Road Administration Management in Regional Level in Japan

March 2004

Performance Management Office
Road Bureau, Ministry of Land, Infrastructure and Transport
1. Promoting road administration management in regional level

Tokyo, Hokkaido, and many prefectures have worked out a succession of "performance plans" to disclose their numerical targets and details of measures and projects to be implemented to carry out immediately effective management of road administration that meets the features and needs of each region. As of today, Tokyo, Hokkaido and 29 prefectures (including seven that are preparing to release public comments) have worked out and released performance plans for road administration.

- YAMAGATA prefecture 7/31 http://www.ym-mlit.go.jp/road/outcome/
- AOMORI prefecture 7/31 http://www.thr.mlit.go.jp/aomori/gyouseki/
- IWATE prefecture 7/31 http://www.at.wakwak.com/~k_tdm/iwa/
- FUKUSHIMA prefecture 9/2 http://www.fks-wo.thr.mlit.go.jp/outcome/
- OSAKA prefecture 9/29 http://www.ok-links.jp/osaka/topics/project_osaka/
- ISHIKAWA prefecture 10/9 http://www.hrr.mlit.go.jp/kanazawa/
- WAKAYAMA prefecture 10/16 http://kkr.mlit.go.jp/kinan/
- TOKUSHIMA prefecture 10/31 http://www.skr.mlit.go.jp/road/ir/index.html
- KAGAWA prefecture 10/31 http://www.skr.mlit.go.jp/road/ir/index.html
- EHIME prefecture 10/31 http://www.skr.mlit.go.jp/road/ir/index.html
- HOKKAIDO 11/26 http://www.hkd.mlit.go.jp/
- SAITAMA prefecture 12/22 http://www.ktr.mlit.go.jp/oomiya/
- SHIZUOKA prefecture 1/28 http://www.shizukoku.go.jp/plan/
- FUKUI prefecture 2/12
- GIFU prefecture 2/19 http://www.gifukoku.go.jp/gyouseki/pdf2.html
- SHIZUOKA prefecture 3/10 http://www.shizukoku.go.jp/plan/

*Fukushima, Nagano, Tochigi, Okayama, Kumamoto and Gifu Prefectures and Hokkaido have worked out rough plans and are seeking public comments.

Other prefectures are also preparing their plans.
2. Setting up performance indicators for each region

Of the 31 prefectures, nearly 160 indicators were set up as of December 20, 2003 (as of December 20, 2003). About half of the indicators (80 indicators) are original ones for the regions concerned and different from those in nationwide performance plans.

Examples of original regional indicators:

- **Hokuriku Regional Development Bureau, Ishikawa prefecture, Japan Highway Public Corporation**
  - Performance Plan 2003 for roads in Ishikawa Pref.
  - Ratio of secured Ishikawa excursions.

- **Toyama River and National Highway Construction Office, Toyama Prefecture**
  - Performance Plan 2003 for roads in Toyama Pref.
  - Percentage of sidewalks with sufficient room in city area.

- **Akita Prefecture Trunk Road Council**
  - Performance Plan 2003 for roads in Akita Pref.
  - Time loss (amount) due to reduction of driving services during winter.

- **Nagano Prefecture Trunk Road Council**
  - Performance Plan 2003 for roads in Nagano Pref.
  - Ratio of elimination of dangerous locations for disaster prevention.

- **Fukushima Prefecture Trunk Road Council**
  - Performance Plan 2003 for roads in Fukushima Pref.
  - Time required between seven areas and the city center.

- **Hokuriku Regional Development Bureau, Niigata Prefecture, Japan Highway Public Corporation**
  - Performance Plan 2003 for roads in Niigata Pref.
  - Ratio of safe areas for passing (automobiles and pedestrians).

- **Aomori Prefecture Trunk Road Council**
  - Performance Plan 2003 for roads in Aomori Pref.
  - Ratio of snow removal in school zones during winter.

- **Yamagata Prefecture Trunk Road Council**
  - Performance Plan 2003 for roads in Yamagata Pref.
  - Ratio of sections where driving speed is reduced during winter.
Relaxing and Spacious Yamagata
To a beautiful Yamagata  To an open Yamagata
To a plentiful Yamagata

Road improvement to support new exchanges and tie-ups
Road improvement for comfortable lives
Improvement of safe and secure roads
Road improvement that suits the characteristics of Yamagata
Improvement of a road framework
Building of a network to unify the prefecture
Roads that create a comfortable living space
Roads that are safe, comfortable, easy to use for living
Roads that suit the attractive regional geography
Roads that are resilient to disasters
Promotion of traffic safety measures
Ensuring safe and secure roads in winter
Road improvement to make Yamagata attractive
Promoting flexible measures for effective and profitable usage

10 Points : Basic Direction of Road Policy
Performance Plan 2003 for roads in Yamagata Pref.
Example of “Performance Plan” in regional level

‡T ‡U
‡V ‡W
‡@ ‡A
‡B ‡C
‡D ‡E
‡F ‡G
‡H ‡I
Outcome goals for Yamagata Prefecture

Main projects to be implemented to achieve goals (sections scheduled for FY2003)

National Road 7: Mikawabypass
National Road 7: Modification of Oomiya intersection
National Road 13: Elevation of Matsuoka intersection
National Road 112: Modification of Wago intersection
National Road 112: Teppomachi underground pedestrian crossing
National Road 112: Kamozakabypass
National Road 112: Tsuruoka district power line utility tunnel
National Road 112: Hinodesidwalk
National Road 113: Akayubypass (a section)
National Road 286: Widening at Teppomachi
National Road 345: Modification of Izumichointersection
National Road 458: Hasedobypass
Major Regional Road: Yamagata Kaminoyama route (Kaminoyama section)
Major Regional Road: Yonezawa Takahata route (Takei section)
Major Regional Road: Mogami kishu route (Mukoma section)
Ordinary Prefectural Road: Higashinuma Naganuma Amarum route (Aoyama section)
Major Regional Road: Kandakawa route (Muko section)
Urban Planning Road: Ishigakishio route (Aiso section)

NOTE: Some require a certain period monitoring before the effect of the measure and project becomes apparent and the degree of achievement in relation to the numerical target cannot be verified and evaluated at the beginning of the following year.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Current Indicator Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Loss due to Congestion</td>
<td>2.8% share</td>
</tr>
<tr>
<td>Ratio of Sections with Lower Driving Speed in Winter</td>
<td>39.0% (2002)</td>
</tr>
<tr>
<td>Ratio of Roads Designed for Winter Safety</td>
<td>10.0% (1999)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target indicator value set by taking the development of motorways and introduction of 30% discount coupon tickets for expressways into consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0% share</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reason for Setting Indicator Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Loss due to Congestion</td>
</tr>
<tr>
<td>Ratio of Death &amp; Injury Accidents and Percentage of Deaths</td>
</tr>
<tr>
<td>Percentage of deaths</td>
</tr>
<tr>
<td>Percentage of deaths</td>
</tr>
<tr>
<td>Death &amp; injury accidents</td>
</tr>
</tbody>
</table>

Indicator Current Indicator Value
Target is to reduce of about 4hr/person in 5 year's time (2007).
Target achievement that's higher than the annual average as it is the first year of the Key Plan for Infrastructure Development.

Aim for 11%:
- National Road 112: Kamozakabypass
- National Road 458: Hasedobypass

Aim for 38.0%:
- National Road 7: Mikawabypass
- Ordinary Prefectural Road: Higashinuma Naganuma Amarum route (Aoyama section)

Based on the New Yamagata Pref. Congestion Measures Program (draft)
Regional Road Management Workshop is:
• Annual workshop between planning division and regional road bureau (10 in total)
• Discuss strategies of road management in each region.
• Held in Feb. 2004 (the first time) : will be held in each Feb. and Jun.

Presentations from next page are examples of discussion in this workshop. (These data are not for disclosure basically.)
Overview of regional road traffic situation

全国の1/3を占める交通渋滞損失
（全国ワースト1）

渋滞損失時間（全国3,810万人時間 関東1,239万人時間）

3D-Map of traffic congestion of Kanto region

東京圏
大都圏
圏央道内側
外環内側

東京圏 2.1%
圏央道内側 1.0%
Overview of road traffic situation of Route 16 (Tokyo-Beltway: no-access-control)

Time loss due to traffic congestion

Accidental death or injury per vehicle/km traveled
Overview of road traffic situation and countermeasures of Route 6 in Ibaraki Prefecture

(土浦・水戸・日立の3市周辺において渋滞は発生）

Around Tsuchiura city

Around Mito city

Around Hitachi city

Chiyoda-Ishioka By-pass (under construction)

Ushiku-Tsuchiura By-pass (under construction)

Route 6 itself has already broadened to 4-lane road

Nakaohno-Nakakawauchi street or other parallel roads (under construction)

Experimental decrease of tolls of heavy traffic on parallel toll motorway

Experimental decrease of tolls of parallel toll motorway Hitachi by-pass (under construction)

実施済 □

日立バイパス 事業中 □

栂橋 事業中 □
List all legs of National Highway in Hokuriku region in order of probability of traffic accident
国道1号の南行き方向で、休日の午後に旅行速度低下が発生。
特に、高松南消防署東～上天神間では速度が10km/h以下。

図 時間帯別旅行速度（休日；旅行速度調査結果より）
Management of each projects
(Activity in Kyushu Regional Development Bureau)

Purpose of this activity

(1) To improve the efficiency of investment
(2) To improve management of each project
(3) To improve accountability

～三つの意義～

□ 投資効率の改善：限られたお金でより大きな効果をより早く
□ 執行管理の強化：目標の共有と意識の統一、自覚と責任感の向上
□ 説明責任の向上：「有言実行」による地域の信頼づくり

九州の5年で見える道づくり「ちょっとプロジェクト2003」

Step 1:
Make projects effective
● Redesign structures
● Innovation for speedup etc ...

Step 2:
Select effective project
● High efficiency
● Favorable atmosphere
● Completable within 5 years

Step 3:
Announce target year and strict project management
● Announce target years to start services along with their outcomes
● Check and disclose progress annually

事業の効率化
□ 規格・構造等の見直し
□ スピードアップのための工夫

「5年で見える道づくり」対象事業の選定
□ 投資効果が高い
□ 円滑な事業進捗の環境を整えている
□ 選択と集中で5年以内の供用が可能

目標明示と事業進捗管理の徹底
□ 1〜5年後の供用目標と効果の明示
□ 予算・体制の確保
□ 毎年の執行目標の公表と進捗状況の確認
□ 収益制度の適切な活用

九州の5年で見える道づくり「ちょっとプロジェクト2003」
～選択と集中、無駄なくスピーディにサービス提供～
Disclosure of plan and progress of each project through internet
(Activity in Shikoku Regional Development Bureau)

・事業執行の透明性の向上
・地域との協働・連携（事業への理解と協力）

「事業進行状況の公表」

・四国地方整備局道路部ホームページに掲載

整備局内の各事務所
四国各県土木、県土整備部、四国内の道の駅
J H四国支社（S A 7箇所）
本四公団（10・177箇所）
イベント（建設フェア会場）

Target year of starting service
Year of starting construction
Target (Actual) Year of starting surveying
Target (Actual) Year of starting designing
Target (Actual) Year of starting land purchase

Overview of each project

Outcomes of the project

□□□□年度
事業内容

□□□□年２回更新（予定）

Japanese version only
Analyzing outcomes of each legs of Fukuoka urban area in Kyushu (changes of cost due to traffic congestion: 2003/2002)

- 10 bil. yen/yr or more
- 5-10 bil. yen/yr
- 0-5 bil. yen/yr
- Increase
- Decrease
- Parallel street has started service
- Urban Elevated Motorway has been extended
- Widened to 6-lane
Analyzing outcomes of each completed project (Akita-Minami By-pass in Tohoku region)

**Understanding the changes in congestion**

**without by-pass (before completion)**

- 15 million hr/yr

**with by-pass (after completion)**

- 12 million hr/yr

**save 3 million hr/yr**
Analyzing outcomes of each completed project
(Experimental decrease of Joban highway (toll road) in Kanto region)

saving in income of the toll road:
- 500,000 yen/day

saving in loss due to traffic congestion on national highway route 6:
- 14,700,000 yen/day

- 常磐道等の減収額は約60万円/日
  (減収額 = その日の車種区分×区分間の平均実績数)
- 国道6号等の渋滞損失額は1,470万円/日 改善
  常磐道等の減収を大幅に上回る一般道路の渋滞緩和効果