessment of the health and safety impacts of product and service categories
- Disclosure 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services
- Disclosure 417-1 Requirements for product and service information and labeling
- Disclosure 417-2 Incidents of non-compliance concerning product and service information and labeling
- Disclosure 417-3 Incidents of non-compliance concerning marketing communications
- Disclosure 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data

## Economic/Governance

- Disclosure 201-3 Defined benefit plan obligations and other retirement plans
- Disclosure 201-4 Financial assistance received from government
- Disclosure 202-1 Ratios of standard entry level wage by gender compared to local minimum wage



- Disclosure 202-2 Proportion of senior management hired from the local community
- Disclosure 205-1 Operations assessed for risks related to corruption
- Disclosure 205-3 Confirmed incidents of corruption and actions taken
- Disclosure 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices
- Disclosure 207-1 Approach to tax
- Disclosure 207-2 Tax governance, control, and risk management
- Disclosure 207-3 Stakeholder engagement and management of concerns related to tax