



Measures for Dealing with Urban Logistics Issues in Japan

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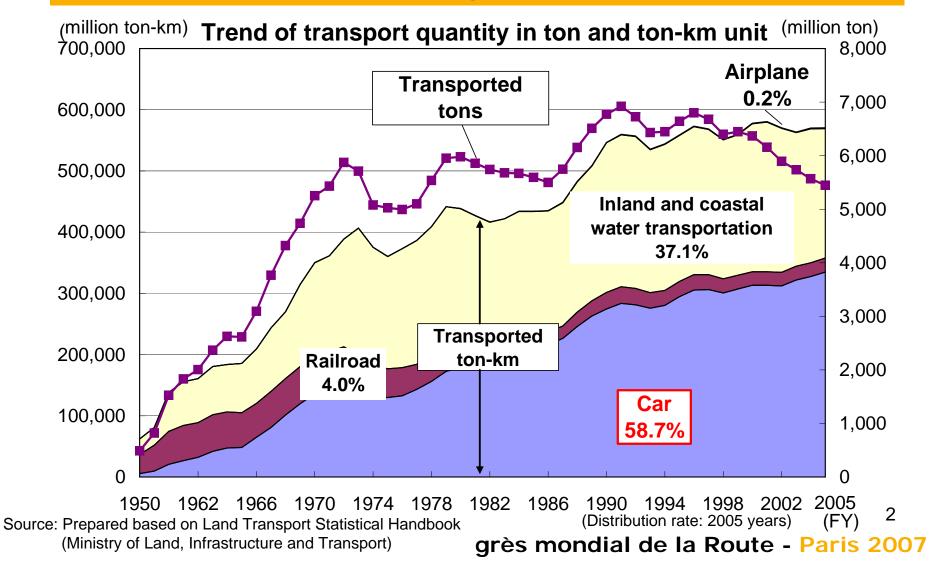
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- Situation of freight transport in urban areas in Japan
- 2. Logistics policy/measures in Japan
- 3. Examples of measures to improve the distribution efficiency
 - Measures for freight transport in urban areas
 - Provision of distribution bases
 - Joint transport system
 - System for controlling freight traffic

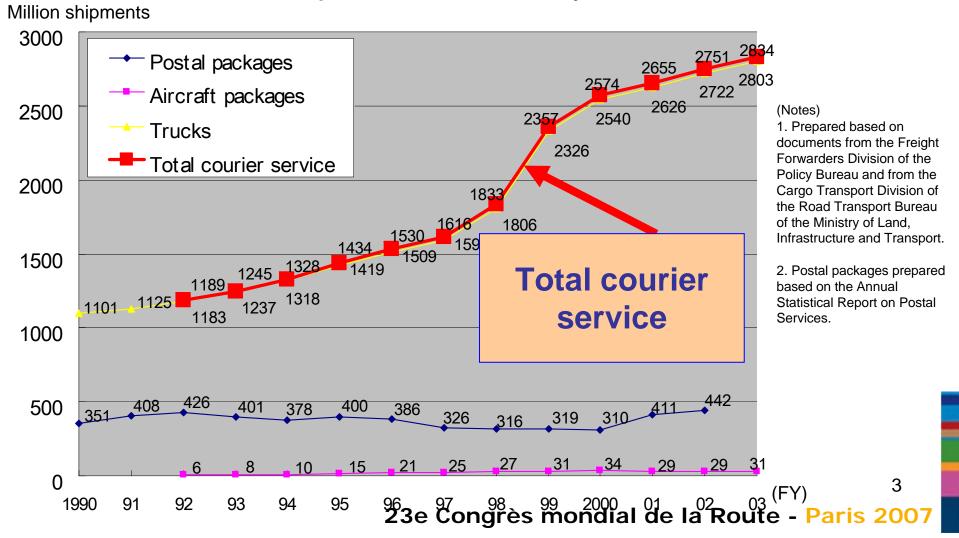
1. Present situation of freight transport in Japan

Trend of domestic freight transport quantity

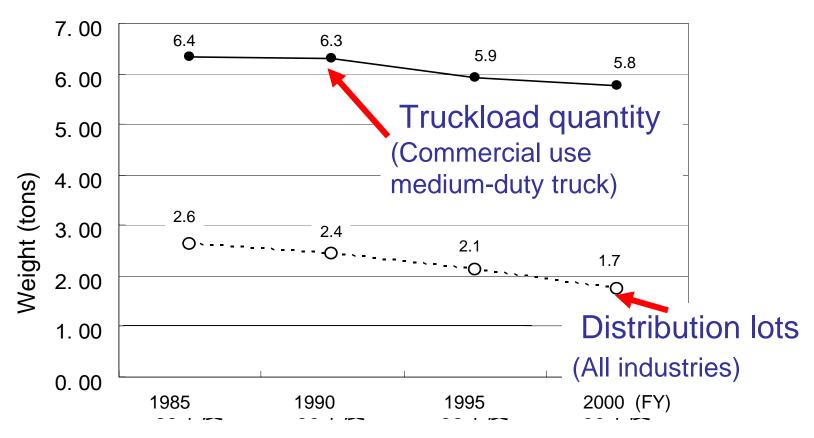


Consumer physical distribution trend (courier service)

Number of shipments handled by courier services



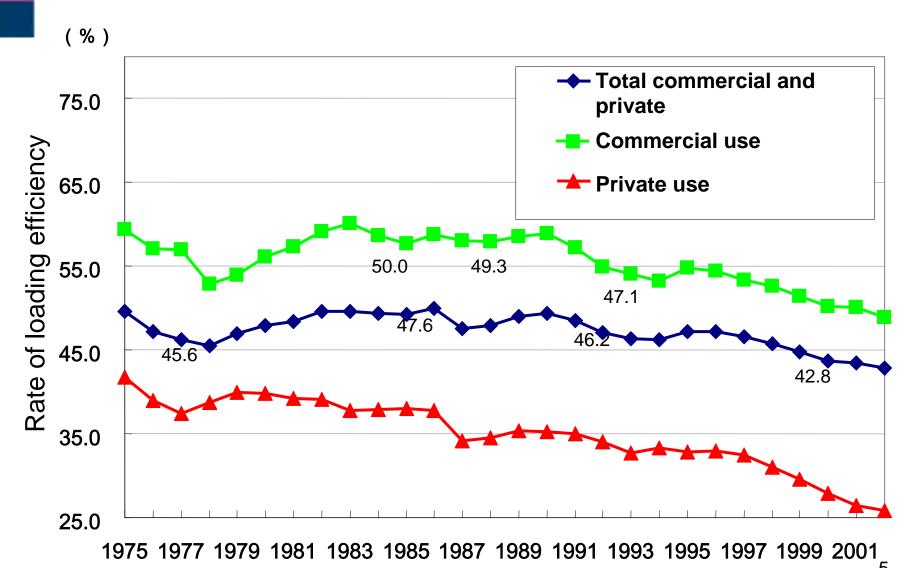
Distribution lots and truckload quantity



^{*}Distribution lots: A size based on weight per shipment, it is the amount of shipments per shipment day, shipped item, and recipient (2000 Net Freight Flow Census)

^{*}Truckload quantity: Average load per truck = transport ton-kilometers / actual vehicle kilometers, and a standard automobile is a truck with a maximum load of 5 tons or more (based on the 2002 Land Transport Statistics Manual)

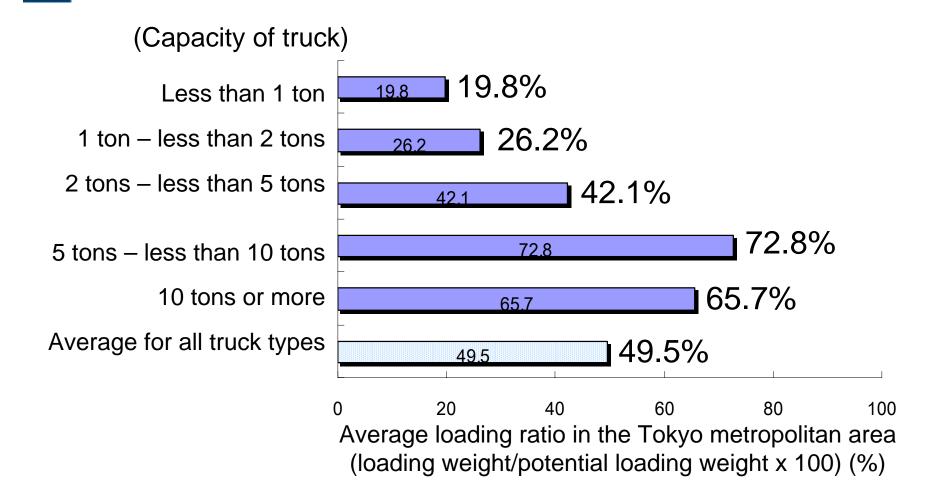
Truck loading efficiency



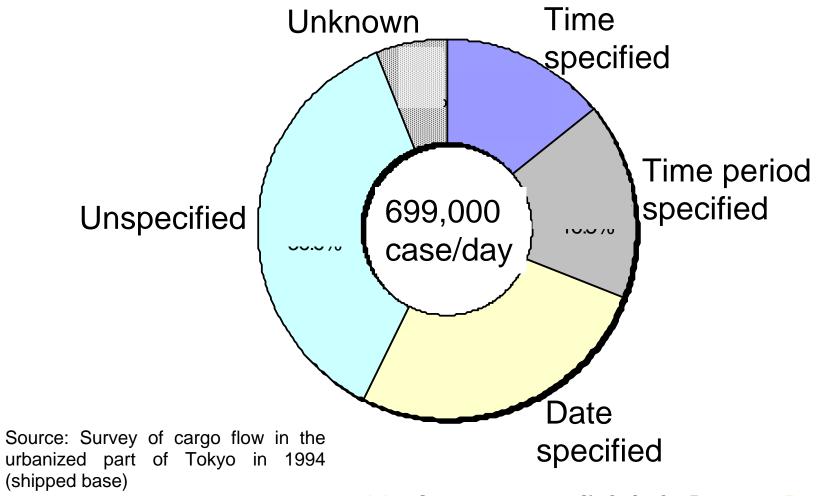
Source: Annual Statistical Report on Automobile Transport: Information and Research Department, Policy Bureau, Ministry of Land, Infrastructure and Transport

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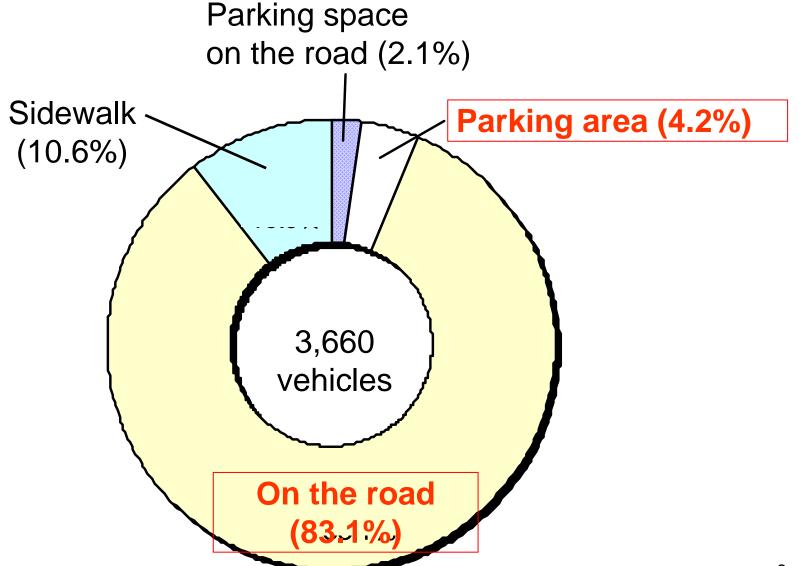
Average loading ratio of by capacity of truck



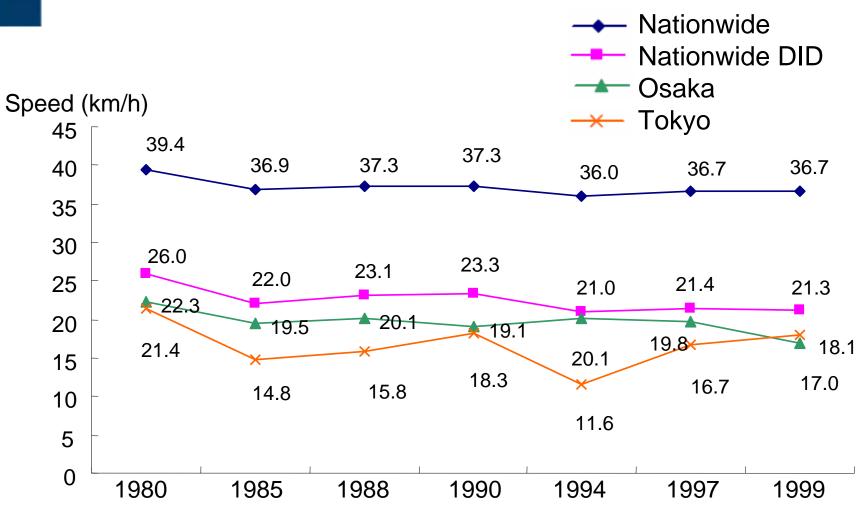
Percentage of cargo with specified delivery times



Loading place



Variation of travelling speed in rush hour



Nationwide DID: National average for national highways in heavily populated regions (DID)

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2. Logistics policy measures in Japan

Comprehensive Program of Logistics Policies (2005-2009)

Background

"Quasi-domestic" quality of logistics within East Asia

- Rapid growth at production bases and consumption markets
- Region that is not much different from domestic logistics in terms of distance

Environmental measures to be in accord with the Kyoto Protocol

- Effective CO2 emission reduction
- Corporate social responsibility (CSR)

Enhancing security measures in the logistics field after terrorist attacks

- Enhancement of security measures on global scale
- Compatibility between safety and efficiency

Comprehensive Program of Logistics Policies (2005-2009)

Basic direction of future logistics measures

- (1) Realize a speedy, seamless and low-cost logistics integrating international and domestic routes.
- (2) Realize an environment-friendly logistics such as "green logistics."
- (3) Realize an efficient logistics system focusing on the demand side.
- (4) Realize a logistics system that supports a safe and secure national life.

List of city logistics measures (1)

	Facilities (hardware measures)			
	Facilities	Traffic routes	Transportation	
Handling freight	Parking areas & Indoor areas for loading and unloading goods	Pay parking meters installed on the street	Trucks equipped with equipment for loading and unloading goods	
Transport	Distribution bases City collection and delivery base	Ring road construction Intersection improvement Special roads for logistics vehicles Truck lanes	Low-emission vehicles New transport system	
Information	Information centers	Road information system Parking area information	Driving control system Freight tracing system	

List of city logistics measures (2)

	Control and Guidance (software measures)				
	Operations	Control	Market		
Handling freight	handling of goods Requiring parking parking		Charge for parking or stopping		
Transport	Joint collection and distribution Lane where trucks have the right of way	Controlling truck traffic Yielding the right of way to trucks	Pricing		
Information	Plan for vehicle allocation route Information-seeking vehicles and freight	Guiding vehicles to most suitable routes Guiding vehicles for parking or stopping	Information user fee		

3. Measures to Improve the efficiency of distribution

Large scale underground driveway and facility

Shinagawa Intercity (Composite super-high buildings)



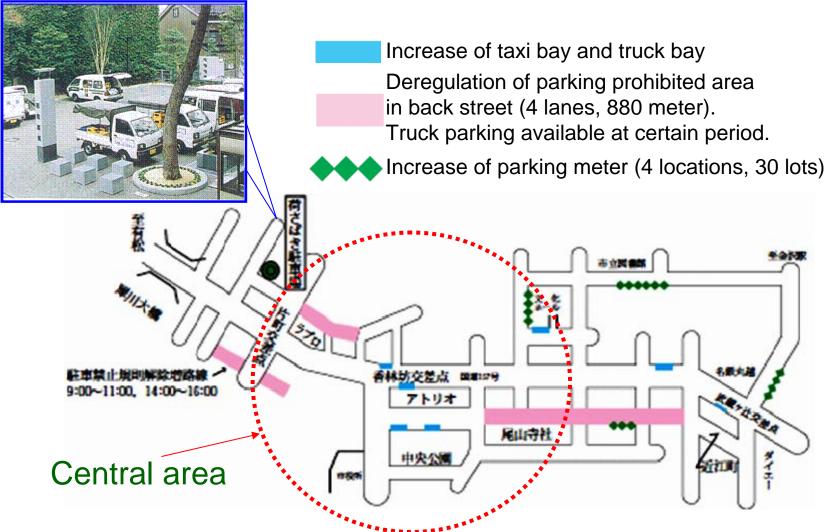
Large-scale underground driveway



Underground facility for load and unload goods ¹⁴ 23e Congrès mondial de la Route - Paris 2007

Off-the-road joint parking

Off-the-road joint parking



Pocket loading system



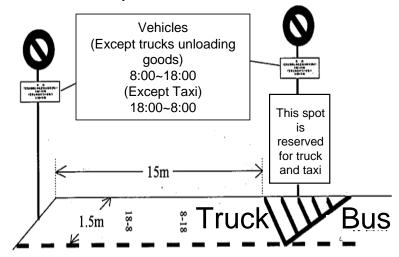


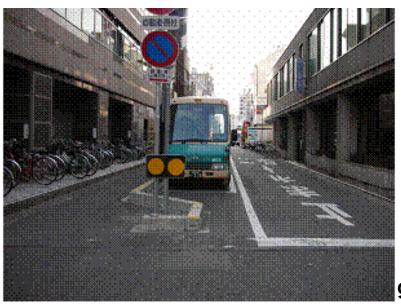
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Sharing space with the bus bay



Site road map





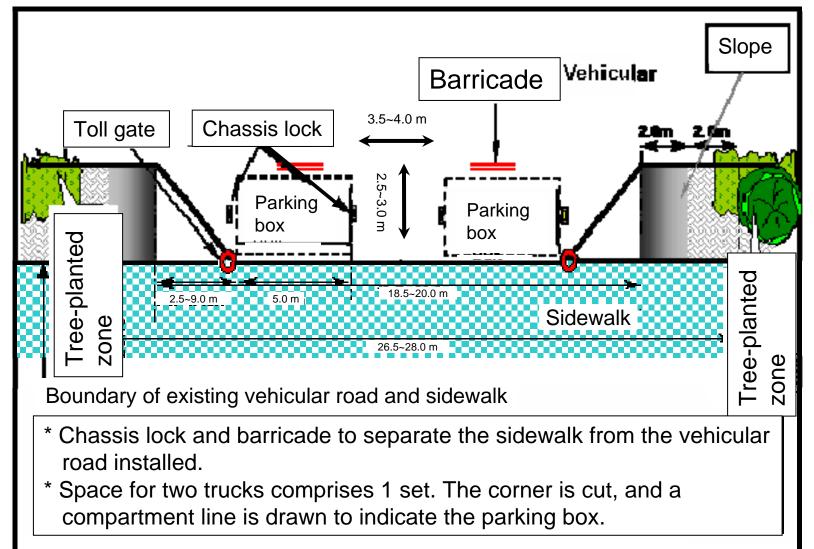
Expansion of bus station give more spaces!

Restricting traffic to oneway makes more spaces!

Measures for loading and unloading goods by road condition

Road condition		dition	
Stop	Traffic Segre- gation	Sidewalk width	Effective measures
Exists			Establish rules for using stop zones
None		one	Build an off-road parking area Establish rules for using the off-road parking area
None	Exists	Wide	Build an on-the-road parking facility in unused spaces Build an on-the-road parking area Establish rules for using on-the-road and off-road parking areas
		Narrow	Widen the sidewalk Build an on-the-road parking facility in unused spaces Build an off-road parking area Establish rules for using on-the-road and off-road parking areas
Where the local shopping area is well organized		11 0	Build a joint transport-delivery system

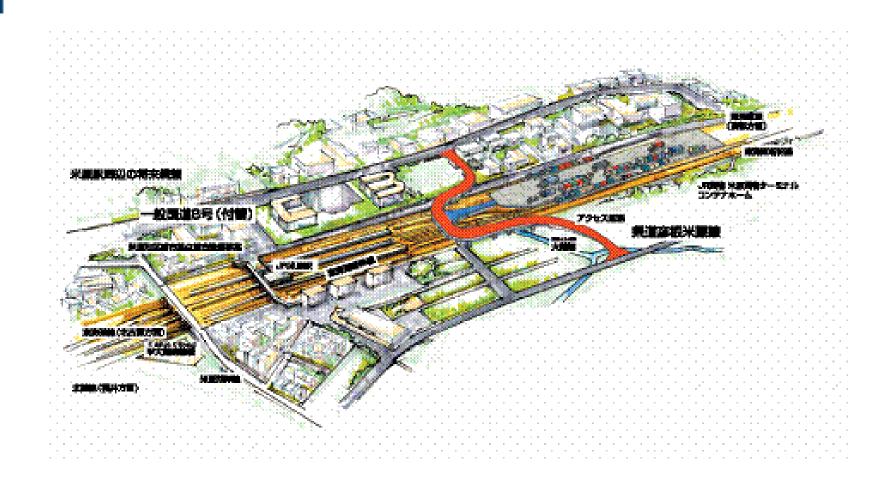
Structure of on-the-road parking facility



Distribution estate near the Tokyo port



Freight Terminal Station near the railroad station

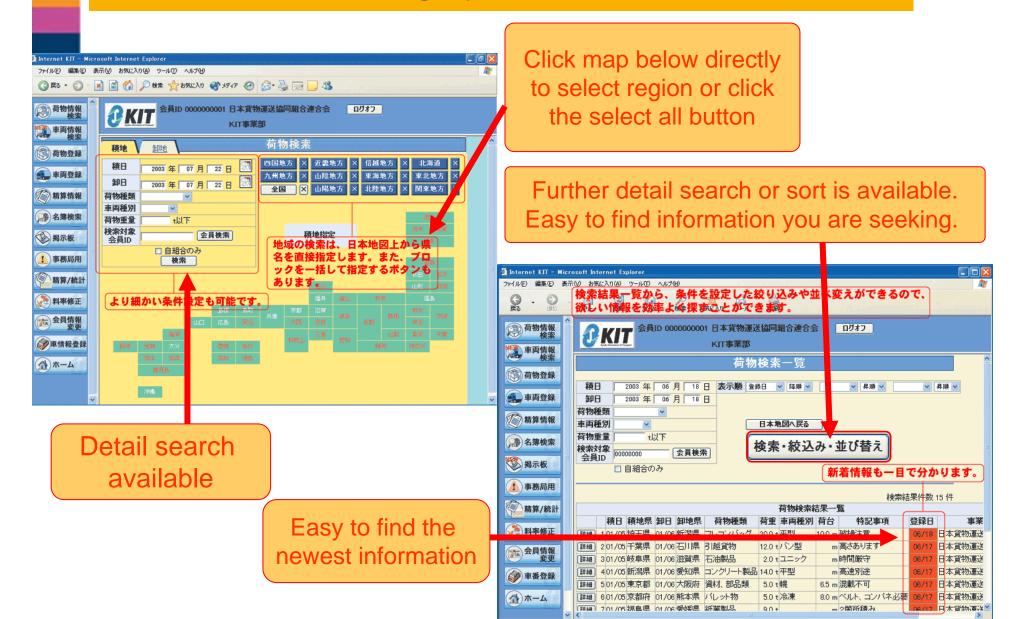


Joint-stock transport company



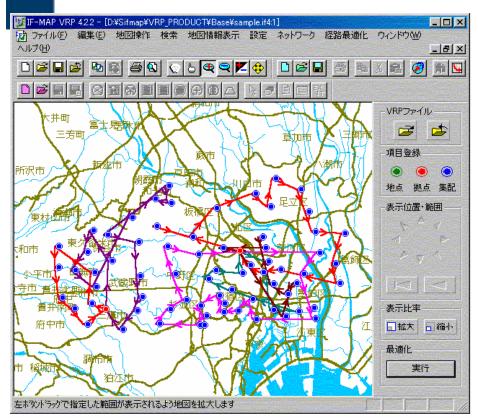
Special truck for joint-stock transport

Truck/load matching system KIT



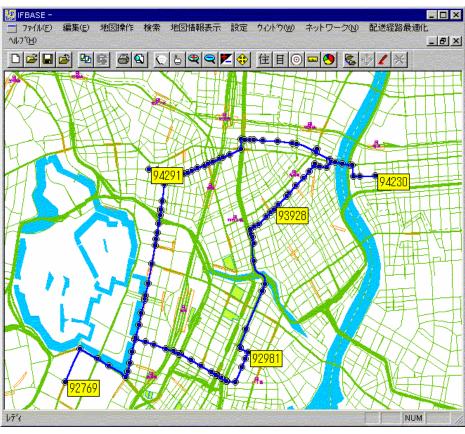
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Delivery plan/optimum route



The vehicle allocation and delivery plan support system

Optimum delivery route system



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Summary

 New comprehensive logistic measures were carried out

Developed social infrastructure including distribution bases

Must tackle soft measures

References

Pictures, Photo, Tables & Data are referenced by following;

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- 7. Lforl, P. (2003), Growth of Distribution Terminal in France, Traffic Engineering Vol38, No.6

17



Thank you for listening