Final Report

GottaGo: The Royal Flush:

A Review of the Challenges Associated with Design, Costs and Innovations of Public Toilets in Canada

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**Contents**

**Part A ……………………………………………………………………………………….…….3**

 **Introduction ……………………………………………………………………….......…3**

 **Literary Review ………………………………………………………………………….6**

 **Methodology …………………………………………………………………………….10**

 **Methods ………………………………………………………………………………….11**

**Part B……………………………………………………………………………………….…….14**

**Findings ………………………………………………………………………………….14**

 **Cost ………………………………………………………………………….…...14**

 **Crime ……………………………………………………………………….……15**

 **Dignity……………………………………………………………………………16**

 **Gender/Sex Segregation………………………………………………….….….16**

 **Hygiene……………………………………………………………………….…..17**

 **Location………………………………………………………………………….18**

 **Safety………………………………………………………………………….….19**

 **Stigma………………………………………………………………………….....20**

 **Suggestions ……………………………………………………………….…..….20**

 **Initiatives……………………………………………………………..…..22**

 **Privacy……………………………………………………………………………22**

**Discussion and Limitations ……………………………………………………….…….23**

**Recommendations ………………………………………………………………………28**

**Conclusion………………………………………………………………………………..30**

**Appendix A:** Literature Search Results **………………………………………….……..……….32**

**Appendix B:** Inclusion and Exclusion Results**……………………………………………......…33**

**Appendix C:** Defining Nodes**……………………………………………………………………34**

**Appendix D:** Letter of Invitation **………………………………………………………………..35**

**Appendix E:** Interview Questions **………………………………………………………….……37**

**Appendix F:** Group Process and Teamwork **.………………………………………………..…..39**

**Part A**

**Introduction**

The GottaGo! Team is a group of volunteers who launched on November 19th, 2013, which was coincidentally, World Toilet Day. On this day, they took on the monumental task of advocating for inclusive, accessible, open public toilets (GottaGo!, n. d.). In collaboration with the GottaGo! team, the Carleton University Master of Social Work students from the SOWK 5013 Community Based Participatory Research class were asked to conduct a study which would address determinants of public toilet usability based on aesthetics, safety, and inclusivity. Consequently, the research team designed a mixed-methods study which would provide an overview of how other Canadian cities have used urban design to develop safe public washrooms.

The act of voiding is a bodily function that all people should have the right to carry out. Generally, this necessity is met using public washrooms placed on city grounds (Siu, 2006), semi-public facilities, including school and recreation centre washrooms, as well as private toilets located in businesses that are open to the public (Kuhn, Vits, Kuhn, & Monga, 2005; Scoular, 2015). This patchwork system allows municipalities to minimize the construction and maintenance of public washroom facilities (Scoular, 2015), however, it creates problems for several populations. For example, homeless individuals are commonly denied entry to private amenities. Similarly, individuals with disabilities are often unable to locate accessible washrooms, and adults with children experience difficultly finding toilets that are clean and properly equipped (Scoular, 2015; Siu, 2006). Additionally, the presence of chronic and acute health conditions including urinary incontinence, irritable bowel syndrome, Crohn’s disease, and ulcerative colitis contribute to an individual’s need to have not only accessible public toilets, but also that these toilets are located within close proximity to a wide range of public-access parks, transportation, their location (Kuhn et al., 2005; Rocchi et al., 2012). Populations with health concerns have reported that a lack of community washrooms has negatively impacted their quality of life (Rocchi et al., 2012), as it leads to the avoidance of public events such as shopping, socializing, and sporting activities (Kuhn et al., 2005). Moreover, Ottawa is the nation’s capital and is subject to large numbers of tourists, commuters, and event participants. Therefore, there is a larger demand to address the lack of public toilets, which are currently restricting one’s activity level and ability to fully participate in life (Canham, 2014).

“Everyone would like to preserve their human dignity and have access to clean, safe facilities” (City of Winnipeg, 2010, p. 32). The lack of accessible public toilets inadvertently isolates community members who require ongoing toilet access and marginalizes those who are deemed *undesirable* or *undeserving.* Consequently, social workers can play an important role in advocacy and awareness raising regarding this often-overlooked issue. Not only can existing health issues be exacerbated by being unable to void, but according to Johnson (2018), holding pee can result in pain, urinary tract infection, bladder stretching, damage to pelvic floor muscles, and kidney stones, resulting in increased health care costs. Unfortunately, this tends to impact our most vulnerable members of society the greatest. This inequity puts them at an even greater disadvantage, thereby perpetuating the classist divide that already exists. Furthermore, there is shame that ensues should an accident occur. This humiliation and the aforementioned health concerns could easily be avoided with adequate access to accessible public toilets.

The GottaGo! research study is informed by intersectionality theory and an ecosystems framework. Rather than observing a singular form of oppression or marginalization, intersectionality theory examines how multiple experiences interconnect resulting in a web of oppression (Bauer, 2014). Bauer (2014) further explains that intersectionality considers identity and social position (race, gender, class, sexuality, geography, age, ability/disability, religion, culture, indigeneity, and migration status), social processes of oppression and privilege (racism, homophobia, classism, sexism, ableism, etc.), and policies and practices that either perpetuate or restrict socio-economic inequalities. Intersectionality theory allowed the researcher to explore how varying modes of oppression weigh on marginalized populations who require public toilet access; thereby, facilitating better informed design elements that can cater to the needs of the more vulnerable communities.

According to Heinonen and Spearman (2010), an ecosystems framework considers the relationship between people and their environment. The systems that are part of the ecosystem are comprised of several parts that make up a whole. A person’s system is made up of “individuals and institutions (family members, school, work, social workers, friends, etc.) with whom the person interacts” (p. 173). A system that is open will grow and develop by having an equal giving and receiving relationship with outside sources; accordingly, this system is said to be balanced and have homeostasis. Alternatively, a closed system occurs when attention is not paid to all or some of the individuals’ systems, causing disorganization to develop. The system no longer receives input, resulting in a state of imbalance. Heinonen and Spearman (2010) further explain that the aim is to maintain an open system that is continuously aware and interacting with all its parts. Ecology, similarly, refers to the relationships between living organisms and their environment. Therefore, an ecosystems perspective “emphasizes the unity of a person within his or her environment, and the focus of practice is on the interface between them” (Heinonen & Spearman, 2010, p. 174). Utilizing an ecosystems framework encouraged the research team to consider the dichotomous relationship between vulnerable populations and their environment, resulting in a better understanding of how to address this affiliation using safe inclusive urban toilet design.

Finally, after all research data was collected and critically analyzed, a report of the study results and researcher recommendations was provided to the GottaGo! team, along with a one-page form summarizing best practices for the safe urban design of public toilets.

**Literary Review**

**Public Perception of Safety**. Fear of crime in public spaces is a concern voiced by many municipalities and service users to rationalize the avoidance of public toilets (Maruthaveeran & Konijnendijk van den Bosch, 2013; Siu, 2006; The City of Calgary, 2008). For example, in Alberta certain cities worry that washrooms in public spaces will become targets of vandalism and crime, resulting in liability and added expense (The City of Calgary, 2008). Contrarily, community members fear victimization (Maruthaveeran & Konijnendijk van den Bosch, 2013) and associate public toilets with drug use, homelessness, and illegal activities (Sui, 2006). Lorenc et al. (2013) cautioned that people will perceive an environment that has dirt, decay, graffiti, and litter as fearful. Furthermore, when toilets are present, they are often dirty, emit unpleasant smells, or contain components that are out of order (Kuhn et al., 2005; Siu, 2006). Users note that because washrooms are public, they believe maintenance and general upkeep are the responsibility of the city and are therefore less likely to treat the amenities with the same care as private facilities. Moreover, public washrooms have developed a psychological association with bacteria, causing individuals to avoid them, thereby, impact to quality of life (Siu, 2006).

In 2014, a small-scale research project was conducted in the city of Ottawa where residents were asked to describe the factors most important to them related to public washrooms (Canham, 2014). The number one concern identified by Ottawa citizens regarding public washrooms was the cleanliness and overall hygiene of public toilets (Canham, 2014). Although security and crime were among the concerns, it rated lower as participants indicated that graffiti and vandalism were less important than issues surrounding accessibility and cleanliness (Canham, 2014).

Green spaces that are well maintained lead to a reduction in both real and perceived crime (Branas et al., 2018). Garvin, Cannuscio and Branas (2013) modified the greenery around vacant lots and found that crime rates did not increase or decrease. However, the residents living nearby all felt safer near those ‘greened’ lots, despite the number of criminal incidences remaining consistent. In other studies, participants were asked questions about what made them feel (un)safe in public washrooms. Moore and Breeze (2012) conducted a qualitative research study and found that bathroom users felt most safe when doors were lockable, when stalls reached the floor, and when they were not being watched. The overarching theme was privacy and a vulnerability about potentially becoming a victim of assault. For example, men felt threatened when they were being watched in the bathroom. Increased privacy was recommended as a way to combat this feeling. Regardless of the actual incident rate of assaults that ensued after being watched, the perception of risk was the strongest factor in the feeling of being safe. These findings indicate that by considering implementing particular design elements, there is potential to make public washrooms feel safer for all users. Throughout this review, it was noted that many studies which were executed with the hopes of impacting crime rates, actually resulted in stronger outcomes in public perceptions of safety than in the crime rates themselves.

It can often be fear of a perceived incident that makes us cautious of certain situations. This can occur especially when there is a position of vulnerability and when children are present, as can be the case in public toilets and spaces near parks and recreational areas. This perception of fear of crimes and violence in public spaces is often higher than the actual occurrence of an incident (Foster et al., 2015). This fear of crime can also be identified as part of a personal narration about what parts of the city are perceived as safe and who are deemed as safe within those spaces (Fanghanel, 2016). The notions of safe and unsafe spaces can often be informed by social location and the neo-liberal values of our society, which dictate how women should feel afraid and vulnerable, and how certain places are unsafe for people with race and class privileges (Fanghanel, 2016). Interestingly, studies reveal that groups most likely to fear crime in public spaces are often the least victimized, and that actions can be taken to mitigate apprehension of public spaces (Branas et al., 2018; Maruthaveeran & Konijnendijk van den Bosch, 2013).

**Public Toilet Discrimination.** There is ample research on all the problematic ways washroom design facilitates discrimination against citizens and acts as a ‘breeding ground’ for crime and harassment. At the same time, there is also research detailing the various ways these harmful effects are being addressed. Most studies that have been reviewed address crime in washrooms from the public’s point of view as users, residents, and victims of discrimination. Subsequently, as an attempt to remedy the excessive need for additional public washrooms, associated stigma, and the inadequate state of facilities, several Canadian cities have completed pilot projects to test and evaluate a variety of strategies (The City of Calgary, 2008). Programs have included increased police presence, automated toilets, portable toilets, extended hours for public washrooms (The City of Calgary, 2008), greening of vacant lots (Branas et al., 2018), and an examination of personal fear-provoking factors (Maruthaveeran & Konijnendijk van den Bosch, 2013).

Safety concerns within public spaces such as washrooms have been shown to impact many different demographics, specifically LGBTQ2S+ and gender diverse people. These groups are disproportionately affected by not only the limited access to inclusive public washrooms, but

also, the lack of specific gender-neutral spaces that are both available and implemented in non-

stigmatizing ways. The lack of safe spaces spans from public community areas to more privatized areas such as businesses and restaurants. Despite research demonstrating that

positive experiences for youth involve gender-neutral or single stall bathrooms (Porta et al.,

2017), a focus on sex-segregated spaces has instead led to “gender panic”, limiting the voice

and power of gender-diverse people to create change (Hasenbush, Flores, & Herman, 2019).

Consequently, this has resulted in an increase in negative, unsafe, and frightening experiences

in public washrooms.

 In relation to perceived fear, “Public urination and public defecation does [sic] not

happen because people are deviant, it happens because there is a lack of true public washrooms”

(Korbynn et al., 2018, p. 22). However, many people believe that there is a causal relationship

between public urban spaces and deviance. This is based on fear of crime in the physical and

social environment. The common message is that without addressing social issues, crime and

deviance will never change. Chellew (2019) explained that “without attention to social factors,

architectural strategies alone are not sufficient for preventing crime” (p. 24). Furthermore,

“community cohesion [is] a more effective solution for improving order in urban neighborhoods

and preventing violence in place of policing and crime containment strategies” (Walker &

Schuurman, 2015, p. 615). Finally, approaches that address social factors such as socioeconomic

disadvantage, inequality, and marginalization would prove a more effective solution to

criminogenic behavior (Lorenc et al., 2013).

This background literature review has summarized the important work that has already been completed regarding safety and perceptions of safety in public washrooms. This review has also demonstrated interventions that could be implemented to potentially increase feelings of safety in public washrooms. However, this background review has identified a lack of

formalized best practice guidelines that identify specific, affordable, and achievable strategies

that can be standardized throughout the city of Ottawa in order to ensure clear and consistent safe

public bathroom designs. Best practice guidelines that clearly articulate the components

necessary for designing and maintaining safe public bathrooms have the potential to increase

feelings of security amongst facility users and promote public bathroom use throughout the city

of Ottawa.

**Methodology**

 The research team addressed the public toilet concern by examining safe urban design best practices employed by other Canadian cities. This was achieved by using an explanatory sequential mixed method design. The research team first extracted quantitative data via a scoping review of pertinent literature to determine key design elements that ensure safe public toilets. A scoping review was completed that involved the appraisal of existing research to help identify design solutions that have already been studied. In addition, the review examined prevailing deterrents to existing public toilets. Subsequently, phone interviews were conducted with researchers involved in previous relevant Canadian studies involving safe public toilet design. The research team used a narrative approach to analyze qualitative data regarding the design elements that were found to be safe and effective, as well as the design elements that were less effective.

McAlpine (2016) described narrative analysis as an “interpretive approach” that “involves telling stories, recounting – accounting for – how individuals make sense of events and actions in their lives with themselves as the agents of their lives” (p. 34). Narrative analysis was chosen for the qualitative portion of this study because it facilitates further exploration into the discourse of public toilet usage and unpacks experiences told through narratives recorded by the researchers from previous public toilet design studies. The data collected through the narrative interviews with the researchers from the previous studies will be used to inform recommendations for best practices of the safe design of public toilets in Ottawa, Ontario, Canada.

Phase one of this study involved a scoping review to help researchers identify key trends within the literature that address the safe design of public toilets. Phase two entailed the development of open-ended questions for semi-structured phone interviews, using the trends identified in the scoping review. Unlike the scoping review, the phone interviews allowed for explanation, details, and perceptions. Limitations to this study design include “lengthy time and feasibility of resources to collect and analyze both types of data” (Ivankova, Creswell, & Stick, 2006, p. 5). This design is well-suited for studies with limited resources; furthermore, as this design employs phases, a single researcher or small team could conduct the research at a slower pace (Creswell & Plano Clark, 2018). Finally, this approach facilitated a more complete picture of what the current deterrents are for public toilet use, which informed what recommendations the GottaGo! team can suggest to City officials regarding public toilet safe design best practices.

**Methods**

**Scoping Review.** This scoping review was conducted by three researchers using the Arksey and O'Malley framework. Three independent researchers conducted a grey literature search of twelve databases to find reports that identify safe urban design practices for public toilets. Additionally, the research team worked collaborative with a Carleton University social work librarian to run a comprehensive search, drawing on a collated list of search terms which could be used in three academic database searches for literature falling within the same scope. All articles that met the inclusion criteria were uploaded for analysis and coding through NVivo.

***Inclusion Criteria*.** The studies included within this review specifically explored dynamics regarding safe design elements for public toilets. The search included both academic and grey literature, focused solely on studies conducted in Canada, and were written in English. Given variation around how terms are used in the literature, we specifically worked with the following definition of ‘public toilet’, conceptualized as a facility that is permanent or semi-permanent and available for a set period during the day, located within a public facility or on public property, and free to access.

***Exclusion Criteria*.** The exclusionary criteria for this scoping review included studies that are not written in English, as well as any books or abstracts. To keep things relevant, studies which occurred prior to the year 2000 were also excluded. Consistent with the GottaGo! conceptualization of public spaces and toilets, studies located in businesses and other private locations were also excluded.

***Search Strategy*.** This search included the following twelve grey literature databases: Gerstein Science Information Centre, Health Canada, Google, Carleton Curve, Open Grey, OAIster, NLM Bookshelf, City of Vancouver, City of Toronto, City of Ottawa, City of Winnipeg, Scopus. Academic databases included Google Scholar, Summons (Carleton University database), and PubMed. All identified databases were examined using the following search terms: public\*, washroom\*, toilet\*, restroom\*, bathroom\* which were used in conjunction with safety\*, design\*, urban design\*, crime\*, and initiative\*. A review of the full text of each article was then completed, as well as a back-and-forth tracking procedure based on the sources for each respective article. As a few discrepancies occured at this point in the search process, the incongruities were discussed with the remaining researchers and a consensus was reached.

**Phone Interview of Professionals.** The phone interviews conducted, inquired in to the specific findings and constraints relative to the safe design of public toilets. Question topics included: the number of individuals involved in their project and their professional experience, safe design recommendations, proposal tools for legislators at the municipal, provincial, and federal levels, consultations with community, as well as barriers faced throughout previous projects and programs. The interview questions were distributed to the research participants via email along with a short letter informing them of the study and their potential role in it. In the interview phase, voice data was recorded, and additional notes were taken as the researcher and participant(s) moved through the interview questions. In the post-interview phase, data was securely stored, coded, and prepared for analysis.

***Semi-Structured Interview*.** The three participants interviewed consisted of various researchers throughout Canada involved in similar projects to the Gotta Go! research initiatives.The research team conducted semi-structured interviews to ensure direction and flexibility of the interview process. Semi-structured interviews ensured questions were prepared ahead of time, while providing the participant(s) with the opportunity to express their views on their own terms. The semi-structured interview guide comprised of open-ended questions that followed a common topical trajectory in the conversation to ensure comparable and reliable qualitative data.

***Inclusion Criteria.*** Those Canadian researchers engaged in previous research or project development related to the GottaGo! campaign’s initiative. Potential participants could come from the following projects or research: ArtStall Toronto; Places to Go - Winnipeg; The Open Washroom Program - Vancouver; Winnipeg Pop-up Campaign; and Public Toilets in the Centre City - Calgary. Other studies or projects identified during the scoping review could have been included if they met the inclusion criteria. Related projects must have addressed safe design practices for public toilets and have been conducted or implemented in Canada.

***Exclusion Criteria.*** Children under the age of eighteen were excluded from this research, as well as studies or projects conducted outside of Canada. In line with the scoping review, projects conducted before the year 2000 were also excluded from this research. Additionally, because the proposed study does not include approval from a Research Ethics Board (REB), community members were excluded from participating in the interview process.

***Interview Limitations.*** Phone interviews increased outreach to individuals who are geographically inaccessible while ensuring cost efficiency by avoiding travel fees. Despite overall convenience and timeliness, there were many limitations and shortcomings found through the conduction of phone interviews. Phone interviews could have resulted in less meaningful interactions, as the interviewer cannot grasp non-verbal cues and overall body language that “can indicate one’s thoughts and feelings which contribute to the richness of the data collected” (Cachia & Millward, 2011, p.272). Biases may have also arisen regarding the process of public toilet reformation. These biases are dependent on the participants’ experience with the process - whether they are successes or tensions - and are shaped by the context of the city’s social structures and political system they had to navigate. There was also a risk that information gathered from the interviews could explore processes and procedures that strictly pertain to that designated geographic area. Due to the population being interviewed, a major limitation to this research design is the exclusion of perspectives and contributions from marginalized and oppressed populations. This exclusion disregards the lived experiences and statements of the individuals that we aspire to support through the creation of safe and accessible public bathrooms.

**Part B**

**Findings**

**Cost.** Results related to costs are summarized in *Table 1* below.

**Estimated Cost of Various Public Toilet Designs**

Artstall Project, Toronto

(Rowan & Hilbrecht, 2016)

$90-110,000 capital costs

$16,000 - annual maintenance cost

Pee Planters

(Korbynn et al., 2018)

$1,600 capital costs for **80 units**

$39,950 - annual maintenance cost

VanPee Initiative

(Korbynn et al., 2018)

$50 monthly tax credit for businesses to participate

$50 monthly fee for business that do not participate

\*potential to have neutral cost

Attended Washrooms

(Korbynn et al., 2018)

$2.4 million capital costs for **8 units**

$911, 040 - annual maintenance costs (plus supplies)

Automated Public Toilets (APT)

(City of Winnipeg, 2010)

$250,000 capital costs

$205 – daily costs/unit

$74,825 – annual cost

$2,500 - maintenance

Portable

(City of Winnipeg, 2010)

$1,200 capital costs

$405 – daily costs/unit

$70,200 – annual cost

$500 – maintenance

KROS Urinal

(City of Winnipeg, 2010)

$75,000 capital costs

$40 – daily costs/unit

$14,285 – annual cost

$1,000 - maintenance

*Table 1.*

**Crime.** Crime and fear of criminal activity in or around public toilets was highlighted in three of the thirteen articles in the scoping review. Sally Merry (as cited in Chellew, 2019) stated that a connection between poor public toilet design and crime can be made, however, a connection cannot be made between good public toilet design and a lack of criminal activity. The location of public toilets as well as signs of orderly misconduct were indicators of potential increased criminal activity.

 Braverman (2010) projected that Automated Public Toilets (APT) can promote the appropriate use of public facilities by immediately eliminating graffiti and any facilities that are seriously damaged, soiled, and possess a strong odour. Braverman (2010) speculated that these indicators signify the presence of orderly misconduct has occurred in or around the facility, which could decrease the likelihood of future use (Braverman, 2010).

 Members of vulnerable populations, such as women, children, and gender fluid individuals can be particularly impacted by safety concerns surrounding public toilets (McMurty, 2012). Public toilets are often located down long poorly-lit corridors or spaces that are out of the public’s view, which can increase fears of violence. Similarly, urinals located in men’s bathrooms are often placed with the person’s back facing the entrance, which can create a position of vulnerability for the user (McMurty, 2012).

**Dignity.** The impact of public toilets on the dignity of individuals was identified within two interviews and within three articles in the scoping review. The most significant overarching message centered around providing safe, accessible, and private public toilets that preserves an individual’s dignity as a basic human right because the need relieve oneself is a need that crosscuts all human classes (C. Mills, personal communication, March 16, 2020; C. Rowan & C. Hilbercht, personal communication, March 13, 2020; Korbynn et al., 2018; & Washington, 2014).

 C. Mills (personal communication, March 16, 2020) highlights the need to shift the perception of public urination away from criminalizing and scapegoating “nightclubbers and the homeless” and reframe it as a lack of basic resources. He further elaborates that based on the research conducted by his students, people who were forced to urinate in public felt their dignity and safety was deeply compromised. Korbynn et al., (2018) supports this view by adding that public toilets that are truly open to everyone at any time of day would remove the criminalization of people who are performing a basic bodily function but lack the appropriate facilities to do so.

 Gender is a theme that emerged within the context of dignity. Gendered public toilets create a barrier for many gender fluid folks to safely access public toilets in a dignified manner. Gendered public toilets have been identified as an area of potential

 harassment and violence, which further compromises their dignity, safety, and privacy (Solomon, 2013).

**Gender/Sex Segregation**. Issues surrounding gendered public toilets was present in eight of the thirteen articles and was primarily centered around populations that are vulnerable in and around public toilets such as women and gender fluid individuals. Much of the literature addresses gendered toilets as a barrier to non-binary populations as there have been reports of negative experiences in public toilets (Cavanagh, 2011; Faktor, 2011; McMurty, 2012; Porta et al., 2017; Solomon, 2013). It was widely identified that non-gender-neutral toilets create potential hostile and unsafe environments where gender fluid individuals can become targets for violence, hostilities, discomfort, and scary situations (Cavanagh, 2011; Faktor, 2011; Porta et al., 2017).

 Women were identified as a specific population that lack safe and accessible public toilets (Faktor, 2011; McMurty, 2012; Solomon, 2013). Women are also at a higher risk for urinary tract infections and other medical conditions related to urine retention or obstructing urine flow due to ‘hovering’ over a contaminated toilet seat (Solomon 2013).

 Overall, the eight articles concluded that one-person use, gender-neutral public toilets would be an inclusive and accommodating solution for all members of society. Gender neutral toilets also eliminate instances where parents and caregivers were forced to provide care in a public toilet that is opposite to that of the dependent, such as a mother needing to bring her son into a woman’s public toilet (McMurty, 2012).

**Hygiene.** Hygiene and overall cleanliness of public toilets is a theme that has been identified throughout five of the thirteen articles selected for the GottaGo! scoping review. Braverman (2010) indicates the uncleanliness of a public toilet acts as an indication of the ‘publicness’ of the facility and reminds users of the separation from their own private space. Therefore, the cleanliness of a public toilet promotes feelings of comfort, which leads to increased usage (Braverman, 2010).

 The overall cleanliness of a public toilet is a major factor in ensuring the health of citizens (Faktor, 2011). The fear of unhygienic public toilets can affect one’s desire to go out and can lead to greater instances of “social isolation, loneliness, and depression” (Solomon, 2013, as cited in Bodden, 2012, n.p.), especially among the older populations. Solomon (2013) indicates that women may avoid direct contact with a contaminated toilet seat, subsequently not effectively emptying the bladder, which could have potential medical implications such as cystitis and other urinary tract infections. Korbynn et al., (2018) highlighted a lack of public toilets led to a Hepatitis A outbreak in 2017 amongst the vulnerably housed population in San Francisco because without hygienic facilities the disease spread easily via contact with bodily fluids.

 In terms of specific design elements, Braverman (2010) identified automated faucets and hand dryers as the number one solution to preventing the spread of infectious diseases in public toilets. Certain automated faucets also have a fifteen second water sensor to promote proper hand washing techniques (Braverman, 2010). The placement of sinks and garbage containers in a space that is separate from the toilets can also curb the spread of infectious diseases (McMurty, 2012).

**Location.** The proper location of public toilets was addressed in four articles within this scoping review. The main findings indicated that successful public toilet installation is most effective in high-traffic areas, not only for easy access but also for increased public visibility and surveillance (Solomom, 2013; Washington, 2014; City of Winnipeg, 2010). Washington (2014) puts forth specific recommendations based on their findings that public toilets should be available within four blocks and no more than 1,000 feet from major transit junctions. In addition, providing safe and accessible public toilets will improve pedestrian experience and increase people’s usage of public transit (Washington, 2014; C. Rowan & C. Hilbrecht, personal communication, March 13, 2020).

 The City of Winnipeg (2010) compiled a comprehensive list based on their data from numerous Canadian cities’ successful implementation of public toilets.

*City of Winnipeg (2010)*

**Safety.** Safety was a theme that emerged throughout five of the thirteen articles in the scoping review and ranged from fall prevention to decreasing opportunities for violent attacks. One suggestion put forth was to install louvred grating along the top and bottom of the bathroom walls, which would provide privacy but also provide a means of monitoring bathroom occupants and activities prior to entering it (Rowan & Hilbrecht, 2016). The installation of hand rails, grab bars, and consistent architectural dimensions will also improve the overall safety of public toilets by decreasing the risk of falls and other physical injuries (Edwards, Chauvin, & Blanchet, 2019).

 Safety is also examined through a gender lens and Overall (2007) states that sex-segregated public toilets may actually increase the risk for violence against vulnerable populations, such as women and children, as these facilities are often separated and isolated from public view. Porta et al., (2017) highlights the importance of gender-neutral bathrooms emphasized by the youth participants in their study, particularly within a school setting and that non-gender-neutral bathrooms are often areas of negative experiences ranging from discomfort (awkwardness, misunderstanding) to overt threats, harassment, and violence.

**Stigma.** This theme was underlined during the two interviews conducted with researchers. C. Rowan & C. Hilbrecht (personal communication, March 13, 2020) recognized that stigma still exists around “…public washrooms and who uses them and why and safety perceptions…” and how they wanted to collectively wanted to incorporate stigma into their Artstall project to proactively address it. C. Mills (personal communication, March 16, 2020) highlights how issues around public toilets do not only concern “nightclubbers and the homeless” but is in fact an issue that could impact everyone. Therefore, when proposing budgets for increased public toilets, it is beneficial to highlight that spending millions of dollars is a solution for a large portion of the population as opposed to viewing it as a solution for a small percentage of “nightclubbers and the homeless”.

**Suggestions.** There were several generalized suggestions for public toilet design throughout all thirteen articles included in this scoping review. Several suggestions were centered around the physical and architectural design of public toilets. C. Mills (personal communication, March 16, 2020) states that the design of public toilets needs to be incorporated into the basic plan of any urban design. McMurty (2012) adds that public toilets are an integral part of the city’s architecture and must reflect the overall urban environment. McMurty (2012) also proposes that toilet stalls are built too small creating a physical barrier for many people and increase the risk for the transfer of harmful bacteria. In order to prohibit bacterial transmission, stall doors should open outwards and stall dimensions should be a minimum of 3’8” X 6’9” in order to avoid contact with the stall surfaces (McMurty, 2010). Alternatively, urban design can also be used to create barriers to public toilets, permanent and temporary structures such as anti-homeless spikes, seasonal fences, and decorative planters, which should be taken into consideration when implementing public toilet designs (Chellew, 2019).

 Another significant conclusion centred around changing the discourse of public toilets and reframing the lack of safe and accessible toilets as a public health concern that affects everyone (C. Mills, personal communication, March 16, 2020; C. Rowan & C. Hilbrecht, personal communication, March 13, 2020). One way to change this discourse is by creating a narrative around this essential infrastructure and relaying an empathetic link of powerful stories of different people’s experiences around the city (C. Rowan & C. Hilbrecht, personal communication, March 13, 2020).

 Finally, engaging with a political representative who can act as a project supporter, especially during the policy-making processes can help propel the argument further. For example, a city councillor who is invested in a public toilet initiative can be a valuable asset to moving the project forward. In addition, presenting the ideas in a highly visual, easy to understand way can allow potential supporters to have a clear and comprehensive understanding of the project’s purpose and outcomes (C. Rowan & C. Hilbrecht, personal communication, March 12, 2020). In addition, being able to highlight the successes of other cities and municipalities is another way to help visualize and promote a project’s potential for success (C. Rowan & C. Hilbrecht, personal communication, March 12, 2020). Solomon (2013) also articulates the importance of a collaborative planning process that incorporates public consultation and feedback, such as: community forums, public meetings, citizens’ panels, open houses, focus groups, in-depth interviews, and surveys.

**Initiatives (Child Node to ‘Suggestions’).** *Table 2* below summarizes the various initiatives that appeared in the literature related to public toilet design.

**Public Toilet Initiatives**

**Peeing in Peace**

**(Faktor, 2011)**

A public toilet resource guide identifying varying options such as: bigger buildings, gender inclusive.

**Safe2Pee**

**(Faktor, 2011)**

A website identifying all gender neutral or single-stall public toilets in all North American cities.

**ArtStall**

**(Rowan & Hilbrecht, 2016)**

Applying locally-designed artistic skins to the exterior of a Portland Loo using a percentage of funds from Toronto’s public art funds. This is an indestructible, easy to maintain, and low-cost solution to Toronto’s lack of public toilets.

**Vibrant Streets: Toronto’s Coordinated Street Furniture Program**

**(Solomon, 2013)**

A 2010 program to increase the accessibility, safety, and beauty of Toronto with street furniture such as transit shelters, benches, recycling bins, and up to 20 Automated Public Toilets (APT).

**Engage**

**(Solomon, 2013)**

The City of Calgary group who engage with community members such as residents, businesses, and community associations for input around issues such as public toilet installation.

**312 Main**

**(Korbynn et al., 2018)**

In the heart of Downtown East Side Vancouver is a community centre that offers free services for all community members: a kitchen, wi-fi, art studio, washrooms, showers, and changing areas.

**The Pee Planter**

**(Korbynn et al., 2018)**

A structure that is a flower planter on the outside but on the inside contains a compost bin and filtration system to easily eliminate human waste.

**VanPee Incentive Program**

**(Korbynn et al., 2018)**

An incentive program for businesses to open up their bathrooms to any member of the public, free of charge. Participating businesses display a sticker in the window and receive a monthly tax credit and facility cleaning support.

**Attended Washrooms**

**(Korbynn et al., 2018)**

24-hour attended public washrooms to increase availability and safety for more vulnerable populations.

**Away from Home Toilet Accessibility Guide**

**(McMurty, 2012)**

A guide that provides locations of public toilets that are aimed to be clean and safe for transit users.

**Portland Loo**

**(Washington, 2014)**

A low-cost durable public toilet, features include: graffiti proof coating, no running water or mirror, bars at the top and bottom, solar -powered, wheelchair and stroller accessible.

*Table 2.*

**Privacy.** C. Rowan & C. Hilbrecht (personal communication, March 13, 2020) stipulate that public toilets are meant to be private but not so private as to encourage a person to linger within them. One design example that illustrates this was from the City of Edmonton where the sinks were located in a glassed-in area, which provided privacy but did not completely isolate the facility from the street.

However, Braverman (2010) argues that although the twelve-inch space between the floor and stall partition is used to improve ventilation, it also acts to encroach on people’s privacy as well as to increase opportunities for surveillance, which could also increase the vulnerability of the user. Overall (2007) addresses privacy and sex-segregated public toilets and argues that privacy is not in fact compromised by the absence of sex segregation. Overall (2007) provides examples of toilet stalls that are completely enclosed, single-person use, and not sex segregated that provide optimal privacy such as those toilets found on trains and planes.

**Discussion and Limitations**

**Discussion**. The articles from the background literature acquiesced that accessible toilets were a matter of dignity and human right. Three articles within the scoping review and all three interviewees reflected that same sentiment impressing that everyone deserved human dignity and should have the right to clean, safe facilities (City of Winnipeg, 2010; Korbynn et al., 2018). Specifically, the authors from Artstall explained that their overarching vision for their project was driven by everyone “having access to a dignified place to relieve yourself . . . it is a human right” (C. Rowan & C. Hilbrecht, personal communication, March 13, 2020). However, the background literature also identified several barriers to accessing public toilets. These included the perception of safety in public toilets, how toilet design facilitated discrimination, how vulnerable communities were excluded and isolated, how a lack of cleanliness was a deterrent to use, and how public toilets were not prioritized by the municipal government and therefore, received no funding.

**Scoping review**. Within the 13 articles that were reviewed and coded some of these same barriers were observed. McMurty (2012) explained that “safety is an issue for all people in public toilets. . . . there are safety concerns with gender” (p. 64). He further linked safety and gender to location, by describing how public toilets were often hidden, covered by trees, and located in poorly lit areas, which put certain people at risk (McMurty). “One of the most important factors contributing to the success of any public restroom program is the strategic location of the facilities” (City of Winnipeg, 2010, p. 24). Additionally, Faktor (2011) explicated that safety is influenced by gender and design stating, “inefficient design, far from being simply an inconvenience, can actually be harmful” (p.4) and created “societally-imposed gender expectations” (p.4) for which toilet a person should occupy. By designing toilets that engage in gender labelling, the opportunity for social policing arises, resulting in unsafe and exclusive spaces (Faktor, 2011). Presumably, we can draw qualitative correlations between toilet design and safety, location, gender, and accessibility based on the scoping review.

Cleanliness was also identified as a significant barrier in the literature review as well as in the scoping review. The hygiene of a public toilet is a public health concern, as improper and infrequent cleaning can lead to the spread of communicable disease (Korbynn et al., 2018). Furthermore, a dirty public toilet acts as a barrier, resulting in social isolation for those who are considered more vulnerable (Solomon, 2013) because they cannot rely on the accessibility of a functional public toilet.

Public toilet design and location appear to be significant factors in the public’s perception of what is considered a safe toilet. Surprisingly several articles have shown, as Chellew (2019) explained, “without attention to social factors, architectural strategies alone are not sufficient for preventing crime” (p. 24). Furthermore, Chellew (2019) stated that attempts to control behaviour through environmental design elements are insufficient and exclusionary. Therefore, Chellew proposed that design alone would not create safety but that there was a greater need for societal and systemic change that would target socioeconomic disadvantage, inequalities, and marginalizations. Consequently, this should be a significant consideration within any public toilet proposal.

**Interviews**. A total of three authors were interviewed from two different projects, therefore limited comparative information is available. Interestingly, both projects were conducted by students and both with views to urban planning using a different lens. Rowan and Hilbrecht were Urban Design students from Toronto, who entered a contest in which they put forward a proposal for a place-making project dubbed *Artstall Toronto*. Their concept was to combine art and infrastructure to create “durable, accessible standardized toilets, that are also aesthetically pleasing, decorated in collaboration with local artists” (Rowan & Hilbrecht, 2016, p. 1). The concept was to use the *Portland Loo*, an already proven public toilet design that was indestructible, easy to maintain, environmentally sustainable, and low cost, and wrap it in artistic skins or structures created by local talent (C. Rowan & C. Hilbrecht, personal communication, March 13, 2020). Colin Mills was the geography professor who oversaw the students who conducted *Solving Public Urination: The Open Washroom Program* for his Applied Human Geography course. The project was in response to a “challenge” that was put forth by the City of Vancouver to come up with an innovative solution to public urination downtown (Korbynn et al., 2018). The students came up with three phases that addressed different needs and had different costs. The first phase was a temporary solution that catered to men only; the second phase involved community use of private toilets with business incentives; and the third phase involved gender neutral attended toilets that provided a safe place to pee that had been proven effective.

Both studies showed that not having a place to pee affected everyone but especially those community members who were more vulnerable. While both projects demonstrated that a lack of public washrooms was an issue that cost the cities money and had health and social implications, they also both identified funding and public perception as barriers to moving forward. Interestingly, all authors mentioned that if they could have done something differently within their projects, they would have engaged the community by reframing the issue as a public health issue (C. Mills, personal communication, March 16, 2020) and appealing to the masses by using narratives that most people could relate to (C. Rowan & C. Hilbrecht, personal communication, March 13, 2020). *Artstall* authors identified location as a barrier because infrastructure would be required or need to be modified to install the toilets on the streets. Moreover, the toilet installations may also be affected by existing street furniture, bike lanes, electrical conduits, and pedestrian use (C. Rowan & C. Hilbrecht, personal communication, March 13, 2020).

The authors of Artstall consciously chose the Portland Loo toilet design because it addressed all the community’s concerns about public toilets and was financially feasible. Considered an art instillation, the city could use the existing art budget to procure the toilets, creating a dual function and providing the much-needed public toilets. C. Rowan and C. Hilbrecht explained that they chose that structure because it provided safety and privacy at the same time. There were slats in the top and bottom so that the public was able to see that it was occupied and how many were in the toilet but could not see them on the toilet. This design was accessible to all and was gender neutral. It had a small footprint and was solar powered. The LED lighting was dim enough to provide privacy but light enough to deter any danger. The structure was indestructible and could easily be washed by hosing it down (personal communication, March 13, 2020).

Notably, it appeared the authors of both projects encountered, within their research, similar barriers (safety, perception, gender inclusivity, accessibility, cleanliness) to what was observed by the GottaGo! research team during the background literature review and the scoping review. Ultimately, both projects approached the barriers in different ways, while being conscientious of the budget.

The lack of safe, accessible public toilets would not, at first thought, appear to be a social work issue. However, when public toilet use becomes a privileged commodity accessible only by the few, the ramifications for all other individuals include social isolation, health concerns, and public safety matters. This study purports that all individuals should have the right to accessible safe public toilets. Numerous studies conducted in various cities have proposed a variety of solutions for effective public toilets within urban centres. Additionally, the literature consistently denotes that accessible safe public toilets will actually decrease the overall cost of keeping urban centres clean, boost the economy for urban businesses and tourism by increasing accessibility in the downtown core, and may increase the overall health of individuals by decreasing the isolation and giving them back their dignity. Social workers can advocate for change within the municipal government, bring awareness to this cause by appealing to the masses, suggest fundraising platforms, and conduct more research on sustainable public toilets. Social workers can be instrumental in bringing awareness that this is an issue that will affect all people at some point in their lives.

**Limitations**. Despite reaching out to eight authors from seven articles, the team was only able to contact three authors; however, the information we gained from those three authors was invaluable. The scoping review also consisted of a smaller sample size of 13 articles. The team deemed it important to adhere closely to the inclusion criteria which limited the scope of available literature. This speaks to the need for more research regarding the accessibility and availability of public toilets, specifically in Canada. Similarly, the articles that were included and reviewed provided very useful information that can be utilized by the GottaGo! campaign team. Due to limited time, the team was limited to conducting qualitative studies; however, two separate methods, a scoping review and individual author interviews, were utilized to support the validity of the findings.

**Recommendations**

Up until this point, we have been conducting research on all aspects of public toilet design. Through research conducted on an international scale, we considered safety, crime rates, public perception, location, design, accessibility, signage, cost, and more. Over the past few months, we narrowed our focus to exclusively design features, and conducted research to understand what other Canadian cities have done to address their public toilet problems through design. We conducted this research with hopes of drawing conclusions towards ‘best practices’ as well as some concrete steps GottaGo! can take to work towards public toilet justice and equity. Our research took an interesting and elightenning turn, which allowed us to re-frame the problem and re-consider if addressing design was the best method to addressing the broader picture of public toilets. However, we were disappointed to draw the conclusion that there is not one feasible best practice for public toilet justice. With all that being said, in consideration of the research team’s literature review as well as the emerging data from our research study, a few recommendations will be proposed. In order to maintain a structural lens throughout all of our work, the recommendations will be expressed in consideration of structural systems.

**Microsystemic Recommendation*.*** Microsystems involve the day to day interactions we encounter, the direct environments we find ourselves in, and the most basic human to human interactions. Within this system, recommendations for better toilet public design involve awareness building, de-stigmatizing, and advocating.

Building awareness around public toilet injustice can take many forms. This could involve installing posters, sharing information through social media, and of course, having conversations with others and educating them on the realities around public toilets.

As stigma can be hurtful and damaging to those it offends, and considering its role as a barrier towards increased funding for public toilets, it is important to address. Stigmas around who uses public toilets and how we can improve their conditions can be broken through education. Similarly to our first point, having conversations and correcting the misinformed folks we encounter can make a large different. The more people that become passionate about improving public toilet conditions, the louder our voice will be.

In terms of advocacy, on a microsystems level, this can entail collaboration with local businesses. It could be very impactful to encourage businesses to make little changes, such as increased signage and accessibility.

**Mezzosystemic Recommendation*.*** Mezzosystems fall inbetween those intimate microsystems and the larger macrolevel systems; this involves bussinesses, community groups, schools, etc. Initiatives that could improve public toilets on this systemic level might involve a project similar to that of Carolyn and Chris’ ArtStall submission. In addition, connecting community groups with education systems, similar to Carleton University and the GottaGo! team’s partnership, could be beneficial to the pool of existing research. In addition, ensuring a voice is being heard at town hall meetings and collaborating with app-developers trying to identify public toilets are all effective mezzo-level iniatives that would improve public toilet conditions. They may not all be related to improving design in particular, but they all work towards public toilet justice.

These initiatives will all increase the awareness around the problems surrounding public toilets. If it wasn’t for GottaGo!, this research team would never have fully understood the depths of the problems and the impacts poor public toilets can have. All efforts, big and small, can contribute to improved conditions for toilet users.

**Macrosystemic Recommendation*.*** Lastly, on a macro level, our research team has uncovered a recurring sentiment that the issues around public toilets need to be re-framed as a public health issue. One of the largest barriers to the implementation of public toilets is the lack of funding available. Funding won’t be given to a cause that is surrounded by so much stigma, misunderstanding, and a general public perception of blame-placing on homeless individuals, or drug users mis-using toilets. Therefore, unless the issue is re-framed as an issue of limited access and insufficient facility, an issue that impacts the general public’s health, it will be difficult to receive funding for the cause.

**Conclusion**

The research question put forth by the research team to guide this project is to explore how North American cities have approached urban design as a means to develop safe public toilets. Despite the aforementioned limitations to the study, the researchers can conclude that design appears to be an influential factor in the perceived safety, accessibility, and usability of public toilets. Specifically, the design, location, and funding for public toilets has many issues that pertain to the unique characteristics of each city, including: population demographics, overall urban environment, and commercial surroundings. This makes creating an overarching best practice guideline applicable to the City of Ottawa especially challenging. However, location and funding seem to be significant variables affecting the success in advocating for more public toilets. Numerous specific recommendations have been put forth in pervious sections, however, the fundamental conclusion is that solutions need to be addressed within all levels of a city’s ecosystem (micro, mezzo, and macro levels).

All these variables appear to be interrelated resulting in multiple barriers. Effective design will address most of these concerns; however, there ultimately needs to be buy-in from the community and city stakeholders. Despite various affordable design proposals for public toilets that have been proven effective in urban centers, most Canadian cities are unwilling to make an investment in public toilets. What is needed most is a great design proposal along with a narrative that users and stakeholders can relate to, as suggested by Mills, Rowan, and Hilbrecht (personal communication, March 13, 2020). One of the most significant aspects to emerge from the data collected in this study, which is applicable across all cities, is that safe accessible public toilets is a fundamental human right. Public toilets cross all populations regardless of class, race, ability, and gender identity and must be regarded as an essential component of providing human dignity to all people.

Although this research project encountered many obstacles and challenges it has been a privileged journey into a topic that may not get as much municipal, provincial, and national attention as is deserved. As this project has concluded, there are several affordable, safe, accessible, and realistic solutions to the debate surrounding public toilets within the city of Ottawa. That being said, the discourse around this debate needs to be reframed as not solely a commodity for the privileged nor a haven for the disorderly conducts of the vulnerably housed or substance consuming population. This is instead a concern that surrounds all humanity and influences our values and attitudes around basic human dignity, human rights, and public health.

**Appendix A**

The tablebelow outlines the various databases Carleton’s Librarian Margaret McLeod included in her initial search, the search terms utilized and the results she received that she deemed as relevant. In addition to these search terms, she only considered results published in 2000 or later.

**Database**

**Search Terms Used**

**Margaret’s Number of Relevant Results**

Canadian Business and Current Affairs

Canad\* AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*)

139

PsycInfo

Canad\* AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*)

67

Criminal Justice Abstracts

Canad\* AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*) AND (safety OR crime)

10

Social Work Abstracts

Canad\* AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*)

0

Social Service Abstracts

Canad\* AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*)

12

Sociological Abstracts

Canad\* AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*)

17

Gale Databases

Canad\* AND public AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*) AND access

3,802

Taylor and Francis Journals Online

Canad\* AND public AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*) AND access

5,438

Sage Journals

Canad\* AND public AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*) AND access

4,390

CINAHL

Canad\* AND public AND (toilet\* OR washroom\* OR bathroom\* OR restroom\*)

8

**Appendix B**

The tablebelow outlines the breakdown of articles received and reviewed.

TOTAL ARTICLES REVIEWED IN SCOPING REVIEW

325

ARTICLES USED FOR INTERVIEW BUT NOT INCLUDED IN LIT SEARCH

7

COMBINED TOTAL OF LITERATURE REVIEWED

**332**

**TOTAL INCLUDED WITH PREVIOUS ARTICLES**

13

TOTAL EXCLUDED

294

TOTAL OF DUPLICATES

25

TOTAL OF COMBINED LITERATURE MINUS THE DUPLICATES

**307**

**Appendix C**

The research team came up with the nodes seen in the table belowafter a thorough analysis of the literature*.*

**Parent Nodes**

**Definition**

Suggestions

Ideas on how to combat issues related to toilet access/equality

Initiatives (child node)

Actual movements or programs/plans in place to work towards toilet justice

Cleanliness

Discussion around hygiene and physical state of a washroom

Cost

Price or sum of money related to upkeep or creation of toilet

Crime

Criminal activity in or around public toilet

Dignity

It inflicts on people’s dignity and to make them go in public because they do not have a home or other place to go

Gender Issues

In relation to the discrimination one faces because of their gender identity

Lighting

Physical brightness (inside or out) as a design element impacting people’s experiences in the public toilet

Location

Best locations for implementing public washrooms

Safety

Amount of privacy toilet users have which impacts their experience and feelings of safety

**Appendix D**

Carleton University

                 1125 Colonel By Dr

Ottawa, ON K1S 5B6

Monday March 9th, 2020

Dear: [ insert name ],

This letter is an invitation to consider participating in a study being conducted through the Master’s degree program in the Department of Social Work at Carleton University. We, Katrina Mallette, Jennifer Luchuk and Melanie Fingold, are the lead research students conducting the project under the supervision of Pam Grassau. We would like to take this opportunity to provide you with more information about this project and what your involvement would entail, should you decide to take part.

The Ottawa GottaGo! campaign is a group of engaged citizens who collectively recognize the need for a network of free, public, open, accessible toilets throughout Ottawa. The GottaGo! Team is collaborating on a research study with Carleton University to further investigate the issues regarding safe public toilet design. The purpose of this study is to determine how we can make public toilets feel safer and be more appealing through design. We strongly believe this insight will greatly inform the future design of public toilets throughout Ottawa. We believe that your respected insight, previous experience, and knowledge would be a valuable contribution to our research data.

Participation in this study is voluntary. It will involve a telephone interview of approximately 30 minutes in length to take place at a mutually agreed upon time and location.  You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researchers. With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Once transcribed, you will have the opportunity to review the transcript for accuracy. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained for approximately three to four months in our supervisor’s locked office. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

For all other questions or if you would like additional information to assist you in reaching a decision about participation, please contact us at KatrinaMallette@cmail.carleton.ca, MelanieFingold@cmail.carleton.ca or JenniferLuchuk@cmail.carleton.ca or by telephone at 613-520-2600 Ext: 6008.  You can also contact our supervisor, Professor Pam Grassau at Pamela.grassau@carleton.ca.

We hope the results of our study will be of benefit to the GottaGo! Campaign, the residents and occupants of Ottawa, as well as the broader research community.

We very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Katrina Mallette, Melanie Fingold and Jennifer Luchuk

**Appendix E**

**Topic**

**Guiding Questions**

**Possible Follow-Up Questions**

General Inquiry

Tell us about the public toilet reform campaign you are/were a part of and its associated research project.

What was/is the overarching vision of the campaign?

What was the research question that guided your project?

Who are the interest groups you are aiming to serve?

Personal Contribution

What was your role(s) in the campaign?

Do you have previous experience working around safe urban design/public toilets?

What prompted you to get involved with this area of research?

The Campaign

Tell us about the individuals you worked with in your respective research initiative.

Who was involved within this multidisciplinary team and what prior experience/background are they coming from?

Were outside members consulted? (politicians, stakeholders, community members, urban designers, members of marginalized communities)

Public Perception

Tell us about the general perception of public toilets in your respective area at the start of the project.

What methods were employed to generate and determine these perceptions?

How did these perceptions deviate between community members and legislators?

How did you navigate these tensions?

Project Development

What were the initiatives employed to promote and ensure the successful implementation of your research design/program?

How did you address the stigmas associated with public toilets?

Who was consulted to determine what constitutes a “safe” public toilet?

Who were the stakeholders involved, and what were the tools used to promote your project?

Are there any design elements that you found received positive feedback?

Barriers

What were some of the major barriers you faced in implementing the project?

Would you have done anything differently?

Were there any unexpected outcomes?

If not already identified: Did you face any financial barriers?

If not already identified: Crime has been recognized in research as a large deterrent for installing public washrooms, was this issue brought up?

Were there any city bi-laws that shaped and potentially inhibited your project development?

Successes

What were some of the successes you experienced throughout your research project?

Were there any unexpected successes/gains?

What strategies did you find worked well? And why?

Recommendation/insights

Based on your experience with this project, do you have any recommendations/insights as we move forward with our research?

**Appendix F**

Our research team has had a collaborate work ethic throughout this entire process. We all feel a sense of gratitude for each other’s identified strengths and weaknesses, and our ability to support each other. In special consideration of the tragic COVID-19 pandemic we are facing, we are proud at how well we adapted to the change of pace and unprecedented circumstances.

Our strategy remained the same throughout the semester. Different topics and issues had different leaders heading the communication around those issues. We managed to maintain in constant communication through text, and ensured we were all up to date on the various meetings and interviews. When family issues or unexpected emergencies arose, we made sure to quickly re-balance the workload to accommodate that person. We became a well-oiled machine.

  Writing a report with three voices that reads as a singular voice is a difficult task, but we delegated the work in a way that allowed the process to remain as simple as possible. We used our class time to work on our “critical path”, ensuring we were always on the same page and working on the most pressing tasks. Apart from one another, we worked on our own portions of the report and collaborated through messaging when conflicts arose. This teamwork experience was incredibly enlightening for us.

 Upon reflection of the previous year we had together, we have learned a lot about teamwork, collaboration and group dynamics. Regardless of the massive learnings we gained around public toilets and the implications on toilet users, we learned that teamwork alone has major implications for social work practice. When folks are able to communicate, there is big strength in numbers. Regarding public toilets, the learning we are taking away is a list too long to address. Regarding social work implications in particular, our eyes have been opened around how important (and relevant) public toilets are for our clients. Anyone with physical limitations, bowel irregularities, visual impairments, gender fluidity, and more, will encounter discrimination trying to access a bathroom. This is an experience that must be validated, and a factor that must be considered when facilitating any type of group outing or public meetup. We have no doubts that the learning we had this term will stay with us for a long time, as will our drive to fight for public toilet justice.

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