

SUSTAINABILITY REPORTING ANALYSIS FOR THE PORT
OF PORTLAND USING THE GLOBAL REPORTING
INITIATIVE FRAMEWORK AND GUIDELINES

by

KEIR THOMAS STAPLE

A THESIS

Presented to the Department of Environmental Studies
and the Robert D. Clark Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Science

June 2014

An Abstract of the Thesis of

**Keir Thomas Staple for the degree of Bachelor of Arts
in the Department of Environmental Science to be taken June 2014**

**Title: Sustainability Reporting Analysis for the Port of Portland Using the Global
Reporting Initiative Framework and Guidelines**

Approved:  _____

Dr. Michael Russo

This report is an analysis prepared for the Port of Portland's Sustainability Integration Team. The Port's committee is working toward integrating the concept of sustainability at the Port of Portland, with the expansion of sustainability reporting as one of its goals. The following report includes a benchmarking analysis, a gap analysis and a survey to help the Port assess the industry's best practices for sustainability reporting according to the Global Reporting Initiative's (GRI) framework and guidelines. The GRI is currently the leading organization that sets the standards for sustainability reporting.

The Port is currently capable of achieving a mid-level application grade according to the GRI's grade-levels that rank the quality of sustainability reports. However, the Port is situated in Portland, OR, a city that prides itself on sustainability practices. Thus, the Port of Portland is encouraged to pursue the highest level of sustainability reporting according to the GRI's standards.

Acknowledgements

- Michael Russo, who has provided a lot of guidance throughout this entire process and helped create a vision for an end product that allowed me to steer this project down a feasible path.
- Steve Mital, who originally helped conceptualize potential project ideas and put me in touch with Professor Russo, as well as later agreeing to sign on and assist with the defense of this project.
- Casey Shoop, who also agreed to sign on and assist with the defense of this project and helped take away the anxiety of approaching a professor by providing a simple “yes”.
- Phil Ralston, who took me under his wing and helped provide me the internship experience, guidance and general life skills that resulted in the development of this project. Phil was also extremely helpful with coordinating all of the meetings and conference calls to complete the gap analysis and articulating objectives to people at the Port. I am forever grateful for Phil’s guidance and friendship.
- Peg Boulay, who helped provide guidance and contacts when this project was originally being conceived.
- Marla Harrison, who originally provided me an internship at the Port of Portland and has continued to offer mentorship and friendship over the years
- All of the folks at the Port of Portland who have given their time to help bring this project to completion.
- My friends, who have supported me throughout this process, and throughout my entire life.
- Anna Reinhard, who has been my source of reason, laughter and love over the past couple of years.
- And lastly, my parents, who have been my every thing and without whom nothing would be possible

Table of Contents

Executive Summary	1
The Global Reporting Initiative—Background and Context	4
GRI Critics	13
Importance of this Project	14
Methods	16
Part I—Benchmarking	16
Part II—Gap Analysis	18
Part III— Survey of North American Reporting Organizations	19
Restraints	20
Results	20
Part I—Benchmarking	20
Part II—Gap Analysis	30
Part III—Survey of North American Reporting Organizations	34
Conclusions	37
Part I—Benchmarking	37
Part II—Gap Analysis	38
Part III—Survey of North American Reporting Organizations	39
Concluding Thoughts	40
Appendix A	42
Appendix B	50
Appendix C	52
Bibliography	57

List of Figures

Figure 1—Total Economic Indicators Reported Across All Reporting Organizations	42
Figure 2— Total Social Indicators Reported Across All Reporting Organizations	42
Figure 3— Total Environmental Indicators Reported Across All Reporting Organizations	43
Figure 4—Comparing Port of Portland to Economic Indicators for All Organizations	43
Figure 5— Comparing Port of Portland to Social Indicators for All Organizations	44
Figure 6—Comparing Port of Portland to Environmental Indicators for All Organizations	44
Figure 7—Comparing Port of Portland to Economic Indicators for A-Level Organizations	45
Figure 8—Comparing Port of Portland to Social Indicators for A-Level Organizations	45
Figure 9—Comparing Port of Portland to Environmental Indicators for A-Level Organizations	46
Figure 10—Comparing Port of Portland to Economic Indicators for B-Level Organizations	46
Figure 11— Comparing Port of Portland to Social Indicators for B-Level Organizations	47
Figure 12— Comparing Port of Portland to Environmental Indicators for B-Level Organizations	47
Figure 13— Comparing Port of Portland to Economic Indicators for C-Level Organizations	48
Figure 14— Comparing Port of Portland to Social Indicators for C-Level Organizations	48
Figure 15— Comparing Port of Portland to Environmental Indicators for C-Level Organizations	49
Figure 16—Minimum and Maximum Page Numbers for Economic Indicators (A-Level)	52
Figure 17— Minimum and Maximum Page Numbers for Social Indicators (A-Level)	52
Figure 18— Minimum and Maximum Page Numbers for Environmental Indicators (A-Level)	53
Figure 19— Minimum and Maximum Page Numbers for Economic Indicators (B-Level)	53
Figure 20— Minimum and Maximum Page Numbers for Social Indicators (B-Level)	54
Figure 21— Minimum and Maximum Page Numbers for Environmental Indicators (B-Level)	55

Figure 22— Minimum and Maximum Page Numbers for Economic Indicators (C-Level)	55
Figure 23— Minimum and Maximum Page Numbers for Social Indicators (C-Level)	56
Figure 23— Minimum and Maximum Page Numbers for Environmental Indicators (C-Level)	56

List of Tables

Table 1—List of GRI Performance Indicators for the Airport Operators Sector Supplement (AOSS)	7
Table 2—Distinction Between GRI Grade-Level Applications	12
Table 3—List of Surveyed Reporting Organizations	16
Table 4—Economic Indicators in Descending Order by Number of Reporting Organizations	21
Table 5—Social Indicators in Descending Order by Number of Reporting Organizations	23
Table 6—Environmental Indicators in Descending Order by Number of Reporting Organizations	27
Table 7—Visual Example of Data in External Workbook (A-Level Groups)	30
Table 8—Comparing the Port of Portland to Average Indicators Reported by Other Organizations According to Grade-Level	31
Table 9—Core Indicators the Port of Portland is Currently Unable to Include in Report	32
Table 10—Raw Responses from Respondent 1 from Toronto-Pearson International Airport	34
Table 11—Raw Responses from Respondent 2 from San Diego International Airport	36

Executive Summary

The goal of this research project is to assess the feasibility of sustainability reporting at the Port of Portland in Portland, OR. This includes a benchmarking analysis of the sustainability reports (also referred to as corporate responsibility reports) put together by international airports in countries around the world, as well as a gap analysis (comparison of actual with potential performance) of data availability at the Port of Portland and a survey of the personal experiences from organizations that previously reported. The scope of the benchmarked reports are limited to those produced using the format and guidelines constructed by the Global Reporting Initiative (GRI), which is a non-profit, international organization that sets standards for sustainability reporting across many different industries and sectors. Currently, many airport operators (those public and private organizations that operate airports) around the world have already produced sustainability reports using the GRI guidelines. Some notable organizations that have GRI reports included in this analysis are the Greater Toronto Airports Authority (Toronto Pearson International Airport), Hartsfield-Jackson Atlanta International Airport, Dallas/Fort Worth International Airport, San Diego International Airport, Fraport AG (Frankfurt Airport), Manchester Airport Group, Abu Dhabi Airports Company, Airports of Thailand, and eleven more, making a total of 19 reports.

Organizations commonly produce annual reports that reflect on the previous year's financial statements and highlight some of its other practices, such as community

involvement. However, new sustainability reporting philosophies encourage companies and organizations to take a more integrated approach and to incorporate broader social and environmental accounting with their financial accounting.¹

A sustainability report produced under the GRI guidelines consists of an organization's qualitative and quantitative measures of economically, socially, and environmentally sustainable practices. A GRI sustainability report "also presents the organization's values and governance model, and demonstrates the link between its strategy and its commitment to a sustainable global economy."² Ultimately, these reports are tools used to communicate successes and failures and to interact with stakeholders (the community, business partners, regulatory agencies, other government organizations and internal employees). More importantly than simply exposing the organization's practices, "it is the way such information is fed back to senior management and decision makers to shape policy, strategy and operations that better represents one of reporting's fundamental purposes."³ An organization's ability to expose and reflect on its own practices with internal employees and external stakeholders provides *the opportunity* for that organization to improve management techniques, increase efficiency, and decrease negative impacts on their employees, the environment, and the community.

The main objective of my research is to investigate what indicators of sustainable practices airports are most commonly reporting and to see how the Port of Portland compares in its data collection to some of these organizations. More specifically, I am

¹ Boulter, Jack, "Global Reporting Initiative" 5.

² Global Reporting Initiative, "What is GRI?" <<https://www.globalreporting.org/information/about-gri/what-is-GRI/Pages/default.aspx>>.

³ Boulter, 5.

interested in assessing what indicators reporting airports are choosing to represent their organization and what information they think will engage their stakeholders. This information can be used by the Port of Portland to benchmark themselves against their peers and begin the integrated reporting process. Using the Global Reporting Initiative as a tool for the analysis is important because it is a set of uniform guidelines that has been selectively refined by people within the industry who have a vested interest in the standards set for their sector. It will be instructive to see which indicators were reported on the most and how these trends vary across different levels of reporting.

Other variables to look at that may impact reporting are whether or not a public agency or a private organization operates the airport, as well as the number of years the airport has been producing GRI sustainability reports. Very rare in the United States, but much more common overseas, many airports are taking a more commercialized approach and moving toward becoming more privatized and/or decreasing government involvement.⁴ Because of this, many of these private airports “no longer see their role as merely providers of infrastructure. Instead they view themselves more and more as just any other industry which requires a wide range of business competencies and skills together with the adoption of effective management and business techniques, including benchmarking.”⁵ This comparative process can help airport operators, such as the Port of Portland, track their progress as they work toward achieving their strategic planning goals. This is done through increased data management, discussion with and accountability to stakeholders, and awareness of market trends related to the economy

⁴ Freathy, Paul, and Frank O’Connell, "Planning for profit: the commercialization of European airports" 589.

⁵ Graham, Anne, "Airport benchmarking: a review of the current situation" 4.

and the industry.⁶ Thus, the airport industry is becoming more invested in benchmarking tools and various methods of remaining competitive in the industry's global market.

The Global Reporting Initiative—Background and Context

The Global Reporting Initiative is an international non-profit organization that officially formed in 2002 as a Collaborating Centre of the United Nations Environmental Program.⁷ As a part of its objectives, the GRI sets sector-specific standards and guidelines for sustainability reporting in order to encourage social, economic, and environmental stewardship practices among organizations of all industries, sizes, and nationalities. The GRI's hopes were to encourage this stewardship through establishing a "universal reporting framework and a language in which discourse about sustainability performance could be carried out, and which would be used by others to form judgments about the level of performance, based on socially formulated standards."⁸ The GRI thrives on other organizations' willingness to compete, as well as cooperate, on the playing field set by these guidelines and standards.

According to the GRI's Sustainability Disclosure Database, there are currently 14,822 GRI Reports submitted to their database from 6,228 different organizations. Within these reports, there are 271 reports that fall under the aviation category and even fewer that are airport operators (statistics not provided). As of 2011, when statistic summaries were last produced by the GRI, 47% of reports were produced by European

⁶ Port of Portland. Port of Portland Strategic Plan 2010-2015. Portland: Port of Portland, 2010.

⁷ Brown, Halina Szejnwald, Martin De Jong, and Teodorina Lessidrenska "The rise of the Global Reporting Initiative: a case of institutional entrepreneurship" (2009) 4.

⁸ Brown et al. (2009), 13.

organizations, 17% by Asian, 14% by Latin American, 14% by North American, 5% by Oceania, and 3% by African.⁹ The GRI's presence is growing every year, with an overall increase of 8% from 2010 to 2011.¹⁰ According to the KPMG's Corporate Responsibility Reporting Survey of 2013, 78 percent of companies that report on corporate responsibility now use the GRI guidelines. Out of the Global 250, the 250 largest companies in the world, 82% use the GRI as their reporting format.¹¹

The GRI would not have the success it has today if it was not so vastly connected with members and organizations from sectors all over the world. These members, or organizational stakeholders, are made of those representatives from "civil society, business, mediating institutions, academia, labor, public agencies, and intergovernmental agencies."¹² It's this multi-stakeholder collaboration that has helped the GRI obtain its esteem and success, as well as its refined list of economic, social, and environmental performance indicators used to measure an organization's progress toward sustainable goals and practices. As of now, the GRI is a global leader in setting voluntary reporting standards.¹³

The GRI is not a regulatory agency with any particular government affiliation.¹⁴ Instead, they are a collaborative organization that translates different sustainability

⁹ GRI Reporting Trends 2011. (2011). Accessed May 22 2014, available at <https://www.globalreporting.org/reporting/report-services/sustainability-disclosure-database/Pages/Discover-the-Database.aspx>

¹⁰ GRI Reporting Trends 2011. (2011). Accessed May 22 2014, available at <https://www.globalreporting.org/reporting/report-services/sustainability-disclosure-database/Pages/Discover-the-Database.aspx>

¹¹ KPMG Survey of Corporate Responsibility Reporting 2013. (2013). Accessed May 22 2014, available at <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/corporate-responsibility/pages/default.aspx>

¹² Global Reporting Initiative, "Organizational Stakeholder Program" <<https://www.globalreporting.org/network/organizational-stakeholders/Pages/default.aspx>>

¹³ Brown et al. (2009), 1.

¹⁴ Brown et al. (2009), 16.

philosophies into a set of guidelines and standards for organizations to follow in the hopes of integrating all aspects of a business (economic, social, and environmental). Some of the sustainability performance indicators that the GRI and its team of stakeholders have developed include: revenues, operating costs, greenhouse gas emissions, total water consumption, quality of storm water discharge, land management practices, biodiversity impacts, human rights issues, labor rights, community involvement, fair labor practices, and many more. It is important to keep in mind that the GRI's list of performance indicators is broad and is meant to apply to all types of organizations across the world. A performance indicator, such as human rights violations, that applies to an organization in one region might not necessarily apply to an organization in the United States.

There is a set of standard disclosures (performance indicators to report on and disclose to the public) that the GRI encourages all reporting organizations to consider when reporting, but there are also many industries that have their own subset of supplemental indicators to report on as well. These "sector supplements" include sector-specific standards that have been created by working groups consisting of members involved in the respective industries. For example, there is a subset of guidelines, in addition to the set of standard disclosures, for airport operators to use when developing a sustainability report. These guidelines comprise the Airport Operators Sector Supplement (AOSS), and they include economic, social, and environmental performance indicators that are specifically relevant to airports. Performance indicators in the AOSS include: number of wildlife strikes with airplanes, amount of airplane de-icing fluid used, number of people affected by airplane noise, annual number of

passengers, total amount of cargo, and more. Each sustainability report registered in the GRI database receives a letter grade (A, B or C) depending on how inclusive the report is and how many indicators the organization addresses. A is the highest earning and C is the lowest. All of the reports in this analysis were produced using the GRI's AOSS guidelines. **Table 1** below shows the GRI's list of performance indicators found in the standard G3.1 Guidelines and Airport Operator Sector Supplement. **Table 2** shows the distinction between the various grade-level applications for GRI.

Table 1—List of GRI Performance Indicators for the Airport Operators Sector Supplement (AOSS)¹⁵

Performance Indicator	Indicator Code	Standard Disclosure, AOSS	Core/Non-Core
Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	EC1	Standard Disclosure	Core
Financial implications and other risks and opportunities for the organization's activities due to climate change.	EC2	Standard Disclosure	Core
Financial implications and other risks and opportunities for the organization's activities due to climate change.	EC3	Standard Disclosure	Core
Significant financial assistance received from government.	EC4	Standard Disclosure	Core
Range of ratios of standard entry-level wage by gender compared to local minimum wage at significant locations of operation.	EC5	Standard Disclosure	Non-core
Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	EC6	Standard Disclosure	Core
Total number of passengers annually, broken down by passengers on international and domestic flights and broken down by origin-and-destination and transfer, including transit passengers.	AO1	AOSS	Core
Annual total number of aircraft movements by day and by night, broken down by commercial passenger, commercial cargo, general aviation and state aviation flights.	AO2	AOSS	Core
Total amount of cargo tonnage.	AO3	AOSS	Core
Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	EC7	Standard Disclosure	Core
Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	EC8	Standard Disclosure	Core

¹⁵ GRI Airport Operators Sector Supplement. (2011). Accessed May 22 2014, available at <https://www.globalreporting.org/resource/library/AOSS-Complete.pdf>

Understanding and describing significant indirect economic impacts, including the extent of impacts.	EC9	Standard Disclosure	Non-core
Materials used by weight or volume.	EN1	Standard Disclosure	Core
Percentage of materials used that are recycled input materials.	EN2	Standard Disclosure	Core
Direct energy consumption by primary energy source.	EN3	Standard Disclosure	Core
Indirect energy consumption by primary source.	EN4	Standard Disclosure	Core
Energy saved due to conservation and efficiency improvements.	EN5	Standard Disclosure	Core
Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	EN6	Standard Disclosure	Non-core
Initiatives to reduce indirect energy consumption and reductions achieved.	EN7	Standard Disclosure	Non-core
Total water withdrawal by source.	EN8	Standard Disclosure	Core
Quality of storm water by applicable regulatory standards.	AO4	AOSS	Core
Water sources significantly affected by withdrawal of water.	EN9	Standard Disclosure	Non-core
Percentage and total volume of water recycled and reused.	EN10	Standard Disclosure	Non-core
Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	EN11	Standard Disclosure	Core
Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	EN12	Standard Disclosure	Core
Habitats protected or restored	EN13	Standard Disclosure	Non-core
Strategies, current actions, and future plans for managing impacts on biodiversity	EN14	Standard Disclosure	Non-core
Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	EN15	Standard Disclosure	Non-core
Total direct and indirect greenhouse gas emissions by weight	EN16	Standard Disclosure	Core
Other relevant indirect greenhouse gas emissions by weight	EN17	Standard Disclosure	Core
Initiatives to reduce greenhouse gas emissions and reductions achieved	EN18	Standard Disclosure	Core
Emissions of ozone depleting substances by weight	EN19	Standard Disclosure	Core
NOx, SOx, and other significant air emissions by type and weight	EN20	Standard Disclosure	Core
Total water discharge by quality and destination	EN21	Standard Disclosure	Core
Total weight of waste by type and disposal method	EN22	Standard Disclosure	Core
Total number and volume of significant spills	EN23	Standard Disclosure	Core
Ambient air quality levels according to pollutant concentrations	AO5	AOSS	Core

in microgram per m3 or parts per million (ppm) by regulatory regime			
Aircraft and pavement de-icing/anti-icing fluid used and treated in m3 and/or tonnes	AO6	AOSS	Core
Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	EN24	Standard Disclosure	Non-core
Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	EN25	Standard Disclosure	Non-core
Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	EN26	Standard Disclosure	Core
Percentage of products sold and their packaging materials that are reclaimed by category	EN27	Standard Disclosure	Core
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	EN28	Standard Disclosure	Core
Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	EN29	Standard Disclosure	Non-core
Total environmental protection expenditures and investments by type	EN30	Standard Disclosure	Non-core
Number and percentage change of people residing in areas affected by noise	AO7	AOSS	Core
Total Workforce by employment type, employment contract, and region, broken down by gender.	LA1	Standard Disclosure	Core
Total number and rate of new employee hires and employee turnover by age group, gender, and region.	LA2	Standard Disclosure	Core
Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	LA3	Standard Disclosure	Non-core
Return to work and retention rates after parental leave, by gender	LA15	Standard Disclosure	Core
Percentage of employees covered by collective bargaining agreements	LA4	Standard Disclosure	Core
Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	LA5	Standard Disclosure	Core
Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	LA6	Standard Disclosure	Non-core
Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	LA7	Standard Disclosure	Core
Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	LA8	Standard Disclosure	Core
Health and safety topics covered in formal agreements with trade unions.	LA9	Standard Disclosure	Non-core
Average hours of training per year per employee, by gender, and by employee category	LA10	Standard Disclosure	Core
Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	LA11	Standard Disclosure	Non-core
Percentage of employees receiving regular performance and career development reviews, by gender.	LA12	Standard Disclosure	Non-core
Composition of governance bodies and breakdown of employees per employee category according to gender, age	LA13	Standard	Core

group, minority group membership, and other indicators of diversity		Disclosure	
Ratio of basic salary remuneration of women to men by employee category, by significant locations of operation	LA14	Standard Disclosure	Core
Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	HR1	Standard Disclosure	Core
Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken	HR2	Standard Disclosure	Core
Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	HR3	Standard Disclosure	Core
Total number of incidents of discrimination and corrective actions taken	HR4	Standard Disclosure	Core
Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	HR5	Standard Disclosure	Core
Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	HR6	Standard Disclosure	Core
Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	HR7	Standard Disclosure	Core
Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	HR8	Standard Disclosure	Non-core
Total number of incidents of violations involving rights of indigenous people and actions taken.	HR9	Standard Disclosure	Non-core
Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	HR10	Standard Disclosure	Core
Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms	HR11	Standard Disclosure	Core
Percentage of operations with implemented local community engagement, impact assessments, and development programs	SO1	Standard Disclosure	Core
Operations with significant potential or actual negative impacts on local communities	SO9	Standard Disclosure	Core
Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	SO10	Standard Disclosure	Core
Number of persons physically or economically displaced, either voluntarily or involuntarily, by the airport operator or on its behalf by a government or other entity, and compensation provided	AO8	AOSS	Core
Percentage and total number of business units analyzed for risks related to corruption	SO2	Standard Disclosure	Core
Percentage of employees trained in organization's anti-corruption policies and procedures	SO3	Standard Disclosure	Core
Actions taken in response to incidents of corruption	SO4	Standard Disclosure	Core
Public policy positions and participation in public policy development and lobbying	SO5	Standard Disclosure	Core
Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	SO6	Standard Disclosure	Non-core
Total number of legal actions for anti-competitive behavior,	SO7	Standard	Non-core

anti-trust, and monopoly practices and their outcomes		Disclosure	
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	SO8	Standard Disclosure	Core
Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	PR1	Standard Disclosure	Core
Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes	PR2	Standard Disclosure	Non-core
Total annual number of wildlife strikes per 10,000 aircraft movements	AO9	AOSS	Core
Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	PR3	Standard Disclosure	Core
Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	PR4	Standard Disclosure	Non-core
Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	PR5	Standard Disclosure	Non-core
Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	PR6	Standard Disclosure	Core
Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.	PR7	Standard Disclosure	Non-core
Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	PR8	Standard Disclosure	Non-core
Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	PR9	Standard Disclosure	Core

Table 2—Distinction Between GRI Grade-Level Applications¹⁶

	C-Level	B-Level	A-Level
Profile Disclosures	Report on: 1.1 2.1-2.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.14-4.15	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Same as requirements for Level B
Disclosures on Management Approach	Not required	Management Approach Disclosures for each Indicator Category	Management Approach disclosed for each Indicator Category
Performance Indicators & Sector Supplement Performance Indicators	Report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment	Report on a minimum of any 20 Performance Indicators, at least one from each of Economic, Environmental, Human Rights, Labor, Society, Product Responsibility	Respond on each core and Sector Supplement* Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission

*Sector supplement in final version

**Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines

***Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines

In **Table 2**, the requirements for performance indicators have been highlighted because the focus of this paper is on this aspect of the reports. The Profile Disclosures and Disclosures on Management Approach are important to the overall report, but they were not originally requested by the Port of Portland and thus are not included in the scope of this project. Future work can be done to complete this area.

¹⁶ GRI Application Level Check Methodology. (2013). Accessed May 22 2014, available at <https://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf>

GRI Critics

There are some skeptics that question whether or not the GRI and its participating organizations are accomplishing what they originally set out to do. Many organizations have become so focused on the act of reporting and data collection that they have lost sight of the bigger picture. When people become focused on the technical aspects of sustainability, they may miss opportunities for “re-thinking assumptions and approaches to interpreting observations and framing problems and situations.”¹⁷ Analyzing data to increase efficiency or decrease impacts is important, but truly sustainable organizations will recognize when they need to re-think their current methods and pay closer attention to the changing environments and communities in which they operate.

Some critics of sustainability reporting worry there is an element of manipulation and dishonesty that comes with the process. This may occur if organizations “take control of or ‘capture’ [sustainability reporting assurance] policy and practice by appropriating the language and processes in order to meet their own commercial and professional objectives.”¹⁸ Having the attention primarily on industry expansion and development of the guidelines, the GRI focused little on data quality assurance and control.¹⁹ It isn’t difficult to see where an organization could use the reports and the terminology as a marketing tool without actually showing any type of dedication or progress toward sustainability goals.²⁰

However, despite some of the obvious flaws in corporate responsibility reporting,

¹⁷ Brown et al. (2009), 26.

¹⁸ Smith, John, Ros Haniffa, Jenny Fairbrass, SPRINGER, and Helena Maria Bolla. "A Conceptual Framework for Investigating 'Capture' in Corporate Sustainability Reporting Assurance." *Journal of Business Ethics*, 99.3 (2011): 425-439.

¹⁹ Brown et al. (2009), 28.

²⁰ Brown et al. (2009), 28.

particularly in the GRI system, the organization's vision and the movement they have set in place have definitely changed the outlook on sustainability in the global marketplace. Many organizations have adopted a new mindset of transparency and self-reflection in an attempt to improve their social, economic, and environmental performance.²¹ The fact that certain industries, such as the mining industry, are now incorporating sustainability into their business models is a huge leap forward in the right direction. Just as well, diverse groups that don't normally work together are now collaborating on sustainability goals. This collaboration among groups from all different backgrounds will help balance out any of the GRI's shortcomings and lead to more economically, socially, and environmentally integrated practices.

Importance of this Project

This past summer I spent a lot of time familiarizing myself with the Global Reporting Initiative and airport sustainability reports during a summer internship at the Port of Portland. The Port is a government public agency that owns and operates the Portland International Airport, as well as the marine terminals along the Columbia and Willamette Rivers and industrial development and ecological mitigation sites throughout the Portland-Metro area. I spent much of my summer assisting the Port Sustainability Integration Team (PSIT) with a project that involved benchmarking existing airport sustainability reports (according to GRI framework), and then looking at Port of Portland data in the environmental department to see what the Port could

²¹ KPMG Survey of Corporate Responsibility Reporting 2013. (2013). Accessed May 22 2014, available at <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/corporate-responsibility/pages/default.aspx>

potentially include in a sustainability report of their own. Although the Port has their own process for engaging with stakeholders and developing metrics to measure and track the organization's improvement, the PSIT was interested in the metrics other airports use and the economic, social, and environmental indicators on which they were reporting. At the end of the project, I was asked to present my results to the team.

Not only is the Port one of the largest industrial landowners in the region, but they are also a key economic gateway for the Pacific Northwest with the rest of the world.²² The Port has large ties with the community, private industries, and other government agencies. With this role in mind, the Port has taken on a vision of sustainability in which they want to more effectively integrate the social, economic, and environmental aspects of the Port's work with the hopes of improving their overall efficiency and reducing negative impacts. The Port's Strategic Plan states the organization recently adopted a "sustainability policy that both reflects [their] community's and the Port's values and meets business needs."²³ I believe this is interesting work because airports often play an important role in local, regional and global transportation, as well as local infrastructure, land management, and community politics. With such a wide network of responsibilities, airports could benefit from an improved sustainable management approach that incorporates reporting as one of its tools.

²² Port of Portland Strategic Plan 2010-2015, 1.

²³ Port of Portland Strategic Plan 2010-2015, 2.

Methods

Part I—Benchmarking

To conduct my research, the majority of my time was spent benchmarking various airport sustainability reports against one another. To do so, I used the Global Reporting Initiative database to obtain the most recent sustainability reports from participating airport operators around the world. A list of the surveyed organizations is listed below in **Table 3**. I read and analyzed these reports by documenting the economic, social, and environmental indicators they reported. The GRI’s Airport Operators Sector Supplement (AOSS) G3.1 list of performance indicators set the framework for my analysis by allowing me to assess which of the GRI’s indicators are reported on by each airport and the depth in which they report.

Table 3—List of Surveyed Reporting Organizations

Reporting Organization	Country	Number of Airports	Government or Private	GRI Grade Level	Self-Declared or Third-Party Assured
Schiphol Group	Amsterdam	4	Government	B+	Third-party (PWC)
Ostend-Bruges International Airport	Belgium	1	Government	B+	GRI-checked (other)
Greater Toronto Airports Authority (GTAA)	Canada	1	Government	A	GRI-checked (not listed)
Manchester Airports Group	England	4	Gov’t/Private	A+	GRI-checked (SGS)
Aéroports de Paris	France	14	Government	B	Third-party checked (other)
Fraport AG	Germany	13	Private	A+	GRI-checked (not listed)
Munich Airport	Germany	1	Government	A+	GRI-checked

					(other)
Athens Airport	Greece	1	Gov't/Private	A+	Self-declared (KPMG)
Grupo Aeroportuario del Sureste (ASUR)	Mexico	9	Private	B	Self-declared
Aeroports de Portugal	Portugal	8	Private	A+	Third-party checked (PWC)
Incheon Airport	South Korea	1	Government	A+	GRI-checked (other)
Aena	Spain	20	Government	B+	GRI-checked (AENOR)
Swedavia	Sweden	11	Government	C+	Self-declared (E&Y)
Airports of Thailand	Thailand	6	Private	B	GRI-checked (not listed)
TAV Airports	Turkey	12	Private	C	GRI-checked (not listed)
Abu Dhabi Airports	United Arab Emirates	5	Government	B	GRI-checked (not listed)
Hartsfield-Jackson Atlanta International Airport	United States of America	1	Government	B+	GRI-checked (other)
Dallas/Fort Worth International Airport	United States of America	1	Government	B	Self-declared
San Diego International Airport	United States of America	1	Government	C	Self-declared

Benchmarking airports from different countries can be difficult due to the vast differences in the way airports are managed and operated across international lines, as well as the “diversity of inputs and outputs.”²⁴ Because of this complication, this *is not* an “apples to apples” comparison of each airport. I am simply interested in looking at trends of which indicators are most commonly reported on, the metrics that are used,

²⁴ Graham, 13.

and how this varies across different airports, regions, and type of operator (public vs. private). I also went through the reports and gauged how many pages were dedicated to each GRI indicator, with one-quarter page increments (i.e. <0.25 page, 0.50 page, 0.75 page, 1.00 page, 1.25 page, etc.), and the medium they used to display information (i.e. text/narratives, tables, graphs and/or graphics). Providing the number of pages dedicated to each indicator and the means in which they communicate the information will provide the Port a sense of the depth that other reporting organizations are undergoing to address the different sustainability measurements.

Part II—Gap Analysis

The second part of this project is a gap analysis that provides an assessment of the Port of Portland's ability to report on the GRI's list of economic, social and environmental indicators in the AOSS. The gap analysis allows the Port to understand what data is available to them to include in the report, and to see how their report would compare to other reporting airports if they chose to include all available data. This process was completed through a series of meetings and conference calls with a number of employees (mostly managers) at the Port who have knowledge and access to much of the Port's data that could be compiled and used in an integrated report. The initial meetings were conducted in the summer months of 2013 during my internship at the Port. It was at this time that I completed the gap analysis for all of the environmental indicators. I concluded whether or not the data was available, unavailable, or needed extensive reformatting to include in a report. The second part of this process involved several conference calls done from Eugene throughout the spring of 2014 to gain

information on available data to address the economic and social indicators. My manager at the Port of Portland, Phil Ralston, helped me identify who would have the data and arranged the calls that connected me with these people. The calls were meant to provide the employees context as to why we were looking for information regarding sustainability reporting, and for them to provide a personal assessment on whether or not the data was available for reporting, unavailable or non-existent, or if it needed some manipulation before it would be available to include in an annual sustainability report. Everyone's responses regarding the status of the data were compiled in a spreadsheet next to the GRI indicator. The results of this gap analysis are provided in **Appendix A** of this report and in a separate workbook.

Part III— Survey of North American Reporting Organizations

The final component of this project was a survey sent out to the employees that led the sustainability reporting process at their respective airports. Phil Ralston also provided me the contact information for the individuals responsible for the sustainability reports reflecting the Toronto-Pearson, Dallas/Fort Worth, Hartsfield-Jackson and San Diego International Airports. Only two out of the four airports provided their insight, but these answers will provide the Port with some insight on the costs and benefits of creating a large-scale integrated report. Questions were provided to the four contacts, some of which asked them to rank their answers on a scale of 1-5 and some which were more open-ended. These questions are listed in **Appendix B**.

Restraints

As mentioned before, this analysis is limited to sustainability/corporate responsibility reports that have been produced using the Global Reporting Initiative standards and guidelines. The analysis is also limited to reports that are written in the English language. Many of the reports that come out of countries where English is not the predominant language are still available in English (i.e. Airports of Thailand), yet reports out of some other countries have not provided an English translation for their report (i.e. Airport Authority Hong Kong). These are two important distinctions when considering the scope of this project.

The survey portion of this project was limited to the individuals from the United States and Canada who chose to respond to my request. My manager only had the contact information for the airports from these two countries, so it limited the type of responses received. Only two of the four people who were contacted were able to provide their feedback for this project. Despite this, the responses they gave will be very useful for the Port of Portland if they decide to pursue this type of integrated annual reporting.

Results

Part I—Benchmarking

The benchmarking process revealed that the GRI reports varied greatly between airports, especially depending on the grade-level each airport received for its report. Since the GRI is a voluntary reporting organization and allows its members a fair amount of autonomy, the reports that fall under the GRI framework vary in length and

content. Some airports reported on almost all 93 indicators (economic, social and environmental) that fall under the Airport Operator Sector Supplement, while others reported on a very minimal amount and kept their reports relatively short.

The following are the lists of economic (**Table 4**), social (**Table 5**) and environmental (**Table 6**) indicators that include the number of reporting organizations that reported on each indicator. The lists are in descending order, from most reported indicators to least reported indicators. Summary graphs of the findings can be found in **Figures 1, 2 and 3** in the **Appendix A**.

Table 4—Economic Indicators in Descending Order by Number of Reporting Organizations

AOSS G3.1 Performance Indicator	Economic Indicator Code	Total Number of Reporting Organizations	Percent of Reporting Organizations
Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations, and other community investments, retained earnings, and payments to capital providers and governments.	EC1	19	100%
Total number of passengers annually, broken down by passengers on international and domestic flights and broken down by origin-and-destination and transfer passengers, including transit passengers	AO1	15	79%
Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	EC8	15	79%
Significant financial assistance received from government	EC4	14	74%
Annual total number of aircraft movements by day and night, broken down by commercial passenger, commercial cargo, general aviation and state aviation flights	AO2	14	74%
Total amount of cargo tonnage	AO3	13	68%
Coverage of the organization's defined benefit plan obligations	EC3	12	63%
Financial implications and other risks and opportunities for the organization's activities due to climate change	EC2	11	58%

Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	EC6	11	58%
Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	EC7	11	58%
Understanding and describing significant indirect economic impacts, including the extent of impacts	EC9	11	58%
Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	EC5	7	37%

The indicators related to the economic value generated and distributed, total passenger traffic, impact of infrastructure development, significant financial assistance received from the government, and annual aircraft movements were the most widely reported economic indicators. On the other hand, the indicators related to ratios of entry level wages by gender, indirect economic impacts, procedures for local hiring, policies on locally-based suppliers, and coverage of the organization’s defined benefit plans were the least commonly reported economic indicators. The difference between the number of organizations that reported on each indicator may be due to the ease with which data can be collected and analyzed. For example, it is much easier to calculate the direct economic impacts rather than indirect economic impacts or the financial implications of climate change. Although all three are important indicators for an organization, the latter two would require extensive research outside of standard financial accounting. Other indicators, such as range of ratios of standard entry-level wages by gender compared to local minimum wages, may not be reported because they are culturally difficult topics to discuss. Some organizations may collect the data, but choose not to report it.

Table 5—Social Indicators in Descending Order by Number of Reporting Organizations

AOSS G3.1 Performance Indicator	Social Indicator Code	Total Number of Reporting Organizations	Percent of Reporting Organizations
Total Workforce by employment type, employment contract, and region, broken down by gender.	LA1	18	95%
Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	LA7	18	95%
Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	LA13	16	84%
Total number and rate of new employee hires and employee turnover by age group, gender, and region.	LA2	15	79%
Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	LA11	15	79%
Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	LA3	14	74%
Percentage of employees covered by collective bargaining agreements	LA4	14	74%
Average hours of training per year per employee, by gender, and by employee category	LA10	14	74%
Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	PR5	14	74%
Percentage of employees receiving regular performance and career development reviews, by gender.	LA12	13	68%
Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	HR6	13	68%
Total annual number of wildlife strikes per 10,000 aircraft movements	AO9	13	68%
Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	LA8	12	63%
Percentage of employees trained in organization's anti-corruption policies and procedures	SO3	12	63%
Actions taken in response to incidents of corruption	SO4	12	63%

Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	LA6	11	58%
Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	HR1	11	58%
Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken	HR2	11	58%
Total number of incidents of discrimination and corrective actions taken	HR4	11	58%
Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	HR5	11	58%
Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	HR7	11	58%
Percentage of operations with implemented local community engagement, impact assessments, and development programs	SO1	11	58%
Operations with significant potential or actual negative impacts on local communities	SO9	11	58%
Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	SO10	11	58%
Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	PR1	11	58%
Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	PR3	11	58%
Ratio of basic salary remuneration of women to men by employee category, by significant locations of operation	LA14	10	53%
Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	HR8	10	53%
Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms	HR11	10	53%

Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	PR6	10	53%
Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	PR8	10	53%
Return to work and retention rates after parental leave, by gender	LA15	9	47%
Health and safety topics covered in formal agreements with trade unions.	LA9	9	47%
Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	HR10	9	47%
Percentage and total number of business units analyzed for risks related to corruption	SO2	9	47%
Public policy positions and participation in public policy development and lobbying	SO5	9	47%
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	SO8	9	47%
Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.	PR7	9	47%
Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	PR9	9	47%
Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	LA5	8	42%
Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	HR3	8	42%
Total number of incidents of violations involving rights of indigenous people and actions taken.	HR9	8	42%
Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	PR4	8	42%
Number of persons physically or economically displaced, either voluntarily or involuntarily, by the airport operator or on its behalf by a government or other entity, and compensation provided	AO8	7	37%
Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	SO6	7	37%

Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	SO7	7	37%
Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes	PR2	7	37%

The indicators related to characterizing the workforce, rates of injury and absenteeism, and composition of the governance bodies were the most commonly reported social indicators. Alternatively, indicators related to incidences of non-compliance with regulations (health and safety), legal actions for anti-competitive behavior, financial contributions to political entities, number of people physically or economically displaced, incidences of non-compliance with regulations (product and service information), incidences of violating indigenous rights, hours of employee training on human rights policies, and minimum notice periods regarding operational changes were the least commonly reported social indicators. The most commonly reported social indicators are ones that have easily attainable data for an organization, such as tracking statistics on its employees. Human resource departments commonly capture this type of data. The social indicators reported on the least are most likely indicators that are not material to the reporting organization. In some countries, indicators related to violation of human rights, indigenous rights, or contributions to political parties may not apply to airport organizations. Of course, in many cases it depends on how the organization defines terms such as human rights or contributions. It is also possible that organizations may choose not to reply to an indicator because the topic is culturally sensitive.

Table 6—Environmental Indicators in Descending Order by Number of Reporting Organizations

AOSS G3.1 Performance Indicator	Environmental Indicator Code	Total Number of Reporting Organizations	Percent of Reporting Organizations
Direct Energy Consumption by Primary Energy	EN3	18	95%
Total water withdrawal by source	EN8	18	95%
Total weight of waste by type and disposal method	EN22	18	95%
Indirect Energy Consumption by primary source	EN4	17	89%
Total direct and indirect greenhouse gas emissions by weight	EN16	17	89%
Energy Saved Due to Conservation and Efficiency Improvements	EN5	15	79%
Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	EN26	15	79%
Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	EN6	14	74%
Initiatives to reduce greenhouse gas emissions and reductions achieved	EN18	14	74%
Initiatives to reduce indirect energy consumption and reductions achieved	EN7	13	68%
Quality of storm water by applicable regulatory standards	AO4	12	63%
Habitats protected or restored	EN13	12	63%
NOx, SOx, and other significant air emissions by type and weight	EN20	12	63%
Total water discharge by quality and destination	EN21	12	63%
Number and percentage change of people residing in areas affected by noise	AO7	12	63%
Percentage of Materials Used that are Recycled Input Materials	EN2	11	58%
Percentage of total volume of water recycled and reused	EN10	11	58%
Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	EN11	11	58%
Other relevant indirect greenhouse gas emissions by weight	EN17	11	58%

Aircraft and pavement de-icing/anti-icing fluid used and treated in m3 and/or tonnes	AO6	11	58%
Total environmental protection expenditures and investments by type	EN30	11	58%
Materials Used by Weight or Volume	EN1	10	53%
Strategies, current actions, and future plans for managing impacts on biodiversity.	EN14	10	53%
Ambient air quality levels according to pollutant concentrations in microgram per m3 or parts per million (ppm) by regulatory regime	AO5	10	53%
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	EN28	10	53%
Water sources significantly affected by withdrawal of water	EN9	9	47%
Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	EN12	9	47%
Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	EN29	9	47%
Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	EN15	8	42%
Emissions of ozone-depleting substances by weight	EN19	8	42%
Total number and volume of significant spills	EN23	8	42%
Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	EN25	7	37%
Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	EN24	6	32%
Percentage of products sold and their packaging materials that are reclaimed by category	EN27	6	32%

The indicators related to direct energy consumption, water withdrawal, total weight of waste, indirect energy consumption, direct and indirect greenhouse gas emissions, energy saved due to conservation and efficiency improvements, and initiatives to mitigate environmental impacts were the most commonly reported environmental indicators. The indicators related to reclaiming packaging material, weight of hazardous waste, characterizing habitats, total number of spills, emissions of ozone-depleting substances, and endangered species living within areas of operations were the least commonly reported environmental indicators. The environmental indicators most commonly reported on are the ones that are often somehow linked to financial accounting or require data collection to satisfy environmental regulations. For example, energy and water consumption are directly related to the costs of the organization. It would be beneficial for organizations to track these dimensions of business operations. Greenhouse gas emissions are now heavily regulated, so many organizations are required to track this data. The least commonly reported environmental indicators might not be material to business as well as some of the social indicators. Airports don't commonly deal with packaging products or transporting hazardous waste, so it would not make sense for the organizations to have data on such indicators.

The second part of the benchmarking process entailed providing a proportion of pages that were dedicated to each indicator by the various reporting organizations. This data is summarized in an external workbook where several spreadsheets break down the data by the grade-level of the organization's report (A, B or C) and the country. There is a proportion of pages provided for each indicator, followed by the range of proportions

across all of the reporting organizations in that grade-level and the different mediums that were used to convey the information. For example, Economic Indicator EC1 had a range of <0.25 page to 3.5 pages across all A-level reports, with text, tables graphs and graphics used to display information that supports this economic indicator. This will help the individuals responsible for each dataset to look at the amount of depth other organizations are going into when addressing each indicator. An example of this information is displayed below in **Table 7** to help visualize what the data looks like in the workbook. Summary graphs for the data available in the workbook are provided in **Appendix C**.

Table 7—Visual Example of Data in External Workbook (A-Level Groups)

	Schiphol Group	Ostend-Bruges Int'l Airport	Aeroports De Paris	Aena	Abu Dhabi Airports Company	Airports of Thailand	Hartsfield-Jackson Atlanta Int'l Airport	Dallas Fort-Worth	ASUR	Range	Mediums
EC1	4 pages (text and table)	1 page (table and text)	1 page (graph in body), <0.25 page (table in index)	4.25 pages (text, table and graph)	0.75 page (text, table and graph)	0.5 page (text and table)	8 pages (text, table and graphs)	1 page (graphs)	1 page (text and table)	0.5 page to 8 pages	Text, table and graph

Part II—Gap Analysis

The gap analysis is a reflection of what data the Port currently has available to them to include in a sustainability report. The Port of Portland is such a large organization that is involved in many different endeavors, so it is challenging to know all of the datasets that are in their possession. This gap analysis is one way to aggregate this information regarding what type of data is desired, the status of these datasets at the Port of Portland, what employee is a point of contact for this data, and how the Port compares to other reporting organizations regarding availability of data.

After speaking with several Port of Portland employees, I was able to gain a sense of what data was available, what data was unavailable because it is not directly tracked, and what data was completely unavailable. After completing these series of meetings and conference calls, I concluded that the Port could report on 8 out of the 12 economic indicators, 19 out of the 47 social indicators, and 23 out of the 34 environmental indicators without further data collection. There are several graphs available in the Appendix that visually display how the Port of Portland compares to other reporting organizations. **Figures 4-15 in Appendix A** show how the number of economic, social and environmental indicators the Port could potentially report compares to the number of indicators reported by other organizations. These graphs are categorized according to the grade-level of the organization (A, B or C) and the types of indicators (economic, social or environmental). According to the graphs, it appears the Port of Portland tends to fall just below the A-Level groups. Instead, the Port seems to compare much better to the B-Level organizations and has a lot more data to report than the C-level organizations reported. **Table 8** below shows the average indicators reported by grade-level compared to how many indicators the Port could report. Average values are rounded to the nearest whole number.

Table 8—Comparing the Port of Portland to Average Indicators Reported by Other Organizations According to Grade-Level

	A-Level (avg.)	B-Level (avg.)	C-Level (avg.)	Port of Portland
Economic	11	7	4	8

Social	43	21	8	19
Environmental	31	18	8	23

*The columns for B-Level averages and the Port of Portland have been shaded yellow to highlight their similarity

It is important to note that the distinction between grade-level applications is not merely the number of indicators reported, but the number of core indicators that an organization can address. As mentioned before, the B-Level application requires that organizations report on at least 20 performance indicators. The Port of Portland easily meets this requirement. The A-level application requires organizations to report on all of the core and supplemental indicators in the Airport Operators Sector Supplement and G3.1 Guidelines. There are 3 economic, 10 environmental and 17 social core performance indicators the Port of Portland is currently unable to include in a report (30 indicators total). In order to achieve an A-level application, the Port would have to change some of its data management systems overtime to begin tracking information for these indicators. **Table 6** below provides the list of core indicators the Port of Portland would need to provide data for to achieve the A-level application.

Table 9—Core Indicators the Port of Portland is Currently Unable to Include in Report

Performance Indicator	Indicator Code	Standard Disclosure, AOSS	Core/Non-Core
Financial implications and other risks and opportunities for the organization’s activities due to climate change.	EC2	Standard Disclosure	Core
Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	EC6	Standard Disclosure	Core
Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	EC7	Standard Disclosure	Core
Materials used by weight or volume.	EN1	Standard Disclosure	Core
Percentage of materials used that are recycled input materials.	EN2	Standard	Core

		Disclosure	
Quality of storm water by applicable regulatory standards.	AO4	AOSS	Core
Total direct and indirect greenhouse gas emissions by weight	EN16	Standard Disclosure	Core
Other relevant indirect greenhouse gas emissions by weight	EN17	Standard Disclosure	Core
NOx, SOx, and other significant air emissions by type and weight	EN20	Standard Disclosure	Core
Total water discharge by quality and destination	EN21	Standard Disclosure	Core
Total number and volume of significant spills	EN23	Standard Disclosure	Core
Percentage of products sold and their packaging materials that are reclaimed by category	EN27	Standard Disclosure	Core
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	EN28	Standard Disclosure	Core
Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	LA5	Standard Disclosure	Core
Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	LA8	Standard Disclosure	Core
Average hours of training per year per employee, by gender, and by employee category	LA10	Standard Disclosure	Core
Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	HR1	Standard Disclosure	Core
Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken	HR2	Standard Disclosure	Core
Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	HR3	Standard Disclosure	Core
Total number of incidents of discrimination and corrective actions taken	HR4	Standard Disclosure	Core
Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	HR5	Standard Disclosure	Core
Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	HR6	Standard Disclosure	Core
Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	HR7	Standard Disclosure	Core
Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	HR10	Standard Disclosure	Core
Number of persons physically or economically displaced, either voluntarily or involuntarily, by the airport operator or on its behalf by a government or other entity, and compensation provided	AO8	AOSS	Core
Percentage and total number of business units analyzed for risks related to corruption	SO2	Standard Disclosure	Core
Percentage of employees trained in organization's anti-corruption policies and procedures	SO3	Standard Disclosure	Core
Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such	PR1	Standard Disclosure	Core

procedures			
Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	PR3	Standard Disclosure	Core
Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	PR9	Standard Disclosure	Core

Part III—Survey of North American Reporting Organizations

A survey was sent to four of the reporting organizations from this study, all of which exist in North America. This survey was sent to the individuals responsible for overseeing the reports at the Dallas/Fort Worth, San Diego, Hartsfield-Jackson Atlanta, and Toronto-Pearson International Airports. Survey responses were received from the people at the Toronto-Pearson and San Diego airports. Responses to the survey were collected through the online service SurveyMonkey. The raw feedback is provided below in **Table 10** and **Table 11**:

Table 10—Raw Responses from Respondent 1 from Toronto-Pearson International Airport

Q1: Please assess the reasons why you chose the GRI as the reporting framework (scale of 1—Of little importance to 5—Of great importance)	
GRI was the leading reporting framework	5—Of great importance
GRI was being used by other organizations that we respect	2
GRI was required by one of our stakeholders	1—Of little importance
GRI was the least expensive reporting framework	1—Of little importance
GRI was the best strategic fit for our organization	5—Of great importance
Other (please specify)	GRI reports on sustainability, pure and simple that is all it claims to do. The guidelines were developed by world-wide experts. If I address all the items in the GRI my company may not be sustainable but we have a better idea os what sustainability means and where we are.
Q2: How large was the committee that worked on this report? Please provide the number of individuals.	
The report itself is the end point, first you need to determine what is material to the company, then you have to produce a program to gather the information needed (data gathering has to be repeatable), So if you have say ten material aspects you need 10 programs and ten data gatherers plus to data reviewers. Depending on the company the data must pass through internal audit. If the report is a combined annual	

<p>and sustainability report there is the company information and MD&A that is produced by the legal and finance department that requires external assurance. The GRI, in the G\$ guidelines requires up to 56 questions on governance be answered. There are also innumeral questions in the GRI that you need to consider. It is the process behind the report that is time consuming the report can be contracted out or in our case one employee half time to manage the GRI, one employee 1/4 time to manage the contract with a creative firm to create the fancy front end and compile the report and however many it takes to produce the financial portion of a combined annual/sustainability report...but that information must be gathered regardless</p>	
<p>Q3: In terms of calendar months, how long did it take to assemble the report? _____ months</p>	
<p>Years to get the background information process setup and once everything is working efficiently 4 months for combined annual and sustainability report every subsequent year</p>	
<p>Q4: As compared to outside agencies and consultants, what percentage of the effort that went into the GRI report was in-house? _____ %</p>	
<p>90% all except for the shiny front end</p>	
<p>Q5: Including the cost of people's time, please estimate the total cost of developing the GRI report? _____ (please include currency units)</p>	
<p>\$12.65. You can't manage what you can't measure. I tap 20 people for data, how many hours they spend gathering it I don't know. The sad fact is that much of that data was never gathered before. Having that data collected and published meant a lot of processes were changed. The ongoing cost is one person year plus a lot of hidden costs</p>	
<p>Q6: In terms of person-months for individuals at your organization, what was the total effort? _____ person-months</p>	
<p>one person-year once the program was up and running</p>	
<p>Q7: How has your organization benefitted from your GRI reporting process?</p>	
It helps us to measure our progress over time	5—Of great importance
It creates public relations benefits	5—Of great importance
It assists us in our strategic planning	5—Of great importance
It helps us learn how to save money	3
It is considered a responsible action by our stakeholders	5—Of great importance
Other (please specify)	We also won the best sustainability disclosure reporting award for company's under 2 billion in revenue in Canada in 2013
<p>Q8: What was your process for deciding which performance indicators to use in the report? (open-ended)</p>	
<p>Identify stakeholders, gather all surveys, comments, complaints, SWAT analysis, interview executives, 1, 5 and 20 year business and strategic plans, company goals and compare them against GRI criteria. Make a nice chart (totally subjective) and hope it comes close to the companies goals for the year or it becomes a little embarrassing.</p>	
<p>Q9: Please share with us any other thoughts about your organization's experience with creating and disseminating your GRI-compliant report (open ended).</p>	
<p>Takes a short time and a fancy consultant to get a shiny award winning report but it takes a long time and a lot of work to put a solid background to the report. Remember you are reporting on sustainability so you should be practicing it. You greenwash and get caught and shit happens. One thing that is important to remember that there are a lot of GRI questions that your company should answer because if you don't they raise questions. these answers don't belong in your report but should be available in a "supplement" posted on the web to back up your report</p>	

Table 11—Raw Responses from Respondent 2 from San Diego International Airport

Q1: Please assess the reasons why you chose the GRI as the reporting framework (scale of 1—Of little importance to 5—Of great importance)	
GRI was the leading reporting framework	5—Of great importance
GRI was being used by other organizations that we respect	4
GRI was required by one of our stakeholders	2
GRI was the least expensive reporting framework	3
GRI was the best strategic fit for our organization	4
Other (please specify)	N/A
Q2: How large was the committee that worked on this report? Please provide the number of individuals.	
2	
Q3: In terms of calendar months, how long did it take to assemble the report? _____ months	
6	
Q4: As compared to outside agencies and consultants, what percentage of the effort that went into the GRI report was in-house? _____ %	
95	
Q5: Including the cost of people's time, please estimate the total cost of developing the GRI report? _____ (please include currency units)	
\$60,000.00	
Q6: In terms of person-months for individuals at your organization, what was the total effort? _____ person-months	
10	
Q7: How has your organization benefitted from your GRI reporting process?	
It helps us to measure our progress over time	4
It creates public relations benefits	4
It assists us in our strategic planning	4
It helps us learn how to save money	3
It is considered a responsible action by our stakeholders	5—Of great importance
Other (please specify)	Gives us a repeatable, defined framework to use as a starting point. Helps us to identify areas of strength and weakness regarding sustainability data.
Q8: What was your process for deciding which performance indicators to use in the report? (open-ended)	
Initially - decided to report on indicators for which we felt data was available or obtainable. Second year - repeated data from previous year with a goal to expand the number of indicators.	
Q9: Please share with us any other thoughts about your organization's experience with creating and disseminating your GRI-compliant report (open ended).	
Our process was not "marketing driven" but I know that this experience is not always common.	

Conclusions

Part I—Benchmarking

The first part of this benchmarking process was to discover which indicators are reported on the most across all of the chosen airports. The economic, social and environmental indicators that are reported frequently are considered to be the most important indicators of sustainability to the airport industry. There was quite a bit of variation between airports on what they decided to include in their report, but the data provides the Port of Portland with the indicators that were most commonly addressed by their peers. Some indicators, such as the direct economic value generated and distributed, were included in all nineteen reports. Other indicators, such as the number of persons physically or economically displaced (voluntarily or involuntarily) were included in only seven reports. Since the GRI takes into account a global context when comparing airports, it is important to remember that not all indicators are material to every airport. It is likely that the airports that have enough money to undertake a GRI report and the confidence to exhibit full transparency tend to be located in countries where there are laws against displacing people for the purpose of constructing airports. Or perhaps the organizations simply do not have the ability to measure physical/economic displacement (voluntary or involuntary) with the current metrics. Conversely, every airport has a means and purpose for tracking their economic value generated and distributed.

Through the benchmarking process I was also able to measure the proportion of pages dedicated to each indicator throughout each report. This data has been stored in a workbook that will be provided to the Port of Portland. The workbook includes tabs that

are separated by grade-level and include all of the economic, social and environmental performance indicators with the corresponding proportion of pages dedicated to each indicator for all reporting organizations. The range of proportions across all of the organizations in that grade-level are provided, as well as the various mediums they used to communicate information. This should be useful for the employees at the Port of Portland who will participate in developing a sustainability report because it allows them to see how their peers allocated space in the reports to each sustainability indicator. This may also help provide a sense of how much work goes into addressing each measurement.

Part II—Gap Analysis

This gap analysis was meant to provide the Port of Portland a means of understanding what kind of data exists at their organization and how this data could help them develop an integrated GRI report. The analysis will help the Port understand how they currently compare to the GRI standards and the rest of the reporting organizations in their industry. After speaking with several individuals throughout the Port, I have concluded that their organization compares well with B-Level organizations in terms of how many indicators they could report. There is not enough data readily available to report on as many core indicators as the A-Level application requires. However, knowledge of the Port's current standings allows them to see where gaps exist and where they could potentially change the way they track certain data in the future. Some of the conversations I had with people gave me the impression that the Port has the means of responding to many of the indicators in the GRI, it's just that the

data isn't yet tracked and compiled in a way that it would be easily available for reporting.

Ultimately the Port of Portland will choose which indicators they wish to include in a sustainability report. This will be a very selective process that will require a lot of conversations with internal and external stakeholders. However, the gap analysis provides them a starting point to know what their possibilities are according to the data at the Port and what other members of the industry are choosing to report. The Port is located in Portland, OR, a city that prides itself on pioneering sustainability practices and has successfully branded itself as one of the most sustainable cities. Because of this, the Port of Portland should set its standards high and target an A-level report in the near future. The Port is the gateway to the city in many respects, and thus the organization should be a strong representative of sustainability. This includes reporting.

Part III—Survey of North American Reporting Organizations

The results of this survey help provide some insight into the experiences and feelings of people who are already engaging in the reporting process, as well as the reasons why they chose to report in the first place. Popular reasons for reporting seem to be that the GRI is a leading reporting framework, respected peers are using the GRI, and the GRI provides the best strategic fit for their organization. As far as how the organizations have benefited from reporting using the GRI, reporting is considered a responsible action by stakeholders, helps measure progress over time, creates public relations benefits, and helps with their strategic planning were all important results.

There are some interesting variations in the more open-ended responses from the two individuals. The Toronto-Pearson respondent seems to note a lot of initial start-up costs to begin the process of collecting data that was not originally tracked, as well as the hidden cost of people's time that goes into collecting data. He also seems to be the only individual working on the project, whereas the San Diego respondent replied that 10 individuals were responsible for putting together the report (most likely a committee). The San Diego respondent seems to have less jaded feelings toward the reporting process. My impression is the Toronto-Pearson individual was asked to put together a program that allows Toronto to develop an A-Level report annually, whereas the San Diego individual is a part of a small committee that is looking to slowly improve their reporting over time. Based on my experiences with the Port's Sustainability Integration Team, I believe the Port's experiences would be more similar to the San Diego experience. The Port does not seem interested in developing a full-blown A-Level report immediately, but rather adopt the most important and feasible indicators at first and slowly develop their program. Toronto is an A-Level reporting organization and San Diego is a C-level reporting organization, so the Port of Portland's experience would most likely fall somewhere in between the two.

Concluding Thoughts

This project provides the Port of Portland with an initial survey and roadmap to visualize how they could begin to report using the GRI framework. The most important portion of this project is the gap analysis, which allows the Sustainability Integration Team to see how they compare to other reporting

organizations in the industry and the data they have available to them. There is a lot of data, social data in particular, that could be discovered, but the tracking process has not yet been streamlined. This is something the Port could improve over time, and the gap analysis provides an idea of where to start.

Integrated sustainability reporting allows an organization to bring together and track all of their internal and external impacts on the triple bottom line (economic, social and environmental aspects of business). Whether or not the Port of Portland chooses to use the GRI framework, it is still helpful to know what peers in the industry view as important sustainable practices and how they are incorporating the collection of particular data into their business models. This will help the Port increase awareness regarding the type of data that is becoming more important to the industry and the community, and where transparency is encouraged and in some cases expected.

Appendix A

Figure 1—Total Economic Indicators Reported Across All Reporting Organizations

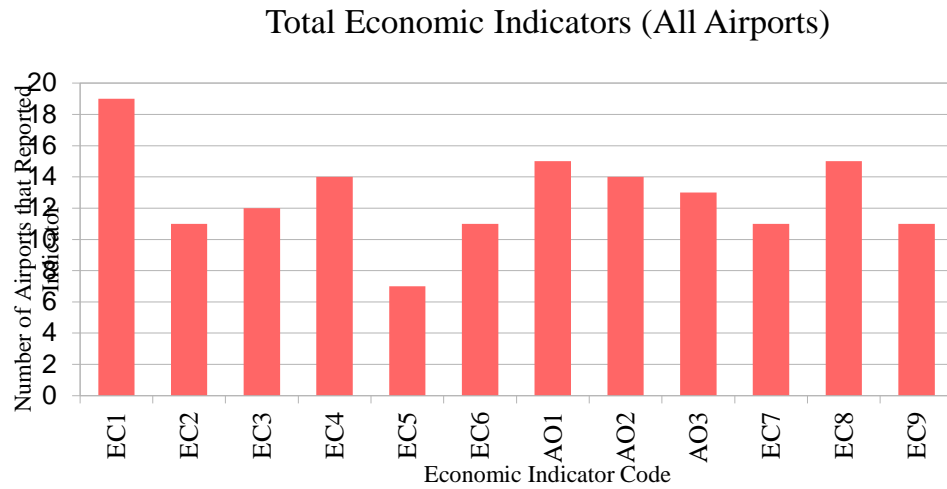


Figure 2— Total Social Indicators Reported Across All Reporting Organizations

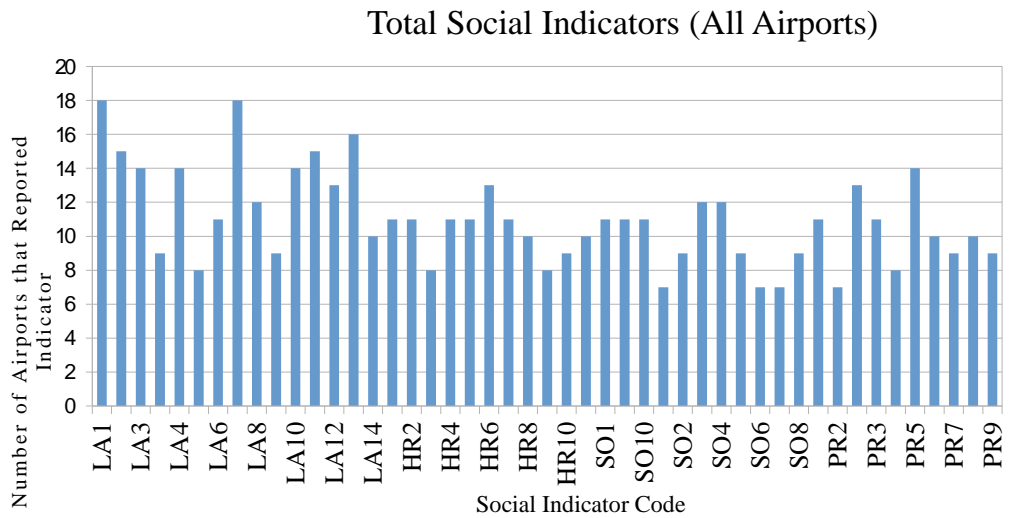


Figure 3— Total Environmental Indicators Reported Across All Reporting Organizations

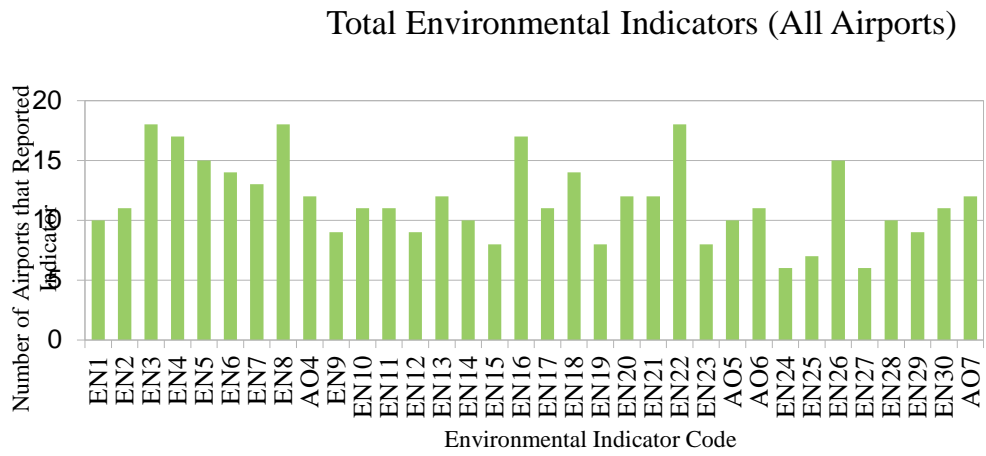


Figure 4—Comparing Port of Portland to Economic Indicators for All Organizations

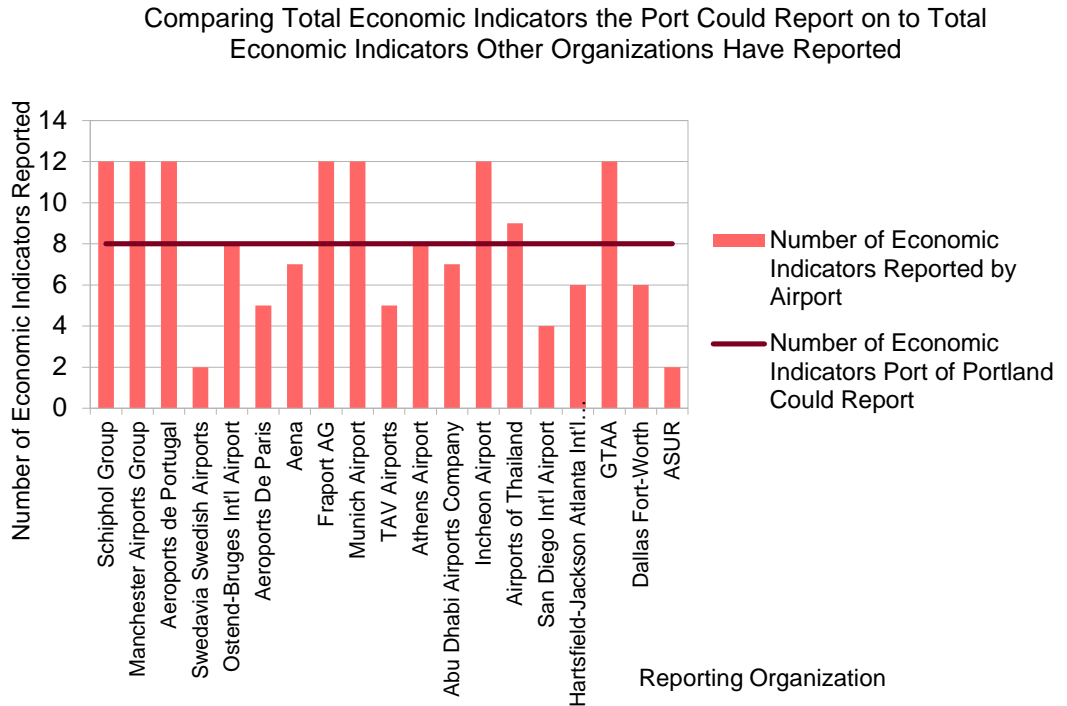


Figure 5— Comparing Port of Portland to Social Indicators for All Organizations

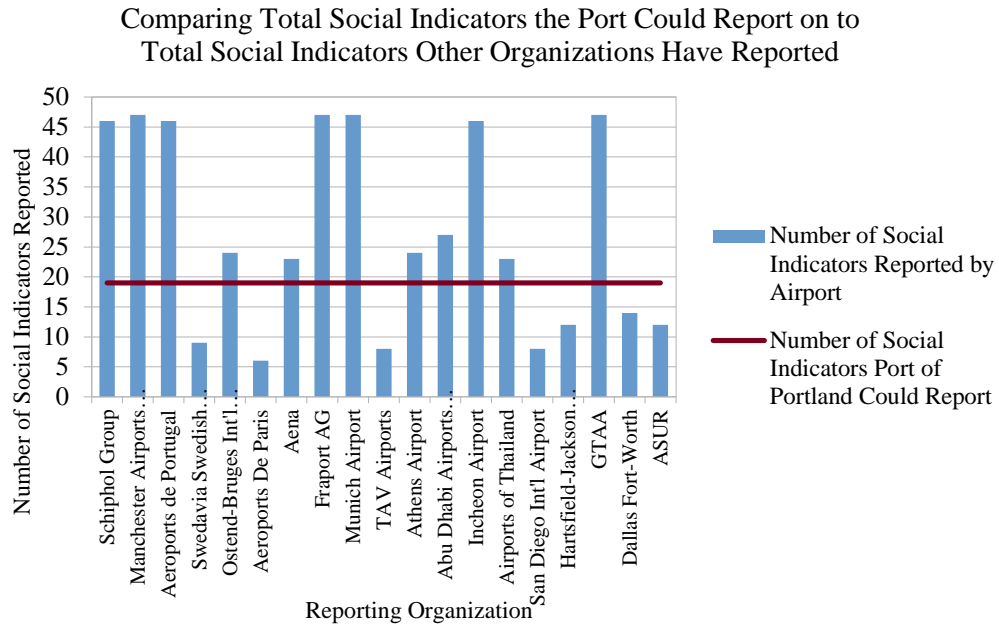


Figure 6—Comparing Port of Portland to Environmental Indicators for All Organizations

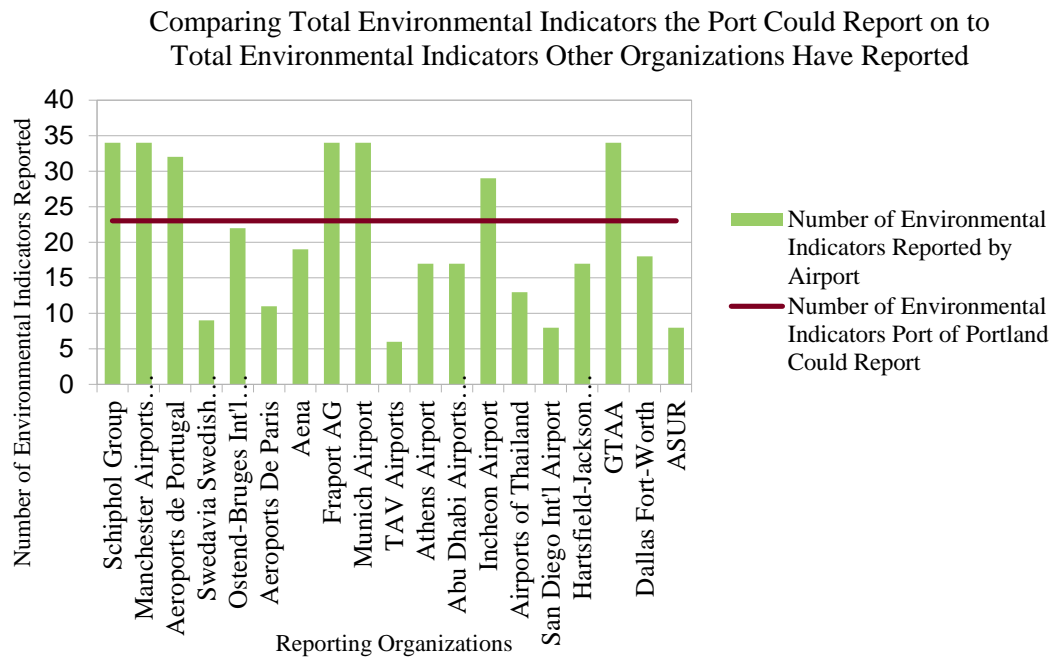


Figure 7—Comparing Port of Portland to Economic Indicators for A-Level Organizations

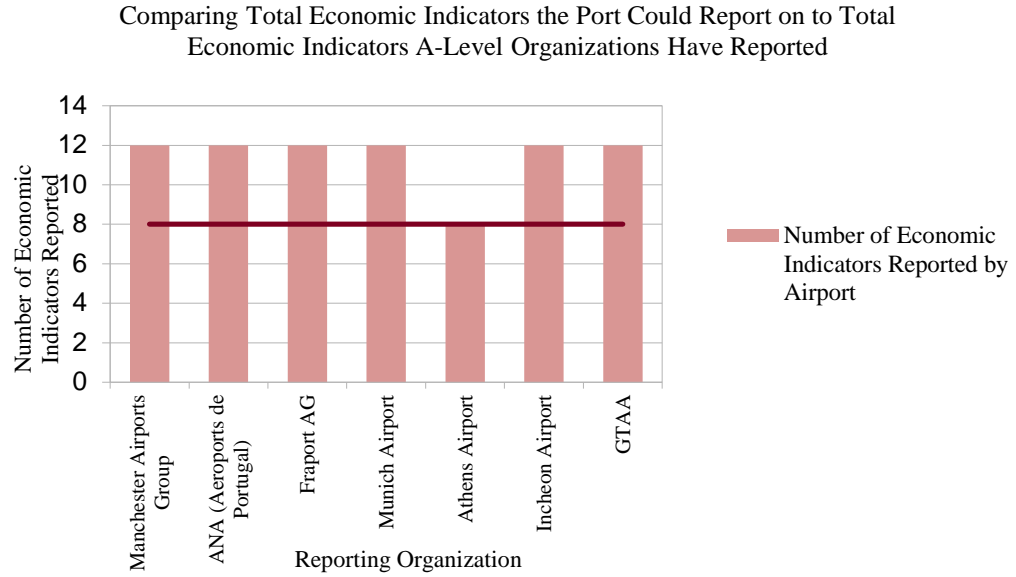


Figure 8—Comparing Port of Portland to Social Indicators for A-Level Organizations

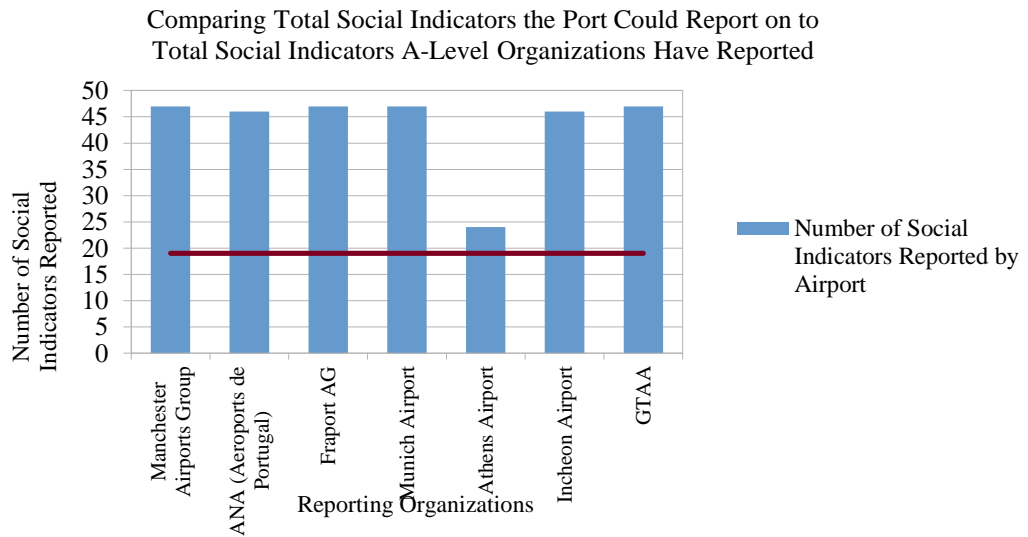


Figure 9—Comparing Port of Portland to Environmental Indicators for A-Level Organizations

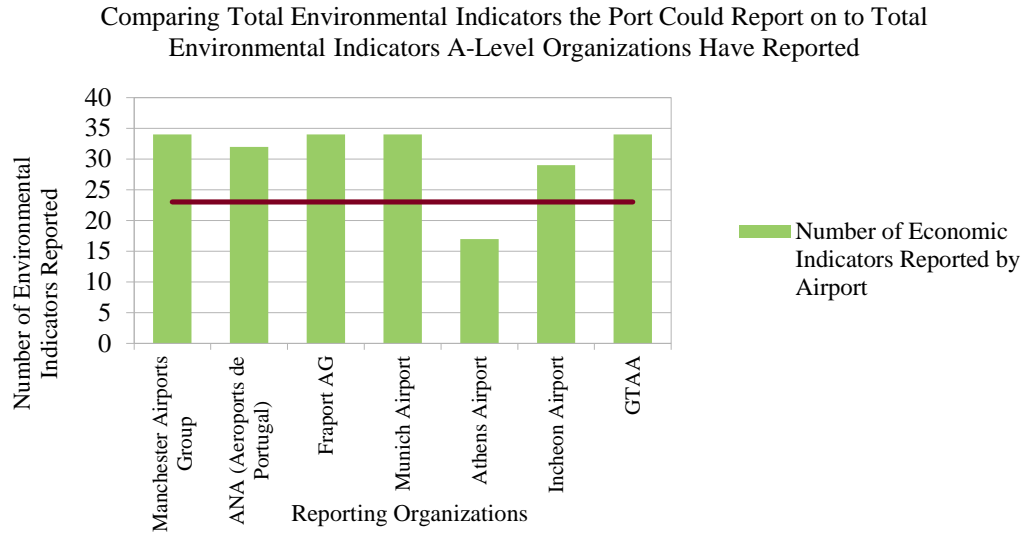


Figure 10—Comparing Port of Portland to Economic Indicators for B-Level Organizations

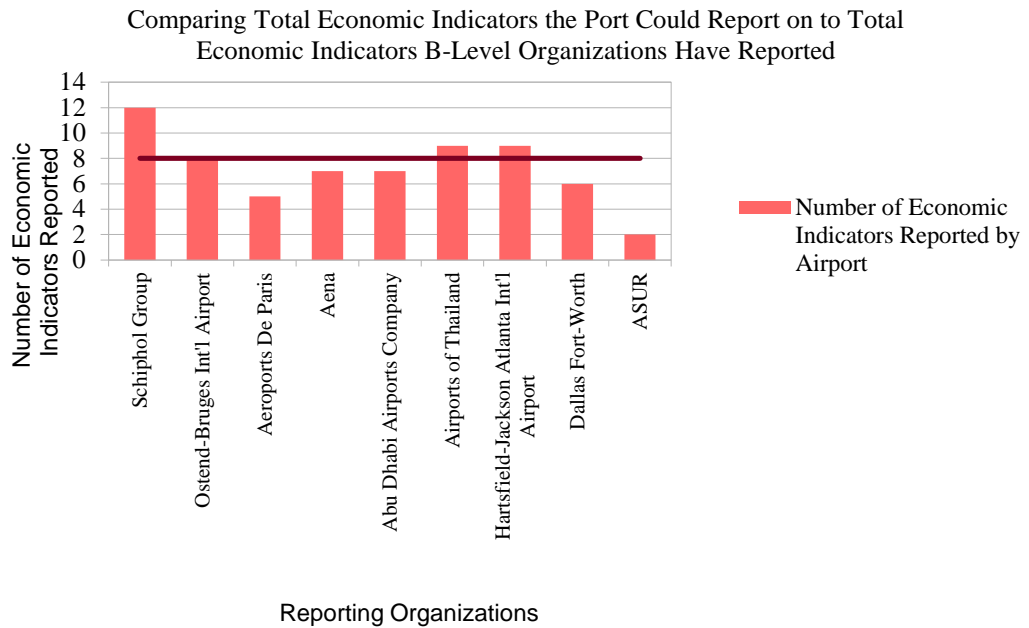


Figure 11— Comparing Port of Portland to Social Indicators for B-Level Organizations

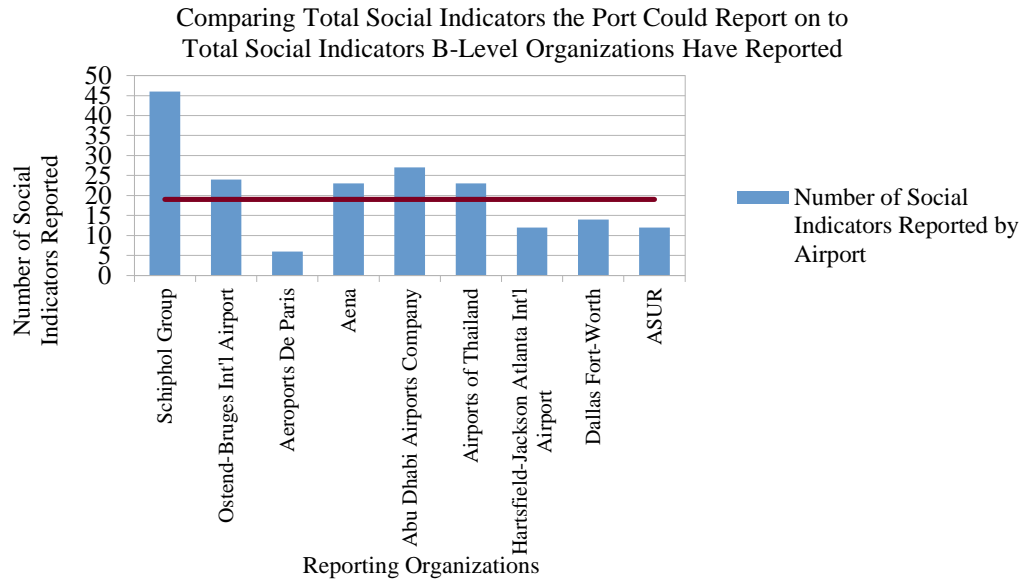


Figure 12— Comparing Port of Portland to Environmental Indicators for B-Level Organizations

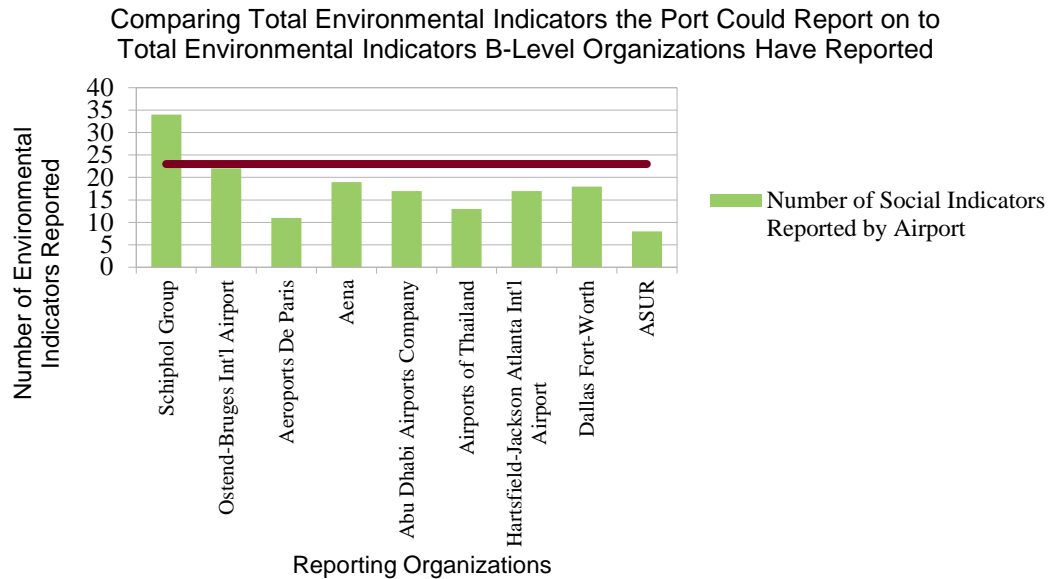


Figure 13— Comparing Port of Portland to Economic Indicators for C-Level Organizations

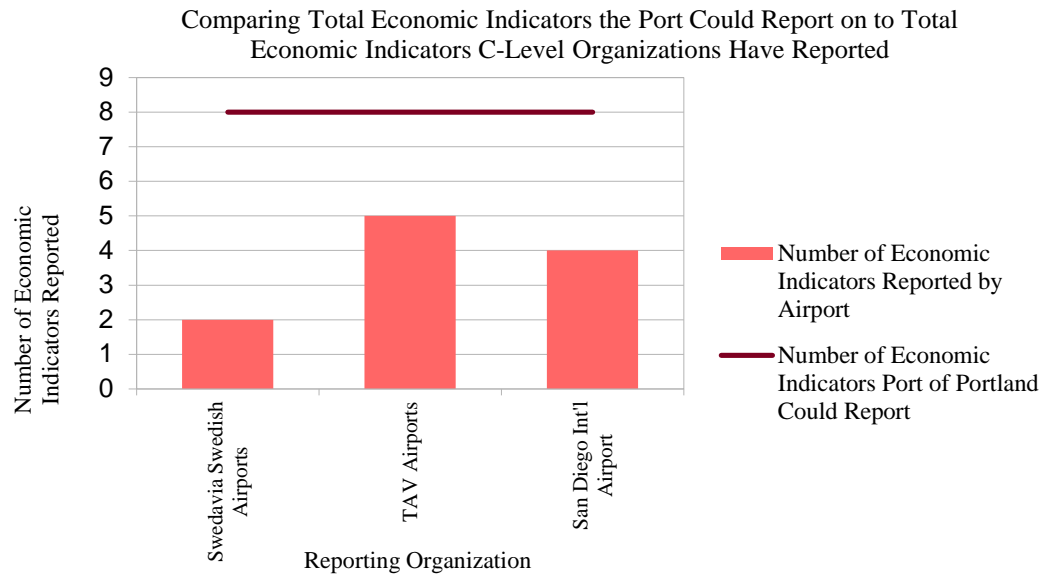


Figure 14— Comparing Port of Portland to Social Indicators for C-Level Organizations

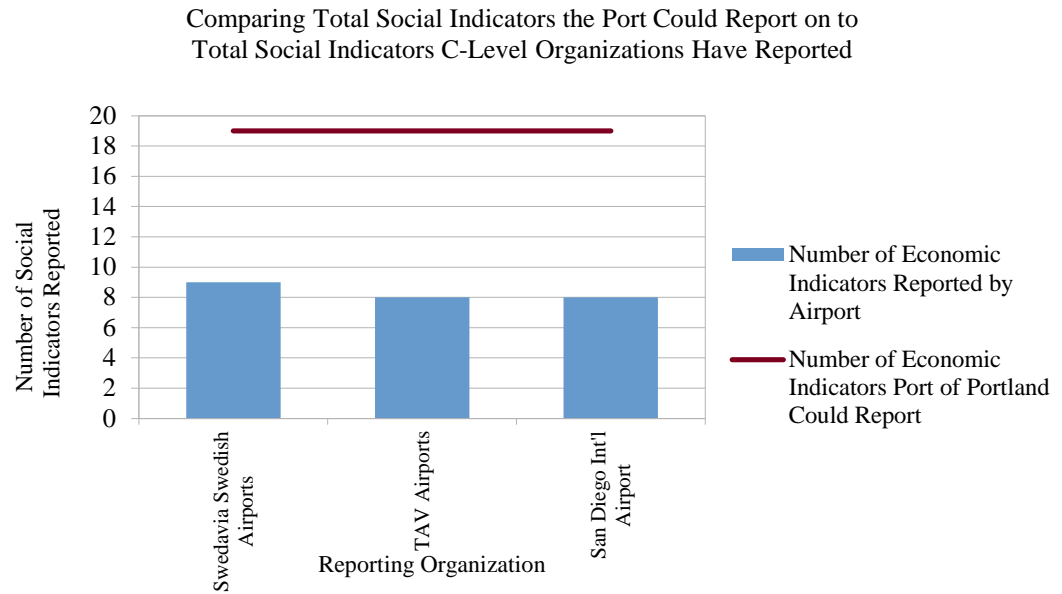
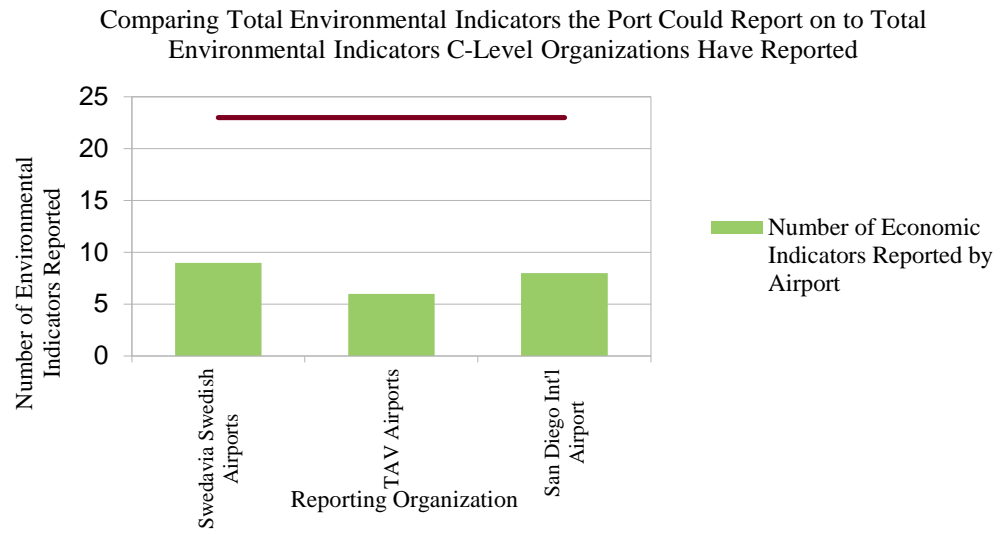


Figure 15— Comparing Port of Portland to Environmental Indicators for C-Level Organizations



Appendix B

1. Please assess the reasons why you chose the GRI as the reporting framework

Choices

GRI was the leading reporting framework

GRI was being used by other organizations that we respect

GRI was required by one of our stakeholders

GRI was the least expensive reporting framework

GRI was the best strategic fit for our organization

Other (please specify) _____

For each of these, a horizontal scale was provided to address the answer

Of minimal
Importance

1

2

3

4

Of great
importance

5

2. How large was the committee that worked on this report?

Please provide the number of individuals _____

3. In terms of calendar months, how long did it take to assemble the report?

_____ months

4. As compared to outside agencies and consultants, what percentage of the effort that went into the GRI report was in-house? _____%

5. Including the cost of people's time, please estimate the total cost of developing the GRI report? _____ (please include currency units)

6. In terms of person-months for individuals at your organization, what was the total effort? _____ person-months

7. How has your organization benefitted from your GRI reporting process?

It helps us to measure our progress over time

It creates public relations benefits

It assists us in our strategic planning

It helps us learn how to save money

It is considered a responsible action by our stakeholders

Other _____

For each of these, a horizontal scale was provided to address the answer:

Of minimal
Importance

1

2

3

4

Of great
importance

5

8. What was your process for deciding which performance indicators to use in the report? (Open-ended)
9. Please share with us any other thoughts about your organization's experience with creating and disseminating your GRI-compliant report (open-ended).

Appendix C

Figure 16—Minimum and Maximum Page Numbers for Economic Indicators (A-Level)

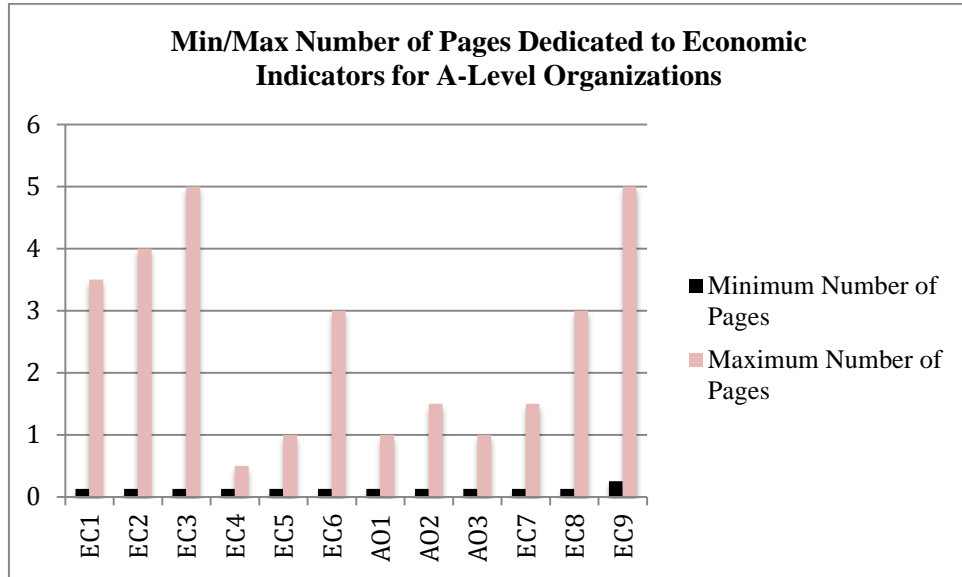


Figure 17— Minimum and Maximum Page Numbers for Social Indicators (A-Level)

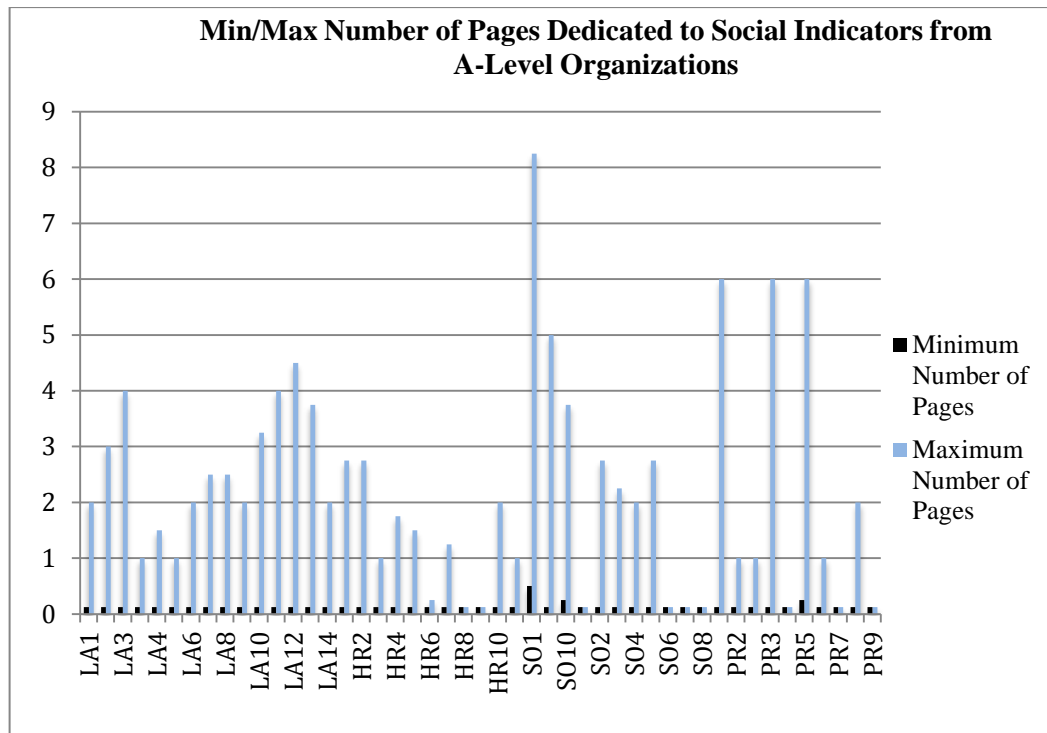


Figure 18— Minimum and Maximum Page Numbers for Environmental Indicators (A-Level)

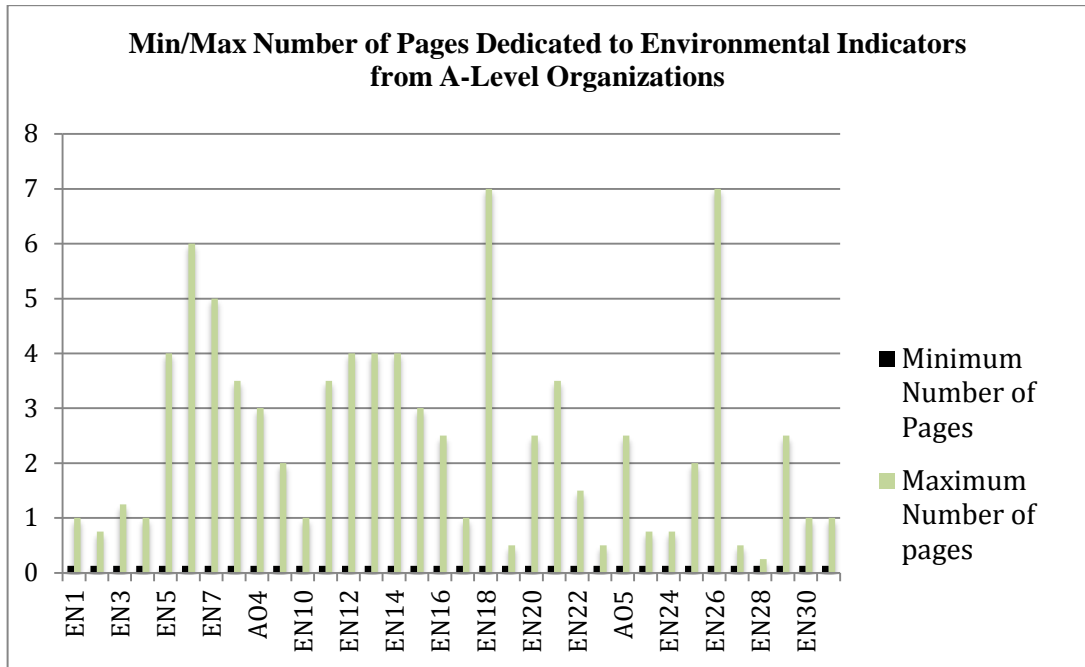


Figure 19— Minimum and Maximum Page Numbers for Economic Indicators (B-Level)

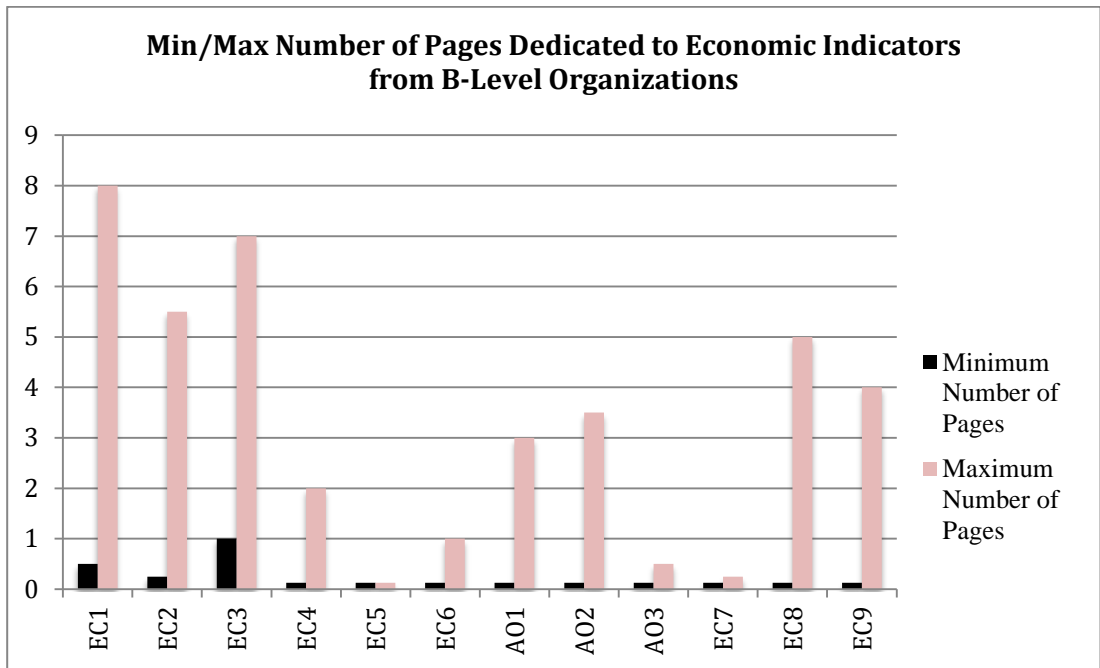


Figure 20— Minimum and Maximum Page Numbers for Social Indicators (B-Level)

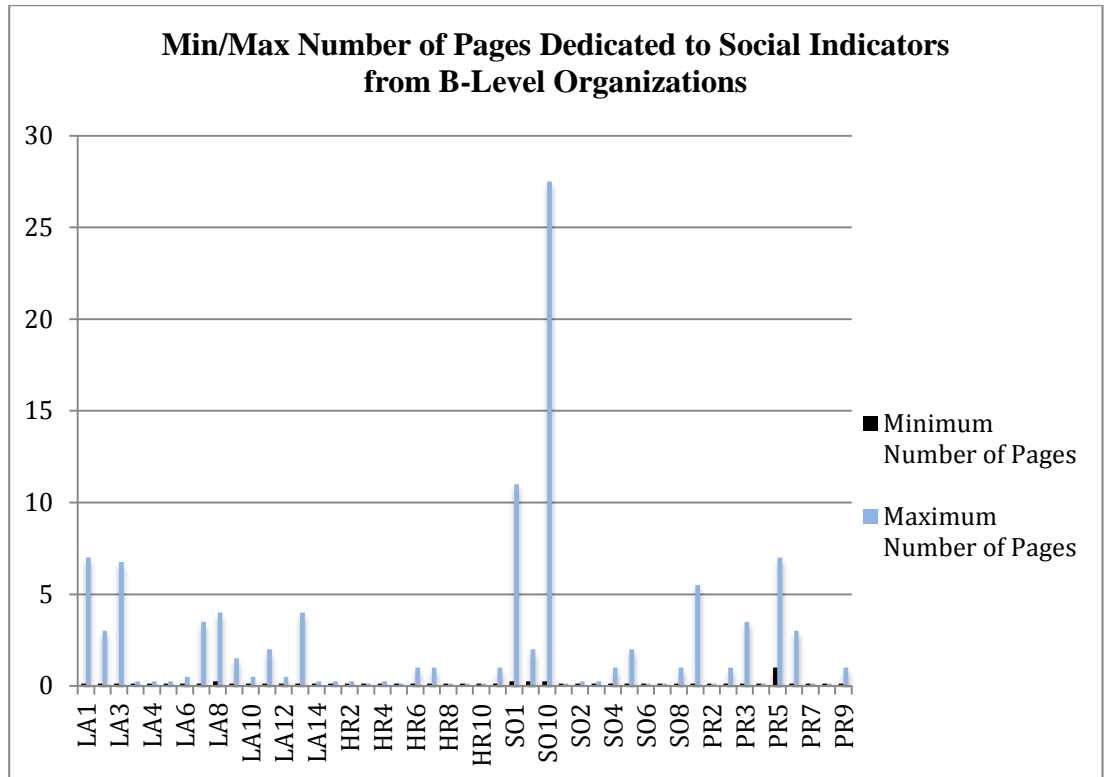


Figure 21— Minimum and Maximum Page Numbers for Environmental Indicators (B-Level)

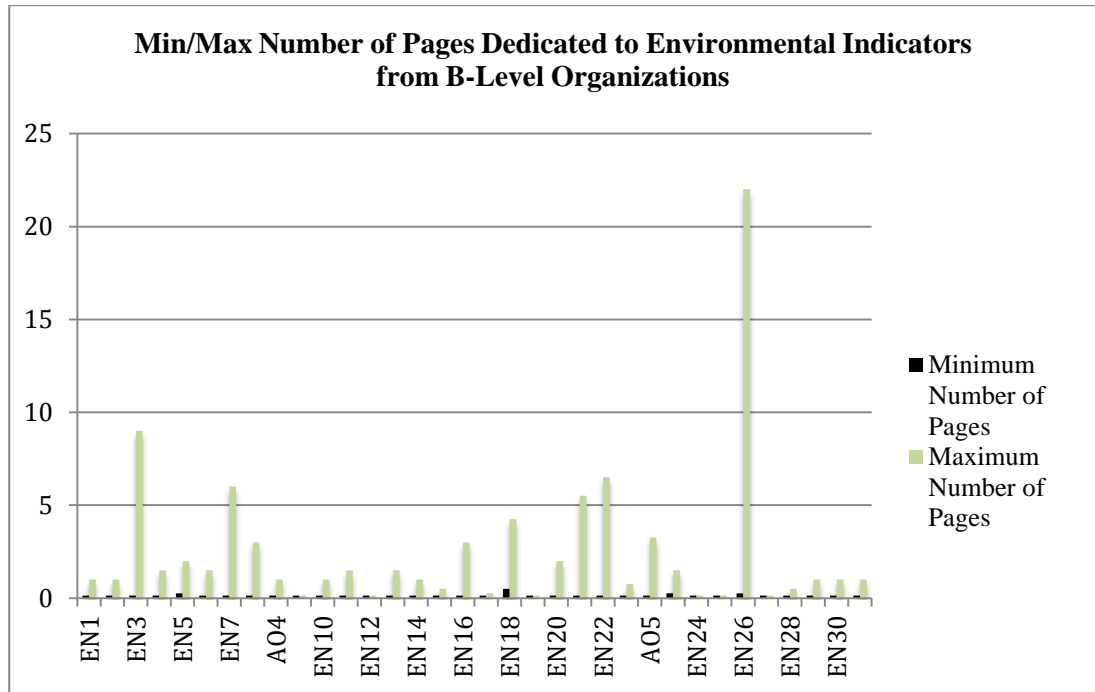


Figure 22— Minimum and Maximum Page Numbers for Economic Indicators (C-Level)

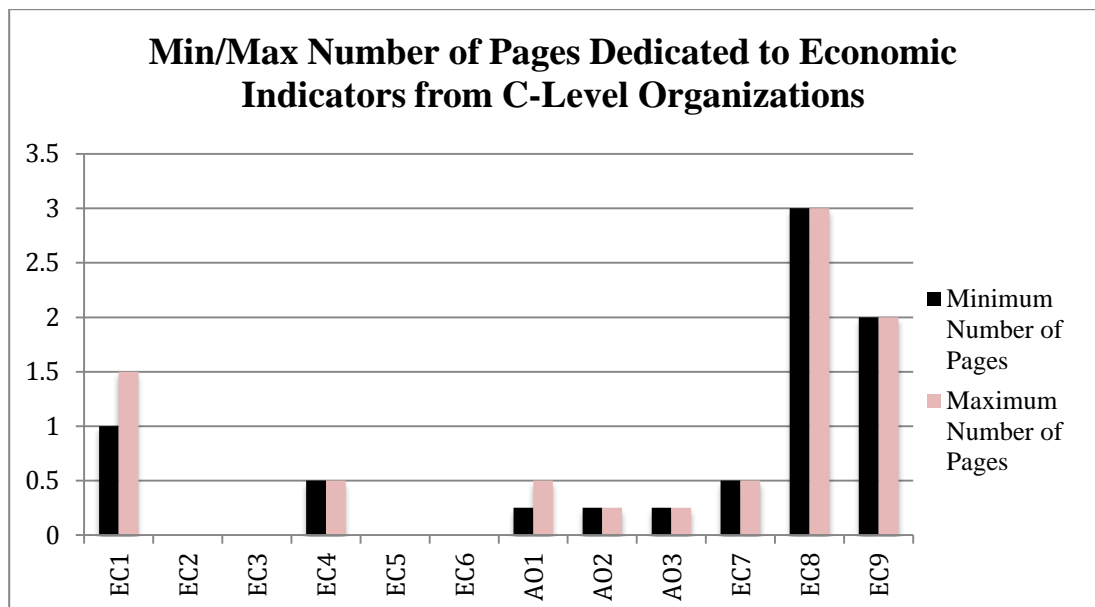


Figure 23— Minimum and Maximum Page Numbers for Social Indicators (C-Level)

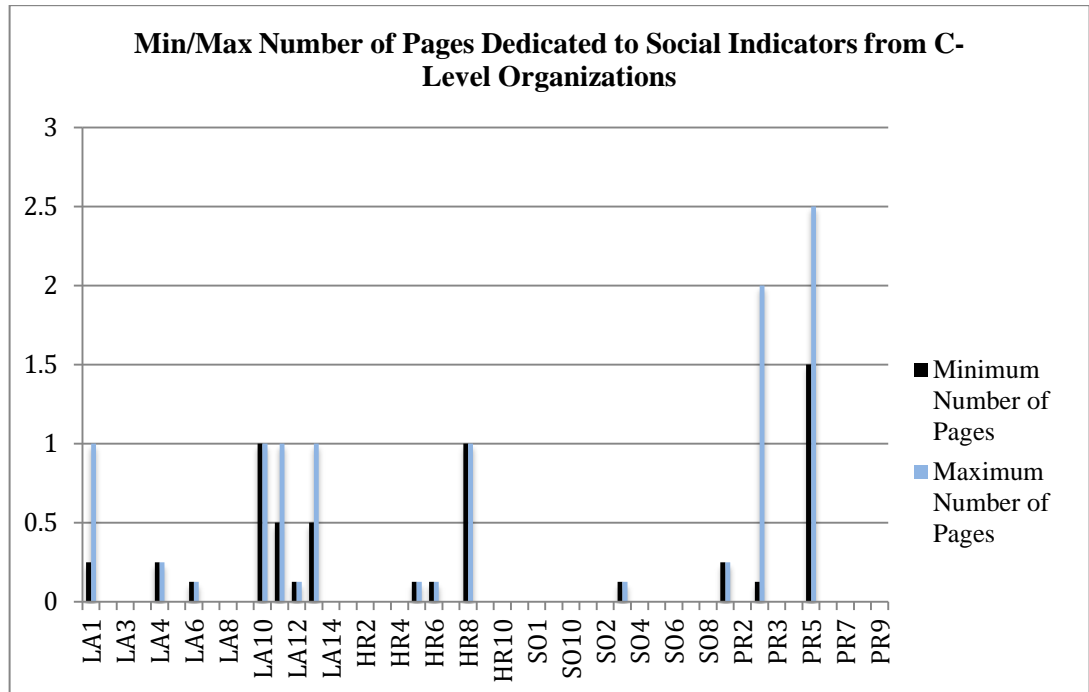
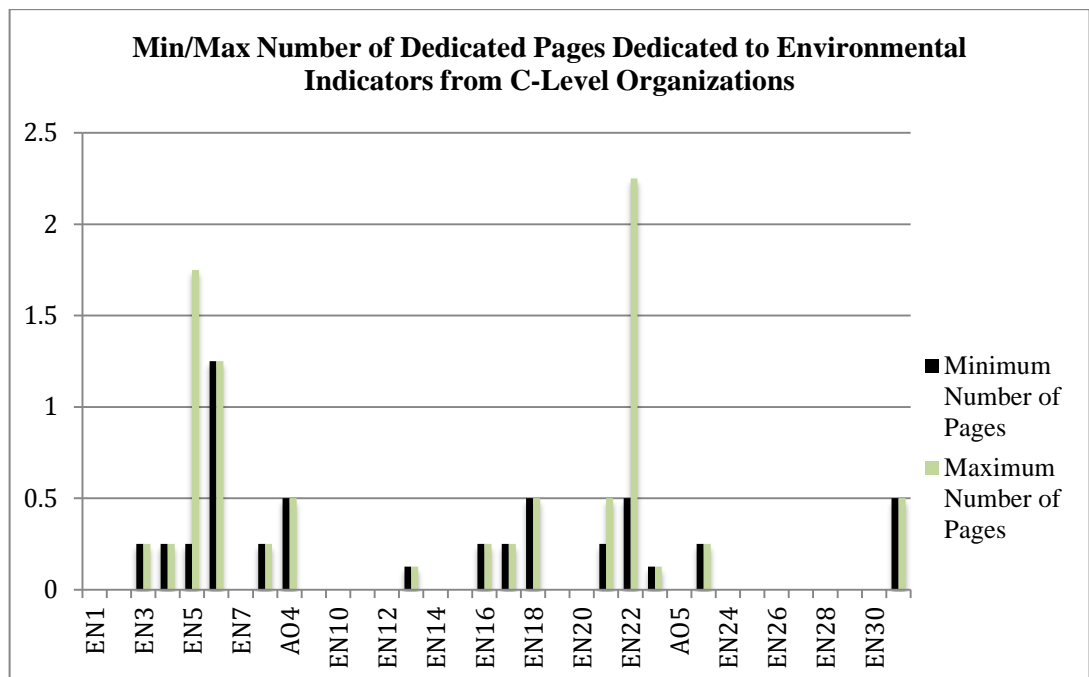


Figure 23— Minimum and Maximum Page Numbers for Environmental Indicators (C-Level)



Bibliography

- Athens International Airport. *Annual Report: Corporate Responsibility Report 2011*. Athens: Athens International Airport, 2011.
- Aena. *Annual Report: Corporate Responsibility Report 2012*. Madrid: Aena, 2012.
- Aéroports de Paris. *Annual Report: Corporate Social Responsibility Report 2011*. Paris: Aéroports de Paris, 2011.
- Airports of Thailand. *Annual Report: Corporate Social Responsibility Report 2012*. Bangkok: Airports of Thailand, 2012.
- ANA. *Annual Report: Sustainability Report 2012—Livening Up Airports*. Lisbon: ANA, 2012.
- ASUR. *Annual Report: Annual Sustainability Report 2012*. Mexico City: ASUR, 2012.
- Boulter, Jack. "Global Reporting Initiative." *International Pharmacy Journal*, 27.1 (2011): 4-5.
- Brown, Halina Szejnwald, Martin De Jong, and Teodorina Lessidrenska. "The rise of the Global Reporting Initiative: a case of institutional entrepreneurship." *Environmental Politics* 18.2 (2009): 1-43.
- Dallas/Fort Worth International Airport. *Annual Report: Trusted with Tomorrow: 2013 Sustainability Report*. Dallas: Dallas/Fort Worth International Airport, 2013.
- DiPiazza Jr, Samuel A., and Robert G. Eccles. *Building public trust: The future of corporate reporting*. Wiley.com, 2002.
- Fraport AG. *Annual Report: Connecting Sustainability—Report 2012*. Frankfurt: Fraport AG, 2012.
- Freathy, Paul, and Frank O'Connell. "Planning for profit: the commercialization of European airports." *Long Range Planning* 32.6 (1999): 587-597.
- Global Reporting Initiative. "What is GRI?" Global Reporting Initiative. Web. 9 Oct. 2013. <<https://www.globalreporting.org/information/about-gri/what-is-GRI/Pages/default.aspx>>
- Global Reporting Initiative. "Organizational Stakeholder Program." Global Reporting Initiative. Web. 9 Oct. 2013. <<https://www.globalreporting.org/network/organizational-stakeholders/Pages/default.aspx>>

- GRI Airport Operators Sector Supplement. (2011). Accessed May 22 2014, available at <https://www.globalreporting.org/resourcelibrary/AOSS-Complete.pdf>
- GRI Application Level Check Methodology. (2013). Accessed May 22 2014, available at <https://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf>
- GRI Reporting Trends 2011. (2011). Accessed May 22 2014, available at <https://www.globalreporting.org/reporting/report-services/sustainability-disclosure-database/Pages/Discover-the-Database.aspx>
- Graham, Anne. "Airport benchmarking: a review of the current situation." *Benchmarking: An International Journal* 12.2 (2005): 99-111.
- Greater Toronto Airports Authority. *Annual Report: A World of Responsibilities: GTAA Corporate Responsibility Report 2011*. Toronto: Greater Toronto Airports Authority, 2012.
- Hartsfield-Jackson Atlanta International Airport. *Annual Report: Sustainability Report 2011*. Atlanta: Hartsfield-Jackson Atlanta International Airport, 2011.
- Incheon International Airport Corporation. *Annual Report: Social Responsibility Report 2013*. Seoul: Incheon International Airport Corporation, 2013.
- KPMG Survey of Corporate Responsibility Reporting 2013. (2013). Accessed May 22 2014, available at <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/corporate-responsibility/pages/default.aspx>
- Munich Airport. *Annual Report: Perspectives: Annual Report 2011*. Munich: Munich Airport, 2011.
- Ostend-Bruges International Airport. *Annual Report: Sustainability and Annual Report 2011*. Ostend: Ostend-Bruges International Airport, 2011.
- Port of Portland. *Annual Report: Portfolio: Annual Report FY 2011-2012*. Portland: Port of Portland, 2012.
- Port of Portland. *Port of Portland Strategic Plan 2010-2015*. Portland: Port of Portland, 2010.
- San Diego International Airport. *Annual Report: Annual Sustainability Report Fiscal Year 2011*. San Diego: San Diego International Airport, 2011.
- Schiphol Group. *Annual Report: Schiphol Group Annual Report 2011*. Amsterdam: Schiphol Group, 2011.
- Swedavia AB. *Annual Report: Annual Report and Sustainability Report 2012*. Stockholm: Swedavia AB, 2012.

Smith, John, Ros Haniffa, Jenny Fairbrass, SPRINGER, and Helena Maria Bolas. "A Conceptual Framework for Investigating 'Capture' in Corporate Sustainability Reporting Assurance." *Journal of Business Ethics*, 99.3 (2011): 425-439.

TAV Airports. *Annual Report: Sustainability Report 2010*. Istanbul: TAV Airports, 2010.