



# 2019 Annual & Sustainability Report

Vancouver Airport Authority





## About this Report

The YVR 2019 Annual & Sustainability Report provides an in-depth look at Vancouver Airport Authority and Vancouver International Airport (YVR), continuing a tradition of honest and transparent reporting under our sustainability pillars: Governance, Economic, Environment and Social. It presents a broad view of the Airport Authority's activities, identifying key priorities and challenges, while also tracking performance. Driving this narrative is our commitment to improvement, which aligns our reporting in accordance with the Global Reporting Initiative (GRI). For more information on how we approach GRI, see **page 14**.



**Please Note:** This document reports on YVR's activities and successes in 2019, which demonstrated how important YVR is to our region—as a key economic driver, a connecting hub and a leader in sustainability.

We recognize the COVID-19 pandemic is unlike anything the global community has experienced in generations, in terms of human costs, direct impacts to our way of life and economic realities. While it's the most profound challenge we have encountered as an airport community, we remain committed to our public interest mandate: to operate a safe and efficient airport, and to make the best possible use of airport lands, in such a way to provide social and economic benefits for our communities. We will continue to strive to be an industry leader, building on our strong foundation, while finding new and creative ways to deliver on our commitments.

## About Vancouver Airport Authority

Vancouver Airport Authority is the community-based, not-for-profit organization that manages Vancouver International Airport (YVR). We have no shareholders and we reinvest all profits back into airport operations and development—improving YVR for everyone. We strive to make YVR an airport that British Columbia can be proud of and we do this, every day, through our commitment to excellence and our focus on serving passengers, partners and communities.

### MISSION

**Connecting British Columbia Proudly to the World**

### VALUES

**Safety, Teamwork,  
Accountability, Innovation**

### VISION

**A world-class, sustainable hub airport**

# 2019 Awards & Recognition



**Best Airport in North America for 10 consecutive years. And this just in: 2020 Best Airport in North America for a record 11 years!**



**Canada's Best Diversity Employers—second year in a row**



**PwC Vision to Reality (V2R) Awards**  
Winner, Builder Category—for BORDERXPRESS™



**2019 Governance Professionals of Canada—Excellence in Governance Awards**

Best Practices in Sustainability and ESG  
Best Practices in Diversity and Inclusion



**BC CEO of the Year: Not-for-profit category**  
Craig Richmond



**IABC Gold Quill Awards**  
Best of the Best and Award of Excellence, Media Relations, for “Flying High at YVR” cannabis campaign



**BC's Top Employer**  
—13 years in a row



**Corporate Champions—1st Place**  
2019 Corporate Champions—fourth year in a row



**BC's Most Loved Brands**  
#3 Most Loved Brand and top 10 brand for survey respondents aged 18-34



**AIRPORT EXPERIENCE®**  
**Highest sales per enplaned passenger in North America**



**ACI – NA Marketing and Communications Awards—1 award**  
1st Place –Video and Film Production for YVR Works for Me

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# Message from Annalisa King

Chair, Board of Directors

While YVR is currently focused on navigating the significant impacts of COVID-19, the challenges we face should not take away from 2019—a banner year that truly demonstrated our vision to be a world-class hub.



I am proud, as YVR's new Board Chair, to be leading such an exceptional organization after taking over from Mary Jordan in June 2019. YVR's governance model ensures that our success is invested back into your airport and region, and in 2019 we continued to deliver.

YVR was a key driver of economic growth in 2019, contributing more than \$20 billion in total economic output. We continued to support our community, donating to more than 50 organizations across our region. And we completed year two of the historic, 30-year *Musqueam Indian Band-YVR Airport Sustainability & Friendship Agreement*, working closely with Musqueam on a range of benefits including scholarships, jobs and cultural activities.

Our team made great progress in environmental management. We were selected to participate in a feasibility study evaluating a sustainable aviation fuel supply chain. We also diverted over 50 per cent of our waste from landfill—for the fourth year in a row—and received Level 3 Carbon Accreditation from Airports Council International.

We received considerable recognition for our industry, governance and

people practices. In addition to our historic Skytrax win, YVR was named one of Canada's Best Diversity Employers for the second year in a row and one of BC's Top Employers for the thirteenth consecutive year. I was very proud to hear that the Governance Professionals of Canada awarded us two Excellence in Governance Awards: Best Practices in Sustainability and ESG and Best Practices in Diversity and Inclusion. These remain key focus areas for the Board.

Though we had some challenges in 2019, we gained valuable insights that are proving essential as we face the severity of 2020 during the COVID-19 pandemic. It is a key cultural tenet at YVR to continuously learn and grow, and 2019 was no exception.

We have a great history, one that highlights our ongoing commitment to performance, innovation and accountability, all while creating an airport that represents the communities we serve. And it is at times like we are in now, times of severe challenge, when our values are most important. As we focus on a new and different future, I want to assure you that we will continue to be open, honest and transparent—

remaining accountable to everyone. And we are optimistic about that future, as Tamara Vrooman comes in as President & CEO in 2020 to take the reins from Craig Richmond as he retires.

On behalf of the Board of Directors, I would like to extend a sincere thank you to the many people who have contributed to YVR's success during both the bright and challenging times. To everyone who has worked so hard for the airport during the COVID-19 pandemic—thank you. Thank you to our community, government and business partners for the ongoing support. And, of course, a very special thank you to Craig Richmond for his immense contributions to YVR during his time as CEO and, in particular, for his leadership in 2020. Craig, we wish you all the best.

We are all in this together. YVR and our industry will adapt, overcome and thrive.

**Annalisa King,**  
Chair, Board of Directors  
Vancouver Airport Authority

# Message from Craig Richmond

## President & CEO

As we work through these unprecedented times, it's important to recognize the many successes of 2019 and know that better days are ahead.

In 2019, the YVR team continued to deliver a great airport experience for everyone. Our many improvements included enhancing accessibility through new video interpretation and a smartphone app wayfinding partnership, becoming the first Canadian airport to offer NEXUS members a more seamless process through our BORDERXPRESS™ kiosks, relaunching YVR's popular jetSet parking product—and much more.

We reached significant milestones, hosting a steel-topping ceremony for our international terminal expansion in June. And, at the same time, we continued to make progress on our new Parkade and Ground Transportation Facility, as well as our new Central Utilities Building—both of which will sit on top of one of Canada's largest geexchange plants.

Of course, 2019 wasn't without its challenges. As passenger growth slowed due to the 737 MAX aircraft grounding and other global challenges, we had to take a hard look at costs. Meanwhile, our immense capital program created disruption in several areas of the terminal, but ultimately helped us gain valuable

learnings that led to process and oversight improvements.

Our team once again persevered, receiving the Skytrax award for Best Airport in North America. And then we won it again in 2020, marking a historic 11 years in a row, while also receiving the Best Airport in the World in the 20 to 30 million passenger category for the first time. This recognition is a massive achievement the whole province can be proud of. It's a testament to the support of our partners and our amazing team, a team that was bolstered by the addition of Annalisa King, one of Canada's most respected business leaders, as our new Board Chair in 2019.

It was with mixed emotions that I announced my plans in November 2019 to retire in summer 2020, after seven years with YVR as President & CEO. I am very pleased that my talented successor Tamara Vrooman will join the YVR team as President & CEO, effective July 1, 2020. I am extremely proud of YVR's accomplishments and am confident that your airport will emerge from the challenges it faces today and thrive under the responsible stewardship

of the creative and capable Executive Team, the Board and the many people who work on Sea Island.

While COVID-19 has taken an incredible toll on everyone, I know we will bounce back, thanks to the dedicated people who strive to make a difference. This includes those who work on the front lines in the community and here at YVR—thank you. Teamwork is one of our core values and COVID-19 has proved just how much we rely on each other and, consequently, how much we can accomplish if we work together. It's because of your great work that I know YVR has a bright future.

Thank you for the opportunity to serve you. It has been the job of a lifetime and an honour.



**Craig Richmond,**  
President & CEO  
Vancouver Airport Authority

# 2019 Highlights



2019 was an exceptional year for YVR. We continued to embed sustainability throughout our decision-making and culture, focusing on a wide range of initiatives under our governance, economic, environment and social pillars. At the same time, we worked towards major milestones under the guidance of the Airport Authority's three-year Strategic Plan (2018 – 2020).



We made great progress by focusing on the Strategic Plan's vision and major objectives:

**08**  
SPEED AND  
EASE OF THE HUB

**10**  
OUTSTANDING  
CUSTOMER  
EXPERIENCE

**12**  
EXCEPTIONAL  
FOUNDATION

## 26.4 MILLION PASSENGERS

In 2019, a period that included several major industry challenges such as the 737 MAX aircraft grounding, YVR welcomed a record 26.4 million passengers—thanks to the efforts of our partners, the great work from our team and the support of the travelling public.

## 122 DESTINATIONS

YVR finished 2019 with direct access to 122 destinations worldwide. We connected people and products with key markets in the Americas, Europe and the Asia-Pacific—spurring growth and innovation around the world.

## 309,791 TONNES OF CARGO

In 2019, we moved 309,791 metric tonnes of cargo. Our cargo included a range of goods, from prized B.C. fruit and seafood to high-tech products, apparel and much more.





# Speed and Ease of the Hub

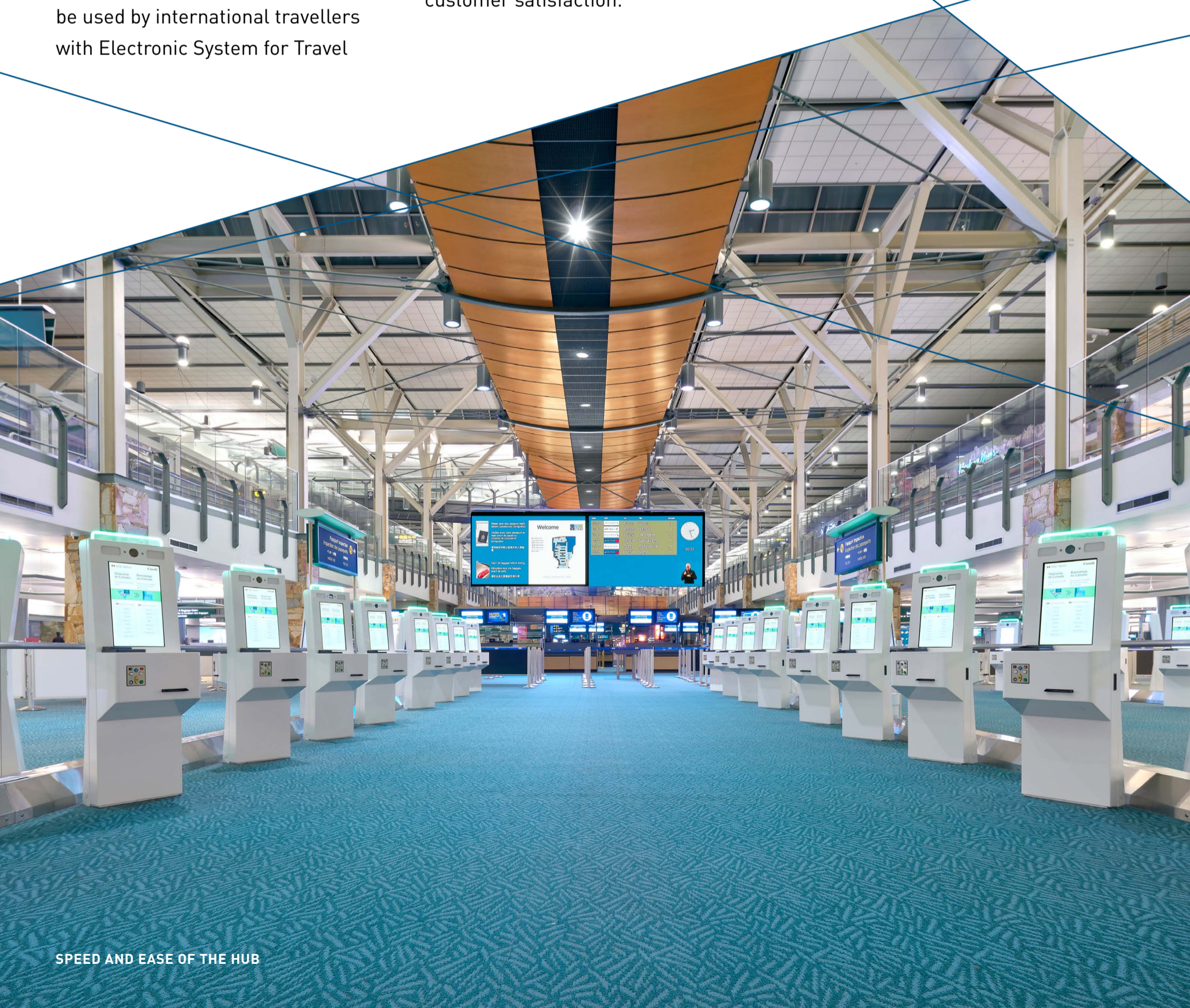


To be a world-class hub, we seek to make our airport more efficient—through terminal expansions and upgrades, innovative technologies, process improvements and policy changes.

## Enhanced Border Clearance

In March, YVR celebrated the introduction of enhanced technology for our BORDERXPRESS™ Primary Inspection Kiosks. The kiosks now meet the Government of Canada's expanded biometric screening requirements and can be used by international travellers with Electronic System for Travel

Authorization (ESTA) approval. Our Innovative Travel Solutions (ITS) team developed BORDERXPRESS™ to help speed up the border inspection process. By enabling more travellers to use the kiosks, we are continuing to reduce congestion and wait times, helping improve efficiency and customer satisfaction.



## Future Expansion Milestones

In June, we celebrated a major milestone with a steel-topping ceremony for the expansion of our International Terminal Building.

Once complete, the expansion will include an additional eight gates, including four bridged gates and four bussing gates. Learn more at [yvr.ca/construction](https://yvr.ca/construction).



# Outstanding Customer Experience



We continued to deliver an exceptional airport experience in 2019. We introduced exciting culinary experiences, enhanced amenities and launched new tools that improve accessibility—all while being named Best Airport in North America by Skytrax, for a record 10 years in a row.

## Taste YVR

In November, YVR celebrated the opening of Joe & The Juice. The restaurant is known for their trendy vibe and selection of healthy food options, juice and coffee, making it a welcome addition to YVR's culinary transformation.

## Ready. Set. Jet!

YVR celebrated the relaunch of jetSet Parking. Our popular parking option is now a drop-and-go system, and YVR is the first airport to bring this popular technology and approach to North America. Customers enter the lot, located just minutes from the terminal, and park their vehicle in a designated drop-off lane. Customers then take their baggage inside the facility to check-in, drop off their keys and hop on a complimentary shuttle bus to the terminal. The lot also features charging stalls for electric vehicles.



## Improving Accessibility

YVR is proud to hold the Accessibility Certified Gold Rating under the Rick Hansen Foundation Accessibility Certification program, which recognizes our holistic approach to ensuring we deliver an exceptional

experience for every customer. In 2019, we built upon this foundation, introducing new tools to support people with varying disabilities that affect their mobility, vision and hearing. This includes our partnership with Aira, an app-based service for individuals who are blind or partially

sighted, and real-time video interpretation of our popular Language Line, which allows us to better serve passengers who are deaf or hard of hearing. Learn more about our accessibility initiatives at [yvr.ca/accessibility](https://yvr.ca/accessibility).



# Exceptional Foundation



The pursuit of our strategic goals is supported by an exceptional foundation. Key elements include safety, employees, environment, financial strength, sustainability, innovation, reputation, enterprise risk management, IT and digital, infrastructure, governance and accountability.

## Everyone Is Invited

In September 2019, YVR hosted our first open house and inclusive hiring fair for persons with disabilities, engaging an audience of 300 job seekers. We are continuously looking to retain top talent and ensure our teams reflect all the skills, experience and perspectives of our region. This includes B.C.'s untapped employment pool of people who identify as having a disability.

## Exercise, Exercise, Exercise

Safety and security are our top priorities. In April 2019, we brought together more than 500 participants from 25 different agencies across Sea Island and the Lower Mainland to conduct a training exercise simulating an aircraft crash. Not only is it a regulatory requirement, this exercise is an essential part of remaining prepared and ensuring coordination in the unlikely event of an incident. We incorporate knowledge learned through each exercise together with the latest developments in airport safety and emergency management to maintain and continually upgrade our Emergency Management Plan.



# Doing Our Part To Address Climate Change



YVR recognizes that climate change is a significant, global challenge and that we must do our part to mitigate its impact.

The International Panel on Climate Change is urging immediate action to reduce greenhouse gas emissions in order to limit global warming to 1.5 degrees Celsius. Given our unique role as a major connecting hub and a leader in sustainability, we are committed to taking action while also supporting our partners.

### How will YVR address climate change?

We have committed to achieving net zero emissions by 2050.

We are on our way towards fulfilling this target. We continue to advance our commitment with the commissioning of our geoexchange system, the purchase of renewable natural gas and investments in more zero-emissions fleet vehicles. We will also continue to develop innovative solutions, including a new approach to asset management that uses new technologies to continuously measure asset health and analytics to plan and forecast life cycle maintenance.

We plan to purchase carbon offsets as part of our journey to achieve carbon neutrality. In addition, we are working to further reduce operational energy use and displace remaining fossil fuel use with renewable fuels by 2050—through conservation, a zero emissions fleet, investing in clean energy and new, low-carbon technologies.

We are proud of our progress, but we still have a lot of work to do and we look forward to updating you along the way.

*To learn more about how we manage our impact on climate change, see **page 66**. Learn more about YVR's new Environmental Management Plan at [yvr.ca/environment](http://yvr.ca/environment).*



**CARBON REDUCTION**



**WATER CONSERVATION**



**WASTE REDUCTION**



**ECOSYSTEM HEALTH**



# Determining Report Content

Vancouver Airport Authority is committed to constantly improving its sustainability reporting. We regularly identify opportunities, through annual benchmarking and third-party audits, and we aim to reflect a high level of open, honest and timely communication—in keeping with our core value of accountability.

We prepared the 2019 Annual & Sustainability Report in accordance with the **Global Reporting Initiative (GRI)**. The GRI Sustainability Reporting Standards are the most widely adopted global standards in sustainability reporting. They align with the Airport Authority's commitment to accountability, helping us better understand our contribution to social, economic and environmental impacts and how we can strengthen relationships with stakeholders.

The result of reporting in accordance with GRI, highlighted throughout this document, covers a broad range of key topics that demonstrate our many efforts.

This report reflects the environmental, economic and social impacts of Vancouver Airport Authority. It does not include the impacts of our subsidiaries; it does, however, include a brief update on our subsidiaries and incorporates their financial activities as part of the Airport Authority's consolidated financial statements.

We have included additional features, which form the framework of this report and are referenced throughout:

## Stakeholder Engagement

We have highlighted our key stakeholders—those who are impacted by, or have influence on, YVR's operations—and we identify how we engage with them and what topics are relevant to each group.



## United Nations Sustainable Development Goals

We have adopted the United Nations Sustainable Development Goals, identifying areas of our operations where we are contributing the most.

## Material Topics

We have developed our reporting narrative around 17 material topics, which are topics that reflect our impacts and influence the assessment and decisions of stakeholders. We identified these topics through an extensive process that included a document review, surveys, workshops and interviews with key stakeholders. These material topics, which are a core requirement of GRI, are in alignment with our four pillars of sustainability.

# Stakeholder Engagement



YVR plays an important role in Canada's aviation sector, connecting passengers and products to destinations all over the world. As a community-based organization, Vancouver Airport Authority is accountable to our region, and we deliver on this responsibility by working with our many stakeholders to constantly improve YVR for everyone.



## Our Stakeholders



We define our stakeholders as anyone who influences or is impacted by YVR's operations. This includes the millions of passengers who pass through YVR every year, employees, local communities and a wide range of partners.



### Passengers

As Canada's second-busiest airport, YVR welcomes millions of passengers every year. These passengers come from all over the world, with key markets including Canada, the U.S., the Asia-Pacific, Latin America and Europe.



### Airlines

Our airline partners connect people and businesses to a wide range of non-stop destinations worldwide.



### Airport business partners

A large community works on Sea Island to support YVR's operations. This team includes a broad range of YVR business partners—from commercial tenants to our maintenance and customer care teams, ground transportation and baggage handling service providers, contractors and much more.



### Vancouver Airport Authority

Vancouver Airport Authority employs a core team of professionals in a range of occupations including technical and administrative roles, management, trades and operations.

Our community-based Board of Directors oversees the business conduct and activities of the Airport Authority's Executive Team.



### Local communities

YVR is located on Sea Island in Richmond, British Columbia, and is bordered by Vancouver across the Fraser River. Our local communities include the 23 authorities that make up the Metro Vancouver Regional District, Musqueam Indian Band—on whose traditional land YVR is located—and other First Nations.



### Government and regulators

We work with municipal, regional, provincial and federal governments, as well as international regulators, to ensure the airport meets and exceeds all regulations, while providing economic and social benefits for our region.






### Industry associations

We strive to be a leader in the aviation industry, and we work with a broad range of industry partners: regional airports and industry organizations such as Airports Council International—North America (ACI-NA), the Canadian Airports Council (CAC), the International Air Transport Association (IATA) and the International Civil Aviation Organization (ICAO).



# Engagement



Stakeholder	How We Engage	2019 Highlights
<p><b>Passengers</b></p> 	<ul style="list-style-type: none"> <li>• Annual Customer Satisfaction Survey and quarterly in-terminal satisfaction survey</li> <li>• Daily frontline Customer Care team</li> <li>• Information kiosks</li> <li>• Monthly Sea Island newspaper (SkyTALK)</li> <li>• Air Mail Newsletter</li> <li>• YVR Website</li> <li>• Social media</li> <li>• Regular airport events</li> </ul>	<ul style="list-style-type: none"> <li>• 91 per cent Customer Satisfaction rating</li> <li>• Most followed airport in Canada—Twitter</li> </ul>
<p><b>Airlines</b></p> 	<ul style="list-style-type: none"> <li>• Regular meetings, communications</li> <li>• Key airport initiatives and events</li> <li>• Airline Consultative Committee</li> </ul>	<ul style="list-style-type: none"> <li>• New services: Air Canada launched new service to Auckland; Hainan Airlines and Sichuan airlines launched new direct service to Shenzhen and Chengdu. New sun destinations from Air Transat, which included Fort Lauderdale and Liberia, Costa Rica. WestJet launched new domestic service to Cranbrook</li> <li>• Historic flight of the world’s first all-electric commercial aircraft at Harbour Air Seaplanes terminal at YVR</li> </ul>
<p><b>Airport Business Partners</b></p> 	<ul style="list-style-type: none"> <li>• Regular meetings, communications</li> <li>• Annual Public Meeting</li> <li>• Key airport initiatives and events</li> <li>• Monthly Sea Island newspaper</li> <li>• Airline Operations Committee</li> </ul>	<ul style="list-style-type: none"> <li>• 54 per cent terminal waste diverted from landfill with the support of our business partners—a 2020 target</li> <li>• Voted Best Airport in North America for a record ten consecutive years in 2019</li> <li>• Highest sales per enplaned passenger in North America</li> </ul>



# Engagement



Stakeholder	How We Engage	2019 Highlights
<p><b>Vancouver Airport Authority</b></p> 	<ul style="list-style-type: none"> <li>• Regular meetings, communications</li> <li>• Regular all-employee meetings</li> <li>• Biennial employee feedback survey</li> <li>• 24-hour whistleblower hotline</li> <li>• Regular updates on YVR Intranet</li> <li>• Monthly video series with CEO and employees</li> <li>• Annual engagement initiatives</li> <li>• Annual employee recognition programs</li> </ul>	<ul style="list-style-type: none"> <li>• 10.5-year average length of employee service</li> <li>• Ranked among BC's Top Employers—for the thirteenth year in a row</li> </ul>
<p><b>Local Communities</b></p> 	<ul style="list-style-type: none"> <li>• Annual Community Survey</li> <li>• Plane Spotter Survey</li> <li>• Annual Public Meeting</li> <li>• Social Media</li> <li>• YVR Website</li> <li>• News releases, media statements and interviews</li> <li>• Monthly YVR newsletter</li> <li>• Consultation and engagement for airport projects (e.g. Master Plan, Templeton area redevelopment)</li> <li>• Quarterly meetings with Aeronautical Noise Management Committee and Environmental Advisory Committee</li> <li>• Community Investment Program</li> <li>• Regular YVR Explorer tours</li> <li>• Experiential airport tours</li> <li>• Regular meetings with the Airport Authority and Musqueam Relationship Committee</li> <li>• YVR-Musqueam newsletter</li> <li>• Participation in YVR events for Musqueam elders and representatives</li> <li>• New employee volunteer program</li> </ul>	<ul style="list-style-type: none"> <li>• \$1.2+ million donated to 50+ community organizations</li> <li>• A 79 per cent satisfaction rating on our annual community survey</li> <li>• 767 million media impressions; 99 per cent positive or neutral media coverage</li> <li>• 15 Musqueam members joined the Airport Authority; airport business partners hired 76 Musqueam members</li> <li>• 15 speaking engagements highlighting the YVR-Musqueam relationship</li> <li>• YVR and Musqueam developed a journey canoe</li> <li>• Awarded 13 scholarships to Musqueam members as part of our Musqueam scholarship program</li> <li>• Launched Mary B. Jordan Scholarship for Women in Business</li> <li>• Participated in the 2019 Vancouver Pride Parade</li> <li>• EcoCity World Summit 2019</li> <li>• Great Canadian Shoreline Cleanup at Iona Beach Regional Park</li> </ul>

# Engagement



Stakeholder	How We Engage	2019 Highlights
<p><b>Government and Regulators</b></p> 	<ul style="list-style-type: none"> <li>• Annual presentations to local municipalities</li> <li>• Ongoing one-on-one meetings with government representatives</li> </ul>	<ul style="list-style-type: none"> <li>• Continued to manage the Beyond Preclearance Coalition to explore the future of cross-border travel</li> <li>• Hosted Canada and U.S. representatives at the second YVR Aviation Border Summit</li> <li>• Co-hosted a successful Transportation Border Summit in April 2019 with the U.S. and Canadian Chamber of Commerce and kicked off 10 working groups to bring together industry, government and other stakeholders to advance pilot projects and initiatives</li> </ul>
<p><b>Industry Associations</b></p> 	<ul style="list-style-type: none"> <li>• Industry association meetings, conferences and working groups</li> <li>• Industry sponsorship initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Maintained Level 3 in ACI – NA’s Carbon Accreditation program</li> <li>• Became the first airport in North America to receive the Rick Hansen Foundation’s gold accessibility certification</li> <li>• Awarded two Excellence in Governance awards by the Governance Professionals of Canada: Best Practices in Diversity and Inclusion, Best Practices in Sustainability and ESG</li> <li>• Launched BioPortYVR, an industry-led project to increase the supply of sustainable aviation fuel to reduce greenhouse gas emissions</li> </ul>

# United Nations Sustainable Development Goals



Vancouver Airport Authority has a wide-ranging impact, and we take sustainability seriously. We recognize the United Nations Sustainable Development Goals as a step in the right direction, and we are proud to do our part in working towards their fulfillment.

In 2015, the United Nations introduced its **Sustainable Development Goals** (SDGs)—17 ambitious areas that seek to address a range of rising global challenges by 2030. The SDGs include 169 targets incorporating issues such as economic growth, social need and environmental degradation.

As YVR continues to connect more people and products to the world, we want to balance our success with accountability. Vancouver Airport Authority has a vision to make YVR a sustainable, diversified hub and for us the SDGs are a way to understand the broader context of our actions.

In preparing this report, we conducted a comprehensive review of each of the 17 SDGs, comparing the encompassed 169 targets to our business operations to see which goals we influenced the most. While we recognize the importance of all 17 goals, our greatest contribution is to nine of the 17 SDGs.

In 2019, we undertook further action towards SDG 8—Decent Work and Economic Growth—and recognized our efforts as an additional contribution to the SDGs.



#### 4 – Quality Education

We demonstrate support of quality education by providing a broad range of educational programs that support employee performance development and career development for young professionals.



#### 5 – Gender Equality

We demonstrate our commitment to achieving gender equality by engaging a diverse and inclusive workforce with ambitious employment equity targets. Furthermore, we offer additional support to Women in Management and leadership roles by facilitating a Women in Management program and Women Coaching Circles.



#### 6 – Clean Water and Sanitation

Our contribution to clean water and sanitation is part of a multistep approach that consists of fixed targets and commitments outlined in our Environmental Management Plan.



#### 7 – Affordable and Clean Energy

We are strongly committed to reducing our carbon footprint and continuously strive to implement sustainable energy solutions. The construction of one of Canada's largest geexchange plants is in progress, which will greatly reduce YVR's environmental footprint and help us meet our aggressive GHG reduction target.



## 8 – Decent Work and Economic Growth

We set specific targets that include women, Aboriginal peoples, persons with disabilities and members of visible minorities to provide decent work for all members of our community. In 2019, we extended our commitment to assist our business partners in removing barriers that impact their ability to hire and retain workers with a new Fair Wage Policy. Our contribution to promote sustainable economic growth is demonstrated by our unique governance model. We have no shareholders and we reinvest all profits back into airport operations and development—providing social and economic benefits for the region.



## 9 – Industry, Innovation and Infrastructure

We are continuously exploring new technologies with the development of our airport. Sustainable features include geoexchange, solar hot water, photovoltaic panels, wind turbines, a rainwater collection system, energy-efficient LED lighting and a runway panel replacement innovation that allows us to replace only the few, heavily used panels, rather than resurfacing the entire runway.



## 11 – Sustainable Cities and Communities

We play a major role in the sustainability of the region and our adjoining communities. Thus, we aim to strengthen and support our natural heritage by minimizing environmental impacts and fostering strong relationships with local and Indigenous communities.



## 12 – Responsible Consumption and Production

Our efforts towards sustainably managing our use of natural resources are part of a multistep approach that consists of fixed targets and commitments outlined in the Environmental Management Plan.



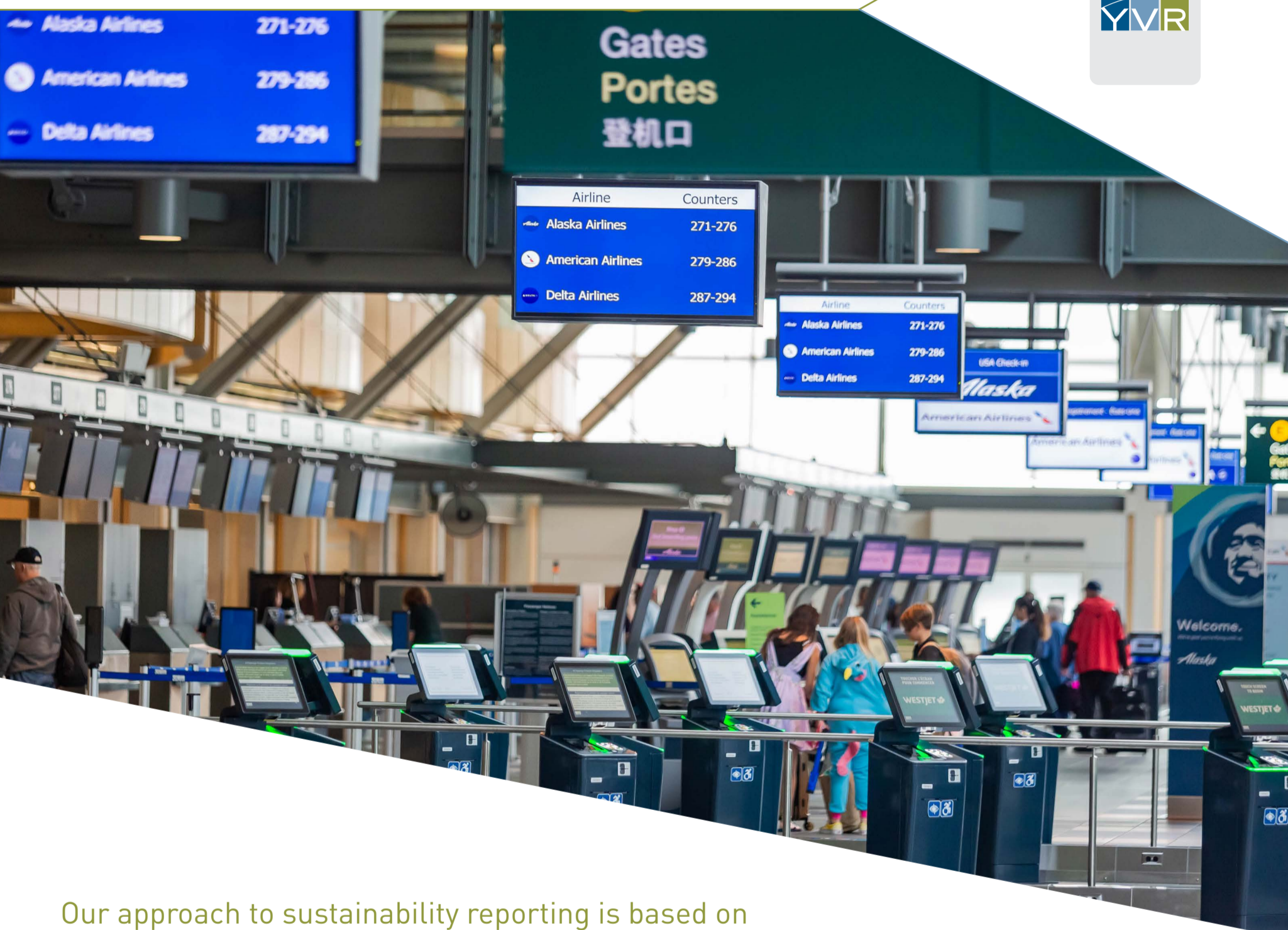
## 13 – Climate Action

We realize the importance of acting on the potential effects of climate change. As part of managing risks, we strengthen our resilience by carefully assessing operational and infrastructure-related risks susceptible to the effects of climate change.

### How To Identify Our Contribution

Throughout this report, we identify reporting areas where we contribute to the SDGs, including the SDG icons at the front of each applicable material topic.

# Material Topics



Our approach to sustainability reporting is based on a clear understanding of what's important to YVR's many stakeholders. We focus on material topics—areas that have a real impact on employees, partners and communities—under the Airport Authority's sustainability pillars. This report contains 17 key areas, selected through workshops, surveys and interviews, ranging from water use to economic impact, community investment and much more.



## Materiality Assessment

This report's framework is based on a comprehensive materiality assessment, conducted in 2017 as the first phase of moving to GRI reporting. The assessment revealed YVR's significant sustainability impact through a multi-phased process that identified, prioritized and confirmed our key economic, social and environmental topics.

During the first phase of the materiality assessment, we worked with an external company to compile key topics through an extensive document review, using the Global

Reporting Initiative (GRI) Standards and the GRI G4 Airport Operators Supplement as starting points. We looked at strategic documents such as Flight Plan 2037, which consolidates the Airport Authority's capital, financial, terminal and master plans under a single roadmap. We reviewed meeting records from influential groups including the internal Sustainability Working Group (SWG), the Environmental Advisory Committee (EAC) and the Aeronautical Noise Management Committee (ANMC). We analyzed significant contractual agreements

including YVR's Ground Lease and Collective Agreement. We also referred to industry standards and other public sources for relevant sustainability issues and likely impacts. These activities produced a long list of potential material topics.

Following the document review, the external company led a stakeholder engagement process that sought to evaluate the impact and importance of key topics across the organization and among select stakeholders. The engagement process included the following:

### Survey

1,582 respondents participated in the YVR Sustainability Survey, which asked them to rank the importance of a range of sustainability topics. We opened the survey to employees and the public for 42 days, posting its URL on our intranet, public website and public WiFi log-in page.

### Workshops

We conducted a series of small to large-scale workshops with invited YVR stakeholders. These included: Vancouver Airport Authority management, executives and staff (the SWG, Director's Working Group, Board of Directors and Navigators, a group of emerging leaders); a joint meeting of the EAC and ANMC; and two multi-stakeholder workshops.

### Direct Interviews







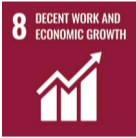









We conducted 13 direct interviews with stakeholders identified as critical in gaining additional qualitative data. Stakeholders included Musqueam Indian Band, the Association of Professional Engineers and Geoscientists of British Columbia, Metro Vancouver, City of Vancouver, Greater Vancouver Board of Trade, Air Canada, Transport Canada, Canadian Airports Council and the Airport Authority's Board of Directors.

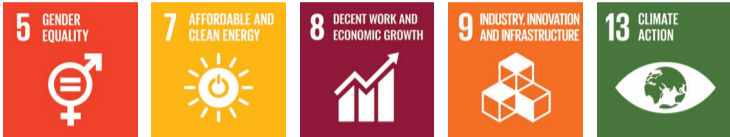

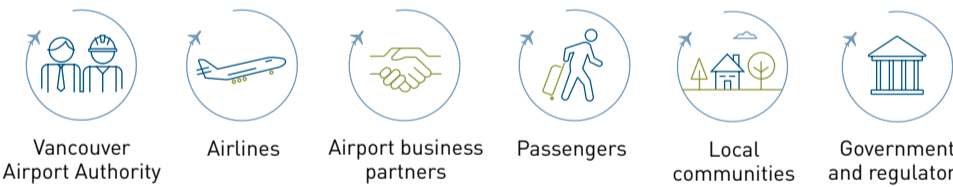

At the end of the engagement process, our Executive Team and Board of Directors validated and vetted the final list of 17 material topics, which form the basis of this report.

# Material Topics



The following snapshot provides key information for the 17 material topics. While this report is not solely focused on these topics, they are a key component of our alignment with GRI and can be found throughout the narrative.

Business Ethics <span style="float: right;">Our Leadership   Page 30</span>	
<p><b>Includes:</b> Anti-corruption, Sustainable purchasing, Airport advertising (GRI 205-2, 414-1)</p>	<p><b>99%</b> New Suppliers screened for social criteria</p>
<p><b>Sustainable Development Goals</b></p> 	<p><b>Stakeholders</b></p>      <p>Vancouver Airport Authority   Airlines   Airport business partners   Passengers   Government and regulators</p>
Air services and Connections <span style="float: right;">Our Business   Page 48</span>	
<p><b>Includes:</b> Airline connections (GRI A01)</p>	<p><b>26.4</b> Million— record passengers in 2019</p>
<p><b>Sustainable Development Goals</b></p> 	<p><b>Stakeholders</b></p>      <p>Vancouver Airport Authority   Airlines   Airport business partners   Passengers   Industry associations</p>
Customer Care <span style="float: right;">Our Business   Page 57</span>	
<p><b>Includes:</b> Accessible air travel, Customer privacy, Customer service quality, Non-discrimination towards passengers (GRI 418-1)</p>	<p><b>91%</b> Customer Satisfaction Rating</p>
<p><b>Sustainable Development Goals</b></p> 	<p><b>Stakeholders</b></p>     <p>Vancouver Airport Authority   Passengers   Airlines   Airport business partners</p>

<b>Direct Economic Impact</b> <span style="float: right;">Our Business   Page 64</span>	
<b>Includes:</b> Direct economic impact, Climate change adaptation (GRI 201-1)	<b>26,500+</b> Jobs on Sea Island supporting YVR's operations
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b> 
<b>Air Emissions</b> <span style="float: right;">Our Environment   Page 74</span>	
<b>Includes:</b> Air emissions (GRI 305-1, 305-2, 305-4, A05)	<b>2%</b> Emissions reduced in 2019 (below 2012 levels)
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b> 
<b>Effluent And Waste</b> <span style="float: right;">Our Environment   Page 81</span>	
<b>Includes:</b> Water discharge, Hazardous waste and non-hazardous waste (GRI A06, 306-2)	<b>54%</b> Waste diverted from landfill in 2019
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b> 
<b>Energy</b> <span style="float: right;">Our Environment   Page 88</span>	
<b>Includes:</b> Energy (GRI 302-1)	<b>\$19+</b> Million— Cumulative energy savings since 1999
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b> 

Water Use		Our Environment   Page 93
<b>Includes:</b> Water (GRI 303-1)	<b>39%</b> Reduction in potable water consumption per passenger from 2012	
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b>  Vancouver Airport Authority  Airlines  Airport business partners  Passengers  Local communities  Government and regulators	

Ground Transportation		Our Environment   Page 99
<b>Includes:</b> Ground transportation	<b>101,381</b> Bike trips on Sea Island in 2019	
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b>  Vancouver Airport Authority  Airlines  Airport business partners  Passengers	

Ecosystem Health		Our Environment   Page 104
<b>Includes:</b> Biodiversity, Remediation (GRI 304-1)	 <b>Salmon-Safe Certified—four years in a row</b>	
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b>  Vancouver Airport Authority  Airlines  Airport business partners  Local communities  Government and regulators	

Aeronautical Noise		Our Environment   Page 109
<b>Includes:</b> Aeronautical noise	<b>77</b> Reported noise concerns per 10,000 aircraft runway movements	
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b>  Vancouver Airport Authority  Airlines  Airport business partners  Local communities  Government and regulators	

**Employment Practices** Our Community | Page 114

<p><b>Includes:</b> Employee working conditions, Employee development and training, Labour practices (GRI 401-1, 404-2)</p>	<p><b>11</b> Years—average employee tenure at Vancouver Airport Authority</p>
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<p><b>Sustainable Development Goals</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>4 QUALITY EDUCATION</p> </div> <div style="text-align: center;">  <p>5 GENDER EQUALITY</p> </div> <div style="text-align: center;">  <p>8 DECENT WORK AND ECONOMIC GROWTH</p> </div> </div>	<p><b>Stakeholders</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Vancouver Airport Authority</p> </div> <div style="text-align: center;">  <p>Government and regulators</p> </div> </div>
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**Employee Health And Safety** Our Community | Page 121

<p><b>Includes:</b> Employee health and safety (GRI 403-2)</p>	<p><b>91%</b> WorkSafeBC health and safety management audit</p>
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<p><b>Sustainable Development Goals</b></p> <div style="text-align: center;">  <p>8 DECENT WORK AND ECONOMIC GROWTH</p> </div>	<p><b>Stakeholders</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Vancouver Airport Authority</p> </div> <div style="text-align: center;">  <p>Airlines</p> </div> <div style="text-align: center;">  <p>Government and regulators</p> </div> <div style="text-align: center;">  <p>Airport business partners</p> </div> </div>
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**Diversity And Equal Opportunity** Our Community | Page 125

<p><b>Includes:</b> Diversity of governance bodies and employees, Non-discrimination in the workplace (GRI 405-1, 406-1)</p>	<p><b>67%</b> Women on Vancouver Airport Authority's Executive Team</p>
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<p><b>Sustainable Development Goals</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>5 GENDER EQUALITY</p> </div> <div style="text-align: center;">  <p>8 DECENT WORK AND ECONOMIC GROWTH</p> </div> </div>	<p><b>Stakeholders</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Vancouver Airport Authority</p> </div> <div style="text-align: center;">  <p>Government and regulators</p> </div> </div>
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**Security And Safety** Our Community | Page 131

<p><b>Includes:</b> Security practices, Passenger and customer health and safety, Emergency preparedness (GRI A09)</p>	<p><b>215</b> Raptors—successfully relocated from YVR</p>
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	<p><b>Stakeholders</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Vancouver Airport Authority</p> </div> <div style="text-align: center;">  <p>Passengers</p> </div> <div style="text-align: center;">  <p>Airlines</p> </div> <div style="text-align: center;">  <p>Local communities</p> </div> <div style="text-align: center;">  <p>Airport business partners</p> </div> <div style="text-align: center;">  <p>Government and regulators</p> </div> </div>
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Indirect Economic Impact		Our Community   Page 136
<b>Includes:</b> Community investments (GRI 203-1)	<b>\$1.2+ Million—</b> donated to more than 50 organizations	
<b>Sustainable Development Goals</b>    	<b>Stakeholders</b>   Vancouver Airport Authority      Local communities	

Local Communities		Our Community   Page 141
<b>Includes:</b> Community relations, Community impacts, Relationships with Indigenous peoples (GRI 413-1)	<b>15 Community events</b> supported in 2019	
<b>Sustainable Development Goals</b> 	<b>Stakeholders</b>   Vancouver Airport Authority      Local communities	



# Our Leadership

At the core of our success is a strong leadership team, whose vision inspires us to deliver an exceptional airport experience. This team works in accordance with the highest standards, supporting a foundation of transparent, ethical and sustainable behaviour.



## GOVERNANCE

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*MATERIAL TOPIC:*  
BUSINESS ETHICS





# Board of Directors

Vancouver Airport Authority's community-based Board of Directors seeks to foster the long-term success of YVR. Our Board reviews and approves the Strategic Plan, long-term financial plans and annual budgets. It also selects the President & CEO, oversees senior management succession, identifies risks, maintains the integrity of internal controls, monitors health and safety management systems and ensures we have a comprehensive public Communications Policy. The Board follows the *Board of Directors Governance Rules and Practice Manual*, available at [yvr.ca/board](http://yvr.ca/board), which includes terms of reference, guidelines and policies.



## Annalisa King

Chair, Director at Large

Annalisa King serves on multiple TSX boards and was formerly the Chief Financial Officer and Senior Vice President at Best Buy Canada Ltd. Prior to that, she was Senior Vice President of Business Transformation at Maple Leaf Foods Ltd. As one of Canada's most respected business executives, she was recognized in 2012 as BC's CFO of the Year and in 2019 she received a Peak Award honouring Women in Finance in the category of Significant Board Contribution.

## Haydn Acheson

Government of Canada

Haydn Acheson has extensive senior leadership experience in the transportation sector and is an accomplished airline captain with thousands of hours of flight time.







### **Joseph Caron**

Director at Large

Joseph Caron has extensive experience providing strategic counsel to Asian and Canadian businesses and has held top diplomatic positions including Canada's Ambassador to China and Japan.

### **John Currie**

Chartered Professional Accountants of British Columbia

John Currie is a respected business leader, with previous experience as Executive Vice President and CFO of lululemon athletica Inc. and CFO of Intrawest Corporation.



### **Mary Anne Davidson**

Greater Vancouver Board of Trade

Mary Anne Davidson brings extensive experience in Human Resources management and strategy and previously served as Vice President Human Resources for ACCIONA Canada Inc.



### **Frances Fiorillo**

Director at Large

Frances Fiorillo most recently served as Senior Vice President, People and Inflight Service at Virgin America and has extensive airline industry experience.





### **Kevin Howlett**

Director at Large

Kevin Howlett brings 40 years of experience in the airline industry with expertise in human resources and operational management and corporate and government affairs.

### **Kenneth Goosen**

Engineers and Geoscientists  
British Columbia

Kenneth Goosen has more than 30 years of experience in senior management, engineering and operations positions with Canada's major airlines. He is currently President, AeroStrategies Limited, a B.C. company specializing in airline maintenance and logistics.



### **Howard Jampolsky**

City of Richmond

Howard Jampolsky is a local entrepreneur whose business interests include Scadax Automation Corp., which provides remote monitoring and control systems for the water and waste industry.



### **Jill Leversage**

Government of Canada

Jill Leversage is a corporate director with over 25 years' experience in corporate finance and investment banking. She holds the Fellow of the Institute of Chartered Professional Accounts of BC designation and is a retired Chartered Business Valuator.





### **Kush Panatch**

Director at Large

Kush Panatch brings over 25 years of knowledge in real estate development and is the principal owner of a group of real estate companies involved in acquisition, management and development.

### **Craig Richmond**

President & Chief Executive Officer

In addition to his role as President & CEO of Vancouver Airport Authority, Craig Richmond has an extensive aviation background, including being CEO of six airports in three countries.



### **Tamara Vrooman**

City of Vancouver

Tamara Vrooman serves as President & CEO of Vancity, the first carbon-neutral financial institution in North America. Prior to joining Vancity, she served as Deputy Minister of Finance for the Province of British Columbia. In 2019, Tamara received a Peak Award honouring Women in Finance in the category of Excellence in Industry.



### **Wayne Wright**

Metro Vancouver (GVRD)

Wayne Wright served as Mayor of New Westminster from 2002 to 2014. For more than 30 years, he supported local organizations and was named "New Westminster's Citizen of the Year."



Vancouver Airport Authority would like to extend a warm welcome to Haydn Acheson, Kevin Howlett and Jill Leversage, who joined the Board in 2019, and a sincere thank you to Anna Fung and Gerri Sinclair, who left the Board in May and September 2019, respectively.

Mary Jordan stepped down in 2019 after serving 15 years on the Board, nine of them as Chair. In her time with YVR she made a considerable impact, and we are particularly proud of her work progressing our focus on diversity, inclusion and sustainability. In honour of Mary's exemplary leadership, trailblazing for women and many significant contributions to the airport, we established The Mary B. Jordan YVR Scholarship to recognize and support women pursuing a business degree in British Columbia. Thank you, Mary!



## Diversity

Our Board believes that its composition should reflect the rich diversity of the communities we serve. The Board identifies diversity as an essential element in attracting qualified directors and maintaining a high-functioning Board. The Board aspires to achieve a target of gender parity and having 20 per cent of its directors comprised of individuals from the three other designated groups identified in our governing legislation: visible minorities, persons with disabilities and Aboriginal peoples. The Board also welcomes other aspects of diversity such as age, sexual orientation and geographic location. The average age of current directors is 62. Among the Board, 100 per cent are above the age of 50.

Board Diversity	Number	%
Women	5	36
Visible Minorities	1	7
Persons with Disabilities	0	0
Aboriginal Peoples	0	0

The Board Diversity Policy also charges the Board with monitoring management's implementation of its workforce diversity policy. Information on employment equity in the workforce and in management can be found on **page 125**.

## Director Ethics and Code of Conduct

Our directors are expected to carry out their duties honestly, with integrity and in good faith. Although we are not a listed company, we choose to report against National Policy 58-201, Corporate Governance Guidelines, and the accompanying National Instrument 58-101, Disclosure of Corporate Governance Practices. Our Corporate Governance Guidelines, available on [yvr.ca/board](http://yvr.ca/board), provide an annual disclosure against 15 key guidelines.



# Executive Team

Our Executive Team guides our organization and ensures we operate the airport in a safe, efficient and reliable manner.



**Craig Richmond**  
President & Chief Executive Officer



**Lynette DuJohn**  
Vice President, Innovation and  
Chief Technology Officer



**Don Ehrenholz**  
Vice President, Engineering



**Argiro Kotsalis**  
Vice President, Legal and Chief  
Governance Officer



**Michele Mawhinney**  
Vice President, People and  
Sustainability



**Robyn McVicker**  
Vice President, Operations and  
Maintenance



**Anne Murray**  
Vice President, Airline Business  
Development & Public Affairs



**Scott Norris**  
Vice President, Commercial  
Development



**Diana Vuong**  
Vice President, Finance and  
Chief Financial Officer

# Executive and Board Compensation



To ensure YVR remains a global leader, Vancouver Airport Authority has a comprehensive executive compensation program in place. This enables us to remain competitive in the marketplace, attract and retain the calibre of executive required and motivate executives to achieve business results, support our vision and reinforce accountability to our customers and communities. We strive to create alignment throughout the organization regarding how incentive pay is structured—the same compensation philosophy informs management and employee groups' incentives.

The targets in the Strategic Plan inform the incentive measures that are core to YVR's executive compensation program. The key elements to the executive compensation program are base salary and incentive compensation, with short-term (one year) measures that include individual performance objectives and long-term (three year) measures.

## Incentive Measures

The short-term incentive plan measures focus on customer satisfaction, employee engagement, our reputation within the community, net operating margin and operating costs per enplaned passenger. The results are determined based on audited financial information and through surveys conducted by independent, third-party firms.

The long-term incentive plan measures are based on a rolling cycle that measures performance

over three years. The measures for the 2017 to 2019 cycle are based on continued performance in passenger growth, sustainability leadership, reductions in greenhouse gas emissions, water usage and airport waste and a financial management/ interest coverage ratio target. An independent firm measures sustainability leadership. The 2018 to 2020 cycle is aligned with the 2018-2020 Strategic Plan and Flight Plan 2037 and, along with passenger growth, its measures include free cash flow and project completion—on time and within budget—for two key capital projects that enable airport growth. The 2019 to 2021 cycle is based on passenger growth and free cash flow.

The Human Resources and Compensation Committee and the Board review the individual objectives set annually for each executive. Performance on these objectives is part of the short-term incentive award calculation and influences salary increase decisions.

## Executive Compensation Peer Group

To monitor the competitiveness of executive pay levels, Vancouver Airport Authority is compared to three peer groups:

1. Canadian airport authorities and, for reference purposes, international airports of comparable size in the U.S., Europe and Australia.

2. Canadian organizations in industries where skillsets for executive-level jobs are similar including transportation, utilities, communications, engineering, construction and commercial real estate industries.
3. Canadian organizations with similar ownership including privately held or subsidiary organizations from a wide range of industries.

Vancouver Airport Authority targets compensation at the median of the peer group with the opportunity for pay to exceed median when individual and corporate performance exceed expectations.

## Executive Compensation Review Process

The Human Resources and Compensation Committee retained an independent compensation consultant, Mercer, to provide market compensation data, assistance with incentive plan design and information on trends in executive pay. The Committee recommends the compensation of the CEO and the Executive Team to the Board only after considering market data, recommendations from the CEO on compensation for positions reporting to the CEO and individual and corporate performance objectives.

The Human Resources and Compensation Committee conducted a competitive process in late 2019 to

select an independent compensation consultant. Korn Ferry was the winning proponent and assumed the consultant role in December 2019.

### Executive Compensation

The Human Resources and Compensation Committee determines a salary framework that identifies salary ranges for the Executive Team positions. The salary range for the President & CEO position is \$388,000 to \$582,000, with a midpoint of \$485,000. For Vice President positions, the salary range is \$188,000 to \$282,000, with a midpoint of \$235,000.

All executives participate in the short-term incentive plan. Under the short-term plan, the President & CEO has a target opportunity of 50 per cent of base salary and a maximum opportunity of 75 per cent of base salary. Vice Presidents have a target opportunity of 30 per cent of base salary and a maximum opportunity of 45 per cent of base salary.

All executives also participate in the long-term incentive plan. This plan has a target opportunity of 45 per cent of base salary and a maximum opportunity of 90 per cent of base salary for the President & CEO and a target opportunity of 30 per cent of base salary and a maximum opportunity of 60 per cent of base salary for Vice Presidents.

Under both the short and long-term incentive programs, actual

performance results measured against the various metrics determine the magnitude of the payouts. If performance objectives are not met, no incentives are paid.

In 2019, the average base salary increase for executives was 2.8 per cent, along with other adjustments to increase salaries further within the salary range for certain executives to reflect development in their role, positioning of their salary relative to the market, or internal pay equity. In addition to the programs described above, the executives participate in standard health, retirement and perquisite programs.

### Directors' Remuneration

The Governance Committee reviews directors' compensation every two years with the assistance of an independent compensation consultant. In late 2017, the Board approved the retainer and meeting fee structure for both 2018 and 2019. The President & CEO receives no additional compensation for services as a director.

In late 2019, the Board reviewed the retainer and meeting fee structure for 2020 and 2021 and decided to make no changes to directors' remuneration.

In making its recommendation to the Board, our Governance Committee is guided by the compensation principles set out below.

Compensation Principles:

1. Compensation paid to directors will neither unduly reward, nor unduly penalize, an individual for choosing to serve on Vancouver Airport Authority's Board rather than on any other Board of Directors.
2. Every two years, the Board will review market data and set compensation at a level generally consistent with the mid-range of that being paid to directors of the Comparable Corporations—defined in point seven below.
3. To reflect both the inherent responsibilities and the variable time commitments, each director will be paid through a combination of an annual retainer and fees for each meeting attended.
4. To reflect the additional time and responsibility of serving as Chair of a Committee or Task Force, these directors will receive additional compensation in the form of an additional annual retainer.
5. To reflect the extra fiduciary responsibilities and time commitments entailed in the role, the Chair of the Audit Committee's additional annual retainer will be 125 per cent of the additional annual retainer.
6. The Board Chair will be paid an annual retainer, calculated as 275 per cent of the average total annual compensation of the other directors.



7. The Comparable Corporations that formed the basis for the 2017 and 2019 reviews are:
- Airport Authorities of Toronto, Montreal and Calgary.
  - British Columbia's major government transportation companies.
  - Twenty corporations with operations in British Columbia, with assets within a reasonable range of the Airport Authority's (i.e. 50 to 200 per cent), whose shares are publicly traded.
8. The Board will be guided by, but not bound by, the following calculation:

**(a + b + c) divided by 3 = mid-range of Comparable Corporations**

a = average of the average annual total compensation paid to Boards in group A.

b = average of the average annual total compensation paid to Boards in group B.

c = average of the average annual total cash compensation (stock options and other compensation are excluded) paid to Boards at the 50th percentile in group C.

The remuneration for non-management directors in 2019 is set out in the table below.

<b>Annual Retainer</b>	Chair	\$175,000
	Directors	\$35,000
<b>Additional Retainer for Committee Chairs</b>	Chair Finance and Audit Committee	\$9,000
	Chair other Board Committees	\$7,500
<b>Board and Committee meeting attendance fee</b>		\$1,400
<b>Other meetings fee</b>		\$700

Directors are also reimbursed for reasonable out-of-pocket expenses, which are reviewed by the Chair and the Corporate Secretary. The Chair's expenses are reviewed by the Governance Committee Chair. We do not reimburse directors for travel expenses to attend Board and Committee meetings unless the director resides outside the Metro Vancouver Regional District.

The total remuneration paid during 2019 to each director was as follows:

A. King <sup>1</sup>	\$125,730	K. Howlett <sup>2</sup>	\$49,538
H. Acheson <sup>2</sup>	\$24,636	H. Jampolsky	\$64,400
J. Caron	\$63,700	M. Jordan <sup>2,3</sup>	\$62,647
J. Currie	\$76,900	J. Leversage <sup>2</sup>	\$19,736
M.A. Davidson	\$69,300	K. Panatch	\$69,300
F. Fiorillo	\$80,050	G. Sinclair <sup>2</sup>	\$41,650
A. Fung <sup>2</sup>	\$21,739	T. Vrooman	\$74,000
K. Goosen	\$82,400	W. Wright	\$72,800
<b>Total</b>	\$998,526		
<b>Average<sup>3</sup></b>	\$57,868		

In addition to the above remuneration, directors were reimbursed for expenses totalling \$1,927.90 in 2019.

1 Our Chair receives an annual retainer for her work on the Board and does not receive additional meeting fees. Annalisa King was elected Chair on May 9, 2019 and received regular Board fees prior to that date. Mary Jordan served as Chair until she retired on May 9, 2019.

2 Haydn Acheson and Jill Leversage joined the Board on September 26, 2019. Kevin Howlett joined on May 9, 2019. Mary Jordan and Anna Fung retired from the Board on May 9, 2019 and Gerri Sinclair retired on September 26, 2019.

3 Excludes the salary for the Chair of the Board of Directors.



# Business Ethics

Vancouver Airport Authority is committed to ethical business practices. We expect our team to uphold the highest standards, and we have a range of internal policies and programs to ensure there is a clear understanding across the organization. We work closely with airport partners to promote sustainable business practices, in recognition that our actions and decisions have a broad impact.

**99%**  
New suppliers  
screened for  
social criteria

## In this Section



Anti-corruption, Sustainable purchasing, Airport advertising.



## GRI Disclosure and Stakeholders

GRI 205-2, 414-1



Vancouver Airport Authority



Passengers



Airlines



Airport business partners



Government and regulators



We strive to deliver excellence in corporate governance. As a community-based organization, a strong ethical foundation is essential to Vancouver Airport Authority because it demonstrates that we are fulfilling our commitment to be a transparent and accountable organization that provides social and economic benefits for the region. As a leader in sustainability, we consider our impact on the environment. And as a major employer, we have a responsibility to set a good example for others to follow.

## Our Approach



Our conduct has a direct impact on employees and business partners, whereas the consequences of this conduct involve a broader spectrum including industry partners and regulators. Ethics is an essential component in the Airport Authority—as a regulatory requirement and as an aspirational part of our culture—and we approach its management as a key part of business conduct.

### Ethics In The Workplace

We conduct ourselves in accordance with the highest standards, communicated and enforced through our Code of Ethics, corporate policies, management systems and an internal audit program.

### Code of Ethics

Vancouver Airport Authority's employees and Board of Directors are obliged to follow our Code of Ethics. Our Board of Directors are also bound by a separate Director Ethics and Code of Conduct. Our overarching Code of Ethics plays an important role in ensuring we meet

Social Policy objectives. We regularly encourage employees to read and report instances of non-compliance. In addition, employees in certain groups are required to sign an annual Conflict of Interest declaration, confirming their compliance with the Code of Ethics and any potential conflicts of interest that may arise in connection with their role at the Airport Authority.

### Corporate Policies

While the Code of Ethics acts as an umbrella policy for key issues like ethics, business judgment and general conduct, our corporate policies are intended to provide specific guidance on issues linked to corruption, perceived wrongdoing or workplace incidents, and to further articulate our values in the areas of social, economic and environmental practices.

### Anti-Corruption Policy

We take anti-corruption laws very seriously, with the understanding that violating them may result in severe consequences for both employees and the Airport Authority. We recognize

that anyone conducting business or otherwise acting for or on behalf of the Airport Authority is subject to these laws. We manage anti-corruption practices through our foundational element "Governance and Accountability" under the Strategic Plan, and through our Anti-Corruption Policy, Code of Ethics, Whistleblower Policy, Community Investment Policy and Guidelines and Social Management System. Our internal expense reimbursement system is set up to confirm that the guidelines in our Anti-Corruption Policy are followed.

We expect all employees to act in accordance with applicable domestic laws, including the *Corruption of Foreign Public Officials Act* and *the Criminal Code of Canada*, and all applicable foreign laws. We have a zero-tolerance approach to corruption, and our goal is 100 per cent compliance. To achieve this target, we provide anti-corruption resources and education for our employees.

## Whistleblower Policy

Our internal Whistleblower Policy provides a framework to report any perceived wrongdoings. Overseen by the Vice President Legal and Chief Governance Officer and the Director Internal Audit, the policy offers several options: reporting to superiors, reporting anonymously through the Safety Management System or calling the Confidence Line, a 24-hour ethics hotline managed by an independent third party. We share this policy with employees and contractors working at Airport Authority offices.

## Social Policy

Vancouver Airport Authority is committed to being a socially responsible organization, increasing awareness about Corporate Social Responsibility (CSR) among employees, stakeholders, customers and communities. For more information on our Social Policy, visit [yvr.ca/socialpolicy](http://yvr.ca/socialpolicy).

## Global Risk Management

The Global Risk Management Program helps protect the critical elements of the Airport Authority's global activities—our people, our assets, our operations and our business reputation—from prevailing political, security, integrity and other key risks. The program consists of several separate elements, including a due diligence framework from which we assess potential international business activities and partners, weighing such opportunities against a comprehensive country-by-country risk assessment.

Our Anti-Corruption Policy and Business Travel Policy helps inform this program, governing business activities at home and abroad. We also provide third party resources and support to our employees with a view to ensuring their safety when they are travelling on business.

## Internal Audit

The Internal Audit Department provides independent and objective assurance as to whether risks, internal controls and governance processes are appropriately managed to acceptable levels to enable the Airport Authority to achieve its strategic objectives. The department develops an annual risk-based audit plan that includes assurance on the effectiveness of the Airport Authority's risk management network. It also provides a core compliance function, by conducting independent investigations of suspected fraudulent activities, internal control audits, compliance audits of core policies, such as the Expense Reimbursement Policy, and assesses the Airport Authority's compliance with applicable regulations and contractual obligations.

## Sustainable Purchasing

Every day, the Airport Authority makes purchasing decisions that impact much more than our organization. In keeping with our commitment to sustainability, we set policies and guidelines to promote our values among suppliers.

Our sustainable purchasing approach impacts a broad range of business partners, including those on and off Sea Island. We outline this approach through the Sustainable Supply Management Plan, which focuses on initiatives that gain a better understanding of the market, providing a fair and transparent competitive procurement process, managing contracts after being awarded and optimizing internal materials handling processes to support YVR's operations.

The Sustainable Purchasing Policy aims to embed sustainability in purchasing decisions and ensure meaningful consideration of environmental, social and economic criteria. We include sustainability as a weighted component of criteria through a Sustainability Leadership Questionnaire that asks respondents about management systems and reporting, environmental considerations, workplace and supply chain practices including diversity, compensation and leadership. The questionnaire helps identify companies that are fair trade partners, local suppliers and that are Indigenous, woman or minority owned. In addition, through the *Musqueam Indian Band – YVR Airport Sustainability & Friendship Agreement*, we work with Musqueam to identify supplier opportunities.

Our commitment is to pursue total compliance with the Supplier Code of Conduct, available at [yvr.ca/suppliers](http://yvr.ca/suppliers). Every new supplier is asked to sign off on the Code, and if they are not in compliance, they must submit a plan outlining how they will rectify the situation. We are committed to the fair and competitive procurement of goods and services and note that exceptions may only be made for several specific reasons including proprietary nature, a single qualified supplier, an urgent safety issue and compliance. Permission

to single source a purchase must be obtained prior to a purchase with authorization from the accountable departmental Vice President.

### Airport Advertising

Advertising is an important business and ethical consideration for Vancouver Airport Authority. Not only does advertising provide a source of revenue, which helps YVR keep costs low and remain competitive, it also impacts the airport experience for our business partners and passengers and thus requires careful consideration.

To ensure we maintain high standards, we manage advertising through the Advertising Policy and Guidelines. Under the Guidelines, companies who wish to advertise at the airport must take the following into account: ad quality, barrier-free standards and content that is respectful of our diverse passengers and business partners. We regularly communicate the policy and guidelines to advertising partners and have an open line of communication to receive any feedback on our approach.



# Business Ethics: 2019 Results

To keep our Code of Ethics both accessible and top-of-mind for employees, we created a four-part video series that delves deeper into key topics like Respect in the Workplace, Conflicts of Interest and Off-Duty Conduct. These videos are available to all employees and form part of the onboarding process for new employees.

While there were no complaints reported in 2019 through our 24-hour Whistleblower hotline, our Chief Governance Officer did receive a Whistleblower complaint that was deemed to require investigation by external legal counsel. As a result of this third-party investigation, one of our executives had his employment terminated for exhibiting a pattern of behaviour contrary to the Airport Authority's values and Code of Ethics. This matter is currently under litigation.

## Anti-Corruption Policy

We communicated the Anti-Corruption Policy to all employees in 2019 and updated our internal

administrative controls to ensure compliance with the financial thresholds for gifts and spending set out in the policy. With respect to the activities of Innovative Travel Solutions (ITS), we provided our agents and representatives in other countries with a copy of our Anti-Corruption Policy and asked them to contractually agree to comply.

## Competition Bureau

The Competition Tribunal released its decision in October 2019, dismissing the application brought by the Commissioner of Competition against the Airport Authority under the abuse of dominance provision of the *Competition Act*. The Tribunal heard the trial over several weeks in October – November 2018 and found that the Airport Authority's decision in 2014 to limit the number of in-flight caterers operating at YVR due to its concern that the catering market at the airport could not support three participants and that allowing further entry could cause one or more of the incumbents to exit, did not constitute anti-competitive conduct. Accordingly,

it found in favour of the Airport Authority and awarded it costs in excess of \$1 million.

Since the Commissioner brought the application in 2016, the Airport Authority continuously maintained that it acted and is continuing to act in full compliance with the *Competition Act* and vigorously defended its right to determine what services are provided at YVR for the greatest overall benefit of its stakeholders. Making such determinations is at the heart of the Airport Authority's unique, not-for-profit, public interest mandate to operate a safe and efficient airport and to promote economic development. This mandate is shared by other Canadian airport authorities; the Commissioner's application was the first case of its kind against a Canadian airport authority.

The case is significant for Canadian competition law for several reasons, not the least of which is that it should provide comfort to business executives that their good faith decisions, if pursued for valid pro-competitive and efficiency-enhancing reasons, will be carefully considered and accorded a measure of deference by the Tribunal.

## Purchasing

We recognize that suppliers have a valuable role to play in upholding our commitment to sustainability. In 2019, the Airport Authority screened 99 per cent of new suppliers using the environmental, economic and social criteria detailed in the Supplier Code of Conduct, available at [yvr.ca/suppliers](http://yvr.ca/suppliers).

Over 61 per cent of our total spend was in Metro Vancouver, more than 36 per cent within B.C. and Canada, and the remaining spend within the U.S. and abroad.

## Report on 2019 Single Source Contracts

In general, the Airport Authority's procurement of goods and services follows a competitive process. Exceptions may be made in the circumstances described as follows.

### Reasons\* for exceptions:

1. The goods or services are of a proprietary nature or there is only one qualified supplier;
2. The urgency of a safety, security or critical operating need so requires;
3. In compliance with a product, services or equipment standardization program;
4. When the supplier has satisfactorily performed previous related services with a cost saving;
5. The supplier has been awarded a contract for a similar product or service by the Airport Authority as the result of a competitive process within the previous five years.

In keeping with our policy of being transparent, we publish the list of goods and services costing more than \$141,546.39 (\$100,000 in 2000 dollars), which were not awarded on the basis of a competitive process during 2019. The contracts below total \$44,753,341 in single source contracts, representing five per cent of the total goods and services purchased in 2019.







# Our Business

2019 was another incredible year. We welcomed a record 26.4 million passengers and connected people and businesses to destinations all over the world—thanks to our airline partners. At the same time, our team delivered exceptional customer care and our airport continued to provide direct economic benefits for the region.



ECONOMIC

49

**MATERIAL TOPIC:  
AIR SERVICES AND  
CONNECTIONS**

64

**MATERIAL TOPIC:  
DIRECT ECONOMIC IMPACT**

57

**MATERIAL TOPIC:  
CUSTOMER CARE**

71

**BUSINESS UNITS**

# Air Services and Connections



Every day, YVR facilitates the movement of thousands of passengers to destinations all over the world. We drive passenger and air service growth through teamwork, constant terminal improvements and a strong vision.

**26.4**  
**Million passengers in 2019—a new record**

## In this Section



Airline connections



## GRI Disclosure and Stakeholders

GRI A01



Vancouver Airport Authority



Passengers



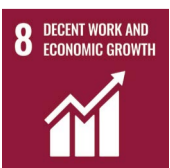
Airlines



Airport business partners



Industry associations



YVR is a major international airport that provides critical and strategic links to markets all over the world. To achieve our vision to be a world-class sustainable hub, the Airport Authority recognizes the importance of supporting a strategic approach to air service offerings and growing connecting traffic, as this allows us to strive for sustainable growth. We benefit from a strong relationship with key airlines—including Air Canada, which is basing its trans-Pacific hub at YVR. Additionally, our focus on airline connections drives the capital plan and investments in process innovations and terminal expansions.

## Our Approach



Airline connections have a substantial impact on the airport, including its partners and passengers. Growth requires constant improvements, which not only alter the passenger journey but also change how we operate. While we provide the facilities, airlines provide the right transportation and passenger choices drive our decision-making.

Our approach to airline connections is focused on building an efficient and attractive hub for everyone.

This approach ensures that we not only stay ahead of the competition, but also provide the facilities necessary to attract and retain valuable connecting traffic, a key source of growth and route profitability.

In the Strategic Plan, we outline a range of initiatives to improve the speed and ease of the hub. Our ConnectYVR rates and charges program, launched in 2016, incentivizes airlines with some of the lowest aeronautical rates in

North America. Our Asia office, located in Hong Kong, strengthens airline partnerships in several key markets. We also work with partners to drive policy changes that support growth, improving the airport experience with innovative programs and aligning our interests.

# Air Services and Connections: 2019 Results

2019 saw growth from all markets, with Asia-Pacific growth leading the way at 2.7 per cent.

**26,379,870**  
Passengers

**+1.8%**  
Annual Growth

**Domestic:**  
**12,681,312**  
passengers  
with  
**+1.9%**  
Annual Growth

**Asia-Pacific:**  
**4,586,934**  
passengers  
with  
**+2.7%**  
Annual Growth

**Latin America:**  
**939,082**  
passengers  
with  
**+0.1%**  
Annual Growth

**Transborder (U.S.):**  
**6,411,69**  
passengers  
with  
**+1.3%**  
Annual Growth

**Europe:**  
**1,815,661**  
passengers  
with  
**+0.4%**  
Annual Growth

## Total Number Of Arriving And Departing Passengers

Passengers	Domestic	International	Total
Arriving Passengers	6,337,287	6,881,702	13,218,989
Departing Passengers	6,344,025	6,816,856	13,160,881
<b>Total Passengers</b>	<b>12,681,312</b>	<b>13,698,558</b>	<b>26,379,870</b>

## Air Services



Aeroméxico



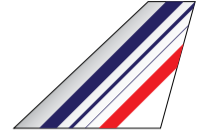
Air Canada /  
Air Canada  
Express



Air Canada  
Rouge



Air China



Air France



Air  
New Zealand



Air North



Air Transat



Alaska  
Airlines



All Nippon  
Airways



American  
Airlines



Beijing Capital  
Airlines



British  
Airways



Cathay Pacific  
Airways



Central  
Mountain Air



China  
Airlines



China Eastern  
Airlines



China Southern  
Airlines



Condor



Corilair



Delta Air Lines /  
Skywest/Delta  
Connector



Edelweiss Air



Eva Air



Flair Air



Gulf Island  
Seaplanes



Hainan Airlines



Harbour Air



Helijet  
Airways



Hong Kong  
Airlines



Horizon Air



Icelandair



Interjet



Japan Airlines



KLM Air



KD Royal Dutch  
Airlines

## Air Services (continued)



Korean Air



Lufthansa Airlines



Pacific Coastal Airlines



Philippine Airlines



Qantas Airways



Salt Spring Air



Seair Seaplanes



Sichuan Airlines



Sunwing Airlines



United Airlines / Skywest/United Express



Westjet Airlines/ Westjet Encore



Xiamen Airlines

## CARGO AIRLINES SERVING YVR



Cargojet



DHL Express



Federal Express



Purolator Couriers



UPS

## Thank you

Vancouver Airport Authority would like to thank YVR's airline partners for another great year. Our mission is to connect B.C. proudly to the world, and we couldn't do this without your continued support.

## New Routes and Services



Air Canada



Air Transat



Hainan Airlines



Sichuan Airlines



WestJet Airlines



In 2019, we continued to expand connections to destinations all over the world. Air Canada launched new service to Auckland. Hainan Airlines and Sichuan airlines launched new direct service to Shenzhen and Chengdu, respectively. Air Transat started new service to Fort Lauderdale and Liberia, Costa Rica, and WestJet launched new domestic service to Cranbrook.

## Airport South

**469,512**

**South Terminal and  
Floatplane Terminal  
passengers**

**32,924**

**Floatplane river  
movements**

**95%**

**Customer Satisfaction—  
South Terminal**

Airport South is a unique reflection of our history and province. In addition to being the location of the original airport, it connects passengers and communities across British Columbia to a range of locations that demonstrate our diverse economy and people. It includes the South Terminal Building, the public Floatplane Facility on the Fraser River, and provides an aviation hub for regional and coastal air services, helicopter operations, corporate charters, sport fishing camps and aerospace facilities.

Airport South continued to connect passengers and communities across British Columbia to the world in 2019, with floatplane operators such as

Harbour Air and Seair Seaplanes, and regional carriers including Pacific Coastal Airlines and Central Mountain Air. A total of 469,512 passengers used the South Terminal and Floatplane Terminals, a slight increase from 2018. Of this number, 134,199 were floatplane passengers.

We continued to improve Airport South in 2019. Our team started work on a new floatplane dock, which when complete will further enhance safety and the reliability of our operations. In addition, we began initial steps to look at how we can improve ground transportation to the South Terminal and will continue to explore options in 2020 and beyond.



### Harbour Air and magniX Made History at YVR

Harbour Air and magniX made history on December 10, 2019 by successfully flying the world's first all-electric commercial plane from YVR's South Terminal. Harbour Air's Founder

and CEO, Greg McDougall, took a retrofitted DHC-2 de Havilland Beaver float plane to the air for a few minutes. The test-flight was a significant milestone for our partners at Harbour Air, and the YVR team was thrilled to witness the future of aviation right here at YVR.





## Improving Connections

### International-to-Domestic

We made great progress in 2019 with YVR's International-to-Domestic Transfer Process (ITD), a procedure that allows passengers from select international destinations to connect to domestic flights without having to retrieve their baggage.

We continued the discussion about program expansion with Canada Border Services Agency (CBSA) and our current airline partners, WestJet and Air Canada. This year we expanded the program's eligibility, which includes flights

from the United States, European Union, United Kingdom, Australia and Japan, to include all WestJet flights arriving from Mexico, and also added three new partner carriers to the program: Air France, KLM – Royal Dutch Airlines, and Delta Air Lines. In addition, construction continued on the permanent ITD connections facility.

We sincerely appreciate the support of CBSA, WestJet and Air Canada as we work together to improve the connection process at YVR.

### USA connections

As a result of the renewed and updated Canada-US Preclearance Agreement, which came into effect August 2019, YVR is in the process of making facility changes to improve the end-to-end connections experience, which include upgrades to support the eventual introduction of biometric processing. We also recently added a third CATSA Plus security screening lane in our U.S. connections checkpoint to better support connecting travelers during peak connecting periods.

# Customer Care



Our team strives to deliver a great airport experience for passengers, partners and communities. We are always looking for ways to improve the airport and our efforts range from ensuring passengers have everything they need to navigate the terminal buildings, to working with partners on accessibility improvements—and much more.

## 91% Customer Satisfaction Rating

## In this Section



Accessible air travel, Customer privacy, Customer service quality, Non-discrimination towards passengers.



## GRI Disclosure and Stakeholders

GRI 418-1



Vancouver Airport Authority



Passengers



Airlines



Airport business partners



Government and regulators



As a community-based organization, Vancouver Airport Authority is in a unique position—we constantly reinvest our success back into the airport, creating an environment that caters to the needs of our many stakeholders. And customer care is at the core of our success. It's what sets us apart as an airport, a community asset and a leader.

## Our Approach



YVR welcomes millions of passengers every year and these passengers interact with a range of stakeholders including Vancouver Airport Authority employees and our many partners. We have taken a multi-pronged approach to customer care, which starts with a strategic focus that places customer care under one of our key organizational and strategic objectives: create an outstanding customer experience. Going forward, our approach will expand and shift focus to address new challenges resulting from COVID-19.

We strive to create an exceptional culture of care for all passengers. We offer training for Airport Authority employees and Sea Island business partners, we undergo extensive terminal audits, and we partner with key organizations, such as the Rick Hansen Foundation, to improve the terminal for everyone. In addition, we seek feedback on how the airport can improve—through the customer care team, website, social media and surveys.

### Customer Service Quality

Improving the passenger experience is critical to building a successful, diversified hub as it impacts our reputation and influences customers' choices. Customer service is visible at all points in the passenger journey—from interacting with friendly staff or volunteers to considering appropriate terminal design.

To ensure passengers receive outstanding service, we have a comprehensive approach that includes terminal improvements, employee recognition programs and new and improved passenger processes. And we constantly measure success, through satisfaction surveys, audits, mystery shops and meetings with partners.

### Accessible Air Travel

Our approach to accessibility is grounded in a belief that YVR has a responsibility to make travel accessible for everyone. We interact

with a diverse range of passengers, and our actions have a big impact on their travel experience.

We approach universal access as an essential component of the customer experience. We strive to offer a welcoming environment that provides meaningful access. We are committed to meet and, where possible, exceed requirements and our team is passionate about ensuring that people of all abilities have a great terminal experience. Our strategy includes adhering to all applicable regulations following the National Building Code of Canada, Canadian Standards Association—Accessible Design for the Built Environment, Canadian Transportation Agency standards and codes, the *Canada Transportation Act* and the *Personnel Training for the Assistance of Persons with Disabilities Regulation and the Accessible Canada Act*. We strive to go beyond code, whenever possible.

We have established universal access design guidelines for all renovations and new construction. In addition, we conduct a wide range of activities and programs under the Universal Access Plan including working closely with partners at the airport and in the community, conducting terminal upgrades, outlining accessibility requirements in tenant leases and offering accessibility training for employees and contractors. We also host popular experiential programs to help individuals and families prepare for air travel requirements and we are constantly adding new features and services.

### Customer Privacy

Vancouver Airport Authority is subject to the *Personal Information Protection & Electronic Documents Act*. Privacy matters are overseen by our Vice President Legal and Chief Governance Officer, in her capacity as Privacy Officer, as well as a Privacy Committee comprised of the Privacy Officer, Vice President People and Sustainability, Vice President Operations and Maintenance and Vice President Innovation and Chief Technology Officer.

We take the collection of information very seriously. Our foundational item, IT & Digital, is a critical element that supports the Strategic Plan. It guides our goals to deliver a stable and resilient foundation of technology and protect the environment through a multi-layered system of cyber

security. Our organization is subject to several policies—Privacy, Privacy Breach Reporting, Technology Use—which guide a range of actions and form part of the Privacy Management Program.

Recognizing that privacy and security go hand-in-hand, we have a cross-departmental, cyber security and privacy team. In the event of a breach, we would engage the team to contain it, evaluate risks and mitigate the situation. Under this team's guidance, we regularly update our policies, offer customized departmental training and communicate changes to our approach through multiple channels. A link to our Privacy Policy is available on our website: [www.yvr.ca/en/privacy](http://www.yvr.ca/en/privacy), and we field all complaints through our Privacy Officer.

### Non-discrimination towards passengers and employees

Vancouver Airport Authority strives to offer a great airport experience for everyone, free of discrimination, which is paramount to our success and reputation. We treat passengers with honesty and integrity, and we work with business partners to ensure passengers receive fair and ethical service. We uphold our standard of conduct to obligations found under the national *Human Rights Act* and elevate our standards through our corporate guidelines, found in the Social Policy and Code of Ethics.

YVR supports Canada's linguistic duality, a cornerstone of our country's rich heritage and diversity. We have a strong foundation in ensuring that we communicate in both French and English with the travelling public. Building on that strong foundation, we are continuing to broaden and expand our Official Languages Program.

We undertake a range of actions to ensure a goal of zero-discrimination. This includes full compliance with English and French language laws, 24/7 language line translation services offering services in more than 240 languages for passengers, concessionaires and airlines—including our newest addition in 2019 of a video call translation service, which includes sign language interpretation, offering 40 languages interpreted by video link. We offer training for our employees and customer care contractors, pictograms and language options on signage (English, French and Simplified Chinese), cultural awareness programs and inclusive washroom signage. Our language survey is conducted every few years to ensure we look after specific linguistic needs of passengers. The survey findings help us make improvements like including Simplified Chinese throughout the airport.

We also work hard to be as inclusive as possible, offering unconscious bias training and cultural cues training on a regular basis to staff and our Green Coat Volunteers.

## Customer Care:

## 2019 Results



2019 was our busiest year ever. We welcomed a record number of passengers and we did this while maintaining a high level of customer care. YVR won Best Airport in North America at the Skytrax World Airport Awards—for an unprecedented ten years in a row—and we achieved a customer satisfaction rating of 91 per cent.

# 91%

## Customer Satisfaction Rating

# 1,071,651

## customer enquiries answered in 2019

Our customer satisfaction rating is based on an annual survey that helps us monitor passenger satisfaction, formulate future initiatives and evaluate the impact of capital improvements. In 2019, we scored a 4.3 out of 5.0 on this survey, with 91 per cent of respondents either “very satisfied” or “satisfied” with our services and facilities. We are very pleased with this result, as we undertook our largest ever annual capital works program in 2019. This has been consistently maintained

at 90 per cent or above levels for 10 years running, and it is all thanks to the broad team of more than 26,500 people who work on Sea Island.

We answered 1,071,651 enquiries at information counters, a fifteen per cent increase from 2018. We responded to 29,111 interactions through our 24/7 communications channels, up 11 per cent over 2018. This included 974 responses through Twitter, 6,425 through email and 20,643 phone calls.



## Customer Service Quality



### Green Coat Volunteers

For 30 years now, YVR's Green Coat volunteers have assisted travellers and visitors. They are located throughout the terminal and are always happy to help answer questions and ensure everyone has a great experience. This friendly team of 427 active volunteers delivered 81,266 hours of service in 2019. In addition to the above, volunteers logged over 2,700 training hours.

All our volunteers completed annual training on emergencies and evacuations. The volunteers learned specific skills such as using clear communication, making appropriate and immediate decisions and understanding YVR's evacuation methods.

### YVR Stars

The YVR Stars program encourages travellers, visitors and employees to nominate anyone who works or volunteers on Sea Island for providing exceptional customer care. In addition to promoting great service, the program inspires the YVR community to take pride in their work. In 2019, YVR Stars received 517 nominations encompassing 56 companies on Sea Island. We hosted our fifth annual celebration event in January 2020 for YVR Stars, welcoming winners that demonstrated exceptional safety and security, teamwork, care and compassion and overall customer service.



## Customer Service Quality



### Terminal Improvements

In 2019, we conducted a range of terminal enhancements. We installed our first-ever nursing pod, Mamava, to provide a comfortable environment for individuals who wish to breastfeed or pump in a private space. We partnered with Aira, a mobile application that connects individuals who are blind or partially sighted to trained agents who help the user navigate their environment.

We converted several airlines in our Transborder (U.S.) sector to a self-serve check-in environment, making passenger check-in processes more efficient and streamlined. We also opened more holdroom spaces for bussing passengers, while keeping with our commitment to maintain an exceptional customer experience.

To enhance access to information, we launched a new digital information kiosk in the International Departures area. We integrated digital messaging on our curbside signage, and we introduced a help point kiosk trial, available as customers arrived curbside at U.S. departures.

### Extended Concession Hours

To help make YVR a memorable experience and provide a consistently excellent service offering for all passengers, we extended the operating hours of all food, beverage, shops and services partners on June 1.



## Accessibility

In 2019, we updated our three-year Universal Access Planning Framework and completed year one of our plan. Our team prepared for the new Accessible Transportation for Persons With Disabilities Regulations, completing detailed reviews of our services, upgrading several check-in kiosks, enhancing washroom signage and adding additional communication tools.

### Accessibility Awareness and Tours

We continued to partner with the Wavefront Centre for Communication Accessibility (formerly known as Western Institute for the Deaf and Hard of Hearing) to implement changes originating from its 2017 terminal audit. We welcomed Canucks Autism Network (CAN) participants to YVR for job-shadowing experiences and hosted the Autism Accessibility tour for nearly 200 participants. Our popular tours with Spinal Cord Injury BC and the Canadian National Institute for the Blind continued in 2019. In partnership with Pacific Assistance Dogs Society and BC Guide Dogs, we also launched a familiarization tour for service dogs in training.

## Privacy Management

As a result of measures taken to reduce the impact of phishing and similar campaigns, the Airport Authority did not experience any cyber-related incidences resulting in a privacy breach in 2019. Throughout 2019, we continued to build on our Privacy Management Program. Activities included:

- Further established the cross-departmental team to review ongoing projects, items of concern, and other privacy and cyber topics beyond privacy breaches, including the EU General Data Protection Regulation, biometrics and other innovative solutions.

- Updating the Privacy Breach Reporting Policy and a Privacy Breach Response Policy.
- Applying a data-mapping approach to proactively answer questions about the personal data we are entrusted with safeguarding.
- Ensuring that all employees completed mandatory privacy and cyber awareness training and that departments received customized training as needed.







# Direct Economic Impact

YVR plays a key role in the economy—creating jobs and driving business activity. The airport’s success is built on Vancouver Airport Authority’s unique business model, which includes a conservative approach to debt, diverse revenue streams and a robust risk management system. Our approach to risk also addresses climate change.

**26,500**  
Jobs on Sea Island supporting YVR’s operations

## In this Section



Direct economic impact, Climate change adaptation



## GRI Disclosure and Stakeholders

GRI 201-1



Vancouver Airport Authority



Airlines



Airport business partners



Government and regulators



Local communities



DIRECT ECONOMIC IMPACT

Direct economic impact is crucial because it reflects our success as a business. Under our not-for-profit governance model, the Airport Authority reinvests all profits back into the airport and region. This approach has strengthened our financial position and supports a broad range of economic benefits in the region.

## Our Approach



YVR's direct economic impact has a wide-reaching influence, supporting the employment of over 26,500 people on Sea Island and a range of businesses through the purchase of goods and services. We seek to ensure financial strength and revenue growth, both critical elements supporting the Strategic Plan, through three sources: aeronautical revenue, which includes landing and terminal fees; non-aeronautical revenue from concessions, parking, kiosks

and terminal and land rents; and an Airport Improvement Fee, which is dedicated to supporting capital projects. We approach economic impact as a positive outcome of the Airport Authority's governance model, with its emphasis on strategic and sustainable growth.

We are committed to being financially stable, and this is reflected in our high credit rating and conservative approach to debt financing. We are also committed to providing social

and economic benefits to the region, and we do this by seeking out new revenue streams—from developing new technologies to go to market to implementing innovative business practices as seen with our part-ownership of the McArthurGlen Designer Outlet Centre. At the same time, we provide significant economic benefits through the growth of the airport and its air services.



## Climate Change

Climate change presents risks and opportunities for YVR's economic performance. From an opportunity perspective, we conduct a range of activities that help us prepare and adapt to a changing climate and in turn reduce our impact on climate change.

For instance, we support more efficient and environmentally friendly supply chain logistics, develop sustainable forms of power for the airport terminals and supporting efficient modes of transportation.

We recognize that climate change presents a range of potential impacts, and we acknowledge our responsibility to sustainably manage these risks. The airport is located on Sea Island, surrounded by the

Pacific Ocean and the Fraser River, and is susceptible to rising sea levels, changing weather patterns and natural hazards. This presents a potential financial impact to all of Sea Island, including our employees, business partners and surrounding communities.

To properly address climate-related risks, the Airport Authority's cross-departmental Climate Change Adaptation Working Group prepared a Climate Risk and Resilience Report. The report focuses on business continuity, with an emphasis on identifying and monitoring potential climate-related risks. Key to the group's work is a Climate Change Matrix that identifies 28 climate-related risks, details the nature of the risks and the methods used

to manage them, as well as their potential impact.

In addition to identifying and monitoring climate-related risks, the Airport Authority has taken proactive steps over the last several years to mitigate the impacts of climate change. For instance, we are part of an inter-jurisdictional initiative to develop a coordinated flood management strategy for the lower Fraser River. We have a multi-year plan to raise our dykes to an elevation of 4.7 metres based on the expected sea level rise of one metre within 100 years. As of the publication of this report, the Airport Authority has 15 kilometres of dykes: 4.5 kilometres at 4.7 metres in elevation and 10.5 kilometres at four metres.



# Direct Economic Impact: 2019 Results

# \$6.6

**Million Overall  
revenue increase**

## Financial and Operating Highlights (2010 – 2019)

Year	Revenue (millions)	Operating Expenses (millions)	Ground Lease (millions)	Excess of Revenue over Expenses (millions)	Net Assets (millions)	Capital Expenditures for the Year (millions)	Passengers (millions)	Aircraft Runway Take-offs and Landings (thousands)	Cargo Handled (thousands of tonnes)
2019	571.8	434.5	60.3	75.6	1,841.0	610.6	26.4	290	302.6
2018	565.1	408.5	59.5	101.7	1,765.4	351.1	25.9	296	338.6
2017	530.6	388.5	55.3	88.6	1,668.7	167.9	24.2	289	312.9
2016	490.5	360.1	50.6	85.1	1,578.0	160.2	22.3	280	282.8
2015	485.5	346.9	49.3	131.5	1,495.8	205.0	20.3	279	271.8
2014	465.6	325.1	46.6	105.6	1,360.7	277.6	19.4	273	256.9
2013	434.2	291.9	42.3	58.0	1,256.5	186.0	18.0	263	228.3
2012	403.9	280.7	39.1	82.5	1,181.6	106.0	17.6	261	227.9
2011	369.4	276.1	34.8	69.3	1,098.2	59.9	17.0	258	223.9
2010	368.8	281.4	33.2	63.7	1,037.9	71.2	16.8	255	228.4

*Based on audited Consolidated Financial Statements.*



**CREDIT  
RATING**

**Second-highest airport  
rating in the world**

## Finances

Sustainability requires strong financial health, which is one of the Airport Authority's fundamental responsibilities. Our sound financial planning is reflected in our consistently high credit rating, which is among the best in the world. Both Standard & Poor's and Dominion Bond Rating Service confirmed the Airport Authority's ratings at AA and AA (low), respectively, in 2019. Our AA credit rating is the second-highest airport credit rating in the world, after Hong Kong.

## Financial Review

The Airport Authority earns revenue from three main sources:

- **Aeronautical revenue**

The Airport Authority collects landing and terminal fees to recover a portion of the operating and capital costs related to airline operations. This revenue amounted to \$146.3 million in 2019, an increase of \$3.1 million from \$143.2 million in 2018. In 2016, the Airport Authority introduced ConnectYVR, an innovative five-year program that held aeronautical fees at the same rates, keeping air carrier operating costs low and encouraging more flights from YVR. ConnectYVR incents growth and efficiency, providing lower overall fees for carriers who utilize the aircraft gates more efficiently to allow the Airport Authority to optimize its terminal infrastructure. We are able to keep our aeronautical revenue low by having a robust non-aeronautical revenue program, as noted below.

- **Non-aeronautical revenue**

This includes revenue from concessions, such as duty free, car rental facility charges and advertising, as well as car parking, kiosks and terminal building and land rents. Revenue from these sources amounted to \$254.5 million in 2019, an increase of \$4.7 million from \$249.8 million in 2018, due mainly to the increased contribution, concessions, rental and car parking revenue partially offset by a decrease in kiosk revenue.

- **Airport Improvement Fee (AIF)**

All the Airport Authority's excess revenue over expenses are reinvested into capital infrastructure. However, the revenue earned from aeronautical and non-aeronautical sources is not sufficient to cover the required capital projects. To help fund capital projects, the Airport Authority collects an Airport Improvement Fee (AIF). Total AIF revenue earned in 2019 was \$171.0 million, a decrease of \$1.1 million from \$172.1 million in 2018, due mainly to a decrease in the ratio of originating versus connecting passengers partially offset by the 1.7 per cent growth in passenger traffic over 2018. In 2019, YVR's AIF remained one of the lowest of the major airports in Canada and continues to provide one of the lowest fees for travel within B.C. and the Yukon.

Almost half of YVR's revenue came from non-aeronautical sources. This included sales of our award-winning BORDERXPRESS™ kiosks, parking and tenant rent. We reinvest this revenue back into the airport, keeping costs low for our airline partners and passengers.

Aeronautical and non-aeronautical revenue goes towards covering the costs of operating the airport, which include salaries, wages and benefits, materials, supplies and services, payments in lieu of taxes and insurance. Our operating costs are a reflection of the services and processes that are required to operate the airport, such as security, janitorial, customer care, maintaining airport infrastructure, and costs related to supporting our hub strategy such as ITD and remote stand operations, which are discussed on **pages 56** and **79** respectively. In 2019, these costs grew to \$243.7 million, an increase of \$20.1 million from 2018. These increases were mainly due to materials, supplies and service costs for operating costs incurred during construction, IT cloud computing, snow operations, new jetSet valet operations, customer care, management consulting, baggage sortation, shuttle bus services, security and terminal repairs and maintenance partially offset by a decrease in legal services costs. Salaries, wages and benefits costs increased in 2019 based on the negotiated wage increases per the Collective Bargaining Agreement as well as from an increase in the number of employees.

The Airport Authority also uses a portion of its revenue to pay rent to the federal government under the Ground Lease, which amounted to \$60.3 million in 2019, an increase of \$0.8 million from 2018. The increase in rent resulted from the increase of the Airport Authority's revenue, upon which the rent payment is based. The Airport Authority paid \$16.7 million to the City of Richmond, with a minor amount to the City of Vancouver, for payments in lieu of taxes. In April 2019, the Airport Authority paid the Musqueam Indian Band \$5.6 million based on one per cent of the Airport Authority's 2018 revenue as part of the 30-year Sustainability & Friendship Agreement between YVR and Musqueam.

The total cash needed to pay for capital projects can exceed the amount available after payment of operating costs, ground lease and interest costs. In these situations, debt financing is required. The Airport Authority takes a conservative approach to debt levels and strives to achieve a reasonable balance between debt and sources of revenue. In October 2019, the Airport Authority financed a new \$300 million debenture. The Airport Authority had \$900 million in outstanding debt financing consisting of a series of four long-term debentures with fixed

interest rates and varying maturity dates. Interest cost, which included interest payments, standby fees and service charges, amounted to \$31.5 million in 2019, an increase of \$1.1 million from 2018.

As required under generally accepted accounting principles and in the statement of operations, the costs of capital projects are spread over the useful life of the assets, as opposed to being recognized as the total cash paid for the projects in the current year. This spreading of cost over the useful life is reflected as amortization on the statement of operations, which is a non-cash charge. Total amortization in 2019 amounted to \$159.4 million, an increase of \$4.9 million from 2018 as a result of new facilities that came into operation.

The Airport Authority earned \$10.6 million in partnership income from the rental of buildings owned by the Airport Authority, which amounted to an increase of \$1.8 million from 2018.

Total excess of revenue over expenses, which includes amortization, was \$75.6 million in 2019, a decrease of \$26.1 million from 2018. When amortization, a non-cash item, is removed, the Airport Authority generated \$281.7 million of net cash flow, prior to its investment in capital projects.

During 2019, the Airport Authority invested \$610.6 million in capital projects. The capital projects included the Central Utilities Building, Parking and Ground Transportation Facilities, Pier D Expansion, Remote Stand

Operations Facilities (passenger bussing), Runway End Safety Areas, Hold Baggage Screening and the International-to-Domestic Facilities.

In order to pay for these capital projects, the following amounts were used:

- Ending 2018 cash balance of \$270.3 million.
- Net AIF in the amount of \$164.1 million.
- Net cash flow (excluding AIF) of \$117.6 million.
- New incremental debenture borrowings of \$300 million.

After paying for the 2019 capital project costs, and when combined with the cash available at the start of the year, we were left \$241.5 million in cash available to pay for capital projects in 2020.



## Financial Statements

Vancouver Airport Authority's 2019 Consolidated Financial Statements are available at [yvr.ca/2019](http://yvr.ca/2019).

# Business Units



## Innovative Travel Solutions

Innovative Travel Solutions (ITS), a business unit within the Airport Authority, is responsible for solving challenges at YVR and, where appropriate, commercializing solutions for sale to other airports. ITS's mission is to transform the airport experience by developing the best travel solutions at YVR and around the world.

The ITS team has been primarily focused on developing, selling and supporting its BORDERXPRESS™ kiosks. ITS is the largest provider of common-use, self-service border control solutions with more than 1,700 kiosks operating in over 43 airport, seaport and onboard locations around the world. This solution has helped more than 250 million passengers clear the border efficiently and safely. The net profits earned from ITS's commercial operations fund the innovation program at YVR.

ITS expanded its portfolio of industry-leading technology with the launch of CHECKITXPRESS™, a self-service bag drop. Vancouver Airport Authority continues to expand the use of these bag drops at YVR and, since going live, the units have processed 68,000 bags with an average read rate of 94 per cent.

For more information on Innovative Travel Solutions, visit [yvr.ca/its](http://yvr.ca/its).

## Vancouver Airport Authority (Hong Kong) Ltd.

Vancouver Airport Authority (Hong Kong) Ltd. was established in 2012 as a wholly-owned subsidiary of Vancouver Airport Authority to strengthen airline relationships and forge new partnerships in the Asia-Pacific. In 2019, the team's efforts resulted in several key developments: Sichuan Airlines operating a non-stop twice weekly flight from Chengdu to Vancouver and a successful event in Beijing to celebrate Air Canada and its 25th anniversary of service between China and Canada.

## YVR Project Management

Established in 2005, YVR Project Management Ltd. (YVRPM) is a wholly-owned subsidiary of Vancouver Airport Authority overseeing major capital expansion projects at YVR and on Sea Island. YVRPM managed the construction of the first and second phases of the McArthurGlen Designer Outlet Centre. YVRPM continues to work on the planning and development of several other capital projects on Sea Island.

## Vancouver Airport Property Management LLP

Vancouver Airport Authority established Vancouver Airport Property Management LLP (VAPM) in 2014 to own and operate the multi-tenanted cargo and office facilities on Sea Island. The VAPM team manages these facilities with a focus on developing and expanding cargo business at YVR. As of December 31, 2019, the portfolio of assets is over 97 per cent occupied and, during 2019, generated more than \$10 million in cash from operations.





## Vancouver Airport Enterprises (Templeton) Ltd.

Established in 2012, Vancouver Airport Enterprises (Templeton) Ltd. is a wholly owned subsidiary of Vancouver Airport Authority and holds our 50 per cent investment in the McArthurGlen Designer Outlet Centre (Outlet Centre). McArthurGlen, a leading European outlet developer, holds the other 50 per cent investment.

Just minutes from the terminal on public transit, in 2019 the Outlet Centre was one of the top performing malls in Canada, having welcomed over seventeen million shoppers since its opening in 2015. In addition to offering our passengers a great shopping experience, the Outlet Centre has a considerable economic impact, providing jobs and creating business activity in the region. In August 2019, the second phase of the Outlet Centre opened, which includes over 84,000 square feet of additional retail space.

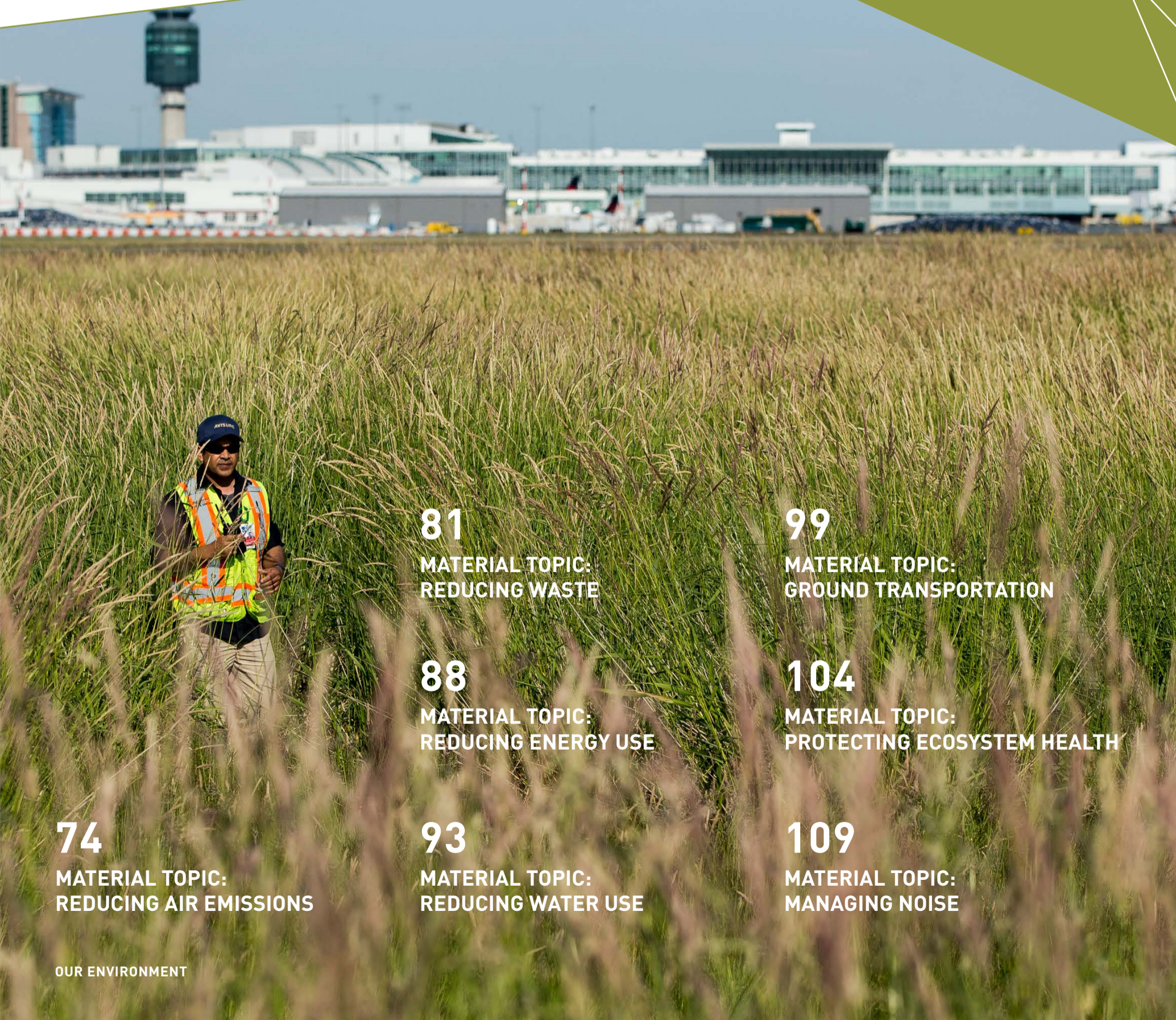


# Our Environment

Vancouver Airport Authority strives to be a leader in environmental management. We maintain robust policies and procedures aligned with our values and regulatory obligations, and we actively identify, seek out and report issues and hazards, promoting a culture of accountability. Above all, we always seek to improve our performance—because we care about our environment and our place in it.



ENVIRONMENT



**81**  
MATERIAL TOPIC:  
REDUCING WASTE

**99**  
MATERIAL TOPIC:  
GROUND TRANSPORTATION

**88**  
MATERIAL TOPIC:  
REDUCING ENERGY USE

**104**  
MATERIAL TOPIC:  
PROTECTING ECOSYSTEM HEALTH

**74**  
MATERIAL TOPIC:  
REDUCING AIR EMISSIONS

**93**  
MATERIAL TOPIC:  
REDUCING WATER USE

**109**  
MATERIAL TOPIC:  
MANAGING NOISE

# Reducing Air Emissions



The sky above YVR is not just a major component of our business—it’s also an essential part of our environment. We protect this vital asset through a concerted effort that seeks to minimize our emissions and those of our partners, while promoting clean energy and efficiency.

**2%**  
**Emissions reduced**  
**in 2019** (below 2012 levels)

## In this Section



Air emissions



## GRI Disclosure and Stakeholders

GRI 305-1, 305-2, 305-4, A05



Vancouver Airport Authority



Industry associations



Airlines



Airport business partners



Government and regulators



Local communities



Air emissions are a key indicator of our impact on the atmosphere and are a significant aspect of the aviation industry. Emissions are both global and local in nature and are a result of many contributing factors. At YVR, we measure and report on our emissions (Airport Authority-owned buildings and operations), and we are also broadening our commitment by working closely with our Sea Island business partners to minimize their impact.

## Our Approach



Managing air emissions considers a complex framework of energy sources, operational and business activities and environmental commitments. We allocate resources under our Strategic Plan, with specific targets set in our Environmental Management Plan. In addition, we communicate our commitment to the environment through our Safety, Security and Environmental Policy, our Social Policy and our Social Management System.

YVR works with employees, business partners and communities to minimize vehicle, building and aircraft greenhouse gas emissions (GHGs) and air contaminants. We focus on several key areas: emissions types, the intensity of emissions and ambient air quality (see below). We act, promoting alternative forms of transportation to and from Sea Island, upgrading our fleet, improving airport infrastructure, reducing fossil fuel consumption and raising awareness of clean air practices. We also include consideration of greenhouse gas emissions as key criteria when evaluating new projects.

### Emissions Types

Differentiating between emissions types helps us better understand how to mitigate our impact on the environment. We measure, monitor and review emissions under several categories: direct emissions from Vancouver Airport Authority-owned and controlled operations (Scope 1); indirect emissions from the purchase of electricity for our operations (Scope 2); and some activities we can only estimate because they are generated by airport businesses and public sources (Scope 3). Under globally recognized GHG reporting protocols, companies are required to account for Scope 1 and 2 emissions. Scope 3 is an optional reporting category and for us is largely comprised of emissions from road traffic on Sea Island, non-terminal buildings occupied by airport-affiliated businesses and partner airlines, ground support vehicles and equipment and aircraft landing, taxiing and take-offs.

We set an ambitious target to reduce Vancouver Airport Authority Scope 1

and Scope 2 emissions to 33 per cent below a 2012 baseline by 2020. We use 2012 as our baseline as that year we undertook a detailed inventory assessment with an external expert. We calculate annual emissions using a methodology consistent with the Provincial Government's framework for reporting emissions (2018 B.C. Best Practices Methodology for Quantifying GHG Emissions, January 2019 Draft). We review this inventory annually with an internal audit, and we are certified under the Airport Carbon Accreditation program as administered by Airports Council International. While we work towards reporting and reducing our operational emissions, we are committed to working with business partners in reducing their impact.

Passenger growth means greater heating, cooling and electrical demands. This, combined with annual fluctuations in weather, contribute to our annual emissions. Understanding emissions intensity helps us better focus on realistic and attainable reduction efforts; thus, we also report

and manage our emissions based on passenger volume.

### Reporting Improvements

In 2019, we undertook an extensive review of our reporting practices and data sources for Scope 1 and 2 emissions. Through this exercise, we made several improvements on how we report on our annual emissions. These improvements include greater accuracy in emissions by including biogenic emissions, and revised emission and energy density conversion factors to reflect the fuel blends used at the airport. Biogenic emissions are emissions related to the natural carbon cycle. At YVR, biogenic emissions are produced from a five per cent blend of biodiesel in diesel and a 10 per cent blend of ethanol in gasoline.

Other improvements to our emission inventories include the incorporation of additional emission sources, such as emissions from fugitives and trucked fuel used during snow events. Fugitive emissions are unintended releases of gas coolants, including hydrofluorocarbons and perfluorocarbons. With more reliable data on the amount of fuel used for snow operations equipment and the amount of releases from these gases, we can include them as part of our Scope 1 emissions.

To ensure comparability and tracking against our emissions reduction target, we retroactively applied these improvements to all our emissions inventories from 2012—our emissions baseline year. As a result, we revised our 2012 emissions baseline from 9,613 to 9,877 tonnes of CO<sub>2</sub>e and our emissions reduction target from 6,441 to 6,618 tonnes. Subsequent years have also been updated and these revised annual emissions are highlighted in the **Direct Emissions** section of this report.

### Ambient Air Quality

The quality of our airshed is crucial to ensuring the health and safety of our communities and the environment. The Airport Authority tracks emissions associated with airport operations and our use of substances that are emitted to the environment and completes detailed analyses each year for the Federal Government. We are committed to reducing air pollution, and we track air quality through continuous monitoring. We report to the National Pollutant Release Inventory (NPRI) and we participate voluntarily in the Lower Fraser Valley Air Quality Monitoring Network.

As part of this network, the data collected from Metro Vancouver's monitoring station on Sea Island is displayed on a live stream through its website. Under the Environmental Management Act, Metro Vancouver manages air quality within its boundaries, sampling the air at this station several times per minute and analyzing this data to demonstrate trends and performance against annual, hourly and 24-hour objectives, publishing it in the Caring for the Air Report each May. We present the data in the following section, comparing it with several of Metro Vancouver's current ambient air quality objectives to ensure we stay aligned.

# Reducing Air Emissions: 2019 Results

## 2020 Target

Reduce emissions from 2012 levels by 33%

## 2019 Result

Emissions reduced 2%

### Airport Authority Scope 1 and 2 Emissions

Our direct GHG emissions (Scope 1 and 2) were 9,660 tonnes of carbon dioxide equivalent units (CO<sub>2</sub>e) in 2019, a two per cent reduction from our 2012 baseline year (9,877 tonnes). While we reduced our emissions from our baseline, 2019 was a challenging year. YVR grew by almost half a million new passengers and a colder heating season resulted in greater

natural gas use. In addition, we used diesel to heat the terminal buildings for a short period of time due to a province-wide shortage of natural gas and repairs to the Enbridge pipeline. We also operated our snow operations equipment more frequently to manage winter conditions at the airport, and we increased passenger bussing operations. These activities

contributed to our Scope 1 emissions, which include fleet vehicles, plant operations, emergency power generators and fugitives. Our Scope 2 emissions include purchased electricity only. The results below include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) gases, together referred to as carbon dioxide equivalent (CO<sub>2</sub>e).

	2012	2013	2014	2015	2016	2017	2018	2019	2020 Target
<b>Scope 1 Emissions</b> (tonnes of CO <sub>2</sub> e)	8,025	8,493	8,817	7,994	6,906	8,902	7,750	8,517	
<b>Scope 2 Emissions</b> (tonnes of CO <sub>2</sub> e)	1,852	1,322	998	1,096	1,108	1,148	1,152	1,143	
<b>Total</b>	<b>9,877</b>	<b>9,815</b>	<b>9,815</b>	<b>9,090</b>	<b>8,013</b>	<b>10,050</b>	<b>8,903</b>	<b>9,660</b>	<b>6,618*</b>

\* Represents a 33 per cent reduction over 2012 levels.

## Emissions per passenger

Emissions per passenger improved 35 per cent from 2012 (0.561 tonnes/1,000 passengers) to 2019 (0.366 tonnes/1,000 passengers). To calculate the ratio, we divide total GHGs in tonnes by total passengers in 000s. This ratio includes the emissions types and GHGs noted in the table above. In simple terms, our emissions are now down to less than 0.37 kilograms for every passenger that travels through our airport.



# 35%

**decrease in emissions  
per passenger  
since 2012**

### Sea Island Scope 3 Emissions

Vancouver Airport Authority has low to moderate control over indirect emissions (Sea Island Scope 3), but can influence reductions in

greenhouse gases from the public and our business partners. Scope 3 emissions for 2019 are estimated to be 344,319 tonnes CO<sub>2</sub>e.

## 2019 Activities & Initiatives



In 2019, the Airport Authority renewed its Airport Carbon Accreditation at Level 3 – Optimization through Airports Council International (ACI). This means we measure our footprint, implement carbon reduction initiatives and widen the scope of our activities to assist partners and tenants in reducing emissions on Sea Island.

### Building Improvements

We continued to benefit from building improvements made since launching our energy conservation efforts in 1999. Since 2012, we have made upgrades to our building envelope, including HVAC and lighting controls and LED lighting conversions, while making investments in renewable energy. These projects, detailed in the **Reducing Energy Use** section, have directly impacted our Scope 1 and 2 emissions.

### Fuel Consumption

Our Fleet Management Plan seeks to reduce our fleet by retiring and, when necessary, replacing vehicles with more efficient or electric versions. YVR uses a five per cent blend of biodiesel (B5) and a 10 per cent blend of ethanol (E10) for fleet vehicles. In 2019, we improved our fuel tracking processes for our snow operations equipment and, as a result, updated all our fuel records from 2012.

We have 131 light duty vehicles and 291 heavy-duty vehicles and equipment in our fleet, with

12 per cent of the total being electric. In 2019, we retired 13 vehicles while commissioning five new light-duty vehicles and four new non-road vehicles. In addition to regular fleet vehicle replacements, we also purchased seven new vehicles for passenger bussing, known as Remote Stand Operations (RSO). These vehicles included four Aviramps and three electric buses. The RSO Program now operates 11 fully electric buses. We also have six common-use fleet bicycles as a zero-emission alternative to using fleet vehicles, which logged 23 hours of use in 2019.

The total amount of fuel consumed in 2019 was 555,504 L, an increase of 10 per cent from 2018. This is mainly due to more winter activities requiring the use of our snow equipment and fleet, as well as greater use of bussing operations. In total, we consumed 163,937 L of gasoline (E10) and 391,567 L of diesel (B5)—an increase of three per cent in gasoline and a 12 per cent increase in diesel from 2018.

### Supporting Our Business Partners

As part of a working group with Transport Canada, we look at ways to reduce emissions from aircraft auxiliary power units and ground support equipment. We also work closely with our business partners to reduce their footprints.

### Ground Service Equipment

We continued to work towards our goal, established in 2015, of having 50 per cent of the Airport Authority ground handling fleet running on electric power by September 31, 2020. And in 2019 we achieved this target, with 167 of our 315 licensed vehicles (53 per cent) being electrically powered, and 74 per cent of the baggage support equipment was electric. To support this equipment, we built 50 common-use charging stalls at four aircraft gates and we installed additional charging stalls at aircraft parking positions.



## Gate Power Units

We have been incrementally installing ground power and pre-conditioned air units to encourage aircraft to shut off their auxiliary power units when parked at gates. In 2019, our team installed two pre-conditioned air units, providing electrical heating and cooling to aircraft. By the end of 2019, all bridged gates at the terminal were equipped with this infrastructure.

## Tenant Education Programs

In 2019, we continued a business partnership with Climate Smart, a local organization that specializes in business engagement and provides training and tools to manage carbon emissions, waste and water use with a goal of reducing greenhouse gas emissions. We sponsored 11 new businesses to join the program and three businesses continued their participation from previous years. Participating businesses were

trained to build a GHG inventory according to internationally-accepted standards and learned about best practices in energy, fuel, waste and water reduction activities. In their reduction strategies, they collectively identified 64 carbon-saving measures to action—from equipment changes to larger capital investments and employee behaviour change.

Additional 2019 activities and initiatives that helped reduce emissions are available in our **Ground Transportation** and **Reducing Energy Use** sections.

## Sea Island Air Quality

In 2019, the Airport Authority submitted an air quality report to the National Pollutant Release Inventory (NPRI) for the 2018 emissions period. We continued to remain below the reporting thresholds for all substances including Carbon Monoxide, Sulphur Dioxide, Oxides

of Nitrogen and Volatile Organic Compounds. The reporting threshold was exceeded for asbestos disposal releases and particulate matter, which is generated from boilers, emergency generators and road dust. The amount of road dust generated varies annually depending on construction and wildlife management activities. Reported levels of asbestos disposal releases in 2018 increased significantly above 2017 levels as we experienced greater construction activities, which included demolishing a maintenance building. All asbestos management is conducted safely under YVR's rigorous Occupational Health and Safety Program and standardized asbestos management protocols.

## Air Pollutants monitored on Sea Island

Annual Averages	2012	2013	2014	2015	2016	2017	2018*	Metro Vancouver Objectives
Nitrogen Dioxide (NO <sub>2</sub> ) (ppb)	14	14	15	14	14	16	14	17 <sup>^</sup>
Carbon Monoxide (CO) (ppb)	239	244	239	254	242	250	250	No annual average
Sulphur Dioxide (SO <sub>2</sub> ) (ppb)	0.8	0.7	0.6	0.4	0.2	0.4	0.4	5
Fine Particulate Matter (PM <sub>2.5</sub> ) (µg/m <sup>3</sup> )	4.2	6.3	6.4	6.0	4.9	6.2	6.2	8
Inhalable Particulate Matter (PM <sub>10</sub> ) (µg/m <sup>3</sup> )	11.1	11.5	11	12.8	10.3	11.1	11.1	20
Ozone (O <sub>3</sub> ) (ppb)	18	16	17	16	16	17	17	No annual average

\*2019 data will be available in May 2020 so is not included in this report.

<sup>^</sup>In 2019, Metro Vancouver sought input from interested parties on proposed changes to its ambient air quality objectives for nitrogen dioxide, ozone and carbon monoxide. The purpose of these proposed changes was to align with objectives and standards adopted by provincial and federal governments. At the end of this process, Metro Vancouver updated its air quality objectives and the new annual average for nitrogen dioxide changed from 21 ppb to 17 ppb.

# Reducing Waste

We seek to make YVR a sustainable hub and a big part of this vision is ensuring we properly manage waste, minimizing its impact on people and the environment. We take an innovative and hands-on approach to waste management that includes ambitious targets, accountability, diverse programs and an emphasis on working with partners.

**54%**  
**Waste diverted from landfill in 2019.**  
**A 2020 goal achieved, four years in a row!**

## In this Section



Water discharge, Hazardous waste and Non-hazardous waste



## GRI Disclosure and Stakeholders

GRI A06, 306-2



Vancouver Airport Authority



Passengers



Airlines



Airport business partners



Government and regulators



Local communities



YVR's operations and construction create various forms of waste. Our waste management efforts focus largely on YVR's main terminals, where we work with partners to reduce our impact and take advantage of opportunities for innovation. We employ a wide range of methods to reduce our impact—from promoting recycling among tenants through creative programs, to piloting new composting initiatives, introducing incentive programs and undertaking regular waste audits. YVR is considered an industry leader in recycling construction waste, which in any given year could include millions of kilograms of asphalt, concrete, metal and more.

## Our Approach



Waste management falls under our Environment foundational element in our Strategic Plan and is a key deliverable in YVR's Environmental Management Plan (EMP), which includes subsequent plans and programs to address several types of waste: hazardous waste, non-hazardous waste and water discharge. The purpose of this approach is to properly manage and reduce waste, while striving towards ambitious targets.

To achieve our vision, we place waste reduction as a key measurable component for our organization, and we share its management across our Environment and Health and Safety departments. Our goal is to ensure regulatory compliance, protect the environment, assess and manage risks and strive for continuous improvement.

### Non-Hazardous Waste

Non-hazardous waste is an important focus because it not only constitutes the largest amount of waste at YVR, but also presents many opportunities for innovation. This waste, which includes compostable organics, containers (plastic, metals and glass), fibre (paper and cardboard) and garbage, comes from the main terminal buildings and impacts terminal business partners, passengers and local communities. Under our Waste Management Program, we employ a wide range of methods to reduce terminal waste, from promoting recycling among tenants through creative programs, to piloting new composting initiatives, introducing incentive programs and undertaking regular waste audits. Driving this activity is an ambitious goal: to divert 50 per cent of terminal waste from landfill by 2020.

We work closely with construction partners to ensure they are properly disposing of construction waste (both hazardous and non-hazardous). Under facility permit conditions, we require all construction contracts to dispose of waste according to Metro Vancouver guidelines, and we require partners to regularly report waste and recycling information for annual construction waste statistics.

## Hazardous Waste

We take hazardous waste management very seriously as its use and disposal can present significant impacts to our employees, airport business partners, local communities and the environment.

To responsibly manage and reduce hazardous waste, we have a comprehensive Hazardous Materials Management Program that reduces risk by meeting or exceeding the regulatory requirements for life cycle management, safe handling of hazardous materials and spill preparation and prevention. In addition, our Building-Related Hazardous Exposure Management Program (BRHEMP) helps us to identify and control building-related hazardous materials throughout Sea Island. More information on the BRHEMP is available [here](#).

We track and store hazardous waste and use a third party to oversee proper hauling, recycling and disposal. We also educate employees and advise contractors on our approach to hazardous waste, while conducting regular inspections and audits of partners and facilities to ensure compliance with hazardous materials regulations, including the use of pesticides and other hazardous materials.

## Water Discharge

Vancouver Airport Authority's Water Quality Program aims to prevent pollution from entering surface waters and impacting the Fraser River estuary, which contains habitat for many species of salmon and wildlife as well as being an important area for migratory birds. We do not discharge wastewater into the environment;

instead, we send all wastewater to a sewage treatment facility.

Under our Water Quality Program, we have a robust monitoring system, we strategically use oil-water separators and de-icing pads, and we educate the Sea Island community about water quality protection. We have a Hazardous Materials Spill Response Plan that provides clear guidance on preventing and mitigating releases of hazardous substances and ensuring proper cleanup. We work closely with Aero Mag, which manages YVR's de-icing infrastructure and procedures. We submit an annual glycol report to Transport Canada, and we have adopted a goal to ensure glycol run-off does not exceed 100 mg/L per stormwater sample, as set out under the *Canadian Environmental Protection Act* (CEPA) Glycol Guidelines.



# Reducing Waste: 2019 Results



## 2020 Target

Divert waste from  
2012 levels by 50%

## 2019 Result

Waste diverted by 54%

# 2.6

Million kg recycled and  
composted in 2019

In 2019, we recycled and composted 2.6 of 4.8 million kg of domestic and international terminal building waste, resulting in a 54 per cent diversion rate—exceeding the 2020 target for the fourth year in a row! We did this by working with our partners, promoting our waste reduction initiatives and constantly checking our progress.

	2012	2013	2014	2015	2016	2017	2018	2019	2020 Target
<b>Total Waste (kg)</b>	3.4 M	3.4 M	3.8 M	3.8 M	4.2 M	4.5 M	4.8 M	4.8 M	
<b>Diversion Rate</b>	38%	37%	36%	46%	51%	51%	51%	54%	50%*

\* 50 per cent waste diversion target

## Reducing Organic Waste

We continued to see great success with our organic waste diversion program in 2019, with a record 948,248 kg diverted from landfill—

thanks to our many initiatives and the hard work of our partners. This includes our green bin program, our International Terminal Building food-

waste composter, our centralized food court waste sorting station and much more.

## Waste Wars



In 2019, the Airport Authority hosted its fifth annual Waste Wars, a friendly competition that seeks to engage food and beverage tenants on proper waste sortation. Throughout the competition, we worked with tenants to inspect their waste sorting facilities, allocating points based on the level of appropriate separation. The 2019 Waste Wars winners were:

### Restaurant Category

1. Lift
2. Globe @ Fairmont
3. White Spot

### Quick Service Restaurant Category

1. Thai Hang
2. Camden Food, Java U, Subway (D-Pier), Bahn Shop and Vera's



## Construction Material Reuse And Recycling

In 2019 we diverted 79.3 million kilograms of construction waste, which included a range of materials such as wood, drywall, metals, 15.9 million kg of concrete and

62.1 million kg of asphalt. This represented a 97.7 per cent recycling rate, exceeding our average of 96.6 per cent over the past five years.

**97.7%**  
Construction materials recycled

## Hazardous Waste



We disposed of 13,132 kg of hazardous waste to specialized landfill, an increase of 12,597 kg from 2018. We recycled and repurposed 5,287 kg of waste oil, waste oily water and antifreeze. We recorded 225 spills, an increase of 52 per cent over 2018. Of these spills, 97 per cent were considered small, meaning less than 100 L. Accidental releases of hydraulic oil from baggage loaders and lavatory fluid from aircraft support vehicles accounted for most of the spilled material.

## Waste Type In 2019



The following table includes YVR's waste by type, amount and disposal method in 2019. All hazardous and non-hazardous waste is disposed of by a third party. Waste data is received in the form of a manifest spreadsheet or invoice.

### Hazardous

Waste Type	Amount	Disposal method
Batteries, Auto Parts, E-waste, Light Bulbs, Waste Oil	24,691 kg	Recycled
Biomedical, International Custom Hall*	73,659 kg	Incinerated
Other Waste (e.g. Oil Filters)	13,132 kg	Landfill
Asbestos Containing Material	288,753 kg	<i>Other</i>

\* International Custom Hall: under CFIA international waste regulation, waste generated in the International Customs Hall is considered hazardous waste

### Non-Hazardous

Waste Type	Amount	Disposal method
Containers, Paper, Liquid Diversion, Gloves	1,653,070 kg	Recycled
Chopsticks, Broom Cores	4,895 kg	Reused
Compostable Material and Moisture Diverted by Composter	948,248 kg	Composted
Other Waste	2,243,590 kg	Landfill
Construction Waste	79,284,361 kg	Recycled Construction Waste

Our 54 per cent diversion rate was based on the first three categories noted in the table above: non-hazardous recycled, reused and composted materials (not including construction waste).

### Effluent

We set clear targets for reducing impacts to water quality, including a 2020 target that strives for zero water samples with glycol concentration above the Canadian Glycol Guideline level of 100 mg/L. In 2019, we installed a new glycol recovery membrane in our relocated de-icing pads to ensure we continue to meet these high standards. Over the course of the year three water samples were above 100mg/L. We applied a combined total of 4,686 m<sup>3</sup> of de-icing and anti-icing fluids to enable safe takeoff of aircraft, a 48 per cent increase from 2018 due to this winter's extreme conditions. In February 2019,

YVR recorded over 32 cm of snow combined with cool temperatures resulting in greater de-icing activities. We were able to collect 3,805 m<sup>3</sup> of these fluids, which were sent off-site for treatment off site.

#### Glycol Sampling Data (Samples above 100mg/L)

2012	2013	2014	2015	2016	2017	2018	2019
1	1	4	0	2	6	1	3

## Training

In 2019, we conducted regular training for employees and business partners through our Climate Smart and Waste Wars programs. We also provided hazardous materials training for Airport Authority employees and training and technical advice to contractors and project managers through the environmental assessment and Facility Permit processes.

## Waste & Environmental Audits

Vancouver Airport Authority regularly conducts waste audits to mitigate environmental risk. We conducted bi-weekly waste and recycling bin inspections of YVR's food and beverage tenants in 2019, in addition to the audits that were a part of our Waste Wars program. We also conducted environmental audits of 13 tenants as part of our multi-year auditing cycle.





# Reducing Energy Use

Vancouver Airport Authority is committed to improving energy efficiency and advancing renewable sources. Improving energy use not only lessens our impact on the environment, but also reduces costs—helping us mitigate business risk and focus on improving YVR for everyone.

**\$19+ Million**  
cumulative energy savings since 1999

## In this Section



Energy



## GRI Disclosure and Stakeholders

GRI 302-1



Vancouver Airport Authority



Airlines



Airport business partners



Government and regulators



Local communities



Aviation is an energy-intensive industry and it is our responsibility, as an organization committed to accountability and protecting the environment, to properly track and disclose our energy sources, including their annual usage and contributions to emissions.

## Our Approach



YVR receives energy from renewable and non-renewable sources. Our renewable energy includes geothermal, solar and wind power from our buildings and purchased hydroelectric power from BC Hydro. Our non-renewable energy includes natural gas, used for heating and cooling the terminal and for cooking, as well as gasoline and diesel, which we use for our ground fleet as well as for backup emergency generators. We categorize energy's impact on the environment through Scope 1 and 2 emissions (see **Reducing Air Emissions**). We do not sell any self-generating energy.

The Airport Authority's approach to managing energy focuses on protecting the environment while finding operational efficiencies. This approach allows us to articulate our commitment to remaining a leader in sustainability, while providing guidance to decision-makers and establishing goals and targets that are in alignment with our mission and vision. We set energy usage as a priority under Environment in our Strategic Plan and have a

wide range of policies and plans to properly manage it. This starts with our Environmental Management Plan, which sets a tough 2020 target to reduce our emissions (Scope 1 and 2) by 33 per cent below 2012 levels—a target largely impacted by our type of energy use. Our Energy Source Strategy incorporates emissions, resiliency, reliability, community and financial impacts in guiding our investment decisions. In addition, we have a Fleet Management Plan that seeks to reduce our own fleet by retiring and, when necessary, replacing vehicles with more efficient or electric versions. Beyond our own fleet, we are actively supporting conversion of ground handling equipment owned by external ground handlers to have 50 per cent of our ground handling fleet running on electric power by 2020. And we establish energy as a key commitment in our Safety, Security and Environmental Policy, our Social Policy and Social Management System.

We coordinate an internal energy team, and we regularly seek

feedback on our approach to energy management through an Environmental Advisory Committee. This team works closely with airport business partners to increase the use of clean energy. For instance, we are electrifying our equipment, installing charging stations for vehicles in our parking lots and airside, adding electric buses to our fleet and installing pre-conditioned air and ground power units at gates. We are constantly improving our buildings—from recovering lost energy by better sealing openings to implementing retrofits, improving automatic lighting and walkway controls and looking at sustainability features for future expansions. We are also part of the BC Clean Transportation Trade Corridors Advisory Council, a multi-agency collaborative led by the Government of British Columbia to advance our province as a globally competitive green transportation region. In addition, we wrapped up our two-year Memorandum of Understanding with BC Hydro, under which we worked collaboratively on low-carbon electrification opportunities.

# Reducing Energy Use: 2019 Results

## Energy Conservation & Renewables



We have created a cumulative savings of more than \$19 million in electric and gas costs since launching our energy conservation efforts in 1999. Over this time, our annual passenger numbers have grown by more than 10 million, and we have expanded the terminal area substantially—all while improving energy efficiency through conservation initiatives, building renovations and improved building design.

The table below shows the growth in natural gas and electrical consumption and the improvements in efficiencies per passenger.

	2012	2013	2014	2015	2016	2017	2018	2019
Natural Gas consumption (GJ)	128,608	135,282	143,914	130,167	110,157	143,576	114,048	124,154
Electrical consumption (GWh)	97.5	96.7	99.8	102.8	103.8	107.6	108.0	107.2
Natural Gas use per passenger (GJ/100,000 passengers)	731	753	743	641	494	594	440	471
Electrical use per passenger (GWh/100,000 passengers)	0.55	0.54	0.52	0.51	0.47	0.45	0.42	0.41

In 2019, we consumed 124,154 GJ of natural gas and 107.2 GWh of electricity. This consumption equates to \$1,444,448 in natural gas costs and \$6,654,650 in electricity costs, totalling \$8,099,098 to heat and power all buildings and activities.

Our natural gas consumption increased by nine per cent in 2019 (from 2018) due to colder temperatures at the beginning of the year as well as the fall, requiring us to turn on boilers at the terminal earlier than usual. We

also consumed 160,276 L of diesel to heat the Main Terminal Building due to a province-wide shortage of natural gas and repairs to the Enbridge pipeline. Between 2012 – 2019, YVR experienced significant growth in our business. Over that period, we welcomed an additional 8.8 million passengers, and we added 32,500 m<sup>2</sup> floor area to our terminal. As a result of a host of energy saving initiatives over that same timeframe, we reduced both the natural gas (by 36 per cent) and the electricity (by 25 per cent) used per passenger.

Through our work with our employees, business partners and communities to encourage low carbon energy use, we have seen an increase in the amount of electricity consumed. British Columbia's electricity is hydroelectrically generated and is therefore a low-carbon energy source. Some of our work included providing charging infrastructure for ground support equipment, vehicles and gate infrastructure, as well as adding more electrified fleet vehicles. These initiatives are outlined in the **Reducing Air Emissions** section.

## Building Upgrades

We are reducing wasted energy by upgrading insulation and implementing programming changes to our building controls. The Airport Authority owns and manages 33 commercial tenanted buildings, and we have been making efficiency upgrades since 2014 by installing more efficient mechanical equipment. In 2018 and 2019, several tenanted buildings undertook HVAC upgrades resulting in the annual saving of 307,439 kWh of energy and 31 t CO<sub>2</sub>e.

## Smart Lighting

In addition to using schedules and sensors to reduce lighting, we have converted a large portion of the terminal to LED lighting, and we have interfaced lighting controls with an automation system based on occupancy and daylight sensors to reduce lighting levels. Our 2017 Apron LED lighting project continues to save energy—more than 715,000 kWh in 2019—and the upgrade also results in less glare and maintenance cost savings. At the Airport Operations Building, optimized lighting controls saved 22,898 kWh in 2019.

We continued to incrementally convert Vancouver Airport Authority tenanted buildings to LED lighting with additional controls, which saved 801,410 kWh and 8 t CO<sub>2</sub>e in 2019.

In addition to these savings, we converted 33,620 square meters of cargo building area to energy-efficient LED lighting in 2019, resulting in an estimated 284,536 kWh of energy savings.

## Renewable Energy

We have focused on renewable energy investments to reduce our greenhouse gas footprint, offset electrical demand and increase resiliency. For example, a solar panel system on the roof of the Domestic and International Terminal Buildings pre-heats two hot water systems for use in washrooms and several food and beverage locations. Combined with the system on the Airside Operations building, this results in annual energy savings of more than 8,600 GJ of natural gas.



## Airside Operations Building

YVR's Airside Operations Building (AOB) consolidates all airside operations under one roof and includes sustainability features such as a geexchange field, heat recovery ventilation, solar hot water, photovoltaic panels, a wind turbine, a rainwater collection system and energy

efficient LED lighting. The building's renewable energy features are a pilot location for YVR to benchmark its ability to produce alternative energy sources. In 2019, the AOB consumed an estimated 3,290,462 kWh of energy and approximately 96 per cent was from renewable sources.

## Partnerships



In 2019, we worked closely with BC Hydro on a range of initiatives. We renewed our participation in BC Hydro's Industrial Energy Manager program, which dedicates an employee to manage the implementation of energy-saving projects and improve existing operational and maintenance procedures. We also worked collaboratively to develop a comprehensive approach to electrical infrastructure development.

In 2019, BC Hydro and Fortis BC shared best practices and highlighted savings opportunities in an event for our tenants.



# Reducing Water Usage

As a major connecting hub, YVR plays an important role in supporting water conservation. We strive to improve YVR's efficient use of water, balancing consumption with sustainable growth.

**39%**  
Reduction in potable water consumption per passenger from 2012

## In this Section



Water



## GRI Disclosure and Stakeholders

GRI 303-1



Vancouver Airport Authority



Passengers



Airlines



Airport business partners



Government and regulators



Local communities



REDUCING WATER USAGE

Water is our most important resource, providing the foundation for a healthy ecosystem that supports our airport, local communities and the environment in which we live and work. Vancouver Airport Authority and its Sea Island business partners have a direct impact on our region's water supply through various uses including terminal building operations, landscape irrigation, hydrant flushing, emergency firefighting and construction activities. We own and maintain 42.8 km of the water mains on Sea Island and receive our water from the City of Richmond.

## Our Approach



Minimizing water usage is a key priority under our foundational objective for Environment in our Strategic Plan and is directly managed through our Water Conservation Management Plan and our Environmental Management Plan. We work to protect water quality and reduce potable water consumption in Airport Authority sources, as well as those of our business partners and stakeholders.

We set tough targets to guide our progress, including a goal to reduce Sea Island potable water consumption by 30 per cent in 2020 (below 2012

levels). We also adhere to water usage restrictions when they arise, as issued by Metro Vancouver, and we recognize water consumption as being a key element in our Social Policy.

The Airport Authority employs a range of initiatives to reduce water usage. We replace, retrofit and repair existing infrastructure wherever possible. We place a major focus on working with our tenants through our Project Green YVR Climate Smart program, which helps businesses identify how to measure their environmental impact and reduce their water footprint. We also conduct regular water audits and

have provided financial rebates to tenants based on their water reduction initiatives.

In addition, we are always looking at alternative ways to improve our water use. This includes a rainwater collection system that operates at our Airside Operations Building and one that is set to be included in YVR's new Parkade, which is currently under construction. Our team is constantly looking for efficiencies, working to improve our water metering and monitoring, reducing water use in washrooms and much more.

# Reducing Water Use: 2019 Results



## 2020 Target

Reduce Sea Island potable water consumption 30% (below 2012 levels)

## 2019 Result

Potable water consumption reduced by 9%

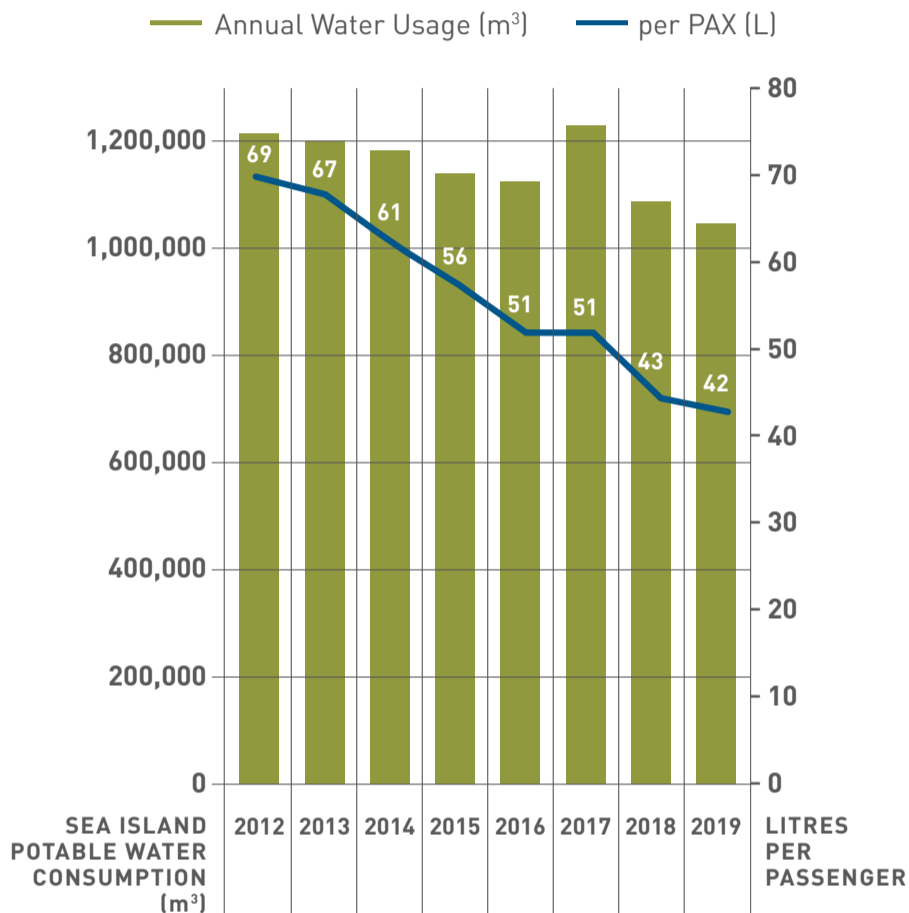


In 2019, potable water consumption across Sea Island was 1,101,350 m<sup>3</sup>—nine per cent below our 2012 baseline of 1,206,721 m<sup>3</sup>. Several factors contributed to this decrease, including washroom fixture upgrades to WaterSense-certified models in the main terminal building and in tenanted spaces.



## Water Use Trends

While YVR grew by almost a half million new passengers in 2019, potable water consumption per passenger decreased to 42 L. This is significant as it demonstrates how our efforts have created a more efficient and environmentally friendly airport.



## Our Progress

To achieve our ambitious water consumption target, we continually check our progress. The City of Richmond replaced three water meters in 2019 to ensure we receive accurate data. In 2019, the Airport Authority and our business partners consumed 1,101,350 m<sup>3</sup> from municipal sources and 620 m<sup>3</sup> from rainwater. Unlike many other airports, the Airport Authority tracks all water consumed on Sea Island. This means that the water consumption we track and report on is also that of our partners.

By installing water meters in our buildings in 2017, we are now able to accurately track water usage in the Main and South Terminal Buildings as well as the Airside Operations Building, locations where we have operational control over our consumption. Collectively, these Airport Authority-operated buildings consumed 366,290 m<sup>3</sup> in 2019—a five per cent reduction from 2018.



## Water Management

Since 2012, we have reduced potable water use on Sea Island by over 85,000 m<sup>3</sup> from many initiatives. Work in 2019 included:

### Terminal Washroom Retrofits

We continued our retrofit program in the main terminal washrooms, upgrading 117 urinals, 300 toilets and 15 lavatory faucets, while also installing 220 aerators. Water savings from this project are estimated to be 35,000 m<sup>3</sup> per year.

### Water & Engineering Assessments

Vancouver Airport Authority owns and manages 33 commercial tenanted buildings, a handful of which use high-water consuming fixtures and equipment. We continued to conduct water and engineering assessments in four of these buildings in 2019 to evaluate existing conditions of water fixtures, determine available capacities for replacements or retrofits and identify water conservation opportunities.

### Water Fixture Rebate Program

We offer free fixture rebates to tenants as financial incentives. In 2019, we continued to work with two tenants in retrofitting a total of 30 continuous flush urinals and 19 toilets, as well as installing 29 lavatory faucet aerators. Estimated water savings from these retrofits are 7,000 m<sup>3</sup> per year.

### Education & Outreach

Our employees celebrated BC Water Week this year with a tour of the Vancouver Convention Centre's Blackwater Treatment Plant, a system which allows for 96 per cent recycled water to be used in the building, and a documentary screening of "The World's Water Crisis" to help educate employees on water conservation in everyday life.

To support our business partners and tenants operating on Sea Island in reducing their water footprint, we developed a "Waterwise at YVR" reference guide to help with purchasing decisions of low-flow and water-efficient equipment. We also created a simple water consumption calculation tool to help businesses estimate their facility's water footprint and identify which pieces of equipment are most water intensive.

### Research & Development

While there is a plentiful supply of potable water in the region, we are cognisant of the impacts of climate change and the potential for increased periods of drought. In 2019, we did not experience any impacts due to drought; however, we continue to consider this issue as part of our risk management system.

In 2019, we continued to advance alternative options in reducing our potable water use and undertook a non-potable water capture screening assessment to explore potential ways to collect rainwater, groundwater or surface water using a combination of new and existing infrastructure to offset potable water use for construction activities at the airport.

### Rainwater Capture

Vancouver Airport Authority collects rainwater from the rooftop of the Airside Operations Building and currently uses this water for non-potable uses. We are closely monitoring this system, which we estimate saves approximately 620 m<sup>3</sup> of potable water per year. This type of feature will be included in YVR's new Parkade, where non-potable water will be treated and reused for emergency firefighting and vehicle washing. We anticipate it will have a significant positive impact on our water use.

# Project Green YVR



Project Green YVR is a Vancouver Airport Authority initiative that helps Sea Island businesses reduce their waste, water and energy use to limit impacts on the environment and save money. Thirteen Sea Island businesses signed on in 2019, taking part in training on recycling and energy-efficiency as well as a celebration for businesses to launch the Project Green YVR program.

Each year, we recognize exceptional Sea Island businesses for their outstanding commitment, enthusiasm and innovation with our annual YVR Green Excellence Award. In 2019, Air Canada and Fairmont Vancouver Airport received the YVR Green Excellence Award in the airside/groundside and in-terminal categories, respectively.





# Ground Transportation

YVR is a major transportation hub, connecting air passengers and cargo to destinations across the region. We seek to strike a balance between the efficient movement of people and goods with efforts to reduce our environmental footprint.

**101,381**  
Bike trips on  
Sea Island in 2019

## In this Section



Ground transportation

## GRI Disclosure and Stakeholders



Vancouver Airport Authority



Passengers



Airlines



Airport business partners



A strong, accessible ground transportation network that supports air services and operations is essential to YVR's role as a connecting hub. Passengers, businesses and employees need reliable access to and from the airport; yet we also recognize that transportation is a major contributor to greenhouse gas (GHG) emissions and that, as a leader in sustainability, it's our responsibility to reduce its impact.

## Our Approach



YVR's ground transportation network encompasses all of Sea Island, impacting our passengers, employees, business partners and service providers. Beyond Sea Island, regional ground access is affected by a variety of factors. As a transportation authority, we have a significant influence on ground transportation on Sea Island, and we work closely with our partners, which include TransLink, to increase sustainable transportation.

We manage ground transportation through our Strategic Plan, as reflected in YVR's 20-year Master Plan and Land Use Plan. Through our Strategic Plan, we set priorities for ground transportation and we

connect our approach to key areas of our operations. We also link ground transportation to GHG reduction targets in our approach to Air Emissions (see **page 75**).

While we do not have specific targets for transit ridership or sustainable modes of transport, we have an objective to support and increase sustainable modes of transportation, and we continue to reduce emissions and improve ground access thanks to several existing initiatives. These initiatives include past incentives to expand airport-licensed hybrid taxi fleets, introducing a fully electric sedan service by Aerocar, the expansion of our electric vehicle charging infrastructure and the

ongoing use of the Canada Line, as well as cycling infrastructure and our cellphone waiting lot. Together with TransLink, we are working to extend access to public transportation opportunities and increase Canada Line train frequency and capacity. We also encourage our employees to use alternative forms of transport through incentive programs and friendly competitions. Each year, we check our progress through YVR's customer satisfaction survey and TransLink ridership data.

# Ground Transportation: 2019 results

## Public Transportation



As part of our commitment to sustainable transportation, the Airport Authority invested \$300 million in the Sea Island portion of the Canada Line, which is used for trips to and from the airport as well as trips between destinations on Sea Island. Since it began operations in 2009, the Canada Line has been a big success—making YVR’s transit ridership the highest among North American airports. In 2019, there were 10.21 million boardings and alightings at the three stations on Sea Island, a 0.2 per cent decrease over 2018. Off-island Canada Line trips decreased by 11.8 per cent to 6.63 million; intra-island trips increased by 33.2 per cent to 3.58 million.



A 2019 survey of air passengers showed that, consistent with 2018 survey results, 29 per cent reported using transit for their journey to YVR. Of this 29 per cent, 17 per cent used the Canada Line while 12 per cent

used other forms of collective transportation (e.g. shuttle buses, courtesy buses and coaches). In 2015, YVR undertook a survey of all employees working on Sea Island, which revealed transit ridership at

25 per cent. In addition, another 13 per cent of employees chose sustainable alternatives including carpooling, cycling, walking and motorcycles/scooters.

## Active Transportation



We continue to see growth in cycling at YVR. Our bike trackers recorded 99,165 cyclists on Sea Island in 2019, an 11 per cent growth over 2018.

YVR completed construction of a new multi-use pathway in 2019. The pathway runs along the west side of Larry Berg Flight Path Park, crosses Russ Baker Way and extends to the dyke near the Pacific Autism Family Network facility. This key connection

in the Great Blue Heron Way added 1.2 km to the now 29 km Sea Island cycling network.

We piloted public bike-sharing on Sea Island by partnering with a bike-sharing service available throughout Richmond and installed a bicycle rack near Templeton Skytrain where members could pick-up or drop off bikes.

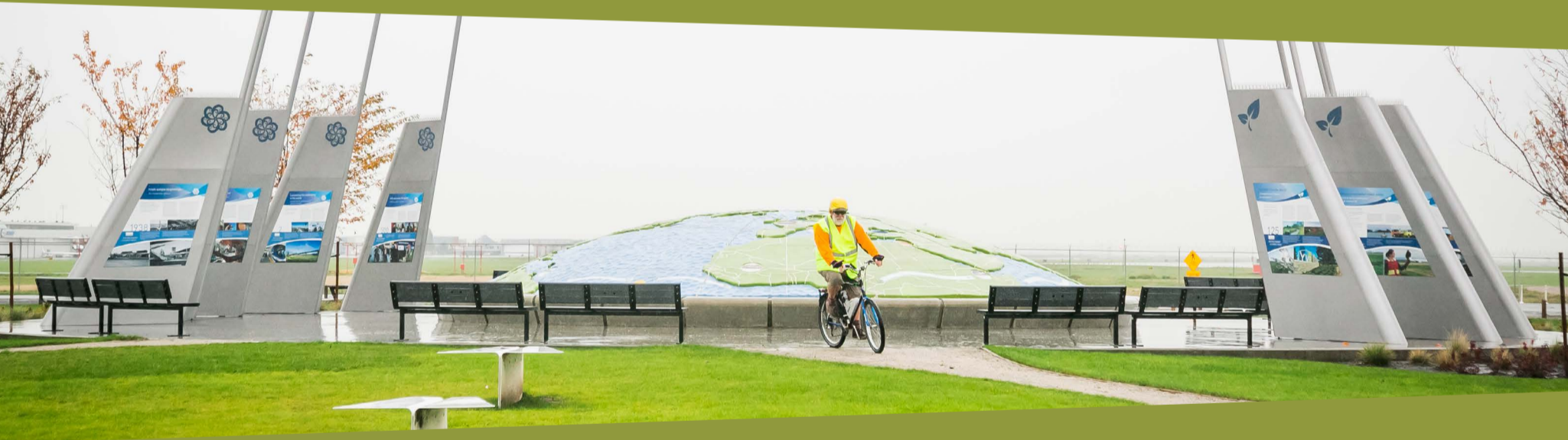
Airport Authority employees participated in the biannual Bike to Work Week, travelling a total of 2,221 km. A summer bicycle ride series was launched to support employee awareness of cycling infrastructure available on Sea Island. In addition, we offered a complimentary bike inspection workshop to employees in partnership with Union Street Cycle, a Vancouver-based bike servicing company.

# 99,165

**Bike trips on Sea Island in 2019**

# 29 km

**Sea Island cycling network**



## Green Commuter Program



We continued to see great results from the popular Green Commuter Program, which offers Airport Authority employees a \$50 per month rebate to take public transit, bike, walk or carpool. In 2019, 34 per cent of our workforce participated.

Their collective efforts helped us avoid 1,191,360 km of single vehicle trips and 100 tonnes in carbon emissions.

Since the program started in 2006, YVR has saved more than 12 million km of vehicle trips and 2,085 tonnes of emissions.

The Airport Authority is a long-standing participant of the Commuter Challenge, a national, week-long event during Canadian Environment Week encouraging Canadians to walk, cycle, take public transit, carpool, or work from home.

## Parking & Ground Transportation



In 2019, we continued construction of our new Parkade and Ground Transportation Facility, which will include space for over 850 new rental car stalls and approximately 2,100 new parking spaces.

### Parking

In 2019, we launched our new parking service, jetSet YVR Parking. With this new service, customers enter the new facility and drop off their vehicles in a designated drop-off lane. From there, customers take their baggage into the customer service building where they check-in and drop off their keys before a five-minute bus ride to the terminal. This approach and technology, a first in North America, allows for a parking configuration that maximizes space and results in no net reduction to parking capacity.

With the new jetSet valet model, shuttle buses no longer need to circle the lot and instead pick-up and drop-off passengers at a single point, reducing the amount of shuttle buses required and kilometres travelled. To enhance the overall experience, we

also installed electric vehicle charging stalls where parking attendants ensure electric vehicles are fully charged by the time customers return to collect them. Finally, our jetSet bus service became more efficient as the distance traveled by buses within the lot was reduced under the new configuration.

In 2019, we also installed anti-idling signage at our cell phone waiting area parking lot.

### Electric Vehicle Charging Stations

**14,342**  
EV charges in 2019,  
an 83% increase

YVR has installed 69 electric vehicle charging stalls for public, employee and fleet use. In 2019, we recorded 14,342 charges from our public and employee stations—an increase of 83 per cent over 2018. Since installing

our first charging station in 2013, we have seen growth every year in the number of charges, for a cumulative total of 29,817 charges. In 2019, we installed additional electric vehicle charging locations in jetSet YVR Parking, and a project began to install more charging stations in the Templeton employee parking lot.

### Taxi program

YVR's taxi program has continued to grow. In 2019, there was a record 1.32 million outbound trips—a 4.5 per cent increase from 2018. To reduce taxi shortages and long wait-times, 117 additional licenses and an additional operator, were added to the YVR taxi fleet. A seasonal taxi program was also generated, adding an extra 186 taxis during the peak summer months.

In 2019, there were 695 taxis operating at YVR, 504 of which were hybrid-electric—an increase of 23 per cent compared to 2018.





# Protecting Ecosystem Health

YVR strives to protect ecosystems on and around Sea Island. From conducting robust environmental impact assessments for all projects to managing the natural habitat through a range of initiatives and programs, we focus on ensuring that both the safety and success of our operations align with the health and well-being of the natural world.



**Salmon-Safe Certified—  
four years  
in a row**

## In this Section



Biodiversity, Remediation



## GRI Disclosure and Stakeholders

GRI 304-1



Vancouver Airport Authority



Airlines



Airport business partners



Government and regulators



Local communities



Vancouver Airport Authority's efforts to protect the environment go far beyond fulfilling a commitment to reduce our impact. These efforts stem from our core belief that without a healthy ecosystem, our business and communities cannot successfully operate. The health of the environment underpins everything—from our economy to our security.

## Our Approach



YVR is located on Sea Island, Richmond, in the mouth of the Fraser River, which is one of the largest estuaries on the west coast of North America. This estuary supports one of the biggest salmon runs on the west coast and is an important location for migratory birds. Our operations are located in an ecologically rich area, and are adjacent to the following: Sturgeon Bank, a Provincial Wildlife Management Area with significant intertidal habitat value that is both a RAMSAR site and part of the Western Hemisphere Shorebird Network; Sea Island Conservation Area, which is managed by the Canadian Wildlife Service for certain wildlife habitat values; Swishwash Island, which is private land owned by the Nature Conservancy of Canada and managed as a nature sanctuary; Iona Island Regional Park; and McDonald Beach Park. We lease 13.4 km<sup>2</sup> of land from Transport Canada on Sea Island and are responsible for balancing the

need for safe airport operations with wildlife management and environmental protection.

We recognize that our operations can have an impact on Sea Island and beyond. To mitigate our impact, we structure our efforts under YVR's Environmental Management Plan, which sets a clear strategic priority—to improve ecosystem health—with specific goals and targets including maintaining our Salmon-Safe certification, managing water quality, tackling invasive species and balancing the need to ensure aviation safety while protecting important wildlife. The purpose of this approach is to not only minimize and mitigate our impacts on the environment, but also to improve ecosystem health.

Our efforts align with YVR's Safety, Security and Environmental Policy and Social Policy. We have clear commitments to comply with environmental legislation under

Environment and Climate Change Canada as well as applicable legislation under Transport Canada, the *Canada Wildlife Act*, the *Migratory Birds Convention Act*, the *Species at Risk Act* and the *Impact Assessment Act*, which came into force on August 28, 2019 and replaced the *Canadian Environmental Assessment Act*.

Our activities fall under a range of plans and programs including an Integrated Pest Management Plan, an Environmental Assessment Program and a Natural Habitat Management Program. Our Environment team works with a large group of experts and organizations to ensure we fulfill our commitments. This team is involved in all aspects of planning and operation of the airport, including reviewing environmental components under our Facility Permit process and coordinating updates to YVR's Sustainable Design Guidelines. The team proactively manages the

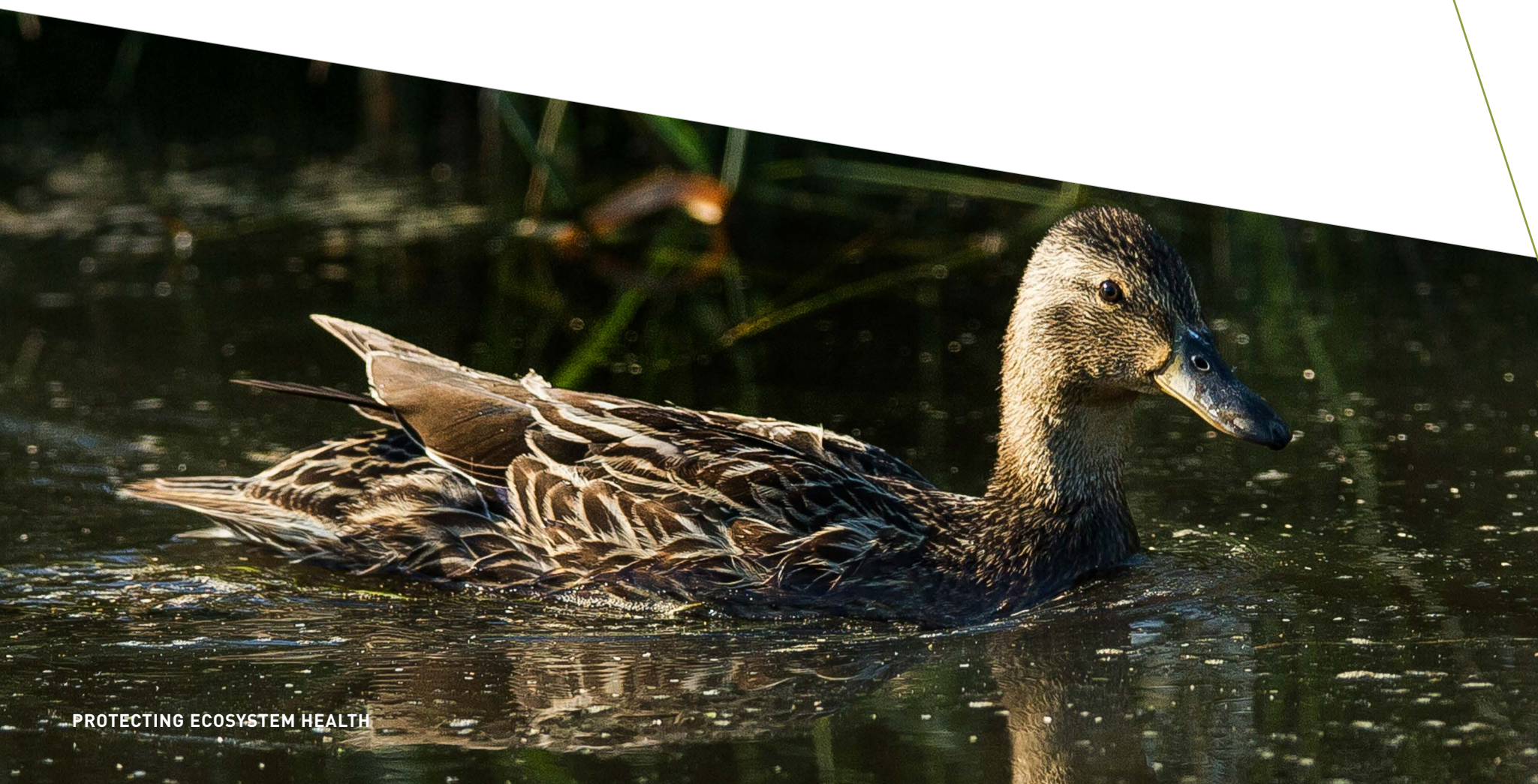
protection of natural and cultural resources and contaminated sites and conducts environmental reviews and monitoring of all construction projects to ensure they meet our environmental standards. They identify pests and invasive species and employ ecological approaches to mitigate their impact. They also regularly conduct sustainability assessments for new operations and facilities through our Sustainability Case Document, which helps narrow down options through a comprehensive matrix based on our social, governance, economic and environment pillars.

YVR has a successful wildlife management program developed in accordance with guidelines established by Transport Canada that includes raptor trapping, tagging and relocation (see **Security and Safety**).

## Remediation

Vancouver Airport Authority has a Contaminated Sites Program, which seeks to protect human health and the environment. We follow federal and provincial environmental guidelines and procedures with respect to land reclamation under our Contaminated Sites Program, which consists of four key activities: Site Identification, Assigning Responsibility, Management Plans and Monitoring.

After Transport Canada transferred management of YVR to Vancouver Airport Authority in 1992, it remained financially responsible for all documented historical contaminated sites identified in the Ground Lease. We will continue to work with Transport Canada to address these sites under our Contaminated Sites Program. In addition, we undertake island-wide water quality sampling and independent laboratory analysis to monitor the natural environment.



# Protecting Ecosystem Health: 2019 Results

## 2020 Target

Become Salmon-Safe Certified

## 2019 Result

Salmon-Safe Certified, 4 years in a row

### Natural Habitat Management



#### Salmon-Safe Certification

In 2016, YVR proudly became the first airport in North America to achieve Salmon-Safe Certification, acknowledging our commitment to the environment. We have retained the certification—a 2020 goal in our Environmental Management Plan—since then and have developed innovative ways to restore, protect and enhance our ecosystem.

As part of our 30-year friendship agreement, YVR and Musqueam Indian Band continued to work together in 2019 to enhance the habitat on Sea Island through an invasive plant management program. We removed over 4,000 kg of invasive plants from a section of river habitat—including Bamboo, Himalayan Blackberry, Scotch Broom and English Ivy.



## Sustainable Landscapes

We constantly improve our landscaping practices. In 2017, we performed a Drought Tolerant Landscape Management Study. We implemented this study in 2018, developing a drought-tolerant plant list, with a focus on native plants which we now utilize in designing landscapes. We developed YVR's new Value Long Term parking lot, demonstrating the application of salmon-safe design principles to stormwater management. In keeping with our commitment to sustainability, the

lot offers several environmental management initiatives including the implementation of bioswales between parking stall aisles as natural run-off water filtration.

## Invasive Species and Pest Management

In 2019, we continued to implement our 2018 Integrated Pest Management Plan. We conducted an invasive plant survey in the summer and provided a training workshop for Airport Authority employees and contractors, focused on identification and best practices. We also adhere

to best management practices in soil movement to prevent the spread of invasive species.

## Contributions to Conservation

YVR coordinates and sponsors the annual Great Canadian Shoreline Cleanup in cooperation with Ocean Wise and the Vancouver Aquarium on Sea Island at Iona Beach. In 2019, over 415 volunteers, including Richmond Mayor Malcom Brodie and MLA Sheila Malcolmson, came out to remove litter from the habitat around Iona beach.

## Remediation

In 2019, there were no new contaminated sites identified on Sea Island. Transport Canada added one previously identified contaminated site at YVR to the Federal Contaminated Site Inventory in 2019 as a result of investigations undertaken by the Airport Authority. We continued to conduct investigations and implemented management plans, some of which include off-site soil removal to a licensed facility to ensure protection of human health and the environment.

## Environmental Reviews

Our Environment team conducted a broad range of site visits and environmental reviews in 2019. See **page 146** for the Environmental Impact Assessment portion of Local Communities 2019 Results.



# Managing Noise



We recognize the importance of managing noise from aircraft operations. Our approach is based on being a good neighbour and business partner—balancing the needs of our communities with our commitment to operating an efficient and reliable connecting hub.

**77**  
**Reported noise concerns per 10,000 aircraft runway movements**

## In this Section



Aeronautical noise



## GRI Disclosure and Stakeholders



Vancouver Airport Authority



Airlines



Airport business partners



Local communities



Government and regulators



Aircraft noise is an inherent part of a functioning airport and can also be a source of disturbance for local communities. Vancouver Airport Authority recognizes that we must take a responsible and balanced approach towards managing our social and environmental impacts, ensuring the well-being of our local communities while reaching our business objectives.

## Our Approach



We recognize that noise can have an impact on communities under aircraft flight paths and in areas near the airport. Under the provisions of our Ground Lease with Transport Canada, the Airport Authority is responsible for noise management activities within 10-nautical miles from YVR. We manage noise through our Aeronautical Noise Management Program and supporting initiatives in the Noise Management Plan. We create a new plan every five-years and submit it to Transport Canada for review and approval.

The Aeronautical Noise Management Program aligns with the requirements in our Ground Lease, our Social Policy, Canadian Aviation Regulations and the International Civil Aviation Organization policy on aircraft noise management. Our commitment is to comply with all regulations and meet the obligations in our Ground Lease. Our objective is to minimize disturbance to those living in communities in the vicinity of the

airport while recognizing the need for continued safe and efficient 24-hour airport operations. We achieve this objective through the following core program elements:

- Consulting with the YVR Aeronautical Noise Management Committee (ANMC) on all aspects of noise management activities and soliciting its input on implementing initiatives outlined in the Noise Management Plan. The ANMC includes representatives from Musqueam, City of Richmond, City of Vancouver, City of Delta, City of Surrey, National Airlines Council of Canada, Floatplane Operators, YVR Airline Operators Committee, Canadian Business Aviation Association, NAV CANADA and Transport Canada.
- Monitoring and assessing aircraft noise levels in the community.
- Maintaining relevant operating procedures (Noise Abatement Procedures, Airside Directives & Procedures) to minimize noise from

aircraft operations.

- Using our Ground Run-up Enclosure for applicable engine maintenance run-ups to minimize noise on the community.
- Responding and providing information to address community questions and concerns about aircraft noise.
- Participating in and supporting noise management discussions at a national and international level to develop new standards and technologies for noise mitigation.
- Partnering and working with community and aviation stakeholders.
- Conducting an annual community survey to track the level of aircraft noise annoyance.
- Working with local cities to encourage compatible land use planning for areas around the airport exposed to aircraft noise.

For more information on YVR's approach to noise management, please visit [yvr.ca/noise](https://yvr.ca/noise).

# Managing Noise: 2019 Results

## Managing Noise

In 2019, we implemented the Airport Authority's 2019-2023 YVR Noise Management Plan, a critical piece of our Aeronautical Noise Management Program that identifies initiatives and key areas of focus. We developed the current Plan in 2018 with support from the YVR Aeronautical Noise Management Committee and input from the community.

Work completed in 2019 included:

- Preparing a multi-year work plan to replace the hardware in our current noise monitoring terminals (NMTs) and identifying potential sites for new NMTs. The Airport Authority currently maintains a network of 20 NMTs located in the community, which help in determining the contribution of aircraft sound levels in relation to the overall sound level at the sites.

- Continuing the deployment of our portable NMT in the Musqueam community to support its understanding of the noise exposure in the area and allow for trend analysis.
- Participating in national industry working groups with other airports and key stakeholders to discuss emerging noise issues.
- Helping coordinate studies and assessments of various airport capital projects to minimize impacts on our surrounding communities from ground-based noise.

We continued to use our Ground Run-Up Enclosure (GRE), a structure designed to reduce noise from maintenance engine run-ups that primarily serves business jets and propeller aircraft on the south side of the airport. The number of run-ups performed at YVR each year will vary depending on the maintenance requirements by the operators. In 2019, the GRE accommodated approximately 980 runups, a decrease of seven per cent from 2018.





## Your Feedback

Our 2019 community survey of Metro Vancouver residents indicates that 85 per cent of respondents reported not being annoyed by aircraft noise—up from 80 per cent in 2018.

In 2019, we recorded 77 noise concerns per 10,000 aircraft movements, an increase from 27 noise concerns per 10,000 aircraft

movements recorded in 2018. These concerns were shared through our complaint management and response system over the course of the year where we received 2,546 noise concerns about YVR aircraft operations from 239 individuals. There were six individuals who registered more than 30 complaints each in

2019, and complaints from these six individuals represented 84 per cent of the total complaints received. While the Airport Authority regularly offers to meet with individuals and discuss their concerns to provide additional information on aircraft operations, these offers are most often declined.



## Fly Quiet Awards

The annual YVR Fly Quiet Awards acknowledge airlines that demonstrate good noise management practices, with winners selected based on having the lowest average

measured noise levels and being in good standing with the YVR Noise Abatement Procedures. We select winners based on three aircraft classes: wide body, narrow body and

propeller. The winners of the 2019 Fly Quiet Awards are: All Nippon Airways (wide-body jet aircraft); Air Canada (narrow-body jet aircraft); and Jazz Aviation (propeller aircraft).



**JAZZ AVIATION:**  
Propeller



**AIR CANADA:**  
Narrow Body



**ALL NIPPON AIRWAYS:**  
Wide Body

CONGRATS TO OUR WINNERS!

# Our Community

We are committed to serving our region by building a dedicated and diverse team, who strive for excellence. We put considerable focus on fostering the success of this team, and we constantly strive to achieve the highest level of safety and security for our passengers, partners and communities, while operating a successful hub that provides a broad range of social and economic benefits for the region.



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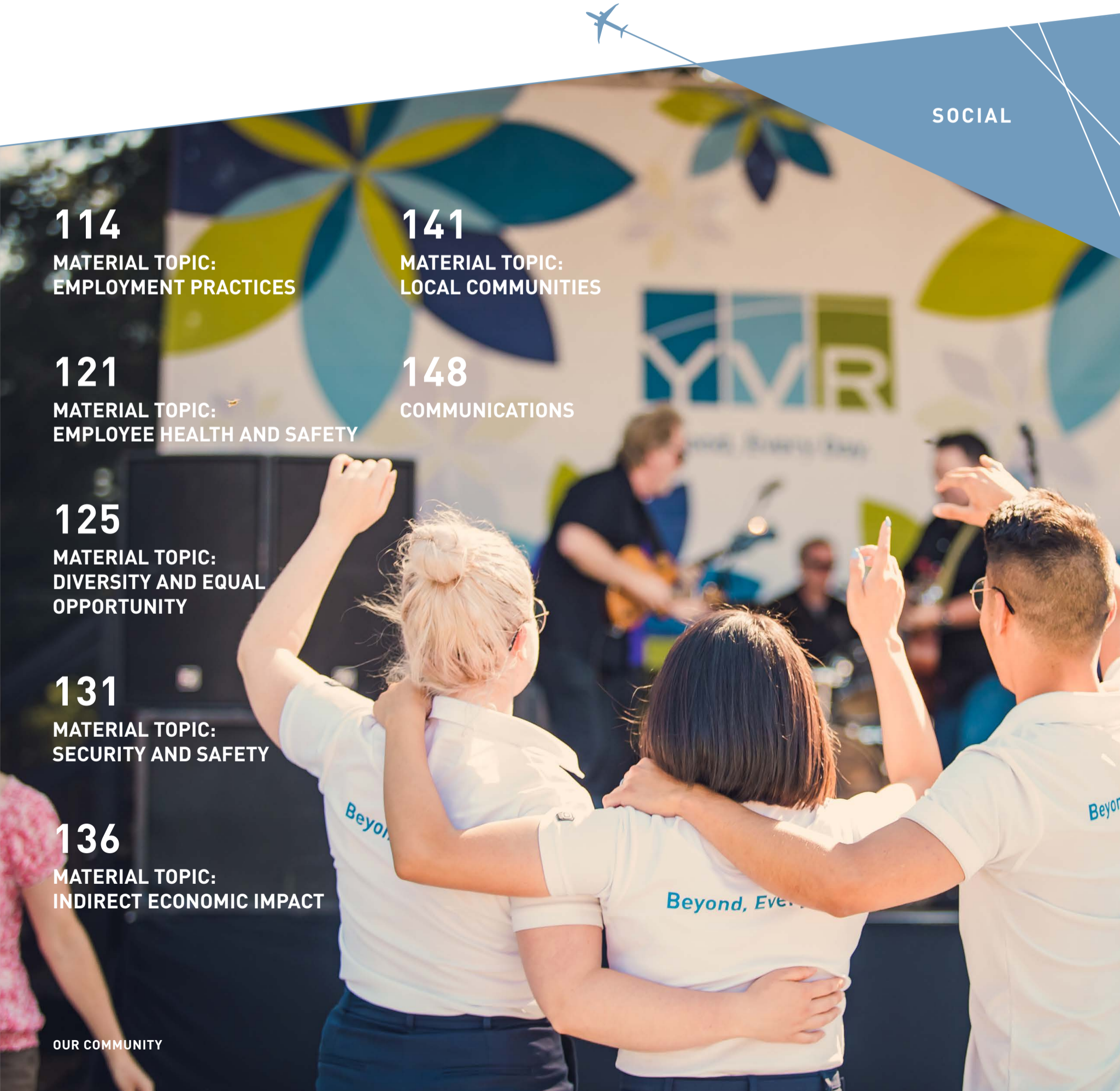
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# Employment Practices

Vancouver Airport Authority employees reflect our core values—safety, accountability, teamwork, innovation—and our commitment is to provide them with the tools and support they need to thrive.

**11 Years**  
Average employee tenure at Vancouver Airport Authority

## In this Section



Employee working conditions, Employee development and training, Labour practices



## GRI Disclosure and Stakeholders

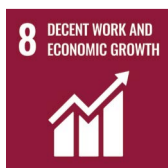
GRI 401-1, 404-2



Vancouver Airport Authority



Government and regulators



Having a motivated team, in which every member takes pride in their work and goes beyond, is essential to YVR delivering an outstanding customer experience. Providing a strong workplace culture, which supports and encourages this team, is thus an essential part of our mission to connect B.C. proudly to the world.

## Our Approach



YVR is an economic engine, supporting thousands of jobs on Sea Island, including Vancouver Airport Authority, airlines and various airport business partners. Under our Talent Strategy, we strive to build and maintain the best team possible by attracting and retaining the right talent. We ensure our people have all the resources needed to build and operate an award-winning hub. And we constantly seek out new programs and tools to ensure that our workforce remains engaged—from strategic sourcing and recruiting, to leadership development and performance-based reward programs.

### Employee Working Conditions

We are committed to providing a safe and healthy workplace. We promote health and wellness through a variety of means, from fitness classes to mental health education and leaves of absence including paid family leave and maternity leave top-up. In addition, we provide adaptive workstations and ergonomic support, and our Joint Occupational Safety and Health Committee reviews policies, programs and safe work practices, resolving safety and health issues through consensus.

We recognize and celebrate achievement and milestones through rewards programs. This includes our Stellar Awards, which are the highest form of recognition YVR employees can receive; the Bravo Awards, which recognize those who have gone above their regular scope of duties; and the Long Service Awards, which celebrate the long-term commitment of employees who have worked for Vancouver Airport Authority for 5, 10, 15, 20, 25, 30 and 35 years.

To support constant improvement, we encourage feedback through employee surveys, all-employee meetings, coaching and performance discussions, an intranet site and more.

## Employee Development and Training

Vancouver Airport Authority supports employee development by proactively managing performance and creating a variety of learning opportunities. As part of our Leadership and Capability Development Strategy, we offer comprehensive Corporate Learning and Development Programs to provide the necessary learning tools for employees to reach their full potential. We help employees meet their learning and development objectives by offering approximately 400 course offerings and an online career development process that helps them map a career path. We offer competitive compensation and benefits programs and a performance management program, where employees outline their objectives and development plans each year and obtain performance feedback, culminating in a final review.

Through the Management and Leadership Development Program, we offer support for emerging and seasoned leaders to reach their full potential. We offer a framework that uses a combination of self-directed, experiential and formal education for leaders. In addition, we have a succession planning program that helps identify and support existing employees with the potential to fill executive and director positions.

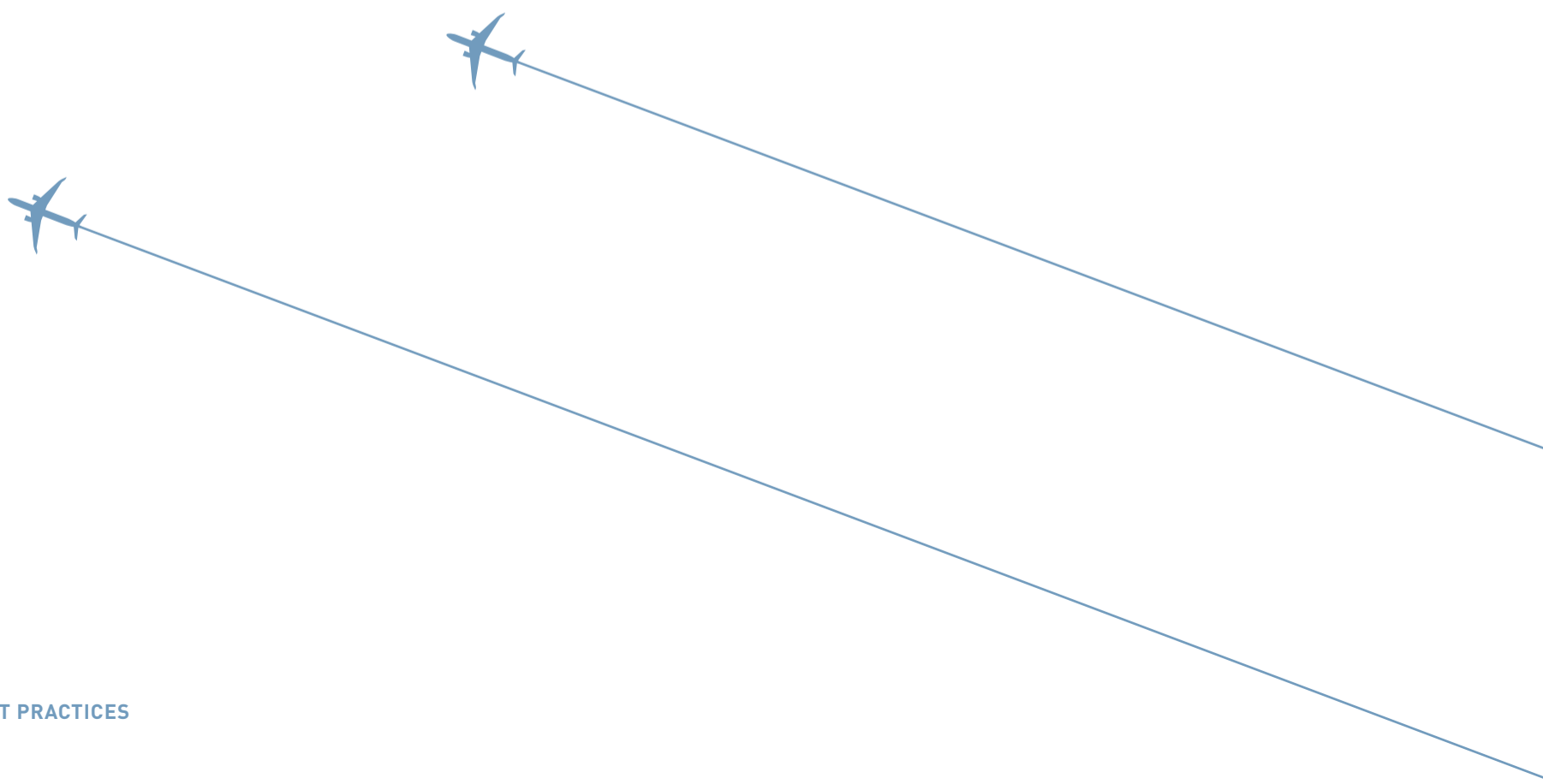
### Labour Practices

We employ fair labour practices and work with suppliers and subcontractors to promote these practices within their organizations, under the Airport Authority's Supplier Code of Conduct.

Our labour standards are based on the core labour conventions of the International Labour Organization.

They include conventions focused on freely chosen employment, age of employment, non-discrimination and diversity, health and safety, employee treatment, freedom of association and collective bargaining, wages and benefits, hours of work, environmental responsibility and anti-corruption business practices.

Non-exempt employees of Vancouver Airport Authority are part of a bargaining unit with the Public Service Alliance of Canada (PSAC) Local 20221. 2019 marked the third year of the current Collective Agreement, which will expire at the end of 2022. The purpose of the agreement is to maintain harmonious and mutually beneficial relationships between Vancouver Airport Authority, the Union and the employees. It outlines the terms and conditions of employment.



# Employment Practices: 2019 Results

Success starts with a motivated team, which cares for every customer and takes pride in their work. In 2019, the Airport Authority team grew to 539 employees, with the addition of 65 new employees. Our 11-year average length of employee service demonstrates a committed workforce. And our ranking as one of BC's Top Employers—for the thirteenth year in a row—shows that we are getting noticed.

Our voluntary turnover rate was 4.82 per cent in 2019, up from 4.5 per cent in 2018, due to a strong labour market. There were no layoffs in 2019.

## New employee hires and employee turnover

Total number of new Vancouver Airport Authority **employee** hires during 2019 by age group, gender and region\*.

	Under 30 years old	30–50 years old	Over 50 years old	Male	Female	Total
<b>Total Number</b>	13	45	7	36	29	65
<b>New hires as a % of total headcount</b>						12.06%

Total number of Vancouver Airport Authority **employee turnover** during 2019 by age group, gender and region\*.

	Under 30 years old	30–50 years old	Over 50 years old	Male	Female	Total
<b>Total Number</b>	6	26	10	18	24	42
<b>Turnover as a % of total headcount</b>						7.79%

\*The Airport Authority operates as one entity, located on Sea Island.

## Talent Strategy

The Talent Strategy encompasses a range of practices, programs and tools within our organization. Key activities in 2019 included sourcing and recruitment, performance management, career management, compensation and rewards, succession management, leadership and capability development and strategic workforce planning.

We completed a training needs assessment in 2017, identifying future skills for success. In 2019, we incorporated these skills in our Leadership & Capability Development framework, adding new courses and promoting those aligned to these skills.

## Career Development

### Performance Management

Performance Management is the continuous process of setting objectives, assessing progress and providing ongoing coaching and feedback to ensure that employees are meeting their objectives and career goals. In 2019, 73 per cent of bargaining unit employees completed performance reviews for the 2018 performance year. Managers who worked for the Airport Authority for at least three months submitted their performance reviews for the 2018 performance year.

### Continuous Learning

Our Human Resources team manages several programs that support continuous learning and leadership development.

In 2019, Airport Authority employees completed 6,246 courses—averaging 12 per person. The majority of classes completed were online computer-based training (58 per cent), followed by in-person instructor led classes (41 per cent) and external training (one per cent).

Nine managers completed our UBC Sauder co-branded Certificate in Corporate Management Excellence program, and we sponsored four director-level employees who participated in Rotman's Executive Leadership Development Program.

We run an emerging leaders program, Navigating through Change, for non-management. In 2019, 23 employees participated in the program (72 have participated since its inception in 2014). Of those who have participated in the program, 28 have been promoted to a more senior role in the organization.

### Other Education Opportunities

We support a range of formal education programs including the Industry Training Authority Apprenticeship Program, external training for professional development, a long-term education program that offers up to \$20,000 of tuition reimbursement and up to 20 scholarships each year, valued at \$2,000 each, for our employees' children. In 2019, six employees accessed the long-term education program.



## Recognition



At our 2019 holiday party, we handed out three awards for safety, accountability and innovation to individuals and a teamwork award to a deserving team.



We recognized 141 incidences of above and beyond performance from our employees, totalling almost \$5,000 in Bravo Award gift cards.



And we presented 53 Long Service Awards.

## Employee Feedback

We conduct an employee engagement survey every two years and share results at employee meetings. For the first time, we conducted a Pulse Survey in 2019—a short survey that tracks engagement levels and the drivers of engagement. We had an 86 per cent participation rate with a 78 per cent engagement score, one per cent above 2018.







# Employee Health and Safety

Health and safety are key to our success. To provide a safe working environment, we maintain rigorous standards that meet and exceed all requirements, and we constantly test these standards—through training, education and industry involvement.

**91%**  
**WorkSafeBC**  
**health and safety**  
**management audit**

## In this Section



Employee health and safety



## GRI Disclosure and Stakeholders

GRI 403-2



Vancouver Airport Authority



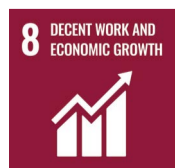
Airlines



Government and regulators



Airport business partners



Thousands of people work on Sea Island, supporting YVR's operations. These employees represent a diverse team—from engineers to transportation companies, retail partners and operations personnel. We are committed to protecting the health and safety of this team.

## Our Approach

Vancouver Airport Authority is federally regulated under the *Canada Labour Code Part II Act* and associated Canada Occupational Health and Safety Regulations. We manage health and safety through the Employee Strategy with an integrated Safety, Security and Environment Policy, which provides the framework for our Health and Safety Management System. This system is verified by the Certificate of Recognition audit program and is based on the “plan, do, check, act” continual improvement model seen in other management standards.

Under the Health and Safety Management System, our Joint Occupational Safety and Health Committee reviews policies, programs and safe work practices. The committee, which equally includes men, women, management and bargaining unit employees across departments, meets to discuss and

resolve safety and health issues through consensus. The committee is active in developing and promoting our health, safety and wellness initiatives, along with regulatory activities such as conducting inspections and investigations and reviewing health and safety programs. Every year, the team sets specific targets including no lost-time incidents, zero non-compliances and training.

It is essential that we have a comprehensive health and safety program in place for the growing number of contractors on Sea Island. All contractors working for the Airport Authority and accessing our holdings must complete the Contractor Safety Orientation before arriving on site, as part of the broader Contractor Safety Management Program. Contractors are also provincially regulated under WorkSafeBC.

## Health and Safety Training

Management identifies training needs for employees and maintains records. To support this responsibility, we have a Health and Safety Checklist for New Employees, a Student/Contractor Orientation Checklist and the New Employee Health, Safety and Wellness Orientation. In addition, all new managers joining the Airport Authority receive additional supervisor health, safety and mental health in the workplace training.

The Health and Safety team has developed a Health and Safety training calendar based on Work Practices Code and Corporate Health and Safety training. This training includes computer-based training modules (CBTs), instructor-led training (ILTs) and supervisor-to-peer competency-based evaluations (CBEs). Depending on risk category, all Airport Authority employees receive training in the form of CBT, ILT or CBE.



# Employment Health and Safety: 2019 Results



## Lost-Time Injuries

We measure health and safety performance by tracking any at-work injuries that result in an employee missing work. Whenever we have a significant employee injury, near-miss or employee lost-time injury, we conduct an incident investigation to identify root causes and develop recommendations to prevent the

incident from happening again. This has led to improvements such as sourcing and distributing new equipment and tools to improving safe work practices for various work tasks. In 2019, we had six lost-time injuries and 24 lost-time days, compared to two lost-time injuries and 47 lost-time days in 2018, which

did not meet our zero target. Root cause analyses were completed on the incidents. An improvement action was for employees and teams to improve their incident and injury reporting and initiate temporary work accommodations quickly and effectively.

	<b>Total</b>
<b>Total Lost-Time Injuries</b>	6
<b>Lost-Time Injury Frequency Rate</b>	1.20
<b>Total Number of Lost-Time Days</b>	24
<b>Absenteeism Rate</b>	3.75%
<b>Total Number of Fatalities</b>	0

## Certificate of Recognition

In 2019, we successfully passed an internal maintenance audit through WorkSafeBC's Certification of Recognition Program, with outstanding scores of 92 per cent for the occupational health and safety management system audit and 89 per cent for the injury management audit. These high scores reflect our strong safety management systems and safe working conditions, which meet the Canada Labour Code.

## Contractor Safety Management Program (CSMP)

The Vancouver Airport Authority's CSMP provides a framework for stakeholders to manage health and safety for the duration of contracted work. This program applies to all contractors, consultants, and service providers working directly for the Airport Authority. In 2019, this program oversaw a new record of 1,993,849 person hours of capital contracted work while continuing

to lower the total recordable injury frequency rate (TRIF) year after year (TRIF of 3.17 in 2018 compared to 3.11 in 2019)—with just five lost time incidents.

## North American Occupational Safety and Health Week

From May 6 to 10, YVR took part in the North American Occupational Safety and Health (NAOSH) Week, a continent-wide event that highlights the importance of increasing understanding, raising awareness and reducing injuries and illness in the workplace, at home and in the community. The NAOSH Week activities started with the annual Day of Mourning ceremony, an event held in memory of workers who have been killed, injured or suffered illness as a result of work-related accidents and illness.

Throughout May, we conducted a range of activities to promote health and wellness such as courses and presentations on mental health, workplace violence de-escalation and proper use of fire extinguishers.

## Wellness Program

Now in its eighteenth year, our incentive-based Wellness Program continued to support the Social Policy by promoting health and wellness through fitness classes, mental health education, lunch-and-learn sessions, wellness e-magazine subscriptions and community involvement. Our employees continued to engage, with strong participation in the program through various events and functions. We hosted four sessions of The Working Mind, a course that aims to reduce the stigma of mental illnesses by increasing awareness, offering resources and increasing resiliency. We also provided financial wellness rewards using a system that awards employees up to \$210 per year in pursuit of their health and social goals.

## Indoor Air Quality

In accordance with our Environmental Air Quality Program, we have four industrial hygienists and a multitude of Indoor Air Quality (IAQ) monitoring equipment to keep air quality in check. This includes CO<sub>2</sub> sensors, which monitor and regulate building ventilation. In 2019, we conducted baseline and ongoing IAQ assessments throughout the terminal and airside to monitor potential air quality impacts for construction projects and airborne contaminants. We found the air quality was within acceptable levels, as determined by Canada Occupational Health and Safety Regulations and WorkSafeBC Occupational Health and Safety Regulations.



In May and June, over 100 employees participated as 24 teams across 11 sport and activity events at the annual Corporate Challenge competition. For the third consecutive year, we placed first overall among 65 organizations, with six gold, two silver and four bronze medals.

# Diversity and Equal Opportunity

We are proud to have a vibrant workforce that reflects the region. We support diversity by identifying areas for improvement, managing a range of programs connected to specific targets and constantly checking our progress.

**67%**  
**Women on Vancouver Airport Authority's Executive Team**

## In this Section



Diversity of governance bodies and employees,  
Non-discrimination in the workplace



## GRI Disclosure and Stakeholders

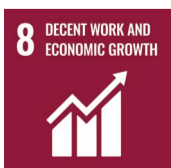
GRI 405-1, 406-1



Vancouver Airport Authority



Government and regulators



A diverse workforce is essential to our goal of providing an exceptional airport experience for passengers, partners and communities. By having a broad range of perspectives, we are better able to serve everyone—through barrier-free terminal design, inclusive hiring practices and a culture that promotes respect and equality.

## Our Approach



Vancouver Airport Authority aims to have a diverse and inclusive workforce. Under the Talent Strategy, the Employment Equity Plan supports our commitment to having a representative workforce and a work environment where all employees are treated with dignity and respect. We take a collaborative approach, in compliance with the Canadian Employment Equity and Human Rights Acts, and we support this approach through several corporate policies to ensure fair employment

practices and treatment across the organization. In addition, our diversity initiatives include work with the LGBTQ2S+ community.

As part of our organizational commitment to employment equity, and as outlined in the Canadian Employment Equity Act, we identify occupational gaps in the workforce and set specific hiring targets for four designated groups including women, Aboriginal peoples, persons with disabilities and members of visible

minorities. Each year, we report on our progress to the public and the Federal Government. We also provide ongoing updates for the Executive Team and annual updates for the Human Resources and Compensation Board Committee. Responsibility for achieving equal employment rests at a high level within the organization. In addition to providing extensive training on diversity and respect in the workplace, we have a dedicated position to oversee and execute employment equity objectives.



## Diversity of Governance Bodies and Employees

We believe that diversity is enhanced when employment equity goals and initiatives are integrated into the normal processes and practices of the workplace. As part of the organizational commitment to employment equity, we identify areas for improvement through voluntary surveys, workshops, audits and interviews. We have an Employment Equity and Diversity team, comprised of employee and employer representatives, to support and execute employment equity objectives. We evaluate our progress each year, setting targets based on the demographics of designated groups in the national, provincial and Metro Vancouver recruitment areas using current labour market data.

Our Board identifies diversity as an essential element in attracting qualified directors and maintaining a high-functioning senior management team. The Board Diversity Policy includes a stretch target of gender parity plus 20 per cent of the board membership from the three other designated groups. The policy also charges the Board with monitoring management's implementation of its workforce diversity policy.

### Non-discrimination in the Workplace

Vancouver Airport Authority is committed to providing a work environment where all employees are treated with dignity and respect and are free from harassment, bullying, discrimination, violence and the effects of alcohol and drug

usage. This commitment aligns with the obligations under the Canadian *Human Rights Act*, which prohibits discrimination in respect to employment.

The Code of Ethics acts as an umbrella policy that helps guide our organization's business decisions and general conduct. It applies to all employees and any party conducting work for, or acting on behalf of, the Airport Authority. Amongst many things, it supports a work environment that is respectful, safe and healthy for everyone. In addition, our Respect in the Workplace Policy includes definitions, examples and a complaint process for employees. For more information on our commitment to non-discrimination, see **page 59**.





# Diversity and Equal Opportunity: 2019 Results



In 2019, for the second year in a row, we received Canada's Best Diversity Employers award for having strong workplace programs. We also received a 2019 Excellence in Governance Award from the Governance Professionals of Canada for Best Practices in Diversity and Inclusion.

## Employment Equity

Each year, we evaluate our employment equity progress and every six months the Executive Team reviews departmental scorecards. The targets are established to serve us until 2022, they include:

- Women in management: 50%
- Women in the workplace: 50%
- Visible minorities in management: 25%
- Visible minorities in the workplace: 35%
- Aboriginal peoples in the workplace: 3%
- Persons with disabilities in the workplace: 8%\*

While we work towards achieving the 2022 employment equity targets, we strive to surpass annual labour market representation. The following table is a summary of our year-end 2018 representation levels compared to 2018 labour market availability.

## Vancouver Airport Authority Demographics vs Labour Market Demographics (2018\*\*)

Designated Group	Vancouver Airport Authority	Labour Market***	Airport Authority Representation
Women	42.3%	39.7%	+2.6%
Aboriginal peoples	2.5%	2.9%	-0.4%
Persons with disabilities	2.3%	8.1%	-5.8%
Visible minorities	34.4%	26.9%	+7.5%

\* Target adjusted in 2019 to reflect labour availability in the 2017 National Survey on Disability

\*\* 2019 data was unavailable at the time of reporting

\*\*\* Includes combined Metro Vancouver, provincial and national employment data

Please refer to the **GRI index** for a detailed breakdown by occupational group.

The following figure indicates the difference in the actual number of employees when comparing our representation by occupation groups

to labour market availability. The shaded cells denote where we have gaps of more than one.

Occupational Group	Women	Aboriginal Peoples	Persons with Disabilities	Members of Visible Minorities
Senior Managers	3	0	-2	0
Middle & Other Managers	8	-1	-2	6
Professionals	5	-3	-10	22
Semi-Professionals & Technicians	3	-2	-2	4
Supervisors	-1	0	0	1
Supervisors: Crafts & Trades	1	0	0	3
Admin & Sr. Clerical Personnel	9	-1	-8	1
Skilled Crafts & Trades Workers	3	-1	-4	9
Clerical Personnel	4	3	-3	-4
Intermediate Sales and Service Personnel	1	0	0	0
Semi-Skilled Manual Workers	2	0	0	-2
Other Manual Workers	0	2	0	0
<b>Total</b>	<b>38</b>	<b>-3</b>	<b>-29</b>	<b>40</b>

Table contains 2018 results; 2019 results were unavailable at the time of reporting.

## Initiatives Supporting Diversity

In recognition of British Columbia's Disability Employment Month during September 2019, the Airport Authority hosted our first YVR Inclusive Hiring Fair and Open House. The half-day event was open to individuals with all kinds of abilities who wanted to learn more about YVR's job opportunities. Representatives from 16 companies operating out of the airport set up booths to share information about their current opportunities and career paths. More than 300 individuals attended and many expressed

appreciation for the opportunity to learn about career opportunities at the airport.

October 2019 marked our eighth annual Diversity Awareness campaign. The purpose of the month-long event is to raise awareness and inspire discussion on topics related to women, the LGBTQ2S+ community, visible minorities, persons with disabilities and Indigenous peoples. Diversity Awareness Month is proudly presented to our employees from the Employment Equity & Diversity

Team. Events during the month included: disability awareness training and three lunch and learns with guest speakers on various topics, including a presentation on the Five Key Characteristics of an Ally led by Alden Habacon.

We undertook a range of activities to promote diversity and inclusion under the *Musqueam Indian Band – YVR Airport Sustainability & Friendship Agreement*. See **page 143**.

## The Presidents Group

Our President & CEO continued to co-chair the Presidents Group, a network of change-driven B.C. business leaders who are champions for more accessible and inclusive workplaces. In September 2019, the Presidents Group announced

a new initiative to improve the representation of people with disabilities in the workplace. All 25 companies, which collectively employ over 50,000 British Columbians, will begin publicly reporting the number of employees and senior leaders with disabilities within their organizations.



## Women in the Workplace

Since 2014, the Airport Authority has sponsored the Women in Management program, which is an initiative aimed to promote and support the advancement of women at YVR. In 2017, we began a program

called Women's Development Circles, targeted to women in non-management roles. The 2019 circles were led by women in management and included 37 participants. In March 2019, we signed the Minerva

BC Diversity Pledge, a public commitment to achieve gender equality in the workplace.

## Respect in the Workplace and Non-Discrimination Policy

Our Respect and Violence in the Workplace Policy outlines what employees should do if a workplace issue arises. In 2019, we arranged for three internal Respect in

the Workplace investigations through an external party. Two of the investigations found that the employees involved had engaged in conduct deemed harassment and

corrective measures were taken. The other investigation was put on hold due to the COVID-19 crisis and will resume at the appropriate time.





# Security and Safety

To maintain the highest standards, we focus on passenger health and safety, security practices and emergency preparedness and response.

**215**  
Raptors successfully relocated from YVR

## In this Section



Security practices, Passenger and customer health and safety, Emergency preparedness



## GRI Disclosure and Stakeholders

GRI A09



Vancouver Airport Authority



Passengers



Airlines



Local communities



Airport business partners



Government and regulators

Millions of passengers travel through YVR every year and our focus is ensuring their safety. Our primary objective is to build, operate and maintain a safe, secure and environmentally sustainable airport for our employees, stakeholders and customers.

## Our Approach



We take a multi-pronged approach to security and safety—working with agencies to ensure safety at every stage of the check-in and screening process, monitoring wildlife to ensure safe landing and take-offs and continuously working with our partners to ensure we have the best possible programs and plans to deal with any emergency situation. Safety and security are foundational elements supporting the Strategic Plan, and we manage them with numerous policies, programs and training workshops focused on security, preparedness and continuity.

### Security Practices

Our customers and passengers interact daily with frontline service staff who ensure their safety and security. In line with Canadian Aviation Security Regulations, we are required to have a Security Awareness Program where all staff working at the airport complete airport security awareness training. This program includes monthly red teaming exercises and other regular exercises such as tabletops with local police and Customs. We work closely

with our agency partners at Canada Border Services Agency and Canadian Air Transport Security Authority to support national security and public safety priorities.

### Passenger and Customer Health and Safety

At all times, we focus on passenger safety. Our efforts include a large range of partners, working in compliance with the *Quarantine Act*, *Public Health Act*, Canadian Aviation Security Regulations and Canadian Aviation Regulation.

In addition, our commitment includes wildlife management. YVR is located on a migratory bird path and, as a result, we have a responsibility to ensure safe aircraft operations while conserving wildlife. We are always working on new and innovative solutions to manage wildlife. We use limited pesticides to reduce bird-attracting insects, and we patrol the airfield year-round, using lethal and non-lethal methods to scare and disperse wildlife. The Fraser River delta is home to the highest density of wintering raptors in Canada. To manage this density,

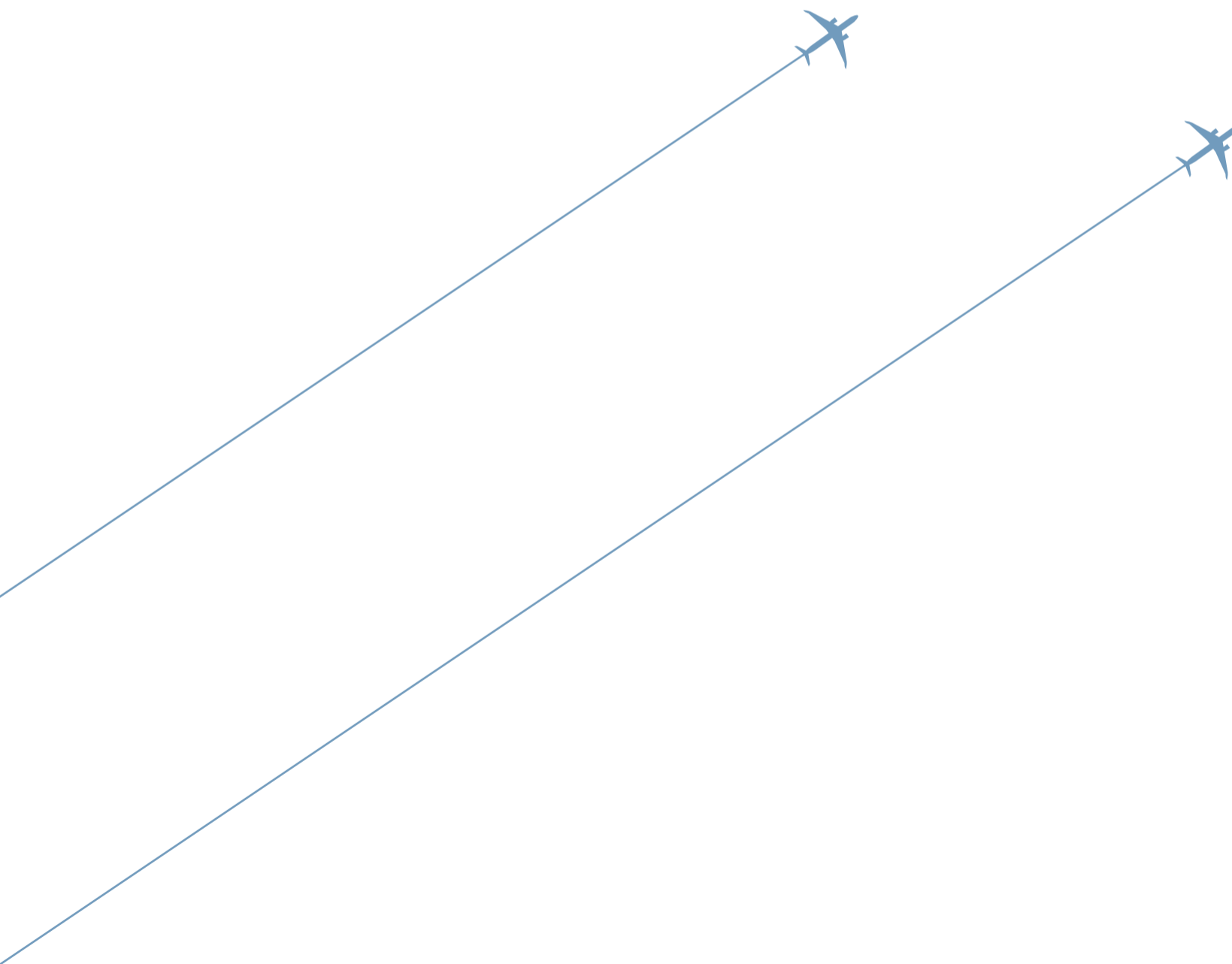
we operate a successful Raptor Trap & Translocation Program. Once captured, the birds are tagged with a unique numbered leg band and translocated to the east, away from YVR. Special wing tags on the larger hawks help us understand the movement of the birds.

## Emergency Preparedness

Vancouver Airport Authority is committed to emergency preparedness and seeks to minimize all risks. Our Emergency Management Plan includes a robust Emergency Management Program, outlining a response structure. Under this program, we follow the Canadian Aviation Security Regulations and Canadian Aviation Regulations,

focusing on three principles: plan, prepare and practice. We incorporate our Hazardous Materials Spill Plan into our approach and follow the BC Emergency Management System response, which highlights the protection of the environment. Under our Seismic Upgrade Master Plan, we continue to prioritize and upgrade our Domestic Terminal Building. Our approach integrates with a Crisis

Communications plan that commits to delivering open, honest and timely information. We continually test and improve plans and initiatives through a range of exercises and drills involving employees, partners and communities.



# Security and Safety: 2019 Results

## Wildlife Management

2019 saw large numbers of migratory birds on Sea Island. We moved 1,063,767 animals away from runways, taxiways and aprons. In addition, we removed 215 raptors from the airfield, down from 241 in 2018, and successfully translocated them away from YVR.

There were 233 wildlife strike incidents at YVR in 2019, resulting in eight wildlife strikes per 10,000 aircraft runway movements (289,533 movements in total). This is down from 268 strikes in 2018, with nine strikes per 10,000 aircraft runway movements. From the total number of reported strikes, we determined that 338 animals were confirmed struck<sup>[1]</sup>

(11.7 animals struck per 10,000 aircraft movements), up from 169 in 2018, all birds except for one bat and one coyote. In order to maintain safe aircraft operations, we use lethal control when necessary. In 2019, we culled 558 birds, an increase from 286 birds in 2018, including 210 Snow Geese and 100 Mallards.

<sup>1</sup> Confirmed strike: a reported wildlife strike where there is evidence in the form of animal remains or damage to the aircraft.







# Indirect Economic Impact



As a major transportation hub, YVR plays a large role in the economy. The airport provides a broad range of social and economic benefits—through community investment, operations, growth and partnerships.

**\$1.2+ Million** donated to more than **50 organizations**

## In this Section



Community investments



## GRI Disclosure and Stakeholders

GRI 203-1



Vancouver Airport Authority



Local communities



While YVR impacts the region through direct employment and purchasing that support airport operations, it also plays an important role in the broader economy. As a major North American hub, YVR participates in the global supply chain with non-stop air services to destinations in Asia, Europe, the South Pacific and North America, and facilitates the movement of millions of visitors to Canada every year. YVR also provides many additional benefits to local communities—through indirect jobs, purchasing and charitable contributions.

## Our Approach



We are committed to operating an airport that provides value for everyone. Our goal is to gain the maximum return on financial and human investment, both for the Airport Authority and the community. YVR indirectly contributes to regional and global markets by facilitating the movement of millions of people and goods across borders. And through our Social Policy and the Strategic Plan, we ensure that the benefits of YVR's operations make their way into the community.

### Community Investment

Community is at the heart of the Airport Authority's commitment to be a responsible corporate citizen, and to demonstrate this dedication we engage in strategic community investment. Through the Community Investment Program, we donate to a variety of local organizations and charities that represent our three key areas of focus: Accessibility, Community and Environment. We distributed these donations to not only the local Sea Island community and immediate municipalities including Richmond and Vancouver, but also to organizations in the Lower Mainland and across B.C. The program connects our philanthropic giving with our business values and ties into

the social aspect of sustainability. While we focus on communities close to home, we consider funding initiatives outside of B.C. through discretionary funding in certain circumstances.

We set clear and objective criteria for donations, sponsorships and in-kind gifts that are distributed through our Community Investment Program. In 2016, the Governance Committee approved three areas of focus and Community Investment Guidelines. Our President & CEO reviews and approves all budget line items and partnerships. In addition, the Board of Directors receives an annual report on our Community Investment Program highlights.

# Indirect Economic Impact: 2019 Results

In 2019, YVR continued to play a significant role in the local economy, driving innovation and supporting a broad range of jobs. YVR's operations, including tourism and cargo, helped facilitate a significant economic impact across the province:

**126,000** Jobs

**\$20.2** Billion  
in total economic output



**\$10.4** Billion  
in total GDP

**\$1.4** Billion  
in total government revenue



**\$1.2+** Million  
donated to more than  
50 organizations



## Community Investment

In 2019, we donated over \$1.2 million to over 50 organizations and an additional \$21,673 to organizations through one-time funding sources of lost and found money at the airport. Our coin balls, which take change

that travellers may not want to take with them, collected more than \$19,000 and we donated this and another \$6,300 of in-kind donations to local organizations. Major funding contributions in 2019 included the

City of Richmond's World Festival and Canada Day Celebration, YVR Art Foundation, Vancouver Fireworks Festival Society, Canadian Mental Health Association and Pacific Salmon Foundation.

## Measuring Success

At the end of the donation period, we ask partners to fill out a survey and discuss the impacts our donations have made in the community. We received extremely positive feedback from many of our community partners in 2019.

Highlights include:

- 1,289 holiday meals donated to families in need with Quest Food Exchange
- Over 635 kg of garbage removed from Iona Beach during our Shoreline Clean-up with Ocean Wise
- 232 people experiencing YVR's Accessibility Tours (Canucks Autism Network, Spinal Cord Injury BC and Canadian National Institute for the Blind)
- 550 tickets distributed through the Community Access Tickets Program with Bard on the Beach
- 114,000 new observations made in parks by more than 2,000 individual citizen scientists with the Wildlife Forever Program with BC Parks Foundation
- 20 puppies in training joined YVR's puppy tour from BC Guide Dogs and PADS
- YVR supported 15 community events



Canucks Autism Network shared some feedback from families who attended the I CAN Fly Accessibility Tour.

*"What has this experience meant for your family or group?"*

- "My previously very anxious children have both expressed to me that they can't wait to go on a flight!"
- "I'm traveling to Brazil, so my parents can finally meet my son. I was super worried about how my son would react to an environment that can be very overwhelming. After this event, I was able to see that my son was totally fine the whole time we were at YVR including inside the airplane, so now I'm feeling way more prepared, comfortable and confident that our trip will not be hard on my son and that we don't need to avoid trips or be afraid anymore."
- "My son now tells us that he thinks he can take a plane to Disneyland (as long as it's not a window seat). This is amazing news."





# Local Communities

Beyond, Every Day.



Vancouver Airport Authority is committed to serving the needs of our region. We reinvest all profits back into the airport, constantly improving the hub, and we engage with communities and partners to operate an airport that benefits everyone.

**15**  
**Community Events supported**

## In this Section



Community relations, Community impacts, Relationships with Indigenous peoples



## GRI Disclosure and Stakeholders

GRI 413-1



Vancouver Airport Authority



Local communities



LOCAL COMMUNITIES

Our mandate is to be accountable to the communities we serve. We recognize that our operations and growth can have impacts on the region; thus, we are committed to being transparent. We are located on traditional Musqueam land and, as a result, we have a unique responsibility to work with Musqueam to manage the airport in a sustainable manner.

## Our Approach



Engaging with local communities is fundamental to the success of YVR; our operations integrate community engagement, impact assessments and development programs. Our approach is grounded in a Communications Policy of being open, honest and providing timely information to stakeholders. We provide multiple opportunities for the community to engage with our team throughout the year: at our Annual Public Meeting, at local festivals and events, through community notifications and through formal consultation activities. We are active with all levels of government, with annual updates to Municipal Councils across the region and regular meetings with Provincial and Federal Government representatives.

### Local Community Engagement

A key component of the Airport Authority's Social Policy is to support our community through effective public engagement. We always consider the health and safety of neighbours and reflect this commitment by performing impact assessments on all new projects, in accordance with Section 67 of the *Canadian Environmental Assessment Act* and the *Impact Assessment Act*. These reviews identify potential impacts, such as loss of sensitive habitats, and include an analysis of potential social impacts. Some details are available in the **Impact Assessments** portion of this report.

We engage the public and key stakeholders on the potential environmental and health impacts of airport operations. Both the

Environmental Advisory Committee and the Aeronautical Noise Management Committee enable local communities to give direct feedback. Committee representatives are appointed by their stakeholder groups, which include community and environment groups, industry, government, Musqueam Indian Band, airlines, NAV CANADA, Transport Canada and Vancouver Airport Authority. In addition, we regularly undergo consultation with communities and stakeholders on key airport development and planning initiatives. See **page 145** for more.

We provide a range of feedback opportunities including an annual community survey, regular communication channels, 24/7 customer call centres and noise complaint platforms.

## Relationships with Indigenous peoples

Vancouver Airport Authority recognizes that Indigenous peoples are an important part of the communities we serve. We honour the traditional and contemporary culture of Indigenous peoples and we commit to mutually beneficial and resilient relationships based on respect, trust and meaningful engagement.

YVR and Musqueam share a unique connection: YVR is located in Musqueam territory and the Musqueam are located in YVR's

operating area. To address this, our 30-year *Musqueam Indian Band – YVR Airport Sustainability & Friendship Agreement* serves as a roadmap to create thriving, respectful and resilient relationships. It includes a broad range of benefits such as revenue sharing, scholarships, jobs, environmental protection and support for the airport's long-term development. More than anything, the agreement is about fostering a real friendship and a sustainable future.

Building on the successful agreement, the Airport Authority aims to deliver a broader Indigenous

vision recognizing that YVR not only connects with Musqueam, but also welcomes and connects to Indigenous peoples around the world. This vision aligns with our values and various Articles in C169 – Indigenous and Tribal Peoples Convention, 189 (No. 169). This Article references the 1989 Labour Organization Convention, considered a forerunner to the United Nations "Declaration on the Rights of Indigenous Peoples."





# Local Communities: 2019 Results

## Community Engagement

### Vancouver Pride Parade

The Airport Authority participated in the Vancouver Pride Parade for the fifth year and showcased a co-branded float in partnership with Air New Zealand. Over 50 Airport Authority and Air New Zealand employees and their friends and family joined in the parade.

### Great Canadian Shoreline Cleanup

On September 21, more than 400 volunteers from the airport and the community took part in the Great Canadian Shoreline Cleanup at Iona Beach Regional Park. This team wielded gloves and pick-up-sticks to help clear the beach of debris.

Thanks to their efforts, we removed and recycled an estimated 635 kg of waste. Vancouver Airport Authority donated \$20,000 to Ocean Wise in support of this initiative, ensuring we continue to help keep Canada's shorelines clean.

### Quest Food Exchange

We continued to support Quest Food Exchange and hosted the annual Holiday Hamper Drive for the eighth year, setting a record of 1,289 hampers donated by the airport community. Quest Food Exchange serves as a conduit to 67 community agencies and their clients and facilitated the delivery of hampers that enabled 6,445 individuals the opportunity to enjoy a holiday meal with all the trimmings. The Airport Authority provided funding to purchase turkeys for the hampers. Beneficiaries of the Hamper Drive are those on a fixed and low income including single parent families, the unemployed or under employed, seniors, newcomers and youth.



**1,289**  
Hampers donated

## Explorer Tours

Our Explorer Tour program offers free, year-round guided tours of YVR, showcasing the airport's award-winning art, accessible terminal features and architecture.

In 2019, we hosted 98 tours, totalling 2,345 participants. This included day camps, school groups, adult students, seniors, social support groups, leisure groups and other interested community members.



## Consultation

### Templeton Area Redevelopment Project

As part of our Templeton Area Redevelopment Project, which seeks to develop a parcel of land in the Templeton Area, we continued to engage with Burkeville residents to ensure we take measures to minimize project impacts and consider a range of community enhancements.

We have completed three phases of the engagement program. On February 4, 2019 we wrapped up Phase 3 engagement by hosting a Community Information Meeting for Burkeville households, and we shared information through the Sea Island Times newsletter. We provided a project overview, summary of key concerns, the results from consultation to date and how feedback has influenced decisions. Members of the Executive Team were also available to respond to questions.

Site work is underway to prepare the site for a future tenant. This includes the development of the Templeton Corridor, which will serve as a natural buffer between the community of Burkeville and the operational land. We continue to keep Burkeville residents informed of site activity and are committed to future engagement opportunities to source feedback on building designs at the appropriate time. We regularly met with City of Richmond staff to keep them informed and provided a memo with key information to Mayor and Council.

### Noise Management Plan

For more information about the Noise Management Plan, see [page 109](#).

### Environmental Management Plan

As the Environment Department, the Executive Team and our Board sought to set new goals and initiatives in the new 2020-2024 Environmental Management Plan, we collaborated with Musqueam Indian Band, our tenants and Sea Island business partners, the Environmental Advisory Committee and industry leaders. We received this feedback through meetings, presentations and brainstorming sessions.

### Engagement Charter

We developed an Engagement Charter that outlines how we integrate consultation and engagement in our business, identifies opportunities where community engagement could be helpful and defines our program both for internal awareness and for public, stakeholders and First Nations to understand how and why we engage.



## Relationships With Indigenous Peoples

We made great progress in the second year of the *Musqueam Indian Band – YVR Airport Sustainability & Friendship Agreement*. The agreement continues to include a broad range of benefits.

### Employment and Contracting

In 2019, the Airport Authority hired 15 Musqueam members and our YVR business partners hired 76. We brought a mentor on site to work with our staff, assisting with certification, apprenticeship studies and higher education. In addition, we registered 27 Musqueam businesses and contractors into the YVR supplier database. They provide a range of services including construction, site cleanup, landscaping, catering, protocol and cultural education.

### Education and Training

We continued with the successful Musqueam scholarship program, awarding 13 scholarships to Musqueam members.



### Revenue Sharing

As part of our revenue-sharing agreement, we paid one per cent of the Airport Authority's 2018 revenue to Musqueam Indian Band in 2019. See **page 69** for more.

### Culture, Environment & Sustainability

#### *Archaeological & Environmental Monitoring*

In 2019, Musqueam and YVR conducted archaeological reviews of all YVR projects and collaborated on archaeological and environmental procedures. YVR introduced environmental and archaeological questions pertaining to Musqueam into the permitting process. These questions ask permit applicants to acknowledge if Musqueam need to be involved from the start, providing project certainty.

#### *Design Competition*

We hosted a design competition for Musqueam artists, with the goal of sharing Musqueam culture throughout YVR. The winning design by Thomas Cannell and his daughter Summer can be seen throughout YVR including on our new roadside banners.

### *Journey Canoe*

In 2019, we launched an ambitious project to create a Musqueam journey canoe. The canoe, which resulted from a suggestion from YVR employees to build stronger ties with Musqueam, took a large team effort—from coordinating the transportation of the western red cedar log from Howe Sound to its arrival at YVR, the removal of its bark, carving and much more. Work will continue on the canoe in 2020, including planning for future journeys and its placement in the terminal.

### *Raising Employee Awareness*

In 2019, YVR and Musqueam worked on a successful internal education program for Airport Authority employees. Sessions included language classes, cedar weaving, interactive drumming and singing, and information on Musqueam history and key legal precedents.

For more information on the *Musqueam Indian Band – YVR Airport Sustainability & Friendship Agreement*, visit [yvr.ca/musqueam](http://yvr.ca/musqueam).



# Communications

Vancouver Airport Authority is committed to providing open, honest and timely information—to travellers, the general public, the people who work on Sea Island, business partners, industry associations, local communities, government, Indigenous peoples, community groups and media.

**767** Million  
Total reach

## Media Relations

YVR monitors and responds to media requests 24/7 and these enquiries cover a wide range of topics including the impact of weather, news and events at YVR, irregular operations, information for flights and services.

Every year, we work with an external consultant to gauge print, online and broadcast media clips. In 2019, there were 5,027 media items that contained YVR coverage, with a reach of more than 767 million and 99 per cent of the coverage was positive or neutral.

## Overall tone

In 2019, we focused on promoting our unique governance model, innovations, travel tips, successes and expansion plans. YVR as an economic generator remained our top key message category, with top messaging conveying our airport expansion and economic impact. The second most popular category focused on our customer experience, which included messaging on busy holiday travel tips. The third most popular category was our growth, focused on our unique operating model.

**30%**  
Positive

**69%**  
Neutral

**1%**  
Negative

## Social Media

Social media helps us engage with the community and communicate directly with customers, partners and passengers. All our channels saw incredible growth in 2019. Of note, our priority channel, Twitter, grew by 28 per cent and WeChat, our newest Chinese social media channel, grew by 64 per cent.

### Twitter

## 28% growth

### Most followed airport in Canada in 2019

Our Twitter account continues to be our most active social channel. Our audience grew from 58.3 to 74.9 thousand followers, a 28 per cent growth over 2019. We saw more than 15 million impressions on Twitter. Additionally, our engagement increased significantly due to hosting several airline ticket contests and promoting creative campaigns.

### Facebook

## Second most followed airport in Canada

Our Facebook page saw an increase of an additional 2.7 thousand fans. Content on this channel focuses on a wide range of areas including contests, retail, operations, events, construction updates and the latest updates from the airport.



### Instagram

## 28% growth

### Most followed airport in Canada in 2019

Our Instagram account showed major growth in 2019, increasing followers by 28 per cent. YVR holds the top spot for a Canadian airport on Instagram. Best performing content on Instagram includes high-quality aircraft livery shots, contests and engaging Instagram stories.

### LinkedIn

## 56% growth

Our LinkedIn account continues to become a priority area for the organization to share corporate announcements. In 2019, there was a total of 13,726 followers on our account, a growth of 56 per cent. We are the second most followed airport in Canada after Toronto Pearson.

### Weibo

## 122,500 followers

Our Weibo channel continues to experience exponential growth. We had 3.13 million views, an increase of 64 per cent, in 2019. Our followers went up by 4 per cent in 2019, from 117 to 122 thousand.

### WeChat

## 64% growth

### Most engaged airport audience

Following the launch of WeChat in 2018, the audience has grown significantly, with a 64 per cent follower growth. The total views on posts were 164,000. We are among the most engaged airports outside of China.

*Want to hear more? Sign up at [yvr.ca/newsletter](https://yvr.ca/newsletter).*

# Appendix



# GRI Index

The following index provides detailed information on Vancouver Airport Authority, for the reporting period covering January 1 – December 31, 2019, with the exception of our Ambient Air Quality and Employment Equity data as noted below (GRI A05, 405-1). This report has been prepared in accordance with GRI Standards: Core option.

GRI	DISCLOSURE	PAGE																								
<b>GENERAL DISCLOSURES AND GOVERNANCE (OUR LEADERSHIP)</b>																										
<b>ORGANIZATIONAL PROFILE</b>																										
<b>102-1</b>	<b>Name of the organization:</b> Vancouver Airport Authority	01																								
<b>102-2</b>	<b>Activities, brands, products, and services:</b> Vancouver Airport Authority is the community-based, not-for-profit organization that manages Vancouver International Airport (YVR). Canada's second busiest airport, YVR served over 26.4 million passengers in 2019. For a complete list of our Air Service partners refer to our Air Services and Connections section on <b>page 49</b> .	49																								
<b>102-3</b>	<b>Location of headquarters:</b> Sea Island, Richmond, B.C., Canada.																									
<b>102-4</b>	<b>Location of operations:</b> Vancouver Airport Authority operates in Richmond, B.C., Canada.																									
<b>102-5</b>	<b>Ownership and legal form:</b> Vancouver Airport Authority is a not-for-profit organization, formed in 1990 under Part II of the <i>Canada Corporations Act</i> and continued in 2013 under the <i>Canada Not-for-profit Corporations Act</i> . The Airport Authority is governed by a community-based Board of Directors. The Airport Authority operates YVR pursuant to a lease of most of Sea Island, Richmond, B.C., from the Government of Canada.																									
<b>102-6</b>	<b>Markets served:</b> Refer to our Air Services and Connections section for a description of our markets served.	49																								
<b>102-7</b>	<b>Scale of the organization:</b> <ul style="list-style-type: none"> <li>• <b>Total Number of Employees:</b> 539 (excluding casuals and temporary employees).</li> <li>• <b>Total Number of operations:</b> 1 (our four subsidiaries are excluded from this report, with the exception of financial data based on Consolidated Financial Statements).</li> <li>• <b>Quantity of products or services provided:</b> 56 airlines serve YVR, connecting people and businesses to more than 122 destinations worldwide.</li> <li>• <b>Net financial overview:</b> See Financial Overview on <b>page 68</b>. For more detailed information, see our Consolidated Financial Statements at <a href="http://yvr.ca/2019">yvr.ca/2019</a>.</li> </ul>																									
<b>102-8</b>	<b>Information on employees and other workers:</b> <b>Total number of employees by employment contract and employment type</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Employment Contract</th> <th style="text-align: center;">Male</th> <th style="text-align: center;">Female</th> </tr> </thead> <tbody> <tr> <td>Permanent Full-Time</td> <td style="text-align: center;">292</td> <td style="text-align: center;">192</td> </tr> <tr> <td>Permanent Part-Time</td> <td style="text-align: center;">12</td> <td style="text-align: center;">13</td> </tr> <tr> <td>Term Full-Time</td> <td style="text-align: center;">14</td> <td style="text-align: center;">13</td> </tr> <tr> <td>Term Part-Time</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Temporary</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Casual</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td><b>Total</b></td> <td style="text-align: center;"><b>323</b></td> <td style="text-align: center;"><b>222</b></td> </tr> </tbody> </table> <p style="font-size: small; margin-top: 10px;">An employment contract refers to a position that is permanent, term, temporary or casual. An employment type refers to full-time or part-time. This data was compiled using data from the HR system.</p>	Employment Contract	Male	Female	Permanent Full-Time	292	192	Permanent Part-Time	12	13	Term Full-Time	14	13	Term Part-Time	2	1	Temporary	1	0	Casual	2	3	<b>Total</b>	<b>323</b>	<b>222</b>	
Employment Contract	Male	Female																								
Permanent Full-Time	292	192																								
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Term Part-Time	2	1																								
Temporary	1	0																								
Casual	2	3																								
<b>Total</b>	<b>323</b>	<b>222</b>																								



102-9	<p><b>Supply chain:</b> Vancouver Airport Authority's top supplier categories by spend:</p> <ol style="list-style-type: none"> <li>1. Construction and Civil Services</li> <li>2. Engineering Services</li> <li>3. Security Services</li> <li>4. Janitorial Services</li> <li>5. Customer Service Representative Services</li> <li>6. Information Technology Services and Equipment</li> <li>7. Terminal Equipment and Maintenance Services</li> </ol>	
102-10	<p><b>Significant changes to the organization and its supply chain:</b> While airport expansions are underway, for the 2019 reporting period there were no significant changes in operations. Regarding the supply chain, Metro Vancouver is experiencing a significant increase in infrastructure investment from the Provincial and Federal governments, impacting the local construction market and the Airport Authority's Capital Program. Affordability and increases in the minimum wage have also created a challenge for workers and suppliers. In addition, increased global trade pressures including as a result of geopolitical pressures have impacted material prices, which has increased costs for projects.</p>	
102-11	<p><b>Precautionary Principle or approach:</b> We are a federally regulated organization and adhere to guidelines specified under the <i>Canadian Environmental Assessment Act</i>.</p>	
102-12	<p><b>External initiatives:</b> United Nations Global Compact, United Nations Sustainable Development Goals, Salmon-Safe Certification, Airport Carbon Accreditation (Airports Council International), International Organization for Standardization.</p>	
102-13	<p><b>Membership of associations:</b> Airports Council International – North America, Canadian Airports Council, Airports Council International – Asia Pacific, Greater Vancouver Board of Trade, Business Council of BC, Canadian Chamber of Commerce, BC Chamber of Commerce, Greater Vancouver Gateway Council, Tourism Industry Association of Canada, Tourism Vancouver, Richmond Chamber of Commerce, Surrey Board of Trade, Tourism Industry Association of BC, Canada-China Business Council and BC-India Business Network.</p> <p><b>Partnerships:</b> YVR has partnerships with the Greater Vancouver Board of Trade, Richmond Chamber of Commerce, Canada China Business Council, Hong Kong Canada Business Association, BC India Business Network, Surrey Board of Trade, BC Chamber of Commerce, Greater Vancouver Gateway Council, Tourism Industry Association of Canada, Richmond Chamber of Commerce, Canada's Aviation Hall of Fame, BC Women's Hospital Foundation, BC Aviation Council, Destination Canada, Destination British Columbia, Tourism Vancouver, Vancouver Hotel Destination Association, Rocky Mountaineer and Tourism Richmond.</p>	
<b>STRATEGY</b>		
102-14	<p><b>Statement from senior decision-maker:</b> See letters from Annalisa King and Craig Richmond.</p>	04, 05
102-15	<p><b>Key impacts, risks, and opportunities:</b> See Materiality Assessment.</p>	24
<b>ETHICS AND INTEGRITY</b>		
102-16	<p><b>Values, principles, standards, and norms of behaviour:</b> See Business Ethics.</p>	41
102-17	<p><b>Mechanisms for advice and concerns about ethics:</b> YVR's internal Whistleblower Policy provides a framework to report any perceived wrongdoings. Overseen by our Vice President, Legal and Chief Governance Officer and our Internal Audit team, the policy offers several options: reporting to superiors, reporting anonymously through our Safety Management System or calling a 24-hour hotline, managed by an independent third party.</p>	43
<b>GOVERNANCE</b>		
102-18	<p><b>Governance structure:</b> See Our Leadership; view the Airport Authority's Board Manual at <a href="http://yvr.ca/board">yvr.ca/board</a>.</p>	30
102-19	<p><b>Delegating authority:</b> See Our Leadership; view the Airport Authority's Board Manual at <a href="http://yvr.ca/board">yvr.ca/board</a>.</p>	30

102-20	<b>Executive-level responsibility for economic, environmental and social topics:</b> Executive level responsibilities for economic, social and environmental topics primarily fall within the responsibility of the Sustainability Working Group, which consists of the following: Vice President of Finance and Chief Financial Officer, Vice President of Engineering, Vice President of People and Sustainability, Vice President of Airline Business Development and Public Affairs and Vice President of Legal and Chief Governance Officer, Director of Environment, Manager of Enterprise Risk Management and Manager of Communications. All Executive-level post holders report directly to the highest governance body.	
102-21	<b>Consulting stakeholders on economic, environmental and social topics:</b> See Stakeholder Engagement and Local Communities.	15, 141
102-22	<b>Composition of the highest governance body and its committees:</b> See Our Leadership; view the Airport Authority's Board Manual at <a href="http://yvr.ca/board">yvr.ca/board</a> .	30
102-23	<b>Chair of the highest governance body:</b> Annalisa King is Chair of the Board of Directors. Annalisa is not an Executive Officer in the organization.	
102-24	<b>Nominating and selecting the highest governance body:</b> Read more about our Board and view the Airport Authority's Board Manual at <a href="http://yvr.ca/board">yvr.ca/board</a> .	
102-25	<b>Conflict of interest:</b> View the Airport Authority's Corporate Governance Guidelines (5 – Ethical Business Conduct) at <a href="http://yvr.ca/board">yvr.ca/board</a> .	
102-26	<b>Role of highest governance body in setting purpose, values and strategy:</b> Read more about our Board and view the Airport Authority's Board Manual at <a href="http://yvr.ca/board">yvr.ca/board</a> .	
102-27	<b>Collective governance of highest governance body:</b> Read more about our Board and view the Airport Authority's Board Manual at <a href="http://yvr.ca/board">yvr.ca/board</a> .	
102-28	<b>Evaluating the highest governance body's performance:</b> View the Airport Authority's Corporate Governance Guidelines (9 – Assessments) at <a href="http://yvr.ca/board">yvr.ca/board</a> .	
102-29	<b>Identifying and managing economic, environmental and social impacts:</b> See Stakeholder Engagement, Material Topics, Enterprise Risk Management.	17, 23, 135
102-30	<b>Effectiveness of risk management processes:</b> See Enterprise Risk Management.	135
102-31	<b>Review of economic, environmental and social topics:</b> See <a href="http://yvr.ca/board">yvr.ca/board</a> and our Social Policy at <a href="http://yvr.ca/socialpolicy">yvr.ca/socialpolicy</a> .	
102-32	<b>Highest governance body's role in sustainability reporting:</b> The Board of Directors reviews and approves Vancouver Airport Authority's Annual & Sustainability Report.	
102-33	<b>Communicating critical concerns:</b> The Airport Authority has a series of corporate policies and guidelines outlining the process for communicating critical concerns to the highest governance body. See Whistleblower Policy.	43
102-34	<b>Nature and total number of critical concerns:</b> See GRI 406-1.	
102-35	<b>Remuneration policies:</b> See Executive and Board Compensation.	38
102-36	<b>Process for determining remuneration:</b> See Executive and Board Compensation.	38
102-37	<b>Stakeholders' involvement in remuneration:</b> See Executive and Board Compensation.	38
<b>STAKEHOLDER ENGAGEMENT</b>		
102-40	<b>List of stakeholder groups:</b> See Stakeholder Engagement.	15
102-41	<b>Collective bargaining agreements:</b> 71.01 per cent of employees are covered by the collective bargaining agreement.	
102-42	<b>Identifying and selecting stakeholders:</b> See Stakeholder Engagement.	15
102-43	<b>Approach to stakeholder engagement:</b> See Stakeholder Engagement.	15
102-44	<b>Key topics and concerns raised:</b> See Stakeholder Engagement and Material Topics.	15, 23

<b>REPORTING PRACTICES</b>		
102-45	<b>Entities included in the Consolidated Financial Statements:</b> We do not report on the financial, environmental and social impacts of our subsidiaries in this report.	
102-46	<b>Defining report content and topic boundaries:</b> See Stakeholder Engagement and Material Topics.	15, 23
102-47	<b>List of material topics:</b> See Material Topics.	23
102-48	<b>Restatements of information:</b> See footnote for GRI 302-1, 305-1 and A06	
102-49	<b>Changes in reporting:</b> See footnote for GRI 302-1, 305-1 and A06	
102-50	<b>Reporting period:</b> January 1, 2019 – December 31, 2019.	
102-51	<b>Date of most recent report:</b> January 1, 2018 – December 31, 2018	
102-52	<b>Reporting cycle:</b> Annual.	
102-53	<b>Contact point for questions regarding the report:</b> Questions can be directed to <a href="mailto:sustainability@yvr.ca">sustainability@yvr.ca</a> .	
102-54	<b>Claims of reporting in accordance with the GRI Standards:</b> This report has been prepared in accordance with the GRI Standards: Core option.	
102-55	<b>GRI content index:</b> Included in this report.	
102-56	<b>External Assurance:</b> With the exception of the Consolidated Financial Statements, this report has not been externally assured. The Airport Authority does not currently have policies with regard to seeking external assurance for the report.	
<b>BUSINESS ETHICS</b>		
103.1-3	<b>The Management Approach:</b> See Business Ethics.	41
414-1	New suppliers that were screened using social criteria: 99 per cent of new suppliers screened using the environmental, economic and social criteria detailed in our Supplier Code of Conduct, available at <a href="http://yvr.ca/suppliers">yvr.ca/suppliers</a> .	
205-2	<b>Communication and training about anti-corruption policies and procedures:</b> We communicated the policy to all employees in 2019 and updated our internal administrative controls to ensure compliance with the financial thresholds for gifts and spending set out in the Policy. We plan to provide specific Airport Authority departments with additional training in 2020/21. With respect to the activities of ITS, we provide our agents and representatives in other countries with a copy of our Anti-Corruption Policy and ask them to contractually agree to comply.	

<b>ECONOMIC (OUR BUSINESS)</b>			
<b>DIRECT ECONOMIC IMPACT</b>			
<b>103.1-3</b>	<b>The Management Approach:</b> See Direct Economic Impact.		64
<b>201-1</b>	<b>Direct economic value generated and distributed:</b>		
		<b>2018</b>	<b>2019</b>
	<b>Economic Value Generated</b>	(\$000's)	(\$000's)
	Revenue	575,138	581,470
	<b>Economic Value Distributed</b>		
	Operating expenditures	144,446	164,729
	Employee wages and benefits	60,502	65,484
	Payments to providers of capital	30,396	31,470
	Payments to government	76,875	77,924
	Community investments	6,682	6,887
	<b>Total Economic Value Distributed</b>	318,901	346,494
	<b>Total Economic Value Retained</b>	256,237	234,976
	Please refer to the <b>Consolidated Financial Statements</b> for more information.		
<b>AIR SERVICES AND CONNECTIONS</b>			
<b>103.1-3</b>	<b>The Management Approach:</b> See Air Services and Connections.		49
<b>A01</b>	<b>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:</b>		
	<b>Total Number of Arriving and Departing Passengers</b>		
	<b>Passengers</b>	<b>Domestic</b>	<b>International</b>
	Arriving Passengers	6,337,287	6,881,702
	Departing Passengers	6,344,025	6,816,856
	Total Passengers	12,681,312	13,698,558
	Omissions, confidentiality constraints, information not available: while the Airport Authority collects accurate data for transfer passengers, specific data related to connecting passengers is currently not available.		
<b>CUSTOMER CARE</b>			
<b>103.1-3</b>	<b>The Management Approach:</b> See Customer Care.		57
<b>418-1</b>	<b>Substantiated complaints concerning breaches of customer privacy and losses of customer data:</b> The Airport Authority did not identify or receive any substantiated complaints concerning breaches of customer privacy from outside parties and regulatory bodies. The Airport Authority did not experience any cyber-related incidents resulting in a privacy breach in 2019.		
<b>YVR-Specific</b>	<b>Customer Service Quality:</b> We scored an impressive 4.3 out of 5.0, or 91 per cent, in our annual Customer Satisfaction Survey.		60

ENVIRONMENT (OUR ENVIRONMENT)																																																																																			
<b>ENERGY</b>																																																																																			
103.1-3	<b>The Management Approach:</b> See Reducing Energy Use.		88																																																																																
302-1 <sup>i</sup>	<b>Energy consumption within the organization:</b> <b>Total Non-Renewable Energy</b> <table border="1"> <thead> <tr> <th></th> <th></th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td><b>Fleet</b></td> <td>Pure Gasoline</td> <td>5,092 GJ</td> <td>5,254 GJ</td> </tr> <tr> <td><b>Fleet</b></td> <td>Pure Diesel</td> <td>10,253 GJ</td> <td>14,288 GJ</td> </tr> <tr> <td><b>Emergency Power Generator</b></td> <td>Pure Diesel</td> <td>1,721 GJ</td> <td>1,451 GJ</td> </tr> <tr> <td><b>Total Non-Renewable</b></td> <td></td> <td><b>17,066 GJ</b></td> <td><b>20,993 GJ</b></td> </tr> </tbody> </table> <b>Total Renewable Energy</b> <table border="1"> <thead> <tr> <th></th> <th></th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td><b>Fleet</b></td> <td>Pure Ethanol</td> <td>372 GJ</td> <td>384 GJ</td> </tr> <tr> <td><b>Fleet</b></td> <td>Pure Biodiesel</td> <td>501 GJ</td> <td>698 GJ</td> </tr> <tr> <td><b>Emergency Power Generator</b></td> <td>Pure Biodiesel</td> <td>84 GJ</td> <td>71 GJ</td> </tr> <tr> <td><b>Wind</b></td> <td></td> <td>22 GJ</td> <td>17 GJ</td> </tr> <tr> <td><b>Solar Thermal</b></td> <td></td> <td>8,654 GJ</td> <td>8,759 GJ</td> </tr> <tr> <td><b>Solar Photovoltaic</b></td> <td></td> <td>28 GJ</td> <td>29 GJ</td> </tr> <tr> <td><b>Geoexchange</b></td> <td></td> <td>4,230 GJ</td> <td>6,403 GJ</td> </tr> <tr> <td><b>Total Renewable</b></td> <td></td> <td><b>13,891 GJ</b></td> <td><b>16,361 GJ</b></td> </tr> </tbody> </table> <b>Total Electricity, Heating and Cooling Consumption</b> <table border="1"> <thead> <tr> <th></th> <th></th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td><b>Purchased Electricity</b></td> <td>Hydro</td> <td>388,800 GJ</td> <td>385,784 GJ</td> </tr> <tr> <td><b>Heating and Cooling</b></td> <td>Natural Gas</td> <td>114,048 GJ</td> <td>124,154 GJ</td> </tr> <tr> <td><b>Heating and Cooling</b></td> <td>Pure Diesel</td> <td>6,250 GJ</td> <td>5,848 GJ</td> </tr> <tr> <td><b>Heating and Cooling</b></td> <td>Pure Biodiesel</td> <td>305 GJ</td> <td>286 GJ</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>509,403 GJ</b></td> <td><b>516,072 GJ</b></td> </tr> </tbody> </table>				2018	2019	<b>Fleet</b>	Pure Gasoline	5,092 GJ	5,254 GJ	<b>Fleet</b>	Pure Diesel	10,253 GJ	14,288 GJ	<b>Emergency Power Generator</b>	Pure Diesel	1,721 GJ	1,451 GJ	<b>Total Non-Renewable</b>		<b>17,066 GJ</b>	<b>20,993 GJ</b>			2018	2019	<b>Fleet</b>	Pure Ethanol	372 GJ	384 GJ	<b>Fleet</b>	Pure Biodiesel	501 GJ	698 GJ	<b>Emergency Power Generator</b>	Pure Biodiesel	84 GJ	71 GJ	<b>Wind</b>		22 GJ	17 GJ	<b>Solar Thermal</b>		8,654 GJ	8,759 GJ	<b>Solar Photovoltaic</b>		28 GJ	29 GJ	<b>Geoexchange</b>		4,230 GJ	6,403 GJ	<b>Total Renewable</b>		<b>13,891 GJ</b>	<b>16,361 GJ</b>			2018	2019	<b>Purchased Electricity</b>	Hydro	388,800 GJ	385,784 GJ	<b>Heating and Cooling</b>	Natural Gas	114,048 GJ	124,154 GJ	<b>Heating and Cooling</b>	Pure Diesel	6,250 GJ	5,848 GJ	<b>Heating and Cooling</b>	Pure Biodiesel	305 GJ	286 GJ	<b>Total</b>		<b>509,403 GJ</b>	<b>516,072 GJ</b>	
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103.1-3	<b>The Management Approach:</b> See Reducing Water Use.		93																																																																																
303-1 <sup>ii</sup>	<b>Water withdrawal by source:</b> 366,290 m <sup>3</sup> from municipal sources and 620 m <sup>3</sup> from rainwater.		96																																																																																
<b>ECOSYSTEM HEALTH</b>																																																																																			
103.1-3	<b>The Management Approach:</b> See Protecting Ecosystem Health.		104																																																																																
304-1	<b>Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas:</b> YVR is located on Sea Island, Richmond, in the mouth of the Fraser River, which is one of the largest estuaries on the west coast of North America. This estuary supports one of the biggest salmon runs on the west coast and is an important location for migratory birds. Our operations are located in an ecologically rich area, and are adjacent to the following: Sturgeon Bank, a Provincial Wildlife Management Area with significant intertidal habitat value that is both a RAMSAR site and part of the Western Hemisphere Shorebird Network; Sea Island Conservation Area, which is managed by the Canadian Wildlife Service for certain wildlife habitat values; Swishwash Island, which is private land owned by the Nature Conservancy of Canada and managed as a nature sanctuary; Iona Island Regional Park; and McDonald Beach Park. We lease 13.4 km <sup>2</sup> of land from Transport Canada on Sea Island and are responsible for balancing the need for safe airport operations with wildlife management and environmental protection.																																																																																		

AIR EMISSIONS																																					
103.1-3	<b>The Management Approach:</b> See Reducing Air Emissions.	74																																			
305-1 <sup>iii</sup>	<p><b>Direct (Scope 1) GHG emissions (tonnes of CO<sub>2</sub>e):</b></p> <p><b>GHG Performance:</b></p> <table border="1"> <thead> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td><b>Scope 1</b></td> <td>8,025</td> <td>8,493</td> <td>8,817</td> <td>7,994</td> <td>6,906</td> <td>8,902</td> <td>7,750</td> <td>8,517</td> </tr> </tbody> </table> <p><b>Biogenic CO<sub>2</sub> Emissions in 2019:</b> 98 t CO<sub>2</sub>e</p>		2012	2013	2014	2015	2016	2017	2018	2019	<b>Scope 1</b>	8,025	8,493	8,817	7,994	6,906	8,902	7,750	8,517																		
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305-2	<p><b>Energy indirect (Scope 2) GHG emissions (tonnes of CO<sub>2</sub>e):</b></p> <p><b>GHG Performance</b></p> <table border="1"> <thead> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td><b>Scope 2</b></td> <td>1,852</td> <td>1,322</td> <td>998</td> <td>1,096</td> <td>1,108</td> <td>1,148</td> <td>1,152</td> <td>1,143</td> </tr> </tbody> </table>		2012	2013	2014	2015	2016	2017	2018	2019	<b>Scope 2</b>	1,852	1,322	998	1,096	1,108	1,148	1,152	1,143																		
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305-4	<b>GHG emissions intensity:</b> 0.366 tonnes/passenger (passengers in 000s) from both Scope 1 and Scope 2 emissions.	78																																			
A05	<p><b>Ambient air quality levels according to pollutant concentrations in microgram per cubic meter (µg/m<sup>3</sup>) or parts per million (ppm) by regulatory regime:</b></p> <p><b>Annual Averages 2018 Metro Vancouver</b> Air Pollutants Monitored on Sea Island</p> <table border="1"> <thead> <tr> <th></th> <th>2016</th> <th>2017</th> <th>2018</th> <th>Metro Vancouver Objectives</th> </tr> </thead> <tbody> <tr> <td><b>Nitrogen Dioxide (NO<sub>2</sub>) (ppb)</b></td> <td>14</td> <td>16</td> <td>14</td> <td>17</td> </tr> <tr> <td><b>Carbon Monoxide (CO) (ppb)</b></td> <td>242</td> <td>250</td> <td>253</td> <td>No annual average</td> </tr> <tr> <td><b>Sulphur Dioxide (SO<sub>2</sub>) (ppb)</b></td> <td>0.2</td> <td>0.4</td> <td>0.5</td> <td>5</td> </tr> <tr> <td><b>Fine Particulate Matter (PM<sub>2.5</sub>) (µg/m<sup>3</sup>)</b></td> <td>4.9</td> <td>6.2</td> <td>7.0</td> <td>8</td> </tr> <tr> <td><b>Fine Particulate Matter (PM<sub>10</sub>) (µg/m<sup>3</sup>)</b></td> <td>10.3</td> <td>11.1</td> <td>12.9</td> <td>20</td> </tr> <tr> <td><b>Ozone (O<sub>3</sub>) (ppb)</b></td> <td>16</td> <td>17</td> <td>17</td> <td>No annual average</td> </tr> </tbody> </table> <p>*1ppm = 1000ppb; The air quality data is compliant with relevant ambient air quality data; both Carbon Monoxide and Ozone do not have Metro Vancouver annual average objectives.</p> <p>Omissions, confidentiality constraints, information not available: this report represents 2018 data and is the most current reporting period provided by Metro Vancouver.</p>		2016	2017	2018	Metro Vancouver Objectives	<b>Nitrogen Dioxide (NO<sub>2</sub>) (ppb)</b>	14	16	14	17	<b>Carbon Monoxide (CO) (ppb)</b>	242	250	253	No annual average	<b>Sulphur Dioxide (SO<sub>2</sub>) (ppb)</b>	0.2	0.4	0.5	5	<b>Fine Particulate Matter (PM<sub>2.5</sub>) (µg/m<sup>3</sup>)</b>	4.9	6.2	7.0	8	<b>Fine Particulate Matter (PM<sub>10</sub>) (µg/m<sup>3</sup>)</b>	10.3	11.1	12.9	20	<b>Ozone (O<sub>3</sub>) (ppb)</b>	16	17	17	No annual average	
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103.1-3	<b>The Management Approach:</b> See Reducing Waste.	81																																			
A06 <sup>iv</sup>	<p><b>Aircraft and pavement de-icing/anti-icing fluid used and treated by m<sup>3</sup> and/or metric tonnes:</b></p> <table border="1"> <thead> <tr> <th></th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td><b>Type I</b></td> <td>974 m<sup>3</sup></td> <td>1,441 m<sup>3</sup></td> </tr> <tr> <td><b>Type IV</b></td> <td>133 m<sup>3</sup></td> <td>245 m<sup>3</sup></td> </tr> <tr> <td><b>Discharged &amp; Captured for Treatment</b></td> <td>6,686 m<sup>3</sup></td> <td>3,805 m<sup>3</sup></td> </tr> </tbody> </table> <p>Omissions, confidentiality constraints, information not available: Vancouver Airport Authority is currently not collecting de-icing and anti-icing data applied to operational surfaces.</p>		2018	2019	<b>Type I</b>	974 m <sup>3</sup>	1,441 m <sup>3</sup>	<b>Type IV</b>	133 m <sup>3</sup>	245 m <sup>3</sup>	<b>Discharged &amp; Captured for Treatment</b>	6,686 m <sup>3</sup>	3,805 m <sup>3</sup>																								
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306-2 <sup>v</sup>	<p><b>Waste by type and disposal method:</b></p> <p><b>Total weight of Hazardous Waste</b></p> <table border="1" data-bbox="308 408 1584 702"> <thead> <tr> <th>Waste Type</th> <th>2018</th> <th>2019</th> <th>Disposal method</th> </tr> </thead> <tbody> <tr> <td>Batteries, Auto Parts, E-waste, Light Bulbs, Waste Oil</td> <td>14,529 kg</td> <td>24,691 kg</td> <td>Recycled</td> </tr> <tr> <td>Biomedical, International Custom Hall</td> <td>40,832 kg</td> <td>73,659 kg</td> <td>Incinerated</td> </tr> <tr> <td>Other Waste, (e.g. Oil Filters)</td> <td>535 kg</td> <td>13,132 kg</td> <td>Landfill</td> </tr> <tr> <td>Asbestos Containing Material</td> <td>98,461 kg</td> <td>288,753 kg</td> <td>Other</td> </tr> </tbody> </table> <p><b>Total Weight of Non-Hazardous</b></p> <table border="1" data-bbox="308 760 1584 1130"> <thead> <tr> <th>Waste Type</th> <th>2018</th> <th>2019</th> <th>Disposal method</th> </tr> </thead> <tbody> <tr> <td>Containers, Paper, Liquid Diversion, Gloves</td> <td>1,584,710 kg</td> <td>1,653,070 kg</td> <td>Recycled</td> </tr> <tr> <td>Chopsticks, Broom Cores</td> <td>2,967 kg</td> <td>4,895 kg</td> <td>Reused</td> </tr> <tr> <td>Compostable Material and Moisture Diverted by Composter</td> <td>826,605 kg</td> <td>948,248 kg</td> <td>Composted</td> </tr> <tr> <td>Other Waste</td> <td>2,340,530 kg</td> <td>2,243,590 kg</td> <td>Landfill</td> </tr> <tr> <td>Construction Waste</td> <td>12,535,742 kg</td> <td>79,284,361 kg</td> <td>Recycled</td> </tr> </tbody> </table>	Waste Type	2018	2019	Disposal method	Batteries, Auto Parts, E-waste, Light Bulbs, Waste Oil	14,529 kg	24,691 kg	Recycled	Biomedical, International Custom Hall	40,832 kg	73,659 kg	Incinerated	Other Waste, (e.g. Oil Filters)	535 kg	13,132 kg	Landfill	Asbestos Containing Material	98,461 kg	288,753 kg	Other	Waste Type	2018	2019	Disposal method	Containers, Paper, Liquid Diversion, Gloves	1,584,710 kg	1,653,070 kg	Recycled	Chopsticks, Broom Cores	2,967 kg	4,895 kg	Reused	Compostable Material and Moisture Diverted by Composter	826,605 kg	948,248 kg	Composted	Other Waste	2,340,530 kg	2,243,590 kg	Landfill	Construction Waste	12,535,742 kg	79,284,361 kg	Recycled	
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103.1-3	The Management Approach: See Managing Noise.	109																																												
YVR-Specific	Community Survey Questionnaire: 85 per cent of respondents reported not being annoyed by aircraft noise.	112																																												
YVR-Specific	<p><b>Total Number of Complaints/10,000 aircrafts:</b></p> <table border="1" data-bbox="308 1758 1275 1854"> <thead> <tr> <th></th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td>Concerns per 10,000 aircraft movements</td> <td>27</td> <td>77</td> </tr> </tbody> </table>		2018	2019	Concerns per 10,000 aircraft movements	27	77	112																																						
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SOCIAL (OUR COMMUNITY)																																												
<b>INDIRECT ECONOMIC IMPACT</b>																																												
103.1-3	The Management Approach: See Indirect Economic Impact.	136																																										
203-1	Infrastructure investments and services supported: Over \$20.2 billion in total economic output in B.C.; over \$1.2 million in donations to over 50 organizations; \$21,673 through lost and found money at the airport; \$19,000 through coin ball donations; and \$6,300 of in-kind donations to local organizations.																																											
<b>EMPLOYMENT PRACTICES</b>																																												
103.1-3	The Management Approach: See Employment Practices.	138																																										
401-1	<p><b>New employee hires and employee turnover:</b></p> <p><b>Total number and rate of new employee hires</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Age</th> <th>&gt;30</th> <th>30-50</th> <th>&gt;50</th> <th>Male</th> <th>Female</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td><b>Total Number</b></td> <td>13</td> <td>45</td> <td>7</td> <td>36</td> <td>29</td> <td>65</td> </tr> <tr> <td><b>Rate</b></td> <td>2.41%</td> <td>8.35%</td> <td>1.30%</td> <td>6.68%</td> <td>5.38%</td> <td>12.06%</td> </tr> </tbody> </table> <p><small>*Includes permanent and term employees. Casual and Temporary employees are not included.</small></p> <p><b>Total number and rate of employee turnover</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Age</th> <th>&gt;30</th> <th>30-50</th> <th>&gt;50</th> <th>Male</th> <th>Female</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td><b>Total Number</b></td> <td>6</td> <td>26</td> <td>10</td> <td>18</td> <td>24</td> <td>42</td> </tr> <tr> <td><b>Rate</b></td> <td>1.11%</td> <td>4.82%</td> <td>1.86%</td> <td>3.34%</td> <td>4.45%</td> <td>7.79%</td> </tr> </tbody> </table> <p><small>*Includes permanent and term employees. Casual and Temporary employees are not included.</small></p>	Age	>30	30-50	>50	Male	Female	Total	<b>Total Number</b>	13	45	7	36	29	65	<b>Rate</b>	2.41%	8.35%	1.30%	6.68%	5.38%	12.06%	Age	>30	30-50	>50	Male	Female	Total	<b>Total Number</b>	6	26	10	18	24	42	<b>Rate</b>	1.11%	4.82%	1.86%	3.34%	4.45%	7.79%	
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404-2	Programs for upgrading employee skills and transition assistance programs: Management and leadership development, corporate learning and development, Managing my Career, Retirement Readiness Program.	116, 118																																										
<b>EMPLOYEE HEALTH AND SAFETY</b>																																												
103.1-3	The Management Approach: See Employee Health and Safety.	121																																										
403-2	<p><b>Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td>Total Lost-Time Injuries</td> <td>2</td> <td>6</td> </tr> <tr> <td>Lost-Time Injury Frequency Rate</td> <td>0.44</td> <td>1.20</td> </tr> <tr> <td>Total Number of Lost-Time Days</td> <td>47</td> <td>24</td> </tr> <tr> <td>Absenteeism Rate</td> <td>3.40%</td> <td>3.75%</td> </tr> <tr> <td>Total Number of Fatalities</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p><small>* IR and LDR to be expressed as incidents per 100 employees with maximum straight-time hours as per OSHA standards.</small></p> <p><small>Omissions, confidentiality constraints, information not available: We do not disclose the health and safety information of our contractors and suppliers due to confidentiality constraints. We do not currently collect data on the occupational disease rate due to our limited control over external validation measures. In keeping with safeguarding employee confidentiality, we do not disclose the data in terms of gender.</small></p>		2018	2019	Total Lost-Time Injuries	2	6	Lost-Time Injury Frequency Rate	0.44	1.20	Total Number of Lost-Time Days	47	24	Absenteeism Rate	3.40%	3.75%	Total Number of Fatalities	0	0																									
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DIVERSITY AND EQUAL OPPORTUNITY																																																																																		
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405-1	<p><b>Diversity of governance bodies and employees:</b></p> <p><b>Percentage of individuals within the organization's governance bodies</b></p> <table border="1"> <thead> <tr> <th>Board Diversity</th> <th>Number</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Women</td> <td>5</td> <td>35.7</td> </tr> <tr> <td>Visible Minorities</td> <td>1</td> <td>7.1</td> </tr> <tr> <td>Persons with Disabilities</td> <td>0</td> <td>0</td> </tr> <tr> <td>Aboriginal Peoples</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p><b>Percentage of employees per employee category</b> Information below is data from December 31, 2018</p> <table border="1"> <thead> <tr> <th>Employee Category</th> <th>Women</th> <th>Aboriginal Peoples</th> <th>Persons with Disabilities</th> <th>Members of Visible Minorities</th> </tr> </thead> <tbody> <tr> <td>Senior Managers</td> <td>60.0%</td> <td>0%</td> <td>2.6%</td> <td>10.0%</td> </tr> <tr> <td>Middle and Other Managers</td> <td>41.3%</td> <td>1.9%</td> <td>2.6%</td> <td>24.0%</td> </tr> <tr> <td>Professionals</td> <td>39.8%</td> <td>0%</td> <td>1.6%</td> <td>50.0%</td> </tr> <tr> <td>Semi-Professionals and Technicians</td> <td>18.6%</td> <td>0%</td> <td>2.3%</td> <td>23.3%</td> </tr> <tr> <td>Supervisors</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>100%</td> </tr> <tr> <td>Supervisors: Crafts and Trades</td> <td>11.1%</td> <td>0%</td> <td>11.1%</td> <td>44.4%</td> </tr> <tr> <td>Admin and Sr. Clerical Personnel</td> <td>71.6%</td> <td>1.1%</td> <td>1.1%</td> <td>39.8%</td> </tr> <tr> <td>Skilled Crafts and Trades Workers</td> <td>6.3%</td> <td>4.7%</td> <td>1.6%</td> <td>25.0%</td> </tr> <tr> <td>Clerical Personnel</td> <td>82.9%</td> <td>9.8%</td> <td>2.4%</td> <td>36.6%</td> </tr> <tr> <td>Intermediates Sales and Service Personnel</td> <td>100%</td> <td>0%</td> <td>0%</td> <td>66.7%</td> </tr> <tr> <td>Semi-Skilled Manual Workers</td> <td>11.1%</td> <td>5.6%</td> <td>11.1%</td> <td>5.6%</td> </tr> <tr> <td><b>Other Manual Workers</b></td> <td>50%</td> <td>100%</td> <td>0%</td> <td>50%</td> </tr> </tbody> </table> <p>*Includes permanent positions (full and part time) and does not include term, temporary, casual, students and permanent employees on leaves of absence.</p> <p>Omissions, confidentiality constraints, information not available: This information was prepared in accordance with the <i>Employment Equity Act</i> guidelines. In order to remain consistent, age group is not included. This report represents 2018 data and is consistent with the reporting period specified under the <i>Employment Equity Act</i> guidelines.</p>	Board Diversity	Number	%	Women	5	35.7	Visible Minorities	1	7.1	Persons with Disabilities	0	0	Aboriginal Peoples	0	0	Employee Category	Women	Aboriginal Peoples	Persons with Disabilities	Members of Visible Minorities	Senior Managers	60.0%	0%	2.6%	10.0%	Middle and Other Managers	41.3%	1.9%	2.6%	24.0%	Professionals	39.8%	0%	1.6%	50.0%	Semi-Professionals and Technicians	18.6%	0%	2.3%	23.3%	Supervisors	0%	0%	0%	100%	Supervisors: Crafts and Trades	11.1%	0%	11.1%	44.4%	Admin and Sr. Clerical Personnel	71.6%	1.1%	1.1%	39.8%	Skilled Crafts and Trades Workers	6.3%	4.7%	1.6%	25.0%	Clerical Personnel	82.9%	9.8%	2.4%	36.6%	Intermediates Sales and Service Personnel	100%	0%	0%	66.7%	Semi-Skilled Manual Workers	11.1%	5.6%	11.1%	5.6%	<b>Other Manual Workers</b>	50%	100%	0%	50%	
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406-1	<b>Incidents of discrimination and corrective actions taken:</b> We did not have any incidents of discrimination in 2019. The Airport Authority arranged for three internal Respect in the Workplace investigations through an external party. Two of the investigations found that the employees involved had engaged in conduct deemed harassment and corrective measures were taken. The other investigation was put on hold due to the COVID-19 crisis and will resume at the appropriate time.																																																																																	
LOCAL COMMUNITIES																																																																																		
103.1-3	<b>The Management Approach:</b> See Local Communities.	141																																																																																
413-1	<b>Operations with local community engagement, impact assessments, and development programs:</b> Vancouver Airport Authority operates a single airport and therefore this equates to 100 per cent.																																																																																	

SECURITY AND SAFETY		
103.1-3	The Management Approach: See Security and Safety.	131
A09 <sup>vi</sup>	<p><b>Total Annual Number of Wildlife Strikes per 10,000 Aircraft Runway Movements:</b> 223 reported wildlife strike incidents; 8 reported wildlife strikes per 10,000 aircraft runway movements, where 338 animals were confirmed struck; and 11.7 confirmed wildlife strikes per 10,000 aircraft movements. There were 289,533 runway aircraft movements in 2019.</p> <p>Omissions, confidentiality constraints, information not available: We do not currently collect information relative to the exact location of the wildlife strike. However, the overall boundary for which the wildlife strike is recorded is defined as within 90 m of the extended runway center and/or when the aircraft is below 200 ft on approach and 500 ft on take-off.</p>	

<sup>i</sup> 302-1: Non-Renewable energy includes the non-renewable portion of fuel for vehicles, heating, and power. Airport Authority fleet vehicles use two fuel blends: Ethanol (10 per cent) and Biodiesel (5 per cent). YVR generators use Biodiesel (5 per cent). Although hydro is considered renewable, it is not self-generated in this case and is B.C.'s primary source of electricity. For fuel used for heating and cooling, in 2019 natural gas and biodiesel (5 per cent) was used in the Domestic Terminal Building and International Terminal Building boilers. We separated the diesel-biodiesel fuel blend to show what is non-renewable vs. renewable. This is not reflected elsewhere as to avoid double counting. Conversion factors are referenced in the 2018 BC Best Practices for Quantifying Greenhouse Gas Emissions. The renewable energy data is based on a combination of actuals and averages from previous years. Values previously reported for solar thermal was data from the Airside Operations Building system only. The Airport Authority has solar thermal systems on the Airside Operations Building, International Terminal and Domestic Terminal buildings. The values now reflect renewable energy from all systems.

<sup>ii</sup> 303-1: The total volume of rainwater was calculated based on an estimated value from a 2016 annual water catchment study. The total volume of potable water consumption is based on water usage in the Main and South Terminal Buildings as well as the Airside Operations Building. As part of our water conservation targets, we track and report on Sea Island water consumption (1,101,350 m<sup>3</sup>), as well as the water under our operational control (366,290 m<sup>3</sup>).

<sup>iii</sup> 305-1: In 2019 we undertook an extensive review of our reporting practices and data sources for Scope 1 emissions and made several improvements resulting in a new baseline. These improvements include greater accuracy in emissions by including additional emission sources (such as fugitives and trucked fuel used in snow events), biogenic emissions, and revised emission and energy density conversion factors to reflect the fuel blends used at the airport. As required under GRI reporting, the 2019 biogenic CO<sub>2</sub>e emissions resulting from the combustion of biodiesel and ethanol from B5 and E10 blended fuel is 98 tonnes CO<sub>2</sub>e. 8,560 tonnes represents Non-BioCO<sub>2</sub>e only, whereas the 2012 baseline data of 8,025 includes both BioCO<sub>2</sub>e and Non-BioCO<sub>2</sub>e.

<sup>iv</sup> A06: De-icing fluid is often applied during a precipitation event. Excess water generated via precipitation is collected with residual de-icing products which is then captured within YVR's containment system. Thus, product discharged/treated is greater than the de-icing products amount used. We have restated the 2018 discharged & captured for treatment volume to reflect the actual total volume including the excess water.

<sup>v</sup> 306-2: In 2018, we implemented a new initiative where passengers at the international check-in point disposed of liquids before recycling the bottles. In previous years, recycled bottles consisting of liquids were accounted for as part of the total recycled weight. As such, in order to stay consistent with our methodology from previous years, we included the weight of the discarded water in the total recycled weight. An additional recycled source, kitchen grease, has been identified and accounts for an additional 80,513 kg of total recycled waste. Since the total recycled weight of kitchen grease does not result in a material difference, the baseline was not re-adjusted to reflect this additional source and thus is not included as part of the total recycled weight.

<sup>vi</sup> A09: Confirmed strike: any reported wildlife strike where evidence in the form of a carcass, remains, blood or damage to the aircraft is found.



Vancouver  
Airport  
Authority

2019  
Annual &  
Sustainability Report

