



**Assessment of the Economic, Environmental, and Social Impacts of the Clothing Reuse  
Industry in Atlantic Canada**

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## 1. Executive Summary

This impact report explores the textile reuse industry (“the industry”) with respect to job creation, textile diversion from landfills, and support of social causes in the Atlantic Canadian provinces of Nova Scotia, Newfoundland and Labrador, New Brunswick, and Prince Edward Island. The report was completed with support from the Association for Textile Recycling (AFTeR), the Memorial University Centre for Social Enterprise, and the Mitacs federal funding agency. This report begins with an extensive literature review, followed by data analysis of information provided from representatives from each AFTeR-member organization in the form of questionnaires and interviews. In addition to this, I conducted additional interviews with notable industry stakeholders, including non-AFTeR members as well as with four individuals working in the recycling and textile waste management industry in Canada and the United States. Following this, I present the research methodology, key findings, and recommendations to help move AFTeR and the Atlantic Canadian clothing reuse industry forward.

Assessing member quantitative and qualitative data and non-member stakeholder interviews revealed the following key findings:

- In 2020, AFTeR participant businesses created an average of 197.3 jobs, paid an average of \$1,431,224.00 in annual wages, and occupied an average of 145,931 square feet of retail, storage, processing, and office space in Atlantic Canada.
- In 2020, AFTeR members diverted approximately 20,686 tonnes (45,604,516 lbs; 20,685,860 kg) of textiles from going directly to landfills and incurred an average of \$35,336.56 in hauling and tipping fees in Atlantic Canada. The weight and percentage of textiles sent to landfill by AFTeR members is not tracked, only in terms of landfill

hauling and tipping expenses incurred. Therefore, the exact amount of textiles ultimately diverted from landfills post-processing is impossible to ascertain at this point in time.

- Wish-cycling, the dumping of garbage at collection sites, and the public's habit of leaving donated textiles outside of donation bins, results in significant product spoilage and high transport, handling, and landfill fees.
- The Atlantic region relies on two primary used textile consolidation groups whose function is to distribute clothing to downstream markets. The Covid-19 pandemic forced one of these consolidation groups to reduce collection activities by a significant amount, resulting in an increase in the number of textiles being stored for future processing or sent directly to landfill. The pandemic further highlighted the fragile nature of the clothing reuse industry in Atlantic Canada (e.g., *force majeure*). In addition, changes to export markets highlight the issues with future reliance on this avenue for excess textile products and underscore a need for more localized solutions.
- The Atlantic Canadian textile reuse industry operates using a wide range of business models, including for-profit, not-for-profit, and charitable organizations. In addition, there is a healthy mix of traditional brick-and-mortar stores and online-only curated thrift experiences.
- More than two thirds (68.9%) of non-member interviewees reported a decline in 2020 revenue over 2019 due to the Covid-19 global pandemic. Charity thrift stores tended to see outcomes that are more positive from the pandemic than local, for-profit small businesses.
- Social enterprises existing in the industry with the sole purpose of furthering a charitable mission are well represented in the Atlantic Canadian clothing reuse industry. 60% of

members and 46.2% of non-members interviewed fell into this category. Furthermore, 43.8% of organizations shown on the list of businesses in **Appendix 1**, including member and non-member participants and non-participants in the study, exist exclusively to provide financial support to charitable causes.

- There is a dearth of data for the industry as a whole and a lack of executive buy-in at the organizational level for improving collaboration and industry research. It was difficult to obtain the necessary data to complete a thorough investigation of the impacts of the industry because of data tracking issues. This contributed to incomplete data and limited the study findings. These issues are further mirrored by Stats Canada coverage of the industry using the North American Industry Classification System (NAICS) codes. Code #453310 represents “used merchandise stores” and provides an inaccurate representation of the industry that is not appropriate for use in making informed industry policy decisions.
- Reputational risk is a key challenge for charities operating in the industry due to the tendency of a small number of for-profit organizations to engage in social washing at the expense of these charities.
- There is a need for the public to be educated around what happens to donated clothes, bin and donation etiquette, and prominent branding to ensure that individuals can discern reputable names on donation bins. Members of the public seeking to donate used clothing to any organization must be given opportunities to access information relating to clothing donations. This includes responsiveness and transparency of bin owners and operators.

## 2. Background

### *2.1 The Association for Textile Recycling in Nova Scotia*

The Association for Textile Recycling (AFTeR) is an organization made up of for-profit, not-for-profit, and charity members that collect and sell residential used textiles across Nova Scotia. The group, founded in 2013, meets on a regular basis to discuss ways to enable change in the textile reuse industry (“the industry”), address common challenges, and share best practices related to residential textile collection, reuse, and diversion. Textiles in this case include post-consumer clothing, household linens, bags, and footwear. The textile reuse industry provides employment and volunteer opportunities to community members while the sale of used textiles provides a significant source of revenue for charities and businesses across the region. Furthermore, it offers a channel by which to divert textile waste from landfills and incinerators. These diversion activities simultaneously extend the usable life of clothing, reduce municipal waste collection, and contribute to numerous social causes. As such, the textile resale industry delivers valuable economic, environmental, and social benefits, also known as “triple bottom line” benefits (Kenton, 2021), to a wide range of community stakeholders.

Currently, AFTeR member groups consist of Diabetes Canada (DC), Big Brothers and Big Sisters (BBBS), The Salvation Army (TSA), Eastern Recyclers Association (ERA), and Value Village (VV). The group is made up of three registered charities that engage in the sale of used textiles to raise money to further their charitable mission (DC, BBBS, TSA), one not-for-profit organization (ERA), and one for-profit corporation (VV). The members of the group can be separated into two categories: used textile collectors (ERA, DC, BBBS) and used textile retailers (TSA, VV). This distinction is important because collector organizations do not sell used textiles directly to consumers. Instead, they collect used textiles and sell them in bulk to VV (or other

intermediary collectors) for a predetermined price based on weight. Conversely, retailers operate thrift stores that collect, sort, and sell used textiles directly to consumers. It is important to note, however, that these two business models are not representative of the clothing reuse industry in Atlantic Canada as a whole. This will be further demonstrated in future sections of this report.

## *2.2 Purpose of the Study*

There is little public data regarding the economic, environmental, and social impacts of organizations operating within the textile reuse industry in Canada. As such, the present study aims to quantify the triple bottom line value offered by AFTeR members and other industry players in the community as they collect and sell used textiles. In addition to the benefits of such activities, the study also serves to identify the limitations faced by industry members and to highlight areas of vulnerability and future growth. Finally, I identify opportunities where AFTeR can make positive and meaningful contributions to the industry.

The current impact study has been partially funded by three organizations: Mitacs, a national not-for-profit organization sponsored by the Government of Canada that builds partnerships to support Canadian industrial and social innovation, the Memorial University of Newfoundland's Centre for Social Enterprise, and AFTeR. A condition of this funding is that the project scope include samples from the capital cities of all four Atlantic Canadian provinces. As such, AFTeR member data and a selection of non-member key industry players in each Atlantic province are examined. I provide a non-exhaustive list of industry players across Atlantic Canada in

## **Appendix 1.**

### **3. Introduction**

In the past 15 years, global clothing production has roughly doubled, while the amount of time that an individual keeps a particular item of clothing has decreased by almost 40% (Ellen



MacArthur Foundation, 2020). In other words, as clothing production and sales continue to rise around the world, people are getting less use out of their clothes. This is one reason why the global second-hand clothing industry continues to grow at a rapid pace. According to ThredUp, an online marketplace for used clothing, the value of the used textile industry will reach \$64 billion USD in the next five years, with 44% of consumers planning to shift more of their spending towards second-hand items in the next twelve months (ThredUp, 2020). Furthermore, McKinsey (2016) reports that more than 65% of emerging market consumers are actively seeking to support fashion brands that act sustainably. This suggests that younger consumers are shifting their buying patterns towards behaviours that reduce their impact on the environment. These trends are further exacerbated by the economic impact of the Covid-19 pandemic and subsequent economic pressures that have shifted consumer preferences towards less expensive thrift clothing.

In Canada, the retail sales volume of clothing, footwear, and accessories for women and men grew between 2004 and 2015, while consumer prices declined (StatsCan, 2016). This change is due in part to the expansion of fast fashion retailers that produce high volumes of clothing in an inexpensive manner (StatsCan, 2016). Furthermore, Ungerth (2011) showed that over one in five people dispose of clothing because they are tired of them, not because of their condition. Consistent with this narrative, Canadian consumers throw out approximately 500,000 tonnes of textiles per year (Storry & McKenzie, 2018). As this number continues to grow due to high production levels of inexpensive, low quality clothing and a lack of commercially viable textile recycling solutions (Storry & McKenzie, 2018), it will present problems for businesses reliant on used textiles as a means of generating revenue. This further indicates that there is a lack of public

knowledge and infrastructure around dealing with clothing that individuals no longer have any use for.

As a result of the increase in new clothing consumption, approximately 26 billion pounds of textile waste, or waste constructed from cloth or fabric, are sent to landfills each year making it the fastest-growing category of waste sent to landfills (Cline, 2019). This presents an enormous environmental problem especially since the production of textiles requires significant use of natural resources (Ekström & Salomonson, 2014). For example, it takes between 7,000 – 29,000 liters of water and between 0.3 – 1 kg of oil to produce 1 kg of cotton (Fletcher, 2013).

Therefore, throwing away clothing, shoes, and accessories like handbags and belts before the end of their useful lives results in lost value, lost resources, increased greenhouse gas (GHG) emissions resulting from decomposition in landfills, landfilling fees, and the use of valuable landfill space (Cline, 2019).

One hopeful prospect is the notion that approximately 95% of landfilled textiles are reusable or recyclable (Savers, 2018) since most textiles can be reused as-is, repurposed (e.g., downcycled) into rags, carpet padding, or insulation, or recycled into new products (Zvaniga, 2017). Thus, the present study aims to establish the impacts that the reuse of textiles has on the economy, environment, and society in the four provinces of Atlantic Canada: Nova Scotia (NS), Newfoundland and Labrador (NL), New Brunswick (NB), and Prince Edward Island (PE). For the purposes of this study, the product categories included are used clothing, shoes, linens, and bags resulting from residential use. First, I discuss the distinctions between textile reuse and recycling. Next, I delve into the role of textile reuse as it relates to the concept of social enterprise. Thereafter, I present the study methodology, followed by the findings, discussion, and recommendations.

### *3.1 Textile Reuse and Recycling*

The terms “reuse” and “recycling” are often used interchangeably in industry circles when referring to the diversion of textiles from landfill. However, there are distinct differences between these two concepts. Textile reuse refers to extending the practical service life of textile products by turning them over to new owners (Sandin & Peters, 2018). Textile reuse takes place when individuals or organizations exchange, sell, swap, rent, borrow, or inherit used clothing. Second-hand stores, flea markets, online marketplaces, and charity shops can facilitate reuse, but are not necessary for this process to take place (Sandin & Peters, 2018). On the other hand, textile recycling is the reprocessing of either pre- or post-consumer textile waste into raw materials for the production of new textile or non-textile products (Sandin & Peters, 2018). Due to numerous technical and non-technical barriers, the global rate of textile-recycling is much lower than that of reuse, which means that textile waste that is not reused or has reached the end of its useful life is not recycled but rather is sent to landfill or incinerated (Sandin & Peters, 2018).

To date, only a small number of municipalities in Canada have made textiles a part of municipal recycling programs. One reason for this is the existence of an informal waste management stream for post-consumer textiles in the form of used-clothing collectors and thrift stores. Resale organizations have taken on the task of sorting residential post-consumer textiles and must assume the responsibility of developing alternative secondary markets (e.g., export, downcycling) for such garments or disposing of them in landfills at their own expense. While some larger resale organizations derive value from unsold textiles by selling clothing to downstream markets or exporting them to developing countries, the resources needed to establish these relationships preclude many smaller charity operations from engaging in this aspect of the

industry. As such, due to a lack of local textile recycling infrastructure, unused textile items or those unsuitable for resale are often relegated to landfill. This represents a sizeable burden to local social enterprises and small businesses operating in the industry as they assume the responsibility of processing and disposing of large quantities of used textiles and other items donated by the public. By contrast, municipalities save money on the curbside collection of these items and create an additional revenue stream via landfill disposal fees.

When considered together, research has shown that textile reuse and recycling are preferable to incineration or landfilling, with reuse being the most preferred option (Sandin & Peters, 2018). The benefits of these processes are largely the result of the avoidance of the manufacture of new products. However, unless the use of these textiles is extended significantly through mass public adoption, the economic and environmental costs associated with transporting used clothing to foreign markets to extend their life may exceed the benefits of avoided production (Sandin & Peters, 2018) and contribute to the region's carbon footprint. This knowledge offers strong evidence of the importance of extending the life of clothing and textiles through local reuse as much as possible and bolsters the need to educate the public on the importance of buying and donating used textiles. Similarly, this information highlights the importance of recirculating used clothing in local communities rather than exporting to foreign markets to minimize transport costs and other environmental impacts associated with this practice.

There are several ways by which clothing and other used textiles recirculate in Atlantic Canada. This study examines both used textile collection methods and resale business models that are currently in use in the following jurisdictions: The Halifax Regional Municipality (HRM), NS, St. John's, NL, Fredericton, NB, and Charlottetown, PE. These models include both for-profit, not-for-profit, and charitable organizations engaging in collection, thrift, and

consignment activities. In **Appendix 2**, I provide definitions of each type of business model considered in this study.

### *3.2 Clothing Reuse and Social Enterprise*

Since the introduction of mass-produced clothing in the 19<sup>th</sup> century, thrift stores have become an important avenue by which charities and not-for-profit organizations create revenue (Waxman, 2018). The textile resale business has since grown from being used a means of increasing financial support for social and charitable causes to include lucrative for-profit resellers in both traditional brick-and-mortar and, more recently, online e-commerce platforms (Park & Martinez, 2020). Furthermore, the clothing reuse and resale industry is expected to be valued at \$64 Billion USD in the next five years (ThredUp, 2020) and grow by 185% in the next 10 years (Park & Martinez, 2019). By contrast, experts believe the fast fashion industry (e.g., Zara, H&M) will only grow by a mere 20% over that same period (Park & Martinez, 2019).

Since there exists in the textile reuse industry a plethora of business models that includes charities, for-profits, and a mixture of both, it is no surprise that social enterprises are well represented therein. While there is no universally accepted definition for a social enterprise (Brozek, 2009), Crocker, Saint, Chen, and Tong (2018) define it as an organization that exists to provide a benefit to the public or community by means of reinvesting a substantial proportion of their income to fulfil their established mission. The proportion of income that firms must reinvest in said mission, however, remains unclear. In general, organizations that operate in the clothing reuse industry place varying levels of emphasis on social returns and some degree of partnership between charities and for-profit businesses is common. For example, a for-profit organization engaged in retail thrift might pay charities to collect used textiles for them and for-profit clothing donation bin operators might pay a charity to license their logo to elicit donations of used textiles

from the community. In fact, it is likely due to the prevalence of charity thrift stores and charity clothing collectors that clothing donations have become synonymous with charitable donations. Colocation of charity and commercial bins alongside one another generates tensions between charity organizations who compete with fully commercial businesses that only provide a fraction of their revenue to charitable causes (Crocker, Saint, Chen, & Tong, 2018). There is evidence to suggest that there are strong philanthropic incentives that motivate consumers to give used textiles to charities (Ekström, Gustafsson, Hieltgren, & Salomonson, 2012). This has led to calls for increased transparency in the clothing reuse industry due to the prevalence of for-profit actors posing as charitable collectors, a problem that undermines public trust in charitable organizations (Ekstrom & Salomonson, 2014). The practice of for-profit businesses leveraging the use of charitable branding to generate donations is known as “social washing.” The term describes a manner of improving the reputation of a company or electing consumer engagement through misleading social responsibility initiatives or under the pretense of social responsibility, but with the ultimate goal of economic return (Etica Funds, 2020). As we will discuss in Section 5.2, the textile reuse industry is particularly susceptible to such practices.

The concept of “wish-cycling” helps to explain another reason why people are motivated to donate clothing to charities. Wish-cycling is centred around the practice of throwing questionable items into recycling bins or donation bags in the hope that they will be recycled or reused, even if they have the opposite effect of contaminating loads of otherwise good recyclables or clothing (Recycle Coach, 2019). There is a general wish by the public to act in a charitable manner and not to harm the environment if possible, however, a lack of knowledge around what can and cannot be donated, recycled, or downcycled can contribute to this consumer practice.

### *3.3 Research Gaps and Opportunities*

Statistics Canada (StatsCan) enables citizens to find the number of retail stores and the number of used merchandise stores that exist in each Canadian province. StatsCan uses the North American Industry Classification System (NAICS) code to track the prevalence of a variety of businesses across Canada. The code for “used merchandise stores” (code 453310) defines organizations that sell donated used textiles and other used products. In this regard, code #453310 includes a broad spectrum of resellers of antiques, books, furniture, sporting goods, and video games to name a few (StatsCan, 2017). This definition of used merchandise stores includes a broad range of organizations including flea markets and pawnshops that are not included in the scope of this study. As such, the number of stores identified in each province by StatsCan is likely to be greater than the number of stores operating in the textile resale industry alone. However, after a close review of the data, this appears not to be the case (StatsCan, 2019a; StatsCan, 2019b). In 2019, StatsCan identified 23 used merchandise retail stores with employees and eight without employees in the province of Newfoundland and Labrador (31 in total). This is an extremely low number for the entirety of the province under such a broad definition. For example, I have identified 11 stores (see **Appendix 1**) that sell used textiles in the St. John’s area alone in 2020, and 15 in 2019 (pre-Covid). This suggests that StatsCan should engage in more robust tracking of these organizations to accurately track industry activity.

Based on this assessment of NAICS codes, it is evident that the Canadian government is not effectively tracking this industry in terms of the number of organizations that fall within this code. There also appears to be inherent flaws in the data collection process leading to inaccuracies in the stated number of industry members on a provincial and national level. This may potentially be the result of an overly broad definition, as described above. StatsCan

reporting also lacks information around number of employees and volunteers, and other macro level factors. This is significant since census data factors heavily into decisions around policy, funding allocations, and other government-led initiatives. Furthermore, there is a dearth of data related to the clothing reuse industry in Canada as a whole, and this is one of the motivating factors behind the present study.

A second opportunity for further research involves identifying and tracking metrics related to labour factors required by organizations operating in the industry. For example, Sandin and Peters (2018) posit that the majority of scholarly studies related to clothing recycling and reuse often overlook the collection and sorting processes. This presents a need for more detailed inquiry that includes up-to-date and publicly available primary data of this growing industry (Sandin & Peters, 2018). In an attempt to address this issue, I describe the study methodology below.

#### **4. Methodology**

To begin, I presented the purpose of the project and reviewed existing literature on textile reuse to gain a thorough understanding of the industry. Next, I compiled a list of key used textile collectors and reseller organizations operating in the industry in each Atlantic province. In the case of online clothing sellers (e.g., Instagram, Facebook), I only contacted those with larger followings. Both members and non-members of the AFTeR organization were included to establish the size of the industry in each city in absolute terms (**Appendix 1**). Another consideration in deciding to interview non-members was the limitations inherent in exclusively studying AFTeR members. Because of the comparatively low number of AFTeR member organizations (five members: three collectors and two multi-national thrift organizations) and



their large size compared to local industry members, an examination of these organizations in isolation would provide an unbalanced representation of the industry in Atlantic Canada.

Following this, I collected qualitative and quantitative data from AFTeR member business units across each Atlantic province. At the same time, I invited a number of non-AFTeR members to participate in the study via email or telephone. In total, 16 non-AFTeR industry players in the four Atlantic Canadian capital cities of Halifax, St. John's, Fredericton, and Charlottetown elected to participate in this study. **Appendix 3** contains a list of all interview and survey questions for AFTeR members, while **Appendix 4** contains the list of all interview questions posed to non-AFTeR members.

To participate in the study, an organization must operate in the clothing reuse industry in at least one of Atlantic Canada's capital cities: Halifax, St. John's, Fredericton, and/or Charlottetown. It should be noted that the comparison of municipal data provided by non-member groups with that of provincial data provided by AFTeR members presents a limitation of the study. Other inclusion criteria for participation in the study consisted of the requirement that organizational representatives have the authority to consent to providing information about their organization and have adequate knowledge of their operations. To address confidentiality concerns, I assured all participants that any data used in the final report would be in aggregate form and that no organization or business would be explicitly identified. There was no specification or minimum placed on the volume of textiles processed or revenue generated by participant organizations. Notable exclusions from the study include flea markets, pawnshops, used sporting goods stores, and other reuse establishments that do not deal primarily with textile diversion.

As part of the interview, each participant was asked to shed light on the economic, environmental, and social impacts of the operations of their organizations, otherwise known as the triple bottom line. In the following sections, I present the findings based on collected data from member and non-member participant organizations with the intent of constructing a comprehensive picture of the clothing reuse industry in Atlantic Canada.

## **5. Key Findings**

Below, I present the key findings resulting from the qualitative and quantitative interviews. First, I begin by presenting data from AFTeR members (**Appendix 3**) followed by non-member organizations (**Appendix 4**).

### *5.1 Impacts resulting from activities of AFTeR members*

The data collected for this study was collected from AFTeR members in two stages. In the first stage, each AFTeR member completed a spreadsheet outlining various quantitative metrics for each Atlantic province. Following this, I collected qualitative data and followed up on any issues observed in the spreadsheet via individual interviews using video-conferencing technology (**Appendix 3**). While qualitative information consisting of opinions and anecdotes was relatively easy to collect during an interview, quantitative information consisting of revenue, employment, diversion, or other quantitative data was significantly more difficult to collect. Only one AFTeR member was able to provide a complete picture of their organization's economic, environmental, and social impact in Atlantic Canada and there were many gaps present in the data provided by remaining members (**Appendix 5**). This suggests that organizations face significant limitations regarding the availability of data, access to information, and executive buy-in. Every effort was made to fill the gaps in the data with the cooperation of member representatives; however, in many cases analyses were conducted using incomplete data.

### 5.1.1 Economic Impacts

The first objective of this study was to carry out a comprehensive analysis of the economic impacts of AFTeR members in Atlantic Canada. Unfortunately, as previously stated, there were a number of gaps present in the data provided by AFTeR members (**Appendix 5**). As such, I conducted all analyses using only available information.

One goal of the present study is to quantify the total number of people employed by AFTeR member organizations in the clothing reuse industry in Atlantic Canada in 2020. I made every effort to collect this information from study participants; however, I was not able to gain a complete picture of this metric. Therefore, I report averages in **Table 1** below in an attempt to minimize the skewing effect of the missing data. The sample size (N) is reported in the top row of the table as being equal to four, meaning that four out of five organizations provided data used in the table. Jobs are counted as either full time (at least 35 hours per week), part time (between 1 and 34 hours per week), or casual/seasonal. In 2020, AFTeR member organizations (N=4) created an average of 197.3 full time, part time, and casual jobs in Atlantic Canada (Nova Scotia 100.6, Newfoundland and Labrador, 22.1, New Brunswick 57.5, PEI 17.1).

<b>Job Type (N=4)</b>	<b>NS</b>	<b>NL</b>	<b>NB</b>	<b>PE</b>	<b>Total</b>
Full Time	79.8	13.8	44.5	12.5	150.6
Part Time	15.8	5.0	12.0	3.8	36.6
Seasonal/Casual	5.0	3.3	1.0	0.8	10.1
<b>Total</b>	100.6	22.1	57.5	17.1	197.3

*Table 1: 2020 average jobs created by AFTeR member organizations in the clothing reuse industry in Atlantic Canada.*

Next, I examined the wages paid to workers in each region. There were similar challenges with obtaining data for this question. One organization was unable to provide data, while another reported numbers from 2019 stating that 2020 values were not available. These roadblocks

preclude consistency in the analysis. As such, I am not able to provide a complete picture of this metric. I do, however, provide average wages paid for three of the five AFTeR members (See **Table 2**). The average annual wages paid by each AFTeR member organization (N=3) in Atlantic Canada in 2020 was \$1,431,224.00.

<b>2020 N=3</b>	<b>NS</b>	<b>NL</b>	<b>NB</b>	<b>PE</b>	<b>Total</b>
<b>Average wages paid annually</b>	\$617,851.25	\$252,989.25	\$495,381.00	\$65,002.50	\$1,431,224.00

*Table 2: 2020 average wages paid per year by an AFTeR member organization in the clothing reuse industry in Atlantic Canada.*

Following this, the amount of rented, leased, and mortgaged space for storage, sales, warehousing, and administration (in square feet and metres) occupied by AFTeR members in each region was assessed. In addition, I present the average expense incurred for rented, leased, and mortgaged space (\$). One organization was unable to provide the amount of space occupied by their organization (see **Table 3**). AFTeR members occupied an average of 145,931 ft<sup>2</sup> of operating space and incurred \$1,583,753.00 in real-estate expenses in Atlantic Canada in 2020.

<b>2020</b>	<b>NS</b>	<b>NL</b>	<b>NB</b>	<b>PE</b>	<b>Total</b>
<b>Average space occupied, ft<sup>2</sup> (m<sup>2</sup>) (N=4)</b>	76,454 (7,103)	26,972 (2,506)	33,925 (3,152)	8,580 (797)	145,931 (13,557)
<b>Average expenses incurred in rent/lease/mortgage (N=5)</b>	\$898,733	\$206,698	\$398,453	\$79,869	\$1,583,753

*Table 3: 2020 average space occupied and associated expenses incurred by AFTeR organizations for occupation of real estate needed to carry out activities related textile reuse in each region.*

Finally, I attempted to quantify the cost of managing textile waste in Atlantic Canada by reporting the annual costs incurred by members to send items to the landfill from 2018-2020. As before, there were challenges in collecting the data from member organizations to paint a complete picture for the industry. Two organizations did not report these numbers, and another

provided numbers for 2018 and best guess estimates for 2019 and 2020. The estimates provided by the member organization did not include any context or methodology to indicate the calculation process of these figures. Furthermore, it is unclear whether the data provided included all landfill fees including those incurred for the hauling and disposal of items other than textile waste. I report the 3-year average of costs incurred by AFTeR members for landfill costs in **Table 4** below based on the responses of three organizations (see **Table 4**). Please note that at the time of writing, no landfill facility in any of the Atlantic Canadian capital cities offers discounts on tipping fees to charities (various, personal communication, May 14, 2021).

<b>Landfill Costs (N=3)</b>	<b>NS</b>	<b>NL</b>	<b>NB</b>	<b>PE</b>	<b>Total</b>
3-year average (2018, 2019, 2020)	\$17,609.56	\$5,104.33	\$9,451.33	\$3,171.33	\$35,336.56

*Table 4: 2020 average annual costs incurred by AFTeR organizations for hauling and disposal of textile waste.*

The difficulty experienced in obtaining the information necessary to carry out the above analysis presents a valuable finding on its own. The goal of this study is to quantify the impacts of the industry in the Atlantic Canadian commercial, environmental, and social landscapes. To achieve this aim, it is essential that study participants embody more than a willingness to collaborate; they must also engage in more diligent tracking, have access to requested data, and possess the authority to provide such information about their organizations. On an organizational level, businesses must engage in accurately tracking this data on an ongoing basis. Without defining, tracking, and measuring appropriate metrics, ensuring access to company information, and providing authority to use such information for the purposes of research, there is a significant barrier to meaningful collaboration that limits our understanding of the industry as a whole and limits the generalizability of the study findings.

### 5.1.2 *Environmental Impacts*

In this section, we turn to the environmental impact of AFTeR members in their mission to extend the usable life of clothing and divert them from landfills. Each member described what happens to items that were no longer suitable for sale or that do not sell on the retail sales floor (i.e., items that do not “sell-through”). They further reported the weight of textiles processed in 2020 and the subsequent amount sent to landfill. This information provides an important first step towards understanding the environmental impacts of AFTeR member diversion activities.

Members engaging solely in collection activities see very little textile waste, as their role is to redirect clothing to retail buyers for processing. Collectors do incur landfill fees, highlighting that there is a cost in dealing with a waste stream through servicing public collection bins. Costs associated with hauling and dumping experienced by collectors is often related to “spoilage,” or donations inappropriately placed outside of bins that are left exposed to snow, rain, and moisture. Similarly, individuals often leave oversized and other unsellable items near bins, forcing collector agencies to arrange the removal and disposal of household items, electronics, and other debris. This is a significant challenge for collection organizations operating clothing donation bins (**Appendix 6**).

While retail members in general do not tend to accumulate donations by using donation bins, they incur significant landfill expenses in processing textile donations. Approximately 20-50% of textile donations are suitable to sell on the retail sales floor and this number diminishes further when we consider how much of the product is actually sold to consumers. Generally, after a period, these unsold items are taken off the sales floor (usually after 2-4 weeks) to make room for new inventory, which accumulates in the back room. When asked what happens to items unsuitable for sale and that do not sell-through, member organizations reported baling excess for

sale to downstream markets including rag makers, shredders, and developing countries. Shipping used textiles to other nations is problematic as it contributes to Atlantic Canada's carbon footprint. An estimate for the percentage of clothing directed to each secondary market was difficult to obtain and does not appear to be tracked directly at the local and provincial levels. Furthermore, a small percentage is destined for the landfill with no secondary market and no local textile recycling option. The average percentage of hauling and tipping fees for textile waste in Canada is estimated to be 10% of total landfill costs (NACTR, personal communication, April 21, 2021). Overall, I found that no AFTeR member organization fully tracked the amount of textile waste that is sent to landfill.

The diversion efforts of AFTeR members result in significant landfill space savings, cost savings for municipalities, and positive environmental outcomes overall. Diverted garments increase the chance of extending their life thereby increasing their value and decreasing the rate at which waste is deposited. **Table 5** shows the weight of used textiles collected and processed in Atlantic Canada by all AFTeR members in 2020. Please note one organization provided numbers for 2019, as the numbers for 2020 were not available due to frequent shutdowns and operational interruptions resulting from Covid-19. It is also important to note that these numbers represent the total weights of goods collected. Without a comparable number for the amount of items sent to landfill post-processing, it is difficult to obtain a true picture of the amount of used textiles truly diverted from landfill.

<b>(N=4)</b>	<b>NS</b>	<b>NL</b>	<b>NB</b>	<b>PE</b>	<b>Total</b>
<b>Textiles Diverted, lbs</b>	26,274,467	4,883,084	11,577,803	2,869,162	45,604,516
<b>(kg)</b>	(11,917,898)	(2,214,930)	(5,251,603)	(1,301,430)	(20,685,860)

*Table 5: 2020 textiles diverted from landfills by AFTeR members in 2020.*

In 2020, AFTeR members prevented approximately 20,686 tonnes (45,604,516 lbs; 20,685,860 kg) of textiles from going directly to landfills. This has the effect of saving space in landfills and of reducing landfill management costs for municipalities. A benefit of these activities is that they contribute to decreasing the demand of new garments thereby reducing the number of resources required to make raw materials for new products (Yavari, 2019). Due to a dearth of information about the amount ultimately sent to landfill post-processing, it is impossible to ascertain the exact amount of landfill space savings resulting from diversion activities in the long term. As previously mentioned, the weight and percentage of textiles sent to landfill by AFTeR members is not accurately tracked and generally focuses only on total landfill hauling and tipping expenses incurred. As such, it is difficult to quantify the exact amount of raw material usage avoidance (Fichtner, Bartlett, Seidel, Gies, & Walker, 2014). However, one estimate states that 65kWh of energy can be saved by substituting 1kg of virgin cotton with discarded textile fabric (Woolridge, Ward, Phillips, Collins, & Gandy, 2006).

### *5.1.3 Social Impacts*

Each AFTeR member organization supports a charity in some way, either directly or indirectly. Three members are registered charities with 100% of profits used to support social causes, while the remaining two members support charities indirectly through the purchase and/or sale of used textiles. However, as you might expect, there are large disparities in the amounts used to support social causes between the charities and non-charities ranging from the entirety of profits derived from used textiles to a negligible amount. Causes supported by AFTeR members include poverty and hunger eradication, education, childcare, youth recreation, and mental and physical health and well-being. It is impossible to ascertain exactly how much money ends up supporting social causes, as three of the five member organizations were unable to



provide a full accounting of these figures. Similarly, members were generally unable to identify the full extent of volunteer opportunities created based on their work.

AFTeR member organizations contribute to their local economies and serve to bolster positive social outcomes in the creation of jobs and volunteer opportunities, providing clothing and supplies to those in need, and supporting local fundraising efforts. Creating jobs increases the socio-economic prosperity of localities and allows community members to earn a living and use that income to support local businesses and infrastructure. Member groups also provide employment and volunteer opportunities to students and individuals facing barriers to work. Many AFTeR members also report their willingness to donate used clothing and goods on a small scale to local families and community groups on an as-needed basis. For example, if a family loses its house and possessions in a fire, they may approach a member group to provide essential housewares and clothing. They also report supporting local sports teams, schools, community events, and other local initiatives in search of financial contributions.

Supporting local, small-scale, not-for-profit initiatives is one way that members reported contributing to an overall sense of community in regions where they operate. Furthermore, one group reports that their staff are trained to interact and communicate with community members in a supportive fashion thus creating a sense of belonging and peace at operating sites. This, in turn, encourages individuals to develop closer emotional bonds with the organization and with other members of the community.

One framework that exists for guiding organizations as they take responsibility for their role in shaping the future of life on earth is the United Nations' Sustainable Development Goals (**Appendix 7**). The 17 Sustainable Development Goals address challenges faced by all individuals on the planet including poverty, inequality, climate change, environmental

degradation, peace, and justice (United Nations, 2021). One member of AFTeR reports that their organization has integrated these goals into strategic planning, choosing to focus on three specific goals. Although the remaining member groups do not expressly focus on these goals, the nature of the business and the business models in operation lend themselves well to the adoption of such a framework. Upon further analysis, it can be concluded that AFTeR members touch upon eight of these Sustainable Development Goals either directly or indirectly: no poverty, zero hunger, good health and well-being, quality education, decent work and economic growth, reduced inequalities, responsible consumption and production, and climate action.

### *5.2 Impacts resulting from activities of other industry players*

In this section, we will examine the impacts of, and challenges faced by non-member organizations operating within the textile reuse industry. I compiled a list of businesses operating in the industry in each Atlantic Canadian capital city (Halifax, St. John's, Fredericton, and Charlottetown) and contacted each one to take part in an interview. The list consisted of 52 thrift and consignment stores in total (**Appendix 1**), including both member and non-member organizations and multiple locations. The list also contains the names of seven organizations operating clothing collection bins in Atlantic Canada. After contacting all of these businesses, I was able to obtain informed consent from 16 non-AFTeR members. In this section, I provide an overall look at the economic, environmental, and social impact of non-AFTeR members in Atlantic Canada.

The non-members consulted as part of this project represented a variety of business models including charities and for-profit businesses operating primarily brick-and-mortar thrift and consignment shops. **Table 6** below shows more detail on the sample.

<b>Business Type</b>	<b>HRM</b>	<b>St. John's</b>	<b>Fredericton</b>	<b>Charlottetown</b>	<b>Total</b>
Charity Thrift	4	1	1	0	6
Charity Consignment	0	0	1	0	1
Curated (For-Profit) Thrift	2	2	0	1	5
For-Profit Consignment	1	1	2	0	4
<b>Total</b>	7	4	4	1	16
	<b>HRM</b>	<b>St. John's</b>	<b>Fredericton</b>	<b>Charlottetown</b>	<b>Total</b>
Female	7	4	3	1	15
Male	0	0	1	0	1
<b>Total</b>	7	4	4	1	16

*Table 6: Non-member groups interviewed by province, business type, and gender of interviewee.*

The majority of study interviewees were female (15). Charity thrift stores made up 37.5% of the sample, curated (for-profit) thrift represented 31.3%, for-profit consignment made up 25%, and charity consignment made up 6.3% of the sample. In total, 43.8% of those interviewed self-identified as social enterprises operated by charities. On the list of organizations listed at the local level per Atlantic Canadian capital city (**Appendix 1**) which includes both members and non-members, charity social enterprises make up 46.2% of those listed. Please note that I arrived at this number by counting the same organization in multiple cities as distinct. For example, I count The Salvation Army four times, once for each city. This is because in speaking with some of these charities, most reported that the money raised furthers the social mission within the communities in which the stores operate. Collectors and bin operators are not included in this number.

### 5.2.1 Economic Impacts

From an economic standpoint, the clothing reuse industry presents opportunities for economic development. Industry players create jobs, generate revenue, and support a number of related industries using products that many view as a waste stream. This industry, however, also presents a number of risks for industry members including landfill fees associated with managing waste and the potential for reputational damage. This section will address each of these considerations.

**Table 7** shows the average number of jobs created in 2020 by the non-member businesses interviewed (N = 16).

City	Job Type	No. of Jobs
HRM	Full Time	3.0
	Part Time	4.6
St. John's	Full Time	2.0
	Part Time	2.5
Fredericton	Full Time	2.3
	Part Time	2.8
Charlottetown	Full Time	2.0
	Part Time	4.0

*Table 7: Average number of jobs created by non-member groups by Atlantic Canadian capital city.*

As of 2020, there were 40 full time and 57 part time jobs created by the businesses interviewed, creating a total of 97 jobs. On average, non-members created an average of 2.5 full time and 3.6 part time jobs in Atlantic Canada in 2020. Next, we look at the gross revenue

(before taxes and expenses) generated in 2020 (N=12) and discuss the impacts of Covid-19 (see **Table 8**).

<b>2020 (N=12)</b>	<b>HRM</b>	<b>St. John's</b>	<b>Fredericton</b>	<b>Charlottetown</b>	<b>Industry Average</b>
Gross Revenue	\$271,443	\$170,000	\$324,125	\$190,312	<b>\$238,970</b>

*Table 8: Average gross revenue generated by non-member study participants in 2020.*

In some cases, interviewees reported reductions in revenue by between 10% and 75% compared with 2019 due to the pandemic. In other cases, participants reported the pandemic as having a positive effect on revenue. **Table 9** explores these findings below (see **Table 9**).

<b>Revenue change from 2019 (N=16)</b>	<b>Percentage of non-member participants</b>
Negative Change 10% - 20%	18.8%
Negative Change 21% - 50%	18.8%
Negative Change 51% - 75%	18.8%
Negative Change (undefined amount)	12.5%
Positive Change (undefined amount)	31.3%

*Table 9: Revenue change scale shown as a percentage of non-member participants.*

The majority of non-AFTeR participants reported that the Covid-19 pandemic had a negative impact on revenue. This is reflected by the fact that more than two-thirds of interviewed participants (68.9%) experienced a decline in year-over-year gross revenue. The remainder of the sample saw positive outcomes resulting from the pandemic. These businesses, with one exception, consisted of charity thrift stores that reported seeing increased donations and increased shoppers even with reduced store hours and shutdowns.

Of the businesses reporting significant declines in revenue, it was most notable at the for-profit small businesses level. Of the participants that experienced a decline in revenue in 2020, 72.7% were for-profit businesses operating at the local level. Respondents from these businesses reported difficulty in sourcing inventory due to travel restrictions and local thrift store closures, and significantly reduced sales due to store shutdowns and reduced hours. These shops consist of local small businesses that in many cases depend on larger charity thrift stores and consolidation centres for sourcing and disposing of product.

The for-profit small businesses that rely on larger charity thrift stores and consolidation centres consist of both online and brick-and-mortar curated thrift and vintage stores, and online second-hand auctions (**Appendix 2**). These businesses, operating at the local level, are offshoots of the charity thrift industry that offer shoppers a more curated experience, with the benefit that it saves customers from having to sort through bins and racks of clothing to find the perfect piece. It is a business model that continues to grow in popularity both for entrepreneurs with a passion for thrifting and for millennial and Gen Z consumers who want to shop sustainably and show their unique sense of style. There are many more curated shops operating solely on social media platforms like Instagram and Facebook, usually owned and operated at a small scale by a single person. The curated nature of these businesses means that they deal with less textile waste than larger, donation-based, sort-and-sell businesses.

Added to the economic considerations of businesses operating in the industry are the fees associated with the management of a potential waste stream. A significant challenge faced by organizations in the textile collection phase is that of dumping outside retail stores after hours and beside collection bins (Crocker, Saint, Chen, & Tong, 2018). Similar to AFTeR clothing collectors, organizations that collect used textiles via collection bins placed in public areas and

stores offering donation areas on-site are faced with fees associated with the removal of waste being dumped at collection locations (**Appendix 6**). These fees can be substantial and require both handling and transportation of large amounts of garbage. Not only do items that are left outside in the elements have to be sent to the landfill, but members of the public use these spaces as dumping grounds for large items (e.g., couches, mattresses, tires) because it is easier and cheaper than taking them to the dump.

Finally, reputational risk was a reoccurring theme throughout my investigation. Given the challenges associated with servicing collection bins and the large number of items left outside of them, it is essential that operators service these bins at regular intervals. During this study, I made every effort to contact each non-member bin collector operating in the Atlantic Canadian capital cities. Throughout this exercise, it became apparent that it would be impossible to establish contact with multiple bin owner organizations directly. As a final step, I contacted the affiliated charities whose logo was on the bin. This led to me speaking with one charity that informed me that they once had a relationship with a local textile collector where the collector had licensed their logo for a small monthly fee. However, the relationship was severed when the bin collector failed to service bins in a timely manner, angering business owners who had agreed to have bins placed on their property. The charity has since stopped dealing with the collector, but the collector has failed to remove their logos from the bins. This is an example of the reputational risk faced by charities when they engage in relationships with bin collectors. These risks pose economic threats to the organization since a marred reputation may result in decreased trust and support from the public, ultimately harming the reuse business by resulting in decreased donations.

### 5.2.2 *Environmental Impacts*

Next, I asked participants how they managed unsold inventory or donated clothing that was not suitable for sale. Members considered clothing unsuitable for sale if they included holes, rips, stains, odours, and/or the presence of excessive amounts of pet hair. Items that have broken hardware (zippers, buttons) or that are not of a style that is in demand, are generally discarded as well. Similarly, many participants mentioned that they did not store clothing that was out of season due to limited storage capacity. In general, many organizations engaged in a cyclical system where one group donates their unused clothing to another charity or collector. For example, some smaller thrift stores rely on large charity collectors to pick-up textiles that are not suitable for sale or that have not sold through. Pre-Covid, collectors would pay these charities a nominal fee for these items, after which they would turn this inventory around and sell it to a consolidation centre for a profit. However, the Covid-19 pandemic introduced significant complications into this fragile supply chain that supports diversion efforts forcing many organizations to find alternatives.

Due to government mandated store shutdowns, reduced retail hours, and limited store capacities, much less product was moving off the sales floor. Moreover, many Atlantic Canadians had additional free time and used it to clear their closets, resulting in a higher volume of donations (Bird, 2020). This problem was compounded by the decision of some consolidation centres to halt or significantly reduce the purchase of clothing from charity collectors as demand for used textiles plummeted. This resulted in an increase of textiles sent to landfill and a spike in landfill fees experienced by many participants that relied on collectors to assist them with excess product (refer to **Appendix 8** for the flows of used clothing).



Some charity thrift stores, however, were less adversely impacted by the cessation of collector pickups. One way in which they managed these issues was to adapt their pricing strategy to encourage the movement of more product through the sales floor. Stores that implemented a categorical pricing strategy where all items of the same type were priced similarly (e.g., all shirts are \$3) and the utilization of frequent discounts (e.g., \$1 racks, free bins) ensured that less product needed to be thrown away.

The options that are available for dealing with excess clothing are not apparent to all organizations in the industry. When asked what happens to unsold or unsellable items, 18.8% reported that they engaged in downcycling excess product. Downcycling is a process by which items become an input in the production of a new item, often of lesser quality than the original (e.g., rags) (Merriam -Webster, n.d.). By contrast, 87.5% (13 businesses) reported that they re-donated unsold items to charity collectors (pre-Covid) or thrift stores. Finally, 18.8% (3 businesses) of the sample reported that they send the discards directly to the landfill at their own cost. It is worth noting that these three businesses are all charity thrift stores and these funds are subtracted from those used towards their mission.

### *5.2.3 Social Impacts*

The textile reuse industry provides a large proportion of charitable social enterprises with the opportunity to raise money to support a wide range of social causes. 46.2% of the businesses listed in **Appendix 1**, 43.8% of non-members interviewed, and 60% of AFTeR members, consist of organizations that operate within the textile reuse industry for the sole purpose of raising money to contribute towards the furthering of a social mission.

The missions supported by industry enterprises are as diverse as the organizations themselves. Causes supported in Atlantic Canadian communities include the shelter and rescue of animals,

the employment of individuals with intellectual and physical disabilities, youth outreach, support for ex-offenders, poverty and hunger reduction, autism support, various diseases and illnesses (both mental and physical), children's hospitals, hospice care, religious groups, and other community programs. Some causes integrate clothing reuse not only as the mechanism for doing good, but also as the source of good by giving items directly to those in need through their organizations.

Charitable thrift organizations offer opportunities for community members to give back through the creation of volunteer opportunities and offering individuals with barriers to employment a chance to gain confidence, experience, and to earn an income. In addition to this, many volunteers are individuals who have retired from the workforce and are looking for meaningful ways to give back to society. Of the businesses interviewed, the majority of charity thrift stores offer volunteer opportunities with active lists between 15-100 volunteers. When asked what the effect of the pandemic had been on the volunteer situation, all of them reported seeing lower volunteer numbers in 2020 due to the main demographic of volunteers (seniors) being at higher risk for infection and therefore being forced to stay home. On average, volunteers contribute approximately seven hours of time to their charitable organization each week.

As previously mentioned, it is common for for-profit thrift stores to accept clothing donations on behalf of local charities, offering a small percentage of revenue from the donations to support the charity. For example, **Appendix 9** shows brochures that are distributed throughout the HRM on an ongoing basis. The headline of the brochure states that "Community Recycling is having a used clothing drive in your neighbourhood in support of Phoenix." The brochure also states that proceeds from donations go to support Phoenix Youth Programs. Upon further investigation, however, collected clothing is used as inventory for a local for-profit thrift store that only

donates a small portion of funds derived from this collection process to charity. The lack of transparency and misleading wording used in the pamphlet is just one example of the highly problematic business practices that pervade the clothing reuse industry in Atlantic Canada.

Another observation concerns the notable differences between the way charitable thrift stores operate compared with for-profit and curated thrift businesses. In general, charity social enterprises tend to lag where operating efficiencies and marketing strategy are concerned. There is a myopic focus by charity social enterprises to further the charitable mission and the business operational requirements of the thrift store are secondary. For-profit businesses harness the power of social media and digital marketing more actively, resulting in an environment that is optimal for generating revenue and moving items off the sales floor, while the large presence of charities in the space allows for-profits to capitalize on the public perception that most used clothing operations are in some way charitable. This contrast in approaches presents an opportunity for charity shops and for-profit thrift to collaborate with one another to help each other to fill gaps in the other's operational and marketing models. Such a partnership will create opportunities to maximize value from used textiles in reaching extended markets and support local small businesses and charities alike.

## **6. Discussion**

The Covid-19 pandemic has laid bare the delicate and highly vulnerable used textile global supply chain. Even at the Atlantic Canadian level, one can observe the strain placed on the industry's ability to manage high volumes of used textiles when global trade is impacted. These changes to the industry are further exacerbated by a societal addiction to fast fashion resulting in lower-quality clothing filling storerooms or going to landfill as overseas markets for used clothing exports have been negatively impacted. This coupled with changes in consumer habits

(e.g., shift to leisurewear), excess free time, and weight gain at the population level, has led to a surplus of donations, many of which will never make it to the thrift store sales racks (Rabin, 2021). Reuse models are very effective, but the reality is that many of the clothes processed by these organizations are never resold and end up in landfill, especially if export supply chains are disrupted.

Diversion activities in Atlantic Canada rely on a small number of organizations that act as consolidation centres. Covid-19 has made it apparent that these organizations cannot process all surplus textiles for an entire region. We must find new avenues for used textiles so that even in the case of complete shutdowns or force majeure, we are able to adequately manage used textiles in a productive and sustainable way. This call is spurred by growing evidence that the overseas market for recyclable goods is dwindling, including the market for used clothes (Dowsett & Obulutsa, 2020; John, 2018; Kuwonu, 2017). One can only look to China and their recent restrictions on imported recyclables as a use case (Rapoza, 2020; Semuels, 2019). This change resulted in shutting much of the world off to the largest market for recyclables (Katz, 2019). All this to say that reliance on export markets to take North American discards is a precarious solution to a long-term problem.

In sum, there is a significant volume of excess used textiles in Atlantic Canada and there are significant costs associated with managing it. Currently, industry and non-industry members are left with few options for dealing with overstock and there is an opportunity to collaborate on creative solutions and create local jobs. The problem of processing unsold and unsellable textile products is one that will need to be addressed at the local level in the coming years, whether we want to or not. This is a view that is shared by some of the leading product stewardship experts

in North America, including Dr. Joanne Brasch, Special Project Manager with the California Product Stewardship Council (CPSC).

Although there have been advances in the domain of clothing recycling, it is a widely accepted belief in product stewardship circles that scalable textile recycling technology will not be readily available for at least another 5 years (J. Brasch, personal communication, March 19, 2021). As such, the state of California has begun to prioritize the repair and repurpose of used textiles to prolong their usable lives. The CPSC is currently working on a grant-funded project that will map all garment repair businesses in the greater San Francisco area. Brasch is also proposing the introduction of “reuse consolidation sites,” an initiative that will offer support to overwhelmed thrift stores that lack adequate sorting and storage facilities. At present, there are three main streams for used textiles: consumer sales, baled clothing for export, or clothing put in landfill. Consolidation sites, in addition to serving as a support mechanism to help filter and sort clothing more efficiently, will also ensure that sorting is taking place for additional downcycling streams (e.g., rags, padding). This approach has the added long-term benefit of enticing recycling and downcycling companies to start-up in the area since this guarantees access to a sustained supply of raw materials essential for operation.

In Nova Scotia, a similar sentiment is echoed by Mike Townsend of the Directions Council, a group of independent not-for-profit organizations that operate social enterprises as a way of providing experience and opportunities for individuals with intellectual and physical disabilities. Thrift stores and online auctions are among the social enterprises operated by Directions Council subsidiaries. To address challenges faced by organizations operating in the textile reuse industry, they established the Thrift Enterprise Team to solve problems associated with managing excess product, maximizing sales, and repurposing textiles that might otherwise go to the landfill. They

are also addressing questions about how thrift stores can share products amongst themselves, how to reduce the reliance on one method of surplus product management, and the ethical problems associated with sending products offshore. The need to be more creative and entrepreneurial at the local level is apparent. Like Brasch's consolidation sites, a thrift recycle-repair-repurpose centre where clothing can be repaired and re-manufactured is under consideration. The goal is to join multiple players in the industry on site to address the overarching challenges faced by all organizations in the industry.

Another method to both increase and maximize the efficiency of the textile reuse industry in Atlantic Canada and Canada in general is through Extended Producer Responsibility (EPR) programs. EPR is an approach to environmental policy that puts the onus on manufacturers and producers to take responsibility for their products all the way into the post-consumer stage of the product life cycle (OECD, n.d.). EPR policies act to shift physical and financial responsibility of end-of-life products from municipalities and charities to producers and customers by incentivizing them to consider environmental factors when designing and purchasing products (Fichtner, Bartlett, Seidel, Gies, & Walker, 2014). These programs have been used with great success in other industries throughout the region. In Atlantic Canada, there are EPR programs in place for the recovery of beverage containers, tires, oil, paint, marine flares, newspaper, sharps, milk packaging, and lead acid batteries (Government of Nova Scotia, n.d.).

While no Canadian province has implemented an EPR program for textiles to date, in 2009 the Canadian Council of Ministers of Environment (CCME) released a Canada-wide Action Plan for EPR. The strategy outlined two groups of products to be considered for implementation within two time periods; carpets and textiles were listed under the second group which planned for implementation by 2017 (Fichtner, Bartlett, Seidel, Gies, & Walker, 2014). At the time of

writing, no EPR program for textiles and carpet exists in Canada. The program would serve to minimize landfilling of textiles and carpets and maximize their beneficial recovery (Fichtner, Bartlett, Seidel, Gies, & Walker, 2014). An economic and environmental impact assessment provided by consulting agency Morrison Hershfield (2014) estimates that an EPR program would raise the number of textiles recovered in British Columbia by 15% (from 30% to 45%), thereby reducing landfill management costs, increasing landfill space, creating jobs, and reducing greenhouse gas emissions. In France, the government has established an EPR program requiring that retailers ensure that 50% of textiles sold are subsequently collected for recycling or energy recovery (Dubois, de Graaf, & Thieren, 2016).

The creation of large-scale textile sorting houses and EPR programs are two proposed solutions that grapple with the growth in clothing volumes being produced and used. These approaches seek to deal with excess textiles in ways that will benefit all members of the industry. The widely recognized problem of increased production volume and decreased quality of clothing is reinforcing the sentiment that it makes good business sense to work locally to find feasible and profitable solutions.

## **7. Recommendations**

The following recommendations have resulted from findings arising from the current study. Below, I present several recommendations pertaining to internal strategic planning for AFTeR as well as those focused on external stakeholder engagement.

### *7.1 Recommendations for Future Strategic Planning*

1. **Increase membership base.** There is an opportunity for AFTeR to increase its reach, access more industry data, and achieve broader representation of the diversity within the industry. One notable finding from the current study was the level of interest expressed

by many non-member groups interviewed to join AFTeR as a member. Increasing the membership base would improve the reach of the organization, while gaining a greater range of opinions and ideas about how to solve some of the key issues faced by the clothing reuse industry in Atlantic Canada.

2. **Define a long-term vision and construct a vision statement.** The development of a vision statement, defined as “a shared, communicated, idealistic idea of the long-term future of an organization” (Kirkpatrick, 2016, p. 2), will help guide and prioritize AFTeR decisions moving forward. Furthermore, AFTeR may consider integrating some or all of the UN Sustainable Development Goals into said vision as a means of integrating a well-known framework for delivering social value into the organization. Reframing the focus of AFTeR from “charitable” good to “social” good will offer a more sincere representation of the activities of the organization, since two members are not charities. It will also create a more inclusive atmosphere for expanding the membership base and further direct attention and effort towards a desirable outcome (Kirkpatrick & Locke, 1996).
3. **Replace “Recycling” with “Reuse” in the AFTeR name.** I suggest that AFTeR replace the word “Recycling” with “Reuse” to avoid confusion and misinterpretation. As stated in this report, there is a significant difference between textile recycling and textile reuse. Changing the name of AFTeR to reflect the true nature of its activities will help to remove ambiguity and further focus the efforts of the organization. Alternatively, when AFTeR members begin engaging in funding textile-recycling programs, they could change their name to AFTeRR (Association for Textile Reuse and Recycling).



4. **Gain further executive buy-in.** All AFTeR members must work with their respective organizations to establish further executive buy-in for collaboration and industry research. This is the only way for AFTeR to move its agenda forward in the long term.
5. **Roll-out of a marketing campaign to accompany recently established bin regulations/standards.** After an extensive review of clothing bins across the Atlantic provinces, it is apparent that several operators are failing to act in a way that is consistent with the messaging on their bins. As such, the public would benefit from further outreach and education concerning industry best practices, transparency, and bin donation etiquette. Recently, bin identification plates and the AFTeR logo have been observed on bins in HRM (**Appendix 10**). The observed AFTeR sticker and charity identification plate on the new bins are small and indistinct. Therefore, I recommend re-designing the signage to be more prominent, using colours that contrast with the bin paint, larger fonts, and placement that will allow it to stand out. It is assumed that this signage certifies that bins meet the standard practices defined by the bin regulations. Public education must accompany the imposition of these standards and should include: *what* to look for on donation bins, *where* certified bins are located (access via website, app, and social media), and *why* it is important (transparency around what happens to clothes, responsiveness of bin operators, and the problem of social washing). Empower the public to take control and in the same way that “vote with your wallet” is a powerful idea in the support of ethically branded products, “vote with your clothing donations” can be used to better support charitable causes and/or local small businesses.

## *7.2 Recommendations for Future External Stakeholder Engagement*

- 1. Public education.** The public remains too far removed from what happens to their clothing. Increasing transparency around what happens to clothing donations could promote better donation etiquette ultimately resulting in reduced hauling and disposal costs. Furthermore, education programs focused on donation etiquette, the proper mechanism to do so (bins, in-store, etc.), and outreach regarding updated donation bin standards (see above) would benefit all stakeholders. These programs could leverage free interactive tools including social media and other free media and online resources to achieve its goals.
- 2. Inter-industry collaboration.** There are opportunities to engage with local institutions (e.g., NSCAD) in creative solutions for unsold/unsellable product that can simultaneously generate positive public relations, community support, and increase awareness and knowledge around clothing reuse. The entire industry will be bolstered by this effort and AFTeR will have an opportunity to gain widespread understanding of the challenges faced by industry members and it will act as a means of garnering public support.
- 3. Lobby for updated, more specific NAICS codes.** There are large-scale inaccuracies in how the Federal government monitors and tracks industry members as evidenced by an assessment of NAICS codes provided on the StatsCan website. Addressing this problem has the potential to bring about widespread policy change with respect to having a clearer understanding of the size of the industry and its impacts on local economies and community members.

4. **Advocacy for local EPR program.** The feasibility of EPR programs can be discussed and evaluated. EPR programs can be further examined as a potential mechanism to fund recycling programs and engage in partnerships with social enterprises.
5. **Engage in strategic partnerships aimed at developing localized textile processing and/or recycling solutions.** The findings of this study confirm the necessity for the development of facilities or solutions pertaining to the local processing and recycling of used textiles to reduce the reliance on international export of such items. As such, a long-term goal of AFTeR should be to work in partnership with government representatives and industry stakeholders (e.g., DivertNS) to advocate for grant money and/or low-interest loans to be made available to companies engaged in downcycling or recycling research and development, or willing to conduct a feasibility or pilot project in Atlantic Canada. This has the potential to create creative solutions to end-of-life clothing and have economic and environmental spinoff benefits.

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## Appendix 1: Non-Exhaustive List of Member and Non-member Clothing Reuse Businesses

### in Atlantic Canada

1



# ATLANTIC CANADIAN TEXTILE REUSE BUSINESSES

### NON-EXHAUSTIVE LIST OF CLOTHING RESALE BUSINESSES

#### HALIFAX REGIONAL MUNICIPALITY, NS

<b>Hand in Hand</b> St. Vincent de Paul*	<b>The Salvation Army</b> The Salvation Army*†	<b>Value Village</b> For-Profit Thrift†
<b>Guy's Frenchys</b> For-Profit	<b>SPCA Thrift Store</b> SPCA*	<b>Honey Moon Vintage</b> Curated Thrift
<b>Mission Mart</b> Souls Harbour Rescue Mission*	<b>The Has Bin</b> Curated Thrift	<b>Great Things in Store</b> Parker Street Food Bank*
<b>The Grateful Wardrobe</b> Mental Health Assistance Society*	<b>The Loot</b> Curated Thrift	<b>Kingspier Vintage</b> Curated Thrift
<b>Brilliant Boutique</b> For-Profit Consignment	<b>Mission Thrift</b> Bibles for Missions*	<b>Elsie's Clothing</b> For-Profit Consignment
<b>The Compassionate Closet</b> Charity Consignment - Hospice*	<b>Lost + Found</b> Curated Thrift	<b>Thrifty Treasures</b> Support Services Group*
<b>The Rusty Zipper</b> Curated Thrift	<b>Penelope's Boutique</b> Curated Thrift	<b>The Beacon House</b> FeedNS*

#### ST. JOHN'S, NL

<b>SPCA Thrift Store</b> SPCA*	<b>The Salvation Army</b> The Salvation Army*†	<b>Scout</b> Curated Thrift
<b>Value Village</b> For-Profit Thrift†	<b>Previously Loved Clothes and Things</b> Epilepsy Newfoundland*	
<b>Breakaway</b> Women Against Violence*	<b>Neighbourhood</b> Choices For Youth*	<b>Fashion Foraged</b> Curated Thrift
<b>Beagle Paws Thrift</b> Beagle Paws*	<b>Found.</b> For-Profit Consignment	<b>Model Citizen</b> Curated Thrift

\*DENOTES CHARITY

†DENOTES CONSOLIDATION CENTRE

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# ATLANTIC CANADIAN TEXTILE REUSE BUSINESSES

## NON-EXHAUSTIVE LIST OF CLOTHING RESALE BUSINESSES



### FREDERICTON, NB

#### Seed The Need

Prison Christian Ministries\*

#### The Salvation Army

The Salvation Army\*†

#### Mission Thrift

Bibles for Missions\*

#### Unique Boutique

Fredericton Food Bank\*

#### Hospice Boutique

Charity Consignment - Hospice\*

#### Value Village

For-Profit Thrift†

#### My Closet

For-Profit Consignment

#### Second Showing Boutique

For-Profit Consignment

#### Variety on York

For-Profit Thrift

#### Jumping Jack's Children's Boutique

For-Profit Thrift

#### Guy's Frenchys

For-Profit Thrift

#### Crabapple Kids Boutique

For-Profit Thrift

### CHARLOTTETOWN, PE

#### Tuck n Roll

Curated Thrift

#### Value Village

For-Profit Thrift†

#### Mission Thrift

Bibles for Missions\*

#### Church Mouse Thrift

Anglican Ministries\*

#### The Salvation Army

The Salvation Army\*†

#### Repeats

Curated Thrift

#### Guy's Frenchys

For-Profit Thrift

#### Luxury Market

For-Profit Consignment

### BIN OPERATORS

#### Diabetes Canada

Diabetes Canada\*

#### Eastern Recyclers Association

Not-For-Profit Collection

#### Big Brothers Big Sisters

Big Brother Big Sisters\*

#### Community Recycling / Funtastic Frenchy's

For-Profit Collection

#### LML Trading

For-Profit Collection

#### East Coast Community Care / The Auction Hut

For-Profit Collection

#### Integrity Recycling

Integrity's Haven Equine Animal Rescue\*

\*DENOTES CHARITY

†DENOTES CONSOLIDATION CENTRE

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## Appendix 2: Clothing Reuse Business Models in Atlantic Canada

# TEXTILE REUSE MODELS

CATEGORIES OF RESALE BUSINESSES IN  
ATLANTIC CANADA

CHARITY	FOR PROFIT
<p><b>Auction</b></p> <p>Conducted online through social media. Inventory created by donation and/or collection activities.</p>	<p><b>Auction</b></p> <p>Conducted online through social media. Inventory created by bin collection.</p>
<p><b>Consignment</b></p> <p>Source inventory through donations and provide donors with charitable receipt from the sale of the item.</p>	<p><b>Consignment</b></p> <p>Source inventory directly from clothing owners. Generally luxury goods and high-end vintage.</p>
<p><b>Free</b></p> <p>Used clothing given to charities that is given directly to those in need in accordance with charitable mission.</p>	<p><b>Curated Thrift &amp; Vintage</b></p> <p>Source inventory from other thrift stores, estate sales, and directly from individual sellers. Operate brick-and-mortar or solely online.</p>
<p><b>Thrift Stores</b></p> <p>Collect inventory via donations at store. Only the best goes on the sales floor.</p>	<p><b>Thrift Stores</b></p> <p>Source inventory from bins, imported bales, or by partnerships with charity collectors.</p>
<p><b>Collection Groups</b></p> <p>Collect via home pick-up, clothing drives, and bins. Sell by the pound to consolidation centres.</p>	<p><b>Collection Groups</b></p> <p>Collect exclusively via bins. Sell in retail locations or export to overseas markets.</p>
<p><b>Consolidation Centres</b></p> <p>Large-scale clearing houses where clothes are sorted and sold in retail or to downstream markets.</p>	<p><b>Consolidation Centres</b></p> <p>Large-scale clearing houses where clothes are sorted and sold in retail or to downstream markets.</p>

### **Appendix 3: Member Interview Questions**

## **Qualitative Questions (Retailers)**

### **Section 1: Background**

1. What is your role within the organization?
2. How long have you worked with the organization?
3. What do you enjoy most about working in the clothing reuse and second-hand industry?

### **Section 2: General**

4. What is your organization's role within the clothing reuse industry (e.g., collects used textiles, sells used textiles at retail location(s))?
  - a. (If retail – yes)
    - i. Does your organization rely solely on donations as a means of creating inventory?
5. Say I give you a bag of donated clothing. From your organization's point of view, can you run me through what happens to it from start to finish?
6. What sorts of key performance indicators (KPIs or metrics) does your organization track with respect to donations and sales volumes (e.g., weights of donations, average donation size in lbs, sales revenue, average transaction value, etc.)?
7. What types of space does your organization rent, lease, and/or own (retail, office, storage, warehouse)?
8. Does your organization arrange the collection of donations? If yes, how (e.g., clothing bins, pick-ups, etc.)?
  - a. (If clothing bins - yes) Is there any reasoning behind the geographic placement of bins within communities (e.g., 1 bin for every 3,500 inhabitants)?
9. Typically, when are the busiest/slowest times of year for your organization and why (i.e. sales and donations)?
10. In your opinion, what are the most significant threats to your organization in the textile reuse industry?
11. How has the Covid-19 global pandemic affected your organization in 2020?
12. How do you see the shift in consumer behaviour resulting from the pandemic affecting the clothing reuse industry moving forward (i.e. post-covid)?

### **Section 3: Environmental**

13. Does your organization measure the energy usage and/or carbon footprint of the facilities that it operates and transport activities that it engages in?
14. Does your organization currently have any strategic goals related to the reduction of carbon emissions and/or the implementation of renewable energy?

#### Section 4: Social

15. Is your organization a registered charity or not-for-profit?
  - a. (If for-profit) How does your organization support charitable causes (indirectly/directly, e.g., purchase of second-hand clothes)?
  - b. (if charity or not-for-profit)
    - i. What social causes benefit *directly* from the revenue generated by your organization? How? (provide examples)
    - ii. How does your organization measure the social benefit to communities in which you operate?
16. Does your organization provide employment opportunities?
  - a. (If yes) What sorts of people does your organization employ?
17. Does your organization provide volunteer opportunities?
  - a. (If yes) What sorts of people volunteer for your organization?
18. In your opinion, what are the positive contributions that your social enterprise makes to the community (outside of the advancement of a charitable mission i.e., education, community programs, employment/skills training)?
19. Are there any other ways in which you are using the clothing reuse model to benefit social causes or the local economy?

#### Section 5: Circularity

20. Where do unsold items not suitable for sale go?
21. Can you tell me about any relationships your organization may have with post-consumer (i.e., downstream) clothing markets (e.g., foreign second-hand markets, clothing graders and recyclers, wiper/rag manufacturers, shredders, etc.)?
22. Is your organization involved in projects aimed at developing downstream markets (e.g., education, advocacy, events)?
23. Is there anything else that you would like to add about any of the previous discussed topics that I have not asked you so far?

## Qualitative Questions (Collectors)

### Section 1: Background

1. What is your role within the organization?
2. How long have you worked with the organization?
3. What do you enjoy most about working in the clothing reuse and second-hand industry?

### Section 2: General

4. What is your organization's role within the clothing reuse industry (e.g., collects used textiles, sells used textiles at retail location(s))?
  - a. (If collector – yes)
    - i. Are you permitted to provide used textiles to more than one buyer?
    - ii. (If yes) How many organizations do you provide used textiles for?
5. Say I give you a bag of donated clothing. From your organization's point of view, can you run me through what happens to it from start to finish?
6. What sorts of key performance indicators (KPIs or metrics) does your organization track with respect to donations and sales volumes (e.g., weights of donations, average donation size in lbs, revenue from textile sales, etc.)?
7. What types of space does your organization rent, lease, and/or own (office, storage, warehouse)?
8. How does your organization arrange the collection of donations (e.g., clothing bins, pickups, etc.)? Please indicate all types of collection activities.
  - a. (If clothing bins - yes) Is there any reasoning behind the geographic placement of bins within communities (e.g., 1 bin for every 3,500 inhabitants)?
9. Does your organization have plans to increase or decrease the volume of textile collection operations in each region in 2021? Indicate the planned increase or decrease for each region. (e.g., adding more trucks/drivers, decreasing the number of bins)
10. Typically, when are the busiest/slowest times of year for your organization and why (i.e., sales and donations)?
11. In your opinion, what are the most significant threats to your organization in the textile reuse industry?
12. How has the Covid-19 global pandemic affected your organization in 2020?
13. How do you see the shift in consumer behaviour resulting from the pandemic affecting the clothing reuse industry moving forward (i.e., post-Covid-19)?

### Section 3: Environmental

1. Does your organization measure the energy usage and/or carbon footprint of the facilities that it operates and transport activities that it engages in?

2. Does your organization currently have any strategic goals related to the reduction of carbon emissions and/or the implementation of renewable energy?

#### **Section 4: Social**

14. Is your organization a registered charity or not-for-profit?
  - a. (if charity or not-for-profit)
    - i. What social causes benefit *directly* from the revenue generated by your organization? How? (provide examples)
    - ii. How does your organization measure the social benefit to communities in which you operate?
15. Does your organization provide employment opportunities?
  - a. (If yes) What sorts of people does your organization employ?
16. Does your organization provide volunteer opportunities?
  - a. (If yes) What sorts of people volunteer for your organization?
17. In your opinion, what are the positive contributions that your social enterprise makes to the community (outside of the advancement of a charitable mission i.e., education, community programs, employment/skills training)?
18. Are there any other ways in which you are using the clothing reuse model to benefit social causes or the local economy?

#### **Section 5: Circularity**

19. Where do unsold items not suitable for sale go?
20. Can you tell me about any relationships your organization may have with post-consumer (i.e., downstream) clothing markets (e.g., foreign second-hand markets, clothing graders and recyclers, wiper/rag manufacturers, shredders, etc.)?
21. Is your organization involved in projects aimed at developing downstream markets (e.g., education, advocacy, events)?
22. Is there anything else that you would like to add about any of the previous discussed topics that I have not asked you so far?



## Quantitative Questions (Retailers)

### Section 1: General

1. Please indicate the number of retail locations that your organization operated in each region at the end of the fiscal years specified.
2. Does your organization have plans to increase or decrease the number of thrift stores in each region in 2021? Indicate the planned increase or decrease for each region.
3. If your organization uses collection bins, how many bins do you service in each region?

### Section 2: Economic

4. How many people does your organization employ in the clothing collection and resale industry in each region?
5. How much is paid in annual wages to your workers in each of these regions (can be a range)?
6. What was the average hourly wage for persons in each region in 2020?
7. In 2020, what were the expenses incurred in rent, lease, and/or mortgage for retail, office, storage, and/or warehouse space occupied by your organization?
8. As of 2020, approximately how many square feet of space (retail, office, storage, warehouse) does your organization occupy in each region?
9. How much revenue did your organization generate in each region for the fiscal years noted?
10. How much profit (revenue after expenses) did your organization generate in each region for the fiscal years noted?
11. In 2020, what percentage of revenue was the result of direct to consumer sale of textiles in a retail setting?
12. On average, what percentage of revenue is the result of textile sales to downstream markets?
13. On average, what percentage of textiles collected by your organization in each region are sold in retail?
14. On average, what percentage of textiles collected by your organization in each region are given directly to those in need?
15. On average, what percentage of textiles collected by your organization in each region are sold to downstream markets?
16. On average, what percentage of textiles collected by your organization in each region are sent to the landfill?

### Section 3: Environmental

17. On average, how many pounds/tonnes of textiles does your organization process in each region annually?

18. How many pounds/tonnes of textiles did your organization send to landfills in each region in the years noted?
19. In 2020, what percentage of revenue was the result of direct-to-consumer sale of textiles in a retail setting?
20. How much did your organization spend on landfill fees in each region in the fiscal years noted?
21. On average, what percentage of revenue is the result of textile sales to downstream markets?
22. On average, what percentage of textiles collected by your organization in each region are sold in retail?

#### **Section 4: Social**

23. If your organization is a registered charity, what percentage of revenue collected annually is used directly in the advancement of the organization's mission?
24. If your organization is not a registered charity, what percentage of revenue is donated to charities?
25. If your organization is for-profit, what percentage of revenue generated through the sale of used textiles is used to fund social causes (please specify the causes to which your organization contributes)?
26. In 2020, how many people volunteered with your organization in each region?
27. In 2020, how many volunteer hours were logged in each region?

## Quantitative Questions (Collectors)

### Section 1: Economic

1. How many people does your organization employ in the clothing collection and resale industry in each region?
2. How much is paid in annual wages to your workers in each of these regions (can be a range)?
3. What was the average hourly wage for persons in each region in 2020?
4. In 2020, what were the expenses incurred in rent, lease, and/or mortgage for office, storage, and/or warehouse space occupied by your organization?
5. As of 2020, approximately how many square feet of space (office, storage, warehouse) does your organization occupy in each region?
6. How much revenue did your organization generate in each region for the fiscal years noted?
7. How much profit (revenue after expenses) did your organization generate in each region for the fiscal years noted?
8. On average, what percentage of textiles collected by your organization is sold directly to used textile buyers?
9. What is the price you receive from buyers of your used textiles?

### Section 2: Environmental

10. On average, how many pounds/tonnes of donated textiles does your organization process in each region annually?
11. If your organization uses collection bins, how many bins do you service in each region?
12. What percentage of donated textiles are collected using public collection bins?
13. What percentage of donated textiles are collected via home/business pick-up service?
14. What percentage of donated textiles are collected via other collection method(s)? Please specify alternative collection methods in the notes section.
15. How many pounds/tonnes of textiles did your organization send to landfills in each region in the years noted?
16. How much did your organization spend on landfill fees in each region in the fiscal years noted?

### Section 3: Social

17. If your organization is a registered charity, what percentage of revenue collected annually is used directly in the advancement of the organization's mission?
18. In 2020, how many people have volunteered with your organization in each region?
19. In 2020, how many volunteer hours were logged in each region?

#### **Appendix 4: Non-member Interview Questions**

1. What sort of organization do you operate in the clothing reuse industry?
2. What is your role within the organization?
3. How long have you worked with the organization?
4. Is your organization a registered charity, a not-for-profit, or a for-profit enterprise?
  - a. (If for-profit) What causes, if any, are you involved with (i.e. charitable work)?
  - b. (if charity or not-for-profit) What social causes benefit *directly* from the revenue generated by your organization? How? (provide examples)
5. What is your organization's role within the clothing reuse industry (e.g., collects used textiles, sells used textiles at retail location(s))?
  - a. (If retail – yes)
    - i. Does your organization rely solely on donations as a means of creating inventory?
    - ii. What sorts of textile collection activities does your organization engage in?
  - b. (If collection – yes)
    - i. How does your organization arrange the collection of donations? (e.g., clothing bins, pick-ups, etc.)?
    - ii. (If clothing bins - yes) How many clothing bins does your organization service?
6. What is your primary mode of selling (brick-and-mortar, ecommerce, social media? How much do you sell on each (%)?)
7. On average, how many items of clothing/shoes did you sell in 2020?
8. Where do unsold items not suitable for sale go?
9. How many people does your organization employ in the clothing collection and resale industry?
  - a. (If yes) How many are paid hourly? Salary?
10. Does your organization provide volunteer opportunities?
  - a. In 2020, how many people volunteered with your organization? Roughly how many hours a week does the average volunteer put in?
11. As of 2020, approximately how many square feet of space (retail, office, storage, warehouse) does your organization occupy?
12. Roughly how much revenue did your organization generate for the 2020 fiscal year?
13. How has the Covid-19 global pandemic affected your organization in 2020?
14. What are your thoughts about the future of the clothing resale industry?
15. What are going to be the biggest challenges faced by thrift stores like yours?
16. Is there anything else that you would like to add about any of the previous discussed topics that I have not asked you so far

## Appendix 5: Distribution of Data Collected From AFTeR Members

# Data Collected

AFTeR member participants were asked to provide data relating to the key variables listed in the left-hand column. This table shows the distribution of data collected from each group.

Legend:

- Data missing or not provided.
- Incomplete data provided.
- Accurate data provided.

KEY VARIABLES	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
<b>ECONOMIC</b>					
People employed	●	●	●	●	●
Annual wages paid	●	●	●	●	●
Real-estate expenses	●	●	●	●	●
Real-estate occupied	●	●	●	●	●
Revenue generated	●	●	●	●	●
Profit generated	●	●	●	●	●
<b>ENVIRONMENTAL</b>					
Textiles diverted/processed	●	●	●	●	●
Textiles sent to landfill	●	●	●	●	●
Hauling/tipping expenses	●	●	●	●	●
<b>SOCIAL</b>					
Revenue % used for charity	●	●	●	●	●
Number of volunteers	●	●	●	●	●
Number of volunteer hours logged	●	●	●	●	●

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**Appendix 6: Dumping Outside Collection Bins in HRM**







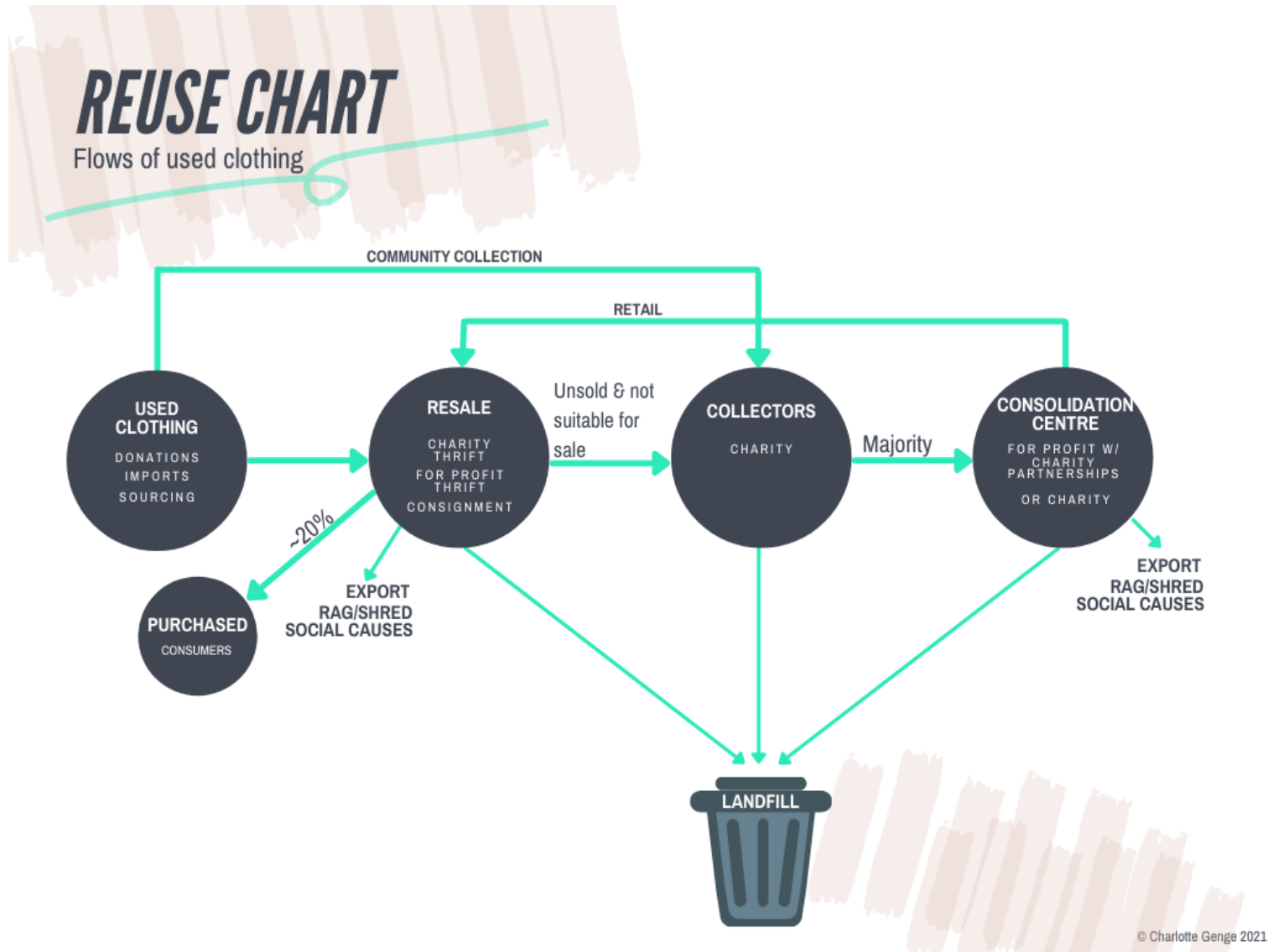




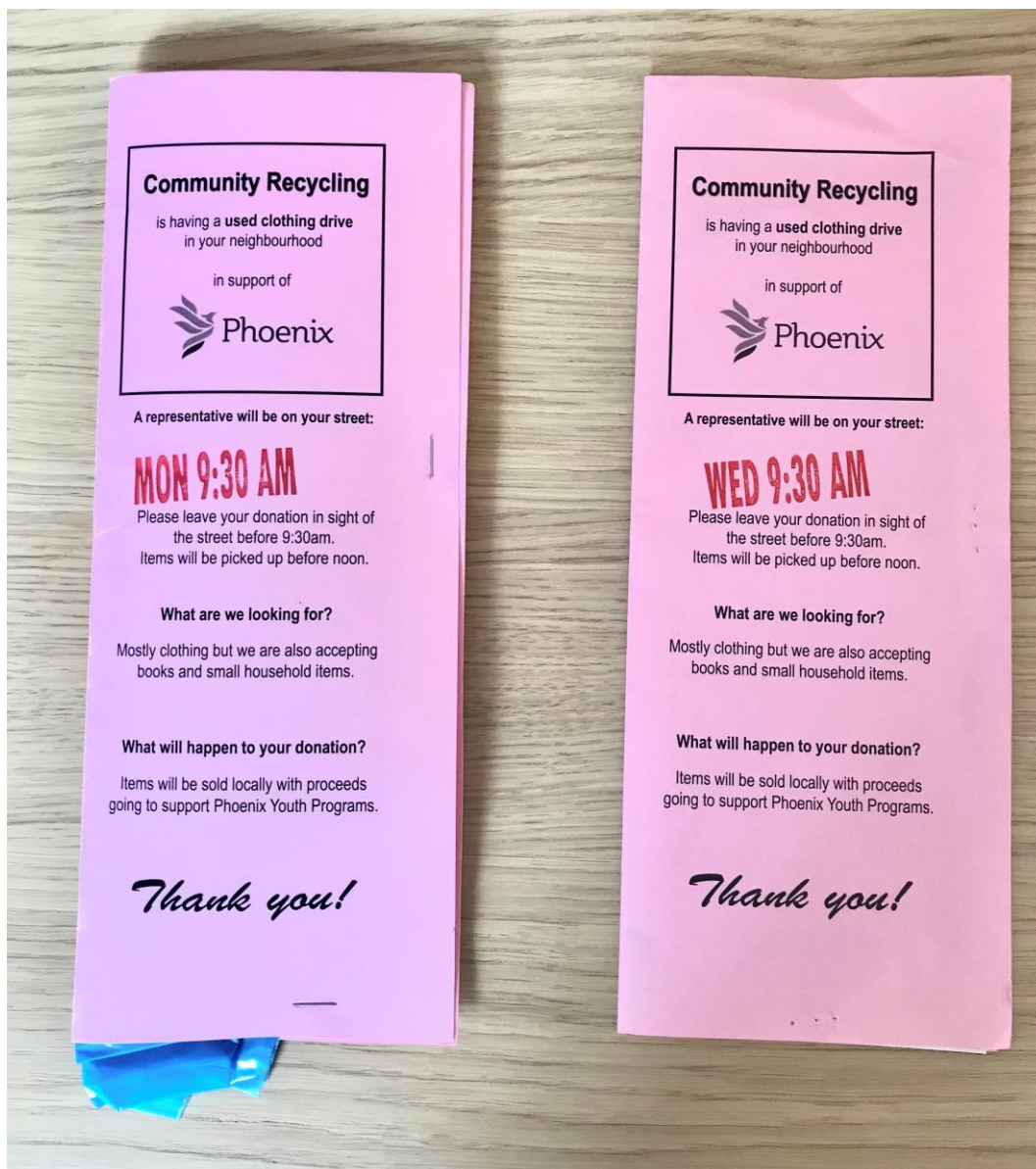
## Appendix 7: The United Nations Sustainable Development Goals

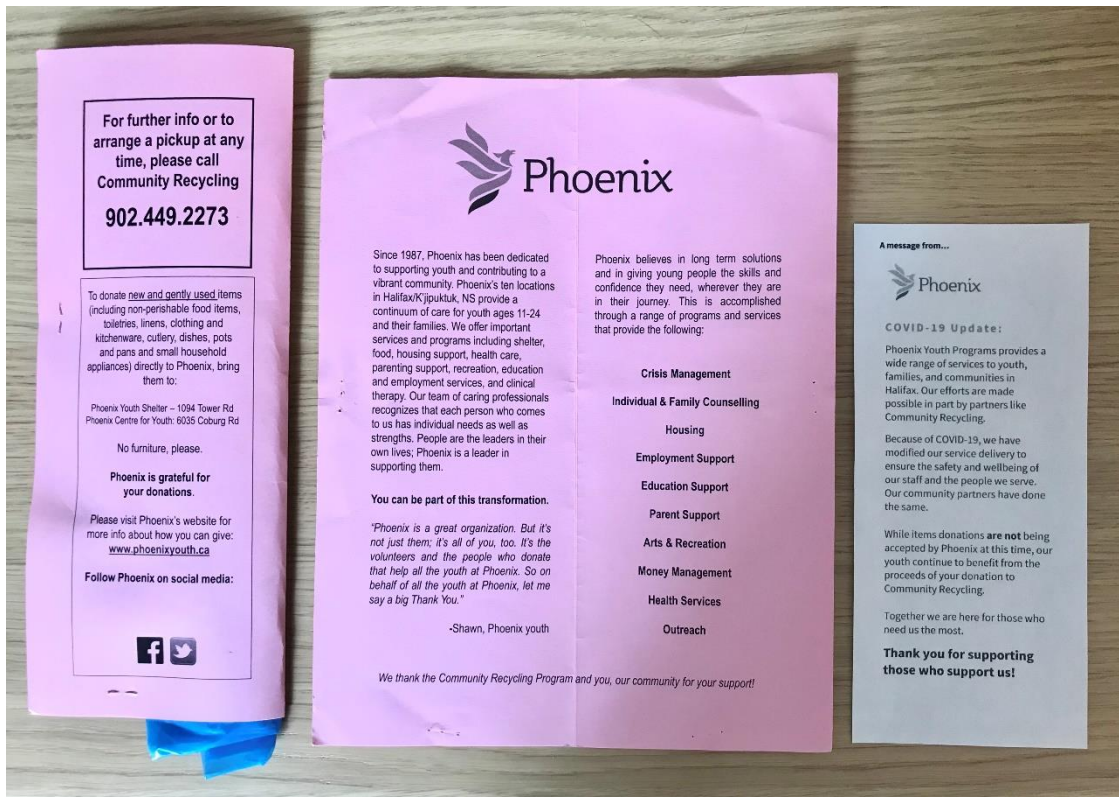


**Appendix 8: Clothing Reuse Chart - Flows of Used Clothing**



## Appendix 9: Clothing Collection Flyers Distributed in HRM





**For further info or to arrange a pickup at any time, please call Community Recycling 902.449.2273**

To donate new and gently used items (including non-perishable food items, toiletries, linens, clothing and kitchenware, cutlery, dishes, pots and pans and small household appliances) directly to Phoenix, bring them to:

Phoenix Youth Shelter – 1094 Tower Rd  
Phoenix Centre for Youth: 6035 Coburg Rd

No furniture, please.

Phoenix is grateful for your donations.

Please visit Phoenix's website for more info about how you can give: [www.phoenixyouth.ca](http://www.phoenixyouth.ca)

Follow Phoenix on social media:



Since 1987, Phoenix has been dedicated to supporting youth and contributing to a vibrant community. Phoenix's ten locations in Halifax/Kijikuktuk, NS provide a continuum of care for youth ages 11-24 and their families. We offer important services and programs including shelter, food, housing support, health care, parenting support, recreation, education and employment services, and clinical therapy. Our team of caring professionals recognizes that each person who comes to us has individual needs as well as strengths. People are the leaders in their own lives; Phoenix is a leader in supporting them.

**You can be part of this transformation.**

*"Phoenix is a great organization. But it's not just them; it's all of you, too. It's the volunteers and the people who donate that help all the youth at Phoenix. So on behalf of all the youth at Phoenix, let me say a big Thank You."*

-Shawn, Phoenix youth

Phoenix believes in long term solutions and in giving young people the skills and confidence they need, wherever they are in their journey. This is accomplished through a range of programs and services that provide the following:

- Crisis Management**
- Individual & Family Counselling**
- Housing**
- Employment Support**
- Education Support**
- Parent Support**
- Arts & Recreation**
- Money Management**
- Health Services**
- Outreach**

*We thank the Community Recycling Program and you, our community for your support!*

A message from...



**COVID-19 Update:**

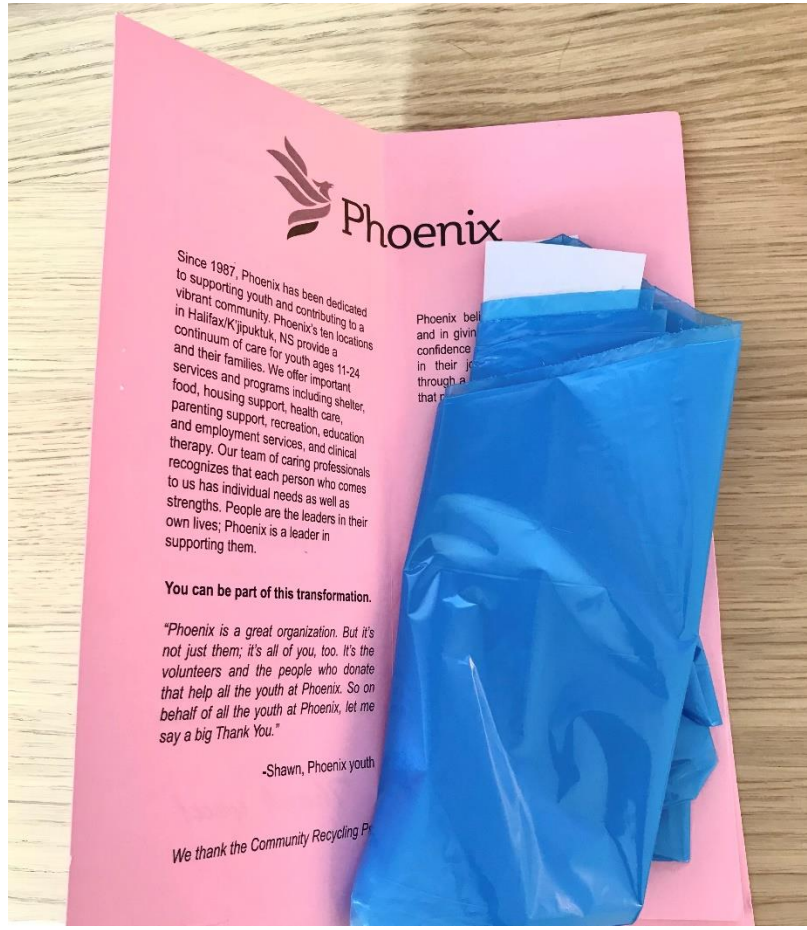
Phoenix Youth Programs provides a wide range of services to youth, families, and communities in Halifax. Our efforts are made possible in part by partners like Community Recycling.

Because of COVID-19, we have modified our service delivery to ensure the safety and wellbeing of our staff and the people we serve. Our community partners have done the same.

While items donations are not being accepted by Phoenix at this time, our youth continue to benefit from the proceeds of your donation to Community Recycling.

Together we are here for those who need us the most.

**Thank you for supporting those who support us!**



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- Health Services**
- Outreach**



### Appendix 10: Bin With Identification Plate and AFTeR Logo in HRM

