**FUTURE ENHANCEMENT**

**RECOMMENDATION FOR FUTURE RESEARCH**

The area of emergency vehicle traffic signal priority is vast in terms of potential research Needs. Because of the difficulty in collecting detailed generalized results from field studies of deployed emergency vehicle signal priority systems, simulation analysis remains a candidate research tool for future studies. The recommendations for future research are presented here is terms of additional emergency vehicle traffic signal priority scenarios and traffic simulation needs.

There are other possible emergency vehicle traffic signal priority characteristics considered for analysis in this research.

* These included:

1. Multiple vehicles per pre-emption event.
2. Varying the distance from which an emergency vehicle preemption request can be received by the traffic signal controller.
3. Using Google maps and its services to provide more enhanced traffic statistics.

**ARDUINO MICROCONTROLLER**:   
The following enhancements can be made using it :

1. It can be used for other purposes like showing the statistics of traffic on LED board.
2. Automatic closing and opening of railway gates .
3. Dynamic display of bus timing and its arrivals.

**TRAFFIC SIMULATION NEED :**

In order to better analyze emergency vehicle traffic signal priority, improvements to the current traffic simulation software is needed. These improvements include the ability to better simulate the operation of an emergency vehicle within a traffic stream (e.g., emergency vehicle maneuvers and other vehicle reactionary maneuvers) and the ability to better simulate the traffic signal control systems.

In order to improve the emergency vehicle operations within the simulation models, it may be necessary to conduct some field studies to ascertain the range of typical emergency vehicle maneuvers and the range of other vehicles driver reactions to these maneuvers. This would be a major undertaking requiring the development of models, field data collection, and the incorporation of these models into existing traffic simulation software packages.

The improvement in the microcontroller will effect to a better advancement in the traffic and will help to greater safety.In general, there is a need to make modeling of advanced traffic signal control logic much easier for the typical user of traffic simulation software.