

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_tdmwiwa/
MIYAGI prefecture	8/21	http://www.sendai-mlit.go.jp/hp/outcome/
FUKUSHIMA prefecture	9/2	http://www.fks-wo.thr.mlit.go.jp/outcome/
OKINAWA prefecture	9/24	http://www.road.dc.ogb.go.jp/ir/kisya/kondankai/h15/h15kondan.htm
NIIGATA prefecture	9/25	http://www.pref.niigata.jp/dobokubu/sosiki/honcho/douroken/niigatakengyousekikeikaku.html
NAGANO prefecture	9/26	http://www.pref.nagano.jp/doboku/douken/outkamu.htm
AKITA prefecture	9/29	http://www.thr.mlit.go.jp/akita/outcome/
OSAKA prefecture	9/29	http://www.ok-links.jp/osaka/topics/project_osaka/
TOYAMA prefecture	9/30	http://www.pref.toyama.jp/sections/1501/outcome/outcome.htm
ISHIKAWA prefecture	10/9	http://www.hrr.mlit.go.jp/kanazawa/
WAKAYAMA prefecture	10/16	http://kkr.mlit.go.jp/kinan/
TOCHIGI prefecture	10/21	http://www.pref.tochigi.jp/douken/pc/autokamu/autokamu.html
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
KOCHI prefecture	10/31	http://www.skr.mlit.go.jp/road/ir/index.html
HOKKAIDO	11/26	http://www.hkd.mlit.go.jp/
HYOGO prefecture	12/4	http://www.hyogo-wo.go.jp/news/press/index.html
OKAYAMA prefecture	12/16	http://www.okakoku-mlit.go.jp/news/2003/contents/oshirase_095.html
TOKYO	12/18	http://www.kensetsu.metro.tokyo.jp/outcome/index.html
SAITAMA prefecture	12/22	http://www.ktr.mlit.go.jp/oomiya/
KUMAMOTO prefecture	12/24	http://www.qsr.mlit.go.jp/kumamoto/gyouseki/sian_.html
NARA prefecture	12/25	http://www.kkr.mlit.go.jp/nara/mitumeru/index.html
MIE prefecture	12/25	http://www.mdrc.jp/ir/gyouseki.html
SHIGA prefecture	1/28	http://www.pref.shiga.jp/h/doro/outcome.html
FUKUI prefecture	2/12	
GIFU prefecture	2/19	http://www.gifukoku.go.jp/gyouseki/pdf2.html
KYOTO prefecture	2/26	http://www.kyoto.kkr.mlit.go.jp/contents/outcomeplan15/index.htm
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

31 prefectures have set up nearly 160 indicators (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)

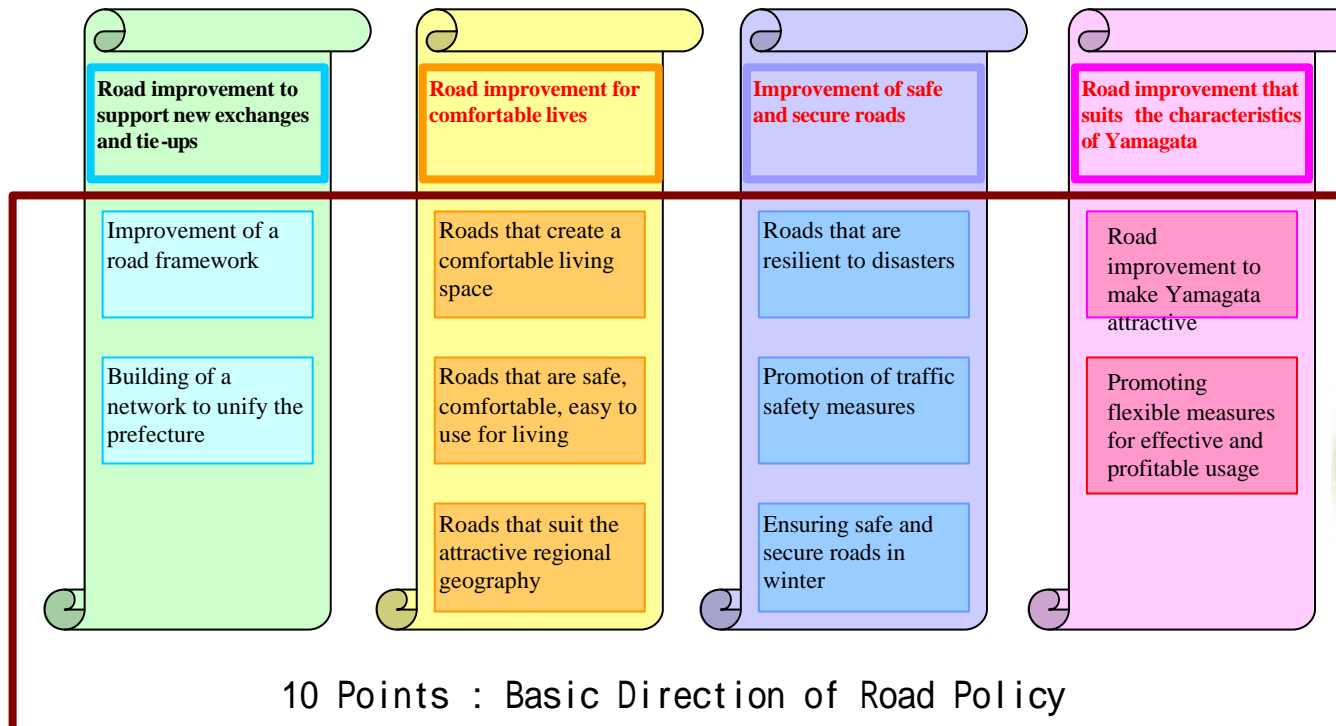
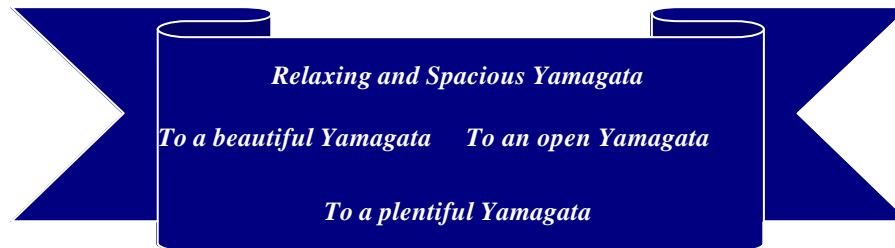
Examples of original regional indicators:

Ratio of sections where driving speed is reduced during winter	Performance Plan 2003 for roads in Yamagata Pref.	(Yamagata Prefecture Trunk Road Council)
Ratio of snow removal in school zones during winter	Performance Plan 2003 for roads in Aomori Pref.	(Aomori Prefecture Trunk Road Council)
Ratio of population arriving at advanced medical facilities for new born babies in 60 minutes		
Ratio of safe areas for passing (automobiles and pedestrians)	Performance Plan 2003 for roads in Niigata Pref.	(Hokuriku Regional Development Bureau, Niigata Prefecture, Japan Highway Public Corporation)
Time required between seven areas and the city center	Performance Plan 2003 for roads in Fukushima Pref.	(Fukushima Prefecture Trunk Road Council)
Ratio of elimination of dangerous locations for disaster prevention.	Performance Plan 2003 for roads in Nagano Pref.	(Nagano Prefecture Trunk Road Council)
Time loss (amount) due to reduction of driving services during winter.	Performance Plan 2003 for roads in Akita Pref.	(Akita Prefecture Trunk Road Council)
Percentage of sidewalks with sufficient room in city area.	Performance Plan 2003 for roads in Toyama Pref.	(Toyama River and National Highway Construction Office, Toyama Prefecture)
Ratio of secured Ishikawa excursions.	Performance Plan 2003 for roads in Ishikawa Pref.	(Hokuriku Regional Development Bureau, Ishikawa prefecture, Japan Highway Public Corporation)

3.Example of "Performance Plan" in regional level

Performance Plan 2003 for roads in Yamagata Pref.

(Making Yamagata Prefecture Trunk Road Council)



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.

Outcome goals for Yamagata Prefecture

Outcome Indicator		Target for 2003	Project Locations	Reason for Setting target Indicator Value
Indicator	Current Indicator Value			
Time Loss due to Congestion (Amount of congestion loss)	32.8 hr/yr/person 40.49 million hr/yr for the whole prefecture(2001) (¥ 121.1 billion/yr for the whole prefecture)	Reduction of 1hr/yr/person	National Road 7: Mikawa bypass	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
No. of main congestion points	30 points(2002) (11 points in Yamagata urban areas)	Implement measures to eliminate and alleviate 6 points (3 points in Yamagata urban areas)	National Road 13: Elevation of Matsuoka intersection	Based on the New Yamagata Pref. Congestion Measures Program(draft)
Ratio of Death & Injury Accidents and Percentage of deaths	Death & injury accidents 75.8 cases/100 million vehicle - km yr(2001) (8,546 cases/yr)	Death & injury accidents Reduce to 74.3 cases/100 million vehicle - km (equivalent to about 8,380 cases/yr)	National Road 112: Teppomachi underground pedestrian crossing	Target is to reduce by 7.5 cases /100 million vehicle - km in 5 yrs(2007)
	Percentage of deaths 0.76person/100 million vehicle - km yr(2001) (86 persons/yr)	Percentage of deaths Reduce to 0.75person/100 million vehicle - km (equivalent to 85 persons/yr)	National Road 286: Widening of Teppomachi	Coordinate with the target in Yamagata Pref. Traffic Safety Plan
Motorway's Share of Traffic	2.5% share (2001)	2.8% share	Akayu bypass(a section) 30% discount coupon tickets for expressways	Target indicator value set by taking the development of motorways and introduction of 30% discount coupon tickets for expressways into consideration
Ratio of Roads Designed for Winter Safety	10.0% (1999)	Aim for 11%	National Road 112: Kamojaka bypass National Road 458: Hasedo bypass	Target indicator value set by taking the progress of the project into consideration
Ratio of Sections with Lower Driving Speed in Winter	39.0% (2002)	Aim for 38.0%	National Road 7: mikawa bypass Ordinary Prefectural Road: Higashinuma Naganuma Amarume route	

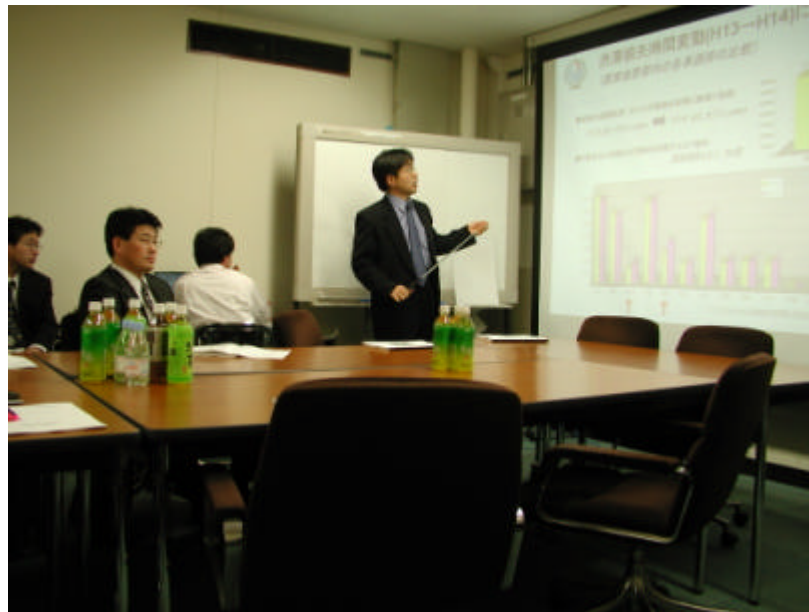
Main projects to be Implemented to Achieve Goals (Sections scheduled for FY2003)

*National Road 7 Mikawa bypass	*National Road 112 Tsuruoka district power lineutility tunnel	*Major Regional Road: Yamagata Kaminoyama route(Kaminoyama section)
*National Road 7 Modification of Oomiya intersection	*National Road 112 Hinode sidewalk	*Major Regional Road: Yonezawa Takahata route(Takei section)
*National Road 13 Elevation of Matsuoka intersection	*National Road 113 Akayu bypass (a section)	*Major Regional Road: Mogamikishu route(Mukomachi section)
*National Road 13 Modification of Wago intersection	*National Road 286 Widening at Teppomachi	*Ordinary Prefectural Road: Higashinuma Naganuma Amarume route(Aoyama section)
*National Road 112 Teppomachi underground pedestrian crossing	*National Road 345 Modification of Izumicho intersection	*Major Regional Road: Kandakawakuchi route(Mukai section)
*National Road 112 Kamojaka bypass	*National Road 458 Hasedo bypass	*Urban Planning Road: Ishigakishioi route(Aioi section)

4.Regional Road Management Workshop

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)

第1章

政策目標の立案

政策分析の実施

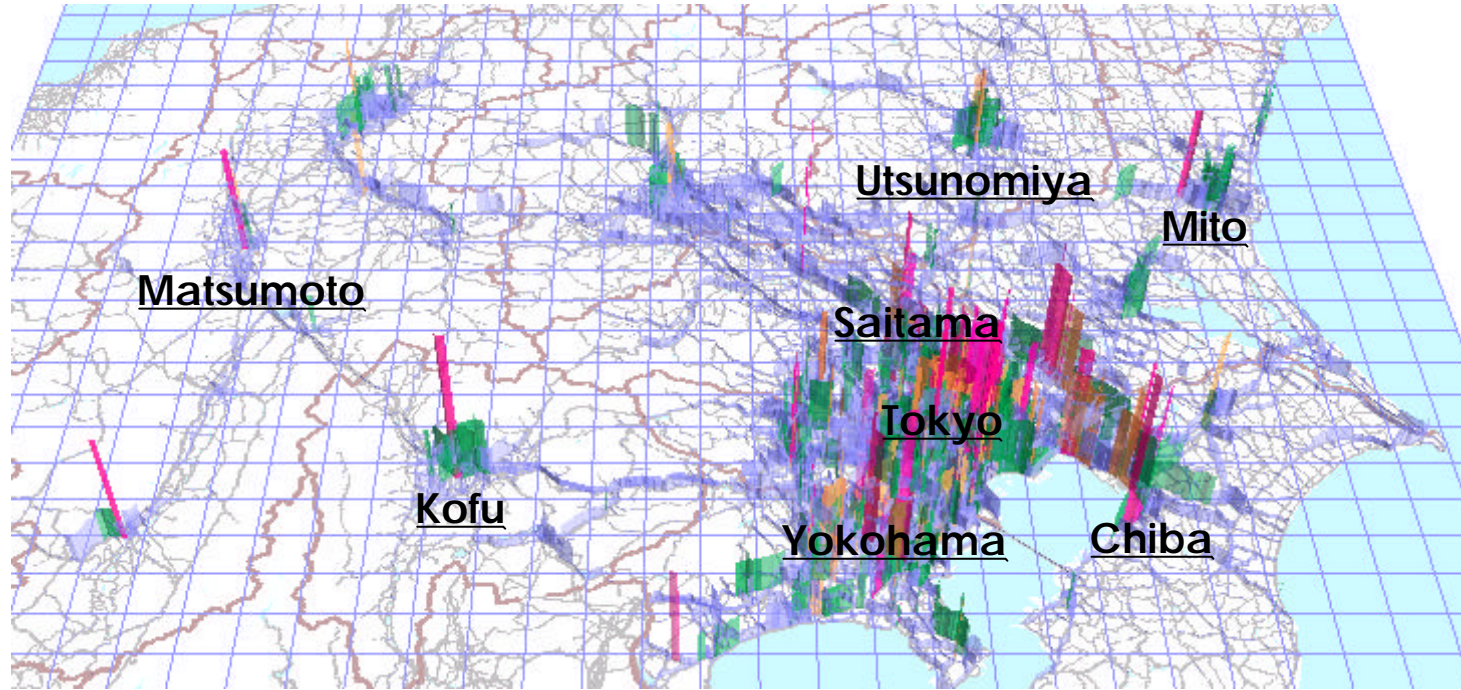
プログラム決定

成果型予算配分

業績測定・評価

意識改革・広報

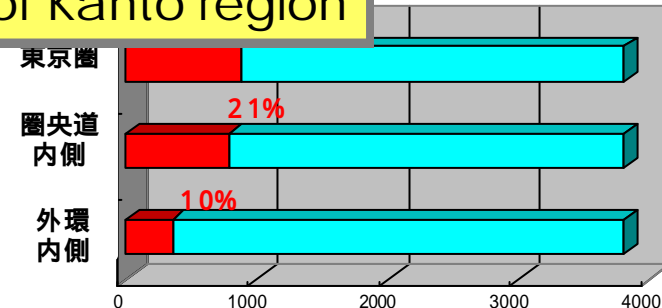
渋滞損失時間（全国3,810百万人時間 関東1,239百万人時間）



3D-Map of traffic congestion of Kanto region

間に占めるエリア別割合

エリア別渋滞損失時間	損失時間
東京圏(1都3県)	881百万人時間
圏央道内側	793百万人時間
外環内側	355百万人時間





Overview of road traffic situation of Route 16 (Tokyo-Beltway:no-access-control)

国道16号の争乗 (伊奈川区间)

第1章

政策目標の立案

政策分析の実施

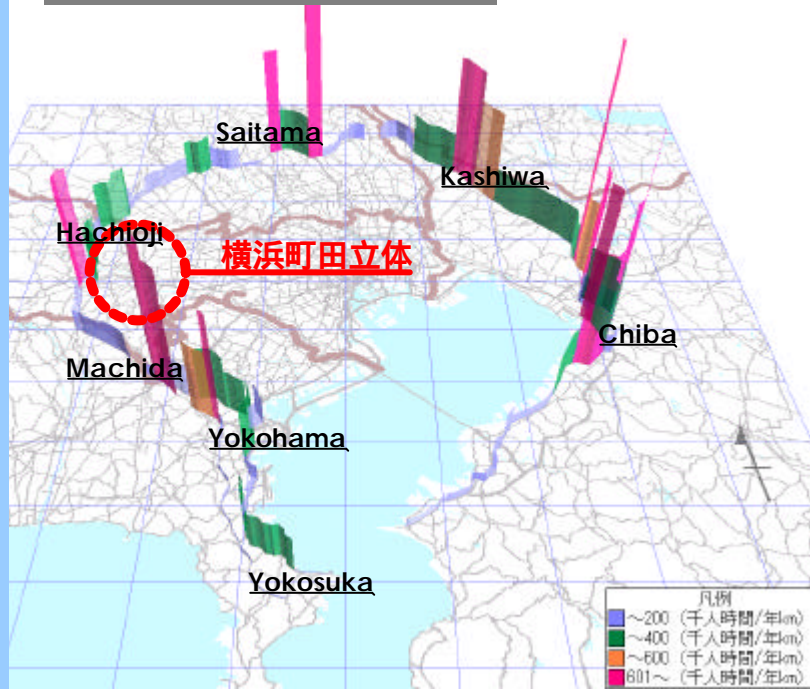
プログラム決定

成果型予算配分

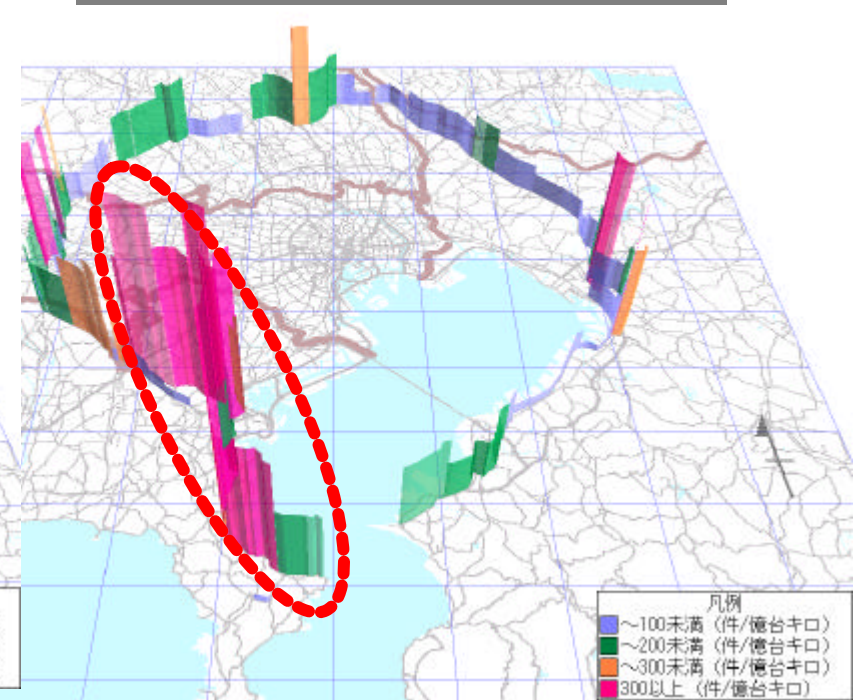
業績測定・評価

意識改革・広報

Time loss due to traffic congestion



Accidental death or injury per vehicle/km traveled

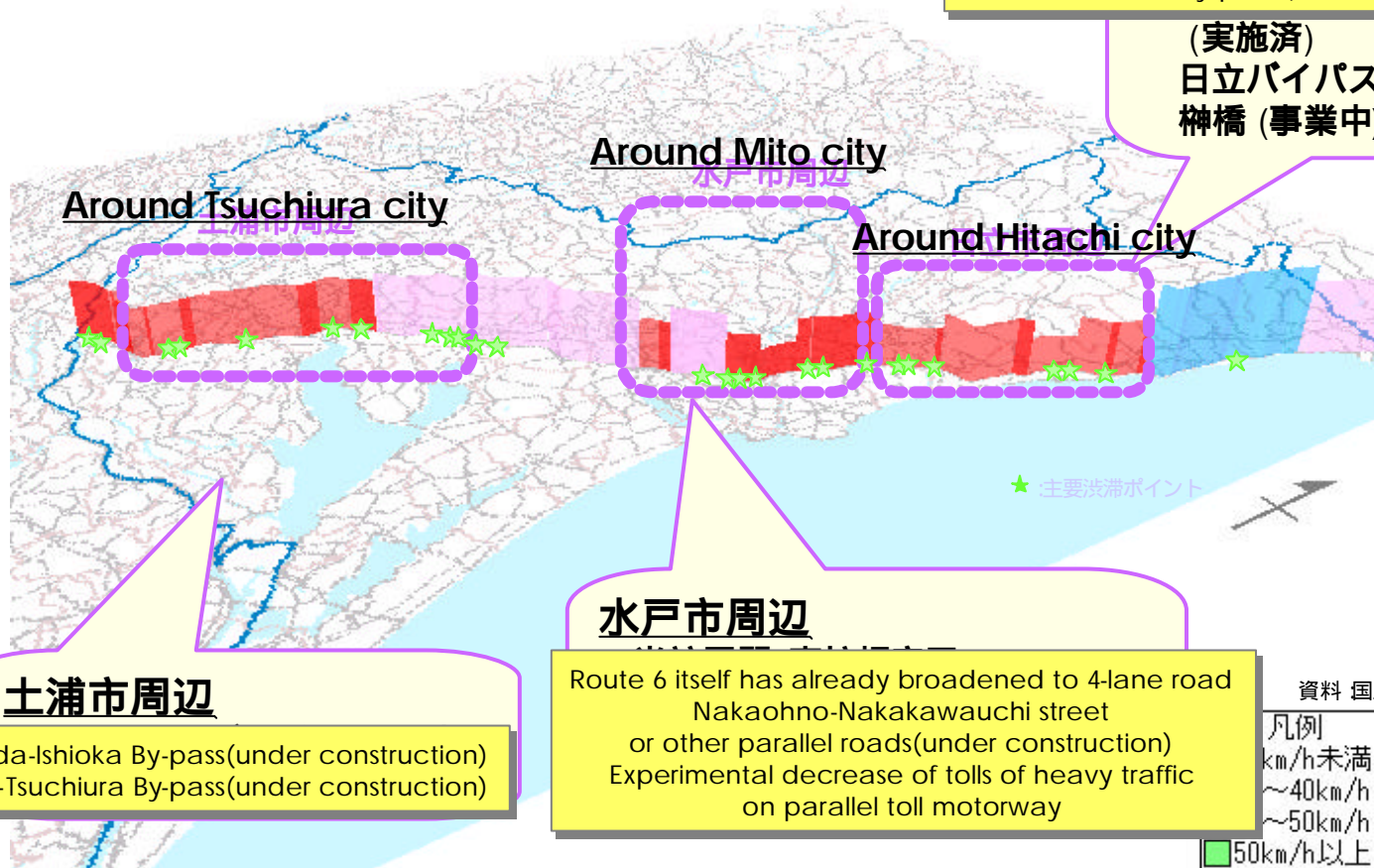




Overview of road traffic situation and countermeasures of Route 6 in Ibaraki Prefecture

(土浦・水戸・日立の3市周辺において渋滞は発生)

国道6号混雑時旅行速度3Dマップ



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)
神橋(事業中)

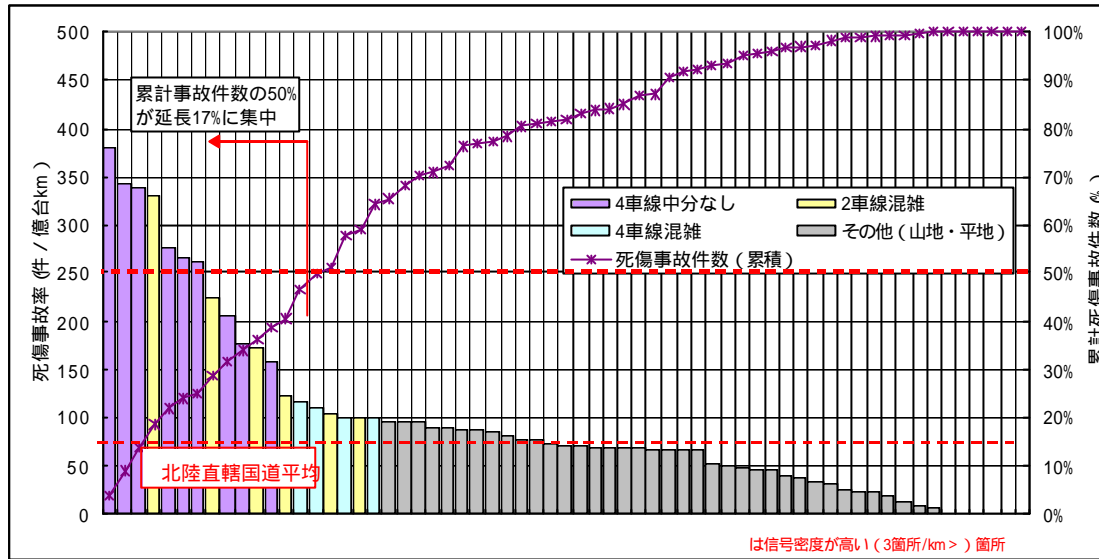
土浦市周辺
Chiyoda-Ishioka By-pass(under construction)
Ushiku-Tsuchiura By-pass(under construction)

水戸市周辺
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

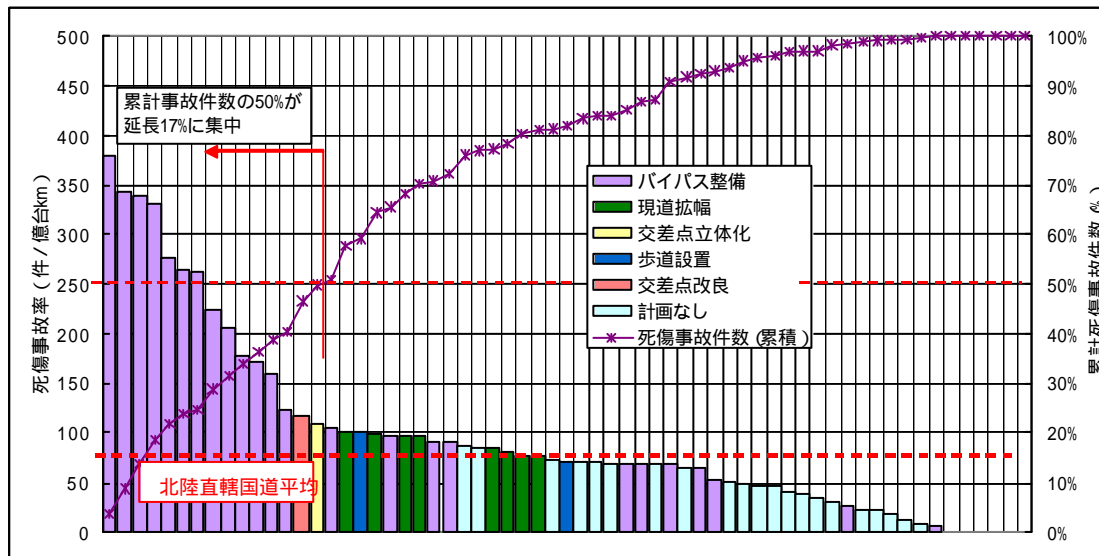
資料 国土交通省試算
凡例
km/h未満
~40km/h
~50km/h
50km/h以上

List all legs of National Highway in Hokuriku region in order of probability of traffic accident

区間別の死傷事故率ランキングと道路状況



区間別の死傷事故率ランキングと対策



Detailed analysis of individual leg 旅行速度の低下 (Traffic speed on time-space diagram)

旅行速度の低下

国道11号の南行き方向で、休日の午後には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。

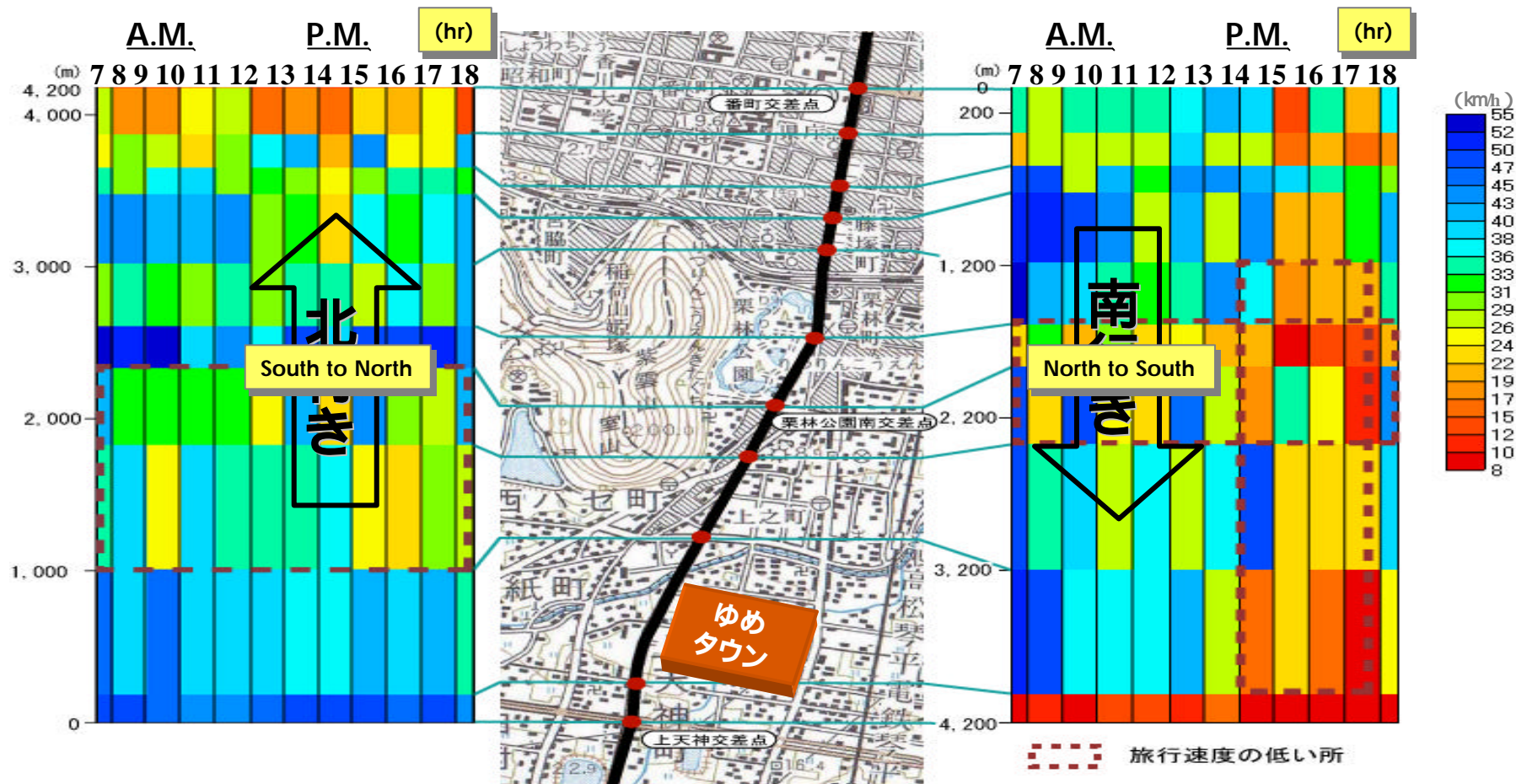


図 時間帯別旅行速度 (休日 ; H13旅行速度調査結果より)

九州の Management of each projects (Activity in Kyushu Regional Development Bureau)



～ 3つの意義～

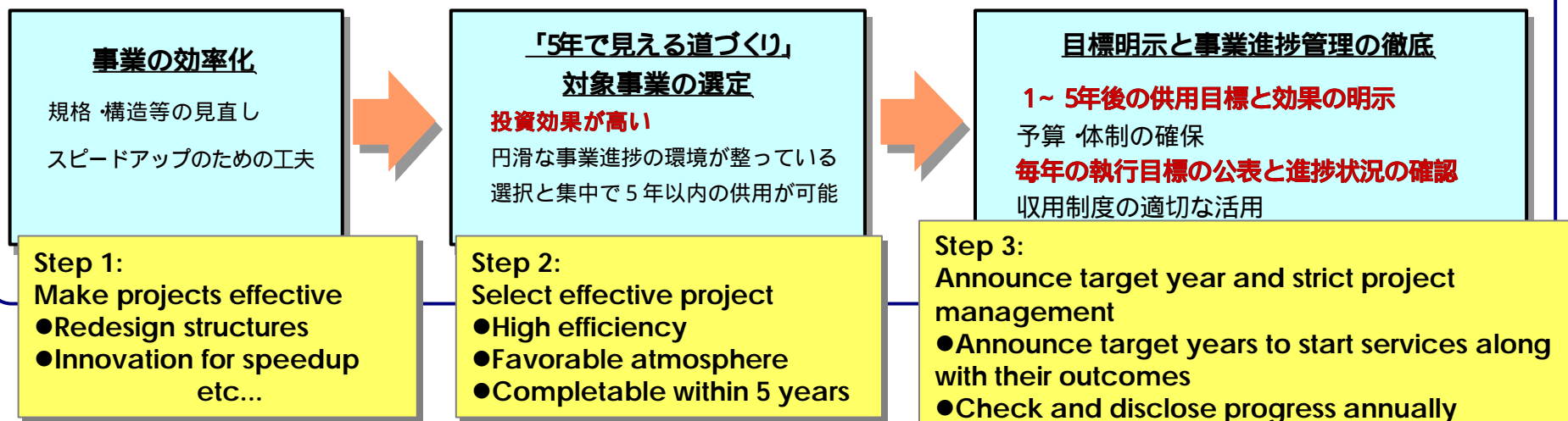
- 投資効率の改善 : 限られたお金でより大きな効果をより早く
- 執行管理の強化 : 目標の共有と意識の統一、自覚と責任感の向上
- 説明責任の向上 : 「有言実行」による地域の信頼づくり

Purpose of this activity

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

九州の5年で見える道づくり「ちやくプロジェクト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 <http://www.skr.mlit.go.jp/road/sinko/index.html>

Overview of each project

区画	高松市上土井町～高松市西原町	高松市上土井町～高松市西原町	高松市西原町～高松市西原町	高松市西原町～高松市西原町	高松市西原町～高松市西原町
区画	0.9km	0.9km	4.7km		
所在地	高松市	高松市	高松市		
事業内容	(H15) (事業中)	(事業中)			
事業年(目標)年度	H17 (全線)				
事業年(目標)年度	H7 (全線)				
事業年(目標)年度	H6 (全線)				
事業年(目標)年度	H9	H20			
事業内容	測量・設計				
用途					
工事	上土井町区画整理工事等	高松市上土井町区画整理工事等	高松市上土井町区画整理工事等		

Target year of starting service

Year of starting construction

H15年度事業内容

Target (Actual) Year of starting surveying

Target (Actual) Year of starting designing

Target (Actual) Year of starting land purchase

事業 (平) Outcomes of the project 価などを追加

リーフレット **Japanese version only**

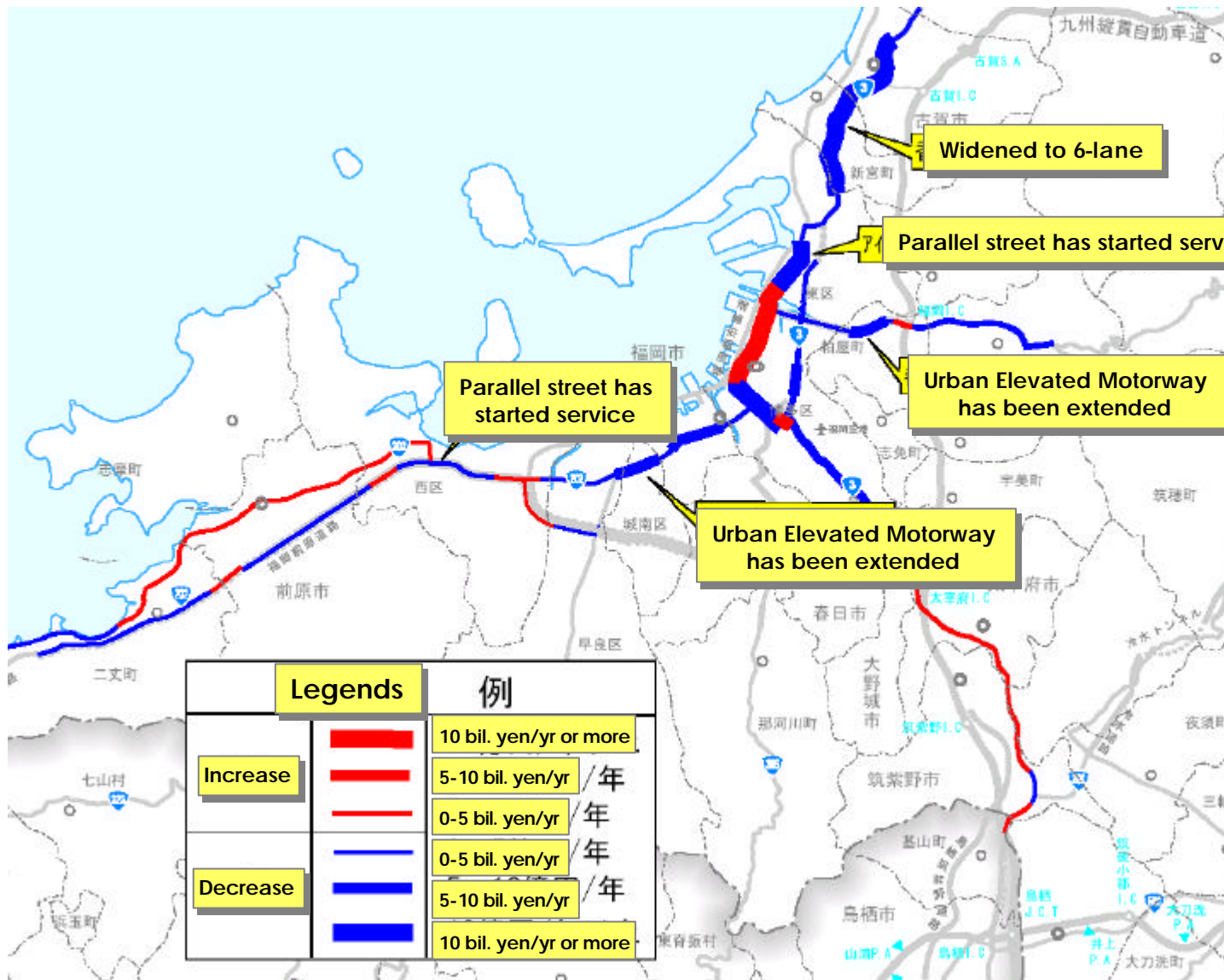
- 整備局内の各事務所
- 四国各県土木、県土整備部、四国内の道の駅
- JH四国支社（SA7箇所）
- 本四公団（PA・SA7箇所）
- イベント（建設フェア会場）



年2回更新（予定）

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

H14年度の年間データによる試算結果 福岡市の例)



事例

Analyzing outcomes of each completed project (Akita-Minami By-pass in Tohoku region)

削減

渋滞損失の変化

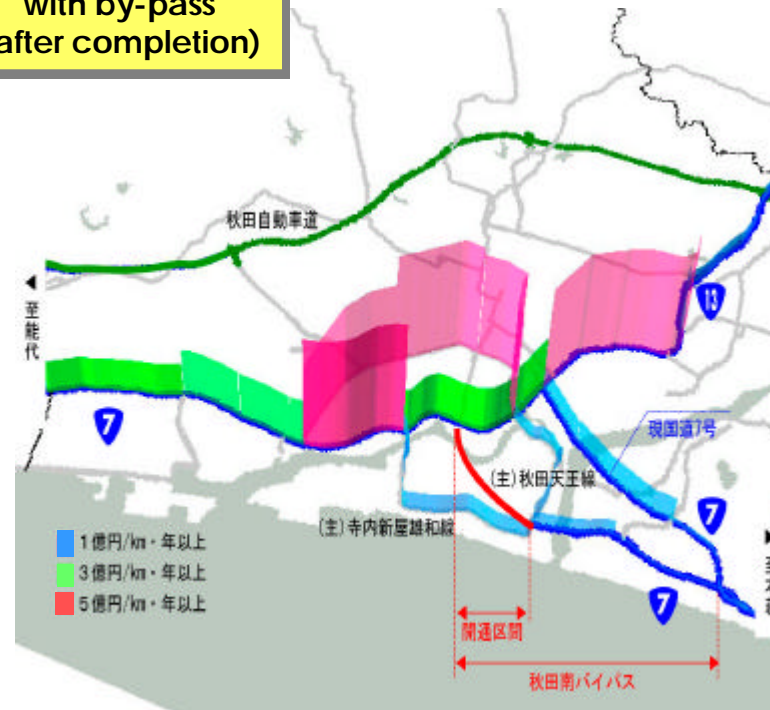
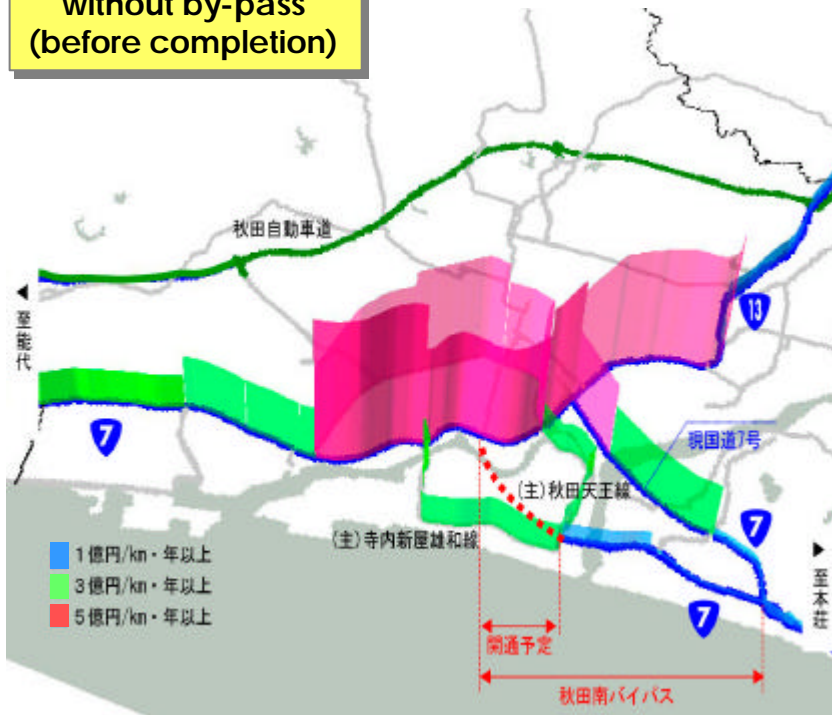
15 million hr / yr

save 3 million hr / yr

12 million hr / yr

without by-pass
(before completion)

with by-pass
(after completion)

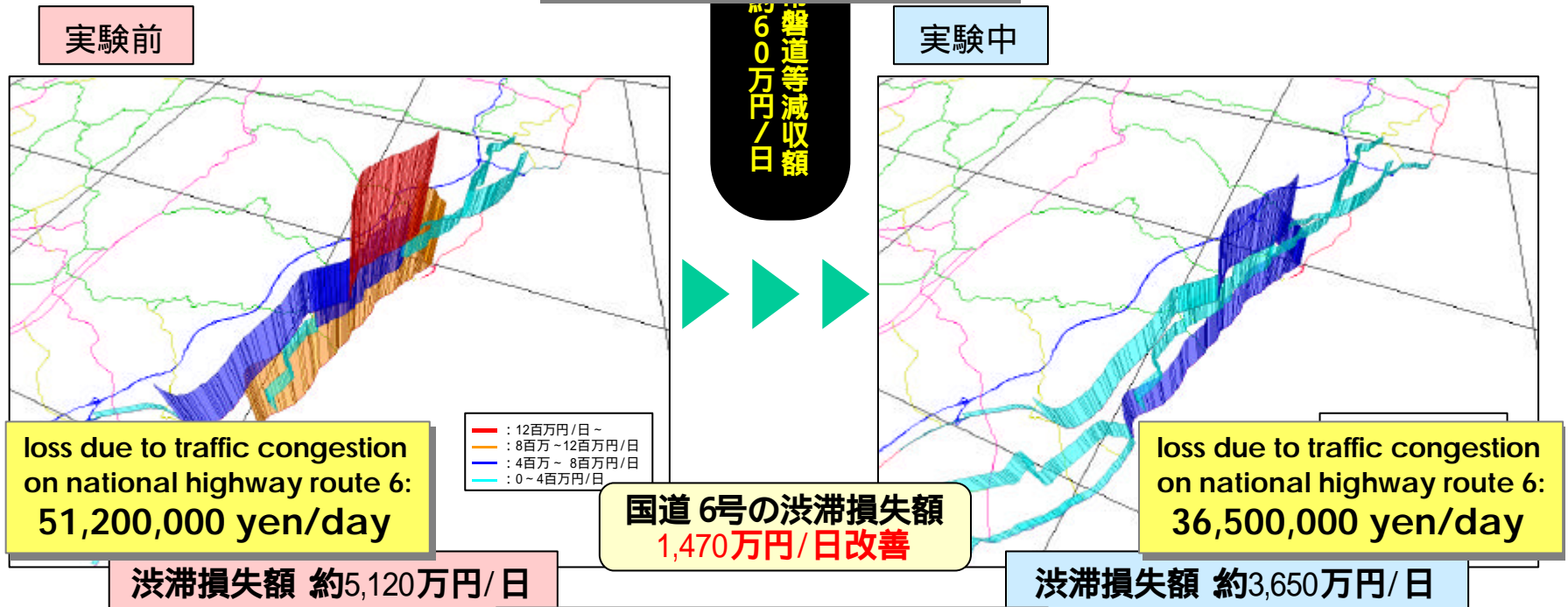


Analyzing outcomes of each completed project (Experimental decrease of Joban highway (toll road) in Kanto region)

(常磐自動車道 料金割引社会実験)

渋滞損失額の変化(実験前・実験中)

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



実験前 H.15 10/29 (水)
実験中 H.15 11/19 (水)、12/3 (水)の平均

- 常磐道等の減収額は約60万円
{減収額 = (実験前の車種区分別料金 × 実験中の車種区分台数 - 実験前の車種区分別料金 × 実験前の車種区分台数)}
- 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