A NEW CITY MAP

VISUALIZING OUR CITY ROADWAYS

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Land Acknowledgement

We are gathered on the traditional, ancestral and unceded territories of the Musqueam (xʷməθkʷəy̓əm) Nation

Our roads shape our neighborhood

Our neighborhoods shape us

We seek to understand how to capture this relationship by using street maps for efficient, tailored abstract art

Motivation

- Cartographical art on the market is often costly and quite impersonal
- Consumers often times have difficulty finding art tailored to precise geographical locations
- Maps are used more as decorative icons or to help navigate rather than mediums of non-spatial information

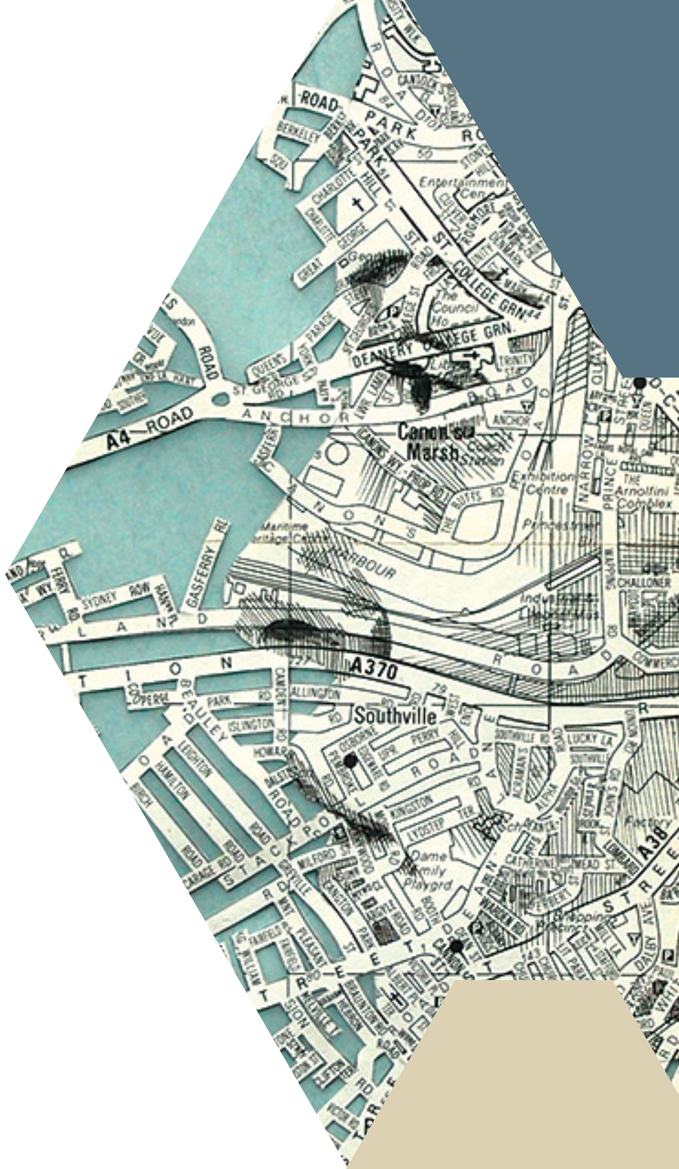
THRO
2pk 20x20 Printed World Map Pillows
~~$19.99~~ $10.00

MADE IN ITALY
Map Print Lined Leather Journal
$14.99

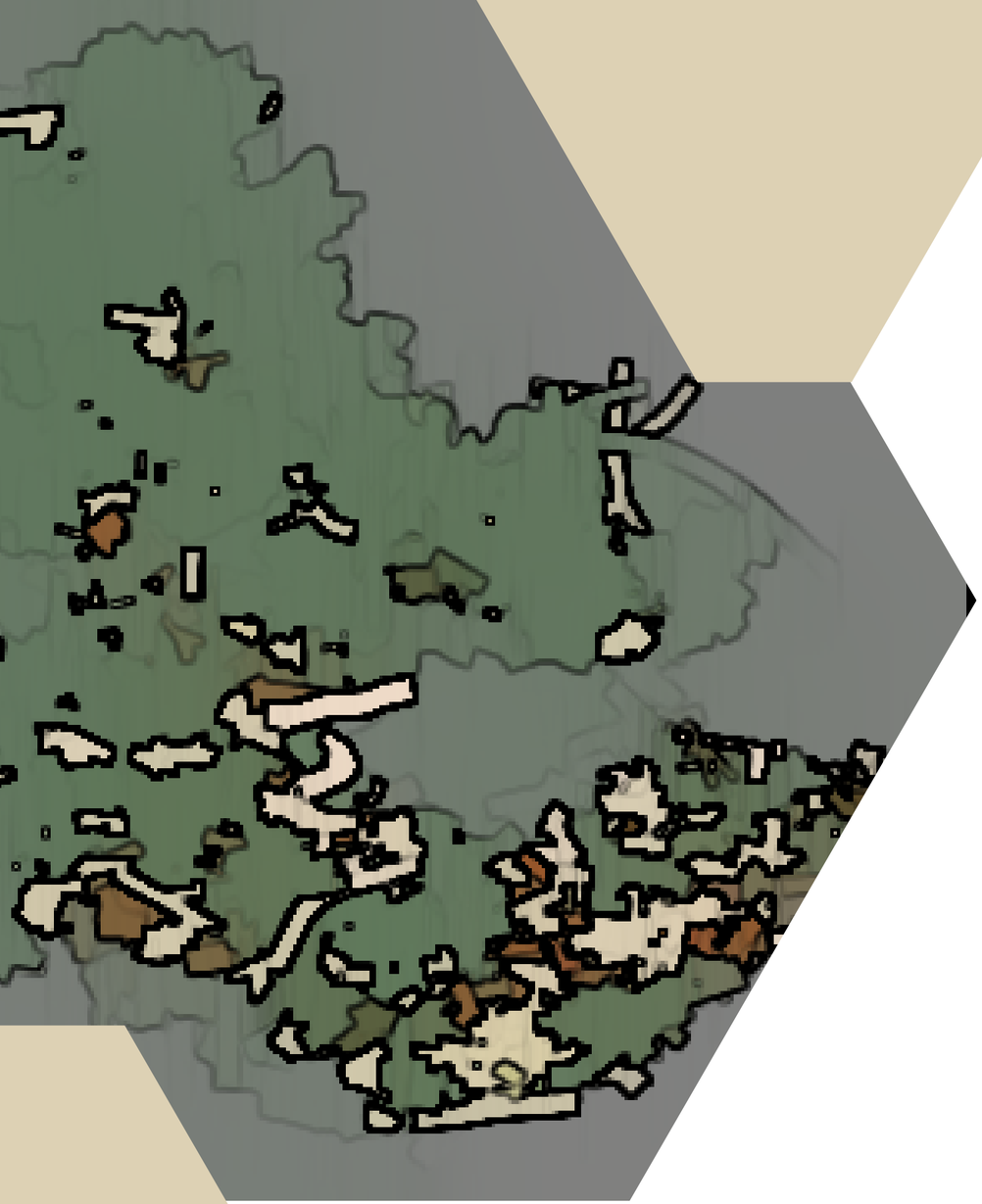
Madaba Abstract Neighborhood Mosa...
★★★★★ (1)
$3,100.00 FREE delivery

Objectives

- To bridge the gap between art and cartography by using a data driven approach
- To deliver art that is accessible to a broad spectrum of users while retaining its meaningfulness
- To present a visualization that can convey the **spirit** of a given area by encoding the factors which makes it special



https://guidetocamden.wordpress.com/2014/03/06/artistic-abstract-street-maps/



The Project:

Visualize the unique features of our space through artistic representation

Enjoyment

See the city through a new lens

Find neighborhoods similar to yours

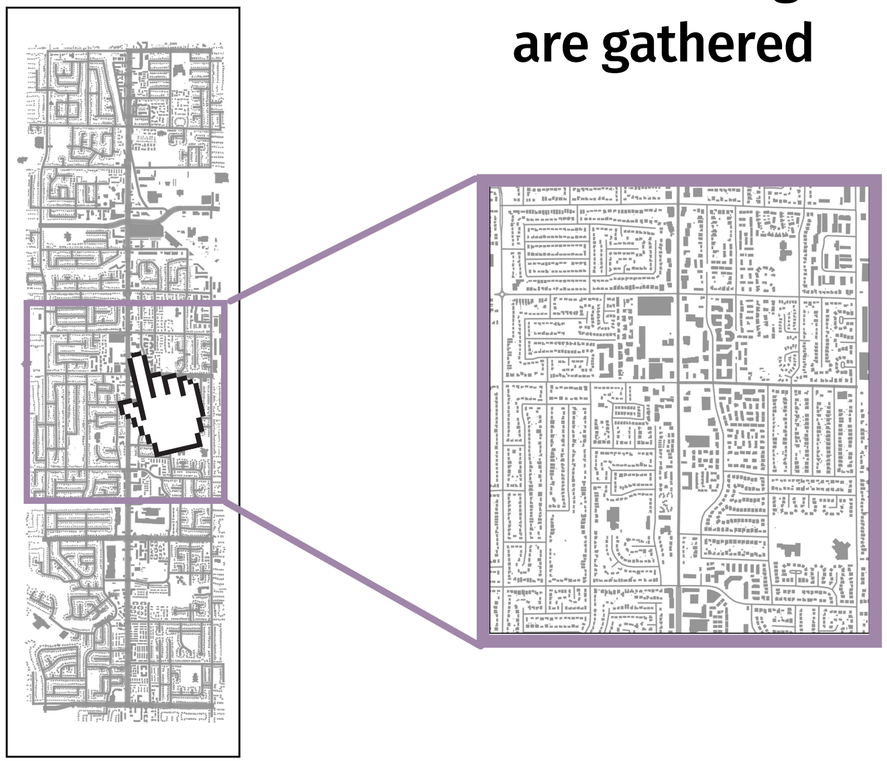
Discovery

Compare neighborhoods and cities

Highlight neighborhood phenomenon

The backend

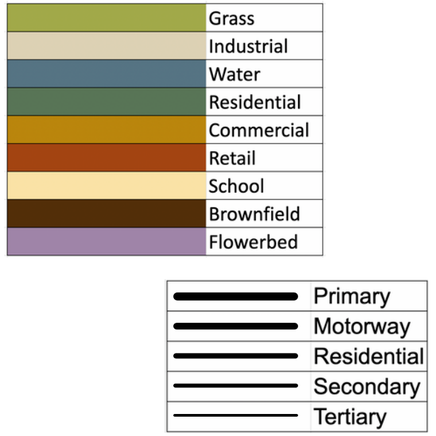
User selects a location



Roads and Amenities for the surrounding area are gathered

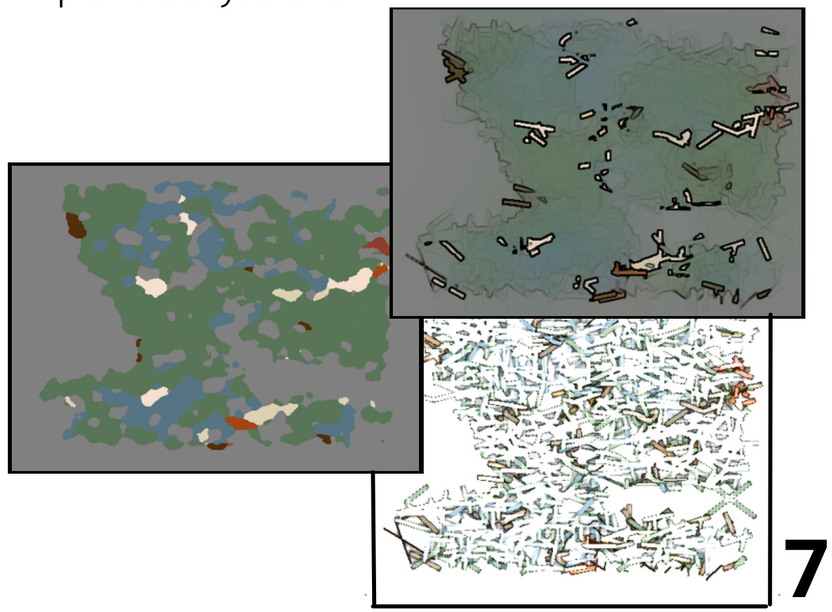
Information about area is encoded

Amenities and road classifications are paired with road edges



Art is returned to user!

Users can choose from oil, watercolor, or color pencil style art

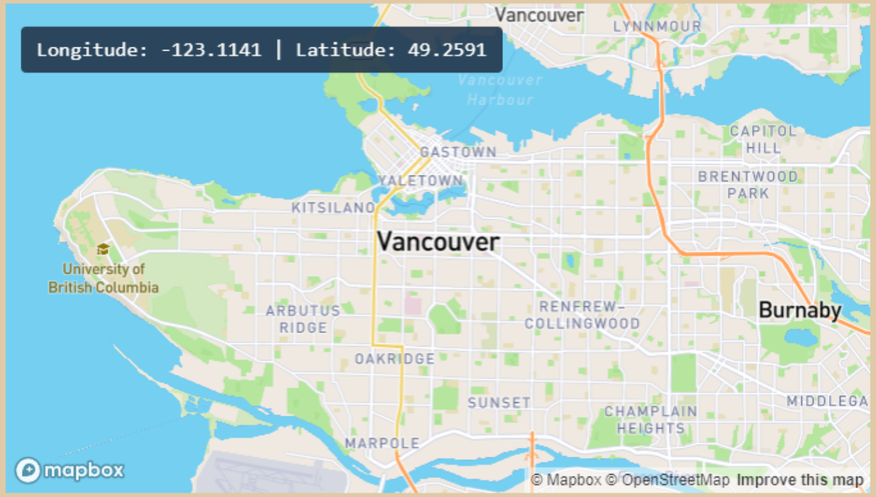


The interface

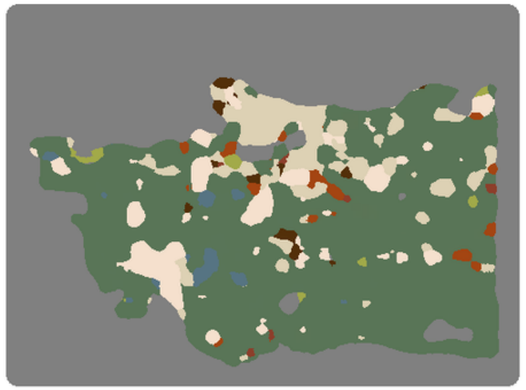
A New City Map

Choose a City | Pick a Point | Boundry Cut

City: Vancouver



Make Map

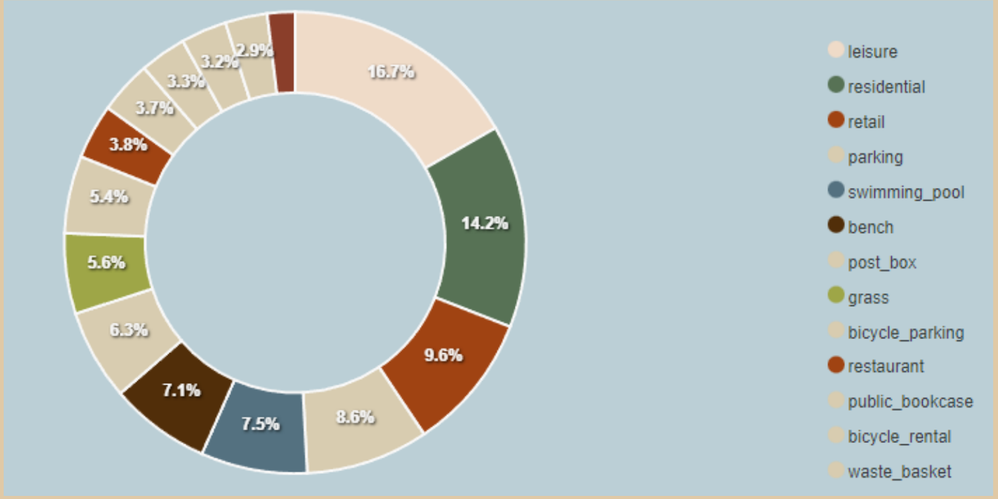


Oil Style

Painting in the Oil Style with normalized orientation

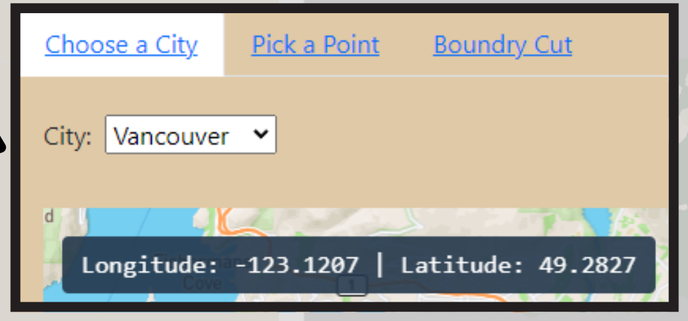
Oil Rand Style

Painting in the Oil Style with random edge orientation

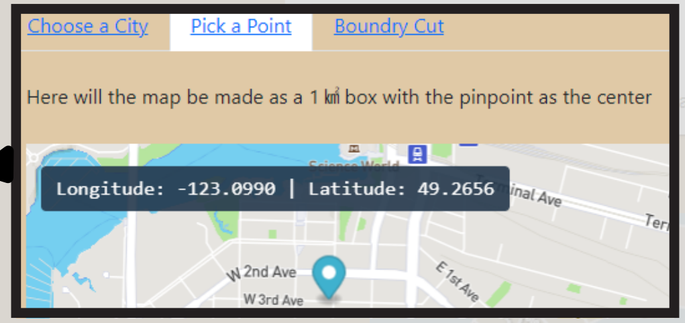


The interface

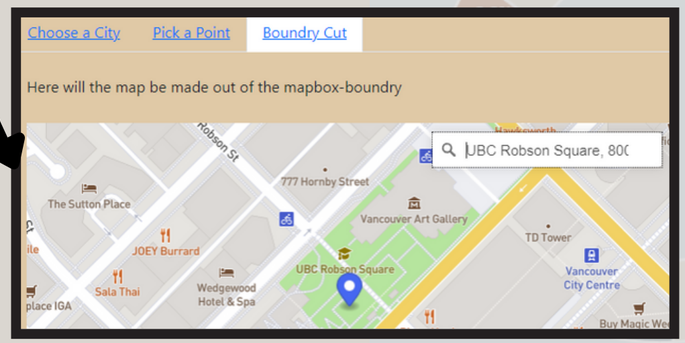
User can select 3 modes of operation



City interface allows user to select city to artistically render

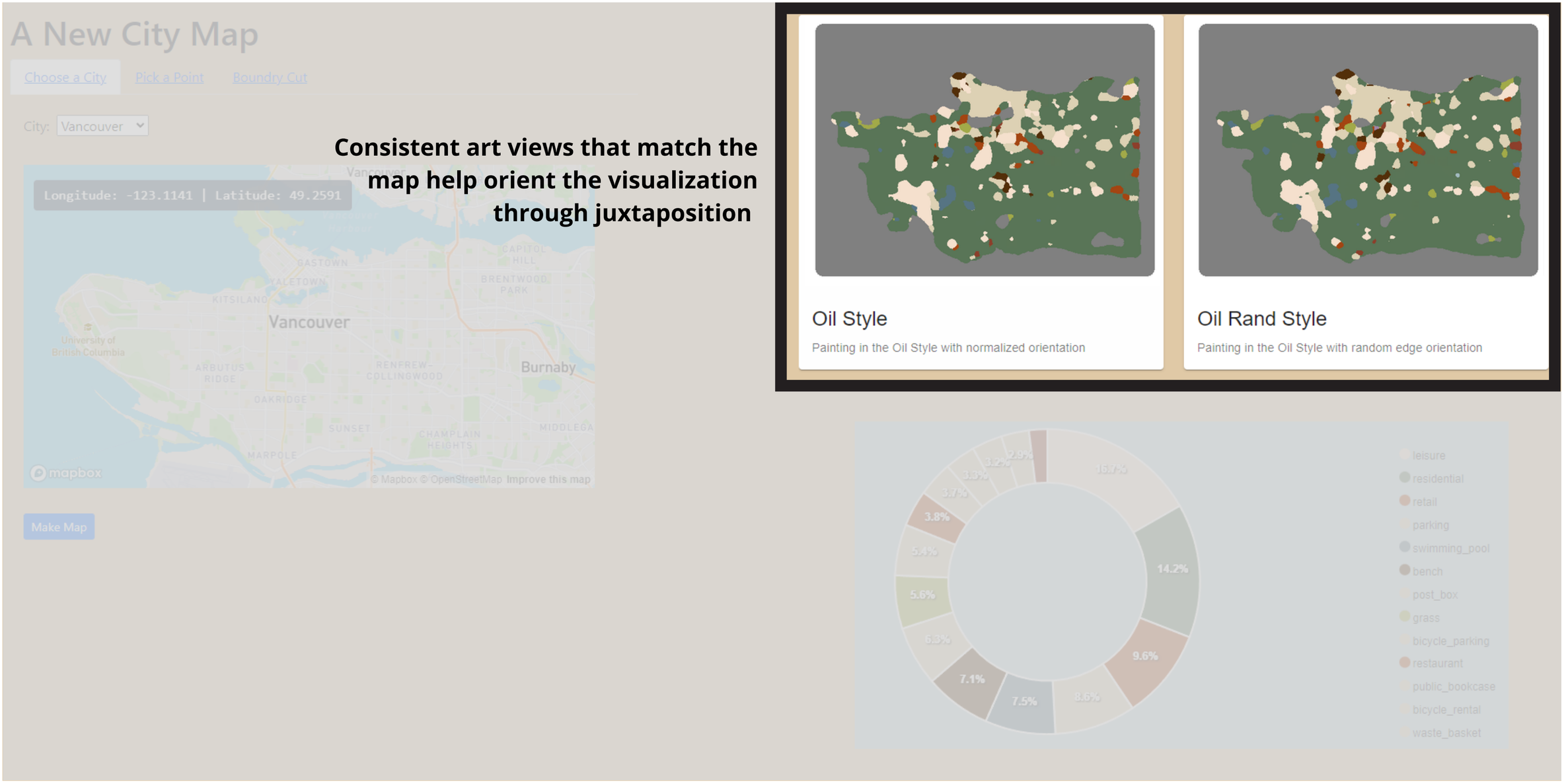


Point interface allows users to drop pin on the map to artistically render around its radius



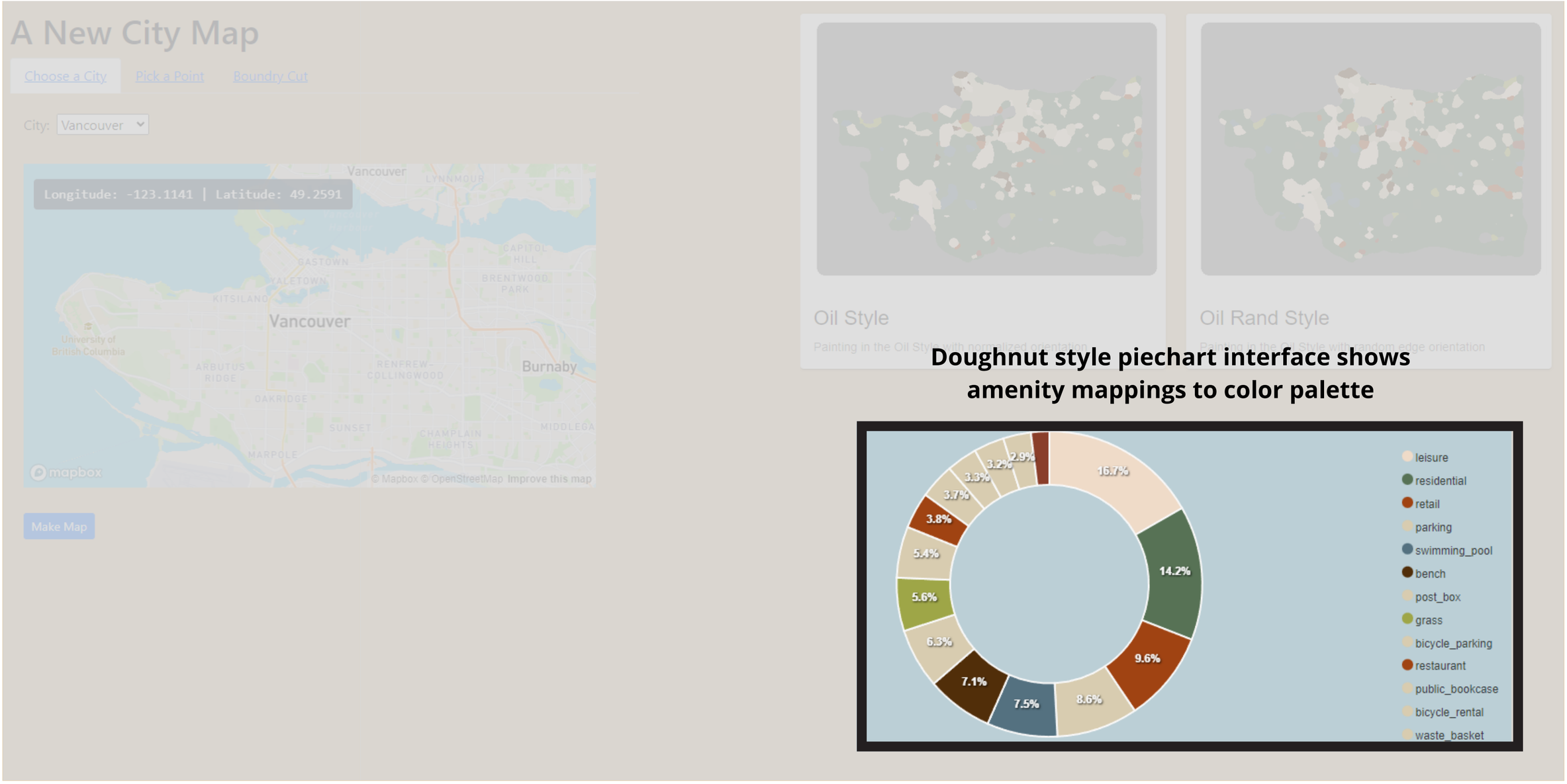
Boundary interface allows users to input address or take the current map view to artistically render around its radius

The interface



Consistent art views that match the map help orient the visualization through juxtaposition

The interface



Doughnut style piechart interface shows amenity mappings to color palette

Demo

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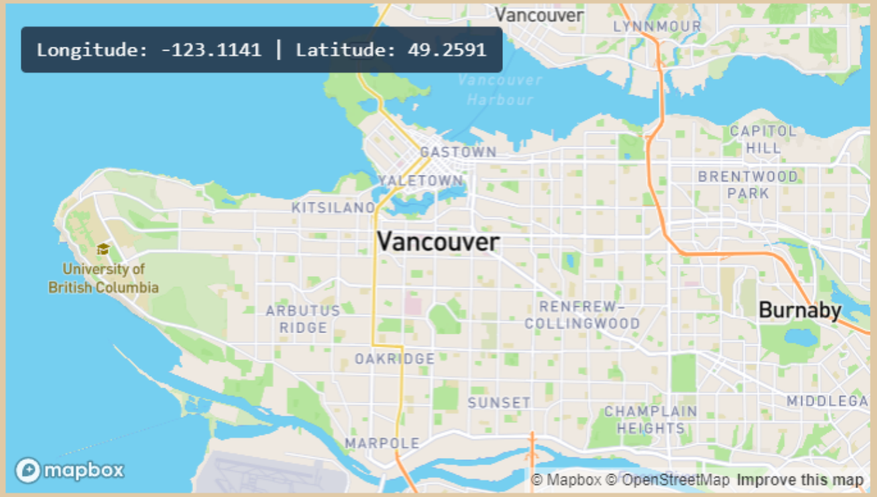
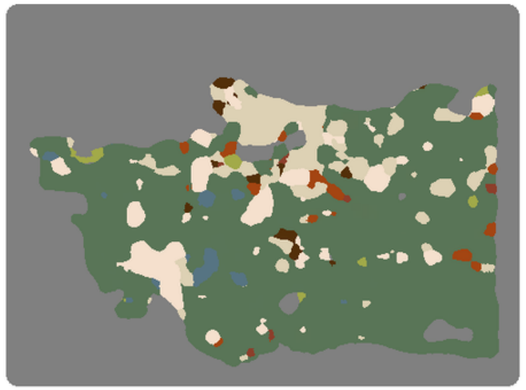


Make Map



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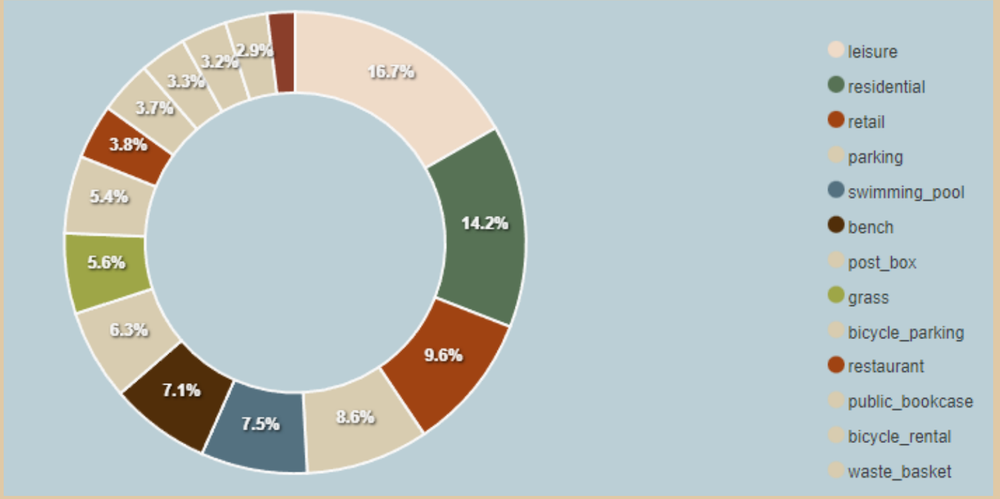

Strengths and Research Contributions

- Easily digestible representation of neighborhood culture
- Standarized visualizations for quick comparison between views
- Unique artistic rendering of city streetscapes
- Alternative method of delivering information about a place

Weaknesses and Limitations

- Trade-off between amount of information available to share and cognitive overload
- Currently only one color palette based on background research
- Longer computation time with large areas (e.g. full cities)

Future Work

- Greater granularity of amenity types (regional awareness)
- Improved computation time / dynamic rendering
- Responsive art for moving cursor around base map

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Thank you!