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Does Public Transport Planning Consider Mobility of Care? A Critical Policy Review of Toronto, Canada

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Abstract: The concept 'mobility of care' captures all the daily travel necessary for the upkeep of a household, including trips to grocery stores, health-related appointments, errands, and caring activities for dependents. Since it was originally coined in 2009, a handful of studies have shown how poorly mobility of care trips are captured in transportation surveys. These preliminary analyses also find that care trips comprise a substantial proportion of daily mobility. As women disproportionately engage in 'mobility of care' travel, the under-consideration of care trips is argued to result in a gender bias in transport planning. Despite this, transport policy related to mobility of care has received less attention. Given that transport policy shapes how transport systems operate, this paper explores the extent to which recent transport policies consider mobility of care. A critical policy review framework is used to systematically examine seven policy documents (435 pages) from the Toronto Transit Commission (TTC), the largest transit agency in Canada. Results indicate that mobility of care is rarely directly considered or significantly discussed. Instead, transport policy often uses the commute to work as the default trip. Mentions of care destinations and trip characteristics associated with mobility of care are more common in recent years and most frequently discussed in relation to the COVID-19 pandemic or specialized services for seniors and people with disabilities. Policies that likely facilitate mobility of care indirectly are also identified, including fare discounts, transfer windows, and accessibility policies. The review concludes with preliminary recommendations on how transit agencies can more directly plan for mobility of care.

Keywords: mobility of care; gender; policy review; public transit policy

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1. Introduction

Transportation planning and research has been critiqued for prioritizing the 'typical' journey to work—a journey that reflects historical patterns of men's commute to work [1,2]. This has led to calls for gender mainstreaming in the field, i.e., to integrate a gender perspective into the preparation, design, implementation, and evaluation of policies and research [3]. One way to do so is through consideration of mobility of care, all daily travel associated with care work, i.e., the unpaid labour needed for the upkeep of the home [4]. Mobility of care captures trips to/from grocery stores and health-related appointments as well as those to pick up/drop off children and other dependents.

Since 'mobility of care' was coined by Sánchez de Madariaga in 2009 [5], first in Spanish, and then in English in 2010 [6], a handful of studies have estimated or directly measured care trips [4,7–10]. In all studies, women were found to complete a greater proportion of these care trips [4,7–10]. In Montreal, mobility of care comprised 32% of women's daily trips and 25% of men's. Here, the proportions of trips that comprise mobility of care range from 12% in Bogotá [9] to 28% in Montréal [7], 29% in Madrid [4,8], and 40% in Barcelona [10]. While these proportions vary, all studies have found that mobility of care trips are not captured directly in traditional transport [4,7–10]. Data, of course, informs transport policy, and with insufficient data indicating the importance of mobility of care trips, planning for and servicing these destinations may be overlooked. And policy informs how transport systems are planned, thereby shaping how people use and experience transportation. Further, mobility of care trips are important, as they are connected to critical issues including gender equity [3,11] and social inclusion [12]. Given this, this paper critically assesses how mobility of care trips are considered in public transport policy through a comprehensive policy analysis. The Toronto Transit Commission (TTC) is used as a case study.

The goal of the review is to assess the ways in which mobility of care trips are currently considered in policies to propose recommendations for more inclusive transit planning. Given that the mobility of care was coined recently, direct considerations of care trips were not expected in the policy documents. However, policy of all forms is never value-free; certain values and ideals are inherently prioritized, whether implicitly or explicitly [13], and this can result in disparities. For instance, public transport planning may prioritize the commute to work because data on employment trips are abundant and, in the process, inadvertently ignore the needs of those relying on transit for mobility of care trips. Given that the bulk of those using public transport for care purposes are women, this could result in a systemic gender bias in transport planning.

2. Literature Review

Mobility of care trips are essential and must be made regularly, and yet major national and regional transportation surveys do not directly or fully capture mobility of care [4], including those used in Canada (e.g., Montréal [14], Toronto [15]). Take, for instance, the Montréal Origin Destination survey, the large-scale travel survey distributed by the city's regional transport authority (Autorité regional de transport métropolitain (ARTM)), whose data informs many transport policies [14]. This survey considers trip motive using the following categories: employment, education, leisure, shopping, health, visiting someone, accompanying/picking up someone, or 'other' [14]. Using these categories, care trips can easily be misclassified as shopping (i.e., there is no distinction between shopping for groceries or for leisure), leisure, or 'other' [4]. Further, many care trips are short and take place close to the home, and yet some surveys intentionally omit short trips (e.g., <1 km or <15 min) because they are not considered relevant for infrastructure planning or policy-making [4]. Finally, travel surveys often poorly capture trip chaining, i.e., when a stop is made between the home and the final destination [4,16]. However, people—and more frequently women—will often trip-chain to incorporate a care task into their commute to work (e.g., grocery shopping on the way home from work) [4,17,18]. These sources of bias embedded in typical travel surveys can result in the erasure of care trips or their redistribution into other categories of travel behaviour [4,8]. For example, when mobility of care trips were estimated in Montréal, it was found that typical representations of travel data obscure the significance of mobility of care [7]. Indeed, Figure 1 shows how trip purposes are typically represented in Montréal (left) beside how this would look if mobility of care were captured directly (right). In this example, the 28% of all daily trips that are

mobility of care are invisible in typical visualizations of travel behaviour. European research has also found that care trips occupy approximately 1/3 of daily trips [4,8].

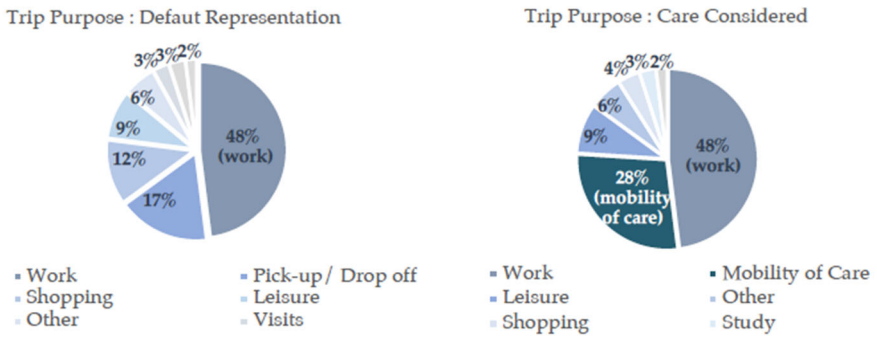

Figure 1. Visual representation of travel behaviour adapted from Ravensbergen, Fournier, and El-Geneidy [7].

Given that women complete the bulk of mobility of care, Sánchez de Madariaga [3] argues that mobility of care is under-quantified, under-valued, and rendered invisible because of gender bias in the way travel data are gathered, interpreted, analyzed, and visually represented. City and regional planning often invest in facilitating what transportation engineers call "compulsory mobility", a term Sánchez de Madariaga [4] criticizes for solely referring to trips made for employment and educational purposes (p. 40). Care trips are not acknowledged as compulsory mobility in mainstream transport planning, though they should be given that they are essential for daily living [4]. For instance, 'shopping' will be framed as a personal choice or for leisure rather than as a necessary trip. Sánchez de Madariaga [4] criticizes the use of the term "compulsory mobility" to show the bias in transport planning that overvalues employment while undervaluing care mobility.

Driving is more common than public transport use for mobility of care trips, which has important sustainability implications. In a study based in Montréal, it was found that only 5.8% of residents use public transport for care trips. This rate is 2.5 times lower than that for work trips in the city (18.7%) [7]. Though public transport is less commonly used for mobility of care, income and gender disparities in public transport use exist for this type of travel. As income increases, the use of public transport for care trips decreases [7]. In line with trends for all trips, women use public transport to complete care trips more than men, regardless of income [7]. This disparity, however, is far larger amongst lower-income households [7], meaning that low-income women seem to be transit-captive for their mobility of care trips, as they are for other types of trips. Past qualitative research also indicates that people often find travelling by public transport inconvenient for care-related travel [19,20]. It seems public transit agencies should incorporate the needs of individuals completing care trips to facilitate mobility of care. Improving transit options for care trips might encourage more people to use transit for diverse types of trips. It might also improve the lives of existing public transport users for care trips—many of whom appear to be low-income women [7].

3. Materials and Methods

3.1. Context

With a population of approximately three million residents (or over six million residents in the Toronto region), Toronto, Ontario, is the largest city in Canada and the fourth largest city in North America [21]. According to TTC data, over half of Toronto residents are part of racialized groups (55%), over a third are 15–40 years old (37%), and over two-thirds live in apartments (65%) [22]. These demographics are not only higher than the

provincial average but have all been associated with a higher likelihood of using public transport [22]. Toronto's periphery is not as well served by transit; average household income is generally lower in these areas as well (Figure 2). For comparison, the average total income for households in Toronto is CAD 121,200 [23].

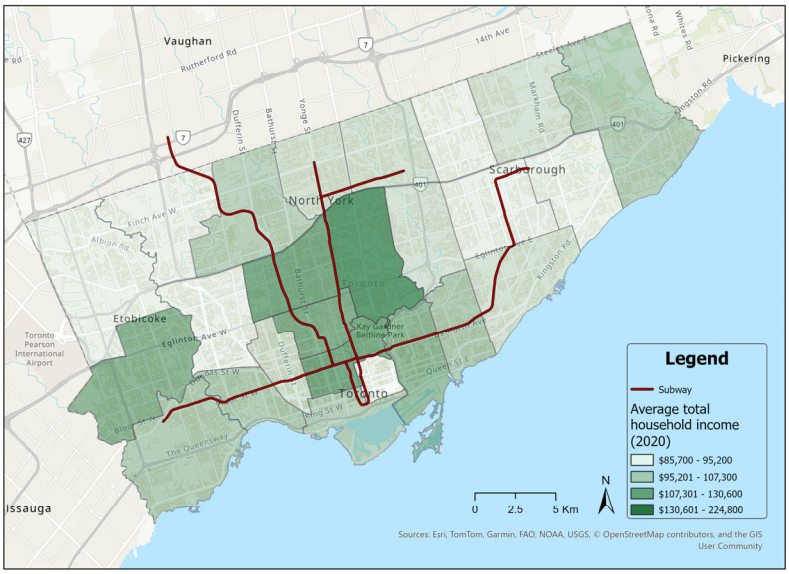

Figure 2. Average household income [23–27] in Toronto alongside major transportation infrastructure [28,29].

Toronto's public transport infrastructure includes the TTC and the GO network of regional buses and trains run by the provincial planning agency, Metrolinx. During peak service in fall 2023, the TTC operated 1590 buses, 278 paratransit buses, 144 streetcars, 98 subway trains, and 5 community bus routes [22]. At the time of writing, the Line 5 Eglinton LRT [24] and Line 6 Finch West LRT are under construction [25]. The TTC is one of North America's largest transit systems; it served 396 million trips in 2023 [22]. Daily bus ridership alone on the TTC is over 1.3 million boardings [22]. As well, a greater proportion of TTC passengers are women: 57% identify as female [26]. This is significant given that women complete more mobility of care trips [4]. This study focuses on the TTC because it is the largest public transit agency in Canada.

3.2. Search Strategy

This critical policy review extends a broader analysis focused on women's public transportation needs [30] by focusing explicitly on mobility of care. The original research assessed the existing policy frameworks of 18 public transit agencies across Canada's eight largest census metropolitan areas (CMAs). The original report involved desktop research for each public transit agency to identify publicly available materials that guide their planning activities. Materials considered include those produced by public transit agencies themselves, as well as relevant documents produced by municipal, regional, and provincial government entities. Representatives from the executive leadership and planning departments of each public transit agency were provided with an initial list of identified materials and were invited to provide any additional agency-specific information or documents that relate to women's travel needs or any commentary pertaining to this area. While representatives were contacted to provide additional context and materials, no interviews were conducted.

The goal of the original study that this paper expands on was to highlight ways in which women's travel needs and behaviours are considered in transport policy, including

more general activities that are aligned with meeting women's travel needs (even if this was not stated as a specific intention). A systematic keyword search was conducted to identify passages in the policy materials that specifically referenced women, gender, and associated terms. The goal of the critical review presented herein is to complement the original search, this time focusing on mobility of care and the TTC. Unlike the keyword-focused approach, in this analysis, the policies' entire texts were carefully read in full. This in-depth approach required the authors to narrow the scope of the review to a single transit agency—the TTC.

The search reported in the original study [30] was updated, this time focusing on the TTC. Policy documents were defined as formal documents from the TTC which outline the rules, regulations, or goals of the agency. Any policy not written by the TTC was excluded. The search took place in May 2024. When an updated version of a policy identified in the original study [30] existed, the newest version was included in the analysis; older versions were not included. Further, a snowball method was employed, whereby careful attention was given to the policy documents referenced in policies. Specifically, when a policy document mentioned another policy document that could be of interest, this new document was identified and considered for inclusion. Finally, general Google searches were performed to identify any other publicly available policy documents that might have been missed.

3.3. Analysis

Following the policy review framework put forth by Cardno [13], a set of questions for nuanced evaluation of policy documents was developed. Through these questions, five areas are addressed: (1) document production and location, (2) authorship and audience, (3) policy context, (4) policy text, and (5) policy consequences. Cardno [13] proposes a range of questions that critically probe the policy text; these guiding questions served as the foundation for developing the data extraction questions for this analysis (Table 1). Cardno's [13] work is not specific to transportation; therefore, the questions were modified to better address transportation policy texts and to reflect a focus on mobility of care and women's travel needs. For instance, when identifying values in the Policy Context section, researchers paid close attention to transportation-related values such as efficiency, cost reduction, and accessibility. Using critical issues raised in the literature, Cardno's [13] guiding questions explore what is stated and omitted about mobility of care considerations in the policy documents under review. For instance, specific questions related to the types of trips discussed, mentions of grocery stores, and the way shopping trips were defined were added to the Policy Text section based on the mobility of care literature.

Table 1. Policy review data extraction framework.

Areas	Questions
Document Production and Location	1. When was the document produced? 2. Where was the document produced? 3. Why was the document produced?
Authorship and Audience	4. Who wrote the document? 5. Who was the document written for?
Policy Context	6. What is the purpose of the policy? 7. What values underpin the policy (e.g., travel efficiency, cost reduction, gender equality, equity, accessibility)? 8. Do any values result in any trade-offs? Yes/No. (a) Please describe (e.g., trading in efficiency for equity, wheelchair space vs. stroller space, etc.)

Table 1. *Cont.*

Areas	Questions		
Policy Text	9. What are the key elements of the policy?		
	10. Is mobility of care considered explicitly? Yes/No.		
	11. Types of Trips	(a)	What types of trips are discussed?
		(b)	Does the policy mention grocery stores or grocery trips? Yes/ No.
		(c)	Does the policy mention leisure travel? Yes/No.
		(d)	How does it define leisure travel?
		(e)	Does the policy mention shopping travel? Yes/No.
		(f)	How does it define shopping travel?
		(g)	Does the policy mention health trips or trips to healthcare facilities and destinations?
	12. When Trips Are Analyzed	(a)	What analysis was conducted?
		(b)	What data is used? (Transportation Tomorrow Survey, Customer Satisfaction Survey, PRESTO Data, Census, other) and what was it used for?
		(c)	What types of trips are mentioned? And how?
		(d)	What destinations are considered in the analysis used to create policy?
		(e)	Is it just assumed that people are going from one destination to another?
		(f)	Are only "neutral" travellers being considered?
		(g)	Is there mention of trip chaining or multiple destination travel?
		(h)	Is there mention of people escorting dependents (children, elderly, people with disabilities)?
		(i)	Is there mention of children, elderly, people with disabilities travelling independently?
		(j)	Is there mention of people carrying items such as strollers or groceries?
		(k)	Are there considerations for the design of buses, subways, platforms, and stops to accommodate items such as strollers or groceries?
		(l)	How is the type of travel under consideration justified (e.g., do they say they focus on jobs because they are the most important trip)?
	13. What is missing from the policy in terms of addressing mobility of care considerations?		
Policy Consequence	14. What is the intended impact of the policy?		
	15. Will the policy impact mobility of care trips (e.g., make them easier/harder)?		
		(a)	Is this explicitly or implicitly discussed?
	16. How is policy implementation intended to be monitored?		
	17. How accessible is the policy proposal for children, elderly travellers, or travellers with disabilities?		
	18. Do they only consider "neutral" travellers throughout?		

The lead author then completed data extraction, meticulously reviewing each identified policy document. While reading, detailed notes were taken, and responses to the questions were documented in a Microsoft Excel (Version 16.98) spreadsheet. The analysis conducted was exploratory and thematic in nature [31,32]. Specific attention was given to key mobility of care trip destinations and characteristics, which were systematically noted, and themes that emerged across documents were identified.

4. Results

A total of seven policy documents, ranging in length from 17 pages to 202 pages, were included in the analysis. Several of these policy documents contained multiple sections that read as separate policies; for example, the *2022 Annual Service Plan* included both a summary of public consultations and technical assessment in addition to the plan. All components of these policy documents were thoroughly reviewed. Table 2 describes the included policies.

Table 2. Summary of documents included in the analysis.

Document	Title	Author	Year	# of Pages	Policy Purpose
Service Standards [33]	*Toronto Transit Commission Service Standards and Decision Rules for Planning Transit Service*	Toronto Transit Commission	2024	40	To lay the framework for achieving the TTC's goals of making public transit the fastest most cost-efficient way to travel and for planning, monitoring, adjusting, and evaluating transit services throughout the City of Toronto (p. 4)
2022 ASP [34]	*2022 Annual Service Plan*	Toronto Transit Commission Chief Strategy and Customer Officer (Acting)	2022	80	To provide a blueprint for transit service in Toronto for 2022 and advances actions identified in the 2020–2024 5-Year Service Plan (p. 1)
2024–2028 5YSP [22]	*5-Year Service and Customer Experience Action Plan 2024–2028*	Toronto Transit Commission Chief Strategy and Customer Experience Officer	2024	202	To provide a blueprint for service and customer experience initiatives to be implemented throughout 2024–2028, ensuring these proposals address immediate needs and the City's overall goals (p. 2, 9)
CIP 2022–2036 [35]	*Making Headway Update to the TTC Capital Investment Plan 2022–2036*	Toronto Transit Commission	2022	54	To update the TTC's initial CIP, released in 2019, identify the most immediate unfunded priorities, and refine cost projections for capital investment over the next 15 years (p. 11)
Fare Policy [36]	*Advancing the 5-Year Fare Policy*	Toronto Transit Commission Chief Strategy and Customer Officer (Acting)	2022	18	To provide an update on the progress of developing the TTC's 5-Year Fare Policy by summarizing the analysis of fare options for further consideration and findings from public consultation (p. 1)
Reliable Transit System [26]	*Sustaining a Reliable Transit System: Outlook 2024 and Beyond*	Toronto Transit Commission Chief Executive Officer	2023	24	To outline the key challenges and trends facing the TTC in 2024 and beyond and to inform strategic directions in the TTC's next 5-Year Corporate Plan, the 2024 Annual Service Plan and the 2024 Operating and Capital Budget Process (p. 2, 5)
2022 AP Update [37]	*2022 Accessibility Plan Status Update*	Toronto Transit Commission Chief Strategy and Customer Officer (Acting)	2022	17	To provide an update on the progress made towards achieving the 52 (now 47) initiatives outlined in the 2019–2023 TTC Multi-Year Accessibility Plan

4.1. Emphasis on Employment Trips

None of the examined documents explicitly mentioned the terms "mobility of care" or "care trips" (Table 3). This absence was expected, as "mobility of care" was only coined in 2009 [5] (in Spanish and in English in 2010 [6]) and is still not considered mainstream [4]. However, care destinations such as grocery stores, healthcare facilities, and pharmacies and care trip characteristics such as trip chaining and escorting children or older dependents were mentioned throughout the policy documents.

Table 3. Care trips mentioned.

	Total	Service Standards	2022 ASP	2024–2028 5YSP	CIP 2022–2036	Fare Policy	Reliable Transit System	2022 AP Update
Destinations								
Grocery	4	1	1	1	1	0	0	0
Health [1]	13	3	3	6	1	0	0	0
Escorting	1	0	0	1	0	0	0	0
Errand	1	0	0	1	0	0	0	0
Shopping	10	3	3	3	0	0	1	0
Total care destinations	29	7	7	12	2	0	1	0
Employment	57	5	13	24	3	0	12	0
Care Trip Characteristics								
Strollers	1	0	0	0	0	0	1	0
Groceries	1	0	0	0	0	0	1	0
Trip chaining	2	0	0	1	0	0	1	0
Children	3	0	0	0	0	3	0	0
Youth [2]	10	1	1	4	0	3	1	0
Seniors	16	2	4	2	0	6	0	2
People with disabilities [3]	7	1	3	1	0	0	0	2
Women	13	1	0	8	0	0	4	0

[1] Including healthcare/medical facility/centre, hospital, and pharmacy. [2] Instances were noted only when they were discussed in relation to a trip. For instance, when the Youth Advisory Committee was mentioned, it was only noted in this table when it was discussed in relation to their travel. [3] Or people with mobility challenges.

Across policies, care destinations were mentioned on average four times per document. The most recent policy, detailed in the *5-Year Service and Customer Experience Action Plan 2024–2028* [22], included the highest number of mentions of destinations common for care trips (n = 12). Among the types of care destinations, trips to healthcare destinations were mentioned most frequently (13 times in total), followed by trips to shopping (10 times), grocery (4 times), and schools (4 times) (Table 3). Daycares were not mentioned. In contrast, employment trips are mentioned 57 times (or 7.71 times per policy).

There was also minimal mention of trip characteristics related to care travel (Table 3). For instance, only one document, *Sustaining a Reliable Transit System: Outlook 2024 and Beyond* [25], directly mentioned people carrying items like strollers or groceries. The document states there is a "...need to provide more space for customers travelling in off-peak when there are more strollers, shopping carts and other items onboard" (p. 12). This, therefore, represents an indirect consideration of care, at least during off-peak hours.

Trip chaining, when one makes a stop (or multiple stops) between their origin and destination, is known to be a common way to complete mobility of care trips (for example, dropping children off at daycare on the way to work) [7]. Trip chaining was mentioned directly two times in the policies. Both documents, *Sustaining a Reliable Transit System: Outlook 2024 and Beyond* [25] and the *5-Year Service and Customer Experience Action Plan 2024–2028* [22],

use the same wording; they state: "Women often trip-chain, making multiple stops during their trip" (p. 6; p. 48). Interestingly, these two direct mentions were in relation to women's travel. Although trip chaining was only mentioned twice directly in the policies, it was mentioned tangentially in a few policy documents. For example: in the *2022 Annual Service Plan* [34], the authors state that the reason they measure boardings by mode is because one customer may board multiple vehicles to complete their journey (p. 10). As another example, *Advancing the 5-Year Fare Policy Staff Report* [36] document references "hop on and hop off to make additional free trips" (p. 5) when discussing the 2 h transfer, implying trip chaining.

Mobility of care includes escorting dependents: trips where carers, often parents or guardians, accompany their children or ageing parents or friends [4]. Therefore, mentions of dependents were noted during the review. Results indicate that seniors are mentioned 16 times; each time they are discussed in the context of independent travel—not as part of an escort trip (Table 2). Children and youth are discussed as well, though less frequently than seniors, with 3 and 10 mentions, respectively (Table 2). It was often unclear whether youth and children were being discussed in relation to dependent or independent travel. One exception is a clear mention of escort trips in the *5-Year Service and Customer Experience Action Plan 2024–2028*. This mention pertains to the pillar "improve service reliability", where it states that the TTC recognizes the importance of service reliability for customers as inconsistent service causing one to be "late for an appointment, childcare pick-up or exam can be more than an inconvenience" (p. 96). This sole mention illustrates that trips to escort dependents may not be explicitly considered in mainstream policy. This is not to say the TTC does not serve children or youth. The TTC's Service Budget serves schools through their regular service, and TTC staff have noted school-specific trips ("school trippers") run by the organization, but these trips were not directly mentioned in the policy documents.

Looking across policies, these mentions of mobility of care trip destinations or characteristics were more common in recent years. The most recent policy document, the *5-Year Service and Customer Experience Action Plan 2024–2028* [22], has the highest number of mentions of care trips (Table 2). It also, however, has the highest number of mentions of employment trips.

The rare direct consideration of care trips across policy documents emphasizes how Sánchez de Madariaga's [4] critique that transport policy emphasizes work and school trips but not mobility of care trips holds true. This is evident in the higher number of incidences in which employment trips are mentioned. As seen in Table 2, employment trips were mentioned the highest number of times out of any trips and were mentioned in 5 out of 7 documents. In the documents that did not mention employment trips, namely the *5-Year Fare Policy* [36] and the *2022 Accessibility Plan Update* [37], no other trip purposes were mentioned. Perhaps this is because these are policies concerned with single themes—developing a Fare Policy and improving the Accessibility of the TTC. The remaining documents, which address the TTC service and facilities more holistically, consider employment trips the most out of any trips. Indeed, except for the *2022 Accessibility Plan Status Update* [37], all TTC policy documents focus on work trips. In other words: the assumed trip is the commuting trip or, at times, the trip to school. This is evident in at least three other ways throughout the documents.

First, the focus on employment trips is evident in many initiatives. Take the initiatives identified in the 2024–2028 *5-Year Service Plan* [22]. Under the pillar "enhance the transit network", action point 2.1 is to "accommodate population growth and employment growth". This action point involves reviewing all active developments in the city to determine if additional services or more frequent service might be necessary. This demonstrates that a factor driving the expansion of services in the TTC transit network is the growth of

population and employment in Toronto. Care trips were never at the centre of initiatives in the way that employment trips were.

Second, the emphasis on employment trips is evident in the justifications provided in *Sustaining a Reliable Transit System: Outlook 2024 and Beyond* [25] for the TTC to receive funding and support from all levels of government to ensure the continued reliable operation of the TTC. This policy does not solely focus on employment, it argues that a "high quality public transit service, [. . .] has the potential to contribute to broader environmental, social and economic goals" (p. 5). However, the economic goals are more often emphasized. For instance, investment in the TTC is rationalized as creating jobs and economic benefits for the City of Toronto, the Province of Ontario and Canada: "15 new jobs created for every $1 million invested with 89% of economic benefits generated by TTC investments remaining within Ontario (52% of that being in the GTA), while a further 11% is realized nationally" (p. 5). This justification for the TTC as necessary for creating jobs, positions the employment travel as "worth" investing in. Environmental and social goals, the latter of which would include care, are not positioned as economically advantageous in this way.

Third, transit policy, at times, frames trips as either for employment or for leisure, leaving essential care trips out. For example, the context section of the *5-Year Service and Customer Experience Action Plan 2024–2028* [22] states: "When riders have a pleasant experience, they are more likely to choose public transit for their *daily commute or leisure activities*." (p. 54, emphasis added). Another example is the plan's summary which states: "The TTC's 5-Year Service and Customer Experience Action Plan will benefit hundreds of thousands of local and regional residents who use the TTC daily to access employment, educational, recreational and cultural opportunities" (p. 2). This may inadvertently imply that there are two kinds of travel: commuter trips to access employment and education and leisure trips to access recreational and cultural opportunities. This assumed trip purpose of either employment or leisure is consistent with the insight that care is often mistaken for leisure, and mobility of care is often confused with mobility of leisure [4].

4.2. Where Mobility of Care Is Considered

There were two scenarios in which care trips were given more consideration: the COVID-19 pandemic and the TTC's Community Bus programme. Further, policies that likely facilitate mobility of care were identified.

Regarding the scenarios that more directly considered care, the first was the COVID-19 pandemic. For instance, in the *2022 Annual Service Plan* [34], care trips are mentioned within the context of the TTC's COVID-19 Demand-Responsive Service Plan. The plan states: "Regular scheduled service will focus on protecting high-ridership corridors and service to essential employment areas, *grocery stores*, *pharmacies*, *healthcare facilities* and NIAs [Neighbourhood Improvement Area]." (p. 8, emphasis added). This statement acknowledges that care trips (in this case, to grocery stores, pharmacies and healthcare facilities) are essential trips in need of service—even if demand is low. Interestingly, these care destinations were combined with employment destinations, highlighting the continued importance of employment trips or that the emphasis is on transporting essential workers to these destinations. It is possible that travel trends observed during the COVID-19 pandemic have influenced the inclusion of more care considerations in the most recent policy document, *the 5-Year Service and Customer Experience Action Plan 2024–2028* [22], discussed above. In fact, the only direct mention of a grocery store in this 178-page policy document is in relation to the pandemic: "The pandemic showed the importance of transit for essential trips such as to employment areas, hospitals and grocery stores." (p. 48). This indicates that COVID-19 may have influenced the ways in which policymakers consider 'essential' trips.

The second scenario which considers mobility of care more directly is the TTC's Community Bus programme. Community Bus routes serve major shopping facilities with a grocery store, bank and pharmacy, hospitals, medical centres, community centres, libraries, and other points of interest or cultural centres [33]. These care-related destinations are not mentioned directly for any other mode of transport. As established in the Service Standards, the Community Bus programme comprises "fully accessible transit services. . . designed primarily for seniors and people with disabilities" ([33], p. 7), and the TTC refers to users of Community Bus as "a niche set of trip generators" ([33], p. 26). This could imply that these trips are considered somewhat "niche" and of more importance to specific populations, such as seniors and people with disabilities.

Beyond these scenarios, certain initiatives being undertaken by the TTC were identified as likely benefiting care travel, though they were not framed as such. Take, for instance, the Fair Pass Discount Programme, as mentioned in the *Accessibility Plan Status Update* [37], which provides reduced fares to certain customers. This Discount Programme likely lessens the financial burden of caregivers, as phase 2 of the programme expanded eligibility to include individuals receiving Toronto childcare subsidies (effective September 2019). Those receiving childcare subsidies are likely caregivers with high levels of escort trips. Further, eligibility was also expanded in phase 2 to include residents receiving rent-geared-to-income subsidies (effective March 2022), and in phase 3, it is planned to include Toronto residents with incomes below the Low-Income Measure plus 15% threshold (planned for 2023) [37]. These discounts can make taking the TTC more affordable for lower-income individuals, and low-income women are more likely to complete care trips using public transport [7].

As another example, some TTC policies facilitate trip chaining, despite trip chaining only being mentioned twice explicitly in the documents (Table 2). For instance, fare capping, which was justified as one of the two best fare options under consideration in the *Advancing the 5-Year Fare Policy* [36] report, could benefit people trip chaining. Fare capping would offer "customers free travel after a specific number of trips in a pre-determined period of time (daily, weekly, monthly)" (p. 7). This would allow for greater flexibility for people completing care trips where they may have to make multiple stops, especially if these stops take longer than the currently allocated 2 h transfer time (which facilitates trip chaining as long as it occurs during a 2 h window).

Further, although only one document mentions people travelling with strollers and/or groceries, a few of the policies discussed in the Accessibility Plan Status Update [37] aimed at improving travel for wheelchair users could make navigating travel with groceries or strollers easier. For example, this update discusses which aspects of the TTC Easier Access programme have been implemented. The original programme "provides elevators, wide fare gates, automatic sliding doors, upgraded signage, ramps, Wheel-Trans stops, and other improvements required to make transit stations accessible" [38] (p. 23). These policies aimed at making the TTC more accessible can also benefit care travel, especially those travelling with dependents, strollers, or groceries. In terms of vehicles, the TTC's conventional bus fleet and all streetcar routes now use accessible low-floor vehicles [37,38]. Progress discussed in the update includes the addition of elevators at subway stops, bus stop accessibility improvements, and modifications to accommodate streetcar ramp deployment [37]. Given that elevators and ramps on streetcars can be deployed for anyone, they are not only beneficial for wheelchair and other mobility device use but could assist someone travelling with strollers and/or grocery carts using the subway or streetcars. Platform edge tile replacement has also taken place at subway stations, which resolves the platform gap issue between platforms and trains [37]. As with the previous examples, this policy could also benefit stroller use or people travelling with grocery carts.

5. Discussion

This policy review found that employment trips were emphasized across the TTC's policy documents. Mobility of care destinations and care trip characteristics were mentioned, especially in more recent documents, but they were discussed less frequently than trips for employment purposes. In many ways, this is expected. Mobility of care was only coined in 2009 [5] (in Spanish, 2010 in English [6]). The commute to work, on the other hand, is a mainstream concept. Commutes are also more commonly concentrated along main corridors during peak hours, which is easier for public transport agencies to plan for. Further, much of the literature on mobility of care emphasizes how poorly transportation survey data captures these trips [4,6–8]. One can imagine that it is difficult to create policies on trips that are not directly captured using our current data. Work trips are also more common than care trips (e.g., 48% of adults' trips in the Montreal study were for work, while 28% were for care [7]). It is also the case that many care destinations can be found at work destinations (e.g., a grocery store in a business park, a medical facility in an office tower). An emphasis on the commute to work was therefore expected. Given how prominent care trips are in people's lives, a direct consideration of these trips is an avenue for gender-mainstreaming transit policy.

Though the emphasis was on what is currently—and problematically—considered 'compulsory mobility' by transport engineers (i.e., trips to work or school), this is not to say that mobility of care is not considered in transit policy. Beyond the references to mobility of care destinations and care trip characteristics, two scenarios considered care more frequently. The first is in the context of the COVID-19 pandemic, and the second is in relation to the community bus programme. These scenarios show that care can be more directly considered in transit planning. There is also the concern, however, that the consideration of mobility of care in relation to COVID-19 and the community bus programme make this type of travel appear to be more important to emergency situations (such as the pandemic) or to specific groups (such as seniors and people with disabilities) rather than an essential form of mobility that everyone engages with.

Further, throughout the review, policies that likely facilitate mobility of care trips were identified. These policies are not being framed as promoting mobility of care, and this can, at times, result in gaps or inconsistencies. For instance, the TTC's 2 h transfer window is likely beneficial to care, as it enables lower-cost trip chaining. Interestingly, these policies were not explicitly discussed in the context of care. If it did, perhaps the discussion would be more nuanced. For instance, trip chaining for care purposes can involve complexities, such as carrying groceries or escorting dependents. It is a good start to acknowledge that these trips exist and that women make this travel behaviour more frequently. Planners, however, should consider how transit agencies can enable more convenient trip chaining, as it is common and frequently used to complete care duties. Land use becomes key here, as mixed-use development around public transport would provide caregivers destinations that are easy to access when trip chaining (e.g., schools, grocery stores).

This study is not without its limitations. Due to the in-depth nature of the analysis of the policy documents, only one transit agency and its most recent documents were included. It is possible that other contexts consider mobility of care more directly. We recommend others replicate this analysis in other contexts, both across Canada and internationally. To do so, careful attention to local context is required to ensure all policies are identified and included in the analysis. Further, the search took place in the summer of 2024. Other documents may have been made available for public consumption since the original search. Given the trend for more consideration of care in recent years, potentially since the COVID-19 pandemic, it is possible that care trips are more directly considered in more recent policy documents. Future research could expand this study by considering other geographic

contexts or timeframes. Future work could also explore the user's perspectives of barriers to public transport use for mobility of care and examine if the policies identified herein that may indirectly facilitate care trips actually do so. For instance, researchers could investigate whether policies aimed at increasing accessibility for people with disabilities (such as ramps and elevators) do, indeed, help caregivers (for instance, those travelling with strollers or groceries).

6. Conclusions

This critical policy review found that transit policies tend to emphasize employment trips. Considerations of mobility of care are less frequent and most often discussed in relation to specific programmes or situations. This is unsurprising, as mobility of care is a relatively recent term [4–6]. However, mobility of care comprises a significant proportion of people's daily travel, especially for women [4,7,8]. Further, people appear to be less likely to use transit for these trips, even women who are more frequent transit users [7]. Therefore, transit agencies should consider explicitly focusing on these trips in their policies. Given this, this policy review concludes with some preliminary recommendations on how to incorporate mobility of care in transit policy moving forward and, ultimately, begin to gender-mainstream transit planning.

- *Measure Care Directly*

It is hard to write policy for something that is not currently measured directly. No standards exist, and limited research can be conducted on a type of mobility that is not fully captured. Therefore, the ways in which transport data is collected, analyzed, and visually represented should be modified to directly consider mobility of care.

- *First Steps to Facilitate Mobility of Care Travel by Public Transport*

More research on how to plan public transport for mobility of care is needed. In the meantime, some policies that would likely facilitate mobility of care trips include ensuring high-frequency services, providing transit strong access to care destinations, fare structures that allow for trip chaining (such as the TTC's 2 h transfer window), and inclusive bus design features that account for care trip characteristics such as accommodating strollers, children, older dependants, or groceries.

- *Include Residents in Transit Planning*

Though research on mobility of care is still relatively scarce, care trips comprise a large proportion of daily mobility (ranging from 15 to 40% of all trips, depending on the estimates). Engaging directly with residents, both those who already use transit and those that do not, to seek their expertise on how to facilitate mobility of care trips on transit could lead to important policy insight and allow for a diversity of perspectives to be considered in transport planning. Indeed, the TTC already does so. For instance, during the development of the *2024–2028 5-Year Service and Customer Experience Action Plan*, the TTC engaged in a three-round consultation process that included distributing surveys, holding stakeholder meetings, conducting focus groups, organizing pop-ups, and engaging youth ambassadors (p. 2). These consultation processes enabled stakeholders, TTC customers, TTC employees, and the public to learn about and provide feedback on the plan. Ensuring these sessions include feedback sessions on mobility of care or having sessions with participants with high caregiving demands, such as parents or those who care for older dependents, may provide additional insight.

- *Planning Transit for Mobility of Care Goes Beyond Transit Planning*

Finally, it is important to note that planning for mobility of care likely extends beyond public transit agencies. For instance, grocery stores are a key care destination and, in many

contexts, especially in car-dependent cities of North America, these destinations tend to be surrounded by large parking lots. These are private property, making it challenging for transit agencies to provide service close to these destinations. Therefore, ensuring high land use diversity is also integral to planning care-friendly public transport. For instance, planning transit stations that are pre-emptively zoned to include and be surrounded by mixed-use development would ensure that transit and care trips are seamless (e.g., a grocery store in a transit station or a school outside a station). Land use and public transport planning go hand in hand here to foster complete—and caring—communities.

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