Adaptation Case Study #2: TransLink

SECTOR: TRANSPORTATION

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Introduction

For Metro Vancouver’s transportation authority, TransLink, climate change poses a real risk. Climate change is expected to bring sea level rise and intense rain; both can affect TransLink’s infrastructure.

Because of TransLink’s mandate to provide safe and reliable public transportation, TransLink knew it had to take action.

Cathy McLay, CPA, CMA, Chief Financial Officer/ Executive VP of Finance and Corporate Services, explained: “One of the things we are good at TransLink is that we are early adopters, which is good and bad. The good part is that we help shape regulations and bylaws. The bad part is that if we are looking for someone else to have the answers, there generally isn’t anyone. So it causes us to take more time to do things and to fully explore what is the true impact. In the early days, we didn’t understand what climate change adaptation would look like. We knew we needed to do something, we just didn’t know what something was yet!’

The organization began considering climate change impacts in 2010, at the same time that it published its first Sustainability Report. Said McLay: “Now, sustainability, including assessing climate change risks, is part and parcel of everything we do each and every day.”

Background on TransLink

TransLink, or the South Coast British Columbia Transportation Authority, is a regional transportation authority located in southern British Columbia, Canada. With Metro Vancouver as its core, TransLink encompasses 21 municipalities, one First Nation, and one electoral area.

TransLink’s service incorporates a broad range of transportation modes, including bus, commuter rail, cycling, walking and roads. In total, TransLink has over $5.4 billion in assets, covers an area of approximately 3,000 square kilometers and provides about 1.2 million trips daily.1

How the Physical Impacts of Climate Change Influence TransLink

For TransLink, managing climate change risks is key to its service delivery, especially because of climate change’s impacts on infrastructure such as stations and rail lines. TransLink’s biggest risk is flooding.

- Sea level rise could potentially impact TransLink’s assets in a number of ways, e.g.:
  - flooding of assets that are now within “expanded” floodplains
  - reduced clearage under bridges
  - impaired operation of the SeaBus (ferry) terminal

- Increased precipitation could cause temporary flooding of TransLink’s assets that cannot manage the increased rainfall, such as bus loops, tunnels, transit stations and trolley electricity conversion (or “rectifier”) stations.

In addition, warmer temperatures, including increasing heat waves, may affect customers’ health and comfort. TransLink’s fleet is not universally air-conditioned, although all new cars on the SkyTrain light rapid transit system have air conditioning.

Climate change adaptation is also a reputational issue, said Sarah Buckle, TransLink’s Corporate Sustainability Strategist. The public is interested in TransLink’s progress.

Buckle explained: “Over the next 30 years, Metro Vancouver is expected to grow by one million more people, placing a greater demand on the transportation system. We need to be aware and plan for climate change risks, so our customers can continue to use the system with minimal disruption.”

Climate impacts in Metro Vancouver

By 2050, predicted changes include:

- **More extreme weather events.** Precipitation during extremely wet days will increase by 28% compared to the period 1971–2000.
- **Sea level rise.** The Province of B.C. estimates a 0.5 meter sea level increase in 2050.
- **Greater heat.** Annual temperature will increase by 1.7°C, with more extremely hot days.

How TransLink Addresses Climate Change Adaptation

TransLink’s specific actions on climate adaptation are supported by a strong organizational structure. Within TransLink, the Finance department has responsibility for sustainability. As a result, sustainability elements such as climate change are embedded throughout the organization. McLay explained: “We’ve worked really hard at a conscious level to make sure that sustainability becomes filtered into every part of the organization and is what we do each and every day. It’s linked to risk management, strategic sourcing and capital planning, which all go through Finance.”

McLay is responsible for seeing that climate change risks are part of TransLink’s decision-making process. She is Chair of the Capital Review Committee and ensures that climate change risks are included in the capital review process.

“The Capital Review Committee ensures that we take a balanced approach to allocating capital to the right priorities,” McLay explained. In evaluating projects, the committee considers environmental, financial, social and strategic concerns; climate change risk is one of the factors.

TransLink does not use climate change adaptation as a direct performance indicator, unlike greenhouse gas emissions or energy use. “You can’t necessarily put a target on adaptation, given that it’s a risk. However, it is a factor in setting the key performance indicators,” explained Buckle.

In its climate adaptation efforts, TransLink has focused particularly on infrastructure and flooding. In 2012, TransLink conducted a climate change vulnerability assessment of its assets. The project was completed to support the organization’s Asset Management Plan, which is currently in development.

“When we are maintaining our existing assets or building new infrastructure, we must include an assessment of the climate change risks,” said Buckle. “It’s about making sure that we can foresee those risks, such as flooding.”

Considering such risks is particularly important given TransLink builds its infrastructure to 100 years, said Donna Chao, CPA, CA, Corporate Controller. “We have a lot of immediate needs in terms of funding, buses being crowded, buses passing people, and [then we have] more long-term issues,” she added.

A stronger infrastructure builds a stronger region. TransLink builds its infrastructure to make sure it can help the community rebound from dislocations. As flooding in Calgary and Toronto has shown, extreme weather can shut down a city.
“Where we build our infrastructure, how we move people through the city, determines how well Metro Vancouver can recover from extreme weather events,” said McLay. “We need to make sure we are aware of the climate change risks and have mitigation plans in place, so our customers can continue to use the system with minimal disruption.

“TransLink is on a journey around climate change adaptation,” McLay explained. While the organization may not have it 100 percent right just yet, it is keen to learn and test new waters.

How Climate Change Adaptation Became Part of TransLink’s Business
TransLink’s executives initially discussed addressing climate change adaptation and mitigation following the development of a sustainability policy in 2008. However, climate-related key performance indicators at TransLink were not tied to outcomes, and so the climate change issue didn’t garner complete organizational support.

To advance the issue, TransLink’s executive management introduced a set of changes to enhance TransLink’s ability to address sustainability by incorporating it into every aspect of the business. Executive management worked to engage everyone in the organization in addressing sustainability and climate change.

According to McLay: “When we [made] climate change [organization-wide] and made cross-functional teams, and started talking about why we are interested, [staff] started to see how it impacts them, and why they need to care about it.”

Accountants’ Role in Climate Adaptation at TransLink
At TransLink, accountants have played a core role in adaptation. Centrally, with sustainability part of the Finance function, CFO Cathy McLay is responsible for ensuring that sustainability risks, including climate change, are part of TransLink’s decision making process. TransLink accountants are involved in adaptation through risk management, capital planning, reporting and strategy development. They bring their competencies and skills to these tasks:
- **Risk management.** Within the Finance group, accountants help to identify risks through the risk register and ensure an appropriate strategy to address them is in place. Accountants also evaluate outcomes so that efforts can be revised accordingly. Chao explained that accountants ask if the strategy is giving them the right outcome and, if not, how to change it.

- **Capital planning/resource allocation.** As the Capital Review Committee considers infrastructure investments, accountants provide the financial analysis necessary to ensure projects are assessed in a systematic way across a broad base of organizational priorities. McLay explained: “We work closely with our engineering group, planning group and the operations, to figure out ‘what does this region want in the next 30 years? What are we going to look like?’ It is with that vision that we as accountants start the financial analysis to determine which ways are best to deliver the vision. The numbers help explain the story.”

- **Reporting.** Accountants are trained to take a consistent and disciplined approach on reporting. They have assisted with the development of the integrated annual report and sustainability key performance indicators. Buckle explained: “Whether it’s in our annual or quarterly reports, including information about climate change risks is an opportunity.”

TransLink staff identified the following additional accountant competencies valuable to assessing and managing climate change impacts.

- Accountants are curious and investigate different layers of a question in order to make a decision. McLay noted: “Accountants use different strategies to build targets, to determine KPIs. They ask ‘what are the expectations?’ and ‘how will I know when I’m there?’”

- Accountants are practical and emphasize evidence. “They are skilled at focusing on results and knowing how to cull information,” said Chao. This skill is important for strategic decision-making, so that senior executives are not inundated with ambiguous information.

- Accountants are action-oriented. Chao explained: “When you’re working with cross-disciplinary groups, everyone’s got their lens of how they see things. So with an accountant’s lens, we’re often very focused on where we’re trying to go. And there are times that you have to pull the group together: How are we going to take these discussions and move to the next step?”
• Accountants are skilled at balancing corporate priorities. McLay explained the need for this balance: “We want to build a sustainable city but we also have to balance this with our revenue projections. What are we capable of handling? How much debt can we take on? What are our reserves? Because there is no sense building something that cannot be maintained over time.”

How Accountants Can Become Better Suited to Work on Climate Change Adaptation

TransLink staff identify several ways to increase accountants’ skill in addressing climate change adaptation:

• **Greater knowledge of climate adaptation.** Buckle calls for more education on climate adaptation. Accountants need to know how organizations can adapt effectively, what metrics are useful, and what benefits adaptation provides.

• **More training in enabling skills.** Accountants are strong analysts—but analysis only takes them so far. “When dealing with multidisciplinary groups, accountants have to build consensus,” Chao said. Generally speaking, accountants would benefit from greater training in skills such as change management, communication and teamwork, to enable better collaboration with non-accountants.

Accountants have a vital role, said Buckle. “Climate change adaptation is not a one-person job, it needs a team, and it is important to understand the different roles within that team. Accountants have a critical role to play but first we need to establish a common language around climate change risks, and be open to new education and experiences.”

Case Summary

• **What is the business impact from climate change?**
  As a transportation provider, TransLink sees climate change directly impacting service delivery and infrastructure maintenance and development.
• **What is the adaptation strategy?**
  While climate change adaptation isn’t a term commonly used at TransLink, the organization considers climate change risks and impacts as one of the factors in strategic decision-making around capital projects.

• **What is the current role of accountants?**
  Accountants at TransLink contribute to adaptation decisions through risk management, capital planning and reporting. Their skills in investigation, analysis and planning are particularly helpful.

• **How can accountants be better positioned in the future?**
  Accountants at TransLink urge the profession to increase training in (a) identifying and managing climate change risks; and (b) enabling skills, such as change management, to enable better collaboration with colleagues in other functions.

*This case study was written by Jeff Birchall, based on interviews with TransLink staff.*