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 (e.g., 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 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 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 6-point 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 Grosvenor Park compare to Saskatoon neighbourhoods in general.
Grosvenor Park Overview

Grosvenor Park is bordered by 14th Street, Preston Avenue, 8th Street, and Cumberland Avenue.

Grosvenor Park 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 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. Indeed, the streets in Grosvenor Park are curved into large crescents.

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 decisions in their neighbourhood.

- Out of a possible highest rating of 10, Grosvenor Park rated 6.12 for Safety from Traffic, above Saskatoon’s average rating of 6.06. (IMI)
- Out of a possible highest rating of 10, Grosvenor Park rated 9.21 for Safety from Crime, above Saskatoon's average rating of 8.46. (IMI)
- Out of a possible highest rating of 6, Grosvenor Park rated 3.25 for Safety, below Saskatoon’s average rating of 3.81. (NALP)

Grosvenor Park’s safety ratings suggest that pedestrian and vehicular travel areas are fairly well defined and safe to navigate and that there are only few elements that reduce feelings of personal security. For example, although the streets bordering Grosvenor Park have high traffic levels, most of the interior streets are mainly for local traffic. Many intersections with heavy traffic included measures of safety for pedestrians, though crosswalks were absent in some areas where they were needed. In terms of safety from crime, well maintained homes, an absence of graffiti and concealed spaces for lurking, and plenty of opportunities for casual surveillance of the street by home owners all contribute to the strong perception of personal security.
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, Grosvenor Park rated 7.00 for Diversity of Destinations, above Saskatoon’s average rating of 6.26. (IMI)
- Out of a possible highest rating of 6, Grosvenor Park rated 4.31 for Density of Destinations, above Saskatoon’s average rating of 3.92. (NALP)

Grosvenor Park’s destination ratings suggest that there are some destinations of moderate variety. For example, observed destinations in Grosvenor Park include a large central park, two churches, and a commercial strip along 8th Street with services, retail, entertainment, and restaurants.

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, Grosvenor Park rated 5.90 for Pedestrian Access, above Saskatoon’s average rating of 5.08. (IMI)
- Out of a possible highest rating of 6, Grosvenor Park rated 3.25 for Activity Friendliness, below Saskatoon’s average rating of 3.67. (NALP)

These activity friendliness ratings suggest that Grosvenor Park has both supports and obstructions for pedestrians. For example, most streets within the neighbourhood have well-maintained sidewalks on both sides of the street. However, the commercial strip on 8th Street has no sidewalk and very little accommodation for pedestrians. Wide streets provide adequate room for cyclists; however, a lack of bike parking at destinations considerably reduces bike friendliness. Further, the street design limits the route choices and access for pedestrians and cyclists, though alleyways can be used to link otherwise disconnected streets.
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, Grosvenor Park rated 5.39 for Attractiveness, above Saskatoon’s average rating of 4.80. (IMI)

Grosvenor Park’s attractiveness rating suggests that both attractive and unattractive features are present in the neighbourhood. For example, street trees provide partial shade for some of the sidewalks. Sidewalk amenities, such as benches and well-kept garbage cans, were present in the park. Further, well maintained homes, some architectural variety, neighbourhood parks, 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, Grosvenor Park rated 1.17 for Universal Accessibility, below Saskatoon’s average rating of 2.19. (NALP)

This universal accessibility rating indicates that Grosvenor Park has few elements that enable safe movement for those with reduced mobility. For example, few sidewalks in Grosvenor Park are mountable, and curb cuts are absent from many intersections. None of the observed pedestrian crossings are adapted for individuals with visual or hearing impairments. Further, many pedestrian crossings did not allow sufficient time to cross the street.

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: www.smartcitieshealthykids.com

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