Spatial Informatics
Project Abstract

Project Name: Fire Mapping and Analysis

Project Team: Kshitij Kansal (201101031)
Anubhav Jaiswal (201102090)

Project Objective: Generate a fire mapping of an area and find the location where fire station should be built.

Steps: 1. Decide the area where analysis is to be performed.
2. Divide the area into smaller units. Here we are not interested in dividing area into smaller units ourselves. We are planning to take the predefined regions like in India cities are divided into wards. So we can do ward by ward analysis.
3. Develop a risk mapping of the area based on various factors.
4. Our factors will include
   • Proximity to combustible places like petrol pumps.
   • Proximity to industries using inflammable/combustible material like wood(paper/furniture) industries, paint industries.
   • Areas having history of fire accidents. These areas may not satisfy above factors but may be fire prone due to poor wiring in houses, usage of unsafe material for cooking etc.
5. After developing the risk mapping of the area, identify the areas having high risk of fire accidents.
6. Analyze the current situation of fire stations and check if they are sufficient or not. If not, identify places where these new fire stations should come up.

Data List: 1. Ward boundaries of the area.
2. Location of petrol pumps.
3. Location of industries using inflammable materials.
4. Location of current fire stations.
5. Previous fire accident records.

Outcome: Identifying fire prone sites in the area and then checking if the present fire
(tentative)   stations are enough to meet the requirement. If not, where should the new fire stations be built.