



Options for Reducing the TDSB's Distribution of Single-Use Plastic Items

To: Program and School Services Committee

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Report No.: 02-20-3826

Strategic Directions

- Create a Culture for Student and Staff Well-Being

Recommendation

It is recommended that the report on the options for reducing the TDSB's distribution of single-use plastic items be received.

Context

At its June 5, 2018 meeting, the Environmental Sustainability Community Advisory Committee (ESCAC) made a recommendation to the Program and School Services Committee (PSSC) that the distribution of single-use plastic water bottles and straws be discontinued at the Toronto District School Board (TDSB).

This recommendation was presented to PSSC at its June 6, 2018 meeting, prompting PSSC to recommend that the following be referred to staff for a report back: that the distribution of single-use plastic items, water bottles and straws be discontinued at the Toronto District School Board.

The following report will outline the types and quantities of single-use plastic items distributed by the TDSB and propose the most viable options for reducing their distribution.

Climate Action at the TDSB

The threats to our environment today, are urgent and real. As communities across the globe continue to experience the effects of climate change, youth are rallying for decision makers to take action.

The TDSB has been engaged in climate action for almost 20 years. During this time, it has gradually reduced greenhouse gas emissions from buildings, spearheaded the EcoSchools movement spreading across Canada, and established numerous programs and partnerships to support and enhance environmental education. In 2000, the TDSB formalized its environmental policy and revised it in 2010 to explicitly address climate change.

Developing a strategy to reduce the TDSB's distribution of single-use plastic items would be well supported in the local, regional and international context, as described later in this report, and would help to further demonstrate the TDSB's on-going commitment to climate action.

Plastic is derived from fossil fuels such as oil and coal, which are non-renewable resources that contribute to greenhouse gas emissions when processed. The growing global dependency on plastic is indeed a climate issue.

The Problem with Single-Use Plastic

In 2018 'single-use' was named Collins Dictionary's Word of the Year¹, underscoring the pervasiveness of disposable products in the 21st century.

Single-use plastics are most commonly found in packaging and products designed to be used once, typically away from home, and then thrown away. These items are generally not biodegradable and are made of a variety of different plastics making them more difficult to recycle. Many of these items end up in landfills or as litter in the environment. Discarded single-use plastics may also enter waterways and eventually the oceans, seriously impacting marine life. Appendix A provides more background on the environmental impacts of single-use plastic.

¹ Collins Dictionary. (2018, November 7). Collins 2018 word of the year shortlist. Retrieved from: <https://www.collinsdictionary.com/word-lovers-blog/new/etymology-corner-collins-word-of-the-year-2018,449,HCB.html>

The Legislation of Single-Use Plastic Reductions

In June 2019, the government of Canada announced its intention to ban single-use plastics beginning in 2021. Several Canadian provinces, including Ontario, are now investigating the feasibility of a similar ban. Locally, the City of Toronto has begun public consultations on what a ban might look like, and the types of items that could be included. These Canadian initiatives mirror policies being implemented in other countries and jurisdictions around the world. Appendix B provides more detail on current government positions on the reduction of single-use plastics.

Single-Use Plastics in School Settings

Many TDSB schools have already taken steps to reduce single-use plastics such as straws and plastic water bottles; the same is true in schools across Canada and the globe.

Throughout the country, several other school boards are developing strategies to reduce single-use plastics. The Vancouver School Board is a progressive example, largely due to the influence of the city of Vancouver's regulations that limit the use of these items throughout the municipality. Internationally, the Maldives banned all single-use plastics in schools as of April 2018. The United Kingdom and France have also taken steps to limit single-use plastics in schools. Appendix C provides more examples.

The TDSB's Distribution of Single-Use Plastic

Single-use plastic items distributed by the TDSB include bottled water, juice, and milk, straws, cutlery, cups, pre-packaged food (e.g., cheese, crackers, yogurt), plastic wrap, plastic bags, coffee cup lids, and gloves for sanitation. Appendix D quantifies the TDSB's distribution of these items.

These items are distributed through a variety of channels including student nutrition programs, cafeterias, the TDSB's Distribution Centre, vending machines, and the Science and Technology Resource Program. On occasion, items may also be purchased externally by schools and central departments. More detail on these distribution channels can be found in Appendix E.

In recent years, some efforts have been made to reduce the TDSB's consumption of single-use plastics:

- EcoSchools' Project Refill provides free water-bottle refill stations to schools that develop targeted initiatives that raise awareness around water issues and the importance of waste reduction specific to plastic water bottles.
- TDSB cafeterias no longer distribute straws unless requested.
- New plastic coffee lids purchased for TDSB cafeterias are now white, as opposed to black. In the City of Toronto, black plastic is not currently recyclable.
- The Science and Technology Resource Program has piloted non-consumable straws to replace single-use plastic straws in one of its structure kits.
- Numerous TDSB schools have implemented campaigns to eliminate or reduce single-use plastic items within their local communities. For example, in the 2018/19 school year, students at Northern Secondary School surveyed some of their peers on their preferences for eliminating single-use plastics and designed a petition based on the results that was then presented to school administration.

However, to mitigate the environmental impact caused by the TDSB's consumption of single-use plastics, broader strategic actions will be required. Legislation may also soon mandate further changes by the TDSB.

Discontinuing the distribution of single-use plastic items will have implications for the TDSB. The degree to which this is the case will vary depending on the approach taken. Reducing the distribution of these items could result in a loss of revenue for the TDSB (e.g., eliminating the sale of plastic water bottles in cafeterias), necessitate costlier alternatives (e.g., paper straws) or require increased capital investment (e.g., retrofitting sink facilities to accommodate current Toronto Public Health food-handling requirements).

A Strategy for Reducing the TDSB's Distribution of Single-Use Plastics: Exemptions, Options and Impacts

The strategy for reducing the TDSB's distribution of single-use plastic items that follows was developed through collaboration between the TDSB's Business Services, the Science and Technology Resource Program and the Sustainability Office. During the development of this strategy, the Joint Management/Labour Environment Committee (JMLEC) and the Toronto School Administrators Association (TSAA) Business Services Liaison Committee were also consulted.

Staff recommend that some items should be exempted from a plan to discontinue the distribution of single-use plastic items at the TDSB for the time being. These items are listed in Appendix F.

Most Viable Options

The following proposes the most viable options for reducing the TDSB's distribution of single-use plastics. More detail on the benefits and drawbacks of these proposed options can be found in Appendix G.

These options have been identified based on the understanding that in some instances existing conditions would make a full withdrawal of certain single-use plastic items difficult for the TDSB to sustain and/or enforce at this point in time.

1. Plastic straws
 - a. Deplete the Distribution Centre's existing plastic straw stock and replenish with paper straws.
 - b. Deplete the Science and Technology Resource Program's existing plastic straw stock and replenish with alternative (e.g., paper straw with plastic insert).
 - c. Prohibit staff from purchasing plastic straws externally.
2. Plastic water bottles
 - a. Eliminate plastic water bottles in vending machines.
 - b. Eliminate plastic water bottles in cafeterias and replace with water in alternative packaging (e.g., cartons).
 - c. Prohibit staff from purchasing plastic water bottles externally, with the exception of special circumstances (e.g., field trips) where water may be unavailable or unreliable or the safety of a student or staff is at risk.
3. Plastic juice bottles
 - a. Eliminate plastic juice bottles from vending machines.
 - b. Eliminate plastic juice bottles from cafeterias and replace with a juice product in alternative packaging (e.g., cartons).
 - c. Continue to encourage student nutrition programs to provide fresh fruit instead of juice in plastic bottles.
4. Plastic milk bottles
 - a. Eliminate plastic milk bottles from vending machines.
5. Plastic cups
 - a. Deplete existing stock of plastic cups in cafeterias and replace with alternative (e.g., paper cups lined with plastic).

- b. Deplete Science and Technology Resource Program's existing stock of plastic cups and replace with alternative (e.g., paper cups lined with bio-plastic).
6. Pre-packaged food
 - a. Encourage all student nutrition program sites with appropriate facilities (e.g., two-compartment sink/dishwasher and dedicated hand-washing sink) to purchase food in bulk and prepare on-site.
 - b. Subject to available funding and where possible, retrofit up to 60 student nutrition program sites with 'limited facilities' to allow the preparation of food on-site.

Impact

If the proposed options are supported, based on available data it is estimated that the TDSB's annual distribution of single-use plastic items would be reduced by the following amounts. Refer to Appendix D for more detail on the assumptions made in calculating these amounts.

		Number of Individual Units Reduced
Plastic straws		
1a.	Deplete the Distribution Centre's existing plastic straw stock and replenish with paper straws.	437,500
1b.	Deplete the Science and Technology Resource Program's existing plastic straw stock and replenish with alternative (e.g., paper straw with plastic insert).	635,000
1c.	Prohibit staff from purchasing plastic straws externally.	unknown
Subtotal		1,072,500+

Plastic water bottles		
2a.	Eliminate plastic water bottles in vending machines.	9,445
2b.	Eliminate plastic water bottles in cafeterias and replace with water in alternative packaging (e.g., cartons).	117,161*
2c.	Prohibit staff from purchasing plastic water bottles externally.	unknown
Subtotal		126,606+

Plastic juice bottles		
3a.	Eliminate plastic juice bottles from vending machines.	7,391
3b.	Eliminate plastic juice bottles from cafeterias and replace with a	60,162*

	juice product in alternative packaging (e.g., cartons).	
3c.	Continue to encourage student nutrition programs to provide fresh fruit instead of juice in plastic bottles.	unknown
Subtotal		67,553+

Plastic milk bottles		
4a.	Eliminate plastic milk bottles from vending machines.	2,780
Subtotal		2,780

Plastic cups		
5a.	Deplete existing stock of plastic cups in cafeterias and replace with alternative (e.g., paper cups lined with plastic).	1,156*
5b.	Deplete Science and Technology Resource Program's existing stock of plastic cups and replace with alternative (e.g., paper cups lined with bio-plastic).	64,000
Subtotal		65,156

Pre-packaged food		
6a.	Encourage all student nutrition program sites with appropriate facilities to purchase food in bulk and prepare on-site.	unknown
6b.	Subject to available funding and where possible, retrofit up to 60 student nutrition program sites with 'limited facilities' to allow the preparation of food on-site.	unknown
Subtotal		unknown
Total		1,334,595+

* Amount estimated based on the assumption that the number of single-use plastic items distributed by external caterers would be proportionate to that of the TDSB's internal caterer. Of the 74 cafeterias currently in operation at the TDSB, 42 are operated by external caterers.

Action Plan and Associated Timeline

If the Board chooses to restrict the distribution of single-use plastics and all options (1 – 6) are supported, the following action plan will be implemented.

- **Action #1** - The Board's direction on single-use plastic items will be communicated to the system. (Spring 2020)
- **Action #2** - Straws that are exclusively plastic will no longer be procured by the Distribution Centre and Science and Technology Resource Program. (September 2020)

- **Action #3** - Staff will be prohibited from purchasing plastic straws and plastic water bottles externally. (September 2020)
- **Action #4** - Plastic water bottles, juice bottles and milk bottles will be eliminated from vending machines. (September 2020)
- **Action #5** - Plastic water bottles and juice bottles will no longer be procured for TDSB cafeterias. (September 2020)
- **Action #6** - Plastic cups will no longer be procured for TDSB cafeterias and Science and Technology Resource Programs. (September 2020)
- **Action #7** - Student nutrition programs will be encouraged to provide fresh fruit instead of juice in plastic bottles and those with appropriate facilities will be encouraged to purchase food in bulk and prepare on-site. (September 2020)
- **Action #8** - Begin to retrofit student nutrition program sites with 'limited facilities', subject to available funding and where possible. (September 2020)

Resource Implications

Assuming consumption practices remain the same as they were in 2018/19 and all options (1 – 6) are implemented, the following are the estimated resource implications. These costs would be annual with the exception of costs associated with retrofitting student nutrition programs with limited facilities.

In the table below, 'TDSB' refers to an impact that would be absorbed by the TDSB's central budget. An 'end user' could either be a school (e.g., buying straws from the Distribution Centre) or an individual consumer (e.g., a customer buying juice in a cafeteria). More detail on the resource implications of these proposed options can be found in Appendix G.

		Impacted User		Resource Implications	
		TDSB	End User	Amount	Description
1a.	Deplete the Distribution Centre's existing plastic straw stock and replace with paper straws.		✓	\$0.027/unit	Cost increase
1b.	Deplete the Science and Technology Resource Program's existing plastic straw stock and replenish with alternative (e.g., paper straw with plastic insert).	✓		\$2,611	Cost increase
1c.	Prohibit staff from purchasing plastic straws externally.		✓	n/a	

2a.	Eliminate plastic water bottles in vending machines.	✓		-\$1,905	Revenue loss
2b.	Eliminate plastic water bottles in cafeterias and replace with alternative (e.g., cartons).		✓	\$0	Cost remains the same
		✓		-\$9,960*	Revenue loss
		✓		-\$3,715	Rebate loss
2c.	Prohibit staff from purchasing plastic water bottles externally.		✓	n/a	
3a.	Eliminate plastic juice bottles from vending machines.	✓		-\$2,146	Revenue loss
3b.	Eliminate plastic juice bottles from cafeterias and replace with alternative (e.g., cartons).		✓	-\$0.75/unit	Cost decrease
		✓		-\$19,512*	Revenue loss
		✓		-\$5,486	Rebate loss
3c.	Continue to encourage student nutrition programs to provide fresh fruit instead of juice in plastic bottles.		✓	unknown	
4a.	Eliminate plastic milk bottles from vending machines.	✓		-\$687	Revenue loss
5a.	Deplete existing stock of plastic cups in cafeterias and replace with alternative (e.g., paper cups lined with plastic).	✓		-\$57	Cost decrease
5b.	Deplete existing stock of plastic cups in Science and Technology Resource Kits and replace with alternative (e.g., paper cups lined with bio-plastic).	✓		\$3,502	Cost increase
6a.	Encourage all student nutrition program sites with appropriate facilities to purchase food in bulk and prepare on-site		✓	unknown	
6b.	Subject to available funding and where possible, retrofit the approximately 60 student nutrition program sites with 'limited facilities'	✓		unknown [†]	

* These amounts only take into account revenue loss to the TDSB's internal caterer. The TDSB could experience an additional loss of revenue if external caterers expect reduced commissions due to decreased sales. Additionally, the calculation of these amounts is based on the assumption that consumption practices remain the same as they were in 2018/19. If carton sales result in decreased consumption, the TDSB can expect an even greater revenue loss.

† The provincial government is currently reviewing its facility regulations for student nutrition programs. See appendix G for more detail.

Communications Considerations

A system message outlining the direction of the Board as a result of this report will be required.

Board Policy and Procedure Reference(s)

N/A

Appendices

Appendix A: What is the problem with single-use plastic?

Appendix B: Government policy on single-use plastic

Appendix C: Single-use plastic bans in other school districts

Appendix D: Quantifying the TDSB's distribution of single-use items

Appendix E: TDSB single-use plastic distribution channels

Appendix F: Single-use plastic items for exemption

Appendix G: Benefits and drawbacks of proposed options

From

Manon Gardner, Associate Director, School Operations & Service Excellence at Manon.Gardner@tdsb.on.ca or at 416-394-2041.

Chris Ferris, Assistant Comptroller, Administrative Services at Chris.Ferris@tdsb.on.ca or at 416-395-8036.

Richard Christie, Senior Manager, Sustainability at Richard.Christie@tdsb.on.ca or at 416-396-8554.