

Shifting to "Outcome-Based"  
Public Management of Road Administration  
—From Theory to Practice —

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Advisory Committee for Public Management of Road Administration



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## INTRODUCTION

The Ministry of Land, Infrastructure and Transport in Japan consulted the Council for Social Infrastructure Development on how road policy should be in the face of new issues, and in August 2002 the Council reported in its interim report, which was titled "*It's time to change*".

The report stated that a certain extent of stock has been constructed in terms of quantity as a result of continuous and steady construction in the post-war period, and that the uniform quantitative development system of the past was no longer necessarily the best system for all regions in the matured society of the future.

On top of this, the report pointed that issues such as chronic congestion and highest number of accidents on record still remain, and that it is necessary to identify problems such as the gap between people's expectations and the outcomes of the infrastructure. And the report suggested that it is necessary to shift to a user-oriented road administration which emphasizing the outcomes of road services.

In light of all of this, this proposal suggests required conditions to realize brand-new user-oriented and outcome-based road administration, mainly from the viewpoint of "Public Management".

# 1. BACKGROUND OF THE PROPOSAL

## Trends Toward Outcome-Based Administration

It has long been a common criticism that the inflation of an administration decreases the efficiency and generates the lack of communication with citizens. Such opinion has been recognized as an issue in many countries, including our country, and those countries have been tried to resolve this issue in order to improve the efficiency.

To achieve this, some countries have begun a series of administrative reforms called New Public Management (NPM) since the 1980s, which applies the methods used in the private sector. For example, the US and the UK have introduced such management system throughout the government including road administration. With those systems, they set policy goals using indicators, which express outcomes of their programs, and the performances of those programs are analyzed and evaluated annually using the indicators. After that, the results of the evaluations should be reflected in future policies and programs.

In our country, the “Government Policy Evaluation Act” has been enforced since 2002 driving the shift to an outcome-based administration. Also, under the “Fundamental Policies 2002 on Economic and Financial Management and Structural Reform”(passed by Cabinet on June 25<sup>th</sup> 2002), public works in particular are being called upon to transform into an outcome-based administration whereby the “emphasis of the strategic plans should shift from volume of projects to achievements of them.”

The Ministry of Land, Infrastructure and Transport has indicated in its “Annual Report on Policy Evaluation of the Ministry for Land, Infrastructure and Transport, Fiscal Year 2001”(published June 2002) that a shift to an outcome based administration should be promoted “in tandem with budgets, personnel affairs, or other internal management reforms” executed by each department and bureau.



### **Present Situation of the Road**

The road is an important infrastructure that supports the flow of people and goods, which is the basis of economic and social activities.

Also, the roads are an integral part of the region, and they are intimately linked to everyday life of taxpayers, whose houses stand, on the other hand, beside the roads.

However, there is persistent distrust in the efficiency road administration associated with lack of transparency in the process of choosing projects. Therefore, it is one of the most urgent tasks to dispel the distrust by changing into a highly transparent, effective and efficient administration that meets the needs of the citizens and attaches importance to the outcomes.

### **Efforts of Road Administration until now**

In order for projects to be executed more effectively and efficiently in road administration, an appraisal system for individual projects mainly using cost-benefit analysis has been implemented since 1997, when it was applied to starting projects.

Furthermore, in order to ensure transparency and impartiality to gain the public's understanding and cooperation, public involvement system has been introduced during conceptualization, planning, construction and maintenance.

Also, in "The 5-Year Road Improvement and Management Program", outcome-based targets are being set using indicators along with the scheduled quantity of projects, such as total budget or total extension of highways. In addition to this, transportation volume, travel speed or other essential data for measuring outcomes are also being actively collected.

### **Importance of Outcome-Based Road administration**

The road administration should put outcome-based public management into practice utilizing its accumulated know-how, in consideration of the current condition of the roads. To take the initiative in the outcome-based public management, the new approach should be started from FY2003 in the road administration.

## **2. THREE KEYS FOR OUTCOME-BASED ROAD ADMINISTRATION**

To construct outcome-based and user-oriented public management system, and to change itself into a more transparent, effective, and efficient administration, the road administration should continuously put effective management into practice, in addition to making theory. Furthermore, in order to persuade people to support the road administration, the activities should be conducted with coordination among various related actors outside the central government.

Based on three key concepts below, this proposal puts forward five main strategies to achieve the above goal, which are stated in the next chapter. The figure on the next page represents the summary of these concepts.

### **(1) Annual Cycle of Management**

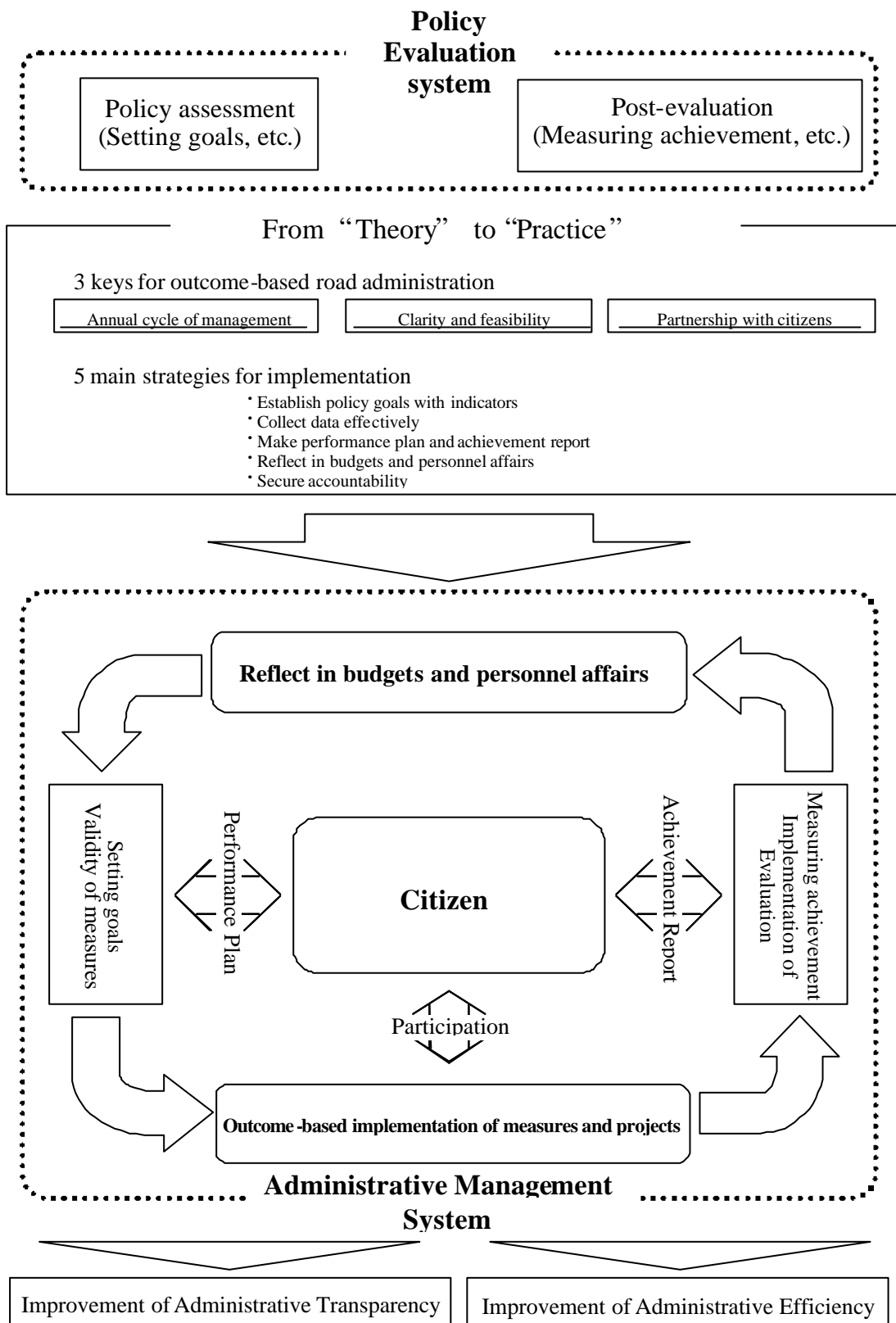
For sustainable management system, annual cycle of management is necessary. To achieve this, based on master strategic plans, annual plans with annual numerical targets must be formulated, and the degree of achievement has to be evaluated in order to reflect them in future administration.

### **(2) Clarity and Feasibility**

For practical management system, the targets are set from the administrative viewpoint to allow these to be reflected in the administration's budgets and personnel affairs, while there is a need for the targets to be easy to understand and to meet the needs of road users.

### **(3) Partnership with Citizens**

For effective management system, the partnership with citizens is important because there are limitations of administration. To achieve this, it is important to improve transparency by disclosing background data in addition to setting targets in advance and evaluating the results afterwards.



**Figure : 3 keys and 5 main strategies for outcome -based road administration**

### **3. FIVE MAIN STRATEGIES FOR IMPLEMENTATION**

#### **(1) Establish Policy Goals with Indicators**

##### **i) Setting policy goals**

For outcome-based public management, it is necessary to define the mission of the road administration with policy goals to achieve this. Extensive policy goals, which affect other departments, bureaus or administrative bodies, should also be actively adopted, such as the creation of a barrier-free environment and transportation safety.

##### **ii) Setting numerical targets and clarify the validity of measures**

In addition to the above, the indicators that quantitatively express the road administration's outcome for each policy goal (outcome indicator) must be set from the viewpoint of the public, along with numerical targets for each year. It is also important to clarify the validity of programs and projects, which are designed as the measures to achieve the numerical targets.

##### **iii) Setting hierarchical indicators systematically**

In order to carry out practical public management by expanding the outcome-based philosophy to the operations level and, various class of indicators must be systematically selected. The first group of indicators is those that are easy to understand and reflect life's realities (final outcome indicator). The second one is a group of indicators, which express the progress of the measures for achieving the targets (intermediate outcome indicator). And the third group contains indicators that express the quantity of projects (output indicator).

Also, targets should be set for each region, department and bureau in order to clarify their respective responsibilities regarding these indicators if necessary.

For example, in the case of congestion, it is necessary to systematically select intermediate outcome indicators such as reduction of congestion causing road works; indicators which express the quantity of public works such as the locations to implement traffic congestion alleviation measures; as well as the easily understandable loss time indicator, and to set the numerical target for each region, department and bureau.

**(2) Collect Data Effectively**

**i) Constructing data collection system**

For technically rational management system as constantly conscious of outcomes, a system for gathering data, at least once a year, is necessary to help checking the outcomes annually. To support this, research and development should be conducted on the methods to collect and analyze more accurate data systematically at a lower cost, by utilizing information technology or other new technologies.

**ii) Collecting monthly data**

Furthermore, for adaptable and flexible management system, it is vital to collect the latest indicator data and related information, such as monthly data, in addition to the annual ones. Basic road administration data such as transportation volume and travel speed should be gathered, in principle, every month if cost allows.

**iii) Disclosing data**

To show the accuracy of the obtained results, related information should be disclosed. To be more precise, the list of background data of each indicator, collected raw data and results of analyses should be published along with indicator figures themselves.

### **(3) Make Performance Plan and Achievement Report**

#### **i) Formulating annual performance plan**

In order to establish an outcome-based management cycle, a “performance plan” should be formulated every year, which outlines numerical targets for indicators. In addition to the numerical targets, the validity of programs and projects, which are designed as the measures to achieve the numerical targets, should be included in the performance plan. Also, for practical management system, numerical targets and validity of programs and projects should be clarified for each department and bureau of the ministry or region.

#### **ii) Reflecting achievement levels**

In order to establish annual cycle of management, it is necessary to understand and evaluate the degree of achievements for indicators as well as to set numerical targets. In the evaluation process, the validity of programs and projects should be verified, in addition to checking if the targeted results are being properly and efficiently achieved.

On top of this, it is important to reflect the evaluation results in future programs and projects to improve the administration process itself.

In addition to annual evaluation, outcomes should be constantly monitored, and the results of analyses should be reflected in the programs being conducted whenever possible.

#### **iii) Constructing annual cycle of management in region**

To make the management system respond to geographical dimensions or local needs, and also to establish outcome-based philosophy in the local agencies, it is important to build a framework of formulating the performance plan in region, in order to make the level of achievement understood, evaluated, and reflected in the subsequent programs and projects. When doing this, the coordination with other administrative organizations, such as regional public bodies, should be concerned.

By doing this, the knowledge gained through these regional activities can be fed back to the national level, and the creation of such a two-way administrative management system is important.

**(4) Reflect in Budgets and Personnel Affairs**

**i) Constructing system to reflect outcomes**

The budgets should be worth the numerical targets.

In order to do this, objective and comprehensive decisions should be made considering the relationship between the targets and measures and the achievements in the past, as well as the project environment. Although it is not possible to set the budget based on the targets and degree of achievement automatically based on all of the critical factors quantitatively, they should nonetheless be treated as valuable material in making a comprehensive decision when drawing up the budget.

Also, the budget operation so called “performance based budget”, which assigns a budget to the expected result, should be actively adopted.

Additionally, it is necessary to establish outcome-based philosophy to reform internal management, such as organizational issues, personnel affairs, and so on.

**ii) Introducing benchmarking**

It is necessary to build a framework so that the departments and bureaus can autonomously recognize problems in their operations and solve them on their own otherwise they would wait instructions from the above or from the outside parties.

For this, it is necessary to introduce a benchmarking system which uses the competition principle where each department and bureau are informed of their achievement so that they can gauge their position relative to the other departments and bureaus. For example, a department or bureau with low performance level shall be given an incentive itself to improve under such situation.

**(5) Secure Accountability**

**i) Ensuring reliability of evaluation**

In order for the outcome-based philosophy to be firmly established, it is necessary for the whole organization to have “high aspirations” emphasizing outcomes. For this, while the evaluation should be done primarily through self-assessment by each department, it should be recognized that there are limitations of such self-assessments, in order to ensure the validity of evaluation results.

For this reason, the organization in charge of evaluation should carry out secondary checks on the measurement methods and evaluation results.

Furthermore, to enable the evaluations to be checked from the public’s viewpoint, the performance plan and the degree of achievement should be officially published as an annual “Performance Plan” and “Achievement Report” which reflect actual societal experiences and are easy to understand. These should be made available to the public, together with the relevant data.

**ii) Securing accountability**

It is important to note that the act of making numerical targets and degree of achievement publicly available is not simply a disclosure of information but a valuable process in a dialogue-based administration in that a “promise” is made to the public and the result is properly evaluated.

Also, in order for the administration to be in tune with actual societal experiences, the participation of various related actors should be encouraged and their input should be reflected in the policy goals and indicators.

**iii) Creating partnership with citizens**

Because the road is an infrastructure, which is closely linked to the lives of every citizen, it is important to recognize that there are issues cannot be resolved through a purely administrative approach among road related issues. For example, although the public’s expectation of the administration rises, there are instances where sufficient cooperation cannot be realized between the two due to the lack of information from the latter. Thus, by disclosing numerical targets, degree of achievement and data that illustrate the current situation, the public and the administration can claim joint ownership of the problems and objectives and create a new partnership to solve them.



## 4. OTHER IMPORTANT POINTS FOR IMPLEMENTATION

### i) Communicating with citizens

Arrangements should be made for the “Performance Plan”, “Achievement Report”, etc. to be made publicly available through the Internet such as the Road Administration Investor Relations site so that the public can easily have access to the necessary information.

To create management system to be in line with actual societal experiences, it is important to conduct and publicize the results of the annual customer satisfaction survey, which is aimed to understand the views of the road users and to reflect them in the road administration.

### ii) Concerning regional needs

Regional “Performance Plan” and “Achievement Report” should provide easily understandable explanations to the region’s citizens by including specific examples or other efforts.

Also, issues specific to the region should be taken up as needed. For example, it is possible to choose the indicators that take into account of characteristics of each region.

### iii) Fitting to systems of regional governments

Regional “Performance Plan” and “Achievement Report” must give weight to the region’s autonomy and independence while at the same time maintain its consistency with the administrative assessment systems being implemented independently by regional governments.

### iv) Improving management system

To make practical management system, the road administration should begin with formulating and publicizing the Performance Plan as of 2003 onwards, rather than wait till the collection of flawless data or the formulation of a master strategic plan.

In addition to this, it is necessary to continuously review the management system according to the changes in society or those in master strategic plans, the experiences of various activities, and whether the required data are collected.

### v) Informing employees of “Outcome-Based” management

In order to make the outcome-based road administration more practical, it is necessary to reform the employees so that they become aware of the need for outcome-based road administration management through internal discussions instead of forcing a system on them. To do this, it is vital to promote the outcome-based management by each employee, utilizing training programs as well as exercises through their daily work.