# **PROBLEM DOMAIN**

## **Background to the Problem**

Day by day world population is increasing dramatically. In the other side, world economy is growing for undeveloped and under-developing countries. Technology is another thing that has touched everyone’s life smartly. As a result, most of the population is trying to change their life status to higher level and to live in urban areas for better facilities, social values, education, healthcare, employment.

It is creating huge population density in urban areas and now-a-days it’s true for almost all the countries, consequently which is resulting in high traffic congestion in the cities. It’s making life standstill.

This is a major problem because it kills millions of millions of working hours of city dwellers collectively on the roads who are high productive people of a country. It also kills lives of emergency patients. Traffic congestion waste fuels on the road uselessly.

## **Solution to the Problem**

We are going to take technological support for this purpose. From every traffic signal, we will collect data of vehicles as moving images. Then this will be sent to the center where main system is implemented. Data will come from every signal of the city dynamically.

Now our system knows the whole traffic scenario for a very specific moment. After analyzing images, it can count vehicles. It knows how much vehicles are there between any two signals as well as for any full route. Now it is high efficiently able to handle traffic clearance for every signal because it has numerical data in its brain obtained from image analysis. So it will sent back its optimized traffic decision to the crossing points as any direction like light, automated breaker etc. Also it will find CLEAR PATH from any point to any point of the city where the vehicle will not face any traffic in its way. If any road is off for any reason, this system will adopt that.

It is impossible to deal with the problem and to cop up with the future traffic complexity manually. So this system is appropriate.

The solution we are offering is highly feasible because all things will be done by automated system. No traffic personnel are required. It just requires one time