Oyin Aderibigbe, Ibreez Asaria, Alicia Au,
Atoosa Berenji Kalkhoran, Fatma Samatar and Zimo Wang

UNLOCKING HEALTHY LIVING: A COMMUNITY CENTRIC APPROACH

Researching the Intersection of Newcomer Wellness and Promoting
Sustainability Through Healthy Active Living (HAL) Activities

CityLAB HAMILTON

McMaster University

SCORE!

LAND ACKNOWLEDGEMENT

A land acknowledgment is an act of reconciliation that involves recognizing the Indigenous inhabitants of the land where the acknowledgement is taking place. Acknowledging the first inhabitants of the land is one way to show respect to Indigenous peoples and their enduring connection with their traditional territories.

We recognize and acknowledge that we, as students at McMaster University working in the Hamilton region, are situated on the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the "Dish with One Spoon" wampum agreement.

We are guests on the territory where we have the privilege to live, study, and work. While giving acknowledgment to those who first inhabited the land is one step towards reconciliation, it is important to recognize that many steps must be taken towards equity and inclusion.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Problem Statement

Low-income and newcomer children and their families often face a higher risk of obesity and Type 2 Diabetes (T2D) due to the unavailability and inaccessibility of Health Active Living (HAL) activity opportunities (Wahi et al., 2023).

This report aims to highlight the work of CityLAB Semester in Residence (SIR) students in partnership with the Strengthening Community Roots: Anchoring Newcomers & Sustainability (SCORE!) Team in the City of Hamilton from September to December 2023. We hope to provide a comprehensive overview of our term and inspire the future direction of the SCORE! Project.

Findings and Recommendations

To address this problem statement, we highlight findings across three domains:
1) Insights From Our Deliverables,
2) Physical Safety Using Public Spaces, and
3) Accessing HAL Activities Online & In-Person.

Additionally, we have provided recommendations and considerations in two separate focus areas:
1) SCORE! Team-Specific Recommendations and
2) Toolkit and HAL Programming Recommendations.

Ultimately, we hope that these recommendations will provide a strategy or roadmap for future projects and effective community engagement.

INTRODUCTION

THE SCORE! PROJECT

SCORE! is an academic-community research partnership aimed at co-designing interventions that nurture and optimize Healthy Active Living (HAL) among a community of children and families new to Canada in Hamilton, Ontario.

HAL activities reduce the public health risk of childhood obesity and Type 2 Diabetes (T2D) and subsequent cardio-metabolic disease affecting newcomer Canadians living in lower socioeconomic circumstances. These activities involve physical activity, both indoors and outdoors and may include: walking, sports, cycling, and swimming.

Their overarching program is informed by a socio-ecological model and will co-create HAL interventions for children and families new to Canada, some of which are rooted in outdoor, nature-based physical activity.

The cause of childhood obesity and related chronic diseases is complex and have many contributing factors. Their intervention strategies targets them as such. One of SCORE!'s proposed interventions, "connecting to nature," seeks to nurture a love of the outdoors, gardening, and hiking among new immigrant families to optimize HAL activities/strategies.

The SCORE! program unites partners, including community members, service providers, academic researchers, and organizational leaders, to build a multi-component intervention that promotes the health and wellness of newcomer children and families.

CITYLAB AND SCORE! COLLABORATION

This year, CityLAB students collaborated with city staff and community partners to focus on climate resilience and justice. CityLAB SIR inspires students to take leadership roles in their city. We aim to utilize the knowledge and skills we have acquired to make a positive and sustainable difference through different community projects. Our team of six has worked with SCORE! to support the propagation of HAL activities/strategies in the Riverdale community.

DELIVERABLES

THE CITYLAB TEAM HAS COMPLETED TWO DELIVERABLES FOR THE SCORE! TEAM:

(1) ENVIRONMENTAL SCAN

An Environmental Scan of neighbourhoods in Hamilton with high rates of low-income and newcomer households to centralize information on what types of facilities, programs, and public infrastructure were available for folks to engage in HAL.

This information allowed us to visualize and empathize with residents' experiences in different neighbourhoods as they went about their day.

Figure 1. Example of a Completed Environmental Scan Map

(2) TOOLKIT

Designing a HAL Recreation Navigator Toolkit to consolidate information on HAL activities in Riverdale, sign-up instructions and additional information (i.e. subsidies, payment options, centre contact information) for those programs.

This was done in a user-friendly format to address cost, informational, and technology barriers for Riverdale residents.

We hosted a dialogue event to collect feedback to fine tune the HAL Recreation Navigator Toolkit. This Toolkit can be created as a template for future Recreation Navigator Toolkits in other neighbourhoods in the future.

Figure 2. Cover Page of the HAL Recreation Navigator Toolkit

BACKGROUND RESEARCH

01. INITIAL SCORE! FIELD TRIP

Our initial exposure to the SCORE! project was through our class trip to Riverdale East & West on September 8th, 2023. We learned about the various challenges experienced by local community residents and gained a first-hand experience of the public spaces and built infrastructure.

50% of Riverdale residents self-identify as a visible minority, with 26% of the total community population identifying as low-income, as defined by Statistics Canada.

These pieces of information are crucial as they highlight how this community faces complex barriers that may hinder a good quality of life. We were also informed of difficulties in maintaining the cleanliness of a nearby field due to non-efficient garbage servicing. Bottles, wrappers, sharp and dangerous objects often clutter the green space and pose additional concerns. We learned that litter can deter children and families from using public spaces alongisde existing access challenges.

Figure 3. SCORE! Project Overview Flyer

During our initial visit, we learned about how the built environment affects how Riverdale residents participate in HAL activities. The SCORE! Team informed us that parks, such as Lake Avenue Park, that are located near a main road with limited safety measures such as crosswalks and traffic lights, may pose safety concerns to children who desire to play at the park. There were minimal trees and infrastructure like benches and fountains that could enhance community engagement and experience with the space. Additionally, public spaces like the green space outside of Lake Avenue Public School experienced flooding due to improper drainage systems, which made it difficult for residents of the area to maximize the use of the space.

Figure 4. Lake Avenue Park in Riverdale East

Figure 5. Lake Avenue Public School in Riverdale West

02. SCORE! Team & Green Venture Tree Planting

On Saturday, October 21st, members of the CityLAB SCORE! Team attended the Lake Avenue Park Mini Forest Tree Planting hosted by Green Venture, in collaboration with the SCORE! Team to increase the density of trees in Lake Avenue Park. This provided us with hands-on work and community engagement with Riverdale residents who participated in this event. The tree planting event aligns with the goals of the SCORE! project by fostering a sense of community as it encourages sustainable practices and addresses the specific needs of the Riverdale Community.

Figure 6. Picture of the Tree Planting Event

03. Published Research and News Articles

Our team consulted published research and news articles regarding the Riverdale community in particular. Two resources that gave us a strong understanding of the SCORE! Teams focus areas in Riverdale include an article published in The Hamilton Spectator and a 2023 research paper published by Kandasamy et al. This also gave us more insight into specific stakeholder needs as they relate to HAL and obesity, shared below.

1. Health and Wellness Considerations

Both articles pointed to the urgent need to build healthy habits through HAL engagement

1.1 Newcomer children and their families are a high-risk population for obesity and related health complications, including mental health (Wahi et al., 2023)

1.2 Obesity is not simply an individual or family level issue, it is propagated by poor infrastructure designs, economic burdens, and food intake (Wahi et al., 2023)

1.3 A bigger risk of both obesity and Type 2 diabetes is found in new immigrant populations in low-income neighbourhoods like Riverdale because of a combination of unhealthy diets and physical inactivity (Leitner, 2023).

1.4 Interventions that help promote health and wellness goals must be multi-level, targeting habit formation while also increasing the accessibility, reliability, and safety of city recreational activities.

1.5 Regular engagement with outdoor greenspace, nature-based activities, and physical activity is likely improve newcomer children and families' mental and physical health (Wahi et al., 2023).

KEY GOALS AND VISION

1 — Explore the community needs and barriers pertaining to Riverdale residents and their engagement with HAL activities. We hope to highlight the intersection between city design, community engagement, and health. By exploring these needs and barriers, we hope to amplify newcomer voices to and advocate for positive and long-term change.

2 — The goal of the Environmental Scan is to research the existing built environment of the Riverdale communities in order to:
a) understand the accessibility of HAL activities in Riverdale
b) create the HAL Recreation Navigator Toolkit and
c) create a format for future HAL Recreation Navigator Toolkits to be created in other communities.

3 — The goal of the HAL Recreation Navigator Toolkit is to provide a "one-stop shop" for Riverdale residents to access and register for community-based HAL activities aimed at improving health outcomes in youth. This toolkit will also feature a 'User Guide' that helps Riverdale residents register for HAL activities in their neighbourhoods. This toolkit will serve as a template for future HAL Recreation Navigator Toolkits in other Hamilton neighbourhoods.

4 — The goal of the Dialogue Event was to collect feedback from members of the SCORE! Operations Team regarding the purpose, design, and content of our Toolkit as they are knowledgeable about the nuanced needs of Riverdale residents. We also aimed to use facilitation techniques that we cultivated in Dialogue class to practically apply our gained community engagement skills.

ENVIRONMENTAL SCAN

The SCORE! team informed us of Hamilton neighbourhoods with high numbers of new immigrants and low-income individuals because this was the target group for the HAL Recreation Navigator Toolkit. The boundaries were clarified using Google Maps and other resources (Neighbourhood Maps, Prints, Photographs. n.d.) To complete Environmental Scan, we were instructed to conduct virtual and physical research on the following Hamilton neighbourhoods:

Using the street boundaries of each neighbourhood, we researched the built environment of the neighbourhood, schools, City of Hamilton community centres, YMCA centres, green spaces, public spaces, parks, natural outdoor infrastructure, housing structures, horticulture/gardening locations, community groups, seasonal activities, civic museums, and other facilities in each neighbourhood. We also made general comments about each neighbourhood.

Through our scans, we identified the differences in HAL activities offered in different neighbourhoods across the city. Different neighbourhoods had different access to different levels of HAL strategies/activities. For instance, we observed that neighbourhoods This was evidenced through the differences in the built environment (i.e. differences in road sizes, sidewalk sizes, access to bike lanes, park lighting at night) and differences in program providers (i.e. community centres and schools offering different services in different neighbourhoods).
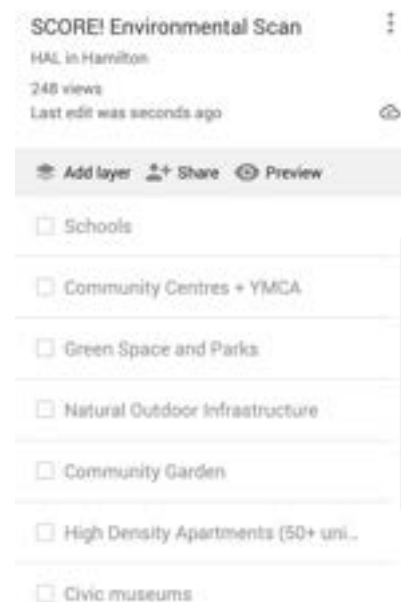
Figure 7. Google Maps Domains for our Environmental Scan

TOOLKIT

The HAL Recreation Navigator Toolkit was created using a stepwise approach that utilised the 5 stage design thinking framework: Empathize → Define → Ideate → Prototype → Test (Interaction Design Foundation, 2023). We utilized this framework to best respond to the problem statement and goals that framed our project. Although this framework is presented in a linear fashion, as we advanced along the continuum, we found ourselves revisiting stages and refining ideas and prototypes as we received feedback from our community partner and the CityLAB Instructor Team.
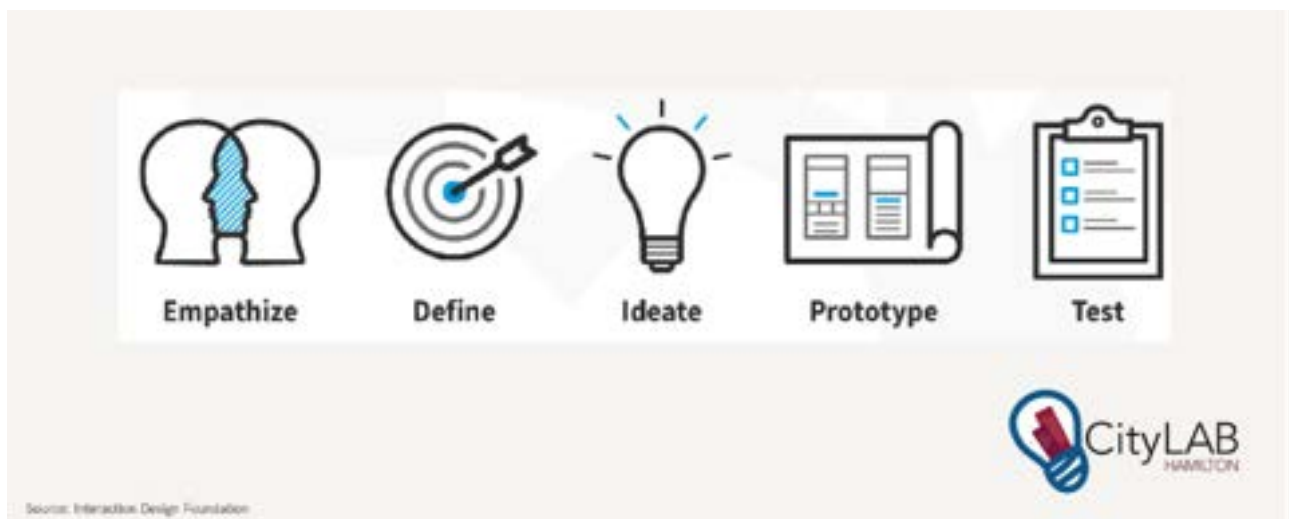
Figure 8. Design Thinking Framework

As mentioned in Section 3 of the CityLAB SCORE! Team Goals & Vision section, the toolkit was created to serve as a "one-stop shop" for Riverdale residents to access and register for community-based HAL activities. This toolkit will also serve as a template for future HAL Toolkits in other neighbourhoods. We expand on this in the 'Our Findings' and 'Future Recommendations' sections of this report.

LISTED BELOW ARE THE STEPS WE TOOK TO CREATE THE TOOLKIT BASED ON OUR DESIGN CLASS TEACHINGS.

01. CENTERING HUMAN EXPERIENCE IN THE INITIAL DESIGN

The 'Empathize' stage required us to determine our stakeholders, their needs and how they experience life. Thus, our target audience became low-income newcomers to Canada who are looking to engage in HAL programming in Riverdale. We learned about the challenges of relocating from a different country to Hamilton and adjusting to new aspects of life in the city, from transportation and job searching to grocery shopping. We learned about these experiences through attending weekly SCORE! Operations Team Meetings and attending the SCORE! Team Community Advisory Board (CAB) Meeting at the Ron Joyce Children's Health Centre on September 18th, 2023. The CAB Meeting is a quarterly event hosted by the SCORE! Team to provide opportunities for parents and community members located in the Riverdale community with the chance to share their lived experiences and challenges that they face in the community. They also shared responses on certain issues that frequently occur in their community.

02. "DEFINING THE PROBLEM" THROUGH RESEARCH

The 'Define' stage consisted of researching existing toolkits and recreation guides in Canada, which served as reference points when we created our toolkit. The purpose of this was to gain inspiration from a variety of sources and identify what considerations were being addressed in other municipal recreational guides of a similar nature. (Please refer to the Resources Consulted tab for more detailed information.) Using the statistics from our Background Research and information from our community partners, we "defined the problem" by understanding the barriers *that Riverdale residents face in accessing HAL activities/strategies. Thus, we "defined the problem" as follows: low-income, newcomer Riverdale residents face barriers in accessing HAL activities/strategies offered in their neighbourhoods. These barriers must be identified and addressed.* In 'Our Findings' section, we outline a number of these barriers. We provide recommendations on these findings in the 'Recommedations' section.

03. RAPID IDEATION AND MAPPING

In the 'Ideate' stage, we brainstormed several manners to collect information on life as a newcomer to Canada who has settled in Riverdale. We used Environmental Scan Maps and summaries to deepen our understanding of existing HAL activities/strategies across the City of Hamilton at large. Focusing on Riverdale East & West as the crux of the project, we determined to design the toolkit with an understanding of community programs, public spaces, and HAL programming in the neighbourhood. We considered using additional information in the toolkit to support low-income and newcomer families (i.e. cost, location, registration codes clearly indicated) to begin designing the toolkit.

04. DESIGNING A USER FRIENDLY FORMAT:

The 'Protoype and Piloting' stage focused on envisioning a final design that would be of maximal use to the user, namely, newcomer adults. We chose Canva to digitally design and structure the toolkit with a focus on a user-centric design. To promote user-centric design, we created a list of high-level explanations what the toolkit contained.

Eventually, our works culminated in the creation of a condensed "User Guide" at the beginning of the toolkit and the integration of a Toolkit Navigator (named 'Tiggy the Toolkit Tiger') into our toolkit deliverable. We focused on providing information on HAL programming through the Dominic Agostino Riverdale Community Center and other service providers. This is because the community centre is located in Riverdale West which hosts a number of newcomers in Hamilton (McMaster Okanagan Office of Health & Well-Being, n.d.) We considered cultural awareness in our design and worked to address community concerns in toolkit formation.

05. FEEDBACK COLLECTION AND PRESENTATION

Finally, during the 'Test' phase, we requested feedback from both the SCORE! Operations Team and our CityLAB peers at large through our Dialogue events. We presented our toolkit and received feedback through Google Forms, Mentimeter Check-Ins, and written comments on the toolkit draft. We implemented this feedback in the creation of our Final HAL Recreation Navigator Toolkit.

By choosing to create our Toolkit based on this design framework, we were effectively able to consider elements of equity and inclusion. Newcomer populations not only face immediate changes to their way of living but also long-term difficulties in accessing opportunities in systems that local families have become accustomed to. This systems level challenge requires decision-makers to dedicate a significant chunk of the solution design process to empathize with the experiences of those whom the solution is made for. While we were unable to directly interview or survey residents of Riverdale due to time constraints and ethics concerns, our deliverables were still well informed by our stakeholder engagement strategy.

STAKEHOLDER ENGAGEMENT

Engaging stakeholders is an essential step within both the 'Empathize' and 'Define' stages of the Design process as it is the most direct way to ascertain the intersecting complexities and barriers faced by individuals. In this project, engaging with Riverdale residents would have required ethics approval fro m the Hamilton Integrated Research Ethics Board (HiREB) in a process that was out of scope for our project timeline (September to December 2023). Hence, we adapted our approach to stakeholder engagement by consulting with SCORE! Team researchers who have an acute awareness of our stakeholder needs through working with them.

In weekly Operations Team Meetings, we were informed of how successful the SCORE! community sports events have been. Soccer was a particular favourite for the youth and this indicated to us how families are actively looking for HAL activities to enrol their children in. However, the advertising of these activities, the difficult sign-up processes, and other barriers impede many residents from signing up for HAL programming. This prompted reflection about increasing the accessibility of HAL. Conducting further research, we found the Recreation Assistance Program which is a subsidy available to low-income Hamiltonions to help offset program costs for children under 18 years of age (City of Hamilton, 2023). We dedicated a portion of the toolkit (p. 34) towards making this information accessible to Riverdale residents.

RESOURCES CONSULTED (TOOLKIT DESIGN)

We referenced several resources to inform our design choices and toolkit development:

01 ──────────── RICHMOND WINTER PROGRAM GUIDE FOR SENIORS

The second page that goes over the "3 Ways to Register" was one of our inspirations. We were able to design something similar that went into detail on the various ways an interested person could sign up for the programs. We also referred to the passes and activities in this booklet to help us include a breakdown of costs in our toolkit. In our toolkit, we were able to add a section called "Cost Package" that explains payment options and the types of passes available.

02 ──────────── RICHMOND YOUTH ACTIVITIES OVERVIEW

This resource helped guide us to provide more details for each program being offered. For instance, the guide includes the address of the facility hosting each program; this would help the users plan their journey accordingly. The guide also includes details such as cost, the timings of the program, program type (i.e. drop-in or registration required), and the days that the programming is offered. We successfully incorporated similar aspects into our final toolkit. We added descriptions of the programs being offered to provide clarity in the toolkit; we got this idea from the 'Details' sections of this guide.

03 ──────────── RICHMOND YOUTH SUMMER PROGRAM GUIDE

In this guide, colours are used to match each program with a certain age group. For example, purple is used for 'Preschoolers (0-5) Years Old.' We used this guide as a reference to colour-code our toolkit; we assigned different colors to different programs. For instance, we used blue for the 'Aquatic Sports' section. The colour-coding of each section is reflected in the toolkits Table of Contents.

DIALOGUE EVENTS & TOOLKIT FEEDBACK

01.   PURPOSE OF DIALOGUE EVENTS:

We hosted two Dialogue events: the Dialogue Dry-Run on November 2nd, 2023 and the Dialogue Event on November 16th, 2023. The purpose of these events was to collect feedback on the design, implementation plan, and usability of the first draft HAL Recreation Navigator Toolkit draft that we created in response to the problem statement and goals that framed the project. We invited the CityLAB SIR '23 cohort and the CityLAB SIR '23 Instructor Team to the Dialogue Dry-Run. We hosted seven members of the SCORE! Operations Team with an in-depth background on the state of HAL programming in Riverdale East & West, alongside two CityLAB Instructors. Although we could not host Riverdale residents due to ethics considerations, we were fortunate to host SCORE! Operations Team members who are knowledgeable about the needs and perspectives of those who live in Riverdale due to their close working partnership.
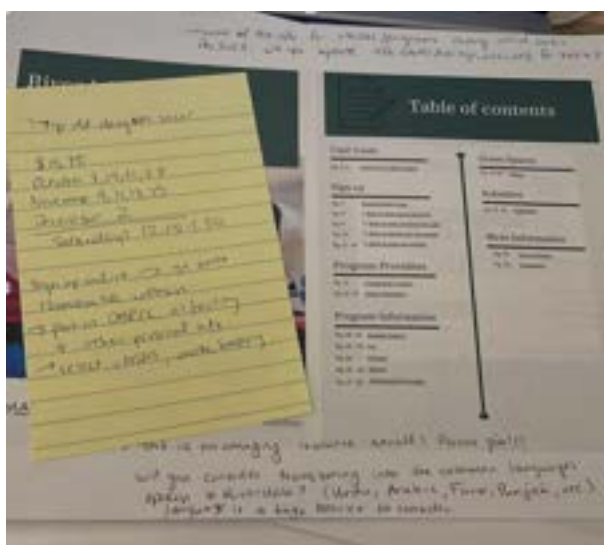

Figure 9. Written Feedback Received During the Dialogue Event

02.   COMMUNITY ENGAGEMENT

The ultimate goal of our project this year was to create a HAL Toolkit for the Riverdale community that can be used as a template for other neighbourhoods in the future. Through community engagement with both our CityLAB peers and the SCORE! Team, we received the following key pieces of feedback 1) Create a user guide to make the toolkit more accessible 2) Incorporate a toolkit navigator mascot that explains what each section of the that there was a lack of clarity in how to register for HAL activities/strategies in the neighbourhood. This feedback was crucial for our continued edits and provided clarity on what would actually benefit users.

03.   PERSPECTIVE AND INFORMATION GATHERING

During our Dialogue Events, we carefully and intently listened to the perspectives being shared by our attendees. We also took this opportunity to note-take and collect feedback from a Mentimeter question and a final Google Form survey. Our specific questions were:

- What did you like about the toolkit?
- What could be improved in the toolkit?

By keeping these questions broad and general, we were able to elicit authentic and diverse responses which were helpful in expanding the depth of information we received to increase the effectiveness of our toolkit in increasing accessibility to HAL programming.

Our Dialogue Events were also informed by the skills we learned in our Dialogue class. We believe these skills helped us to host a successful and engaging Dialogue Event. For example, we learned about the role of facilitators who are essentially collaborative thinkers. We learned that facilitators are to mediate hopes that all members have a voice and a role to play in thinking. We implemented this understanding of facilitators by keeping our presentation short and using the majority of the time to talk with, instead of at, our attendees. The purpose of having a shorter overview component was two-fold.

For one, the Dialogue participants were knowledgeable about the SCORE! project and its moving parts. Additionally, the main purpose of our Dialogue Event was to ask for feedback about our Toolkit and not to explain our work plan, which would have likely led to more lecturing and less engagement. To do this successfully, we focused on a quote from our Week 6 lesson that read "thinking together implies that you no longer take your position as the final position". As facilitators, we are responsible for sharing thoughts and knowledge but we do not hold authority over anyone present at our event and this was something we were very mindful of as we asked for feedback. This mindful approach would be an effective way to enhance inclusion and generate innovative ideas at these types of community-engaged events.

04.   EQUITY, DIVERSITY, AND INCLUSION CONSIDERATION

The most special part of our Dialogue Event was the diversity of thought and background in the room. We spoke to folks from diverse walks of life with unique lived experiences and interactions with the residents in Riverdale. This was a great asset in our feedback collection because we heard experiences from students whose parents struggled with HAL activity sign-ups a decade or more ago. To make the room environment more comfortable, we had a team member assigned for folks who needed to chat privately or express discomfort and we communicated that clearly at the beginning of the event. We also had note-takers who ensured that the opinions shared by our guests were being written down and this showed our value for their feedback. We offered lunch and snacks to be mindful of attendees' travel time and accessible washrooms were a short distance away. Our Dialogue plan included other considerations such as childcare, transportation reimbursements, and virtual participation. We ensured that the Zoom was actively monitored by having a team member independently respond to and share the feedback from our two guests online with the wider group and this led to a more inclusive and fruitful dialogue.

OUR FINDINGS

The Dialogue Event played a significant role in revising our Toolkit and also compiling a list of edits that would be useful for the SCORE! team to consider during future implementation. Three findings emerged from this community-engaged session:

USING CLEAR AND SIMPLE LANGUAGE

- The feedback highlighted how certain words used may be unfamiliar or unduly difficult for newcomers with ESL to understand (e.g. Amenities).
- This feedback was important because our user-thinking framework did not consider how less clear language may detract from the utility of the Toolkit.
- While we considered this feedback, it was beyond the scope of our timeline to revise the language used throughout the Report. If this were to be corrected, we recommend presenting the Toolkit to folks with varying English proficiencies and age groups to collect more feedback.
- We adapted this feedback by shortening our activity descriptions which were lengthy and difficult to parse through.

INTEGRATING A MASCOT OR CHARACTER

- The feedback highlighted how the inclusion of a mascot or character might increase the usability of the Toolkit for youth.
- This is important because parents may select programs in consultation with their children, who may be more inclined to read the information if it includes a fun character.
- We applied this feedback and chose Tiggy the Toolkit Tiger
- Future Toolkit adaptations might consider creating an animated figure that walks through the sign-up instructions similar to Chat Bots on webpages.

ADDITIONAL FEEDBACK

- We did not include a privacy and confidentiality statement as we do not have the legal modalities to craft an all-encompassing privacy statement. We recommend that this is addressed in future and official iterations of the toolkit.
- We also did not implement some pieces of stylistic feedback (i.e. move the placement "Cost" column.)

LANGUAGE TRANSLATION

- The feedback also highlighted the need to translate our Toolkit into commonly spoken languages in Riverdale
- This is important because we have established how English-speaking proficiency is a barrier when navigating online and in-print tools.
- We considered this piece of feedback, but due to the scope of our project, we were unable to apply it to the final Toolkit.
- Future Toolkit adaptations might consider consulting professional translation services into Urdu, Pashto, and Arabic - the three languages spoken by a large proportion of Riverdale residents.

Through our final deliverables and both the CAB meeting and neighborhood walkthroughs, we made several observations that informed our understanding of stakeholder needs. We organised our findings beneath two key domains Physical Safety Using Public Spaces and Accessing HAL Activities Online & In-Person. It is important to consider these future challenges for HAL participation in this Report because many of these observations may not be intuitive or considered in current solution designs.

ACCESSING HAL ACTIVITIES ONLINE AND IN-PERSON

Parents in the CAB meeting expressed concern with transportation, cost, language, familiarity with technology, and cultural differences as primary barriers to HAL engagement

- Transportation was identified as a barrier due to intersecting economic concerns of using cars as evidenced by the shuttle bus service offered by the SCORE! Team to allow members to attend the CAB meeting
- Cost was identified as an immediate concern for parents at the meeting who consider it a first determinant in registering their children for lessons or programming at the Dominic Agostino Riverdale Community Centre, with special consideration being given to a "per session" cost compared to a "one-time cost" method of payment.
- Language was identified as a barrier in the HAL activity registration process and CAB Leaders highlighted how Urdu, Pashto, and Arabic, among others, were the most widely spoken in this population, yet City materials are often not translated or if they are, residents have trouble accessing those translated guides online.
- Familiarity with technology was a concern brought up by parents in the meeting who provided their input on the use of QR codes and user-friendly designs for HAL activity booklets
- Cultural differences in gender-specific activities (i.e. woman's only swimming) was brought up as an interesting factor for families who choose to sign up their children in larger sports sessions.

Most HAL activities/strategies offered by the City of Hamilton can only be signed up for during a certain window. Since the sign-up window is limited, some parents and guardians who do not have access to technology are not able to register their children for HAL activities/strategies.

- The spots for registration for HAL activities/strategies fill up fast. Thus, since some parents/guardian are unable to register their children because other parents/guardians, sometimes from different neighbourhoods, register their children for programs in the Riverdale community before Riverdale residents are able to register
  - Some members of the CAB suggested creating early registrations for Riverdale residents in order to provide more access to HAL activities/strategies provided by the city.

PHYSICAL SAFETY USING PUBLIC SPACES

- Our observations of the Southam neighbourhood sidewalks revealed how many were narrow and cracked especially along main roads which may be concerning for parents of young children.
- In Rolston and Yeoville, there was a distinct lack of light posts and lit areas within parks which may be a concern for adults and older youth visiting the parks during the Winter or year-wide in the evenings.
- In Riverdale, we observed overflowing garbage bins and excess litter scattered on the ground which may worry parents of young children (i.e. beer bottles, cigarettes).
- During one of our neighbourhood walkthroughs, we recognized that some public spaces (i.e. Lake Avenue Park) were difficult to access due to safety concerns (i.e. large road beside park without clearly delineated crossing points, the park is in a less accessible area that may be difficult for the public to see which could increase the safety concerns that parents have)
- General observations showed how most neighbourhoods had narrow or non-existent bike lanes for those using this method of transportation and a general lack of lamp posts and benches along major streets.
- The implications of these observations include: disengagement with public parks and built infrastructure, difficulty accessing community centres or far public facilities via alternative and green modes of transportation, and general concern for children's physical activity in open public spaces after school.

PROJECT IMPLICATIONS AND FUTURE CONSIDERATIONS

While our work in CityLAB was only a brief contribution to the SCORE! Initiative, this project does have several community, health, and economic implications that must be considered.

01. COMMUNITY COHESION AND COLLABORATION

The Toolkit template is primarily responsible for connecting residents to HAL programs in Riverdale but a direct implication of increasing community involvement in physical activity is an increase in cohesion. By providing residents with a more equitable opportunity to engage in HAL, an active support network is built and trust is established both with organizations like SCORE! but also between residents. Over time, this may foster a greater sense of community care among newcomers because they will actively be promoting health and wellness in their families and children.

02. ESTABLISHMENT OF HEALTHY HABITS

As a key objective of the SCORE! Initiative is to develop healthy habits in early childhood for newcomer families, this Toolkit also functions as a health promotion tool. While this intervention does not actively target significant challenges to wellness for newcomers including employment barriers and housing opportunities, it can specifically inspire a greater awareness and interest in engaging with recreational opportunities. This can then lead to the inclusion of physical activity, both scheduled and unscheduled, in the everyday routines of children and their parents.

If parents are more easily able to engage in HAL programs through the subsidy program or otherwise, then generations of newcomer families will centre physical activity as a readily accessible method for health promotion. This can lead to downstream effects in diet changes and healthy eating habits that discourage ultra-processed foods. If these changes are made collectively within Riverdale, it is likely that chronic health issues may see decreased prevalence and severity in the years ahead.

03. CULTURAL APPRECIATION THROUGH SPORT

Another likely implication of this project in the long-term is the sharing of cultural values and the establishment of positive friendships amongst youth. Sports often unite individuals across diverse backgrounds due to a shared sense of accomplishment and fun. This may be especially true in children and youth. Hence, this Toolkit and any associated Co-Design, Community Sports, or CAB events can foster a vibrant community by simply empowering individuals to compete, collaborate, and participate in physical activity.

04. MODELLING HAL PARTICIPATION FOR OTHER COMMUNITIES

A unique implication of this Toolkit is that it may serve as inspiration for other communities and community-engaged organizations similar to SCORE! Addressing the accessibility of HAL for Riverdaler residents may encourage other groups to develop novel and tailored solutions for their respective communities. While we were not able to develop a way to measure or monitor the success of our Toolkit nor implement it into the community, perhaps this initiative can be shared with other organizations who may now prioritize HAL initiatives. Broadly, this may contribute to a wider health promotion campaign across the City.

Below are some future considerations that we received from the entire process of designing, creating, and testing our deliverables, for your reference:

- Concerns with including and advertising private businesses that offer HAL programs
- Arranging communal transportation services to accommodate residents in Riverdale East who may have different experiences with HAL participation compared to those in Riverdale West
- Encouraging community centres to reserve spots or design an otherwise equitable solution for those disproportionately excluded from HAL in ways such as:
    - implementing prioritized group sign-ups for those receiving the Recreation Assistance Program Subsidy,
    - promoting HAL activities in schools and offering students the chance to learn more,
    - advertising programs in libraries or other community spaces
- Broadening the scope of healthy active living to include community hikes, or challenges (such as rock collecting or 10,000 steps challenges) to incentivize more time spent outdoors
- Developing a survey or other data collection method to track improvement in HAL engagement within Riverdale and designing a longitudinal research study to track specific health improvements

RECOMMENDATIONS

As a result of our research, findings and the feedback that we have received throughout this term on the Environmental Scan, HAL Recreation Navigator Toolkit, and other work that we have engaged in, we have determined the following recommendations for future SCORE! operations. Both Toolkit specific and broader SCORE! Recommendations have been identified:

SCORE! TEAM SPECIFIC RECOMMENDATIONS

CREATION OF A YOUTH LEADERSHIP BOARD

- The purpose of this board would be to amplify the voices of newcomer youth who engage in HAL programs in Riverdale East and West.
- Doing so will highlight any new challenges or obstacles to abstaining healthy living
- The implication of this board would be the hosting of monthly meetings to share updates on physical activity and programs while also providing an opportunity to develop leadership skills and advocate for their needs
- A foreseeable challenge with this could be consistent engagement and defining the purpose of this Board in the wider scope of SCORE!

ADVOCATE FOR CITY RECREATION GUIDES

- The purpose of this is to advocate for the City to reinstate physical pamphlets made available to visitors of community centres.
- Given that community members were used to this method of receiving information on HAL activities, SCORE! can advocate for either the reinstatement of pamphlets or for the City to create their own online Toolkit
- The implication of this is mainly to reconnect folks who disengaged with HAL programming due to the discontinuation of these physical resources

ADVOCATING FOR STREET AND PARK LIGHTING

- As an identified finding of this Report, street and park lighting will continue to pose challenges for HAL participation for families and especially youth
- We recommend the SCORE! team work with City Staff to submit requests for infrastructural development in highly trafficked community parks and main streets in neighbourhoods with large newcomer populations
- A foreseeable challenge with this is the length of time for such a recommendation to be implemented by the City and the expertise required to make strong suggestions to City Hall on these infrastructural changes

HOSTING REGULAR CO-DESIGN EVENTS

- The purpose of this is to leverage the work of our CityLAB team in designing our Dialogue Event
- Hosting regular Co-Design events with the people who live in the community, work in the community, and lead initiatives that provide HAL programs and services would be an excellent way to guide future community initiatives
- Communicating updates from these meetings to Riverdale residents is also essential in raising awareness for future interventions
- A foreseeable challenge with this is logistical planning amongst the other research and community-engaged projects of SCORE!

USING THE ENVIRONMENTAL SCAN TEMPLATE

- The purpose of this recommendation is to standardise information collecting in neighbourhoods where SCORE! aims to operate in next
- Using the framework already developed can save time and human resources
- A foreseeable challenge with this is adapting to different neighborhoods with specific geographical, infrastructural, and cultural dynamics given significant differences are likely

TOOLKIT AND HAL PROGRAMMING RECOMMENDATIONS

LANGUAGE TRANSLATION OF TOOLKIT

- The purpose of this recommendation is to make the Toolkit more inclusive for Riverdale Residents who speak English as a Second Language (ESL)
- Commonly spoken languages beyond those currently identified could be included in future iterations and requires professional translation services
- The implication of this recommendation would be greater awareness of the Toolkit in cultural groups and in spaces for cultural congregation (e.g. having physical copies available)
- The inclusion of a glossary with difficult to understand terms would also be a useful recommendation to prevent information from being a barrier itself
- A foreseeable challenge could be the extent of language translation and the exclusion of certain languages that may not have been identified

EXPAND THE TOOLKIT TO DIFFERENT REGIONS AND CITIES

- An expansion plan is an important next step for this project to take form in different regions.
- Having close relationships with community groups and City staff in those regions will allow SCORE! to better understand the needs of residents in other areas.
- Similar to how we consulted our community partners and learned of stakeholder needs through CAB meetings, similar meetings may be organised within other cities.
- To expand the role of SCORE!, perhaps more attention can be paid to untraditional HAL activities that are geographically relevant (ie. cycling competitions, community yoga, etc).
- A foreseeable challenge with expansion could be the time necessary to establish new partnerships and survey the community on their unique needs.

DYNAMIC DASHBOARD

- The purpose of creating a webpage that can be updated manually or automatically based on data from the City's recreation website is to consider the scalability of this prototype.
- Currently, the Toolkit is a static document that requires manual input and manual use (i.e. reading program information and then going to the City website to register)
- One suggestion could be to include all the appropriate hyperlinks and HAL activity information on a dashboard and have residents select the sport/activity they wish to engage in, with instructions on a subsequent page
- The implication of having a webpage that can be updated would not only benefit residents' in providing up-to-date information, but would also serve as a centralised page where all registration, activity, and subsidy information can be found
- A foreseeable challenge is in coding such a webpage and assigning members of the SCORE! team to consistently monitor if hyperlinks are functional or if they become invalid over time

HIRING AND EXPANDING THE ROLE OF A COMMUNITY NAVIGATOR

- Elaborating on the Community Navigator role proposed by the SCORE! team is essential in understanding how the Toolkit will actually be used within the community.
- Understanding where the Navigator will work from, what their role will be, and their hours of operation is necessary.
- Advertising the availability of a Navigator to the community is an essential first step in raising awareness about the Toolkit as a resource.
- A foreseeable challenge with this could be a shortage of funding for such a new role and if community centres have the necessary infrastructure to support them

CONCLUSION

This report highlights various community needs and barriers to accessing HAL in Riverdale. Our exploration of these stakeholder needs through our work this semester has resulted in valuable insights that have ultimately led to a more comprehensive Toolkit design. The Environmental Scan provided us with a strong understanding of the built environment in Riverdale and other neighbourhoods in Hamilton, which underscored the importance of the environment as a facilitator or barrier to HAL participation. The Dialogue Event played a pivotal role in allowing us to test our Toolkit and refine it based on feedback from the SCORE! Operations Team.

The broader implications of this project, such as fostering community cohesion and establishing healthy habits, highlight the many positive outcomes that can arise by addressing the specific health and wellness needs of Riverdale residents. When considering the future implications of our work and the 26% of surveyed residents coming from low-income backgrounds, we hope that this report can be used to successfully implement future initiatives, toolkits, and regular meetings between all relevant decision-makers.

This project grew our understanding of stakeholder needs and barriers; however, there are still areas for further development and knowledge-seeking. Future considerations must include a way to collect feedback directly from residents of Riverdale pertaining to their usage of the Toolkit. Furthermore, researchers should design a method to measure the success of this intervention and its adaptations as it relates to HAL participation and health outcomes. The SCORE! team will more clearly understand the community impact of this intervention on the prevalence of obesity and T2D in this high-risk population, in addition to other populations in Hamilton and across Ontario, moving forward. As a result of this, residents will be in a stronger and healthier position to adapt to climate change and engage in efforts to centre the climate in their daily lives.

ACKNOWLEDGEMENTS

We would like to extend our appreciation to all members of the SCORE! Operations Team for their support and guidance throughout this project. We would like to esspecially thank Patty Montague, Dr. Deborah DiLiberto, Dr. Sujane Kandasamy, and Dr. Sonia Anand. We would also like to thank the CityLAB Team for their unwavering support and thoughtful feedback throughout the semester. We would like to appreciate Darina Vasek, Kojo Damptey, Elizabeth Bang-Farrugia, Randy Kay, and Hannah (Stoesz) Elgersma for their leadership, guidance, and teaching.

MEET OUR TEAM

Oyin Aderibigbe

Atoosa Berenji Kalkhoran

Alicia Au

Zimo Wang

Ibreez Asaria

Fatma Samatar

CONTACT

CITYLAB SEMESTER IN RESIDENCE
58 JACKSON STREET WEST
HAMILTON, ON L8P 1L4
905-977-1897

www.citylabhamilton.com

citylab@hamilton.ca

@citylabhamilton

GLOSSARY

Healthy Active Living (HAL)
refers to physical, mental and spiritual practices that promote health and well-being (Health Canada, 2023).

Newcomer
This refers to someone who is relatively new/moved to a new place i.e. Canada. For this context this would encompass people who stayed in Canada for less than five years.

Immigrant
An immigrant is a person who has left their home country and moved to another country to live there permanently. In Canada this would be someone who either is currently or has been a landed immigrant or permanent resident. This means they have been given permission by immigration authorities in Canada. People who have become Canadian Citizens through naturalization are also considered immigrants in this context.

Low-income
This relates to people who earn less money than most people. A family is considered low-income, according to Statistics Canada, when its earnings are less than 50% of the average household income.

HAL Recreation Navigator Toolkit
This refers to the program guide created by the City Lab SCORE! Team that details available program activities within the Riverdale area. This guide focuses on recreational programs like soccer that community members can sign up for.

APPENDIX
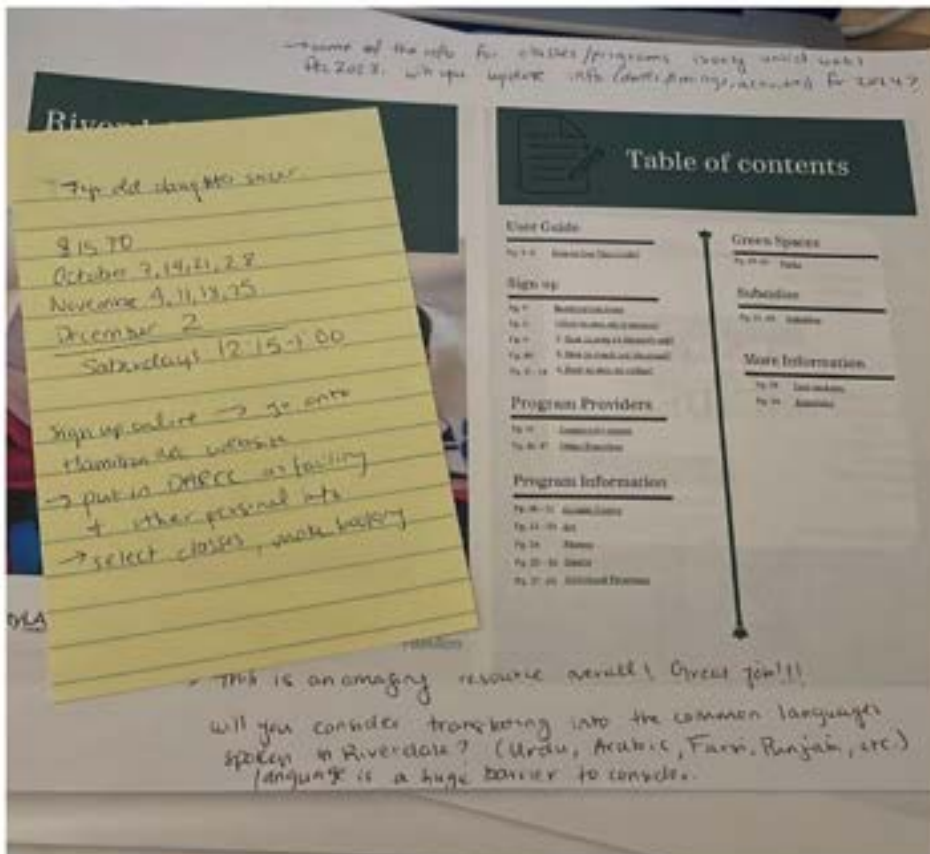
Figure 10. Example of Feedback Received During our Dialogue Event on November 16th, 2023

APPENDIX

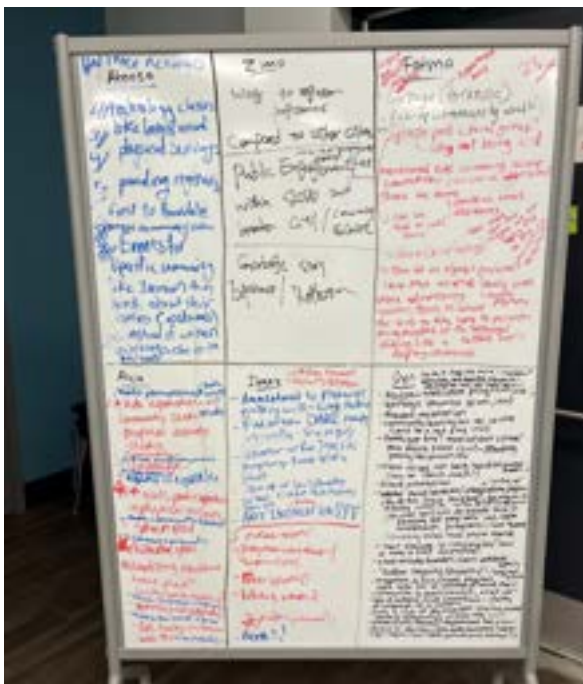**Figure 11.** SCORE Project Overview Flyer

Figure 12. Deliverable Brainstorming Process

REFERENCES

About the Riverdale Community. (n.d.). McMaster Okanagan Office of Health & Well-Being.
        Accessed December 6, 2023, from https://okanagan.mcmaster.ca/score/community/

A., Souza, R. J. de, Anand, S. S., & Team, the S. R. (2023). Strengthening Community
        Roots: Anchoring Newcomers in Wellness and Sustainability (SCORE!): A protocol for the co-design
        and evaluation of a healthy active living program among a newcomer community in Canada (p.
        2023.07.06.23292304). medRxiv. https://doi.org/10.1101/2023.07.06.23292304

Dam, R. F. (2023, December). The 5 Stages in the Design Thinking Process. The Interaction Design Foundation.
        https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

Canada. Employment and Social Development Canada. (n.d.). Poverty Reduction in
        Canada: Backgrounder. Retrieved from https://www.canada.ca/en/employment-social-
        development/programs/poverty-reduction/backgrounder.html

Denwood, D. (2023, March 21). Community-Based Research Project: SCORE! explores
        team insights in the latest Global Health Collective Podcast episode - Global Health Graduate Programs.
        Global Health Graduate Programs. Accessed December 5, 2023, from
        https://globalhealth.mcmaster.ca/community-based-research-project-score-explores-team-insights-in-
        the-latest-global-health-collective-podcast-episode/

Health Canada. Healthy Living. Government of Canada. Accessed December 6, 2023.
        https://www.canada.ca/en/health-canada/services/healthy-living.html.

Leitner, R. (2023, February 27). McMaster University-led SCORE! project seeks to get
        Riverdale neighbourhood's newcomer kids outdoors. The Hamilton Spectator.
        https://www.thespec.com/news/mcmaster-university-led-score-project-seeks-to-get-riverdale-
        neighbourhood-s-newcomer-kids-outdoors/article_c0f51b01-9650-5812-b650-91ec7b830b42.html

Neighbourhood Maps, Prints, Photographs. (n.d.). Jelly Brothers.
        http://www.jellybrothers.ca/locator/

Recreation Assistance Program | City of Hamilton. (2023, November 29). City of Hamilton.
        https://www.hamilton.ca/things-do/recreation/customer-service/recreation-assistance-program

Statistics Canada. (2022/10/18). Immigration, Citizenship, Place of Birth, Ethnic Origin,
        Visible Minorities, Religion and Aboriginal Peoples Reference Guide, 2016 Census. Retrieved from
        https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=Unit&Id=85107

Wahi, G., Kandasamy, S., Bangdiwala, S., Baumann, A., Arsenio, M. C.-, Desai, D.,
        Georgiades, K., Jackson-Best, F., Kwan, M., Montague, P., Newbold, B., Sherifali, D., Sim, A., Souza, R. J. de,
        Anand, S. S., & Team, the S. R. (2023). Strengthening Community Roots: Anchoring Newcomers in
        Wellness and Sustainability (SCORE!): A protocol for the co-design and evaluation of a healthy active
        living program among a newcomer community in Canada (p. 2023.07.06.23292304). medRxiv.
        https://doi.org/10.1101/2023.07.06.23292304

What are different statuses of newcomers? | New Youth. (n.d.).
        https://newyouth.ca/en/resources/immigration/more-resources/what-are-different-statuses-
        newcomers