









HDM-4 INTRODUCTION AT DEPARTMENT OF ROADS AND ITS IMPLEMENTATION

					<h2 style="text-align: center;">H D M - 4</h2> <p style="text-align: center;">HIGHWAY DEVELOPMENT & MANAGEMENT</p> <p style="text-align: center;">volumes one - five</p> <h3 style="text-align: center;">The Highway Development and Management Series</h3> <div style="text-align: right;">   </div>
Volume one Overview of HDM-4 THE HIGHWAY DEVELOPMENT AND MANAGEMENT SERIES	Volume two Applications Guide THE HIGHWAY DEVELOPMENT AND MANAGEMENT SERIES	Volume three Software User Guide THE HIGHWAY DEVELOPMENT AND MANAGEMENT SERIES	Volume four Analytical Framework and Model Descriptions THE HIGHWAY DEVELOPMENT AND MANAGEMENT SERIES	Volume five A Guide to Calibration and Adaptation THE HIGHWAY DEVELOPMENT AND MANAGEMENT SERIES	
ENGLISH	ENGLISH	ENGLISH	ENGLISH	ENGLISH	
ESPAÑOL					
FRANÇAIS					
РУССКИЙ					
					

IMPLEMENTATION STAGES :

- Department of Roads (DOR) places priority on introduction of HDM-4 to planning and management system of Mongolian road sector and application of it for the purpose of developing road network and maintenance management and took step by step measures on policy level.

IMPLEMENTATION STAGES :

1. A DOR official was involved in international training program on HDM-4 in Malaysia in 2000. It was a significant step for introduction of HDM-4 to DOR and development of trainings and dissemination of the software.

2. An additional program on “HDM-4 and Road Sector Management” was implemented under “Policy Support” project funded by Technical Assistance of the Asian Development Bank.

3. Training course and workshop on HDM-4 for Asia and Pacific sponsored by Asian Development Bank were organized in Mongolia.

“HDM-4 AND ROAD SECTOR MANAGEMENT” PROJECT

- Training course and workshop for dissemination of HDM-4 were organized by Planning and Research Division, DOR, jointly with Mr. Burak, TERA Senior Associate, under the “Policy Support” project .
- Totally 12 workshops involving 126 high officials and engineers were conducted under the project .
- Topics covered under the workshops :
HDM-4 software and its application; data collection; input of data; analysis in strategy, program and project levels and application of outputs of the analysis in management

“HDM-4 AND ROAD SECTOR MANAGEMENT” PROJECT

- One-month intensive training course was organized for officials of Planning and Research Division, Road Maintenance Management and Operation Division and Central Laboratory for Materials Testing of the Department of Roads.

Result of the training:

Officials input total state road network database to the software and had practice to make strategy level analysis on the road network.

- At the completion of the training, the officials reported the strategy level analysis and discussed about policy and planning for road network improvement and return of the investment.

“HDM-4 AND ROAD SECTOR MANAGEMENT” PROJECT

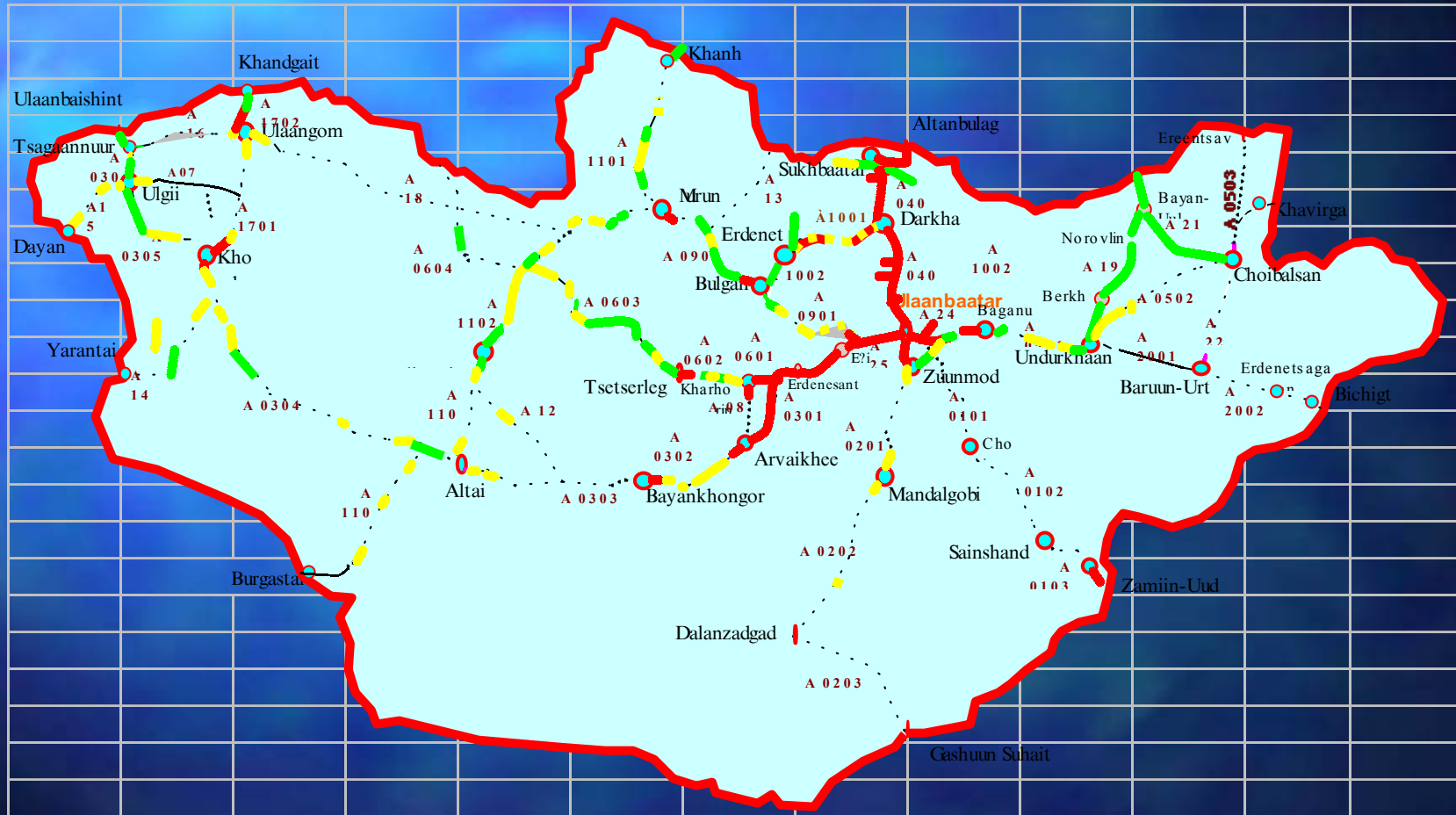
- At the completion of the intensive training course on HDM-4, Transport and Economic Research Association (TERA), which implemented the “Policy Support” project, provided a Certificate of Accomplishment as a Domestic Expert to a participant and Certificates of Accomplishment of the Intensive training to 6 participants.

HDM-4 DATABASE

The following data were input to HDM-4 software on the basis of state road inventory data (data on 11063 km road) and road database was updated.

- geometric characteristics,
- traffic pattern,
- vehicle operation cost,
- road maintenance standard.

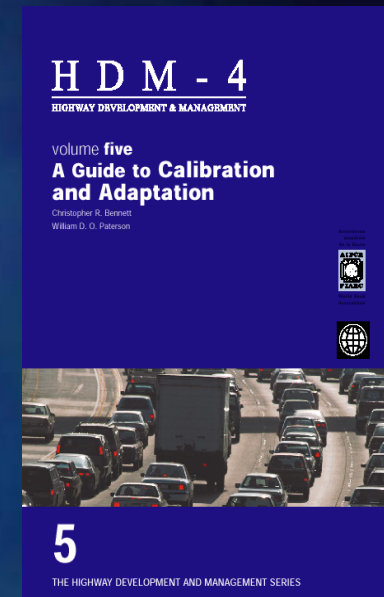
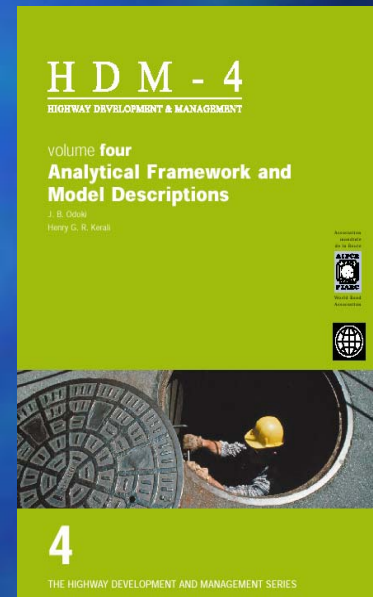
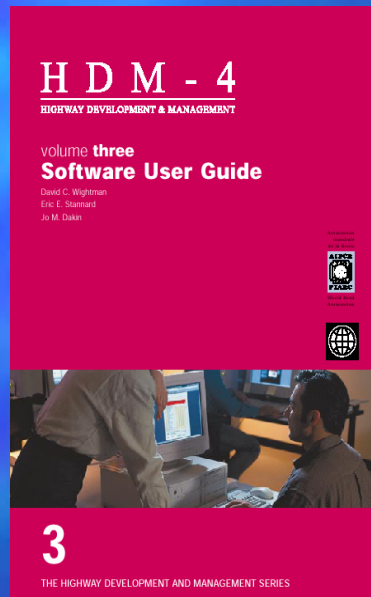
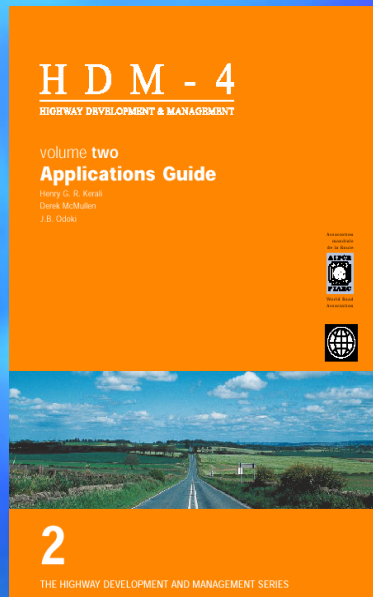
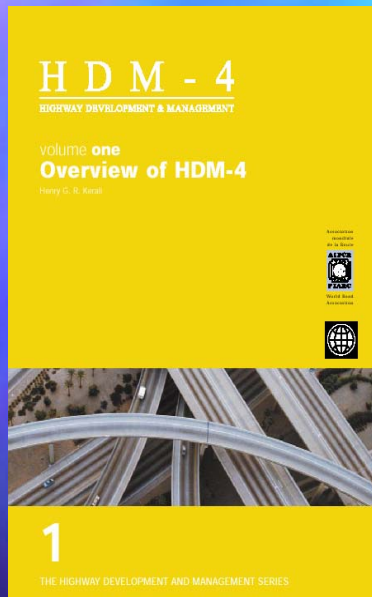
HDM-4 DATABASE



INTRODUCTION OF ADVANCED TECHNOLOGY

- Planning and Research Division, DOR, arranged activities associated with translation of 5 volumes of HDM-4 Manual, the primary training material for HDM-4 training and dissemination, into Mongolian.

TRANSLATION OF HDM-4 MANUALS



TRAINING AND WORKSHOP FOR ASIA AND PACIFIC ORGANIZED UNDER ADB FUND

The training course and workshop were organized in Ulaanbaatar in September 2001.

Organizers of the training and workshop:

- Planning and Research Division, DOR,
- Transport Research Laboratory (TRL), UK,
- Australian Transport Research Institute.

TRAINING AND WORKSHOP FOR ASIA AND PACIFIC ORGANIZED UNDER ADB FUND

The training and workshop were organized under the following 2 stages:

- One-week intensive training program for engineers,
- One-day workshop on “Application of HDM-4 As a Tool for Road Investment Evaluation and Management“ for high level officials.

INTENSIVE TRAINING COURSE:

Over 20 engineers were involved in this training course, which took place at the School of Civil Engineering, Mongolian Technical University.

The training program covered:

- Study of technical models of HDM-4,
- Study of road maintenance standard and their techniques,
- Study of alternatives for conduction of analysis on the base of upgrading, improvement of roads and strengthening its capacity.

As well as, case studies for selection from alternatives for road network planning and investment were reviewed and issues on road network investment evaluation and frame of application of the outputs and reports of the software were discussed.

ONE-DAY WORKSHOP ON “USE OF HDM-4 AS A TOOL FOR ROAD INVESTMENT EVALUATION AND MANAGEMENT”

The workshop was conducted in Meeting Hall of Chinggis Hotel on 27 September, 2001.

The workshop involved about 50 officials from 15 organizations, such as Parliament members, officials from the Ministry of Infrastructure, Ministry of Finance and Economy and from other agencies.

ONE-DAY WORKSHOP ON “USE OF HDM-4 AS A TOOL FOR ROAD INVESTMENT EVALUATION AND MANAGEMENT”

Paper presenters at the workshop:

- Dr.Greg Morosiuk, Transport Research Laboratory (TRL), UK
- Mr.Tyrone Toole, Consultant, Australian Transport Research Institute,
- Mr.Ts.Adilbish, Head of Road Maintenance Management and Operation Division, DOR,
- Ms.B.Oyuntsetseg, Senior Officer, Planning and Research Division, DOR,
- Mr.J.Davaasuren, Lecturer, School of Civil Engineering, Science and Technology University

ONE-DAY WORKSHOP ON “USE OF HDM-4 AS A TOOL FOR ROAD INVESTMENT EVALUATION AND MANAGEMENT”

Topics of the papers:

- Introduction to International studies on HDM-4,
- Use of HDM-4 as a tool for road investment and management,
- Analytical framework and application of the software,
- Data inputs and processing.

ONE-DAY WORKSHOP ON “USE OF HDM-4 AS A TOOL FOR ROAD INVESTMENT EVALUATION AND MANAGEMENT”

■ Promotion on the workshop:

Activities of the workshop were promoted on Mongolian National Television and Eagle TV.

Dr.Greg Morosiuk, Transport Research Laboratory (TRL), UK and Mr.Tyrone Toole, Consultant, Australian Transport Research Institute, gave interviews on “Implementation of HDM-4 in Mongolia”.

FURTHER ACTIVITIES FOR IMPLEMENTATION OF HDM-4

- Road Maintenance Management and Operation Division is intending to carry out a road condition survey jointly with Carl Bro company, Denmark, under “Transport Development” project funded by the World Bank and database of the software will be developed.
- Planning and Research Division will carry out study on road user’s cost from road service and operation levels, and database on vehicle operation cost will be updated.