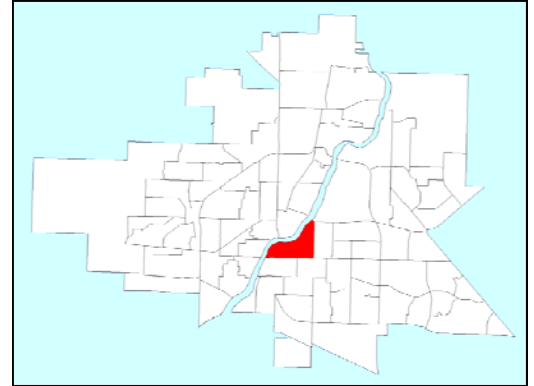


Nutana



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 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).



Nutana in Saskatoon



NALP Route 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 6-point scale after walking a pre-defined route in each neighbourhood that connected 10 randomly-selected street segments. The route, typically 4-5 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.



IMI Segments 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 Nutana compare to Saskatoon neighbourhoods in general.

Smart Cities Healthy Kids

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Nutana Overview

Nutana is bordered by Saskatchewan Crescent, Clarence Avenue, and 8th Street. Nutana is one of Saskatoon's first established neighbourhoods. Originally, there were three distinct village settlements on the South Saskatchewan River: Saskatoon (now the Central Business District), Riversdale, and Nutana, which were incorporated as the City of Saskatoon in 1906. Each of these villages developed on 25-foot lots in a grid pattern around a main street. In Nutana, Victoria

Avenue, which led down to the ferry crossing where the Victoria Bridge now stands, served as the main travel corridor. However, Broadway Avenue assumed the role of Nutana's main business street, and continues to be the primary commercial corridor in the neighbourhood. Over time, Nutana has maintained and capitalized on its historic identity, becoming a destination-rich neighbourhood.



Nutana street view

Safety



Crosswalk at Five Corners

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, Nutana rated **6.46** for Safety from Traffic, above Saskatoon's average rating of **6.06**. (IMI)
- Out of a possible highest rating of 10, Nutana rated **8.03** for Safety from Crime, below Saskatoon's average rating of **8.46**. (IMI)
- Out of a possible highest rating of 6, Nutana rated **4.63** for Safety, above Saskatoon's average rating of **3.81**. (NALP)

Nutana'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, high traffic areas had well marked crosswalks, though not all areas across the neighbourhood considered the safety of pedestrians to the same extent. On many streets, large grass and tree buffer strips separate pedestrians on the sidewalk from the traffic on the street. In terms of safety from crime, mostly well maintained homes and plenty of opportunities for casual surveillance of the street by residents and businesses contribute to the perception of personal security. However, we observed several spaces concealed by bushes or located in alleyways that could be used for lurking. As well, a considerable amount of graffiti was observed.



Graffiti

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.



Broadway Avenue Business District



Rotary Park

- Out of a possible highest rating of 10, Nutana rated **10.00** for Diversity of Destinations, well above Saskatoon's average rating of **6.26**. (IMI)
- Out of a possible highest rating of 6, Nutana rated **5.31** for Density of Destinations, above Saskatoon's average rating of **3.92**. (NALP)

Nutana's destination ratings suggest that there are many destinations of a wide variety. For example, observed destinations in Nutana include three schools, several churches, park space along the river, and a wide range of destinations along Broadway Avenue, Victoria Avenue, Dufferin Avenue, and 8th Street, including restaurants, retail, entertainment, and professional 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.



Wide sidewalks support pedestrians

- Out of a possible highest rating of 10, Nutana rated **5.40** for Pedestrian Access, above Saskatoon's average rating of **5.08**. (IMI)
- Out of a possible highest rating of 6, Nutana rated **4.08** for Activity Friendliness, above Saskatoon's average rating of **3.67**. (NALP)



Bike parking on Dufferin Avenue

These activity friendliness ratings suggest that Nutana has both supports and obstructions for pedestrians. For example, sidewalks were often in good condition, present on both sides of most streets, and commonly separated from the street by a grass buffer. Wide sidewalks along the commercial corridor support high amounts of foot traffic. Bike parking located at some destinations considerably increases bike friendliness. Further, the grid street pattern is easy to navigate and provides a wide range of route choices for pedestrians and cyclists.



Bike support sign

Attractiveness

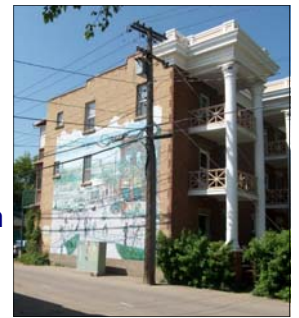
We rated each neighbourhood based on specific features that could potentially increase or decrease the attractiveness of the neighbourhood. This rating suggests whether the level of attractiveness for each neighbourhood itself can encourage or discourage individuals to participate in an active lifestyle.



Public art on
Broadway Avenue

- Out of a possible highest rating of 10, Nutana rated **5.13** for Attractiveness, above Saskatoon's average rating of **4.80**. (IMI)

Nutana's attractiveness rating suggests that both attractive and unattractive features are present in the neighbourhood. For example, large street trees are present on most streets and provide shade for pedestrians on the sidewalk. Sidewalk amenities, such as benches and well-kept garbage cans, are present in some areas throughout the neighbourhood, particularly along Broadway Avenue and the Meewasin Valley Trail. Public art, such as murals and statues, was present along Broadway Avenue. Further, well maintained homes, architectural variety, pleasant landscaping, and river views considerably increase the attractiveness of the neighbourhood.



Public mural



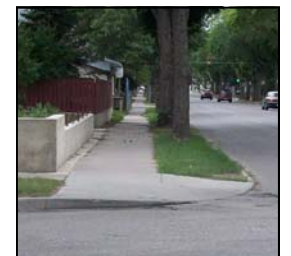
Sidewalk amenities: bench,
garbage can, and public art

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, Nutana rated **2.17** for Universal Accessibility, below Saskatoon's average rating of **2.19**. (NALP)

This universal accessibility rating indicates that Nutana has some elements that enable safe movement for those with reduced mobility. For example, few sidewalks in Nutana are mountable, though curb cuts are present at most intersections. Further, some of the observed pedestrian crossings are adapted for individuals with visual or hearing impairments.



Curb cut

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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