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Abstract

Cities are facing growing uncertainties on how public spaces should be designed, particularly because traditional urban planning and stakeholder engagement methods are no longer sufficient in addressing the complex needs of an increasingly diverse citizenry. This study explores a new public engagement method called Foresight Walks, which aims at realizing the considerations of complex multi-stakeholder groups through immersive, audio walking tours that take participants through alternative futures of public spaces. Foresight Walks integrate and address gaps within the practices of walking, experiential foresight, and speculative design. The method was prototyped in a case study on the futures of suburban shopping malls. Insights were gathered on how walking through physical environments, while listening to a story from the future can help create the perceptual bridge for experiential foresight practices to better encourage visioning and critique of the futures of public spaces. Learnings gathered bring value to the realms of stakeholder engagement, foresight practice, and design research.

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Introduction & Background

Public spaces in cities are a wonder for our senses. Stand on any busy street corner in any large urban centre, and you will begin to notice all of the sensory details in that environment. The textures of the street, the sheen of buildings, the indistinct chatter of people passing you by, the sharp smells around you – they are all elements that have been built into our immediate surroundings. With a closer look you will begin to see the invisible lines that further define the space. Look even closer, and you will start to recognize the systems that underlie and support these special jurisdictions – whether it be sensory experiences, the socio-economic differences between people, the unique culture of neighbourhoods, the history behind the buildings, and even the different possible futures public spaces could explore.

1.1 The experience of walking

Creating a sense of place, however, goes beyond the relationship between the design of built environments and one's sensory experiences (the space, the light, the repeated architectural elements), but also between the environment, sensory experiences and the way one moves through the space (Degen & Rose, 2010). By moving through the space, people get to shape the sensory experiences they gather into experiences of meaning that define the space. No form of movement does this better than walking. Walking is an engaged way of experiencing and interacting with the physical and social forms of a neighborhood, through which individuals can react to density, connectivity, and mixed uses; it is a key process through which the values inhering in these urbane qualities can be enacted (Knudsen & Clark, 2013).

Walking allows for the physical aspects of a space to be better understood as one does not perceive things from fixed points, but instead "by walking around them" (Ingold, 2004). While walking around objects, we understand their depth, size, scale, and function. Hence, the act of walking is "a way of circumambulatory knowing" (Ingold, 2004). In addition to walking around objects, one also unavoidably touches and feels the environment with the entire body. A notion of place is acquired through the participatory attribute of the haptic sense (Matos, 2008).

Experiencing physical sensory elements is only one component contributing to one's sense of place as people and the social landscape they exist in are also a part of that equation. If we do not encounter the struggles and experiences of others, we run the risk of stunting our understanding of our environment, the people in it and ourselves (McFarland, 2015). These encounters are only made possible if one is bodily present in that space: conversing, sitting, observing, standing, and walking through that space (Kohn, 2004). Walking helps establish a sense of place as walking also lets one engage with the rules of that space. Writer, Rebecca Solnit, states that exercise of democracy begins as exercise, as walking around, becoming familiar with the streets, becominging comfortable with strangers, and being able to imagine your own body as powerful and expressive, rather than a pawn. People who are at home in their civic space preserve the power to protest and revolt, whereas those who have been sequestered into private space do not (Solnit, 2006).

To build on Solnit, Richard Sennett also proposes that the social heterogeneity of public urban spaces offers unpredictable encounters that are democratic and civilising (1990). This can be tied to the walkability of a city influencing the activity of social movements. In locales with more walking, there are higher incidences of social movement organizations with higher channels of connectivity to them (Knudsen & Clark, 2013).

Through walking, people put themselves in spaces that make them more open to active citizenship. In the space that walking creates, citizens can see the differences in society, the socio-economic factors that influence their urban experience, and the barriers and opportunities they have in engaging with them. Experiencing urban contexts through walking produces emboldened, empowered individuals, who can then be forces for change through innovative political forms like current-day social movement organizations (Knudsen & Clark, 2013).

1.2 Reimagining the world through walking

Situationists, the derive, and psychogeography

Explorations of movement, mobility, and its ability to connect people to the urban experience has a long history of practice. French situationists, also known as the Situationist International (SI), developed the concept of the "flâneur", an unwilling detective, stroller, and social observer, into that of the dérive (drift), which is an experimental mode of behaviour associated with the urban condition of life, leading to studying, examining, and constructing a new city life and landscape (Vachon, 2004). The act of dérive involves walking purposefully, with no set destination, to understand how urban city landscapes, architecture, spaces, and places affect emotions and behaviours of people living in the city. This helped develop a new approach to urban planning based on psychogeography to design more suitable and playful urban spaces for the future (Vachon, 2004).

Psychogeography was commonly regarded as an urban practice where the the individual and their experiences of the city are the main focus (Löffler, 2017). Psychogeography can be understood as a means of engaging with, and often attempting to map, the ambiance and 'softer' dimensions of the city (Middleton, 2010). In The Society of the Spectacle, Guy Debord claims that "secrets of the city are, at a certain level, decipherable. But the personal meaning they have for us is incommunicable" (Debord, 1992).

Walking, as they say, 'empties the mind'. In another way, walking fills the mind with a different sense of purpose. Not connected with ideas or doctrines, not in the sense of a head full of phrases, quotations, theories: but full of the world's presence. (Gros 2014, p. 97)



The purpose of psychogeography, therefore, is to take in the objective, material environment of the city and uncover from it subjective, hidden meanings of the city that vary from individual to individual (Löffler, 2017). What understandings of psychogeography and the dérive tend to neglect, however, is the specifically strategic dimension of these practices. Psychogeography for the SI was primarily not a passive aesthetic activity, as it was more so intended to be a strategic approach to understanding the forces shaping the city through a de-familiarization of everyday life and from those, finding points of intervention within it to open new political possibilities (Shukaitis, 2013). Shukaitis continues to state that the dérive and psychogeography are thus forms of reconnaissance, gathering information of the territory in which the tactics of everyday resistance are to unfold (Shukaitis, 2013).

Social practice

The SI encouraged psychogeography as a spatial practice, but as of today, psychogeography is not merely regarded as a practice any more, but has expanded its realm to all kinds of different media (Löffler, 2017). The socio-politically motivated use of psychogeography of the SI would be influential for many artists that would follow them to develop what artist, educator, and writer, Suzanne Lacy, identifies as "new genre public art", and what Cameron Cartiere

would later build on as "social practice art". Social practice art, also referred to as socially engaged art, functions by attaching itself to subjects and problems that normally belong to other disciplines, moving them temporarily into a space of ambiguity. It is this temporary snatching away of subjects into the realm of art-making that brings new insights to a particular problem or condition and in turn, makes it visible to other disciplines (Helguera, 2012). In the space of ambiguity that social practice art creates, the subject of focus has the opportunity to be reevaluated with respect to its functions in the wider system that it is a part of. This revaluation and reframing of the subject's boundaries of focus allow stakeholders to release their stance on preferred outcomes, or to "defactualize" the present to envision alternative future functions in the system (Jones, 2014). It is in these spaces of ambiguity that the imagining of possibilities for potential futures can occur.

More importantly, social practice art focuses on engagement through human interaction and social discourse (Helguera, 2012). Since it is people and their relationships that form the medium of such works – rather than a particular process of production – social engagement is not only a part of a work's organization, execution, or continuation, but also an aesthetic in itself (Finkelpearl, 2012).

Janet Cardiff's Audio-Walks

Walking continues to be a common medium in social practice art. Using audio as the main component to her walks, artist, Janet Cardiff, explores the notion of "walk as sculpture", expelling traditional thoughts that sculpture can only exist as something physical. The audience plays a key role as her works are performed or are sometimes co-created with them. Audio instructions, which participants are asked to perform, encourage them to navigate a space according to the privileged perspective of the artist. Cardiff has also incorporated video to her most recent walks, in which participants watch pre-recorded art performances in the spaces they are navigating with the artist. There is a sense of being caught up in a fantasy as the audience is both aware of its fabrication (with its directions, intercutting voices, and bursts of music), while being immersed at same time within the space-between that the work creates (between fiction and reality as the sounds merge with those around you, and you are on this pavement with these buildings, these people and these passers-by) (Pinder, 2001).

To re-emphasize Degan and Rose, the movement of the body through the city itself again plays an important role in Cardiff's work as walking invokes memories, a process associated with what Proust terms as "mémoire involontaire". There is a wider argument to be made here about the active significance of space and streets in remembering and forgetting.

These involuntary memories not only create new pathways in our mind, but also in our perceptions of our geography. Much like how social practice art moves audiences into spaces of ambiguity, Cardiff

> In Cardiff's work, the movie is no longer on the screen, the art is no longer in the museum; it's in the forest and on the street, it's in our heads (Peaker, 1999)

also creates windows in which participants can see their environment differently. Cardiff then takes it to the next step by literally directing the walker to turn up in "this alley or into that church". At the same time, these memories also question the boundedness and singularity of the self (Pinder, 2001).

When Cardiff's Audio-Walks come to an end, Pinder states "it is like awakening from a dream". Participants are dropped off back into the real world, left to reflect on the journey they were on. Unlike the political and interventionist versions of psychogeography of the SI, Cardiff's Audio-Walks are individual, solitary, and detached from many aspects of the social geographies through which it passes. They centre not so much on a moment of awakening, but more so on the drift of the dreamwalk itself, and on exploring the connections between the self and the city, between the conscious and unconscious, and between multiple selves and steps through the streets (Pinder, 2001).

1.3 Walking as understanding

Within the realm of research, the act of walking has grown to be a useful tool especially for ethnographic studies. Walking is a physical way to start exploring a research focus, especially one that deals with relationships among people, organizations, places, communities, and environments. Qualitative researcher, Yuha Jung has developed a research approach which she calls "mindful walking" where the empirical materials collected assist in further theorization in ethnographic research. Mindful walking is an interactive way of knowing, allowing the entire body, and all of its senses to experience the surroundings, to trace, and connect different areas, to intuitively sense when and how to avoid potential dangers, and to live in the entangled social pathways (Jung, 2013). Mindful walking can be broken down into the following concepts: I) curious spectator or flâneur, 2) entangled pathways, 3) ways of knowing, and 4) meditation (Jung, 2013).

The networks of streets both produce and contain memories. At one and the same time, one can travel in time and move through space. Each new angle, each new experience on the streets, could produce another memory – in a flash, the past, the present and the future are combined and recombined. (Pile, 1997)

Mindful walking as curious spectator

Much like Situationists partaking in derives, mindful walking encourages researchers to embody the role of the curious spectator, to walk without a designated destination or a laid out map in hand. As researchers begin to explore new environments, an emphasis is placed on learning to understand the unfamiliar through exploring and getting lost. What differentiates the curious spectator from the flâneur, however, is that while there is no preset destination or map, there is a clear purpose or question to be answered during the walk. This is referred to as being "both an outsider and an insider" – a genuine researcher who wants to pay attention to the details that matter to tell a holistic story of the environment in relation to its community from multiple perspectives (Jung, 2013).

Entangled pathways in mindful walking

Empirical materials gathered through mindful walking cannot be entirely controlled or manipulated by a researcher because they often lead the researcher to find connections among the entangled web of empirical materials that leads to further understanding, research, and theorization (Jung, 2013). This way of thinking about empirical materials through mindful walking is well suited to qualitative research that is grounded in systems thinking, which conceptualizes that all human beings, species, and natural ecosystems are interconnected and interdependent, forming a web of life (Capra, 1996).

Experienced materials as a way of knowing

To Jung, walking is a different way of knowing or gathering subjective information in ways driving a car, talking to people, or doing archival or internet research cannot. One case study of hers involves conducting ethnographic research of a museum and its surrounding downtown area. Her initial experiences of emptiness in the downtown area and the visual contrast of the museum raised questions of accessibility between socio-economic groups, which led to more in-depth research about the community, and theorized the museum as a White, privileged place

where many may not feel welcome. In this, mindful walking created initial empirical material lines to the investigation of further questions that yielded new, unanticipated empirical materials (Jung, 2013)

Mindful walking as meditation

Mindful walking can also serve as an awakening and meditative process that increases awareness. Scientifically speaking, meditation is helpful for one's physical and mental health, lowering heart rate and blood pressure, reducing physical and psychological discomforts, and improving self-esteem (Roth & Creaser, 1997). When one is relaxed, they are in the ideal mental and physical state to observe their feelings or intuitions, to be fully aware of her surroundings to notice the extraordinary in everyday scenes, and to think deeply (Jung, 2013).

1.4 Walking as citizen engagement

Walking has also been an important tool for citizens to engage with their community and with each other. One approach that aims at building this sense of community connectivity has been through Jane's Walks. Established in 2006 as way to practice the principles of famed urbanist Jane Jacobs, Jane's Walk is an international non-profit community that develops walking tours intended to encourage engaged citizens to share the different stories, histories and issues they have concerning their community. The unique qualities of communities are designed into walks through knowledgeable walk leaders who are community leaders as well. This format has worked well to empower communities through an engagement format that is led by the community, for the community.

The differentiator between Jane's Walks and traditional tour guides is that the walk leaders live, work, and play in the communities they give tours in. This gives walk participants an intimate understanding of the community they are walking through as they get to see the streets through the eyes of the people who



live there. Here, there is a sense of empowerment in walk leaders being able to reclaim the narrative of their communities, especially as outsiders may come into a space with predetermined narratives informed by sources that do not reflect the true nature of the community. Unlike how formal tourism highlights the attractions that outsiders deem noteworthy, community walk leaders get to choose what ideas and landmarks they want to share and what stories they want to tell. They also get to decide what the purpose of the walk is – whether it is to engage their own members, to bring people from outside of the community in, to educate, or even to change perspectives.

Creating new connections between people is also another enriching aspect of Jane's Walks. The walks give an opportunity for neighbours who live on the same street, who might not normally interact, to meet and get to know one another. Meeting new people of different backgrounds and age groups while discovering new aspects of a community allows walk participants to explore their community through different, sometimes critical, lenses as walk leaders are encouraged to self-select from priority voices, which include aboriginal, newcomer, LGBTQ, seniors, youth, low-income citizens, and those living with disabilities.

The effect Jane's Walks have in connecting people to places through the intimate perspectives of its localized walk leaders becomes transformational when many different stories come from many different people in a neighbourhood. This transformational potential is explained through Jane's Walk's theory of change, which states that these walks can become a platform for educating city builders, policy makers, and designers of civic spaces. This in turn will help expand knowledge of diverse places, community needs, and methods of public engagement. By encouraging those city builders to actively implement ideas learned, the walks could lead to the improvement and design of urban places, and make cities informed by those who live in them.

There are as many stories about the city as there are people in the city.

(Mark Loeb, Jane's Walk City Organizer)

1.5 Properties & critiques of walking

Creating a sense of place

A sense of place refers to one's relationship with places - different people inherently experience or perceive the same city space in different ways. Places do not come with prescribed meaning, it is in the process of experiencing and making meaning of experiences in and with a place that an impersonal and abstract environment acquires personal or communal meaning. Much like the effects of Cardiff's Audio-Walks or Jane's Walks, these experiences enable the creation of a sense of place, leading to transformational potential within those who feel a sense of place to enact positive change in a place. In environmental psychology, sense of place or the perception of a place revolves around the concepts of "place attachment" and "place meaning" (Adams et al, 2016). Place attachment refers to "a bond between people and places", and place meaning is the "symbolic meanings people ascribe to places" (Adams et al, 2016). Overall, a sense of place influences one's well-being, the way one describes a place, the value one places in a place, how one perceives and interacts with affordances of a place, and ultimately, one's desire to maintain and improve the place and its communities (Adams et al, 2016). At the same time, this perception of place also reflects one's "historical and experiential knowledge" of a place (e.g. learned knowledge from "growing up" in a place) (Adams et al, 2016). The importance about the connection between place and experience, however, "is not that place is properly something only encountered 'in' experience, but rather that place is integral to the very structure and possibility of experience" (Malpas, 1999, p. 32). In this sense, place acts as a "social artifact" that actively shapes, and is also shaped, by the people who interact in that place, creating "a dialectic with identity" that can be both personal and collective (Adams, 2017, p. 45).

Properties and critiques

Looking at the different purposes of walking, there are common themes that highlight a few key properties walking has as a tool for creating a sense of place. The first includes walking's ability to allow the mind to take involuntary thinking that is triggered by sensory

experiences, and give it a physical space to reflect off of. Cardiff's work is an example of this as walking gives the space for the mind to take a reimagined version of one's world (through her fictional audio narratives), and impose it on one's immediate surroundings to create a new way of seeing the world. The same goes for approaches like mindful walking and Jane's Walk, where walkers see the world differently once they embed newly discovered histories and stories to familiar places. Driving, cycling, and other forms of movement through a space do not allow for this the way walking does. This is because with walking, there is no barrier between the self and the physical world.

The second property of walking is that it allows sensory experiences to reveal invisible underlying systems they are interconnected with. The meditative qualities and pace of walking allows you to see the details to make these connections. Drawing connections between different objects you see, different stories you hear, and the different people you interact with in a space also facilitate an iterative process of inquiry that leads to a deeper understanding of a space.

Lastly, walking also has the ability to bring people together. When you find yourself walking in a space with other people, it allows you to step outside of yourself, and tap into the bigger group you are a part of. This is evident in Jane's Walks, where walkers meet neighbours they have never met before, but have been living next to for years. This is similar in mindful walking, where the people you see raise questions of the bigger social systems they are a part of. And, while Cardiff's Audio-Walks are solitary, participants are creating an intimate relationship with the artist, seeing the world through his or her eyes. Walking allows you to notice the details of the people with whom you share that environment with; the differentiating factors, and similarities between each of them; the stories they share; and the new perspectives you adopt after you hear them.

While these properties make walking a useful method in creating a sense of place, these case study approaches also have some drawbacks. With Cardiff's Audio-Walks, while they work well in getting people to reimagine their environment, there is a risk of getting

lost in the dream worlds she creates. Cardiff's Audio-Walks are designed in a way that is detached from many aspects of the social geographies of the space, which makes it hard for participants to relate their experience back to the real world. Doors in how your mind experiences the world are opened, but to what end?

To an extent, Jung's mindful walking addresses Cardiff's divergence from reality by giving her walks an underlying research focus. The drawback here, however is that Jung's sense of space is informed primarily through the privileged perspective of the researcher. While Jung does engage with people on her walk, it is ultimately just her who is making sense of the interconnected systems of the space. There is much value that could be added to mindful walking if it were made to be more participatory, to have others walk alongside Jung, along with the research tools to make sense of spaces together.

Alternatively, the participatory nature of Jane's Walks helps fill the gap to Jung's researcher-focused approach to mindful walking. The drawback with Jane's Walks, however, is that the makeup of the walking groups is often homogenous, made up mostly of socially minded, active, engaged citizens who are already in the know, and want to learn more about their city. This can make it intimidating for outsiders who are not well-versed in social issues or urbanism to join walks. In turn, this may be a barrier for critical discourse as there is less chance of exposure to people who have conflicting views on the walk.

The hyper-localized nature of Jane's Walks also run the risk of not being able to address the dynamics of the wider system that a neighbourhood is part of. This is especially important in large urban centres, where change is happening at an exponential rate. The possible downside to this hyper-localized approach is that one's sense of place becomes that much more fragmented where the boundaries of a place become smaller and borders become less porous. Here, there are places within places, where each place crafts its sense of place independent from other places.

Lastly, creating a sense of place goes beyond the sensory experiences that may shape them as they are

also influenced by the perception of time. With mindful walking and Jane's Walk, temporal focus is directed to the past and present as they aim to utilize history and current system dynamics to define environments. One way this happens is through memories. Memories affect our sensory experiences by how we experienced the same spaces in the past and how other spaces we have visited are different and similar to the ones we are experiencing now (Degen & Rose, 2010). While walking in urban space, the sensorial engagement with the environment involves the intensification of sentiments, imagery, and metaphors that we associate with places. It is simply by walking through places that we grow our attachment to them (Lynch, 1960). How is the sidewalk we walk on today the same sidewalk we walked on yesterday? And the day before that? Or how is it different from that in the other part of town?

Cardiff's Audio-Walks, on another hand, are completely "out of time", based on fictional worlds that have no ties to our own. Here, Cardiff's fictional worlds are developed through her artistic interpretation of her own memories and a testament to her own urge to construct scenarios and narratives around her environmental encounters, something Cardiff associates with "a desire to dramatize my life, make it real by making it filmic or probably the result of reading too many detective novels or watching too many movies" (Cardiff, 1999).

Is this sense, do we only rely on the perceptions of the past to establish a sense of place? Because memories cannot be made in the future does it then become less influential in how we might create a sense of place? This inertness towards the future is where the value gap lies in the three approaches walking has in creating a sense of place.

Designing a dream city is easy; rebuilding a living one takes imagination.

(Jane Jacobs)

1.6 "In-between" Spaces

The discussion that comes with art in the public realm is most useful when faced with the need to understand and make sense of ambiguities that exist within the context of "in-between spaces", where the boundaries of social jurisdictions remain uncertain. As Malcolm Miles notes in Art, Space and the City, art in public realm functions "as a social process of ... engagement, defining the public realm as complex fields of public interest" (Miles, 2005, p. 2). He also suggests that art, as a form of provocation or imagination, can "contribute to a critique of the city and to sustainable ... urban futures" (Miles, 2005, p. 2). There is no doubt that such criticality related to an understanding of social systems associated with public spaces has been further achieved through research and artistic practices that integrate the act and properties of walking leading to the creation of a sense of place. Our observation, however, is that most known practices tend to be rooted in the present or the past, whereas the implications of and possibilities for issues in the future have not yet been as explicitly explored. The pertinence of exploring futures lies in the inherently uncertain nature of what has yet to happen, and as such, futures becomes one of the most relevant "inbetween spaces" that must be given thought. What could emerge from the creation of a sense of place in a possible, yet uncertain future?

Role and value of exploring futures through speculation

Foresight or futures studies is a growing field that is formalizing methodology to leverage the value of imagining possible or alternative futures to contribute towards a form of critique similar to that which Miles has identified. The foresight process usually stems from a "what-if" research question, leading to an analysis and extrapolation of current trends for the development of scenarios that are "intended to open up spaces of debate and discussion" (Dunne & Raby, 2013, p. 2-3). Scenarios, more significantly called "alternative futures", is a reminder that while it is impossible to always predict one particular future, "by focusing on a range of alternatives, we can better prepare for uncertainty, [... and] to some extent embrace uncertainty" (Inayatullah, 2008, p. 6).

Alternative futures are often used within the context of "helping an organization or community plan for and move towards its preferred future" (Dator, 2009, p. I). The crucial components of this "futures visioning process" are I) appreciating the past; 2) understanding the present; 3) forecasting aspects of the futures; 4) experiencing alternative futures; 5) envisioning the futures; 6) creating the futures; and 7) institutionalizing futures research (Dator, 2009, p. 2-3). Futurist, Jim Dator, warns that "it is a huge mistake to try to limit participation in a futures process only to a small number of leaders ... the process should be very broad" (Dator, 2009, p. 4). This is because there must be "alignment" between an envisioned future with day-to-day realities, which also includes the inner realities of how an organization or individual sees itself (Inayatullah, 2008, p. 6). The use of the future in training individuals or organizations with new skills is really about creating "capacity" towards "more effective strategy"; it is not about "predicting correctly or getting the right strategy", however, but about "enhancing ... confidence to create futures that we desire" (Inayatullah, 2008, p. 6).

When mapping the past, present and futures, there is a need to understand the weight of a "shared history", coupled with the push of the present or "qualitative drivers and trends that are changing the future", and the pull of alternative images of the future (Inayatullah, 2008, p. 8).

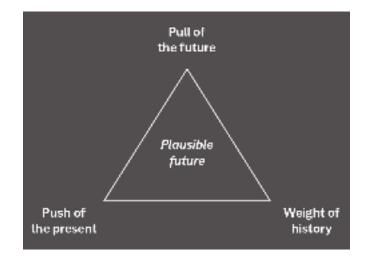


Fig I. The Futures Triangle (Inayatullah, 2008, p. 8)

It is in analyzing how these three forces interact that plausible futures emerge (Inayatullah, 2008, p. 8). Overall, futures methods "deconstruct ... [and] challenge basic concepts" about our perceptions of the world by creating "the conditions for a paradigm shift" (Inayatullah, 2008, p. 6). This acceptance of emergence must be reinforced by the opportunity to experience and respond to alternative futures, which Dator deems as the most crucial component of the futures visioning process (Dator, 2009, p. 2). In particular, Dator's method for experiencing futures calls created environments in "rooms ... [with] artifacts from the future, decorations, moving or static pictures, sounds, smells, and actors exemplifying life in each ... [alternative] future", or if decorating a room is not possible, then to have "written copies of one future that will be read and discussed" in each room (Dator, 2009, p. 10). Facilitated discussion to immediately debrief the experience of alternative futures in turn allows participants to "envision, invent, and move towards a 'preferred future'" (Dator, 2009, p. 12).

This necessary experience of alternative futures inherently necessitates a sense of provocation that suspends disbelief and allows for imagination to "wonder about how things could be" (Dunne & Raby, 2013, p. 2-3). Such value has, and is still, considered a primary function of design and design research today. There is thus a recognized nexus between the two disciplines of futures studies and design.

As articulated by speculative designers, Anthony Dunne and Fiona Raby, the main interest is in the idea of using possible futures "as tools to better understand the present and to discuss the kind of future people want, and ... ones people do not want" (Dunne & Raby, 2013, p. 2-3). It is important to distinguish that this concept of "futures" is meant to be viewed "not [as] a destination or something to be strived for but a medium to aid imaginative thought – to speculate with ... [n]ot just about the future but about today as well" (Dunne & Raby, 2013, p. 3). The provocation of speculation, which can be experienced through designed prototypes and environments, and the ensuing discourse that such an experience generates, become valued "critique". Such value emerges through

an acquired understanding of present limitations and the potential to remove or loosen "reality's grip on our imagination" in order to affect change in current systems towards preferred elements of imagined futures (Dunne & Raby, 2013, p. 3).

The problem, however, is that experts in futures studies have generally been exclusively tied to industry practices for testing emerging technology or business models within corporate industries "such as energy, defense, finance, insurance, and politics" (Montgomery & Woebken, 2016, p. I). The tools and models used by such experts are "rarely introduced beyond insular circles within industry and academia" (Montgomery & Woebken, 2016, p. I). Fortunately, there is growing literature and practice in the realms of **design fiction**, speculative design, and critical design that are beginning to democratize and contextualize futures studies through more collective and participatory methods (Montgomery & Woebken, 2016, p. 10). This lies in tandem with a recognition that futures are rapidly becoming more and more complex, and that there is an increasing need for "better ways to talk publicly about potential objects and services [and the implications of such], because we can move them from potentiality to actuality with remarkable speed nowadays" (Sterling & Gfader, 2016, p. 94). Moreover, contemporary approaches to futures studies is now increasingly driven by research into the "role of futures in social and cultural thought" (Montgomery & Woebken, 2016, p. 28). In particular, Dator's codification of how four popular Western narrative arcs tie to possible images of the future (continued growth, collapse, disciplined society, and transformation) is significant in illustrating the power of "collective" cultural prediction" and the role of futures as stories that inevitably flow back to the continued creation of a lived present (Montgomery & Woebken, 2016, p. 28).

1.7 Overlapping design practices

As mentioned above, three particular design practices, namely design fiction, speculative design, and critical design are the primary practices explored by contemporary speculative designers today. They are all within a diverse range of design practices "governed by the belief that design methods have a distinct and important role to play in shaping conversations about the future" (Montgomery & Woebken, 2016, p. 26).

Design fiction

A term first coined by Julian Bleecker of Near Future Laboratory, "design fiction" was formally defined by science fiction writer, Bruce Sterling, as "the deliberate use of diegetic prototypes to suspend disbelief about change" (Sterling, 2013). The use of the term diegetic importantly borrows, from cinema and theatre studies, the act of "telling" to convey an interior view within a world. However, as opposed to a narrator, design fiction "tells" through "prototypes that imply a changed world" (Sterling, 2013).

The preoccupation, however, has been to view design fiction as a "creative technique [and] not as a research methodology" (Markussen & Knutz, 2013, p. 231). Recently, Markussen and Knutz have proposed "a poetics of design fiction", which focuses on an intersection between literary and design practice that transfers verbal and compositional techniques for fictional world-making to the field of design research (2013, p. 231-232).

The crucial distinction that is now being made through the practice of designers like Dunne and Raby and The Extrapolation Factory is that prototypes typically associated with design fiction should go "beyond technological futures to borrow from the literature of speculation" (Poynor, 2016). Along this vein, it is evident that the practice has been expanding to traverse media in addition to prototypes, including "videos, experiential"

futurism, tech-art exhibits, design-museum shows, social activism, public relations efforts, classroom exercises" etc. (Sterling & Gfader, 2016, p. 95).

Speculative design

The definition of speculative design is complex in that it often intersects with other design practices including design fictions and critical design. According to James Auger, the purpose of speculative design is to I) "enable us to think about the future", and 2) "to critique current practice" (Auger, 20II). This centers on a distinction between two types of speculation that J.C. Vlugter identifies as "speculative futures" and "alternative presents" (20I7). Speculative futures are the extrapolation of contemporary trends, systems, and technologies, whereas alternative presents "investigate a changed present by assuming it came to be under different ideological and technological circumstances" (Vlugter, 20I7).

Although speculative design practice has traditionally been used for imagining potential developments for emerging technology and to test product ideas, ultimately this practice can be taken outside of an "object-based" tradition to challenge existing cultural and socio-political frameworks. Paola Antonelli, senior design curator at the New York Museum of Modern Art, has notably expressed that the purpose and value of such practice should be viewed "as the R&D [research and development] of society" (Fairs, 2014).

Critical design

Critical design is what Dunne and Raby describes as "critical thought translated into materiality" (2013, p. 34). What distinguishes critical design from other design practices is its "criticality", which involves "thinking through design rather than through words or using the language or structure of design to engage people" (Dunne & Raby, 2013, p. 34-35). Harkening

back to the social practice of public art and its roots in dadaism and situationism, critical design is similarly informed by these traditions to draw on "tactics associated with art to orient a subversion of design norms" (Malpasse, 2017, p. 29). Malpass notes, however, that although critical design and art might overlap, it "should not be absorbed into the [institutional structures and] social practices of the artworld" (2017, p. 29). Rather, critical design functions best when "operating within a context of use" (2017, p. 29).

With respect to its relation to other design practices, critical design in essence "uses speculative design proposals to challenge ... [underlying] assumptions" (Auger, 2013, p. 32). The thinking that it is meant to evoke can vary from a basic level questioning of assumptions in design itself, to a next level questioning of industry and market-driven limitations, and to even deeper questioning towards fundamental principles around social theory, politics, and ideology (Dunne & Raby, 2013, p. 35).

Furthermore, it is noted that critique does not necessitate a negative response – it can be a "gentle refusal" of what exists, but can come in the form of positive wishful thinking, "even a dream" (Dunne & Raby, 2013, p. 34). Critical design can be thought of as "testimonials to what could be, but at the same time, they offer alternatives that highlight weaknesses within existing normality" (Dunne & Raby, 2013, p. 34). This duality is key to the value of useful futures speculation that consciously ties back to possibilities for the present, or the "alternative presents" that Vlugter identifies.

Overall, there is clear overlap and a blurring of boundaries between these design practices. However, to us, the pertinent components to draw from these three practices are design fiction's emphasis on the deliberate act of "telling" to convey a changed world; critical design's inherent criticality to trigger a questioning of norms; and speculative design as a practice that seems to encapsulate both design fiction and critical design to enable future thinking and critique that is beyond the traditional "object-based"

approach. In this sense, these practices together provide the means to answer Dator's call for the need to experience and respond to alternative futures.

I.8 Limitations of futures speculation

Returning to the idea of "in-between spaces" that could be used as a space to drive criticality, it is precisely in these transitions that futures speculation thrives – the magic lies in a designer's ability to "[play] games with these transitions of the amazing and the boring, the transitions of the believable and the incredible" (Sterling, 2013). As such, one of the main dangers of futures speculation is that sometimes provocation can take participants too far away into the future that they lose ground of the present, and with that, the ability for critical discussion that is of value. Much like the dreamwalk state of Cardiff's Audio-Walks, immersion in speculation requires moments of awakening or a grounding with the familiar present. Without such, the value of being temporarily snatched away into a space of provocative ambiguity cannot be harnessed and transformed into actionable critique.

Role of audience and role of designer

In fact, whether a speculative work is successful or not depends entirely on the perception of its audience. In this way, the audience plays a focal role in the creation of speculative designs, because it is the audience's own reimaginings and construction of opinions about the issues being presented by the speculative designer that matters, irrespective of the designer's original intentions (Vlugter, 2017). This "disinterest in intention" is viewed by some as problematic to the notion that "design is about intentional change" (Vlugter, 2017), and hence is seen as a limitation of critical theory's application to design (Bardzell et al., 2012, p. 290).

Vlugter qualifies the role of the designer, however, by suggesting a two-pronged approach that leverages a designer's inherent toolkit of empathy and understanding so that there could be better alignment

between intention and perception: I) to first define the desired effect the speculation should have on the onlooker, and 2) to investigate how this effect can best be achieved (Vlugter, 2017). By better understanding the "fears, hopes and expectations" of the audience, the designer can make relevant design choices in scenario world-building and persona design in order to "direct the audience to the desired level of critical discourse" (Vlugter, 2017).

Accessibility of possible worlds

It is clear that the role of the designer inherently necessitates a careful management of the speculation. If the speculation strays too far, the audience will not relate to the proposed future, resulting in a lack of engagement. Design literature provides differing positions on how to balance the right amount of critical and discursive content for valuable speculation. According to Simon Grand and Martin Wiedmer, who developed "Design Fiction: A Method Toolbox for Design Research", it is necessary to find "the right focus in-between ... something that is too far away from our current concerns or too close to what we already know" (2010). On the other hand, Thomas Markussen and Eva Knutz of the Kolding School of Design critique the validity of this criterion by highlighting that it is impossible to determine whether something is actually too far away or too close to current realities. To them, the real question lies in how speculative design elements "are connected to our present realities" (2013, p. 232).

Markussen and Knutz further discuss accessibility to design fictions through the use of the "possible world theory" (2013, p. 233). This theory assumes that "fictions can be properly understood as 'possible worlds', which can either be easy or difficult to access from our real world" (2013, p. 233). This view thus opens up futures design fictions beyond the mere polarities of utopia and dystopia. Instead, this "in-between" future space is better seen "as a dynamic relation that

can be characterized in terms of various criteria of accessibility" (Markussen & Knutz, 2013, p. 233).

The audience's perceptual bridge

In an attempt to reconcile and concretize this concept of accessibility, Auger came up with the concept of a "perceptual bridge" that must exist "between the audience's perception of their world and the fictional element of the concept" (2013, p. 12). He highlights a number of bridging techniques, two of which are of most relevance to this project.

Design for context

Not only must the designer consider the audience, but also "the environment and context" in which speculative future services would exist, which can be "a specific space such as a home or office or a cultural or political situation based on current developments or trends" (Auger, 2013, p. 13). This "ecological approach" is meant to assist speculative designs by "grounding [futures] in a familiar or logical reality" (Auger, 2013, p. 13).

This is similar to an approach that Nick Foster of New Future Laboratory describes as "the Future Mundane". Foster posits that the future is "an accretive space" because "humans are covetous, sentimental and resourceful; they cling to things" (Foster, 2013). As such, he notes that in order to communicate visions of the future, it is helpful "to incorporate the existing designed space in parallel with the new" so that the nuanced and mundane familiarity of everyday life can be leveraged to manage audience perception (2013).

Rooting the speculation in the familiar

One of the biggest challenges for a speculative designer is in finding the appropriate "amount of complexity of knowledge that needs to communicated before a project can be understood" (Auger, 2013, p. 22). Auger takes inspiration from observational comedy to see the power of

compressed shared stories that utilize I) mundane, yet familiar observations; 2) that are specific to a particular time, place, and person; and 3) that are told in a way that pays great attention to detail, to set the stage for more extreme anecdotes that provide the humorous punchline (Auger, 20I3, p. 24). As such, Auger highlights that mundane, familiar, small, unnoticed details can provide "spectacular [futures] proposals with a tangible link to our contemporary sensibilities ... by rooting the audience in known contexts, limiting the need for complex explanations" (20I3, p. 24).

Overall, the literature is consistent in emphasizing that there is no "one-size-fits-all" guide to crafting speculation or an experience of the future, particularly due to the diversity of possible subjects, context, perspectives, and audiences of speculative design projects (Auger, 2013, p. 31). The crucial factor is in how speculation is managed and designed "to connect to a specific audience's perception of the temporal world around them" (Auger, 2013, p. 32).

Research Question

How might embodied foresight practices inspire critical approaches to public engagement for future public spaces?

The properties of walking have demonstrated clear value in the realms of art, sociological and design research, and citizen engagement practices. Case studies on the practice of these three aspects show clear alignment with the principles of the social practice art. These practices adhere to an approach that utilizes art as a form of provocation to directly engage with social or political imagination in the public realm. In so doing, these practices have been able to show value in contributing to critiques of the city through the creation of a sense of place, particularly with respect to "in-between spaces" where boundaries of social jurisdictions are yet to be defined. Our interest lies in whether the value that we see in these artistic practices can be translated to intentional design that turns the value of criticality into useful insights

that can be shared and harvested to affect future change. Literature on critical and speculative design has highlighted their ties to the same socially active artistic practices, but posits the need for a "context of use", which has generally been tied to an "everyday life" context of use. Our hypothesis is that such use can come in the form of engagement that leads to critical discussion regarding the future uses of public spaces. Through the development of a new stakeholder engagement method that integrates foresight with speculative design (that integrates design fiction and critical design methods), while leveraging the properties of walking, we hope to provoke imaginings of potential futures, in order to solicit critique to facilitate a temporal bridge back to affect present action.

2.1 Methodology

Phase I: Discover

In this phase, we explored how a sense of place is created and how walking and foresight practices brings value to process particularly in the context of public spaces.

Phase 2: Define

In this phase, we explored how the act of walking, foresight practices, and speculative design methods can be used together through the development of Foresight Walks.

Phase 3: Develop

In this phase, we partnered with Gladki Planning Associates for a case study to prototype Foresight Walks in the context of exploring the futures of suburban shopping malls in Mississauga.

Phase 4: Deploy

In this phase, we conducted 3 instances of the Foresight Walk onsite through targeted recruitment of multi-stakeholder walk participants. Each walk was followed by a facilitated workshop to test both content and method.

Phase 5: Synthesis

In this phase, we analyzed the data collected from our facilitated post-walk workshops. The insights and learnings allowed us to identify potential improvements to and value of the Foresight Walk method to different stakeholders.

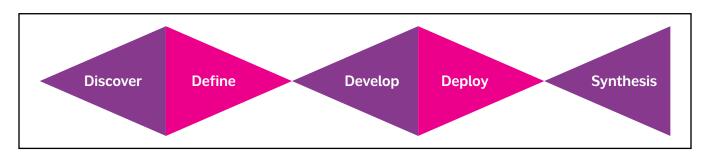


Fig 2. Foresight Walk design research methodology framework



Phase I: Discover

Lit review: Explored the properties of walking, foresight methodologies and speculative design.

Interviews: Connected with experts in the realm of public engagement, social practice of art and foresight practice.



Phase 2: Define

SWOT analysis: Critiques of walking, foresight methodologies and speculative design.

Method development: Through understanding the strengths and weaknesses of the properties of walking and foresight practice, Foresight Walks as a new engagement method is developed.



Phase 3: Develop

Design brief: Design criteria for producing the foresight walk prototype is developed with Gladki Planning Associates.

Site research: Each of the malls that were a part of the wider study were visited and assessed.

Trends scanning: Signals and trends that may influence the future of malls were researched.

Critical uncertainties matrix: Underlying themes in the trends that point to critical uncertainties were uncovered.

Scenario development and selection: 4 alternative future scenarios were developed from the 2x2 critical uncertainties matrix depicting different images of the future for how suburban malls might contribute towards complete communities.

Stakeholder mapping and persona design:

Stakeholders that were uncovered in trends and research done by Gladki Planning were analyzed to highlight critical players for who the Foresight Walk experience should be designed around.

Scenario narrative: A narrative for audio storytelling was designed using site-specific narrative anchor points, trends, pain points, pain relievers, opportunities, and opportunity optimizers.

Immersive walk experientialdesign: Futures artifacts and a site-specific walk route were designed in tandem with the scenario narrative in order to create affordances for participants to better create the speculative bridge to experience a future of the site.



Phase 4: Deploy

Foresight Walk #I and Workshop: The first instance of the walk targeted a mix of city officials, planners, and community member participants. It was followed by facilitated workshop focused on validating the selected scenario.

Foresight Walks #2 & 3 and Workshops: The second and third instances of the walk utilized a more open snowball recruitment strategy. It was followed by facilitated workshops focused more on understanding how the walk experience and the method resonated with participants.



Phase 5: Next Steps

Data Analysis: Analyzed collected data from postwalk workshop to understand points of emotional and cognitive resonance during the walk

Learnings: Better understand value of the Foresight Walk method to the realms realms of public engagement, design research, and foresight in order to determine next steps for refining and scaling the method.

A New Method: Foresight Walks

The purpose of this study aims at developing "Foresight Walks" as a new multi-stakeholder engagement method. This new method is primarily designed to be a tool to help multi-stakeholder groups envision and plan for the design of public spaces. They are one-part an audio walking tour, and another part live-action participatory theatre where diverse stakeholders are invited to immerse themselves in

entertaining and provocative experiences that depict future scenarios of public spaces. By immersing stakeholders into provocative possible futures, deeper and more critical discussions can be facilitated. Shared insights, once synthesized, will lead to more robust strategic planning on how to design public spaces that are that much more responsive to different possible future scenarios.

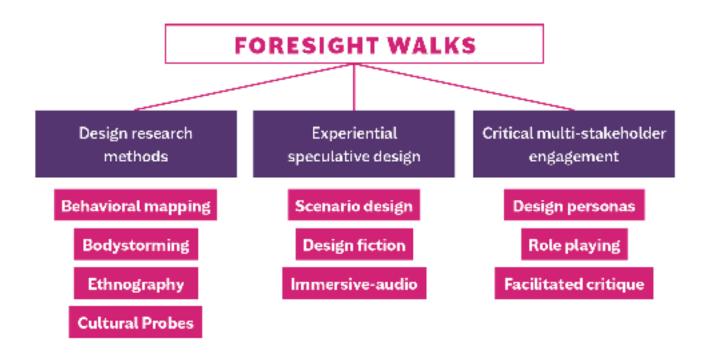


Fig 3. Foresight Walk components

3.1 Drawing from design research methods

Foresight Walks draw from the strengths of place-based research methods. Behavioural mapping is the most influential with its roots coming from cultural anthropology, structural anthropology, and architecture, where behavioural maps are used to understand spatial relations (Hillier, 1984). Behavioural mapping, is a quantitative observational research

method that assesses human behaviour in relation to their physical environments (Cosco, 2010). Assuming that human behaviour is partially in response to stimuli within our environment, and that there are patterns between many people's behaviour and these stimuli, behavioural mapping provides an insight into such relations.

In understanding how people relate to space, bodystorming is another research method Foresight Walks is influenced by. As an experience design research method, bodystorming is a method for simulating and designing interactions between people and objects in a space. Bodystorming also allows the real-time generation of new scenarios that would not otherwise be considered. It can be used as a generative tool for creating insights that precede ideation and concept design. Early bodystorming also helps a team discover flaws and assumptions before brainstorming and concept development (Schleicher, Jones & Kachur, 2010).

A natural complementary method that can be used in conjunction with behavioural mapping and bodystorming in Foresight Walks is ethnography. The benefits of pairing systematic quantitative analysis with micro-ethnographic qualitative analysis is that it allows researchers to probe the patterns identified in quantitative results and to anchor and enhance the generalizability of micro-ethnographic findings. Alternatively, the limitations of behavioural mapping can be dealt with through the use of iterative cycles of data collection and analysis. This refines and focuses data collection, which can help overcome limitations of quantitative approaches. This involves a short period of data collection, followed by preliminary analysis, followed by refined data collection, and so on (Jewitt, 2012).

To further qualitative analysis, Foresight Walks also utilize cultural probes as a way to uncover deeper tacit knowledge from the way people relate to space. It serves as a means of gathering inspirational data about people's lives, values, and thoughts. Cultural probes can come in small packages that can include any sort of artifact (like a map, postcard, camera, or diary) along with evocative tasks, which are given to participants to allow them to record specific events, feelings or interactions. The aim is to elicit inspirational responses from people, in order to understand their culture, thoughts and values better, further stimulating the researcher's imaginations (Gaver, 1999).

3.2 Drawing from experiential speculative design

Futures being informed by the past and present

Futures are inherently comprised of roots planted "in past and present societal economic and technological conditions; as well as its projected impact on the individual and the culture in which it operates" (Montgomery & Woebken, 2016, p. 56). Given that the objective of Foresight Walks goes beyond pure entertainment and provocation, towards "the context of use" that critical design should operate in, it employs a rigorous foresight process that is informed by systems thinking in order to develop the future scenarios that will be conveyed through speculative design into a temporal experience for walk participants. Foresight methods used include STEEPV trends analysis for mapping and anticipation, critical uncertainties and 2x2 matrix for creating alternative futures, and windtunneling to test strategic options in order to select the primary scenario for use in the Foresight Walk. This process ensure a robust extrapolation of current trends and signals in the creation of a designed futures experience that pay attention to how the new can exist alongside the present.

Moreover, Foresight Walks embrace the notion that it is not the role of the designer to define futures for everyone else. Instead, the method aims to follow the lead of designers like the Extrapolation Factory to utilize "collaboration-driven approaches" that employ participatory process to engage multi-stakeholders, whether they are within or outside the design community (Montgomery & Woebken, p. 28, 31). As such, the aim is for Foresight Walks to include relevant stakeholders perspectives and insights to feed into the trends collection, scenario development, and persona development phases.

Dunne and Raby provides several guiding principles that serves as a basis to inform the role of the designer in the development of future scenarios and the speculative experiential design that is used to convey those future scenarios in Foresight Walks:

Designers must work with experts [and stakeholders] (likely their audience) to generate preferred futures by giving them:

- I. "Permission to let their imaginations flow freely",
- 2. "Give material expression to get insights generated"
- 3. "Ground these imaginings in everyday situations", and
- 4. "Provide platforms for further collaborative speculations".(Dunne & Raby, 2013, p. 6).

Overall, the pairing of a rigorous foresight process with principles of experiential speculative design creates a framework that drives the development of plausible future scenarios with multi-faceted societal dimensions to highlight the implications of today's issues on longer-term futures. Ideally, this process would be created through a participatory design process, but for the purposes of the case study below, the analysis and assessment of scenario evaluation was done by the design researchers – a limitation that will be discussed further below.

3.3 Conveying scenarios through the narrative experience

According to designer, Hiroko Shiratori, the function of fiction within the design world is its ability to "[speak] to your brain and heart" (Shiratori & Krier, 2016, p. II4). In essence, futures are but "subjective depictions of possibilities yet to be realized" (Raven & Elahi, 2014, p. 52), and scenarios are inherently stories. With that, there is a subjectivity to futures narrative in that it is inevitably an account of the narrator.

Foresight Walks harnesses the value of fictional storytelling through combined sensory and spatial experience. The narrative utilizes a first-person, stream-of-consciousness voice to reveal the inner thoughts of a future protagonist in real-time to a participant walking through a present space. Through an user-centered approach to the audio narrative design, the narrator is a designed user persona with a specific interpretation of a sequence of events in a future time and space (the story) that occurs within a contextual time and space (the story-world or future world) (Raven & Elahi, 2014, p. 52). This is meant allow participants to perceive the future speculation outside of their own cultural and social backgrounds, to a certain extent, and become fully immersed in a future through the perspective of a "user" that "exists only as an element of [the] speculative world" (Vlugter, 2017). The hope is that this would enable participants to empathize with new perspectives that could inform their own reimaginings of preferred futures, but that also ties back to their current realities.

The audio narrative is derived from scrutinized analysis over the identified trends and critical uncertainties for a specific research question. This involves a careful extrapolation of the selected scenario to create a world populated with key characters and designed objects, layered with insights from the persona's empathy map to construct interpretive goals, plans, relations, and motivations around the narrated events (Madsen & Nielsen, 2010, p. 60). Returning to Foster's view of "the Mundane Future", Foresight Walks pointedly takes into account the need to incorporate the everyday familiar into an audio narrative and other design objects that accompany the walk experience.

Affective audio futures storytelling

In tandem with the function of fiction for world-building and empathy, Foresight Walks specifically employ audio storytelling as a means to harness the medium's subtle, but powerful, sense of intimacy. Compared to video or the written word, which tend to require full attention for comprehension, audio is moreso a medium that accompanies us (McHugh, 2014, p. 143). While "sight isolates, sound incorporates [... and whereas] sight situates the observer outside what he views, at a distance, sound pours into the hearer" (Ong, 2007, p. 7I). This enveloping nature inevitably involves the audience, whether wanted or not. In this sense, audio storytelling is an ideal non-

intrusive method to accompany the act of walking in order to solicit emotive engagement with an audience while fostering an understanding of a particular space.

The act of listening – particularly when an engaging narrative is coupled with the "affective qualities of sound" - inevitably elicits a visceral response that is hard to forget (McHugh, 2014, p. 144). Additionally, audio cues sync with physical elements of the space or embedded artifacts to ground imaginings of the future back to the present (e.g. the smell of bread at the mention of a bakery). These elements are meant to address the key properties of walking that are highlighted above. Foresight Walks leverage the human mind's "ability to interpret feelings absorbed through sound, particularly when those sounds act as reminders of past events in our own history" (Street, 2014) to trigger emotional responses that better allow for content to be absorbed. The links between feelings and cognition thus, in our opinion, expand the audience's elasticity to suspend belief for immersion in a designed futures experience.

Future artifacts - fabricating tangible futures

Recalling Janet Cardiff's practice of "walks as sculptures", Foresight Walks take inspiration from her work to craft future worlds within a walk charged by multi-dimensional layers of sensory properties. Although the audio narrative is the focal point for presenting a fictional future to Foresight Walks participants, future artifacts are designed and used as tangible props in order to render this future as believable (Franke, 2010). There are two main functions for the inclusion of future artifacts in Foresight Walks:

- I. To make tangible the future world that is being conveyed, and hence assist participants with the "perceptual bridge" for embodying a character from the future and in being able to absorb a future world from that character's perspective; and
- 2. To act as a designed object with intention that can also be a standalone tool to spark critique about a speculative future.

The ability to interact with an actual tangible object

is a form of affordance that lends legitimacy not only to the ideas presented in the object, but also to the fictional world the object is situated in. As aptly put by the designers of the Extrapolation Factory, "the future does [not] seem so far away anymore when you can pick it up" (Montgomery & Woebken, 2016, p. 65). Future artifacts are often also designed with flaws or other subtle "alienating" factors that accentuate tensions discovered in the foresight process. Hence, the audience's role is to "judge the quality and implications of the propositions put forward in this world" of embedded artifacts that appear as if they were real (Franke, 2010).

Interactivity with space and sensory properties

Another function of future artifacts in Foresight Walks is to allow the audience to imagine and enact the fictional world (Franke, 2010). Synced properties of the walk sometimes require a level of interactivity (i.e. where the participant needs to make a conscious choice as the designed persona). The narrative arcs for Foresight Walks generally end on a cliffhanger with this choice, reinforced by a particular future artifact. This strategically acts as the jumping off point for critical discussion. These moments of interactivity guide participants out of mindful walking's passive meditation mode towards a decisive point of action, pushing participants to make lived, everyday decisions as someone that exists within the context of the presented future world. As design critic and historian, Glenn Adamson, says, "the thing about an object is that if you put it in front of somebody they actually have to deal with it" (Rapacki, 2017). Not only are future artifacts placed in front of walk participants, but they are intricately tied to the audio-narrative so that participants are prompted to critically think through how they would deal with the object, in the context of that space, in the future.

Overall, the juxtaposition of a familiar present "public" space with controlled design fictions situated conceptually and physically in a future of that space is meant to pinpoint Auger's bridging techniques of designing for context and rooting the speculation in the familiar. In this sense, Foresight Walks also require a particular attention to detail in fictional storytelling that employs an almost "day-in-the-life-of" mundanity

to assert familiarity within the speculative future. The accumulation of all these designed elements function as a whole, coherent speculative design experience that is meant to activate the participants' many senses.

increased communication within design processes; 2) the ability to explore complexity; 3) the experience and empathy of design researchers; and 4) the ability to engage design researchers with social change (2006).

3.4 Critical multi-stakeholder engagement

In Foresight Walks, design personas are adopted by participants to prime and ease them into the immersive future scenario. Priming is the mental process of processing information of a particular semantic category that facilitates subsequent processing of related information and focuses attention on categoryrelated aspects (Tulving & Schacter, 1990). Semantic priming facilitates the processing of words related to the target word, and words likely to occur after the priming event (Neely, 1977, p. 251). Visual and semantic priming increases processing fluency for judgments of aesthetic pleasure, and thus determines the perception of concepts presented (Reber, Schwarz & Winkielman, 2004). The Foresight Walk itself becomes this process of facilitated imagination that creates additional creative capacity. As mentioned above, this imagination is further leveraged through critical design. Specific artifacts from the future are paired with narrative cues that trigger intentionally provoked questioning in the participant within the embodied role of the persona. This in turn could make participants generate more effective ideas than from a neutral scenario exploration.

As mentioned earlier with bodystorming, role playing in Foresight Walks helps bring design personas to life. Role playing can be used to make the conceptual leap from what "is" to what "might be", and to overcome "simplified, stereotypical portrayals of environments and users" that can occur with the storyboarding technique, also commonly used for developing and communicating new design concepts (Burns et al, 1994). Design researcher, Stella Boess, argues that role play creates at least four benefits which include, I) the

3.5 Facilitated critique

One of the key elements of the Foresight Walks is the workshop after the walk experience. This is a crucial component meant to create a platform for facilitated critique and a harvesting of responses to the designed speculation. The workshop is designed to tailor to the specific research question that the Foresight Walk addresses, and the relevant stakeholder groups invested in the space. Given that critical design is "an intellectual journey based on challenging and changing values, ideas, and beliefs" (Dunne & Raby, 2013, p. 35), the main objectives of the workshop is to understand any changes in the perspectives of the participant - "unpacking the different hopes, fears, promises delusions, and nightmares" of the experienced speculative change, and allow room for further reimagining of alternative futures (Dunne & Raby, 2013, p. 35). A causal layered analysis framework can be used as a theoretical frame to shape the workshop so as to guide work participants. This method has been identified by Inayatullah to be effective for unpacking and "deepening the future" (Inayatullah, 2008, p. 12). It can begin with an initial latent layer of questioning underlying assumptions immediate evident in the designed elements of the Foresight Walk. This can be followed by an exercise that urges participants to foster debate over a conscious choice that they must make "in the shoes of" the embodied persona, given their gained perspective(s) of this designed character. The workshop can then dive deeper into the systemic ideologies and politics of the portrayed future to explore possible areas of intervention and strategies to enact change in the present.

Case Study – Reimagining the Mall



Ontario College of Art and Design

- + Gladki Planning Assosciates
- + City of Mississauga & Region of Peel

To test Foresight Walks as a new approach to stakeholder engagement, a research collaboration was established with Gladki Planning Associates and the City of Mississauga in developing strategic recommendations on the future of suburban malls in the area. The study aims to provide policy direction for

these shopping malls and their surrounding areas to ensure that any future development is done in a way that will improve the quality and functionality of the physical surroundings, promote active lifestyles, and reinvigorate local retail offer in a mixed-use complete community (Gladki Planning Associates, 2017).

4.1 Case study research question

"How might the role of malls contribute towards complete communities in the future?"

Complete communities

The main focus of exploration that both Gladki and the City were interested in was how suburban shopping malls might move towards contributing to the larger concept of a "complete community". As a requirement of a preferred future for the city, "complete communities" is an urban planning term used to describe communities that "meet the dayto-day needs of people throughout all stages of their life" (City of Mississauga, p. 7-I) in order to nurture a quality of life that allows people "to not only live and work, but also thrive" (City of Mississauga, p. 7-I). The City of Mississauga Official Plan identifies a pillar for "completing" its neighbourhoods, which addresses elements of urban living that include housing, community infrastructure, heritage planning, cultural infrastructure, distinct identities, and urban agriculture.

Mixed land use

The conversation around complete communities usually involve the topic of mix-use land policy as it is one of the biggest factors influencing how planners, developers, and citizens think about and use space. Contemporary planners see mixing residential, retail, and other compatible uses as an essential planning principle. While mixed-use approaches bring with them benefits to the urban experience, it comes with its challenges.

For contemporary urban planners, a pivotal planning principle asserts that mixing commercial, institutional, and residential uses at fine scale contributes to community vitality, economic vibrancy, and urban efficiency (Duany et al., 2000; Calthorpe, 1993; Jacobs, 1961). Famed urbanist, Jane Jacobs, argued that mixed use and the diversity that it generates produces vibrant cities (1961). She chastised planners for creating monotonous, segregated land uses that she saw were killing cities. Like public spaces, local-level retail that comes with mix-land use planning provides outlets for social interactions necessary for building what Duany et al. call "authentic communities" (2000). Other notable benefits that come with mixed-use approaches have been known to push urban design innovation, increase the visual attractiveness, and develop a sense of place (Grant & Perrott, 2009).

Although policies provide opportunities for integrating mixed uses at the local scale, market factors (like consumer behaviour and corporate specialisation) affect the probability that plans get implemented (Grant & Perrott, 2009). Other factors that contribute to challenges of mix-use projects are location and its exposure to traffic, the logistics and time of building different mix-use aspects, entrenched consumer behaviours around driving to big box stores, and the fact that jobs and housing tend to cluster separately throughout cities (Grant & Perrott, 2009).

Developers also play a big role in the success of mix-use projects. In North America, the development industry is new to mixed-use developments. Traditionally, developers, builders and financiers tended to specialise either in residential or retail (Kozloff, 2005; Willis, 2004). Mixing uses in a project complicates calculations and probabilities of risk (Gyourko & Rybczynski, 2000). Where single-use projects have timelines that developers can predict with some confidence, mixed-use projects require complex phasing.

The state of suburban shopping malls

The current state of suburban malls in Canada is in flux as they are trying to navigate what some might call a retail meltdown. This state of flux can be traced to factors that include the online shopping revolution led by online retailers like Amazon; the fact that North America is now seeing the consequences of "mall sprawl" during the era of suburban development in the 70s and 80s, where overstocked malls are now failing to meet actual customer demand; and changes in retail behaviour that is shifting from valuing material goods to greater value now being placed on experiential social retail, as can be seen in the growth of the restaurant and entertainment industry sectors.

The negative results of this retail shift have hit suburban malls harder than those in dense, more affluent city centers. In the suburbs, big box retail stores like Sears and Target have left malls, while some, like the case of Zellers, have gone bankrupt all together. This void has affected the ability for suburban malls to attract other smaller retail anchor stores,

making the retail offering to customers that much weaker. In the United States, this sudden decline in retail power has forced many malls to shut down entirely, as documented by the website *deadmalls.com*.

Despite these retail barriers and failures, some suburban malls have found ways to adapt to the changing retail landscape. While malls in dense urban areas are overcoming retail barriers by doubling down on rich luxury shopping experiences, malls in the suburbs have started to explore another direction by listening and responding to the needs of the communities they are

a part of. Some of the approaches include catering to specific ethnic and cultural demographics as seen in the ethnic malls that are emerging in Canada. The Pacific Mall in Markham, Ontario is an example as it caters almost solely to the Chinese community – to a point of seeming exclusion. Another adaptation approach has been through reimagining the purpose of malls altogether, moving away from retail and exploring mixed-use models for residential housing, professional offices, recreational community centres, and even green agricultural spaces.



Fig 4. Suburban malls moving towards being community hubs

4.2 Trends

The implications of the ongoing evolution of the retail market extends far beyond the commercial sector, impacting quality of life, neighbourhood affordability, and community ties. The following STEEPV trends were collected as they all have the potential to impact the evolution of suburban shopping malls as they move towards contributing to complete communities.

*See Appendix A for trend descriptions.

4.3 Critical uncertainties

By stepping back and looking at the trends collected, themes started to emerge. To uncover the two critical uncertainties needed for a 2x2 matrix, affinity mapping was used to organize and group trends into two "themes".

Critical uncertainty: changing demographics

The first theme revolved around trends that spoke to how society was changing in regards to demographics and how this might affect the future of malls. Who the mall serves in the future will greatly affect how they are to be designed and operated. Changing demographic trends point to increased diversity emerging in Canadian suburbs like Mississauga.

More and more immigrants are creating homes in the suburbs, bringing with them spending power as most are often in better financial positions than previous generations (eMarketer, 2014). To cater to this trend, malls are being designed and retrofitted to cater to specific cultural groups (Kotkin, 2015). This growing trend in ethnic malls has spread throughout Canada with malls like the Pacific Mall in Markham, Ontario and the Aberdeen Mall in Richmond, British Columbia, both of which concentrate primarily on Asian consumers.

Diversity is also becoming a broader concept beyond one's ethnic background. When Canada describes itself as "diverse", we often think of one's ethnic background. However, Canada is a leader in other diversity issues, such as gay and transgender rights. Now, new forms of diversity are being accepted, such as neurodiversity and physical abilities, which paint a richer picture of what diversity in Canada looks like (Guardian, 2016).

Moreover, suburban demographics are changing in terms of age distribution. As of 2015, for the first time, Canada has more people over the age of 65 than under 15. The rate at which Canada's population is aging is accelerating with significant economic, social, and political implications (Parkinson, 2015). Also, millennials are starting to impact suburban demographics as they are starting to move back due to overwhelmingly high costs of living in the urban cores of cities. Millennials look to the suburbs when purchasing a property, especially when it comes time to raise a family, as the supply of affordable developments and spacious residences are more abundant in these areas (Fox, 2017).

The underlying theme here revolves around how different demographics within the larger "complete community" will be accounted for by the mall. As diversity, in all its forms, continues to grow in Canada, there exists a tension between acknowledging the unique needs of individuals within the larger context of the holistic communities they are a part of. The challenge for suburban shopping malls here will be finding a way to create spaces for increasingly diverse communities to maintain and practice their culture, while being part of a larger Canadian whole.



Fig 5. Critical uncertainty of changing demographics

Critical uncertainty: prioritizing needs

The second theme revolves around the changing policies and behaviours with respect to retail service delivery trends, and how this might affect the future of malls. Changing market and development trends point towards the mall moving away from strictly meeting retail demand and into services that meet a wider range of consumer needs.

As discussed earlier, changing trends in urban planning will significantly affect the future of malls. Local policymakers are beginning to reassess land use and zone restrictions to see how big box retail "greyzones" can be reimagined as denser mixed-use developments that residents and city managers want (Gray, 2017). Mixuse policy is still in its emerging stages in North America, but planners have already began looking to places like Hong Kong for inspiration as their mall development practices revolve around the HOPSCA model, which aims to integrate complexes that contain hotels, offices, parks, shopping malls, clubs, and apartments (Jia, 2011).

The growing trend of increased integration of public services into malls will also bring about new partnerships. Partnerships with institutions and the government (i.e. libraries, recreation facilities, community centres, etc.) will become a means of attracting reliable and long term anchor tenants that drive visitation to other retailers, or directly serve the surrounding community. With these institutions beginning to grow in malls to meet essential needs comes the emergence of anchor communities. Such include the communities that belong to churches, sports clubs, cultural networks, and the creative arts.

Despite the increasingly popular rise of online shopping and the decline of big box stores, retail will still have a place in shopping malls. The approach to retail, however, is changing towards the growing trend of "experiential retail". Consumer surveys are showing a general trend towards consumers placing more importance on experiences than possessions, which is particularly evident amongst the millennial demographic. In particular, social media presence and a "fear of missing out" are drivers for millennials' preference towards experiential purchases over material possessions (Pozin, 2016). Retailers are beginning to adopt experience-based models to drive consumer purchases, such as incorporating mini-concerts, yoga classes, and cafes into the retail environment (Hamblin, 2014).

The underlying theme here revolves around how malls might prioritize the needs of changing demographics mentioned in the first theme. Understanding and prioritizing the needs and wants of different groups in a way that creates value to the larger "complete community" will be a challenge that these malls will need to consider. On one side of the spectrum, malls could contribute to complete communities as spaces that interpret and fulfill the essential needs of communities through social and health services. On the other side of the spectrum, malls could contribute to complete communities as spaces that are shaped by experiences communities want, responding to how mall patrons value aspects of the mall as evident by the way they spend their money and direct their support.

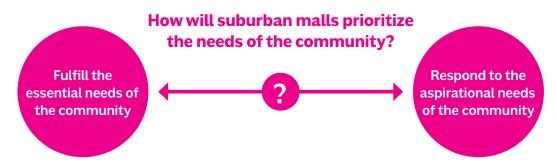


Fig 6. Critical uncertainty of how malls will prioritize the needs of the community

4.4. Scenario framing

Critical uncertainties matrix

The two main identified critical uncertainties above were used to create a 2x2 matrix to frame the development of four future scenarios that explore the overarching research question of "how might the role of malls contribute towards complete communities in the future?". The critical uncertainties are explored as tensions that exist between two extremes at opposite ends of a spectrum.

Y-Axis – diversity in enclaves vs. holistic communities

"Demographic accountability", as the first critical uncertainty, was placed on the y-axis to explore the question, "how will suburban malls account for changing demographics?". This question outlines a spectrum where the top quadrants of the 2x2 matrix explore possible futures in which demographics identify themselves through maintaining and preserving their distinct, individual cultures within silos. On the other hand, the bottom quadrants explore possible futures in which demographics are accounted for through a holistic lens where the common characteristics of different communities become the focus of consideration.

X-Axis – essential needs vs. aspirational needs

"Prioritizing needs", as the second critical uncertainty, was placed on the x-axis to explore the question, "how will malls prioritize the needs of the community?". This question outlines a spectrum where the left quadrants of the 2x2 matrix explore possible futures in which the mall responds to diverse needs by providing for the common essential needs of different communities. We utilized Maslow's hierarchy of needs as a conceptual basis to define the tension underlying this axis. The left quadrants in this case adhere to the base levels of Maslow's pyramid of needs, namely the physiological, as well as the safety and security needs. Note that the Max-Neef model of needs was also considered as an overarching framing model to define stakeholder needs, but was used more extensively in the scenario selection process and with respect to persona development.

At the opposite end of the spectrum, we have ascribed the right side of the x-axis to an inverted version of Maslow's pyramid of needs, where self-actualization is met through the ability to place value on aspirational "wants". Consequently, the right quadrants in the matrix explore possible futures in which the mall focuses on responding to specific services that different communities value and express a demand for through a responsive cultural free market model.

Focus on social and cultural thought

Given the two identified critical uncertainties and the overarching question surrounding the mall's role in contributing towards a complete community, we made a conscious decision to focus on developing the scenarios primarily through a social and cultural lens, without being too laden with concern for the implications of technological trends that are affecting retail models.

Time Horizon

A time horizon of IO years into the future was chosen as the "Reimagining the Mall" project is specifically aimed at developing strategies for a 5 to IO-year timespan. This is a notably short time horizon for the foresight process, particularly since our emphasis is not on technological developments, but on potential implications of changing social and cultural worldviews. Consequently, we acknowledge that the developed scenarios possess a certain familiarity with the present. They are, however, also meant to subtly provoke by imagining futures in which the radical design is in the complete normalization or standardization of the social trends and models that were identified in our trends analysis.

Audience

Although the Foresight Walk is aimed at a multistakeholder audience, we are cognizant that in this case, the scenarios must target the stakeholders with the power to affect change, namely the City and / or mall management. As such, the scenarios must acknowledge certain values (i.e. sustainable business model) that these stakeholders recognize, yet provide perspectives that would enable these decision-makers to reimagine futures.

4.5. Scenario development

Utilizing the 2x2 matrix and the framing criteria above, we developed four generic images of the future that explore the role of the mall in contributing towards "complete communities". For each scenario, we identified a number of common contextual factors that were used as a framework to build and dimension the four future scenarios.

They include:

- **I. Cultural context**, which addresses the general cultural worldview of the future world, the organizational structure within the mall, as well as the pertinent internal and external relationships that affect the mall and communities it serves.
- **2. Strategic context**, which addresses the design of programming and services in the mall.
- **3. Financial context**, which addresses the use of resources within the mall, and the decision-making powers that govern such use.

As a result, the following four scenarios were developed:

Scenario 1: Members Only

In this future, malls contribute towards complete community by providing essential needs services that are mandated by policies to exist in all malls and that are to be equally distributed between cultural communities within each mall. These regulations "formalize" equality in a way that can be seen as "forced inclusivity", and that is not necessarily reflective of shifting demographics around the mall, which can sometimes lead to wasted resources. Access to services are policed and monitored based on mall patrons' engagement with their communities, which pressures patrons to maintain sometimes inauthentic relationships with specific cultures, and leads to program abuse by patrons who claim to be part of many communities.

Scenario 2: Cultural Turfs

In this future, malls contribute towards complete community by providing a free open marketplace for authentic cultural expression, to the extent that communities compete with each other for cultural dominance over the marketplace. Community leaders emerge as advocates of their culture for mall resources,

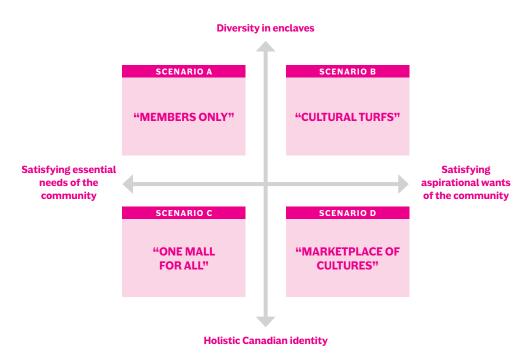


Fig 7. 2x2 scenario matrix based of critical uncertainties

leading to clear cultural hierarchy and exclusion from public spaces based on cultural identification. Dominant community bubbles emerge as there is no need to interact with other communities.

Scenario 3: One Mall for All

In this future, malls contribute towards complete community by providing space and essential needs services that support the fulfillment of civic needs. Mall patrons are identified by their city and nation, and the mall itself is a place to celebrate all things Mississagian and Canadian. The mall provides citizens with resources, such as utilitarian public services and neutral facilities like professional offices and recreation centres, as well as programming to celebrate broad civic cultural events, enabling patrons to better connect with Canadian culture. In this sense, the mall aims at providing for the common needs of the wider community it is part of. It excels at providing for the common basic needs of larger demographic groups that include families, seniors, and youth, but faces challenges in providing for the specialized needs of newcomers and ethnic groups.

Scenario 4: Marketplace of Cultures

In this future, malls contribute towards complete community by providing a free open marketplace for novel experiences of remixed cultures. Cultural appropriation is the norm, and is widely accepted as the practice of cultural remixing is necessary to constantly create new cultural experiences for profit. This leads to the complete erosion of authentic traditional cultures. Mall programming is developed to appease to trends set by "tastemakers" that shape the demands of mall patrons, and performance of services is measured by the financial value that is created in meeting popular community demand.

4.6 Pain points & strategic options

From these scenarios, we explored what the possible pain points some of stakeholders might face in using the mall as a complete community resource. Pain points include anything in the experience that makes life difficult for stakeholders before, during, and after trying to meet their needs through the mall.

Once pain points for each scenario were highlighted, strategic options were developed as possible solutions to the difficulties stakeholders face within those scenarios. Strategic options outline how the mall might eliminate or reduce some of the things that make life difficult for stakeholders before, during, or after trying to meet their needs through the mall.

Stakeholder categories were informed by our trend analysis, and include service providers, service recipients, city government, and mall management.

Scenario A: "Members Only" pain points:

Membership authenticity: In this scenario, it is difficult to track the level of authenticity of the relationships patrons have with communities in the mall as there is pressure through constant data tracking to maintain relationships. There comes a risk of patrons engaging with communities not to develop authentic relationships with members of a particular community, but to simply receive the benefits of being a part of that community. There is also the risk of patrons abusing the system, claiming to be a part of many communities to receive the benefits from each one.

Distribution of resources: In this scenario, trying to provide for the diverse needs of many community groups may be costly and can be sometimes wasteful. To evenly distribute resources requires a lot of management and sometimes it is hard to take

everyone into consideration as some groups are more vocal about their needs than others.

Strategic options:

Status and recognition: Instead of relying on data tracking to manage memberships, the mall could empower community groups to design the explicit ways by which memberships are granted and maintained. Through this option, community groups get to define and manage membership relationships, which in turn also removes some of this responsibility from mall management,

Integrated offering: To help streamline the distribution of resources, mall management can work with different community groups to group their overlapping needs into services that groups can share. Instead of trying to meet the specific individual needs of each community group, a middle ground could be found where offerings could be designed for multiple groups.

Scenario B: "Cultural Turfs" pain points:

Inaccessibility for outsiders: In this scenario, dominant cultural enclaves might grow to a point where it is difficult for outsiders to access that space. While dominant community groups in the mall could be a reflection of how population demographics are represented in the greater community (i.e. a mall with many offerings directed towards Southeast Asians because the wider community is comprised primarily of Southeast Asians), there may still be a need for the mall to serve the needs of community groups who are in the minority. These outsiders might find using the mall difficult because they are not accustomed to the norms set by the dominant community groups the mall caters to.

Conflicts between silos: In this scenario, there might be conflicts between communities vying for the same resources. In regards to dominant community groups, they may want to maintain the level of influence they have in the mall by using their advantage to make

growth harder for other smaller enclave communities. This may result in feelings of resentment and bitterness in smaller enclave communities towards antagonistic dominant communities who do not want to share mall assets.

Strategic options:

Channels for entry: The mall could make it a requirement for communities to include channels for cultural education for patrons outside of their cultural community. This allows for two things to happen. The first being that outsiders have an opportunity to learn from and meet their needs through a different community group; and the second being that dominant community group gets a chance to expand their offering to more of the complete community.

Community benefit agreement: Community groups that grow to a certain size can be asked to invest in resources for emerging communities. With this approach, larger community groups continue to grow while giving emerging communities enough resources to be a part of the mall community.

Scenario C: "One Mall for All" pain points:

Isolation of newcomers: Newcomers, who are a growing demographic, might find it difficult to navigate and access resources as they have yet to assimilate into the wider Canadian culture. With an emphasis on providing for the wider basic civic needs of the community, newcomers may face a steep learning curve in trying to understand how a community works.

Lack of culture: In this scenario, because of the emphasis of providing for the wider civic needs of the community, the wider community lacks the space and infrastructure for cultural practices. This results in a community that lacks unique cultural flavor. This may result in the mall being one less place for people to connect and celebrate the unique aspects of their community.

Strategic options:

Informal newcomer networks: The mall could work with stewards in informal cultural networks to help newcomers navigate the system of services. These stewards can also work in partnerships with civic institutions that have newcomer programs designed into them, but may not have the right communication channels to reach them (i.e. libraries, language classes provided by the city etc.).

Institutionalized culture: The mall could encourage civic institutions (i.e. libraries, farmers markets, recreational centres etc.) to partner with cultural communities in the design of cultural programming. Another option would be to have civic institutions empower newcomer groups to design cultural programming themselves. This may require the help of informal newcomer networks to get the invitation out to interested newcomers.

Scenario D: "Marketplace of Cultures" pain points

Appropriation: In this scenario, cultural appropriation unfairly rewards those who find a way to profit off the cultural products of another community, while neglecting to compensate or credit them. The constant desire to market the "next new thing" may drive some retailers to exploit the cultural elements of smaller lesser known communities. This might also drive them to "remix" elements of different communities, not considering how it might affect the communities they are remixing from.

Cultural fatigue: In this scenario, the constant remixing of culture may result in quick burnout and a numbness towards innovation. Here, the hottest trend may quickly become something you find in the discount bin within weeks. This, in turn, may lead to a rapid loss of authentic cultural practice where the

histories and traditions of a group of people disappear completely.

Strategic options:

Building on culture: Mall businesses could be required to articulate how their offerings speak to the history of the different communities the mall belongs to, and how it plans to build on and contribute to those communities' futures. This approach encourages mall business owners to think beyond the personal economic benefits of their business, and instead work with communities on how to create unique and meaningful cultural offerings that benefit the entire community.

Flexible models: To help prevent quick business turnover, mall management can support businesses in renewing their business models annually to encourage models that are open and flexible enough to adapt to changing trends. By encouraging more consideration of foresight, businesses will be able to see how their businesses can grow with trends.

4.7 Assessing strategic option fit

For each strategic option to be successful, it needs to be implementable and fit within the conditions or context set in each future scenario. To evaluate the "fit" of each strategic option in each of the scenarios, we used the four evaluation criteria developed by Kees van der Heijden, which assesses financial performance, risk performance, strategic fit, and cultural fit (1997).

Financial performance

Van der Heijden refers to financial performance as the strategy expressed through a financial business plan, which can be approached qualitatively by considering distinctiveness, competitive advantage, and customer value (Van der Heijden, 1997). Within the context of the shopping mall, financial performance is assessed by a few other factors. It is assessed by whether or not the resources are there to implement them, and if not, whether it is valuable enough to the complete community for members to want to contribute time and resources to implement it.

Risk performance

Risk performance is the trickier of Van der Heijden's criteria as it is often a somewhat haphazard, intuitive affair since the probability of unique events cannot be estimated. Within the context of the shopping mall, risk performance is assessed as to the probability that harm might come to a stakeholder group (1997). Harm could include feeling isolated, being exploited, and other psychological or physical stress.

Strategic fit

Van der Heijden defines strong strategic fit as a strategy based on exploiting existing distinctive competencies rather than one based on building an entirely new business idea. Unrealistic expectation in this area have a significantly lower potential for success (Van der Heijden, 1997). Within the context of the mall, strategic fit could be assessed on whether or not strategic options align with stakeholder goals. The question to ask is whether strategic options fit with the service and business design models in the scenario.

Cultural fit

Van der Heijden sees cultural fit being one of the most important aspects to focus on. A corporate culture is one of the most stable characteristics of an organization. Any strategy aiming to make significant changes in this area faces major obstacles as it requires behavioural change, which sometimes takes a long time to achieve (Van der Heijden, 1997). Within the context of the shopping mall, strategic options need to align with the values of stakeholders.

4.8 Wind tunneling

To create a Foresight Walk that explores elements of all four scenarios and assesses all eight strategic options would be too overwhelming and complicated for walk participants to absorb. To help us better understand which strategic options and scenarios to focus on, we used another one of Van der Heijden's methods, the scenario-strategy matrix. It helps illustrate the idea that all strategies need to assessed for all scenarios – evaluating performance in all boxes of the matrix on criteria that assesses risk, cultural, financial, and strategic fit.

We ranked the cumulative scores to determine the highest ranked strategic options to be used for crafting provocative tensions ripe for critical discussions that will be highlighted in our Foresight Walk.

*See Appendix B for the Wind Tunnel Matrix.

The two strategic options that performed the best in terms of risk, cultural, financial, and strategic fit across all four scenarios were:

- Provide tools to community leaders that allow them to better leverage their informal cultural networks to help newcomers navigate the system of services; and
- 2. Encourage civic institutions to partner with cultural communities in the design of cultural programming.

While these two options scored the highest, it is important to keep in consideration a few factors that may influence the implications of these strategic options if they are to be implemented. The considerations are as follows:

Leveraging informal cultural networks

This strategic option scored the highest from the eight that were put through the wind tunneling evaluation with **a score of 73 points.**

In terms of cultural fit, this strategic option scored high in all four scenarios. This is due to the fact that in each scenario, this is a practice that happens naturally. Newcomers in any context will naturally look for people with the same background and values as means to find ways for engagement with a system. The only difference with this option is that informal networks could become formalized with programs or incentives for community leaders to actively search out newcomers to help find them their way.

In terms of strategic fit, this option also scored high, and aligned with the mall business and service design models in all four scenarios. This is due to the fact that in each scenario, the strategic goal is to ultimately serve the needs of the complete community. By leveraging informal newcomer networks, the mall becomes more accessible to members of the community who may have been marginalized, which in turn enables them to get closer to the goal in serving the needs of everybody.

Financially, this option scores fairly high across most scenarios. The investments that need to be made are not overly taxing with the biggest being the time required to discover and meet with community leaders to come up with strategies to connect with newcomers. The only scenario that might have trouble with this is scenario C, where because of the focus on providing for civic needs, cultural infrastructure in the mall does not exist as much as it does in other scenarios. Consequently, finding the leaders needed to connect with newcomers might take a little bit longer and may require more resources.

In terms of risk, this options scores high for scenarios A and B, but scores lower for scenarios C and D. This might be due to the fact that in scenarios A and B, cultural communities within the mall have more control over things, whereas in options C and D, compromises might be made in order to better fit into the wider Canadian context. This is especially true in option D where there is high risk of cultural fetishization through remixing and cultural appropriation. Informal newcomer networks here might be more reluctant to engage and collaborate with mall management.

Cultural partnerships

This strategic option scored the second highest when wind tunneled through all four scenarios with **a score of 60 points.**

In terms of cultural fit, this option scores high in scenarios C and D, but scores lower in scenarios A and B. This could be due to cultural communities feeling protective of their independence, not wanting to compromise their ways of providing for their members with institutional intervention. Also, in scenario A and B, the mall is shaped by what its cultural communities want, and there might not be as many civic institutions within the mall to collaborate with.

In terms of strategic fit, this option scores high in all four scenarios. Much like the previous option, having civic institutions team up with cultural communities only opens up doors to new members of the wider community. Each civic institution brings with them their own community that could use the mall as a means to meet their needs. Also, by having these two groups collaborate, it allows the mall to innovate and expand on its offerings to the wider community.

In terms of financial fit, this option scores high in scenarios B and D, but scores low in scenarios A and C. With there being a focus on meeting the essential needs of everyone in scenarios A and C, resources in terms of money and supply are in short supply to develop new programming. If this option wants to succeed in scenarios A and C, programs will most likely need to depend on resources coming from civic institutions and the cultural communities, not mall management.

In terms of risk, this option fairs medium across all four scenarios. The factor influencing this could be the level of trust between the two parties. In scenarios A and B, cultural communities are empowered by mall management to direct their own programming, and to have civic institutions suddenly become a part of decision-making is a change that will require trust to be built. This is especially the case for scenario D where having civic institutions be a part of cultural programming might be seen as another compromise on an already compromised community, with the possibility for high levels of cultural appropriation and cultural remixing.

4.9 Choosing a scenario

The scenario-strategy matrix not only helped to narrow our focus on the two strategic options mentioned, it also enabled us to choose a scenario for the focus of the Foresight Walk. Using the scenario-strategy matrix vertically, we were able to see which scenario allowed for more strategic options to possibly succeed in the conditions set within each of the different futures. Scenario C scored the highest with I23 points (refer to Appendix B), and was selected as the primary scenario for our Foresight Walk.

With a score of 35 points, scenario C scores high in being able to strategically support strategic options. In this scenario, the strategy the mall utilizes to meet the needs of the complete community is to address their essential needs through civic institutions. Most strategic options address how needs could be better met. Because essential needs are more universally understood than aspirational or cultural needs, they are easier to agree on, plan for, and provided for.

With a score of 34 point, scenario C scores highest in all scenarios in having a culture that can support strategic options. In this scenario, the mall has adopted an inclusive worldview where everyone is welcomed at the mall. Patrons are not asked to prove their membership to any part of the community to gain access to the goods and services of the mall. This inclusive worldview makes it easier for strategic options to be implemented in that most aim to make the mall more accessible to more people.

In terms of risk, scenario C scores high, with a score of 32 points in being a low risk scenario for strategic options to be implemented in. Because inclusivity is the main driver of the mall, patrons on the margins, whose vulnerabilities the mall is still required to be mindful of, have more to gain than lose. Also, meeting the needs of the community through partnering with institutions like libraries, schools, and churches helps in reducing risk as these institutions might already have formal policies and practices in place that mitigate risks.

Financially, this scenario scores lower than others with a score of 22 points and faces some challenges in being able to support strategic options. Unlike some of the more aspirational business retail happening in scenarios B and D, where more profit is likely to be made, scenario C's focus on providing for essential needs has them working alongside civic institutions and nonprofits where making money is less of a goal. Because of this, it is least likely to have resources to redistribute to implement strategic options. This scenario would most likely need to rely on volunteering as a resource, but that comes with challenges as well.

However, to focus primarily on scenario C and not explore any of the elements of the other three scenarios would be a missed opportunity because

despite not scoring the highest, there are still insights we can learn from in each scenario. Also, we believe that by focusing on the extreme ends of critical uncertainties disregards the reason of exploring their tensions in the first place. Because of this, we chose to incorporate elements of the other three scenarios as less emphasized background elements in order of their wind-tunneling scores.

The Foresight Walk would then be designed to reflect a scenario that has the following composition:

- I. Scenario C (primary focus)
- 2. Scenario A (secondary focus)
- 3. Scenario D (tertiary focus)
- 4. Scenario B (fourth focus)

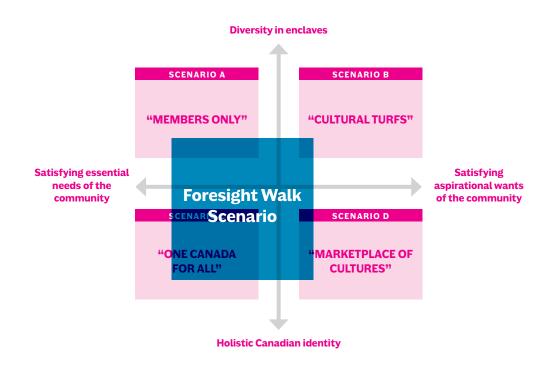


Fig 8. Scenario boundary in relation to the 2x2 scenario matrix

4.10 Stakeholder perspectives

To develop personas that will help us gain insights on how to come up with design solutions for the mall, it was important to understand the system that the different stakeholder groups are a part of. This began with a mapping of the different stakeholders groups on a stakeholder influence map, as informed by our trends analysis. At the center of this map is the goal of the mall, which is to provide for the needs of the complete

community. using our Foresight Walk scenario, influenced mainly by scenario C with elements of scenarios A, B, and D, we mapped out stakeholders in relation to their influence on how the mall can reach its goal. Stakeholders who had more influence were closer to the center, and those who had less influence were farther away.

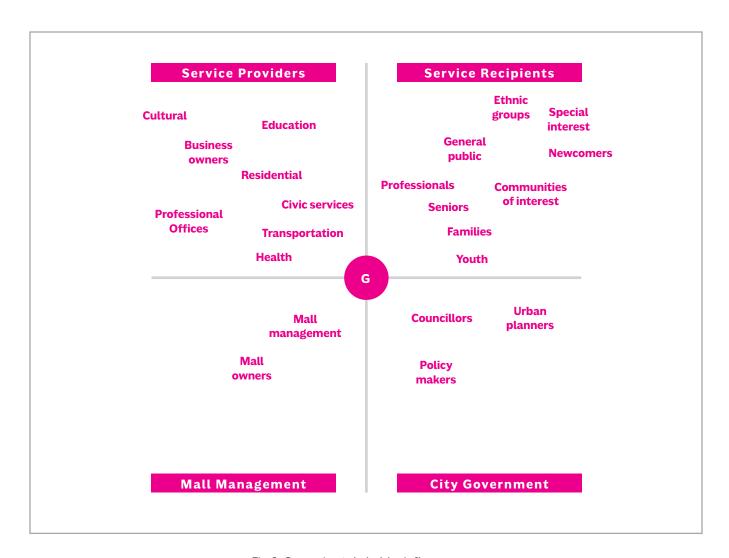


Fig 9. Scenario stakeholder influence map

Influence

The stakeholder influence map illustrates how because the mall has only so many resources in this scenario, it focuses on meeting the needs of larger, more broad stakeholder groups, this case being families, youth, seniors and professionals. Because of this, the service providers that the mall directs its resources towards to meet these needs lean more towards services within the realm of health, transportation, and civic services

(i.e. libraries, recreation facilities, community centres, etc.). Alternatively, smaller stakeholder groups with more specialized needs that are harder for the mall to cater to with become less of a priority and have less of an influence on how the mall functions in meeting the needs of the complete community. This is made evident by how services within the realm of culture are on the fringes.

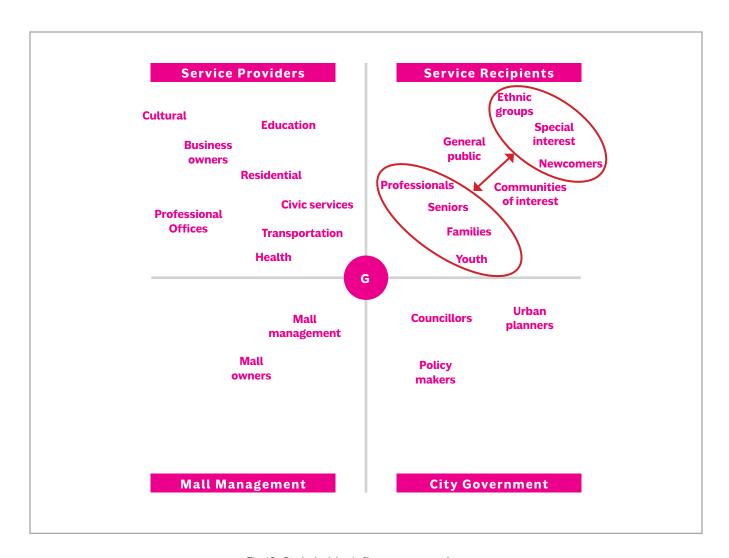


Fig 10. Stakeholder influence map value gap

Value gap

How the mall tries to meet its goal of providing for the needs of the complete community in scenario C results in a fairly big value gap between broader stakeholder groups and those who are more specialized and culturally distinct. This is important to highlight because these groups, while they are smaller in individual size, are becoming that much more influential as the number of these groups are, as our trends analysis shows, starting to grow in suburbs. Immigrant communities are starting to migrate in increasing rates to Canadian suburbs like Mississauga. Minorities are now the majority as more than half of Torontonians identify as visible minorities (Whalen, 2017). Moreover, they bring with them increased spending power, compared to previous generations of immigrants.

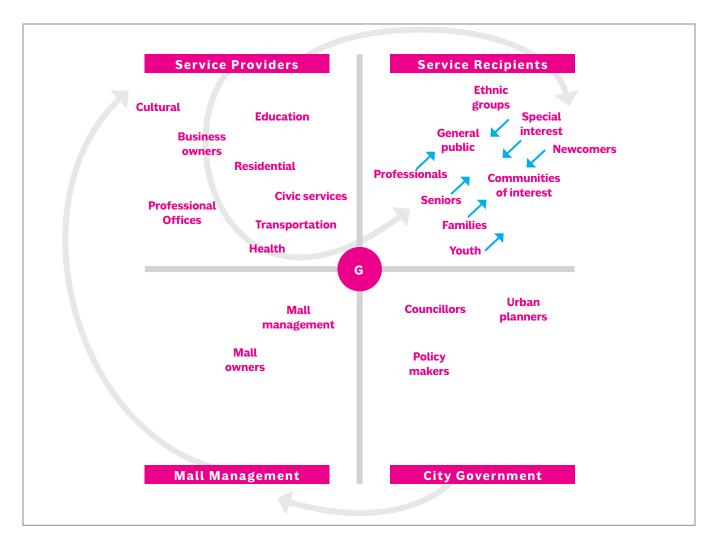


Fig II. Scenario stakeholder system intervention

System intervention

To address this value gap and while continuing to meet the goal of providing for the needs of the complete community, the mall needs to develop a middle ground where the needs of service recipient stakeholder groups near and far from the center can be catered to with a simplified offering. This could be done with mall management encouraging businesses and services to develop initiatives that aim

at welcoming and integrating specialized stakeholder groups into the wider community. At the same time, these initiatives would also work in expanding the worldviews of broader stakeholder groups, giving them the opportunity to connect with and learn from diverse specialized groups. Both of the selected strategic options aim at achieving this objective.

4.II Stakeholders needs assessment

If the design intervention lies in creating initiatives for services and businesses to develop offerings to meet the needs of both specialized and broader service recipients, it then becomes important that personas focus on exploring those two stakeholder categories. To highlight the critical stakeholders in scenario C that we needed to frame our personas around, we used the Fundamental Human Needs framework developed by Max Neef. This framework provides a value theory with which to conceptualize meeting needs, wants, and desires. In Max-Neef's characterization, what is considered basic needs arise from a conception based on human bio-psycho-social needs (Shen, 2016). We used the framework to understand the two stakeholder segments by addressing the following questions: I) do stakeholders categorized as service providers have the resources and capacity to meet community needs?; and 2) how well are the needs of stakeholders categorized as service recipients being met?

Using the Max-Neef's Fundamental Human Needs framework, we discovered that I) cultural service providers were least likely to have the resources needed to meet community needs, having the lowest score of I5; and 2) newcomers were least likely to be able to meet their needs at the mall, having the lowest score of I9.

*See Appendix C for the full set of needs assessment data.

Cultural service providers

While the mall may not actively disregard cultural services as a service provider to direct resources to, the decision to invest resources is influenced by how much of a return is being met by being able to meet community needs. Investing in civic institutions that meet more essential needs to a wider group of people creates more of a return than investing in numerous smaller cultural service providers that meet the specialized needs of smaller niche groups. Because of this, malls might lean away from investing resources into cultural service providers for the limited reach in meeting the needs of large groups of people within the community.

Newcomers

Newcomer groups are directly affected by limited resources directed towards cultural service providers as they can be used as entry points for newcomers to access the wider system of services and relationships available to them in the mall. The effects go beyond not being able to meet needs as this might also result in feeling isolated from the community. Time spent trying to overcome barriers to meeting needs become less time trying to integrate and learn about the new communities newcomers are a part of.

If critical perspectives are needed to understand how to develop design interventions, these two groups would give us the most insights as their pain points, which are greater in comparison to other stakeholders, provide more dimensioning for tensions to be shaped and be addressed.

4.12 Persona design

Primary persona

For us, the persona functions as a speculative design tool to provide participants with an accessible and human-centered approach to immersion in the "One Mall for All" future scenario. The primary persona is meant to support our trends analysis and scenario development process by conveying tensions and gaps between different stakeholders as experienced by an extreme user persona. Moreover, by having all participants immerse themselves through the experience of one primary persona, our aim was to provide a "common language" that enables implicit assumptions of participants to be made explicit for discussions on the role of malls in the future (Nielson & Hansen, 2014, p. 1673).

Based on the analysis and insights generated from scenario selection through wind-tunnelling and the stakeholders influence map, we first determined a set of design criteria for the creation of a primary persona to be crafted as the protagonist in our narrative.

Primary persona criteria

Extreme User:

Extreme users' needs are often amplified as compared to average users, and their needs are generally also those of the wider population (Stanford d.school). As such, we decided that the primary persona should be an extreme user, so that it could more provocatively demonstrate pain points and tensions to better prime participants of the Foresight Walk for critique of the selected future scenario.

Scenario Context:

Given our wind tunnelling analysis and resulting selected scenario composition, the primary persona should be:

- A stakeholder within an "augmented" Scenario C, with influences also of scenarios A, D, and B to highlight pertinent tensions related to the research question.
- Representative of particularly relevant trends and tensions, including:
 - The value gap between broader service recipient stakeholder groups vs. those with more specialized and culturally distinct needs
 - The leveraging of informal newcomer networks
 - Partnerships between civic institutions and cultural communities

Stakeholder Perspectives:

Given our stakeholders influence map and assessment of stakeholder needs through Max-Neef's Fundamental Human Needs Framework, the primary persona should:

- Be either a service provider or service recipient.
 - If the persona is a service provider, he
 / she / it should be from the service
 provider group with the least resources
 and capacity to meet community needs,
 namely cultural service providers.
 - If the persona is a service recipient, he
 / she should be from the specialized
 service recipient group whose needs are
 least likely to be met at the mall, namely
 from a newcomer group.
- Have regular interactions or a personal relationship with broader service recipient stakeholder groups, namely families, youth, seniors and / or professionals.

Design Ethics Criteria:

We must be able to draw perspectives from our own personal experiences or be able to base the persona development process on first-hand knowledge of real people that we have access to.

From this criteria, we created the persona of **Andre Flores.**

Andre Flores - "The Newcomer Caregiver"



Andre Flores, 31

Newcomer

Demographics and Country of Origin:

- · From Lima, Peru
- Speaks Spanish as his primary language
- Able to speak English for everyday routines

Andre's Newcomer Status & Move to Canada:

- He is a brand new newcomer to Canada, arrived a month ago
- He came here on caregiver visa on his own with help from sponsor family
- He is sponsored by cousins who are Canadian citizens to take care of his elderly uncle (80), Diego Flores

Andre's Family & Work Background:

- · He is 31 years old
- He provides for his family back home, sisters, brothers, parents
- He communicates with them everyday, and is waiting to fulfill his employment

- requirements to get citizenship status so he can bring them to Canada
- Professionally, he has only worked labor jobs back in Peru
- He has undergone caregiving training back home before coming to Canada (needed to be "qualified" to get the visa)

Andre's Goals:

- · Care for his uncle, Diego, on a daily basis
- Develop meaningful relationships, and potentially find a life partner
- Establish financial stability and legal status to bring family from Peru to Canada
- To practice and maintain his culture and connections to Peru

Andre's Main Pain Points:

- Difficulty developing meaningful relationships due to language and cultural barriers, lack of access to resources, and limitations with built environment (i.e. transportation)
- Disconnection with family back home, and lack of access to larger Peruvian community in Canada
- Difficulty assimilating to Canadian culture because he feels he is not confident enough with his English skills to connect with Canadians
- Resulting in feelings of loneliness and isolation

Design justifications

Demographics and country of origin:

According to the 20II and 20I6 census or National Household Survey data for Mississauga, Peel Region, and the Greater Toronto Area, it is clear that visible minorities make up over half of the population in Mississauga (City of Mississauga, 2017; and Peel Data Centre, 2013). In particular, South Asians and Chinese are the majority minorities based on data around ethnicity and major non-English languages spoken at home. However, given that our design criteria specified to create an extreme user persona, we decided to create a persona from a minority group within the main newcomer groups in the area. Latin American ethnicity and Spanish as a major non-English language were consistently ranked 4th or 5th in the census data, so we created Andre to be from Peru and to speak Spanish. This profile was also based on our access to interviews with a recent newcomer to Canada from Peru – his personal pain points were used as a basis to integrate future trends and projection into the "One Mall for All" scenario.

Gender:

The choice to create Andre as a straight male is mainly based on the fact that our access to a real person of similar background is a straight male. We are cognizant that there might be gender biases in the perspectives conveyed through Andre's persona.

Role as Caregiver:

The caregiver role is based on personal experience with sponsoring family members through the now defunct Live-In Caregiver Program that brings foreign workers to Canada. Although the program no longer exists, given the trend of a drastically growing aging population, we see possibility for a similar program to exist in the future for the Canadian government to address this population issue. Moreover, attaching Andre to this role is crucial to having his persona develop a personal relationship with someone from the broader service recipient stakeholder group of seniors.

Empathy mapping

How does Andre see the Peruvian community in the mall?

- There is no space to for Peruvian / Latin-American cultural practices in the mall
- Andre sees more Indian and Chinese people in the space
- He sees Latin American people and hears Spanish in public spaces sometimes

What does Andre do or feel in his engagement with the Peruvian community?

- His sponsor family are not very active in their ethnic community
- He interacts with his elderly uncle's friends in the walking club
- He engages in small talk with people but the experiences are surface level

What does Andre do or feel in his engagement with the larger community?

- He goes to the mall with his uncle for exercise, health services, and groceries
- He takes his uncle to mall programs and the library
- He is afraid and not confident to speak English with anyone at length

What does Andre say?

- "Confidence is really hard for someone like me to build"
- "It's hard not to feel isolated and lonely, but I have to find a way."

How does the larger community interact with Andre?

- They accept him, but don't know how to communicate with him
- Civic institutions organize programming for newcomers

Secondary characters

Diego Flores

The character of Diego Flores, who is Andre's uncle, functions as a foil to Andre's character. He is a crucial counterpart in the narrative as he provides insights from the perspective of someone who is in the broader service recipient stakeholder group, namely seniors. Diego frequents the mall for essential needs such as health services, including exercise and prescription refills. At the same time, he also has experience as a newcomer, and as such provides a baseline comparison to distinguish how the role of the mall might be seen differently from someone who has the advantage of being in both the broader and more specific service recipient stakeholder groups. For example, Diego is an active participant in the mall's programming for seniors (e.g. Mall Walking Club, Seniors Reading Group), which serves to highlight differences in how the mall is able to cater to his self-actualizing needs despite a lack of capacity for culturally-specific programming. More importantly, Andre's close relationship with Diego was designed to explore the means by which the mall might leverage informal newcomer networks to better provide for seemingly neglected stakeholder groups.

Sofi Rivero

The character of Sofi becomes Andre's underlying social motivator. Andre sees and thinks about her constantly, but has yet to interact with her on a more personal level – this becomes a goal that drives the narrative in addressing Andre's main pain points and the tensions that exists in the future scenario.

Jorge Rivero

The character of Jorge Rivero, who is Diego's good friend from the mall and Sofi's uncle, functions to reinforce trends such as aging population, increased immigrant spending power, informal newcomer networks, and anchor communities in malls. The bond that Jorge has with Diego through the Mall Walking Club and the Reading Group demonstrates an established sense of community within the mall for this broader stakeholder group. Given his connection to Sofi, Jorge also acts as a critical gateway for Andre to have more incentive to access the mall's

resources. This is designed as a jumping off point for potential discussion on how the mall can address the value gap and system intervention in "Stakeholders perspectives".

Limitations

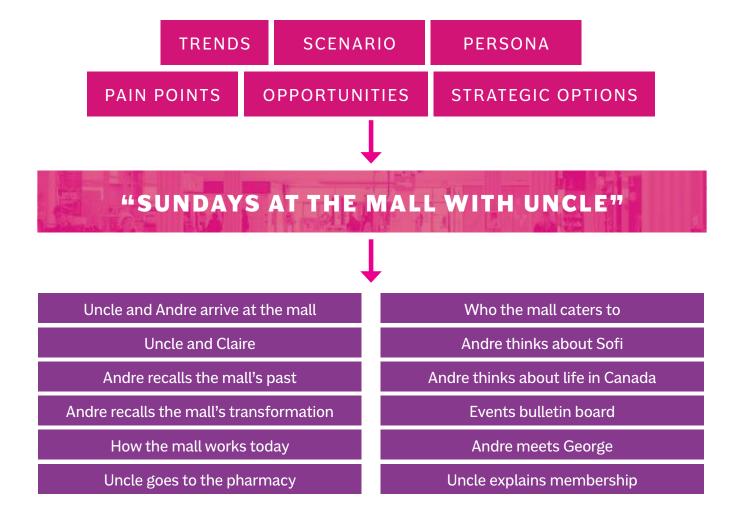
We acknowledge that the personas developed for the Foresight Walk were were primarily based on trends analysis with secondary research and some limited primary interviews with real people as a basis to create Andre's profile. More robust ethnographic research and one-on-one interviews could have been conducted to build these personas.

We acknowledge that the persona of Andre Flores is but one representative extreme user, and his pains and goals address a perspective that is not entirely inclusive, particularly given the fact that he is a single, straight male. There are, in fact, many other realms to explore such as gender dynamics, sexuality, and disabilities, as well as whether characters can be depicted in a more encompassing, neutral manner. Having multiple narratives from a number of primary personas is something that we hope to further explore as next steps for the Foresight Walk.

4.13 Narrative design & ties to physical space

Incorporating everything from the foresight process, we created a story with I2 narrative anchor points that bring to life trends, tensions, strategic options from scenario development, and persona pain points and opportunities.

A synopsis of the foresight walk focuses on our main character Andre, who along with his Uncle, Diego, make their weekly visit to the pharmacy at the mall. On this visit, Andre recollects an embarrassing interaction he had with a girl he secretly has feelings for. This brings up emotions of loneliness as he is having difficulties integrating himself into the community after having recently arrived from Peru. After sharing these feelings with his Uncle, he tells Andre about the newcomer community membership and the community events the mall offers. As a coincidence, when Andre's Uncle meets his friend Jorge, he reveals that the girl is actually his niece, Sofi. The foresight walk ends with Andre considering how the newcomer membership could better help him connect with his community, and with Sofi.



Limitations

Site specificity

Gladki Planning Associates, in partnership with the city, developed public engagement outreach for six different malls in Mississauga. This involved a great deal of coordination with mall management in all six sites, ensuring that there was political balance in the approach to public engagement for each. To adapt to this limitation, the Foresight Walk was designed in a way that was not wholly reliant on being site-specific. While this approach allows for the same walk to be conducted in multiple sites, it compromised our approach of using Foresight Walks as a way to magnify and dig deeper into specific environmental elements.

Non-site specific narrative

To further expand on the last limitation, a nonsite specific approach sacrificed our ability to incorporate interesting unique qualities of the space into our Foresight Walk. Sheridan Centre had many architectural features that could have given our walks more dimensioning if they were incorporated. This created an unbalance in the narrative in the sense that the story spent more time describing the scenario through the main character's internal monologue than through the environment. While walk participants were still able to make sense of what our future scenario looked like, they did this more so through the character's story and less through the environment. Ideally, Foresight Walks need to be balanced in how both the story and the physical environment contribute to participants' ability to envision the future.

*See Appendix D to read and listen to the Foresight Walk narrative.



4.14 Artifacts design

To give further dimensioning to the scenario and the persona we asked participants to embody, we designed artifacts that were to be engaged with throughout the Foresight Walk. Along with the story, these artifacts helped give participants a background context into the life of the main character, Andre, his aspirations, and the resources he has to meet them. Artifacts were also designed to show how the mall is implementing the strategic options the Foresight Walk aims to explore.

Andre's wallet

The first artifact that participants engage with is Andre's wallet. In the wallet, we included pieces that help prime participants before they adopt and embody Andre's identity during the Foresight Walk. As extremely personal objects, the idea of a wallet also acts as way to create empathy for Andre as it highlights what he can and cannot do, how he might provide for his life, and what he values.



Fig 12. External view of Andre's wallet



Fig 13. Selection of items inside wallet



Fig I4. "Conversation Topics with HER" – Andre's note to self in wallet



Fig 15. Photo of Andre & friends from home with personal message

Community events bulletin board

The second artifact that participants encounter is the events bulletin board. This bulletin board consists of 9 posters that advertise events happening through the different communities the mall is associated with. Events include activities like community festivals, group fitness sessions, and art programming. Events are designed in a way to show the different ways that the strategic option of encouraging civic institutions to partner with cultural communities in the design of cultural programming could be implemented.

The design criteria for the events programming include:

- They need to appeal to both the broader community and newcomer groups;
- They need to be provided through a collaboration between civic institutions and cultural groups;
- They need to incorporate programming that allows people to open up and try new things;
- They must further explore the criteria we developed, which include community context, location, resources needed, how the mall might be repurposed, and accessibility.



Fig 16. Community events bulletin board placed in-situ

Newcomer membership brochure

To supplement the community events bulletin board, the newcomer membership brochure showcases the system of services available to newcomers to help them meet essential needs, get exposed to the community, and find ways to give back. The purpose of this brochure is to test what newcomers might find valuable and useful when it comes to engaging with a new community. To test how newcomers might opt in to a service like this, they have the option of either paying a monthly subscription, or volunteering their time. Signing up for a membership also gives members a discount to a list of basic services as well as a list of more specialized services they can customize with their membership. Additionally, by signing up to a membership, members can direct their subscription or volunteer time towards community groups of their choice.



Fig 17. Newcomer membership brochure

Rose

The last artifact that participants receive during the Foresight Walk is a rose from Uncle character. The rose symbolizes the potential and desire for Andre to connect with the community (by asking Sofi out on a date). We used the rose to hopefully remind participants of this as they fill out the post walk questionnaire.



Fig 18. Rose from Andre's uncle



4.15 Facilitation design

Workshop facilitation objectives

As mentioned above, our main hypothesis with developing the Foresight Walk is that it could open up multi-stakeholder critique through provocation that bridges the present with futures. Hence, the facilitated workshop that followed the Foresight Walk was crucial in understanding the impact of the walk.

Our objectives for the facilitation were:

- To see whether there were any changes in perspective after undergoing a futures experience, and to understand those changes in the participants;
- To solicit insights on any emotional and / or cognitive resonance with the experience in order to refine the speculative design methodologies used to create this immersive futures experience; and
- To see how the experience might allow participants to imagine other alternative futures or critique the conveyed future scenario and affect current action through strategy development.

Given these objectives, we designed a suite of exercises and questions to accompany and leverage the walk experience to spark discussion:

Pre & post walk questions

We were interested to know what the participants' perspectives and assumptions were prior to the Foresight Walk experience, and whether there were changes in those views (expanded, narrowed, refined, or mobilized) after the walk. So, we designed a check-in and check-out exercise that posed the same question regarding the participants' own vision for the role of the mall in the future within the context of a complete community. The pre-walk question was asked during the introduction to the Foresight Walk, and the postwalk question was asked at the very end after the walk and the facilitated workshop.



Fig. 19. Pre & post-walk exercise to understand any changes in participant perspectives

Mapping the walk for resonance

One of the main objectives of the Foresight Walk is in designing an environment that harmonizes various speculative design elements to enable participants to acquire knowledge and understanding of a future through experience, thought, and provocation of the senses (Stevens, 2016). Our hope is that this harmony of experience will activate moments of cognitive and emotional resonance that ultimately create an understanding of, and consequently, the ability to have critical discussions about futures.

Categories of resonance

To collect data on what aspects of the walk might have been most effective in creating these moments of resonance, we created a map that visualizes narrative anchor points on a route tied to a layout of the mall's physical space. Walk participants were asked to recall and mark down points where they felt positively or negatively about this future and the reasons for these feelings throughout the walk route. They were also asked to note points on the map where they recall seeing evidence of trends that changed the mall or the community in this future. Overall, this exercise was designed to help us generate data on six categories of resonance, which include narrative anchor points, trends, pain points, pain relievers, opportunities, and opportunity optimizers.

This resonance mapping exercise was first done individually by participants directly after the walk to facilitate a period of self-reflection before opening up to sharing and discussion as a group.

*See Appendix F for an example of a participant's completed scenario resonance map.



Fig 20. Instructions & empty resonance map for post-walk workshop

Critical discussion leading to strategy development

After allotting individual self-reflection time to complete the workshop exercises, we facilitated a 20-minute sharing and discussion on the questions. The 20 minutes proved to be limited, and the majority of the groups actually remained for close to a 45-minute discussion. In a sense, this step from introspection to sharing also act as a useful temporal "breaking" point for the participants as they step out of the future, from the embodiment of Andre into thinking about how the experience could create value for the present. The discussion was wrapped with the final post-walk check-out question, which provided a feedback loop to the participants' perspectives at the beginning of the walk.

Improvements for immersion into the future

Lastly, we were also interested in how well the participants were able to create their own "perceptual bridge" within our design of this future scenario experience. Thus, as a purely methods-based question, we also solicited recommendations for improvement on the strengths and weaknesses of the immersive experience itself – whether it be logistics or design.

Limitations

One of the greatest limitations for the facilitated workshop was time and the recognition of cognitive overload for the participants. Although we designed self-reflection elements to the workshop, more ample time was necessary, particularly for the sharing of insights to generate more productive critical discussion. Although conversations approached strategic development, it was clear that this phase of the walk only broached the subject. A subsequent workshop designed specifically for the development of current strategy could be a useful means to better foster that discussion.

Another limitation is the numerous variables at work throughout the Foresight Walk. This makes it difficult to measure the true impact of the walk, and to see which specific factors or design elements resulted in moments of resonance, and how that resonance was established.



Case Study Foresight Walk

5.1 Sheridan Centre

Sheridan Centre, appropriately characterized by its tagline "your community mall", is one of the six suburban indoor shopping malls involved in the "Reimagining the Mall" project led by the City of Mississauga in partnership with the Region of Peel.

The mall is centrally located as an anchor in what planners identify as the "Sheridan Community Node" within the Sheridan neighbourhood of west Mississauga. Community Nodes are "areas that provide surrounding neighbourhoods with access to uses for daily living like shops and restaurants, community facilities, heritage and entertainment uses, schools, parks, open spaces, and a diverse housing stock" (City of Mississauga, 2017). As a focal point within this node, Sheridan Centre currently provides a mix of commercial and public services, office spaces, and retail, with its main retail anchors being a Metro and a Shoppers Drug Mart. The mall is managed by Bentall Kennedy, one of North America's largest real estate investment and service providers.

Depending on the time of day, the mall seems guiet, and almost deserted at first glance. A walk around the space reveals a string of closed stores, alongside a massively empty, but recognizably red Target store space, indicating clear evidence of trends such as retail meltdown, and the decline of big box stores. However, our initial observations of Sheridan Centre is that in the face of changing retail trends, the mall seems to be well underway in reinventing and repurposing itself towards a very communityfocused shared space. Notably, it is home to an array of public community services such as the Sheridan Branch Library, the 180 Merge Youth Centre, the Story Garden – a non-profit literacy centre, Polycultural and Immigrant Community Services, and a Service Ontario branch. It also offers organized community programming, including the Annual Giant Used Book Sale, the Sheridan Sharks Kids' Club, and a thriving Mall Walking Club. These provided a useful physical backdrop and grounding present context to the "One Mall for All" scenario conveyed in the Foresight Walk.



Fig 21, 22, 23, 24. Examples of public community services at Sheridan Centre

5.2 Three instances of the Foresight Walk & their objectives

In total, we conducted three instances of the same Foresight Walk. The format of each walk consisted of:

- A 20-minute introduction of the emerging trends affecting suburban malls;
- A 20-minute walk "through the future" inside Sheridan Centre; and
- A 30 to 45-minute facilitated workshop for critical discussion.

Walk 1

The first instance of the Foresight Walk was meant to be targeted towards City stakeholders, and key decision and policy-makers involved in the "Reimagining the Mall" project – mostly due to their availability to participate on a weekday. The main aim for this first instance was to validate and critique the selected scenario, "One Mall for All". Learnings from Walk I were used to refine the walk format, particularly with respect to the workshop design for Walk 2 and 3.

Walk 2 & 3

The remaining two instances of the Foresight Walk were open to the larger public, with many of the participants coming from outside of Mississauga. The aim of these walks was to validate and critique the design and method of the walk itself. The facilitated workshop was refined shifting away from content research, but to concentrate on testing the emotional and cognitive resonance of designed elements throughout the walk in order to provide insights on how the Foresight Walk method can be improved.

*See Appendix E for photo documentation of the Foresight Walks.



Fig 25. Walk participants listening to audio narrative & interacting with future artifact

5.3 Pre-walk introduction

To assist participants with creating the "perceptual bridge" necessary for a valuable experience of futures, we facilitated a brief introduction prior to the Foresight Walk that provided the participants with context around the foresight process and the concept of "complete communities". Without revealing very much about the scenario that the participants were to experience, we gave a short description of the world and time horizon to prime the participants for "time travel":

In this scenario, the year is 2027. The mall is a community hub that aims at providing for the essential needs of the whole community. The mall excels at providing for the common needs of larger demographic groups that include families, seniors, and youth, but it faces challenges in providing for the specialized needs of newcomers and ethnic groups.

We understand that embodying the persona of Andre Flores is a crucial cognitive entry point into our designed future experience. As such, we decided to employ characteristics of rituals designed to assist in creating a moment that could spark meaning-making for the participants in this temporal transition (Ozenc, 2016).



Fig 26. Facilitators introducing Foresight Walk to participants



Results & Synthesis

6.1 Pre & post walk questions

There were similarities between all participant groups in their responses to the pre and post-walk questions. In particular, the responses from Walk I (Friday, Nov. 3) have almost identical responses between the pre-and post-walk descriptions of the future role of the mall. This indicates that the selected scenario designed for the Foresight Walk aligns with what participants, particularly City representatives and planners, already had in mind in terms a visionary direction for what the role of the mall could be in contributing to a complete, healthy community.

With respect to the responses from Walk 2 and 3 (Sunday, Nov. 5), although they also presented similar visions for the mall, it is interesting to note that the pre-walk responses were generally very surface level. Participants mainly viewed the role of the mall as an important shared space with a sense of place. In comparison, the post-walk responses took on a much deeper level of thinking - it was evident that the Foresight Walk experience and discussion have moved participant perspectives beyond the obvious of physical space to involve deeper marginal views. In a sense, the pre and post-walk perspectives seems to show a layered articulation of discourse surrounding possible futures for the mall that can be likened to thinking within a causal layered analysis (CLA) framework. Mostly significantly, and in line with the benefits of CLA, many of the post-walk responses also included strategies for transformative actions that is based on an empathetic view of marginalized needs represented by Andre's persona. Several notable quotations from walk participants highlighting these refined perspectives are outlined below:

Pre walk responses mostly spoke to malls being community spaces where people could gather and experience their community together:

"Provide a convenient place for shopping all sorts of necessity for entertainment and for getting together with friends."

"Malls should be an extension of open and public spaces found in a community. It is a place that can connect people."

"One-stop [for] shopping and community services, from groceries to daycare to doctor and healthcare to justice services court and community service & rehab & employment training."

Post walk responses represented similar community-focused ideas, but differed from the participants' initial pre-walk responses in that they presented views that dove deeper into explaining how malls could provide for community needs. Post-walk responses showed that participants were imagining potential strategies to tackle challenges or tensions highlighted throughout the Foresight Walk:

"Community [members could be] on the mall [management] team, not a mall building owner deciding on future of mall."

"Creating a community with programs that can connect various ethnicities and age groups"

"A community space where events can be hosted, posted, where people can put up their own ideas as well."

"Blended community needs, government services and commercial business to suit everybody."

6.2 Resonance

Having participants map points of resonance on the walk allowed us to explore and synthesize why certain parts of the walk stood out. Insights from this analysis will help inform how future walks can be designed in a way to have points of resonance be stronger, more strategic and richer for both researchers and participants to draw insights to use in following problem solving phases.

*See Appendix G to see the scenario-resonance data matrix.

Experiencing the world

In designing the world in which this Foresight Walk exists, trends that may affect the future of shopping malls were incorporated. These trends manifested themselves in multiple ways as they were incorporated into the wider community, the story, the different characters, and in the persona of Andre Flores. The trends that generated the most moments of resonance for participants were the following:

- I. Reimagining the purpose of malls (8 recorded moments of resonance)
- 2. Decline of big box stores (5 recorded moments of resonance)
- 3. Aging population (5 recorded moments of resonance)

Synthesis Notes

Artifact design:

- One thing that could have improved on is to have the artifacts be more explicit in contextualizing the future world. Artifacts that were designed for this Foresight Walk focused on contextualizing either Andre's persona or how the mall might implement the strategic option.
- Artifacts that could have helped contextualize the world could have come in the form of a newspaper, a general community board or miscellaneous nonstory or persona specific items in Andre's wallet, like receipts.

Narrative design:

- Throughout the mall's transformation in the future, it is repurposed numerous times and in ways as it is explored in the story, the community events posters, and the community membership the mall offers.
- The trend of an aging population may have resonated with participants as the only other people in the mall during the walk in all three sessions were mostly seniors. Also, the story paints a vibrant picture of how the needs of seniors are provided for in the future through the attention that the character of Uncle gets at the pharmacy, the programs that are designed for him and how all of his friends are at the mall.

Ties with present environment:

 The trend of declining big box stores is something participants can actually see in the present as a large Target store is walked past at the beginning of the walk.

Recommendations for future walks in creating a world that resonates with participants

- Artifacts need to work just as hard as the audionarrative to give context to the world this Foresight Walk exists in. Though it is necessary to be careful not to overwhelm participants with too many artifacts.
- To strengthen the resonance of story themes, it is important to repeatedly visit them through different sensory interactions (through the story, through the posters, through the membership etc.).
- Utilize the people who use the space in the present and project how they might still relate to the space in the future.

Experiencing the story

The narrative story is how the tensions in the world the Foresight Walk exists in are explored. The **narrative anchor points** that generated the most moments of resonance for participants were the following:

- I. Andre reads the events bulletin board (25 recorded moments of resonance)
- 2. Andre recalls the mall's past (16 recorded moments of resonance)
- 3. Andre thinks about Sofi (I5 recorded moments of resonance)
- 4. Uncle explains the membership (I4 recorded moments of resonance)
- 5. Uncle's experience in Canada (13 recorded moments of resonance)

Synthesis Notes

Artifacts design:

 The events bulletin board and the mall membership were moments of deep focus in the story. We gave a significant amount of time to this part of the story. There were designed physical posters and membership pamphlets that participants were asked to reflect on.

Narrative design:

- With respect to the events bulletin board, we inserted Andre's own thoughts on factors that affected his decision-making in the story to highlight some of the challenges and opportunities he faces. This may have provided support for the thoughts of participants to reinforce empathy for Andre's character.
- Empathizing with the hardships that Andre has
 in connecting with Sofi and the hardships his
 Uncle had in connecting with the community are
 two very emotional parts of the story. Feelings of
 loneliness and lacking confidence are not things
 just newcomers feel, as everyone has felt these
 emotions at one point or another.

Ties with present environment:

 When Andre recalls meeting Sofi at the farmers market, participants walk through a grocery store.
 On two instances of the walk the grocery store had bread on display, which participants walked past. The combination of the narrative, being in a grocery store, and being able to smell bread could have been factors that made this part of the story resonate strongly with participants.

Recommendations for future walks in creating a story that resonates with participants

- Utilize a multi-sensory approach in the way participants experience story elements.
- Bring present day, unaltered elements of the present physical space to help people create a perceptual bridge in imagining the future.
- Draw upon life experiences that everyone can relate to.

Empathizing with the persona

The character of Andre was designed to highlight the different challenges and opportunities newcomers might face when trying to integrate themselves in a new community. These challenges and opportunities were embedded in the story to see which of them would resonate most with participants.

*See Appendix F for a sample of the workshop data.

The **pain points** that Andre have in engaging with the community through with the mall that generated the most moments of resonance for participants were the following:

- I. Isolation and loneliness (8 recorded moments of resonance)
- 2. General negative resonance (6 recorded moments of dissonance)
- 3. Lack of confidence / social anxiety (5 recorded moments of resonance)
- 4. Lack of financial stability / high costs (5 recorded moments of resonance)

The **points of opportunity** that Andre have in engaging with the community through the mall that generated the most moments of resonance for participants were the following:

- I. Social stimulation / opportunity to meet people (6 recorded moments of resonance)
- 2. Social connection (4 recorded moments of resonance)
- 3. General positive resonance (I2 recorded moments of resonance)

Synthesis Notes

Artifacts design:

 Artifacts illustrated both what Andre have and does not have. His photo of friends in his wallet shows us that he has meaningful relationships back home, but at the same time, he misses them. His "note to self" in the wallet shows us he is developing strategies on his desire to get to know Sofi better. Yet, at the same time, we see the barriers he has in doing so.

Narrative design:

- Again, these pain points and opportunities Andre experiences in the story are universal experiences that most people face.
- Isolation comes in the form of not being to connect with his culture, by not being able to connect with his new community, by not being to connect with friends and family back home, and by not being able to connect with Sofi.
- Positive feelings that come from the social interactions people have with each other throughout the story may point to the social needs of patrons as most important for the community to address.

Ties with present environment:

 Developing a sense of empathy was achieved on this Foresight Walk mostly through Andre's internal thoughts. There was an supporting relationship of Andre feeling lonely and isolated and walking through a mall that was nearly empty. His feelings of loneliness may have resonated less if the mall were active with more people.

Recommendations for future walks in creating a story that resonates with participants

- Have the narrative that matches the emotional tone of the environment the Foresight Walk is taking place in.
- Have the narrative draw on universal feelings that participants can relate to.
- Artifacts should show both the challenges and opportunities personas face.

6.3 Realizing interventions

To address the challenges and maximize opportunities Andre experiences in the mall, we incorporated strategies that could help implement the strategic options the Foresight Walk was designed around.

Strategies for optimizing opportunities that generated the most resonance for participants were the following:

- I. Utilize informal community networks (7 recorded moments of resonance)
- 2. Offerings that allow for social connection (4 recorded moments of resonance)

Strategies for diminishing barriers that generated the most resonance for participants were the following:

I. Tools that create familiarization of place (3 recorded moments resonance)

Synthesis Notes

Artifacts design:

- Participants come into contact with most of the artifacts through Andre's informal network (i.e. his Uncle). The suggestion for Andre to check out the bulletin board and consider the newcomer membership were both given by his Uncle, who also gives a rose to Andre at the end of the walk as a form of motivation to pursue a relationship with Sofi.
- Each of the 9 community events provided a
 different way by which Andre could better connect
 with his community. Each one having their pros
 and cons. This allows for Andre to consider an
 approach to community integration that works well
 for him.

Narrative design:

Positive feelings from the community events
 offered through the mall may signal how important
 community events are in providing for the needs of
 diverse community members.

 Positive resonance from how newcomer networks were used in this scenario may validate the strategic options this Foresight Walk was designed around.

Ties with present environment:

- For many of the participants, this was their first time visiting the Sheridan Centre. Not knowing how to navigate this space may have related to how Andre has challenges in navigating his community.
- Again, walking through an empty mall listening to Andre's challenges of feeling isolated and lonely may have developed a sense of resonance for participants to explore strategies that allow for more social connectivity.

Recommendations on how participants can realize interventions that address challenges and optimize opportunities personas face

- Consider how participants come into contact with artifacts as these interactions could help generate service design insights
- Consider the level of familiarity participants have with the space as this may influence how they experience the Foresight Walk
- Show not only how interventions can optimize opportunities but how they can also contribute to barriers. Considering pros and cons to interventions will lead to stronger reiterations.

6.4 Critiques of interventions

When asked whether or not participants would sign up for the newcomer membership as Andre, all said they would in that it helps address Andre's challenges in connecting with the wider community. When we asked the motivations behind why the would sign up for such a membership, the insights revealed which parts of the membership participants thought were of most value. Additionally, when we asked participants if they would take Sofi to a community event, all said they would as these events would provide a setting where Andre could better connect with Sofi and the wider community. When we asked participants to choose which event they would take Sofi to, it gave us insights as to how community events could be designed to create a setting to allow newcomers to connect with the wider community.

*See Appendix F for a sample of the workshop data.

Membership details that participants found most valuable included the following:

- I. Option of volunteering or paying for membership (7 recorded moments of resonance)
- 2. Social stimulation (6 recorded moments of resonance)
- 3. Opportunity to participate in new experiences (participant-generated) (4 recorded moments of resonance)
- Affordable way to access resources, activities, spaces (participant-generated) (4 recorded moments of resonance)

Events the participants as Andre would take Sofi to include the following:

- I. Farmers' Market Festival (8 recorded moments of resonance)
- 2. Letters We Write Together (4 recorded moments of resonance)
- 3. Winter Palace (4 recorded moments of resonance)

Synthesis Notes

- Having the option to volunteer instead of paying a membership fee makes the membership particularly appealing for Andre's situation as one of his biggest considerations is his finances.
- Participants discussed how volunteering provides a platform for him to more actively participate in the mall's programming – not only will this allow him to meet new people, and integrate into the community, but even more so to have the agency in shaping the programming to include more cultural-specific events.
- Overall, the membership provides Andre with an affordable way to access not only newcomer tailored resources, but events that allow for social connection and an opportunity to meet people with similar interests.
- Although not all the events and programming cater to Andre specifically, walk participants noted that this would still provide a good opportunity to participate in new experiences and expose Andre to elements of Canadian culture.
- Participants generated additional benefits to signing up for a membership, which provides valuable insights to make possible solutions more robust as participants are able to incorporate some personal perspectives that we overlooked in addition to the designed persona's perspectives.
- The Farmer's Market potluck may have scored the highest due to the fact this is where Andre and Sofi had their last social interaction. The farmers market is a place of familiarity for Andre where he has shared memories with people. This might indicate that the narrative had great influence on how participants made decisions as Andre.

- The letter writing event creates a platform for Andre to express himself to his community in a low stakes, easily accessible format. Through this event he also gets the chance to learn about how other newcomers relate to the city.
- Having some sort of relationship with winter is something every Canadian has. Through this event, Andre gets a glimpse of what having fun in winter could look like. There is something also something very Canadian with the activity of skating. This interestingly ties to a participant-generated gain that was not originally thought of in the design of the events – namely to be able to participate in new experiences.

Recommendations on how to develop design interventions that allow for critical feedback

- Contextualize offerings in the story and the world of the Foresight Walk. Details from the story and the world may help participants better imagine how offerings work.
- Design offers that are simple enough so participants can easily consider pros and cons
- Do not design complete offerings and leave them open for participants to build on.
- Consider designing offerings that are customizable with options that pros and cons for participants to critique.
- Allow participants to draw from their personal perspectives in addition to the perspectives of adopted personas.
- Allow participants to draw from the perspectives from the world as it exists today as well as in the world that exists in the designed scenario.

6.5 Improving the immersive experience

Responses from walk participants with respect to possible improvements to create a more immersive experience were invaluable for us to learn from this Foresight Walk in order to refine the method. This is especially pertinent towards helping us better understand how the method can assist with the creation of an effective "perseptual bridge" for participants – especially those unfamiliar with foresight methodologies. Although there were comments that validated the effectiveness of the walk, participants also highlighted particular challenges they faced, and also provided ideas that could enhance the experience.

Several notable quotations from walk participants, as well as some our own observations from the design process, are outlined below:

Effectiveness of walk

"It was great! I felt really immersed. The audio matching with location we were in made it feel like I was in the "virtual" space of mall 2027."

Challenges

Familiarity with the present: Some participants found themselves too preoccupied with the present during the Foresight Walk, and suggested having a chance to familiarize themselves with the present space prior to immersion in the same space in the future.

"I was really interested in the stores that are here and because the space isn't familiar to me, I had trouble envisioning the future because I was preoccupied with the present."

Site specificity: It was necessary to having the right amount of time to become familiar with a space in order to properly design for it. The constant shifting of locations prior to the Foresight Walk was a great limitation for us as design researchers.

Uncontrolled variables: There were several variables in the present environment that we did not have control over. We found that these factors either enhanced the experience (e.g. the smell of bread, seeing children play in the halls) or detracted from the experience (e.g. fire alarm, people coming up and asking what we were doing).

"I wonder what it would have been like to have the mall completely empty. Sometimes it's easier to reimagine a space when there isn't present day activity in ti but it was also nice to have the people around."

Aspects for improvement

Experiencing the future through other senses:

Walk participants suggested that more anchored interactive ties between the audio narrative and the physical space could have enhanced the immersive experience. Particular suggestions include having actors enacting narrative points, and having more planted props in the physical environment that are tied to audio cues.

Experiencing the future through designed physical environments: Walk participants suggested instead of future artifacts (i.e. event posters) that supported an imagination of the future environment, designed storefronts or even actual store spaces that participants could step through during specific segments of the walk could be a way to allow people to more physically experience the future.

"... finding / stopping inside a closed store with a "opening soon" sign."

Interactivity in the future: Walk participants suggested that interactive navigation and real-time story options that enabled participants to make choices and see the effects of those choices in the future scenario would have been interesting.

Explore multiple persona perspectives: Several walk participants were curious to hear the narrative from the perspectives of different and or more characters, namely families, different genders, and different stakeholders

"Share their [the shopkeepers] dreams & fears."

Future world building: Although Foresight Walks explore the future of particular spaces, walk participants noted that it was also necessary to build a backdrop of the outside world for the participants to more readily immerse themselves in a future of that space.

"Provide context for world outside the mall."



Learnings & Next Steps

7.1 Limitations of the Foresight Walk design process

The design of the Foresight Walk came with limitations that we had to design around and later learn from. They include the following:

Management and coordination: We were fortunate that Gladki Planning championed the project early on and made the case for this Foresight Walk to be incorporated into the bigger mall research study. What made things challenging in this process was that Gladki was not only coordinating the research study with the city, but also with the six other malls. This made things complex as there were various levels of responsiveness from all partners when trying to coordinate how this Foresight Walk could be executed.

Site changes: As mentioned before, the mall in which the Foresight Walk was to be conducted changed due to the levels of engagement that the malls were receiving in earlier stages. In the interest of time, a non-site-specific Foresight Walk needed to be designed while a site was being decided.

Time: To plan for, design, and develop a Foresight Walk is an intensive process, compromises needed to be made in order to execute the Foresight Walk in the four months the research semester allotted for.

Research limitations: Because of time restraints, our primary research was limited to speaking with our partners at Gladki Planning along with a few experts in the realm of public engagement. Ideally it would have been beneficial to conduct interviews and workshops with mall patrons. Insights from previous public engagement pop ups done by Gladki Planning were supposed to help inform our Foresight Walk, but the timing ended up not aligning with our development schedule.

Proto-personas: Due to not having the capacity to interview present day mall goers, and the opportunity to conduct primary research with community members, the persona designed was based primarily off secondary research.

Single persona: Because of time limitations and the amount of details needed to make a persona feel authentic, only one persona could be designed and developed into the Foresight Walk.

Time Horizon: Due to not having control over knowing what participants' comfort levels are with foresight practices, the Foresight Walk utilizes a time horizon of IO years. Using this time horizon felt safe enough for participants to envision future scenarios within reason. Embedded artifacts: Due to time, resources, and not having the approval to embed physical installations in the mall, artifacts were limited to handheld printed pieces and posters on easels.

Co-creation: The Foresight Walk narrative was written primarily by the research team and was later validated by colleagues who can relate to newcomer experiences. A participatory design approach would have been favored in the design and evaluation scenarios, as well as the creation of personas and foresight narratives.

Environmental control: During the three Foresight Walks, incidents happened in the environment that the research team could not control. This included security alarms being activated, kids playing in the hallway, retailers approaching participants curious as what they were engaged in, and a group of mall workers loudly congregating at the food court.

7.2 What we learned from the method

Foresight practice

One piece of feedback we received from Gladki Planning was that while the Foresight Walk was an engaging and insightful experience, it could have benefited from expanding the context beyond the mall. From the perspective of the planner, the design focus goes beyond a site as it needs to consider how that site is part of a bigger system. For future Foresight Walks, it is important to consider not just how people use the public space in question, but also how they get there, which streets they take, the time it takes to get there, the safety of their neighbourhood, and how they feel when they get home afterwards.

This systematic approach, of course, can only be explored so long as it does not overburden research participants with too many details to keep track of. This walk highlighted this point quite clearly as only a handful of trends managed to resonate with participants. This also applies to artifacts as well. Over-designing and creating too many artifacts may hinder the participants' ability to make sense of the experience they are in. To manage an audio-device, hold onto objects, pay attention to live-actors, and engage with installations could make the experience too overwhelming, detracting from the possibility of useful critical discourse.

This leads us to be particularly mindful of Auger's "perceptual bridge" – the connection between the speculation and the audience's perception of their own reality. Creating convincing design fictions depends on finding the "right focus" between what is too outlandish from our current world to influence our thinking, and that which is too realistic. If the speculation is considered too weird it will fail to make the audience relate and engage, yet when it is too familiar, the audience will be able easily assimilate it into what they already know, which fails to provoke or question existing beliefs (Grand & Wiedmer, 2010; Auger, 2013).

Building on Auger, we learned from Foresight Walks that it is not necessarily a balance of keeping participants in a state of speculation, but to have them move in and out of their present reality and a state of speculation. A few participants mentioned how this constant looping back and forth between speculation and reality as the strongest aspect of Foresight Walks that created the most resonance for them.

Traditional strategic foresight approaches usually begin with an environmental scan of the present that informs the speculation and development of multiple future scenarios in which strategic options are designed, tested, refined, and then strategically back-casted into the present to be implemented.

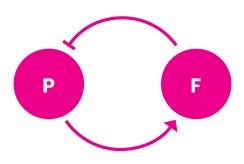


Fig 27. Traditional strategic foresight process

How Foresight Walks build on this is that the physical space acts as the perceptual bridge that allows participants to develop a feedback loop where:

- I. Through speculative design, imagine the space through the perspective of the future;
- 2. Then perceive the space in the present informed by what was speculated in the future;
- 3. Then reimagine the future of the space informed by a new outlook on the space in the present.

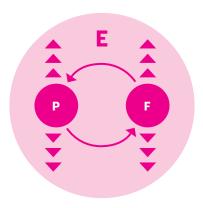


Fig 28. Temporal perspectives from the present (P) and the future (F) projected out into the environment (E)

By walking through a space, this feedback loop becomes intensified. Through the act of walking, the space and sensory experiences within it change, allowing for thoughts of that space generated from different temporal perspectives to be recontextualized within new focal points in the environment.

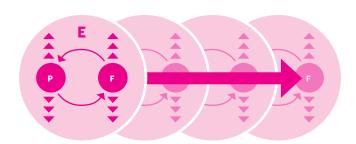


Fig 29: How walking facilitates perpetual reimagining

Participants of our Foresight Walk mentioned this perpetual reimagining felt strongest during the part of the walk where Andre recalls the mall's transformational history. Participants listened to Andre recall of the "past" as they were walking through it, in how "it used to be a ghost town" and how he felt about the different changes it underwent up until Andre's "present day" future world. One participant mentioned the experience being visceral, hearing Andre describe the vacuum created when the big box stores left the mall while they walked past a closed down Target store.

While this Foresight Walk encouraged participants to reimagine the space, it did so linearly as the walk had a starting and end point where no section was revisited. For future Foresight Walks, it would be interesting to see how participants would respond to a walk that repeatedly revisits parts of a space, but through different parts of the narrative story. This perceptual reimagining of reimagined spaces may lead to more critical multi-faceted participant discussion.

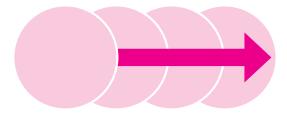


Fig 30. The linear routes of initial Foresight Walk experiments

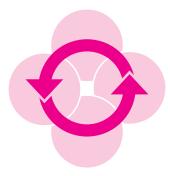


Fig 3I: Intensifying perpetual reimagining with circular Foresight Walk routes

7.3 Design research method learnings

To help frame research method learnings gathered from the development of Foresight Walks, the design research map developed by Liz Sanders was used, where the map is defined and described by two intersecting dimensions with one being defined by approach and the other defined by mind-set (2008). Design research approaches on this map have, on one side, being defined by research-led perspectives, while the other side is defined by design-led perspectives. Design research mindsets on the other hand can be defined as expert-led on one side, and participatory on the other. By considering how the learnings of Foresight Walks situate the method on the map, we can also see how it could be positioned in the wider system of design research.

Learnings from an expert mindset

Because of the limitations of the project in terms of time and access to participatory pre-research, the process adopted more of an expert mindset relying on secondary research gathered while interviewing planners and experts in the field of public engagement and foresight research. Working with experts did, however, allow us to push the critical aspects of Foresight Walks that participatory mindset may not have been able to do as they were privy to emerging concepts to explore and test. This was especially the case with how the method utilized environmental trend analysis, the design of foresight scenarios and the design of cultural probes.

Learnings from a participatory mindset

While there was a lean more towards an expert mindset with the development of this Foresight Walk, there is much that a participatory mindset can bring to the method. To better inform the design of the walk, it would have been nice to have a balance of both expert and participatory influence on the trends collected, this would have helped inform us of trends that were more localized and valuable to citizens of Mississauga. Also

a participatory mindset would have been beneficial to the persona and narrative design process. Utilizing a participatory mindset, there may have been an opportunity to develop richer characters and a more authentic narrative.

Learnings from a design-led approach

With the intended purpose of Foresight Walks being an engagement tool to provoke critical discourse, the development process leaned heavily towards the design-led approach. This is especially the case with how Foresight Walks so heavily rely on strategic foresight methodologies as the design of scenarios, speculative narratives and probes all exist in the realm of abductive thinking. The design of these elements helped us better understand how we can communicate research questions in ways that:

- Resonates with participants enough to imagine future scenarios;
- Resonates with participants enough to empathize with the challenges and opportunities of stakeholders whom they are designing for in the future:
- Provoke them enough to engage in critical discourse; and
- Inspire them enough to generate ideas on how to address issues posed.

Learnings from a research-led approach

While there was a heavy emphasis on the design-led approach to Foresight Walks, we cannot discredit how a research-led approach helped in developing stable grounding for design concepts to jump off from. Secondary research, interviews with experts, and environmental scanning helped inform us of how trends might impact the future of malls. If more resources and time were available, ethnography could have proven to contribute to the process as well.

Positioning as a design research method

Considering the heavy emphasis on strategic foresight and speculative design along with the need to engage with key stakeholders into account, Foresight Walks can be positioned on Sander's design research map mainly as a design-led research method with an expert mindset:

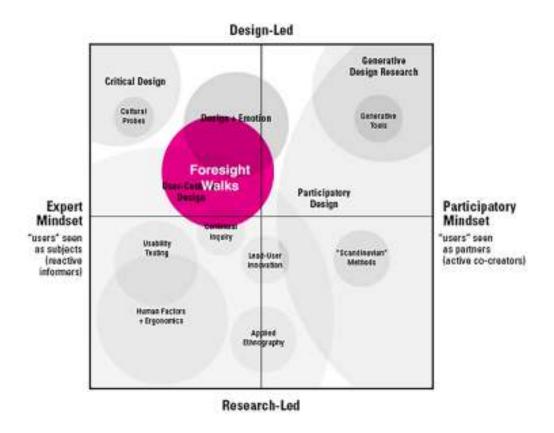


Fig. 32: Position of Foresight Walks on Liz Sander's design research map



7.4 Innovation value & outcomes of Foresight Walks

Conducting this research generated insights that are exciting to explore further with future Foresight Walks. From what was learned, Foresight Walks have the potential to bring innovation value to the realms of design research, stakeholder engagement, and strategic foresight.

Designers and researchers

Foresight Walks have the potential to be a method that can be repurposed and used in all stages of the design research process as they can be reiterated on based off the insights from previous walks. Using the British Design Council's Double Diamond approach to define the different stages of the design process, Foresight Walks can be used in the following ways:

Discover: It allows research participants to develop a systems perspective in being able to see the different stakeholders, what their needs are and how they influence each other and the space.

Define: Points that resonate with research participants in the Foresight Walk experience can be explored deeper and provide direction for problem framing.

Develop: Foresight Walks can use speculative design to prime and prompt research participants to engage in divergent idea generation.

Deploy: Foresight Walks create a space in which design interventions can be prototyped, tested and evaluated.

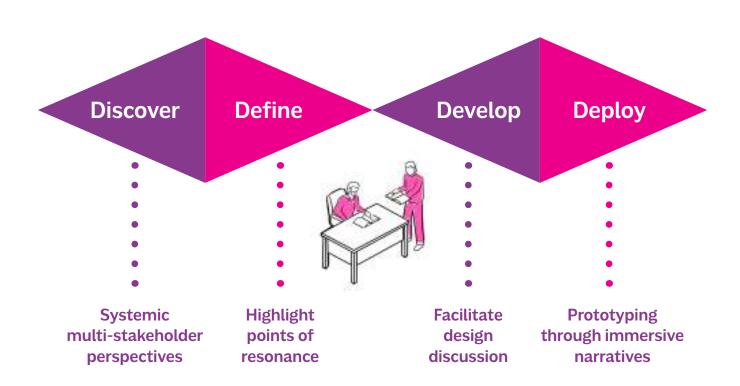


Fig. 33: Value in design research process



The practice of stakeholder engagement

One of the key challenges that intermediaries like urban planners and city officials face in stakeholder engagement regarding public space projects is managing considerations from different stakeholders. Different stakeholders have different ideas on how public spaces should be designed. Sometimes these conflicting viewpoints make it difficult for them to come together and listen. The value that Foresight Walks bring is that it allows stakeholder considerations to be recontextualized into low stakes speculative futures that are removed from the tensions of today that prevent stakeholders from being able to see eye to eye.

Moreover, Foresight Walks allow stakeholders to discover the considerations of others through the different characters they embody as well as interact with during the walk. Not only does this facilitate exposure to different worldviews, by having groups of mixed-stakeholder participants embody the same characters and be immersed in the same designed experience, this creates a common language for

critical discussion. Recruitment for Foresight Walks participants is deliberate in ensuring a mix of key stakeholders to balance perspectives for the facilitated critique after the walk experience. We see the value of Foresight Walks as a compelling and inclusive engagement method that bridges stakeholders' views, with the potential for provoking more robust and collaborative thinking about preferred futures of public spaces.

Aside from the stakeholder engagement possibilities, Foresight Walks are also fun and entertaining. When most people think of stakeholder engagement, they think of the traditional non-transparent "consultation" processes – long town hall meetings, telephone surveys, or complicated census forms. Foresight Walks have the potential to spark the imagination in fun and creative ways through the design of immersive environments and interactive live-theatre.

For city builders, foresight walks create opportunities to create community buy-in. By communicating the rigorous foresight walk process with community members, city builders can show they have invested the time to meaningfully consider the future of the community. Through investing time in conducting foresight walks, it may show that city builders can just be invested in a community as everybody else.

By exploring different future scenarios through the foresight walk process, city builders also have the opportunity to uncover future market opportunities. By exploring how different STEEPV factors might change in the future, they become that much more prepared in being able to design for them.

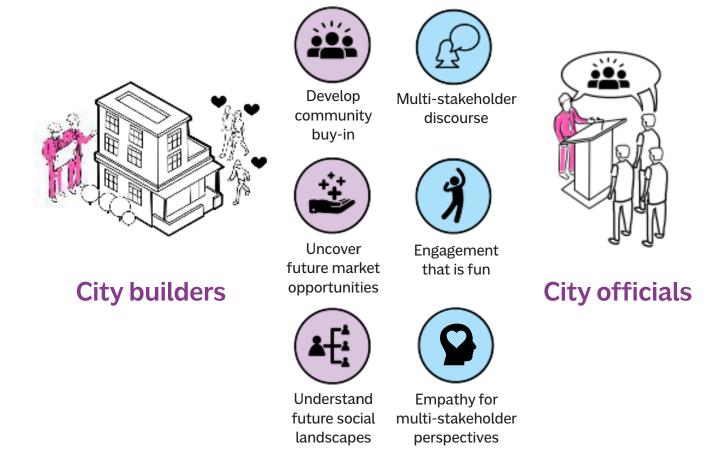
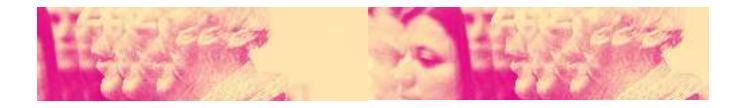


Fig. 34: Value to the practice of stakeholder engagement



The practice of strategic foresight

Lastly, Foresight Walks also bring innovation value to the practice of strategic foresight. The unaltered present day environment in which they are conducted in allows researchers and participants to create perceptual bridges to the future where they are given the capacity to not only travel there, but also travel back to the present.

Temporal and spatial recontextualization:

Insights from the experience are not only recontextualized temporally as they can also be recontextualized spatially. The act of walking allows for insights developed through the experience to be recontextualized with each new environmental element participants come across. This ability to recontextualize insights through changing temporal and spatial perspectives has the potential to generate deeper more critical discourse to inform design decisions that are potentially that much more impactful.

Democratization of foresight methodologies & collaborative speculation:

Overall, our hope for the Foresight Walks is to allow the methods and benefits discussed above to not only be experienced by designers, but to democratize it through participatory processes so that stakeholders, as well as the public, can be affected by experiential futures.

"The act of reflecting on the future collectively – and the capability to do so" is becoming a growing necessity for visioning and resilience in an uncertain world (Bobak, 2017). Integral to the idea of "co-created futures" is the ability and space to confront different worldviews, engage the margins, and ensure broad participation (Bobak, 2017). For example, the School of International Futures, a not-for-profit organisation based in the UK adheres to the principle that foresight should not be "just a dialogue for the elite or decision-makers. It should aspire to give voice to the excluded ... [with citizens given the opportunity]

for more participation in deciding their future" (Tully & Bobak, 2017). Along the same vein, Foresight Walks aims to serve as a "platform for further collaborative speculations" (Dunne & Raby, 2013, p. 6). We would like to develop the method so it can engage communities directly to build capacity in futures thinking by opening up space for collaborative problem-solving and discussion.

There has been critique that governments have been tentative to embrace and take advantage of speculative design because "as a tool it is difficult to hide the politics and assumptions that designers have" (Nesta, 2016). Foresight Walks, however, employ speculative design, critical design, and foresight methods, so that the design and engagement processes can be grounded within a "context of use" that prompts "deliberation and debate" as opposed to staying only in the realm of provocation (Nesta, 2016). In this way, we hope to continue refining Foresight Walks to build on a vision where this method could be tested with governments and policymakers to work together with citizens for collaborative policy-making towards collectively formed preferred futures.

7.5 Method scalability

In short, the essence of the Foresight Walk method is its ability to allow multi-stakeholder groups to reimagine imaginings of the futures of a public space. It provides an active experience that moves participants in and out of a state of future speculation, to continuously re-contextualize present reality and critique the presented alternative future.

Consequently, we see potential for the method to be adapted with different facilitation approaches to target research objectives and stakeholder needs as long as this essence is kept. We are aware that the Foresight Walk development process is intensive, and that

scalability and efficient reproducibility of the method can be explored as next steps.

There are, however, advantages and disadvantages to adaptations of the method. For example, increasing the size of the participant group to more than 20 people could yield more data and insights, but it will detract from the walk experience, making the walk less intimate and personable. Self-guided Foresight Walks could be a practical approach to lessen the resources needed for facilitation. However, a solely independent experience of the walk is not recommended. This takes the context of "use" out of the method, harkening back to the gap we saw in practices like Cardiff's Audio-Walks, in which the artist's perspective is the only one

that is explored. The walk thus loses its crucial value of being able to bring participants out of their entrenched perspectives through shared conversation and critique.

Ultimately, our recommendation is that regardless of any slight adaptations, all Foresight Walks should include a facilitated multi-perspective post-walk workshop or discussion conducted in small groups. Facilitation is an inherent necessity when bringing together a diverse group of stakeholders. Moreover, this is a crucial element of critique, and it is also essential to the inclusion and understanding of multi-stakeholder perspectives that Foresight Walks foster.



Bibliography

- Adams, J. Theorizing a Sense of Place in a Transnational Community. *Children, Youth and Environments* 23:3, 43-65.
- Adams et al. (May 26 2016). "Sense of Place". Retrieved from https://www.thenatureofcities.com/2016/05/26/sense-of-place/
- Auger, J. (2013). Speculative design: crafting the speculation. *Digital Creativity*
- Bardzell, S. et al. (2012). Critical Design and Critical Theory: The Challenge of Designing for Provocation. *In Proceedings of the Designing Interactive Systems Conference*. Newcastle, UK: 288-297.
- Barina, K. (2017). The Evolution And Impact Of Online Shopping. Forbes. Retrieved from: https://www.forbes.com/sites/mitsubishiheavyindustries/2017/02/02/the-evolution-and-impact-of-online-shopping/#22ab792d34a3
- Beyard, M. (2007). Ten Principles for Developing Successful Town Centers. *Urban Land Institute*.
- Blythe, M. & Wright, Peter. (2006). Pastiche scenarios: Fiction as a resource for user centered design. *Interacting with Computer, 18*, II39-II64.
- Boal, A. (1992). Games for Actors and Non-Actors. New York: Routledge.
- Bobak, A. (April 2I 2017). "Participation and foresight putting people at the heart of future". OpenDemocracy. Retrieved from https://www.opendemocracy.net/cat-tully-allie-bobak/introducing-this-week-s-theme-participation-and-foresight-putting-people-at-he
- Buchenau, M. and J. Fulton Suri (2000) Experience Prototyping. Proceedings of DIS 2000 (424–433). New York, NY: ACM Press.
- Boess, S. (2006). Rationales for Role playing in design. *Design Research Society.*
- Burns, C., E. Dishman, W. Verplank, B. Lassiter (1994). Actors, hairdos & videotape informance design. *CHI Conference Companion* 1994: 119-120
- Burrows, A. (2015). Cultural probes and levels of creativity. Loughborough University Institutional Repository
- Calthorpe, P. (1993) The Next American Metropolis. *New York: Princeton Architectural Press*.

- Candy, S., & Dunagan, J. (2016). The Experiential Turn. *Human Futures*, *I*, 26-29. https://www.researchgate.net/profile/ Stuart_Candy/publication/3ll9100II_The_Experiential_Turn/links/586l8b5c08aebfl7d392d0a9/The-Experiential-Turn.pdf
- Capra, F. (1996). The web of life: A new scientific understanding of living systems. *New York*, NY: Anchor Books.
- Cardiff, untitled text dated Sept. 1999, in The missing voice, p. 66.
- Carol Peaker, 'The voice of a friend', Weekend post arts (3 July 1999), p7.
- Carrington, D. (2016). Climate change will stir 'unimaginable' refugee crisis, says military. Guardian. Retrieved from: https://www.theguardian.com/environment/2016/dec/01/climate-change-trigger-unimaginable-refugee-crisis-senior-military
- City of Mississauga. (2017). "Reimagining the Mall Fact Sheets". Retrieved from https://yoursay.mississauga.ca/reimagining-the-mall
- City of Mississauga. (July 2017). "Population, Demographics, and Housing". Retrieved from http://www7.mississauga.ca/documents/business/2017/Population_Demographics_Housing.pdf
- City of Mississauga. (2015). Complete Communities. *Mississauga Official Plan*, Ch.7.
- Cosco, N. G., Moore, R. C., & Islam, M. Z. (2010). Behavior mapping: a method for linking preschool physical activity and outdoor design. *Medicine & Science in Sports & Exercise*, 42(3), 513-519.
- Cunniffe, A. (2016). The automation revolution and the rise of the creative economy. *Tech Crunch*. Retrieved from: https://techcrunch.com/2016/04/2l/the-automation-revolution-and-the-rise-of-the-creative-economy/
- Dator, J. (2009). "Alternative Futures at the Manoa School". *Journal of Futures Studies*, 14:2, 1-18.
- Debord, G (1992). The Society of the Spectacle. London: Rebel Press.
- Degen, M. Rose, G. (2012). The Sensory Experiencing of Urban Design: The Role of Walking and Perceptual Memory. *Urban Studies*.
- Duany, A., Plater-Zyberk, E. and Speck, J. (2000) Suburban Nation: The Rise of Sprawl and the Decline of the American Dream. *New York: North Point Press.*

- Dunne, A., & Raby, F. (2013). Speculative everything. *Cambridge, MA: MIT Press.*
- Dykstra, J. (2012). Why Millennials Don't Want To Buy Stuff. Fast Company. Retrieved from: https://www.fastcompany.com/184258//why-millennials-dont-want-buy-stuff
- Elgan, M. (2015). Here comes the 'Internet of Self'. *Computerworld*. Retrieved from: https://www.computerworld.com/article/2867234/here-comes-the-internet-of-self.html
- eMarketer. (2014). Immigrants in Canada: Just How Big Is Their Spending Power? Retrieved from:https://www.emarketer.com/ Article/Immigrants-Canada-Just-How-Big-Their-Spending-Power/I0II356
- Fairs, M. (May I5 20I4). "'Not all design is for the general good,' says MoMA's Paola Antonelli." Retrieved from http://www.dezeen.com/20I4/05/I5/not-all-design-is-for-the-general-good-says-momas-paola-antonelli/
- Finkelpearl, Tom (2012). What we Made: conversations on art and social cooperation. *Durham: Duke University Press.* pl32.
- Flanagan, M. (2009). Critical play: Radical game design. *Cambridge*, *MA: MIT Press*.
- Florida, R. (2015). How the Arts Add to Urban Economies. *City Lab.* Retrieved from: https://www.citylab.com/life/2015/12/how-the-arts-add-to-city-economies/421191/
- Foster, N. (October 7 2013). "The Future Mundane", *Core 77.* Retrieved from http://www.core77.com/posts/25678/the-future-mundane-25678
- Franke, B. (2010) "Design Fiction is Not Necessarily About the Future." Sixth Swiss Design Network Conference, Negotiating Futures—Design Fiction (2010): 80–90.
- Fox, J. Sen, C. Smith, N. (2017). Millennials Are Driving the Suburban Resurgence. *Bloomberg*. Retrieved from: https://www.bloomberg.com/view/articles/2017-08-25/millennials-are-driving-the-suburban-resurgence
- Gaver, W, Dunne, A., & Pacenti, E, (1999). Design: Cultural probes, *Interactions*.
- Grabar, H. (2016). U.S. Cities Have Grown. Their Cores Have Not. Slate. Retrieved from: http://www.slate.com/blogs/moneybox/2016/07/07/urbanization_has_mostly_meant_growth_in_suburbs_not_center_cities.html
- Grand, S., & Wiedmer, M. (2010). Design Fiction: A Method Toolbox for Design Research in a Complex World. *In proceedings of the DRS 2010 conference: Design and Complexity*.

- Grant, J & Perrott, K. (2009). Where Is the Café? The Challenge of Making Retail Uses Viable in Mixed-use Suburban Developments. *Urban Studies*, 48(I) 177–195, January 20II
- Gray, D. (2016). Empathy Map, Understand your Customer. Retrieved from http://thetoolkitproject.com/tool/empathymap#sthash.gPa6IHWU.dpbs
- Gray, N. (2017). How to Survive a Retail Meltdown. City Lab. Retrieved from: https://www.citylab.com/life/2017/04/how-tosurvive-a-retail-meltdown/524868/
- Gros, Frederic. A Philosophy of Walking. London: Verso, 2014. Print.
- Guardian. (2016). Trudeau says Canada will explore gender-neutral ID cards as he joins gay pride. *Guardian*. Retrieved from: https://www.theguardian.com/world/2016/jul/04/canada-gender-neutral-option-identity-cards-trudeau
- Gyourko, J. E. and Rybczynski, W. (2000) Financing new urbanism projects: obstacles and solutions, *Housing Policy Debate*, II(3), pp. 733–750.
- Hamblin, J. (2014). Buy Experiences, Not Things. *Atlantic*. Retrieved from: https://www.theatlantic.com/business/archive/2014/I0/buy-experiences/38II32/
- Heidjen, K. V. D. (1997). Scenarios, Strategy and the Strategy Process. Center for Organizational Learning and Change. Nijenrode University Press.
- Helguera, Pablo (2012). Education for Socially Engaged Art. *New York: Jorge Pinto Books*. p22.
- Hillier, B. (1984). The Social Logic of Space. Cambridge University Press
- HM Government, Horizons Scanning Programme. (2014). "The Futures Toolkit: Tools for strategic futures for policy-makers and analysts". Retried from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328069/Futures_Toolkit_beta.pdf
- llama, E. (2015). Creating Personas. Retrieved from http://www.uxbooth.com/articles/creating-personas/
- Inayatullah, S. (2008). "Six pillars: futures thinking for transforming", Foresight, 10:1, 4-21. DOI: 10.1108/14636680810855991
- Ingold, T. (2004) Culture on the ground: the world perceived through the feet, *Journal of Material Culture* 9: 315–340.
- Jacobs, J. (1961) The Death and Life of Great American Cities. *New York: Vintage Books*.
- James, J. (2013). "Speculative design: crafting the speculation", Digital Creativity, 24:1, II-35. DOI: 10.1080/I4626268.2013.767276

- Jewitt, C (2012) An Introduction to Using Video for Research. *NCRM Working Paper*. NCRM.
- Jia, C. (20II). HOPSCA: The new reality in reality. China Daily USA. Retrieved from: http://usa.chinadaily.com.cn/business/20II-07/II/ content_12876408.htm
- Jones, P. (2013). Design for Care. Rosenfeld Media. PI55-I57.
- Jones, P. H. (2014). Systemic design principles for complex social systems. *In Social systems and design* (pp. 91-128). *Springer Japan*.
- Jung, Y (2013). Mindful Walking: The Serendipitous Journey of Community-Based Ethnography. *Qualitative Inquiry*
- Kansara, V. (2016). How Global Brands Are Thinking Local. *Business of Fashion*. Retrieved from: https://www.businessoffashion.com/articles/intelligence/glocalization-localization-retail-lululemon-uniqlo-nike
- Klooster, S., R. Appleby and K. Overbeeke (2004) *Design (Education) Moves.*
- Knudsen, B. Clark, T. (2013) Walk and Be Moved: How Walking Builds Social Movements. *Urban Affairs Review*.
- Kohn, M. (2004). Brave New Neighborhoods: The Privatization of Public Space. *New York: Routledge*
- Kotkin, J. (2015). Mall's Washed Up? Not Quite Yet. *Daily Beast*. Retrieved from: https://www.thedailybeast.com/malls-washed-up-not-quite-yet
- Kozloff, H. (2005) Refining mixed use, *Urban Land*, 64(2), pp. 92–98.
- Lambert-Beatty, C. (2016). "Believing in Parafiction" in EP Vol. 2: Design Fiction. *Sternberg Press: Berlin*, 47-68.
- Lambert-Beatty, C. (2009). "Make-Believe: Parafiction and Plausibility", October, I29, 5I-84.
- Löffler, C. (2017). Walking in the City: Urban Experience and Literary Psychogeography in Eighteenth-Century London. Chicago
- Loveridge, D. (2009). Foresight: The Art and Science of Anticipating the Future. *New York: Routledge*.
- Madsen, S. & Nielsen, L. (2010). "Exploring Persona-Scenarios Using Storytelling to Create Design Ideas" in Katre, D. et al. (eds). HWID 2009, IFIP AICT, 316, 57-66.
- Mahony, N., & Stephansen, H. C. (2016). The frontiers of participatory public engagement. *European Journal of Cultural Studies*, 19(6), 583-597.

- Malpas, J. (1999) Place and Experience: A Philosophical Topography. New York: Cambridge University Press.
- Malpasse, M. (2017). Critical Design in Context: History, Theory, and Practice. *New York: Bloomsbury.*
- Markussen, T., & Knutz, E. (2013, September). The poetics of design fiction. *In Proceedings of the 6th International Conference on Designing Pleasurable Products and Interfaces* (pp. 231–240). ACM.
- Matos W. (2008). Walking and rhythmicity: Sensing urban space. *Journal of Urban Design*, 13(I), 125-139.
- McFarland, R. A. (2015). The Walking City is a Better City: Promoting Human Social-Spatial Understanding as a Foundational Framework for Urban Planning (Doctoral dissertation).
- McHugh, S. (2014). "Audio Storytelling: Unlocking the Power of Audio to Inform, Empower and Connect", *Asia Pacific Media Educator*, 24:2, 141-156. DOI: 10.1177/1326365X14555277
- Miaskiewicz, T., and K. A. Kozar. 20II. "Personas and User-Centered Design: How Can Personas Benefit Product Design Processes?" *Design Studies* 32 (5): 417–430.
- Middleton, J. (2010). Sense and the city: exploring the embodied geographies of urban walking. *Social & Cultural Geography*, II(6), 575-596.
- Miles, M. (2005). Art, Space and the City: Public Art and Urban Futures. *New York: Taylor & Francis.*
- Montgomery, E. & Woebken, C. (2016). Extrapolation Factory Operator's Manual. Extrapolation Factory: Middletown, Delaware.
- Nesta. (April 5 2016). Speculative design: A design niche or a new tool for government innovation? Retrieved from https://www.nesta.org.uk/blog/speculative-design-design-niche-or-new-tool-government-innovation
- Nielsen, L. & Hansen, K. S. (2014). Personas is Applicable A Study on the Use of Personas in Denmark. *In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. Toronto: 1665-1674.
- Nielsen, N. (May 16 2016). "Inverting Maslow's Hierarchy". Retrieved from https://medium.com/@jnnielsen/inverting-maslows-hierarchy-b2c32l56f09l
- Norma P. Nickerson, Parks & Recreation. 28.II (Nov. 1993): p59
- O'Brien, D. (2013). Malls, shopping centers getting new life as residential and retail projects. *Washington Post*. Retrieved from: https://www.washingtonpost.com/business/capitalbusiness/malls-shopping-centers-getting-new-life-as-residential-and-retail-projects

- O'Doherty, K., & Einsiedel, E. (2013). Public engagement and emerging technologies. *Vancouver: UBC Press.*
- Ong, W. (2007). Orality and literacy (2nd ed.). London: Routledge.
- Ozenc, K. (2016). "Introducing Ritual Design: meaning, purpose, and behaviour change". Retrieved from https://medium.com/ritual-design/introducing-ritual-design-meaning-purpose-and-behavior-change-44d26d484edf
- Pak, B., & Verbeke, J. (2013). Walkability as a Performance Indicator for Urban Spaces. In Strategies and Tools for the Social Construction of Experiences', eCAADe 31st Conference, Delft (pp. 423-431).
- Parkinson, D. (2015). Boom, Bust and Economic Headaches. *The Globe and Mail*. Retrieved from: https://www.theglobeandmail.com/globe-investor/retirement/the-boomer-shift-how-canadas-economy-is-headed-for-majorchange/article27l59892/
- Peaker, P. (1999). 'The voice of a friend', Weekend post arts, p. 7.
- Peel Data Centre. (May 2013). "2011 NHS Bulletin: Ethnic Diversity & Religion." Retrieved from https://www.peelregion.ca/planning/pdc/pdf/Ethicity_Religion_Bulletin.pdf
- Peterson, H. (2017). A jobs threat worse than mass store closures could fire more than 7 million retail workers. *Business Insider*. Retrieved from: http://www.businessinsider.com/how-automation-will-impact-the-retail-industry-2017-5
- Pinder, D. (2001). Ghostly Footsteps: Voices, Memories and Walks in the City. *Cultural Geographies*. Vol 8, Issue I, p.I-I9.
- Pile, S. (1997) Memory and the city, in Jan Campbell and Janet Harbord, eds., Temporalities, autobiography in a postmodern age. Manchester, *Manchester University Press*
- Policy Horizons. (2017). The informal-formal interplay in meeting newcomers' needs. *Policy Horizons*. Retrieved from: http://www.horizons.gc.ca/en/content/informal-formal-interplay-meeting-newcomers%E2%80%99-needs
- Poynor, R. (2016). "Critical World Building" in Coles, A. (ed.). EP Vol. 2: Design Fiction. *Sternberg Press: Berlin*, 47-68.
- Pozin, I. (2016). The Secret to Happiness? Spend Money on Experiences, Not Things. Retrieved from https://www.forbes.com/sites/ilyapozin/2016/03/03/the-secret-to-happiness-spend-money-on-experiences-not-things/#378ac75739a6
- Rapacki, K. (January 4 2017). "The Object as Reality-Check". Retrieved from https://www.disegnodaily.com/article/the-object-as-reality-check
- Raven, P. C. & Elahi, S. (2015). "The New Narrative: Applying narratology to the shaping of futures outputs", *Futures*, 74, 49-61.

- Ryan, M. (2015). "Transmedia Storytelling: Industry Buzzword or New Narrative Experience?", *Storyworlds: A Journal of Narrative Studies*, 7:2, I-I9.
- Schleicher, D., Jones, P., & Kachur, O. (2010). Bodystorming as embodied designing. *Interactions*, 17(6), 47-51.
- Sennett, R. (1990) The Conscience of the Eye: The Design and Social Life of Cities. *London: Faber and Faber.*
- Shen, C. (2016). What Max-Neef's Human Scale Development Can Teach Us About Poverty. *Medium*. Retrieved from: https:// medium.com/@cathrans/draft-theories-of-changee8d72234a5bf
- Shiratori, H. & Krier, S. (2016). "Most design fiction will of course be pretty bad bad bad" in Coles, A. (ed.). EP Vol. 2: Design Fiction. Sternberg Press: Berlin, II3-I28.
- Simsarian, K. (2003). Take it to the Next Stage: the Roles of Role Playing in the Design Process. *Proceedings of CHI 2003*
- Shukaitis, S., & Figiel, J. (2013). Metropolitan strategies, psychogeographic investigations. Cultural Studies? *Critical Methodologies*, 13(6), 536-543.
- Sorensen, C. (2015). Mapped: IO years of unprecedented change in Canada's cities. *Macleans*. Retrieved from: http://www.macleans.ca/news/canada/mapped-IO-years-of-unprecedented-change-in-canadas-cities/
- Stanford d.school. (n.d.). "Method: Extreme Users". Retrieved from https://dschool-old.stanford.edu/wp-content/themes/dschool/method-cards/extreme-users.pdf
- Sterling, B. (2009). "Design fiction", Interactions, 16:3, 20-24.
- Sterling, B. (October II 2013). "Patently untrue: fleshy defibrillators and synchronised baseball are changing the future", *Wired*.

 Retrieved from http://www.wired.co.uk/article/patently-untrue
- Sterling, B. & Gfader, V. (2016). "Most design fiction will of course be pretty bad bad" in Coles, A. (ed.). *EP Vol. 2: Design Fiction. Sternberg Press: Berlin*, 87-98.
- Stevens, A. (October 27 2016). "What's Cognitive Resonance?" Retrieved from https://medium.com/cognitive-resonance/whats-cognitive-resonance-7e9922d36290
- Street, S. (2014). Ways of seeing, ways of saying: Review essay about 'Poetry, Tx' by Pejk Malinovski. RadioDoc Review, I. Retrieved from http://ro.uow.edu.au/rdr/voll/issI/4/
- Solnit, R. 2006. Democracy should be practiced regularly, on foot. *The Guardian*. Retrieved from: www.guardian.co.uk/commentisfree/2006/jul/06/comment.politics

- Sopadjieva, E. (2017). A Study of 46,000 Shoppers Shows That Omnichannel Retailing Works. *Harvard Business Review*. Retrieved from: https://hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works
- Thompson, D. (2017). What's Causing the Retail Meltdown of 2017?. *City Lab*. Retrieved from: https://www.citylab.com/life/2017/04/whats-causing-the-retail-meltdown-of-2017/522600/
- Vachon, M. (2004). From flâneur to arpenteur. *Prairie Perspectives: Geographical Essays*, 7, 44-56. Retrieved from http://pcag.uwinnipeg.ca/Prairie-Perspectives/PP-Vol07/Vachon.pdf
- Vlugter, J.C. (2017). Speculative Design and its Audience. *Medium*. Retrieved from: https://medium.com/@JJCV/speculativedesign-and-its-audience-effd3203fb8l
- Welch, D. (2012). Retail's big box era at an end. *Financial Times*. Retrieved from: http://business.financialpost.com/news/retailmarketing/retails-big-box-era-at-an-end
- Whalen, J. (2017). Census 2016: More than half of Torontonians identify as visible minorities. *CBC*. Retrieved from: http://www.cbc.ca/news/canada/toronto/census-visible-minorities-I.437I0I8
- Willis, B. (2004) The mixed use maze, Regeneration and Renewal, 28 May, pp. 23–24.

Appendix A - Trends

Complete communities

Type: Social, Environmental

To improve individual neighbourhoods and boost overall regional performance, there has been a movement towards designing for Complete Communities. Elements of complete communities include a quality education, access to good jobs, an affordable roof over our heads, access to affordable healthy food and health services, the ability to enjoy artistic, spiritual and cultural amenities, access to recreation and parks, meaningful civic engagement, and affordable transportation choices that get us where we need to go (Reconnecting America, 2012; City of Mississauga, July 2017).

Urbanization of the suburbs

Type: Social, Environmental, Economic

Suburban sprawl continues to increase as real estate prices in urban cores are still to costly for many Canadians to move into. While this may still be the case, some of the amenities and design elements of urban centres are finding their way to the suburbs. This includes walkable neighborhoods, more dense main streets, and mass transit connections (Grabar, 2016).

Revamping land use restrictions

Type: Political, Economic

Local policymakers are beginning to reassess land use and zone restrictions to see how big box retail "greyzones" can be reimagined as denser mixeduse developments that residents and city managers want. Benefits of mixed-use zoning include lower infrastructure costs, increased tax revenue, and operating budget savings. One such example is the Greenline development in Calgary, which is a mash-up of residential and commercial (Gray, 2017).

Integrated public transportation

Type: Social, Economic

Providing access to local shopping centres by public transportation or high quality pedestrian and cycling infrastructure is now an important consideration for successful retail projects. The city of Mississauga plans on expanding transit services to areas that have achieved, or will be planned to achieve, transit supportive residential and employment densities, together with a mix of residential, office, institutional and commercial development, wherever possible (Mississauga p.8-8; City of Mississauga, 2015).

Millennials moving out into the suburbs

Type: Social, Economic

Peak millennial survey respondents across Canada would prefer to buy a detached home. Consequently, many within this age range have adjusted their expectations and have become increasingly open to other property types, provided that they are move-in ready. Most would look to the suburbs when purchasing a property, especially when it comes time to raise a family, as the supply of new developments and spacious residences are more abundant in these areas. Some would be willing to move to another city or suburb where property is more affordable (Fox, Sen & Smith, 2017).

Aging population

Type: Social, Economic

The rate at which Canada's population is aging is accelerating with significant economic, social and political implications. The Canadian population is aging at a rapid rate with projections showing that the total and proportion of Canadians 65+ and 80+ will increase significantly in the near future. The population growth rate for those 64 and over is increasing around four times faster than the population at large, and the population of people 65 and older is now larger than the number of children under I5. The number of "community-dwelling" seniors is also rapidly increasing (Parkinson, 2015).

Increased ethnic diversity in suburbs

Type: Social

Many demographic studies have charted how suburbs are becoming more and more colourful, welcoming large numbers of minorities and recent immigrants. Suburbs are now being designed to meet the needs of highly diverse communities. For example, nearly three out of every four Markham residents claim "visible minority" status, with more than a third of the population hailing from China. Other sizable groups include South Asians, Arabs, Koreans and Filipinos (Sorensen, 2015).

Diversification of society

Type: Social

Diversity is becoming a broader concept beyond one's ethnic background. When Canada describes itself as "diverse", we often think of one's ethnic background. However, we are a leader in other diversity issues, such as gay and transgender rights. Now, new forms of diversity are being accepted, such as neurodiversity and physical abilities, which paints a richer picture of what diversity in Canada looks like. It's not just about accepting different ethnicities, but different ways of thinking and being (Guardian, 2016).

Climate refugee migration

Type: Social, Political

Climate change is set to cause a refugee crisis of "unimaginable scale", according to senior military figures, who warn that global warming is the greatest security threat of the 2Ist century and that mass migration will become the "new normal". The Global Military Advisory Council on Climate Change project that we will see the climate refugee crisis reach to potentially 30 million people (Policy Horizons, 2017).

Informal newcomer networks

Type: Social, Economic

Some of the main challenges newcomers face upon migration to Canada include employment, housing, language, and cultural integration. Over time, as immigrants improve their language skills, find better jobs, increase their knowledge of the culture and gain a better sense of identity and their place in Canadian life, they move towards increased participation in the societal and economic life of the country. Because of this, the relationships between informal cultural networks and formal organizations is key to helping newcomers navigate Canadian communities. This has already taken shape in the form of social services in community hubs that are run and maintained by newcomers (Policy Horizons, 2017).

Stronger creative sector

Type: Economic, Social

With the rise of universal income, automation and artificial intelligence, mechanistic jobs will soon be given to machines. This will place pressures on the labor force to attract and develop jobs that can not be easily replaced by machines. One sector that may grow because of this is the creative sector as machines will still have difficulties working in authentically creative and artistic ways. The "automation revolution" will change what it means to be employable. To have jobs, people will have to do creative work or work in a service industry that requires the human touch (Cunniffe, 2016).

Decline in materialism

Type: Social, Economic

Because of increased economic pressures and a favorable social lifestyle shift towards minimalism, millennials are buying less things. Technology and the mindset of the sharing economy (AirBnB, Uber, Spotify etc.) are encouraging people think differently about what it means to "own" something. Because of this, the balance between supply and demand has been altered, and the value has moved to more experiential purchases (Dykstra, 2012).

Hong Kong HOPSCA System

Type: Economic, Social

Shopping malls in Hong Kong follow an approach to urban development dubbed HOPSCA, which are building complexes that contain hotels, offices, parks, shopping malls, clubs and apartments. Contrasted to the North American shopping malls surrounded by vast parking lots, HOPSCA developments are fully integrated into the transportation, communication and economic systems of highly dense urban cores. Developers in mainland China and around the world, including Miami and New York, are beginning to closely copy Hong Kong's mall projects (Jia, 20II).

Ethnic malls

Type: Economic, Social

Demographic change is creating opportunities for a new breed of shopping mall-maker. Savvy investors and developers have been buying older malls, which tended to serve Caucasian Canadian customers, and shifting them instead to focus on fast-growing ethnic markets. Examples of this include Pacific Mall in Markham, O.N. and Aberdeen Mall in Richmond, B.C., which concentrate on Asian consumers (Kotkin, 2015).

Reimagining purpose

Type: Economic, Social

Developers and planners are rethinking the mall concept, integrating different property types in hopes of achieving higher occupancy rates and higher rents. Office tenants and residents enjoy the convenience of having multiple retail and dining options nearby, while retailers and restaurants like the increased foot traffic from having both workers and residents on site. Malls have been repurposed as social service centres, professional offices, health care centres, churches, nature enclaves and as public markets (O'Brien, 2013).

Malls as Town Centres (main streets)

Type: Social, Economic, Values

A town center is an enduring, walkable, outdoor, openair, multi-use development that is organized around a clearly identifiable and energized public realm where citizens can gather and strengthen their community bonds. It is anchored by retail, dining, and leisure uses, as well as by vertical or horizontal residential uses. At least one other type of development is included in a town center, such as office, hospitality, civic, and cultural uses (Beyard, 2007).

Partnerships with institutions or government

Type: Social, Economic, Values

Partnership with institutions or government (i.e. libraries, recreation facilities, community centres, etc.) as a means of attracting reliable and long term anchor tenants that drive visitation to other retailers, or directly serve the surrounding community. As an example, some of the occupants of Sheridan Mall in Mississauga include a public library, a Service Ontario office, and immigration services.

Increased immigrant spending power

Type: Social and Economic

Not only do recent immigrants represent a new and consistently growing consumer base, they are also arriving in better financial positions than previous generations, reflecting the current skew in Canada's immigration policy toward admitting skilled professionals. Visible minority ethnic groups far outpaced the average non-visible-minority resident in consumer spending growth from 2008 to 2013 (eMarketer, 2014).

Retail meltdown

Type: Economic, Social

Several retail bankruptcies in 2017 show the signs of a retail meltdown taking place. Retail giants like Macy's, Sears and J.C Penny in the US have shut down stores, with Canada starting to experience some of those ripple effects. This retail meltdown has been attributed to the rise of online retail powerhouses like Amazon, a behavioural shift towards more experiential retail, and an overall oversupply of malls failing to meet actual customer demand (Thompson, 2017).

Decline of big box stores

Type: Economic, Social

Declining sales at large big box stores have forced some to close locations leaving large unutilized spaces in many shopping malls. With these big box stores once acting as anchor stores not only for customers but for other smaller stores as well now gone, the economic ecosystem of malls have become that much more fragile (Welch, 2012).

Online shopping revolution

Type: Technology, Economy

Improvements to the customer experience, increased retail options, and faster shipping has made online shopping more appealing. Customers are now buying more things from the comfort of their homes than in person at brick and mortar stores. Grocery shopping may be the last holdout. At the moment, the majority of people still want to push a cart down the aisle, choosing items for their family, but that is changing as well (Barina, 2017).

Retail automation and delivery

Type: Technology, Economy, Social

Retail workers are at risk of losing their jobs to robots and other automation technology. Automation services that are disrupting retail employment can range from tablets where customers can check out without the help of a cashier to more complicated technologies that can interact with customers in stores and help them find the items they need (Peterson, 2017).

Growth of anchor communities in malls

Type: Social

In the wake of anchor big-box stores leaving shopping malls comes the emergence of a new type of attractor: anchor communities. As some shopping malls explore the different ways they can repurpose themselves beyond retail, they are beginning to attract the communities that come with those new spaces. Such include the communities that belong to churches, sports clubs, cultural networks and the creative arts.

Global going local (offerings)

Type: Economic, Social

Increased global connectedness is generating opposition in the form of localisation, as people try to assert their own identity. Forced to think about how to run global businesses that are also localised, global retailers (e.g. Uniqlo, Lululemon and Nike) are activating communities through local engagement strategies like the creation of local hubs and cultural programming, "superhero" ambassadors, and neighbourhood run clubs. These strategies shift from traditional merchandise standardization to embracing decentralized leadership, and recognizing the need to be good at understanding other cultures, while still being mindful of protecting brand equity and economies of scale (Kansara, 2016).

Valuing of experience over materialism / "Experience Economy"

Type: Economic, Social

Consumer surveys are showing a general trend towards consumers placing more importance on experiences than possessions, which is particularly evident amongst the millennial demographic. In particular, social media presence and a "fear of missing out" are drivers for millennials' preference towards experiential purchases over material possessions. This trend has caused retailers such as Macy's to adopt experience-based models to drive consumer purchases, such as incorporating mini-concerts, yoga classes, and cafes into the retail environment. Psychology studies reinforce this trend to show that purchasing experiences tend to be more rewarding, and that there is a correlation with increased happiness (Pozin, 2016, Hamblin, 2014).

Omni Channel Retail

Type: Technology, Social

Omni-channel retailing is on the rise: the use of a variety of elements to shape a customer's shopping experience, including bricks and mortar stores, online shopping, mobile apps and telephone sales (Sopadjieva, 2017).

Internet of Self

Type: Technology, Social

A combination of the Internet of Things (IoT) and the Quantified Self (QS), the Internet of Self (IoS) describes a system that involves the harvesting data from bodily functions through biometric sensors, which then automatically analyzes the data to command IoT objects in everyday life. As such, the physical human body controls the human environment without the need for conscious decision-making (Elgan, 2015).

Urban renewal through the arts

Type: Economic, Social, Value

As real estate prices and studio spaces become more expensive and harder to find in the city, artists may begin migrating out into the suburbs. This might pose as an opportunity to help boost the renewal of neighbourhoods as artists have had a history of being catalysts to the renewal of urban cores for many cities. There is evidence collected that urban renewal through the arts encourages cultural tourism and subsequent economic growth. Revitalization through the arts and culture has also been able to give new meaning to decaying and low-profit urban infrastructure (Florida, 2015).

Appendix B - Wind Tunnel Matrix

The following wind tunneling matrix was used to test strategic options in the four scenarios that were designed. Each strategic options fit was based off four criteria which includes cultural fit (CF), strategic fit (SF), financial fit (FF) and is risk (R).

We utilized a 0-5 grading system to analyze the strategic options with 0 representing "no fit" and 5 representing "a very good fit".

Strategic option wind tunneling matrix

| | Scenario pain point | Strategic recommendation | 1000 | nanodo rem Only | 1 25.00 | ratio () ext.T.efc.F | | restorich restorier all? | *565 k | or of hiplaction breef | |
|----|--|---|-------|--------------------|---------|-------------------------|-------|-----------------------------|--------|------------------------------|------|
| ٨ | Tracking the level of authenticity of memberships as there is a reposite through los to maintain | Place seminarrium though ig. at lattice ways well indeed not their time and engine and in decident | CF: 0 | NF: D | CF: 5 | NF: 5 | CRIG | NF: D | CF: D | NF: 0 | 48 |
| | minimum right and the distinct of terms (in- term certific above | mo-ing night: momberships are compined. | FF:5 | R:5 | FF: 5 | R: 2 | FF:3 | R:5 | FF: 6 | R: 3 | 300 |
| | communities is posity and can be sometimes | Wish, at, common besit of ideatard what the addition common needs around design services they can share trusted dress those extremen hoods. | CF: 5 | SF:5 | cr:5 | SF: 1 | cr:s | SF: 5 | CF:1 | SF: 3 | 52 |
| | | | FF: G | R: 2 | FF:5 | R: 2 | FF:3 | R:4 | FF:4 | R: 0 | |
| В | Eon nant cultural encloses might glow to a sonit where it much make it at the other encomes | Develop amphamotion that all over communities as | CF:3 | SF: 2 | CF:1 | SF: 0 | CF: 4 | SF: 5 | CF:3 | SF: 5 | 34 |
| | to the application of the control of | better inde stand date of the | FF:4 | E: 3 | FF:3 | R: 2 | FF:0 | R:4 | FF: 0 | R: 0 | 1000 |
| | These are conflicts between optimizables as by the the same resources. | Communities that glowith a certain size must meast miniscenses on among regisemment uses (P4 the property) | CF:1 | SF: 5 | CF:5 | SF: 0 | CF: 5 | SF:4 | CF: 5 | 5F: 0 | 53 |
| | | | FF: O | R; D | FF: 5 | R; 4 | FF;5 | R:4 | FRIS | R; O | |
| | bewonerers in the fine it difficult to cavigate and | Figure 2 to earning may lead as that above near to be the rise state in their to be made as their | CP:5 | SF: S | CF:5 | SP: 5 | CRS | SF:5 | CF:5 | 5P: 5 | 73 |
| c | execuse resources as they have yet to desire late into Canadian culture. | notworks to help necessaries have gate the system of authors. | FF: S | R:5 | FF: 5 | R: S | FF: 2 | R:5 | FF: S | R: I | |
| | à focus an de a services makes à difficult for | Encourage celo institutions (libraries if a more intervals), worse, president region per intervals. | CP: 2 | 5F: 4 | CF:2 | 5F: 4 | CR.5 | SF:5 | CF:5 | SP: 5 | 8220 |
| | the water community to have the space and amount communities not record up of current programming. | FF: 2 | R: 3 | FF: 5 | R: 4 | FF: 2 | R: 4 | FF: 5 | R: 3 | 60 | |
| | C. ft. rol appropriation unfoldy rewards the st. Mail audicesses will be required to an item agreement to the first property in which all languages will be instructed in a silicon graph of the first property in the silicon graph of the sili | CP: Z | SF: G | CF: G | SP: 5 | CE 6 | SF:5 | CF:1 | 5F: 3 | 58 | |
| 22 | of another community walls neglecting to compare steep could the m. | | FF:5 | R: 4 | FF: 5 | R: 4 | FF: 2 | R: 2 | FF:5 | R: Q | 58 |
| b | Signor hydrees in receiving the hadrees in receiving their hydrees. The constant removing of cuttors reaches in collision in models aroundly to choosing inner the data translated by factors are not third be enough to subspace to changing their by the collisions and the collisions are not the collisions. | | CR:5 | SF: G | CF; O | 5F: I | CRG | SF: 6 | CF; 6 | 5F: 9 | 1200 |
| | | FF: 2 | H: 2 | FF: 4 | R: 2 | FF:5 | R:4 | FR:5 | R: 4 | 57 | |
| | 1 | | | 165 | | 107 | | 623 | - 33 | 99 | |

A Appendix C: Needs Assessment

Table: Do service providers have the resources and capacity to meet community needs?

0 = no capacity to meet that need , 5 = high capacity to meet that need

| Civic services providers | Education service providers | Health services providers | Cultural services providers |
|---------------------------------|-----------------------------------|--------------------------------|-----------------------------|
| Subsistence 5 | Subsistence 2 | Subsistence 5 | Subsistence I |
| Protection 5 | Protection 3 | Protection 5 | Protection I |
| Affection 5 | Affection 4 | Affection 5 | Affection I |
| Understanding 4 | Understanding 4 | Understanding 4 | Understanding 0 |
| Participation 3 | Participation 3 | Participation 3 | Participation I |
| Leisure 2 | Leisure 4 | Leisure 3 | Leisure 3 |
| Creation I | Creation 4 | Creation I | Creation 2 |
| Identity I | Identity 4 | Identity 0 | Identity 3 |
| Freedom 4 | Freedom 3 | Freedom 4 | Freedom 3 |
| Total: 30 | Total: 31 | Total: 30 | Total: 15 |
| Professional services providers | Transportation services providers | Residential services providers | Business owners |
| Subsistence 5 | Subsistence 4 | Subsistence 5 | Subsistence 3 |
| Protection 4 | Protection 4 | Protection 4 | Protection 3 |
| Affection 3 | Affection 3 | Affection 4 | Affection 3 |
| Understanding 2 | Understanding 2 | Understanding 3 | Understanding 3 |
| Participation I | Participation I | Participation 2 | Participation 2 |
| Leisure I | Leisure I | Leisure I | Leisure 5 |
| Creation I | Creation 0 | Creation 0 | Creation I |
| Identity I | Identity 0 | Identity 3 | Identity I |
| • | Freedom 3 | Freedom 5 | Freedom 5 |
| Freedom 3 | Freedom 3 | Ticcuoiii 5 | 1100001110 |

Appendix C: Needs Assessment

Table: How well are service recipient's needs being met at the mall?

0 = not being met at all, 5 = very well met

| Seniors | Youth | Families | Newcomers | General public |
|------------------|------------------|------------------|------------------|-----------------|
| Subsistence: 3 | Subsistence: 5 | Subsistence: 5 | Subsistence: 4 | Subsistence 4 |
| Protection: 3 | Protection: 4 | Protection: 4 | Protection: 3 | Protection 4 |
| Affection: 3 | Affection: 3 | Affection: 4 | Affection: 3 | Affection 3 |
| Understanding: 3 | Understanding: 3 | Understanding: 4 | Understanding: I | Understanding 2 |
| Participation: 3 | Participation: 2 | Participation: 4 | Participation: I | Participation 2 |
| Leisure: 2 | Leisure: 3 | Leisure: 4 | Leisure: 3 | Leisure 2 |
| Creation: I | Creation: 2 | Creation: 3 | Creation: 0 | Creation 2 |
| Identity: 3 | Identity: 3 | Identity: 4 | Identity: I | Identity 2 |
| Freedom: 2 | Freedom: 5 | Freedom: 5 | Freedom: 3 | Freedom 5 |
| Total: 23 | Total: 30 | Total:37 | Total: 19 | Total: 26 |

| Ethnic communities | Communities of interest | Professionals | Residents | | |
|--------------------|-------------------------|-----------------|-----------------|--|--|
| Subsistence 4 | Subsistence 4 | Subsistence 4 | Subsistence 4 | | |
| Protection 3 | Protection 4 | Protection 4 | Protection 4 | | |
| Affection 3 | Affection 3 | Affection 3 | Affection 3 | | |
| Understanding I | Understanding 2 | Understanding 3 | Understanding 3 | | |
| Participation I | Participation 2 | Participation 3 | Participation 3 | | |
| Leisure 2 | Leisure 2 | Leisure 3 | Leisure 3 | | |
| Creation I | Creation 2 | Creation 2 | Creatio 2 | | |
| Identity 2 | Identity 2 | Identity 3 | Identity 2 | | |
| Freedom 4 | Freedom 4 | Freedom 4 | Freedom 5 | | |
| Total: 21 | Total:25 | Total: 29 | Total: 29 | | |

Appendix D: Narrative

Audio Recording

The audio recording of the narrative for the Foresight Walk case study is available for streaming on the project website at:

http://activemode.ca/projects/future-of-malls/



Written Narrative

SUNDAYS AT THE MALL WITH UNCLE

Sheridan Centre 2027

(Sounds of being on the bus. Sounds of people talking. Sound of bus stopping.)

Act I - "Beyond Basics"

(Ambient sounds of malls constantly playing in the background.)

ANDRE (narration):

Uncle loves the mall on Sundays. We go every other day, but he seems to be the most happy on Sundays. It must be all the families that show up. It's hard not to enjoy the sounds of children laughing and playing. Uncle says that Sundays are more lively now that millennials and newcomers have moved to the suburbs, to escape the downtown real estate bubble.

UNCLE: It's such a great day out today! The sun's out, people are smiling and my joints are feeling gooood! I hope I get to see Claire at the pharmacy today². I learned a new pick up line from one of the teenagers at

the English class, let me know what you think of it.

(Uncle clears throat.)

Do you have an inhaler? You take my breath awayyyyy.

ANDRE: ha ha... Didn't you try that one last week?

UNCLE: Nope! Last week I told her ... antacids couldn't stop my heart from burning for her.

ANDRE: You are such a romantic, Uncle – I don't know how the ladies can resist you ...

UNCLE: "I know right? Pause, pondering. You know, Andre, thanks for bringing me to the mall and being my mall companion. It's great that the Canadian government restarted the live-in caregiver program so you could come to Canada and be with me. God knows your cousin and her husband are too busy to ever help me out.

ANDRE (narration):

The mall wasn't always like this – Uncle told me stories of how this place used to be a ghost town. When the big box stores left³, a huge vacuum was made⁴, and no one knew how to fill the space. Online shopping and

- 1 Trend: Millennials moving out into the suburbs
- ² Trend: Mall catering to an aging population
- 3 Trend: Decline of big box store
- 4 Trend: Retail Meltdown

retail automation made it easier and easier for people to get what they need from the comforts of their home. The more convenient online shopping became⁵, the less power retail had over this space.⁶

That's when the mall started listening to the community.⁷

It was obvious that people didn't just value *things* anymore. Ownership, was a thing of the past⁸, instead, people wanted experiences.

With this shift in behaviour, came a shift of purpose for the mall⁹. It grew to become less of a place to experience material things, and instead, became a place to experience your community. During the beginning of the transformation, Uncle clearly remembers the mall being a canvas, for artists, to inspire people, to find what that purpose was¹⁰. It became a venue for art fairs and music festivals, attracting different communities, each having their idea of what the mall could be. The mall tried really hard to make sure all the different communities were catered to, but it almost seemed impossible to get everyone to agree, on what the community as a whole wanted¹¹.

The mall defined its direction when it took the old, empty department store, and turned it into a huge recreation centre ¹². It was a highly contested development with each community wanting something different. Mall management couldn't figure out whose needs to prioritize. To appease the whole community, the recreation centre became both a place for everyone, and a place for no one – a neutral space that no one community or culture had claim to ¹³.

This approach to appeasing the community as a whole started to spread across the mall. The Indian spice market eventually became a farmer's market. The community artist lofts became housing for seniors. The Chinese school became a children's pre-school. Almost all the niche spaces and services transformed into something that served the needs of the greater community, and that's how we got to where we are today¹⁴.

The only big anchor stores that managed to stand the test of time were the supermarket, the health center, and the pharmacy. I guess those human interactions were just too complex for automation and artificial intelligence to completely replace 15. That's probably why Uncle still goes to the pharmacy instead of using his device to order his meds. Claire, the pharmacist, knows how to talk to him, which words he can understand, and which words just go way over his head 16. I'm pretty sure she's one of the biggest reasons why he comes to the mall so regularly. Regardless of how many times she turns him down, he continues to jokingly flirt with her – It's kind of awkward, but also super cute.

UNCLE: "Andre, I'm going to step into the pharmacy to talk to Claire about my meds. Do you want to come with me?"

ANDRE: That's ok Uncle, I'm just gonna hang out and walk around here. Say hi to Claire for me please.

UNCLE: "Ok, I won't be long, see you in a bit"

- 5 Trend: Online shopping and automation
- 6 Trend: Decline in materialism
- 7 Trend: Reimagining purpose of mall
- 8 Trend: Experiential Retail
- ⁹ Trend: Reimagining purpose of mall
- 10 Trend: Urban renewal through the arts
- Scenario pain point: Mall management trying to cater to everyone's needs
- 12 Trend: Repurposing the mall
- Scenario visioning: Highlighting the characteristics of scenario C
- Scenario visioning: Highlighting the characteristics of scenario C
- 15 Trend: Retail automation
- 6 Opportunity: Social stimulation

ANDRE (narration):

It's been great getting to know Uncle these past few months. We've been going to the mall a lot more since I moved in as his caregiver – it's the only way for him to get his exercise and social stimulation. I've enjoyed these trips too¹⁷. My cousin and her husband don't do anything social, and they are not that connected to the Peruvian community. Don't get me wrong, I'm grateful for everything they've done so that I could have this work opportunity¹⁸, but I'm starting to miss home. I'm starting to miss my friends and family.

The mall mostly caters for the seniors and families around here – I guess they are the largest portion of our population these days¹⁹. No wonder Uncle has so many friends to say hi to whenever we come to the mall²⁰. If only I could be "75" with grandchildren ... they seem to have everything they need in this mall.

In the end though, there really is no excuse other than the fact that I need to overcome my shyness and get better at meeting people²¹ – Uncle can't be my only friend. That's easier said than done, especially now, since I've started seeing *her* around²².

I first saw her on the bus talking to her friend in a Spanish accent, and now I'm starting to see her more and more often, around the community. I think I am starting to develop a really big crush on her. I see her at the Community Garden²³ walking her dog, at the library reading, and ... well... there was also that one time at the Farmer's Market²⁴.

I for sure I blew my chances with her that day at the Baker's stall. I couldn't believe I was standing next

to her in line. As much as I wanted to say hi, in that instance, I was mentally and physically paralyzed.

Say something. Say anything.

All that came out of my mouth was,

"So... do you like bread?"

I'll never forget the face she made after that. She looked both confused and astonished.

"Do you like bread??????" Was that the only thing I could think of?

I wonder if I'll ever get to see her again. I need to find a way to redeem myself. Still, despite how embarrassing that whole situation was, it was the most alive I've felt since I came to Canada²⁵.

Is she the reason why I keep coming to the mall with Uncle? I would be lying to myself if I said she wasn't.

(pause)

If confidence is the ingredient needed for me to better connect with this community, then we have a problem, because confidence is really hard for someone like me, to build²⁶.

Confidence comes from being able to communicate and speak the language. I know enough English to make my way through most things, but I still catch myself not having the right words to fully express what I want to say.

- Opportunity: Exercise and social stimulation
- Opportunity: work opportunity
- 19 Trend: Aging population
- **20** Trend: Informal newcomer networks
- ²¹ Persona pain point: shyness, lack of confidence
- Persona opportunity: Seeing Sofi around motivation to create deeper relationships

- ²³ Trend: Repurposing mall
- **24** Trend: Repurposing mall
- 25 Persona opportunity: Social connection
- Persona pain point: Challenges in communicating / expressing yourself

Confidence comes from being able to feel independent. Even though I receive a decent amount of money from the government as my uncle's caregiver, it's still not enough to afford a place of my own²⁷.

Ultimately, confidence for me is knowing you are a part of something bigger than yourself. I haven't felt this sense of belonging at all since moving to Canada. I'm slowly losing my connection to life back home²⁸, and I continue to fumble at trying to integrate myself here. It's hard not to feel isolated and lonely - but I have to find a way²⁹.

UNCLE: "Andre! Earth to Andre. Hellooo? I've been waving like a madman for the past 5 minutes!"

ANDRE: Sorry Uncle, I was lost in thought... How was the pharmacy?

UNCLE: "Claire is just great, she told me all about my new meds. The new pick up line didn't work, I'll have to try another one next week..... You're thinking about the girl again, aren't you?"

ANDRE: I'm thinking about a lot of things, Uncle. UNCLE: Andre, you always think too much. You need to get out of your head and into the real world. I can guarantee it's less confusing out here.

ANDRE: I know, Uncle... It's nice that we come to the mall together, I like seeing how you managed to find your place in the community. I know it's only been a few months, but I feel like I'm really struggling. Yes,

the mall is well designed.... it's available for everyone to share together³⁰, but it really doesn't allow for any deep relationships³¹ – I miss the Peruvian flavour! Even though people are nice to me, we only ever make small talk about the weather or where I am from.

But I see you with your friends, and I know that doorways to deeper connections do exist!³² Take that Book Club you're a part of³³ – you've been able to make friends with so many people your age, but you also got to connect with people from other communities – like those high school volunteers you always get your... questionable... dating advice from! It's like I am missing a tool or something to help me find my doorways into the community.³⁴

UNCLE: I was a lot like you when I first came to Canada. Learning English was hard, but even more difficult, was trying to understand what it meant to be both Peruvian, and a new Canadian³⁵. I didn't find my way into the community through any "tool". It was through Claire³⁶. She saw how I wasn't interacting with the other seniors in the mall, and took the initiative to introduce me to George, who was a member of the Mall Walking Club.

You know... you are really helping me as my mall companion. Maybe I can help you too, by being that doorway, for you.

ANDRE: Thanks Uncle, it's been great getting to know Claire and your friends, but I also need to find a community for myself - a community of people my

- 27 Persona pain point: No financial independence
- 28 Persona pain point: Losing connection to home
- Persona pain point: Difficulty integrating; isolation and loneliness
- 30 Scenario opportunity: Mall provides for basic needs
- 31 Scenario pain point: No channels for deep connections
- 32 Trend: Informal newcomer networks
- 33 Scenario opportunity creator: Space for people to connect
- 34 Scenario pain points: Newcomers may have difficulties finding entry points into the wider community
- 35 Persona pain points: Newcomers may have difficulties balancing their old life with their new life
- Scenario opportunity creator: Mall businesses tapping into informal newcomer networks

age, with the same interests. Unfortunately for me, my community is not big enough for the city to prioritize and cater for.³⁷

Still, you gave me great insight Uncle. What I need isn't a space or a tool. What I need are people.

Act II - "Offerings"

UNCLE: "Oh look, George and the high school kids are waving for me to go into the reading room. Good talk Andre, but I better get in there."

ANDRE: Okay, I'm going to stay out here and think about what you said. Maybe something on the community events board will spark some ideas on what I can do.³⁸

ANDRE (narration - internal):

(Andre looks at the bulletin board, reviews the offerings and thinks about each one)

Whoa some of these are kinda pricey.39

Umm. That would be a nice skill to learn.

Hmm I can see myself connecting with people there. 40

Do I have the skills for that?41

That'd be a great way to see the city.42

I don't think I own the right things for that.43

Hmm I don't know if I can do that in front of strangers.44

I wish this event wasn't just for that community. 45

Oh! I could bring something Peruvian to that.46

I'd need to go with someone to that, I wish I had more friends.⁴⁷

UNCLE: Andre! Andre! Stop looking at the bulletin board, I have something better for you. George, tell him!⁴⁸

JORGE: Hi Andre, your Uncle has been telling me how you are having a hard time making friends. The mall has great programming, but it can be hard for newcomers, especially when they're as bad at having small talk at the Farmer's Market as you are ...

ANDRE: What? Uncle why are you telling people my personal things! It's embarrassing! I'm never showing my face here again.

- 37 Scenario pain point: Specialized groups are hard for the mall to cater to
- 38 Scenario opportunity creator: Public awareness of what the mall offers
- ³⁹ Persona pain point: Financial limitations
- 40 Persona opportunity creator: Fun social events for him to connect with others
- Persona pain point: Some offerings might not be accessible to those who do not have the skills for it
- 42 Persona pain point reliever: Means to familiarize with new place

- Persona pain point: Not having the resources to participate in the community
- 44 Persona pain point: Lack of confidence
- 45 Persona pain point: Some demographics are not catered to
- **46** Persona opportunity creator: Channels to express culture
- 47 Persona pain point: Lack of social network
- 48 Trend: Informal newcomer networks

JORGE: Nah, don't blame your Uncle, it was actually my daughter, Sofi, who told me.⁴⁹ She keeps mentioning how she's been seeing this cute Latin guy around the mall. She thought it was really nice of you to spend so much time with your uncle, helping him get around the city. Trust, me, I was sick of hearing it until she told me the story about your interesting exchange at the Farmer's Market. We have both been trying to figure out what you wanted to say for weeks...

ANDRE: Believe me when I say there's nothing to decipher from that, other than I'm an idiot.

JORGE: Well, she'll be coming to visit me at the food court in an hour, maybe you can have another shot. Better yet, I know that she is pretty free these days – maybe you guys can plan to do something fun together?

ANDRE: Oh I don't think that's a good idea, I don't really know where to go in the city and I don't know if I can afford anything fancy.⁵⁰

UNCLE: You should sign up for the community membership the mall offers!⁵¹ I'm surprised I haven't mentioned it earlier. This community has a heavy focus on arts programming, t might be fun with Sofi. The memberships are a monthly subscription but it lets newcomers go to community events for free. Let's head down to the library⁵² and pick up a membership brochure.

ANDRE: Uncle, you've been holding out on me!

UNCLE: You never told me how lonely you were until now... The world can't read your mind Andre – you have to let them know what's going on up there. The best thing about the membership is that it gives discounts for essential needs like groceries, transportation, and health care, which is a huge benefit for guys like you and me with fixed incomes. What's also great is that you can customize it to include benefits for things that go beyond essential needs like going to concerts, specials at restaurants, or access to the art gallery.⁵³

ANDRE: I don't know if I can afford it. My budget is pretty tight these days.⁵⁴

UNCLE: It's okay, you can also donate your time through volunteering. That's why I am always at the Book Club when we come to the mall. The time I spend reading with newcomer kids helps me pay for my essential needs, and it also connects me to a group of people I normally wouldn't interact with. Whether or not you have the time is up to you though. You might have to stop spending so much time with me - but hey, maybe that's a good thing.

Oh look - it's my mall walking club. Steve! Walter! Susan! How're you guys doing? Andre, do you mind if I catch up with my buddies? How about you take some time to go over the membership brochure and see what you like.

ANDRE: Okay, no problem Uncle, I'll see you in a bit.

- 49 Trend: Informal Newcomer Networks
- Persona pain point: Lack of finances and knowledge of the community
- 51 Scenario opportunity creator: Offerings that aid in providing for basic needs and to connect members of the community to each other
- 52 Trend: Reimagining purpose of malls

- 53 Scenario opportunity creator: By providing for essential needs, community members can spend more time trying to connect with one another
- ⁵⁴ Persona pain point: Financial limitations
- 55 Scenario pain reliever: Multiple options on how memberships can be paid for

ANDRE (narration):

I really wish Uncle told me about this membership sooner. Let's have a closer look at the details and see if this can work for me.

WALK FACILITATOR VOICE: Take some time to sit down in the food court and read through the membership offerings

ANDRE (narration – internal):

This membership fee is kind of pricey for me.⁵⁶

Can I step away from uncle and volunteer this much time? 57

Would I have the energy and be social enough?

It would be really nice to meet some new people though, even if they are not Peruvian. Who knows, maybe I'll learn to fit in more.⁵⁸

Do these custom offerings really speak to me?

It's nice how most of these community perks are integrated into the mall.⁵⁹

Will this membership let me find the deeper relationships I want?⁶⁰

None of these cater to Peruvian culture - is that something I can work with?⁶¹

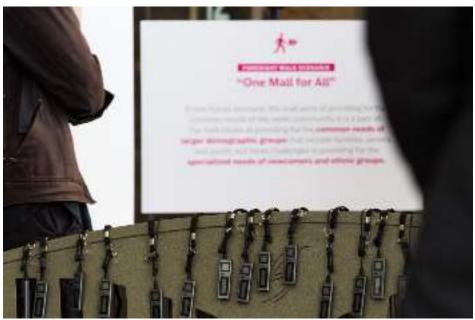
If only there is a Peruvian community group that I can support. 62

It's interesting which groups are organizing these events together. 63

UNCLE: Hey Andre, so ... what do you think about the membership? Maybe you can take Sofi to one of the programs⁶⁴. And you might also need this. Good luck, Andre.

(Uncle hands Andre a rose)

- ⁵⁶ Persona pain point: Financial limitations
- Persona pain point: Not having enough time outside of work to volunteer time
- 58 Scenario opportunity creator: Opportunities for newcomers to meet others in their community
- 59 Scenario opportunity creator: It is more convenient for the community access offerings at one place
- 60 Scenario pain reliever: This membership may give newcomers access to deeper relationships
- 61 Persona pain points: Specialized cultural groups are hard to cater for
- 62 Persona pain points: Specialized cultural groups are hard to cater for
- 63 Trend: Partnerships between institutions and cultural groups
- 64 Scenario opportunity creator: Access to community events for social interaction

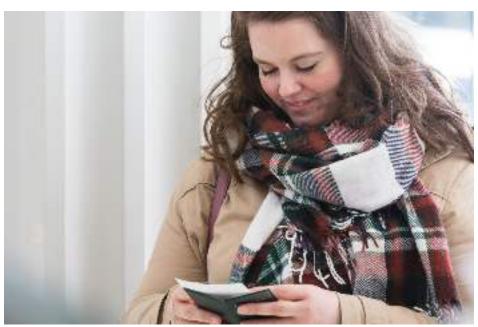


Mp3 players with audio narrative ready for walk participants during pre-walk introduction.



Walk participant sharing her pre-walk question response.





Walk participants studying future artifacts to embody the persona of Andre Flores.





Participants listening to the audio narrative and contextualizing futures in present space.





Walk participants interacting with in-situ future artifacts.



The rose as an artifact guiding participants into facilitated workshop for critique.



Walk participants completing the scenario resonance map.





Facilitated workshop with multi-stakeholder groups.

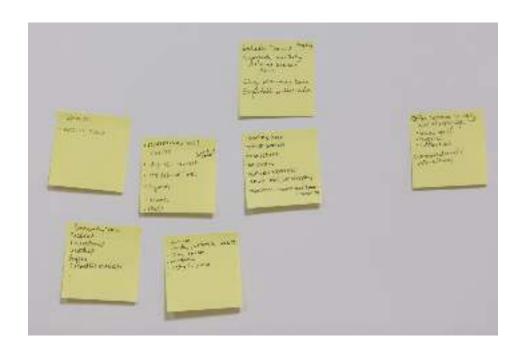
Appendix E: Foresight Walk Documentation





Participants enjoying critical discussion.

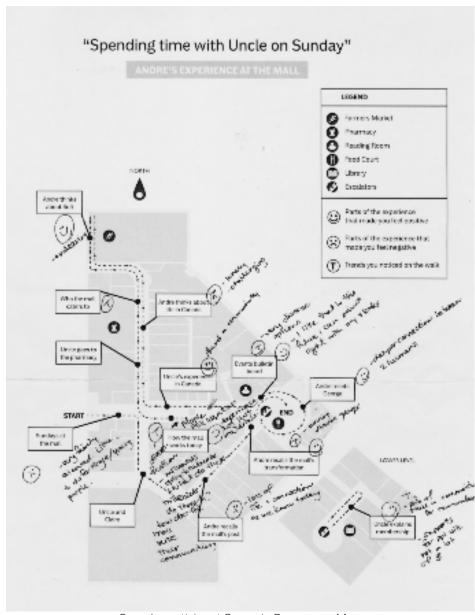
Appendix F: Sample Workshop Data





Walk participants' pre and post-walk question responses.

Appendix F: Sample Workshop Data



Sample participant Scenario Resonance Map.

Appendix F: Sample Workshop Data

∱> POST-WALK QUESTIONS

On the map, mark points anywhere on the walk gath with a "end face" where you fall majority about this future. Next to each said light, explain why this part of the story endior space made you feel this way.



On the map, mark points anywhere on the walk publicethis, "Hoppy face" where you felt positively about this figure. Next to each hoppy face, applied only this part of the story and/or space made you feel this will.



On the map, mark points anywhere on the walk path with a "1" on parts of the walk where you see a twent having changed the mail and the community. Next to such "1", option what that change looks like.



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Sample participant Post-Walk Question Responses.

Scenario resonance matrix (trends)

| | Sundays at the mall | Uncle and Claire | Andre recalls the mall's past | Andre recalls the mail's transformation | How the mall works today | Uncle goes to the Pharmacy | Who the Mall caters To |
|---------------------------------------|---------------------|---------------------|----------------------------------|---|--------------------------|-------------------------------|---------------------------|
| Trends | | | | | | | |
| Millenials in suburbs | | | | | 0 | | |
| Decline of big box stores | 1 | | 000 | 0 | | 0 | |
| Retail Meltdown | | | 000 | | | | |
| Online shopping | | | 7.0 | | | | |
| Decline in materialism | | | | | | | |
| Reimagining purpose of malls | | | 00 | 0 | 000 | | |
| Experiential Retail | 00 | | | | | 12 | |
| Urban renewal through artists | | | | | | | |
| Retail Automation | | 0 | | 1 | | | |
| Aging Population | | 00 | | | | 0 | |
| Informal Newcomer Networks | | | | | | 110 | |
| Anchor Communities | 10 11 | | | | | U I | |
| Global Going Local | | | | 0 | | | |
| Increased ethnic diversity in suburbs | | | | | | | |
| Omni-channel retail | | | | | | 0 | |
| Internet of self | 1 | | | | | | |
| Complete communities | | | | | | | |
| Partnerships with institutions | | | 1 | | | | 0 |
| Integrated public transportation | | | | | | | |
| Diversification of society | 0 | | 10 | | | | |
| No comments / general comments | | | 0 | | 0 | | |

Resonating trend

Positive emotional resonance

Negative emotional resonance

Scenario resonance matrix continued (trends)

| Andre thinks about Sofi | Andre thinks about life in Canada | Uncle's experience in Canada | Events bulletin board | Andre meets George | Uncle explains membership | Overall experience | Total resonance |
|----------------------------|---|------------------------------------|-----------------------|-----------------------|------------------------------|--------------------|--------------------|
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| | | | | | | | 31 |
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| | | | | | | 0 | 3 |
| | | | | | | | 0 |
| | | | | | | | 1 |
| | | | | | 0 | | 3 |

Resonating trend

Positive emotional resonance

Negative emotional resonance

Scenario resonance matrix (pain points & pain relievers)

| 51 | | | 1 | E | | |
|---|------------------------|---------------------|---------------------------------|---|--------------------------|-------------------------------|
| | Sundays at the mall | Uncle and Claire | Anore recalls the matterpas. | Andre recalls the mall's fransformation | How the mail works today | Uncle goes to the Pharmacy |
| Pain Points | | | | | | |
| Lack of confidence / social anxiety | | | | | | |
| Inability to communicate / express oneself | | | | | | |
| Lack of financial stability / high costs | | | i i | | | |
| Losing connection to home | | | | | | |
| Dittku ty integrating | | | | | | |
| Isolation and loneliness | | | 1 | | | |
| No channels for deep connections | | | | | | |
| No sense of community or belonging | | | | | | |
| Neglecred minority demographic | | | | | | |
| Lack of skills & resources | | | | | | Ī |
| Unfamiliar with surroundings | | | | | | |
| No time to volunteer | | | | 2 | | |
| No cultural events / culture is lost | | | | | | l l |
| No opportunity to centribute | | | | | | |
| No commant | 00 | | | | 0 | |
| Pain Relievers | | | | | | |
| Tools that create familiarization of place | | | | | | |
| Community membership | | | | | | 1 |
| Option of volunteering or paying for membership | | | | | | |
| Translation services | | | | | | l. |
| Law stakes cartistic programming | | | | | | |
| Programming that walcomes diversity | | | | | | |
| Offerings to help with basic needs | | | | | | |
| No comment | | | | | | |

Scenario resonance matrix continued (pain points & pain relievers)

| Who the Mall caters To | Andre thinks about Sof | Andre thinks about life in Canada | Uncle's experience in Canada | Events bullerin spard | Andra meets George | Uncle explains membership | Overall experience | lotal resurance |
|---------------------------|---------------------------|---|------------------------------------|--------------------------|-----------------------|------------------------------|-----------------------|--------------------|
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Scenario resonance matrix (opportunities & opportunity optimizers)

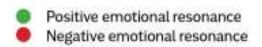
| | Sundays at the mall | Uncleand Claire | Andre recalls the malfs past | Andre recalls the malf's transformation | How the mall works today | Uncle goes to the pharmacy |
|---|---------------------|--------------------|---------------------------------|---|--------------------------|-------------------------------|
| Opportunities | | | 1 | | | |
| Social stimulation | | | | | | |
| Exercise | | | | | | |
| Work appointmenty | | | | | | |
| Social connection | 1 9 | | 1 | | 9 | |
| Community perks are integrated in the mail. | | | ije e | | i i | 200 |
| Place to spend time with family. | | | | | | 1- |
| Participate in new experiences | | | | | | |
| No comment | 000 | | | | | |
| Opportunity optimizers | | | | | | |
| Utilize informat community networks | | | | | | |
| Offerings that allow for social connection | | | | | İ | |
| Plauforms for expression | | | | | | |
| Community membership custom attennes | | | | | | |
| Giving back to specific common by groups | | | | | | |
| Physical infrastructura for people to gather | | | | | | |
| Community events are advertised | | | | | | |
| Afforeable access to resources and activities | | | 1 | | | |
| Oliverse programming that is inclusive | | | | | | 1 |
| General comment | 1 | | | | 1 | |

Scenario resonance matrix continued (opportunities & opportunity optimizers)

| Who the Mall caters To | Andre thinks about Self | Andre trinks about life in Canada | Undic's experience m Canada | Events bulleon board | Andre meets George | Uncle explains membership | Overall experience | Tota. resonance |
|---------------------------|----------------------------|---|-----------------------------------|-------------------------|-----------------------|------------------------------|-----------------------|--------------------|
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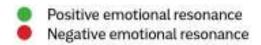
Scenario resonance matrix (membership offerings)

| | Membership afferings | lotal |
|---|-------------------------|-------|
| Pain Points | | |
| Lack of confidence / social anxiety | | 0 |
| Inability to communicate / express oneself | | 0 |
| Lack of financial stability / high costs | 000 | 3 |
| Losing connection to home | | 0 |
| Difficulty integrating | | - 1 |
| Isolation and Ioneliness | | 0 |
| No channels for deep connections | | 1 |
| No sense of community or belonging | | 0 |
| Neglected minority demographic | | 1 |
| Lack of skills & resources | | 0 |
| Unfamiliar with surroundings | | 0 |
| No time to volunteer | | 0 |
| No cultural events / culture is lost | | 0 |
| No opportunity to contribute | PR-17-18-1 | 0 |
| No comment | 000 | 3 |
| Pain Relievers | | |
| Tools that create familiarization of place | | - 1 |
| Community membership | | 0 |
| Option of volunteering or paying for membership | 0000000 | 7 |
| Translation services | 120 | 0 |
| Low stakes / artistic programming | • | - 1 |
| Programming that welcomes diversity | | 0 |
| Offerings to help with basic needs | • | 9 |
| No comment | | 0 |



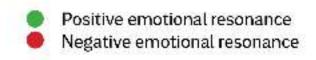
Scenario resonance matrix continued (membership offerings)

| | Membership offreings | Total |
|---|-------------------------|-------|
| Opportunities | | |
| Social stimulation | 000000 | 6 |
| Exercise | | 0 |
| Work opportunity | | 0 |
| Social connection | | - 1 |
| Community perks are integrated in the mall | | 0 |
| Place to spend time with family | | 0 |
| Participate in new experiences | 0000 | 4 |
| No comment | | 0 |
| Opportunity optimizers | | |
| Utilize informal community networks | | - î |
| Offerings that allow for social connection | 000000 | 7 |
| Platforms for expression | | 1 |
| Community membership custom offerings | | Q. |
| Civing back to specific community groups | | 1 |
| Physical infrastructure for people to gather | | 0 |
| Community events are advertised | | 0 |
| Affordable access to resources and activities | 0000 | 4 |
| Diverse programming that is inclusive | | 0 |
| General comment | | 0 |



Scenario resonance matrix (events to take Sofi to)

| | Membership offerings | Total. |
|-----------------------------------|-------------------------|--------|
| Pain Points | | |
| Disconnection Spoken Poetry Night | | |
| Letters We Write Together | 0000 | 4 |
| Christmas Carol | | 0 |
| Public Art Bike Ride | 000 | 3 |
| United Flags of Mississauga | | 0 |
| Winter Palace | 0000 | 4 |
| Waltz Night Around the World | 00 | 2 |
| Sounds of Meditation | | 0 |
| Farmers Warket | 00000000 | 8 |

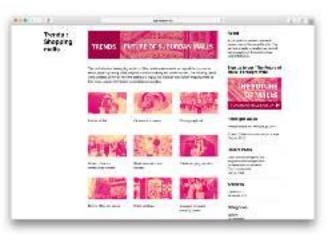


Appendix H: Website & Invitation

A project website was used to share the research with interested stakeholders and to also inform and recruit interested research participants. The website listed trends collected in the research as well as an explanation on what Foresight Walks are, how they are conducted and how they might be useful as a stakeholder engagement tool. You can visit the site at:

http://activemode.ca/projects/future-of-malls/









Appendix I: Recruitment

A snowballing sampling for recruitment was used to leverage contacts among relationships already developed with Gladki Planning Associates and the City of Mississauga, as well as experts from the public art, urban planning, and community engagement fields. Open invitations were sent through the Eventbrite platform to three main stakeholder contact lists:

- I. A pre-approved list developed by the City and Gladki, which was also supplemented with contacts that we established from speaking to service providers at Sheridan Centre. The list included a number of active community groups and organizations in Mississauga, government or city representatives, mall service providers, and mall owner or management representatives;
- 2. A list of experts with a practice or interest in community engagement and/or the social practice of art; and
- 3. A list of personal contacts from the SFI community and others interested in foresight methodologies or city-building (e.g. futurists, urban planners, architects etc.).

The invitation settings were set to "public" so that the targeted contacts may easily pass on the event link to other relevant stakeholders. Event registration required participants to self-identify as being in the stakeholder group(s) that applied to them, namely Community Leader or Member, Government or City Representative, Mall Owner or Management, Mall Shop Owner or Service Provider, and Mall Visitor. As such, we were able to monitor the distribution of registered participants closely.

Additionally, the event link was shared widely on social media, including on Facebook groups of the Young Urbanist League and Jane's Walk, as well as the distribution lists of the SFI community and OCAD University graduate studies. A project website was also created at *www.activemode.ca* to highlight the process behind this case study and other foresight prototype walks that we have conducted, and to further promote the Futures of Malls Foresight Walk event registration page.

The maximum number of registrations was limited to 20 participants per walk. This was because we only had 2 facilitators available. We felt that a larger group would detract from the immersive experience, and would be difficult to ensure meaningful discussion that allows all participants a chance to voice their perspectives.

*See Appendix H for screenshots of the website and the digital invitation.

Appendix J: Foresight Walk Participants

Breakdown of walk participants:

Walk I - Friday, November 3, 2017 at Ipm

Total number of participants: 14

- IO participants identified as a "Government or City Representative" with representatives from Planning and Building, City Planning Strategies, Culture Division, the Region of Peel, Peel Public Health, and a consultant.
- 2 participants identified as a "Mall Shop Owner or Service Provider" namely from the Story Garden and the Library.
- 2 participants identified as a "Community Leader or Member" from the Hillcrest Ratepayers' Association and the Sheridan Homelands Ratepayers' Association.

Walk 2 - Sunday, November 5, 2017 at Ilam

Tatal number of participants: II

All participants identified as a "Mall Visitor".

Walk 3 - Sunday, November 5, 2017 at 3pm

Total number of participants: 9

- 7 participants identified as a "Mall Visitor".
- 2 participants identified as a "Community Leader or Member".

Overall Participant Sample:

Overall total number of participants: 34, with:

- 53% Mall Visitors,
- 29% Government or City Representatives,
- 12% Community Leaders or Members, and
- 6% Mall Shop Owners or Service Providers.

Mall Owner or Management was unfortunately not represented.

Appendix K: Audio Logistics

Individual mp3 players preloaded with the audio narrative were provided for each walk participant, along with a lanyard and headphones to make it a handsfree experience. Each device was pre-set so that audio narrative was ready to play at the press of the "Play" button, even the volume was set at a tested level that would provide an average optimal audio immersion level. It was crucial to the design of the Foresight

Walk that the audio must function as seamlessly as possible. This is because certain narrative anchor points or audio cues must be timed specifically with physical characteristics of the space. As well, we are cognizant that the audio narrative already contains a wealth of information that requires a cognitive leap for participants to process, particularly because it is set in the future.



Mp3 player with Andre's narrative provided for walk participants; lanyard and headphones attached for easy use.