The first model aims at evaluating given modification systems. We consider five main factors: cost, sensor cover rate, wifi support rate (peak/average) and crosswalk cover rate. If getting the value of these factors, the modification plan can be evaluated.

The second model helps develop the best lamppost modification plan for a particular area in Hong Kong. We separated the roads in the area into several sections and calculate the traffic flow of each section and get the required throughput of each section. In that way we can get the best location of smart lampposts equipped with wifi access points. As sensors need to cover all crosswalks, no buildings, and as many roads as possible and balance with cost, we can calculate their locations by a similar method.

Finally we need to evaluate our own modification plan with the evaluation model, which shows the pros and cons of a modification plan. By applying our plan to it, we can see how to improve our solution.