

Queen Elizabeth



Smart Cities Healthy Kids Contact: Tracy Ridalls 306-966-2237 tracy.ridalls@usask.ca www.smartcitieshealthykids.com The **Smart Cities, Healthy Kids** research project looks for solutions to childhood obesity by investigating how neighbourhood design affects children's ability to be physically active. Research suggests that safety from traffic and crime, the presence of destinations and built features supporting an active lifestyle (eg. parks, playgrounds, and bike lanes), a neighbourhood's attractiveness, and its accessibility are all very important in determining whether people will be active there. To determine which Saskatoon neighbourhood designs are the most



Queen Elizabeth in Saskatoon

supportive of active living, researchers walked each neighbourhood in Saskatoon in the summer months of 2009/2010, collecting data on these areas using two research surveys: the Neighbourhood Active Living Potential (NALP) and the Irvine-Minnesota Inventory (IMI).



NALP Route Map



IMI Segments Map

NALP consists of 22 items within four areas: Activity Friendliness, Safety, Density of Destinations, and Universal Accessibility. Using this method, observers rated each item on a 6point scale after walking a pre-defined route in each neighbourhood that connected 10 randomly-selected street segments. The route, typically 4 to 5 kilometres in length, is shown in red on the map.

IMI consists of a 229-item inventory of neighbourhood features within five areas: Attractiveness, Diversity of Destinations, Pedestrian Access, Safety from Traffic, and Safety from Crime. Twenty percent of street segments in each neighbourhood were randomly selected and observed. Each segment is the two facing sides of a street block and is indicated by a numbered flag on the map.

The NALP tool is more subjective in nature and takes into account the impression of the entire neighbourhood based on the systematic observations of the researchers. In contrast, the IMI is more objective in nature and is based on observations of each individual segment. The following report will discuss how the characteristics of Queen Elizabeth compare to Saskatoon neighbourhoods in general.

Queen Elizabeth Overview

Queen Elizabeth is bordered by Taylor Street, Clarence Avenue, Ruth Street, and Melrose Avenue.

Queen Elizabeth was designed under the First Zoning Bylaw, which was in effect from 1930— 1966. This Bylaw marked the beginning of a formal land use classification system that



Queen Elizabeth street view

separated land use types into more defined categories for the purposes of controlling land uses and protecting property values. This Bylaw also marked the beginning of a street classification system that separated volumes of traffic into classes (local, collector, and arterial). Neighbourhoods developed under the First Zoning Bylaw include early forms of curvilinear streets, where grid patterns give way to crescents linked by a collector street. However, for the most part, the streets in Queen Elizabeth are mainly a grid pattern.

Safety

We rated each neighbourhood according to the presence or absence of certain neighbourhood elements that increase or detract from a feeling of personal security. Observing both the physical and social characteristics of the neighbourhood, security was measured both in terms of traffic and crime. These ratings suggest whether safety concerns affect an individual's related active living designed in their neighbourhouth



Well marked pedestrian crossing

individual's related active living decisions in their neighbourhood.

- Out of a possible highest rating of 10, Queen Elizabeth rated **5.68** for Safety from Traffic, below Saskatoon's average rating of **6.06**. (IMI)
- Out of a possible highest rating of 10, Queen Elizabeth rated **9.90** for Safety from Crime, above Saskatoon's average rating of **8.46**. (IMI)
- Out of a possible highest rating of 6, Queen Elizabeth rated **4.75** for Safety, above Saskatoon's average rating of **3.81.** (NALP)



Grass buffer strip separates the sidewalk from the roadway

Queen Elizabeth's safety ratings suggest that pedestrian and vehicular travel areas are fairly well defined and easy to safely navigate and that there are few elements that reduce feelings of personal security. For example, although several observed intersections were uncontrolled and few were marked for pedestrian crossing, traffic levels were quite low, so observers felt most streets were safe to cross. In terms of safety from crime, no observed graffiti, well maintained homes, and plenty of opportunities for casual surveillance of the street by home owners all contribute to the perception of personal security.



Commercial Centre on Clarence Avenue

Destinations

We rated each neighbourhood according to the number, diversity, and density of its destinations. These ratings suggest whether destinations in a neighbourhood can motivate deliberate, localized active living choices by providing a place to go and a means to interact with others.

- Out of a possible highest rating of 10, Queen Elizabeth rated **5.00** for Diversity of Destinations, below Saskatoon's average rating of **6.26**. (IMI)
- Out of a possible highest rating of 6, Queen Elizabeth rated **4.13** for Density of Destinations, above Saskatoon's average rating of **3.92**. (NALP)

Queen Elizabeth's destination ratings suggest that there are some destinations of a moderate variety. For example, observed destinations in Queen Elizabeth include two schools, a large park and playing field, a church, an outdoor pool, a convenience store, and a commercial centre along Clarence Avenue with a grocery store, food outlet, retail, and services.

Activity Friendliness

We rated the activity friendliness of each neighbourhood based on specific features that encourage or present barriers to an active lifestyle. These ratings suggest whether a neighbourhood assists or limits the opportunities for physical activities such as walking, cycling, or skateboarding.



 Out of a possible highest rating of 10, Queen Elizabeth rated 4.86 for Pedestrian Access, below Saskatoon's average rating of 5.08. (IMI)

Benches and a garbage can

• Out of a possible highest rating of 6, Queen Elizabeth rated **4.33** for Activity Friendliness, above Saskatoon's average rating of **3.67**. (NALP)



These activity friendliness ratings suggest that Queen Elizabeth has both supports and obstructions for pedestrians. For example, although most streets have a least one sidewalk, some sidewalks are in poor condition and some are completely absent. However, grid street patterns provide route choice and easy access for pedestrians and cyclists. Further, wide streets provide adequate room for cyclists and bike parking located at the schools and other destinations increases bike friendliness.

Bike parking in the park

Attractiveness

We rated each neighbourhood based on specific features that could potentially increase or decrease the attractiveness of the neighbourhood. This rating suggests whether the level of attractiveness for each neighbourhood itself can encourage or discourage individuals to participate in an active lifestyle.

 Out of a possible highest rating of 10, Queen Elizabeth rated 4.33 for Attractiveness, below Saskatoon's average rating of 4.80. (IMI)

Queen Elizabeth's attractiveness rating suggests that both attractive and unattractive features are present in the neighbourhood. For example, sidewalk amenities, such as benches and well-kept garbage cans, were absent from most observed streets. However, street trees on most observed streets provide partial shade for many of the sidewalks. Further, well maintained homes, some architectural variety, and pleasant landscaping considerably increase the attractiveness of the neighbourhood.

Universal Access

We rated the universal accessibility of each neighbourhood according to the presence or absence of specific features that help or prevent safe movement for those with mobility, visual, or hearing impairments. These ratings suggest whether people with reduced mobility are able to travel in the neighbourhood safely without assistance.

 Out of a possible highest rating of 6, Queen Elizabeth rated 1.83 for Universal Accessibility, below Saskatoon's average rating of 2.19. (NALP)

This universal accessibility rating indicates that Queen Elizabeth has few elements that enable safe movement for those with reduced mobility. For example, few sidewalks in Queen Elizabeth are mountable, and curb cuts are absent from many intersections throughout the neighbourhood. Further, none of the observed pedestrian crossings are adapted for individuals with visual or hearing impairments.

The principal investigator for this project is Nazeem Muhajarine, PhD. For a complete list of contributing researchers, partner organizations, project staff, and more information, please visit our website: <u>www.smartcitieshealthykids.com</u>

If you have any further questions about the project, please contact our research co-ordinator <u>tracy.ridalls@usask.ca</u> or call 966-2237.









and the second sec

Paved pathway with a curb cut