# Tacoma Youth Mapping Project – MSGT Overview

This document serves as a one-page overview of the UWT-MSGT capstone project that will support the Tacoma Youth Mapping Project (TYMP). This document provides insight on high level goals, end product concepts, and markers for success for the MSGT capstone project.

## Goals

In supporting the TYMP, the purpose of this project is threefold:

1. Develop a portal through which individual, digitized shapefiles can be uploaded to the TYMP service
2. Develop a server-side program which will process all incoming shapefiles and generate the desired heat map outputs
3. Develop a portal through which individuals may access existing TYMP data on a web map, or download it in a to-be-specified format

## End Product Concepts

The end product for this project will take two core forms. Firstly, a user-facing web page. Users can interact with the web page to upload new data to the TYMP, or they can view existing TYMP data through a web map. Users may also download existing datasets from the TYMP server. The second product is a back-end server which will accept new spatial data, process that data according to a pre-defined model, and serve that data for consumption by the front-end.

## Criteria for Success

Fundamental success for this project is defined by satisfaction of the three goals described above. Users will be able to upload shapefiles to the server, and consume the resultant data in a web map or as a downloadable file. The server will perform batch processing of incoming data against a pre-defined model in order to generate the heat maps required by the TYMP.

This project will also consider secondary measures of success. These include: (1) Significant cost savings with regards to the amount of time and effort it takes to compile heat maps from digitized shapefiles. (2) Automation of all processes that can be automated without detracting from the overall intended final product. (3) Design of a delightful and comprehendible user interface that attracts new users and districts to participate in the TYMP program. Quantitative data for these evaluations will be described at a later date.