

## CHAPTER VII

### RECOMMENDATION



#### 7.1 Recommendation for Model Applicability

The Highway Design and Maintenance Standards Model (HDM) is an efficient tool for senior administrators, highway engineers and transport planners in studying an economic analysis of road transport planning. After the time spent for set the program in the computer, the model enables many different assumptions to be tested very quickly. It is likely that the total time spent is less by using the model and certainly it gives the opportunity to explore a much wider range of construction, maintenance, traffic and discount rate assumptions than would be feasible in a non-computerized analysis.

#### 7.2 Recommendation for subsequent study

The subsequent study should be made of the Model parameters to ensure that they are in the range appropriate for Thailand. Some of parameters used in study model based on Kenya research such as initial surface conditions, vehicle age distributions. To investigate these parameters, field work must be carried out.

For construction cost submodel, the present model can not calculate the construction cost because it does not provide subprogram to analyse the cost and also does not provide subprogram for calculation of regional

income, value added benefit. The subsequent study should be carried out to provided these subprograms for analysis propose because it will gives the exact value for economic analysis and evalvation. The construction cost calculation subprogram are available from several economic analysis models.

Thus, further useful research could be done by one who has highway sense and is competent with FORTRAN IV, as the model is quite complicated.

### 7.3 Recommendation for Highway Economic Analyst

In the feasibility study for highway improvement, the following processes are necessary to obtain exact solutions.

a) After completed in route alternative formulation, prior to study of the best route alternative, the selection of most economic improvement type must be done because each route alternative has different conditions such as topography, environment, climate, initial road condition, road geometric, regional development, traffic.

b) In the process of selection of most economical improvement type the analyst must apply different maintenance policies and maintenance standards to search for the most appropriate maintenance policy and maintenance standards for any improvement type. Then the comparison to determine most economic improvement type can be immediately done.

c) After obtaining the most economical improvement type for each route, the economic analysis or feasibility study for route alternatives shall be carried out.