

CHAPTER 1 Introduction

- Project Objectives
 - Scope of Work
 - Project Duration
-

Office of Transportation and Traffic Policy and Planning (OTP) is a center in stipulating nation traffic and transportation policies, including land, water, and air transportations. OTP is also coordinating with other institutes or organizations to manage policies, plans, projects, and measures in the most effective way.

OTP has been continually developing the information system and transportation & traffic models to be used as a tool assisting the management and decision related to transportation & traffic policies as well as supporting the development of transportation and logistics.

However, the most important issue is to make sure that the information system and transportation & traffic models have been continually implemented to the most current available data and ready to be used whenever it is needed. This is a primary component in stipulating effective transportation and traffic policies, plans, projects, or measures. On the other hand, currently, traffic and transportation models have to be continually developed to respond short term implementation plans in order to mitigate traffic problems in responding to government policies and OTP assignments.

1.1 Project Objectives

OTP had hired the consultant for the Transport Data and Model Center (TDMC) project. The project has the following objectives:

- 1.1.1 To improve and maintain the transportation & traffic database and information system which is necessary for planning and implementing the transportation projects in any provinces and travel modes (land, water, and air transportation). However the goal of this objective is aimed at making the database available at any times and ready to support decision makings in transportation and traffic planning processes.
- 1.1.2 To improve and maintain the OTP's transportation & traffic models for National model, Bangkok Metropolitan Region model, Local Area Model and Regional City

model to be used as a tool for planning, managing transportation & traffic projects and to support the development of Transport Logistics for the Nation.

- 1.1.3 To encourage the application of transportation & traffic information system and model for stipulating policies, plans, projects, or measures. This objective also includes OTP human resource capacity strengthening for using these information systems and models.

1.2 Scope of Work

In order to implement the project correctly according to the objectives, the scope of work is very important, i.e.

- 1.2.1 Improvement and maintenance of transportation & traffic database and information system
- (1) Study and revise the steps of the development of transportation & traffic database and information system in every data group that was designed by OTP and then recommend and create the suitable database system.
 - (2) Improve and maintain the database and information system according to the condition at least 10 patterns, including the document distribution in the electronic book format. The consultant should provide the recent data which can be applied all the time.
 - (3) Develop and integrate the transportation & traffic database, transportation network, and related data by applying GPS, GIS and MIS in order to support the strategic plan and decision
 - (4) Provide the computer and necessary equipment as follows:
 - (4.1) 3 Personal Computers
 - (4.2) 1 Notebook
 - (4.3) 1 Laser Printer (B/W)

(4.4) 1 MP3 (capacity at least 4 GB)

(4.5) 1 External Hard disk (capacity at least 40 GB)

(4.6) 1 External DVD Writer

1.2.2 Improvement and maintenance of transportation & traffic model

- (1) Study and revise the transportation & traffic model in each level of OTP
- (2) Improve the National Model (NAM) for the base year 2007 and future year 2012, 2017, 2022, 2027, and 2032 by applying Cube Cargo and surveying the additional data as well as improving the road network.
- (3) Improve the Extended Bangkok Urban Model (eBUM) for AM Peak and PM Peak as well as daily trip in the base year 2007 and future year 2012, 2017, 2022, 2027, and 2032 by surveying the additional data in order to adjust the model according to the Module Voyager structure reliably. Moreover, transportation network should be improved by utilizing satellite image to make the model more realistic and include the connection to the real time system of OTP.
- (4) Develop the Local Area Model (LAM) of the major regional cities (Phase I includes Chiang Mai and Songkhla). Each province should have at least 15 major intersections with the program that can be linked with NAM and eBUM according to (2) and (3) in order to analyze the local area and present to public appropriately. Moreover, transportation network should be improved by utilizing satellite image to make the more model realistic.
- (5) Develop the transportation & traffic model linking between NAM and eBUM according to (2) and (3) as the method to develop the transportation system of Thailand.

1.2.3 Application of transportation & traffic information system and Human resource development

- (1) Consultant should apply the transportation & traffic information system to analyze and appraise the plans, projects, transportation & traffic measures, and related impacts at least 5 issues as the In-house Consultant of OTP.
- (2) Consultant should provide the technical and academic recommendation, including consulting and/or meeting as the OPT assigns during the project duration.
- (3) Consultant should arrange the seminar for understanding of the transportation & traffic information system to OTP and related agencies at least 2 times.
- (4) Consultant should arrange the GIS and MIS technical training for 10 OTP officials in the standard and approved institute.
- (5) Consultant should provide the transport planning model Technical Tour at least 10 OTP officials in the successful country.

1.3 Project Duration

2007 annual budget, time duration is 10 months.