# Ideal student locations in Prince George, BC

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## Introduction

A map was created that highlights the most ideal housing locations for students attending University. This map could be used for students attending either CNC or UNBC because distance to the school itself was not a factor in this analysis.

- The goal of this project is to see where the ideal housing location is for a student attending university in Prince George.
- The criteria was based on personal experience of what I thought to be important for suitable housing for students
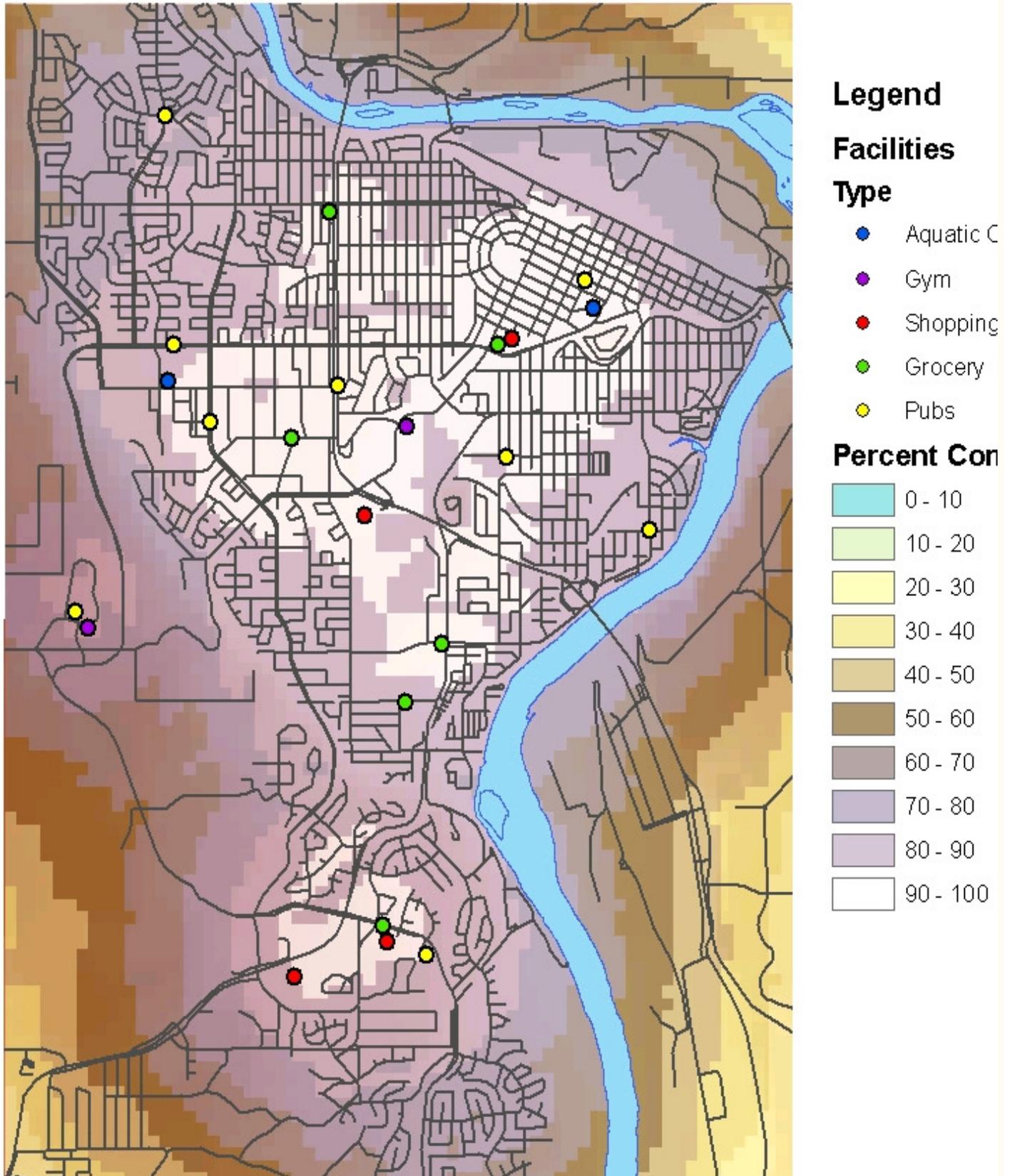
## Study Area and Data Source

- The study area was Prince George, BC which is in the
- The data was acquired from the GIS server through Roger and Ping.
- The layers for grocery stores and pubs was created in GoogleEarth by Thomas Cheney
- A small area consisting of the downtown bowl area and College Heights was used for this analysis. Suitable areas may exist in the Hart but I chose not to include that area in this analysis.
- The facilities I thought to be important to students were distance to  bus stops, grocery stores, shopping malls, exercise locations and a small importance on location to pubs.

## Data methods and analysis

- I edited the pgboundary layer to be just the area I was looking to analyze and created a straight line raster data set showing the distances from each of the criteria in question
- The data sets were then reclassified to put higher importance on smaller distances.
- Hill-shade was created from contours
- The weights for the data sets are as follows:
  - 35% for bus stops
  - 25% for grocery stores
  - 10% for pubs
  - 15% each for shopping malls and gyms/aquatic centers.
- I was planning to include coffee shops and parks in the analysis but including those data sets made the results very narrow and I felt that they were not nessecary as there are many parks and coffee shops across the town that distances to them should not be a large factor.

## Results

# Ideal Locations for UNBC Students



**Legend**

**Facilities Type**

- 🔵 Aquatic C
- 🟣 Gym
- 🔴 Shopping
- 🟢 Grocery
- 🟡 Pubs

**Percent Con**

| | |
|---|---|
| | 0 - 10 |
| | 10 - 20 |
| | 20 - 30 |
| | 30 - 40 |
| | 40 - 50 |
| | 50 - 60 |
| | 60 - 70 |
| | 70 - 80 |
| | 80 - 90 |
| | 90 - 100 |

# Conclusions and Discussion

- The most difficult task was determining the weights for the data sets and seeing if I should use all of them. Parks and coffee shops were removed from the equation because the result was quite limited.
- The results are mostly what I had expected. The city is fairly small and most things are within a short walking distance from each other, especially if you are taking the bus.
- With more time I may have included distance to the two post-secondary schools and done further analysis.
- There is currently no future work planned on this project. If there was more time I would have modified the bus stops layer to include the 17 and 18 routes which were not included in the data set I was provided.
- This project may be ideal for a student who is just moving to Prince George to get an idea of which locations are potentially best for accessibility to facilities and shopping.

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