1. In this project, we are seeking to develop the sustainability for the City of Surrey, BC, Canada. Sustainable city is a future development tendency of the world. Because of population increase and energy consumption, global environment is in a great challenge. If people still cannot find a way to distribute resources equitably and manage land use rationally, they will have high possibility to be faced with environmental crises. City of Surrey is chosen for our study area since the population growth is about 23.5% from 2005 to 2015 which is higher than BC average 11.7% and also higher than Canada average 9.3%. The rapid accretion of population will stimulate the urbanization, but it also will consume a mass of resources; consequently, Surrey need to find a sustainable way for future development.
2. This app takes a close look at the distribution of land use for the City of Surrey. The appealing part of this app is that it shows a highly detailed categories of land use and its distribution such as residential use, commercial use, agricultural use and etc. Users can choose necessary layers to display based on their own analytical goals. However, land use is not the only data obtained in this app. In order to show the sustainability level of Surrey, additional service information is also essential. In addition to the distribution of different land use of Surrey, the app indicates the existence and location of green infrastructures, bus stops utility facilities to show the degree to sustainable development the City of Surrey has reached. With the display of those data, end users then can do analysis to check where and what the City of Surrey needs to improve in order to meet a higher sustainable standard. Moreover, it works as a useful reference system for the city planners to take sustainability into consideration and fill in potential green service gaps.