### Vancouver Public Space Network

## Heart of Vancouver Public Space Map



# **Executive Summary**

By Stella L. Zhou B.A Candidate, Department of Geography University of British Columbia

#### About this Project

The mapping project is done by a UBC Geography Student in collaboration with the Vancouver Public Space Network (VPSN). The final product is an alpha version of an online interactive map showcasing the different public space in the Heart of Vancouver. This map provides the groundwork for future volunteers and members of the Vancouver Public Space Network to work on. The ultimate goals of this project is to launch an online interactive map that would educate the general public around the values and functions of different public space, and promote the importance of urban social interactions between people and their living environment.

A public space is defined as "Any urban space that encourages and fosters positive social interactions between different people and the environment at the location". This includes the whole Downtown Peninsula and parts of Fairview, Mount Pleasant and Kitsilano, with an east boundary up to Main Street and west boundary up to Burrard Street. The south boundary is drawn at 16<sup>th</sup> avenue to include the city hall area on Cambie, which is also a commercial, political and public centre of the city.

The main audience group of this map is identified as the general public living in the City of Vancouver. It is made with the purpose that most people living in Vancouver will be able to understand and learn about the different public space within the heart of the city. People from the greater Vancouver lower mainland area are secondary audience. They may have the interest to explore the Metropolitan Centre, but they are not considered the primary users of these public space.

#### **Data Processing**

The data used for this project was collected by a group of dedicated VPSN volunteers over a 4 year period. Volunteers went to the actual locations and recorded the details of that public space. They then input them to the main data set spreadsheet through filling out a google form on the VPSN website. In total there were originally 345 data points. This is a great example of citizen science, where volunteers used digital technology to help build up the data set over time.

The lack of consistency and extensive amount of information was the biggest challenge of processing this data. Although volunteers were asked to fill out the form, not all fields are required to be filled in order to submit;

hence a large percentage of the data points were missing important information. Volunteers were not given a standardized definition of different public space, so there information provided was not very consistent. This made it difficult to parse, filter and mine, hence also making it more time consuming. Nonetheless, the recorded information contains precious details about each public space, and should be regularly maintained and managed for future purpose of referencing.

The raw data was parsed and categorized according to the definition and categories of different public space that VPSN came up during meetings with the UBC student partner. Many missing data information were manually filled in based on the available information. After eliminating duplicated data points and locations that are not significant enough to be considered a functional public space, approximately 160 data points were acquired and refined to be represented on the map. They are sorted into 8 typology and 3 categories for the purpose of this map.

#### Choice of Technical Software

VPSN was clear that the most desirable product would be an interactive map with clickable functions to present detailed information on individual data points. The mapping software should contain functions and features that would enhance the audience's experience. CartoDB was chosen as the final mapping software because it is an open source application with friendly user interface. CartoDB allows users to create map creatively with less technical barriers, and it is also easier for VPSN volunteers to update in the future since it does not require knowing how to use programming language.

#### Visual and Interface Designing Process

It is essential to constantly keep in mind the purpose of the map and how the audience will perceive it throughout the visual designing process. The mental image of map users can be very different to what is being presented on a map. Every map has a visual hierarchy, even if it was not intentionally built in by the map creator. The way human eyes trace things determined the hierarchy level of the different elements. Especially when making an online interactive map, the map interface is crucial because it affects the whole audience experience.

In order to have an effective map interface, repeating the process of assessing the map users, map utility and map usability was very important. The map is produced for the audience and map users; hence identifying who are the audience, how will they interpret the map, how can the map can improve their interaction with the map became the ultimate criteria when making any decisions.

After many meetings and discussions, it is determined that the most dominant and straightforward feature on this map should be the individual public space location points. In this case, all other elements and components should be designed in ways to serve this main purpose. The final product is map with different layers of public space features, in which map users can turn on and off to view and explore the various category of public space. They can also click on individual data points to view an information box of that public space.

#### Limits and Future Improvements

This map shows the effort of the whole VPSN community; but it is only an alpha map so there are still many things that need to be improved for each data set before it's ready to launch for a beta test. There were constraints on the data as certain data information was missing, so data representation were also compromised to a certain degree, particularly the pop-up information box. Nonetheless, it is still a relatively complete alpha map that contains the most basic and important information of each public space location.

Vancouver is a dynamic city and place making is happening all the time; over the next few years, there will be more public space spawning around the city in order to accomplish the sustainability goals in the Greenest City Action Plan for 2020. Therefore, this map will be constantly updating and changing, but this is a positive future development. It means that normal citizens can contribute to this process of educating the public around the values of public space making, and promote the importance of urban social interactions between people and the living environment. It is exciting to see how this project will develop overtime and how it can influence people in the city of Vancouver on their awareness of urban public space.