

Data Collection/ Analysis Process Strategy for Landslide Prediction Research of North Huntingdon Township

As a process for the data collection & analysis, as noted in Figure 1, is similar to that for other types of research except for the methods of gathering and working with the data. For the beginning (a) we formulate research questions, (b) and conduct the literature reviews from multi sources, (c) establish criteria designs, (d) collect data(GIS, Climate, and etc.) (e) analyze data(Modeling) and (f) report findings.

Especially for Data analysis part, after (c) establish criteria for inclusion, we (d) locate summarized data collected for a various landslide research purpose, (e) and then do analyze data(Descriptive, Modeling, Evaluation), and (f) report regularly findings.

In the data gathering and recording stages of secondary data analysis, we establish size of study, research design, quality controls, and so forth, for the data to be included. Next, they search data archives for data meeting their criteria. These data, frequently subsets of larger data sets, are transported into R or Jupyter notebook or any other data analysis environment. Variables are established, often by combining other variables or by constructing new variables. Once the secondary data have been analyzed, secondary researchers compare their findings with findings of primary researchers and report their findings.

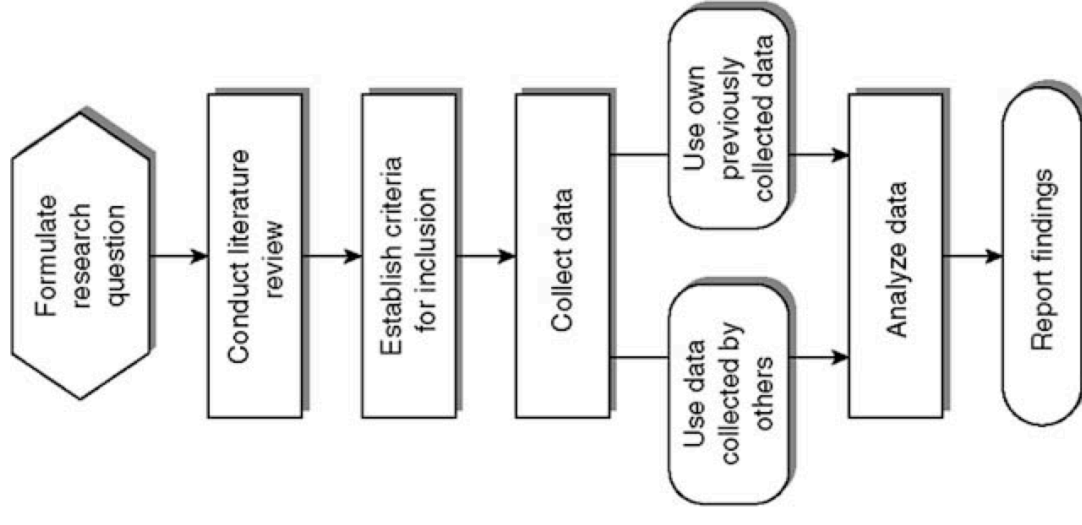


Figure1. Data Collection & Analysis Process