

CHAPTER V

CONCLUSIONS AND RECOMMENDATION

It is known that the main purpose of this research is to find the optimal timing signal in order to control the maximum queues occurred in both directions of the link between intersections through the desired period, within the street capacity. From the results show that to set the proportion of phases in timing signal is very important, for improper setting will lead to the traffic jam condition since the queue may be over the capacity of the street. To adjust the timing signal for optimizing the queues between intersections can be started at any value of timing cycle which has been discussed in the result. If the optimal solution of phase ratio is obtained then the timing cycle is increased or decreased in order to make the queues exist the desired limit of maximum capacity of the street. The main factors which make the queue over the capacity of the street are the probability of vehicles to distribute into the specific lane and the number of lanes on the way. For the case of capacity, it may be improved by the traffic construction techniques in increasing the capacity, but for the probability of lane-distribution, it is impossible to improve for it is uncontrollable. In the research, the standard distribution of the flow has been used to generate the arrivals, but in practical work the flow pattern may be any kind of distribution, however, the Empirical discrete distribution can be applicable for this. Since the computer programming does not give the final result of the optimal timing by itself, for it has to be analyzed again before getting the optimal solution, it is recommended that the complete computer programming with the optimal solution

as a final result should be developed. Indeed, not only the queues between two intersections can be optimized but also the queues for more intersections can be optimized too. Some ideas from this research can be used to apply for more intersections, because its' basic concepts are the same, the difficult is only that the more complicate logics have to be used in developing the computer programming.



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย