Sponge City Program Modeling & Scenario Classification

Reviewing Hanyu Gao’s Capstone

Mid-Point Work in Progress Review

by Alexander Nelms – CPLN 680 – 3/25/22

# General Comments

I was able to review Hanyu Gao’s Capstone by looking at her March 18th Midpoint presentation ([pdf slides](https://github.com/CPLN-680-Spring-2022/Hanyu_Gao_SCP_/blob/main/01_Proposal/SPC_Hanyu_MidPoint.pdf)) and her [January 13th Proposal 0](https://github.com/CPLN-680-Spring-2022/Hanyu_Gao_SCP_/blob/main/01_Proposal/CPS_Proposal1_Hanyu_G%202.pdf). Since I don’t have a written report that describers her presentation and current status, it is difficult to provide feedback on the project’s problem statement, methodology, or literature review. On a positive note, Hanyu’s project seems to be fairly developed based on the collected data and visualizations. The highpoint of Hanyu’s Midpoint presentation seems to be that she has a superior grasp on the project’s subject matter, methodology, and related data. Now it’s just a matter of formalizing the project into a report or a deliverable of some kind.

# Question

Regarding what appears to be the main question, *“How to incorporate Social Factors in Sponge City Planning and Design”,* it would be beneficial to understand in writing what the desired metrics are.

# Methodology

The presentation slides suggest that there is an already formed system of finding metrics, but I don’t know the metrics being formed or how vulnerable sites are selected from the suitability analysis. Is the k-means clustering finding which areas have the highest suitability metric? It does appear that there is a strong methodology, I just don’t know what it is.

# Literature Review

I don’t see a literature review. I believe it would be beneficial to have a written literature review of flood inundation and potential negative effects on social conditions. Literature could help determine which social conditions should be used and how much they should play a factor.

The presentation does provide beautiful diagrams on the political process of the Sponge City Program. But I’d like to see in writing how the program differs from others. Do other programs use social conditions?

# Datasets

I think it is impressive that Hanyu was able to collect and engineer all of this data – when Chinese data has been notoriously hard to find. It could be beneficial to have demographic data for the social vulnerability analysis, but I can’t imagine it be easy.

# Current Status & Problems

Overall, the presentation’s detailed content and visualizations suggests that Hanyu is in a strong place in this project. I just don’t have any written report to review and provide feedback on.