
The Manual for Monitoring and Evaluation of Performance according to the Master Plan and the Action Plan for Road Accident Reduction under the Ministry of Transport

The monitoring and evaluation of performance according to the master plan and the action plan for road accident reduction are a complex process when put in practice. This is mainly because it concerns multiple parties, and the process itself is imperative for assessing the effectiveness of efficiency of transport safety work as a whole. The aim of this manual is to provide a tool for relevant organizations to work on following up and evaluating their projects related to road accident reduction, both within and outside of the Ministry of Transport. This manual covers the importance and underlying principles, the methods and procedures, the types of data and data collecting methods, data analysis, summarizing and report writing. The content of the manual can be categorized into core operating guidelines as follows: the monitoring and evaluating processes, the monitoring and evaluating guidelines, and the monitoring and evaluating forms. The details are as follows:

1 Definitions and information concerning monitoring and evaluation as referred to in the Master Plan and the Action Plan on Road Accident Reduction under the Ministry of Transport

Monitoring

Monitoring refers to a process in which an assessment of progress in performance is conducted under the Ministry of Transport according to the master plan and the action plan on road accident reduction. This process covers the periods of time before, during and after project operation. The aims of the process are to assess whether the project is operating as planned, as well as to report any problems that may occur during the project. This can be done by sending out questionnaires or pre-designed forms on project progress for relevant organizations to fill out.

Evaluation

Evaluation means a process in which value, cost-effectiveness, practicality and success of the master and action plans on road accident reduction under the Ministry of Transport are assessed. The assessment consists of the following questions. Is the actual practice in accordance with the plans? Does the actual practice follow the goals, objectives or indicators stated in the plans? Can the evaluation results be employed to help improve or develop alternative or new guidelines for other projects in the future?

Monitoring and Evaluation

Monitoring and evaluation means the process of measuring and following up with the performance of the projects from the master and action plans on road accident reduction under the Ministry of Transport. This process covers the periods of time before, during and after the project operation, and is conducted with the aim of assessing whether the projects are conducted in accordance with the goals, objectives and indicators stated in the plans.

The Transport Safety Board (TSB)

The Transport Safety Board is a central organization in the Ministry of Transport that oversees transport safety. Its primary roles are 1) proposing policies and strategic plans, 2) establishing safety standards, 3) collecting data, in-depth analyses of accidents, and research and development, 4) improving high-risk areas. The board has the authority to manage and control internal organizations within the Ministry of Transport, and co-ordinate with and provide supervision to external organizations, both domestic and international. Therefore, it can be said that the TSB is authoritatively responsible for managing activities concerning transport safety, including provision of approval for projects, enforcement of strategic plans, data collection and evaluation.

2. The Monitoring and Evaluation Process

The monitoring and evaluating process can be divided into two important parts as follows: the monitoring of policy enforcement and the evaluation of enforcement outcomes. As regards the outcomes, the evaluation was conducted at the level of the intermediary outcomes (the implemented measures) and the level of the final outcomes (the goal of the project). The framework for monitoring and evaluation can be divided into three significant areas, including 1) goal setting for transport safety at a policy level, 2) evaluation of the project results, 3) follow-up and control. The framework is illustrated in Figure 2-1 (Thailand Development Research Institute, 2015).

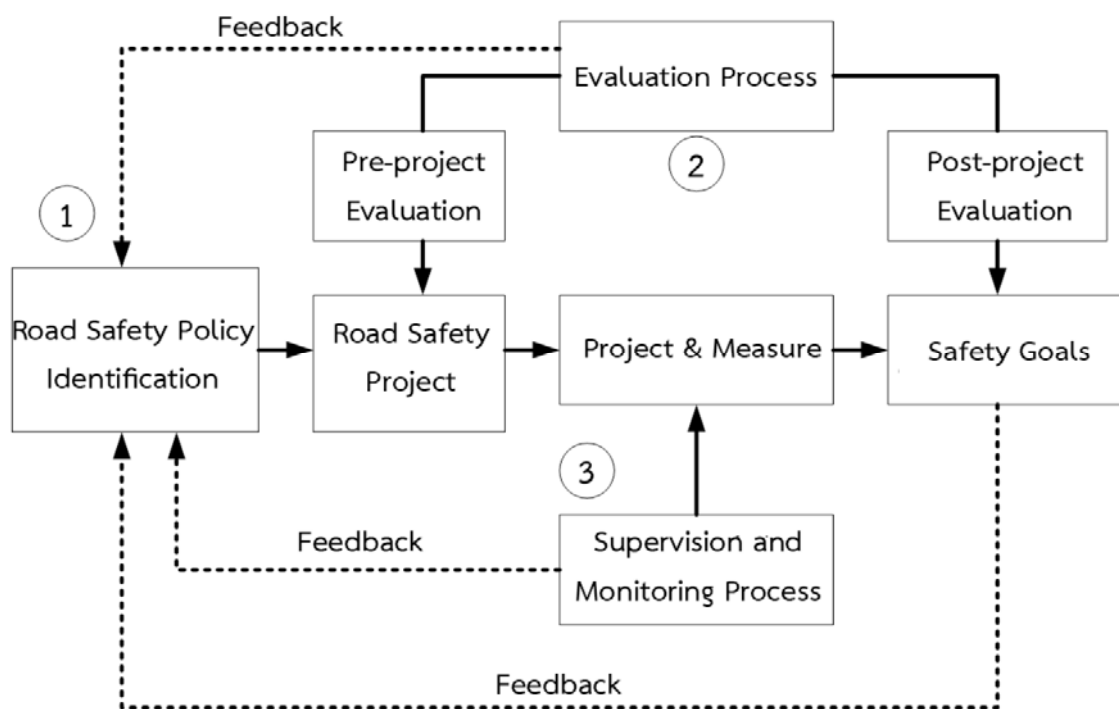


Figure 2-1 The framework for monitoring and evaluation of projects and measures concerning transport safety.

Source: Thailand Development Research Institute, 2015

Work on any transport safety project must start with goal setting in order to establish work guidelines that can be followed within the given time frame. The ultimate goal should be to reduce the number of accidents, injuries and deaths from road accidents. The strategic goals should be established in accordance with the five core strategic plans for transport safety, designed to guide policy setting to achieve road safety.

The monitoring and evaluation of projects and measures for transport safety are a process to assess the progress of the work that has been carried out following the policy and safety measures in the master and action plans for road accident reduction. The monitoring and evaluation will be conducted throughout the project, i.e. before, during and after the project, in order to ensure that the project will be carried out as planned, as well as to report any problems that may arise. This will be done by sending out questionnaires or pre-designed forms on project progress for relevant organizations to fill out. In addition, data on accidents will be collected from relevant organizations in order to create a central database for the Ministry of Transport. The work mechanism operates at two levels as follows. Firstly, a follow up is conducted every three months to assess whether each related organization has performed according to their plans. Secondly, a monthly follow up is conducted to assess whether the practice is adhering to the master and action plans. The Transport Safety Board (TSB) will act as a central body to monitor each project.

The evaluation of the projects and safety measures is a process to gauge the value, cost-effectiveness, practicality and success of the master and action plans on road accident reduction under the Ministry of Transport. The aim is to assess whether the plans have been put into practice, and whether the practice is following the set goals, objectives or indicators. The work mechanism operates at two levels: firstly, a follow up every three months to assess the performance of each related organization and secondly, an assessment of the project outcomes at the end of the project. TSB will employ a questionnaire to evaluate the performance of operational and administrative staff for each project. Then the data will be collected and analyzed in accordance to its goal and measures.

3. The steps in monitoring and evaluating performance

The monitoring and evaluation of performance according to the master plan and the action plan on road accident reduction are a complex process when put in practice. This is mainly because it concerns multiple parties. Therefore, it is important that a system that aids decision making should be created. The details are shown in Figure 3-1.

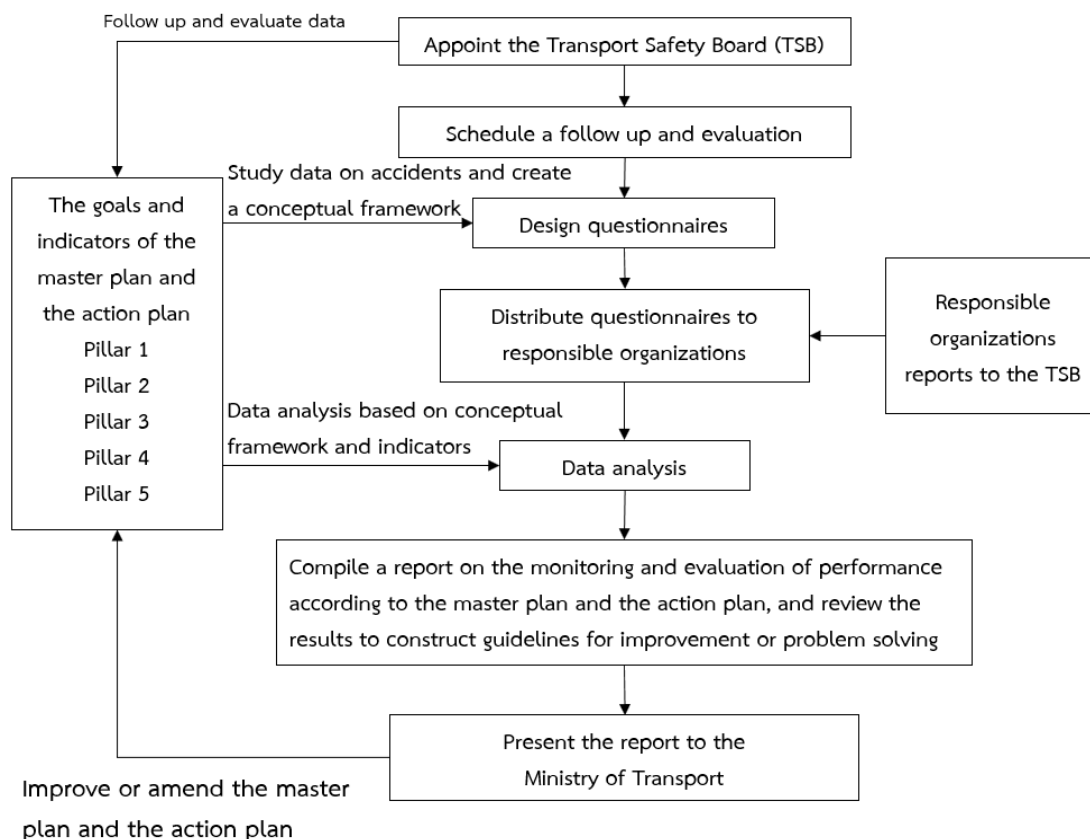


Figure 3-1 Monitoring and evaluation of performance

Source: Advisor (2017)

Step 1: The Appointment of the Transport Safety Board (TSB). The Transport Safety Board is a central organization in the Ministry of Transport that oversees transport safety. The TSB is authoritatively responsible for monitoring and evaluating safety measures and action plans, as well as managing activities concerning transport safety, including data collection and

evaluation. This also includes goal setting for monitoring and evaluation, devising questionnaires, collecting and analyzing data, and writing and presenting reports. The TSB also supervises internal organizations within the Ministry of Transport and co-ordinates with and provides supervision to external organizations whose work is related to transport safety.

Step 2: Scheduling the monitoring and evaluation. Although the Ministry of Transport master plan and the action plan on road accident reduction both cover a 3 year period and require 10 years to be fully implemented, the monitoring and evaluation still require a regular and frequent action schedule in order to tease out approaches to improve the plan each year.

Step 3: Designing the questionnaire. The questionnaire should contain important information, for example, the action plan report, the project report, the project details, the project framework, the budget, and the current status or progress of the project. The questionnaire contents should be prepared in accordance with the conceptual framework and the indicators of the master plan. Only when additional information is required in order to gain insight into another area or to gain information for project improvement or problem solving, should the questionnaire be revamped.

Step 4: Distributing the questionnaire to relevant organizations. The questionnaire should then be distributed to related organizations. The information should be filled in by both the staff members who work at the practical level and at the policy and planning level; and by staff in the central office and at a local office or in the field.

Step 5: Data analysis and report writing. The collected data will be statistically analyzed, categorized, summarized and presented in the form of tables and graphs. The data will be analyzed employing the correlation between indicators, as stated in the framework of the master plan. The tools employed in this data analysis are the Efficiency Assessment Tools (EAT) which include the Cost Benefit Analysis (CBA) and the Cost Effectiveness Analysis (CEA).

Step 6: Report writing and the search for approaches to improve the plan for the following year. The report should include important information such as the monitoring results of the project progress. The report should be able to indicate whether or not the project was conducted in accordance with the planned goals. In addition, the report should reveal problems that have occurred in order to promote problem solving. The report should also evaluate project performance so as to be a supportive document, able to assess the effectiveness, the success and the public acceptance of the plans. This information should help further the development of a more sustainable plan for the following year.

Step 7: Report presentation to the Ministry of Transport. The report will be presented to the central organization to provide an opportunity to adjust or improve the action plan to better suit the current situation through the following year and to solve any problems that have been found. In addition, any improvements can be made to the master plan in order to produce a plan that is truly suitable and beneficial.

4. Guidelines for monitoring and evaluation

The guidelines should contain important information, including the goals for transport safety to be used as indicators for project assessment and a procedure to follow up and assess transport safety. The goals for transport safety are crucial for indicating the effectiveness of the measures and the project. They can also be used as guidelines for regulating the monitoring and evaluating processes. Therefore, the goals for transport safety can be divided into two parts: the project's final goal and the goal for each measure. These goals can also be categorized based on the five pillars of the strategic plan, each of which requires a different monitoring and assessment process depending on the work of each organization in each project. These different types of work and projects are 1) a study project which will be conducted when that kind of project does not have a precedent, 2) a regular project, for which a preliminary study and plan have been put in place, and 3) the monitoring and evaluation of

the project, which will be done when the project has passed preliminary studies and been put into practice, but not yet properly or regularly assessed.

The monitoring and evaluation of the final goal are also considered the monitoring and evaluation of all the strategic goals. That final goal is to reduce the number of deaths from road accidents in the central database of the Ministry of Transport which compiles the statistics of injuries and deaths from road accidents. The development of the database is completed and used as an indicator for the master plan and the action plan for transport accident reduction as shown in Table 4-1.

Table 4-1 Guidelines for monitoring and evaluating projects and measures for transport safety

Strategy	Objectives	Final Goals	The monitoring of projects and measures for transport safety	The evaluation of projects and measures for transport safety
Strategy 1: Road safety management	To develop the Ministry of Transport management system to reduce the number of deaths from transport accidents	Reduced number of deaths from transport accidents in the central database of the Ministry of Transport	1. The TSB develops the Ministry of Transport database to collect data from within and outside the Ministry of Transport as follows: - Data on accidents, injuries and deaths throughout the country - Data on accidents, injuries and deaths within the work scope of the Ministry of Transport - Categorize data on accidents based on important factors such as the types of vehicles, risky behaviors, death from delayed medical help, and compensation or remedies for accident victims or affected people 2. Manage and monitor the work of each organization to determine how they can reduce the number of deaths	Evaluate the data on fatalities from the central database every 3 months, assess the results, write a report, and devise guidelines for reducing deaths in order to improve the action plan for the following year
Strategy 2: Safer roads and mobility	To develop roads that are safer to improve road safety	Reduced number of deaths in the cases covered by the work scope of the Ministry of Transport		Evaluate the data on the number of fatalities in the cases covered by the work scope of the Ministry of Transport every three months, then assess the results, write a report, and devise guidelines for reducing deaths in order to improve the action plan for the following year
Strategy 3: Safer vehicles	To develop vehicle safety to meet international standards	Reduce number of fatalities in cases involving high-risk vehicles (motorcycles, public transport and pick-up trucks)		Evaluate the data on the number of deaths in the cases involving high-risk vehicles every three months, then assess the results, write a report, and devise guidelines for reducing deaths in order to improve the action plan for the following year

Table 4-1 Guidelines for monitoring and evaluating projects and measures for transport safety (Cont.)

Strategy	Objectives	Final Goals	The monitoring of projects and measures for transport safety	The evaluation of projects and measures for transport safety
Strategy 4: Safer road users	To develop a culture of safety and reduce road users' risky behaviors	Reduced number of fatalities in the cases with high-risk behaviors (exceeding the speed limit, not wearing a helmet, not wearing a seatbelt, driving a vehicle that is not in good condition, misusing vehicles)		Evaluate the data on the number of deaths in cases with high-risk behaviors every three months, then assess the results, write a report and devise guidelines for reducing deaths in order to improve the action plan for the following year
Strategy 5: Post-crash Response	To improve the land transport system in order to facilitate and increase the efficiency of emergency help for road accidents	<ul style="list-style-type: none"> Reduced numbers of deaths due to obstructions to emergency medical service (unable to access the accident site, the delay in patient transfer or accidents while transferring patients) Reduced numbers of deaths due to a lack of or inappropriate compensation or remedies 		Evaluate the data every three months on the number of fatalities from obstructions to emergency medical service and cases with a lack of or inappropriate compensation or remedies, then assess the results, write a report and devise guidelines for reductions in the number of deaths in order to improve the action plan for the following year

Regarding the five pillars of the strategic plan for transport safety, the monitoring and evaluation of performance are conducted in the following areas. Strategy 1 is related to the management system for transport safety. Strategy 2 stands in the area of the development of safer roads and a safer traffic system. Strategy 3 covers safer vehicles. Strategy 4 concerns safer road users, and Strategy 5 is in the area of responses after accidents. The main roles of the TSB in monitoring and evaluating the performance regarding these strategies are as follows:

1) The TSB will follow up and monitor the work of all internal organizations within the Ministry of Transport, and collect data on accidents from all of the organizations for the central database. 2) The TSB will evaluate the overall picture of the projects by looking into the measures put in place at a national level. For example, a reduction in the number of fatalities from accidents, the work of relevant internal organizations, and the work of regional or local organizations. In addition, several measures from the master plan and the action plan to support a reduction in transport accidents will be enforced and put into action. Therefore, the TSB will also implement several secondary or subordinate monitoring and evaluation guidelines, which still adhere to the main monitoring and evaluation guidelines, as defined by the Ministry of Transport. Altogether, this should provide an overall picture of all the projects regarding project details, outcomes, cost-effectiveness, level of satisfaction, and the future sustainability of the projects.