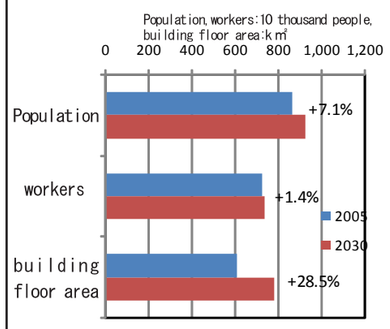
Outline Of Report

Urban Status of Tokyo in 2030 ->Prologue

Population resurgence in the Inner-city

population:7.1% of increase
Workers:1.4% of increase
Floor Area:28.5% of increase



Population, workers, building floor area in 2005, in 2030

Source:" Tokyo in 2030, Part1" , Mori Memorial Foundation, 2008

Future Environmental Change Affecting Logistics -> Prologue

Globalization

Movement of goods between countries will increase, and the size of international shipping containers will grow larger.

Logistical Expansion due to Digitalization and Population Aging

A greater demand for convenience will result in a greater demand for more meticulous delivery service.

Response to Environmental Issues

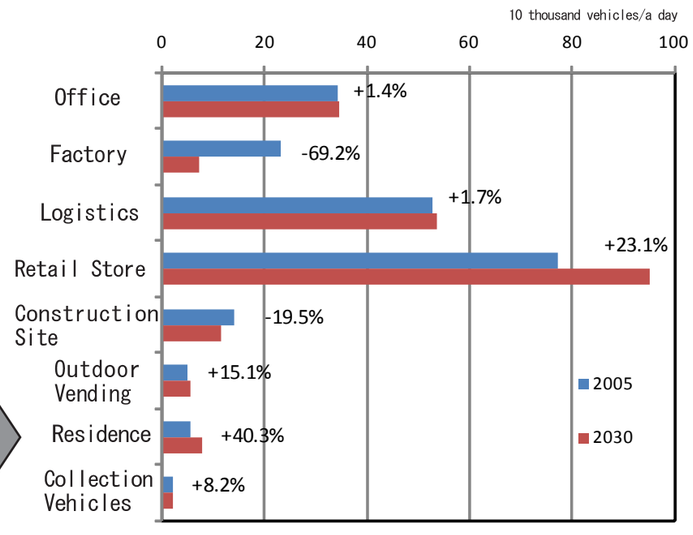
Environmentally-friendly policies are a preferable response to global environmental issues and issues concerning residential areas.

Cargo Vehicle Number Estimate -> Chapter 1

The number of cargo vehicles coming and going within Tokyo's urban area as a whole (i.e., the number originating and concentrated in Tokyo's urban area) will increase 1.8% from 2.139 million vehicles/day to 2.177 million vehicles/day.

Looked at in terms of facilities, the number of vehicles originating in Tokyo in 2005 was large for logistical facilities and retail store facilities, and the number of vehicles concentrated in Tokyo was particularly large for retail store facilities. This is strongly indicative of the fact that Tokyo is a high goods-consuming region.

This trend is expected to strengthen by 2030, with a large decrease in the number of vehicles originating and concentrated at industrial facilities (69.2% decrease for vehicles originating at, and a 69.3% decrease for vehicles concentrated at industrial facilities) being offset by a 22.9% increase in vehicles originating at, and a 23.2% increase in vehicles concentrated at retail store facilities.



Facility-specific Cargo Vehicle Traffic Numbers for Tokyo in 2005, in 2030

1.8% Increase for Overall Urban Area

There will be a small increase of 1.8% for the overall urban area in 25 years. Questions of whether some areas will see large increases in traffic volume resulting in congestion and, if so, how to address this congestion, will be considered.

179,000 Vehicle Increase in Retail Store Vehicle Traffic

In urban areas, the number of vehicles coming and going from retail store businesses will see a large increase from 773,000 vehicles / day to 952,000 vehicles / day - a 179,000 vehicle / day increase. Terminal distribution for commercial hubs in shopping and entertainment districts will be considered.

42.1% Increase in Residential Vehicle Traffic

Although 79,000 vehicles/day as the traffic figure for residential areas in 2030 is not much compared with other facility-specific traffic, it does represent a significant 42.1% increase. Thus, terminal distribution for large-scale apartment complexes will be considered.

Consideration of Highway Traffic -> Chapter 2

Consideration of where highway traffic will increase as a result of increased logistical volume and how to address it

The number of cargo vehicles originating in Tokyo's 23 wards (including vehicles not handling freight) will be 1.569 million vehicles / day (2.9 % increase) , and the number of vehicles concentrated in Tokyo's 23 wards will be 1.571 million vehicles / day (3.0% increase) ; there will be an increase in cargo vehicle traffic for some waterfront areas. Measures, such as upgrading Tokyo's three beltways and establishing cargo vehicle transit routes, will need to be implemented in order to ensure traffic flows smoothly and that the environment is preserved in residential areas.

Consideration of Terminal Distribution for Shopping and Entertainment Districts -> Chapter 3

Consideration of whether issues will arise for areas expected to see an increase in commercial facilities

In the case of Ginza Ward, which has been designated as an Urgent Urban Renewal Area and which is expected to see expansion and revitalization in terms of commercial facilities, measures are needed such as traffic time restrictions and the installation and development of shared freight handling areas under-street and as part of large-scale development.

Consideration of Terminal Distribution for Residential Districts -> Chapter 4

Consideration of freight handling parking capacity and operation needed for future large-scale housing complexes

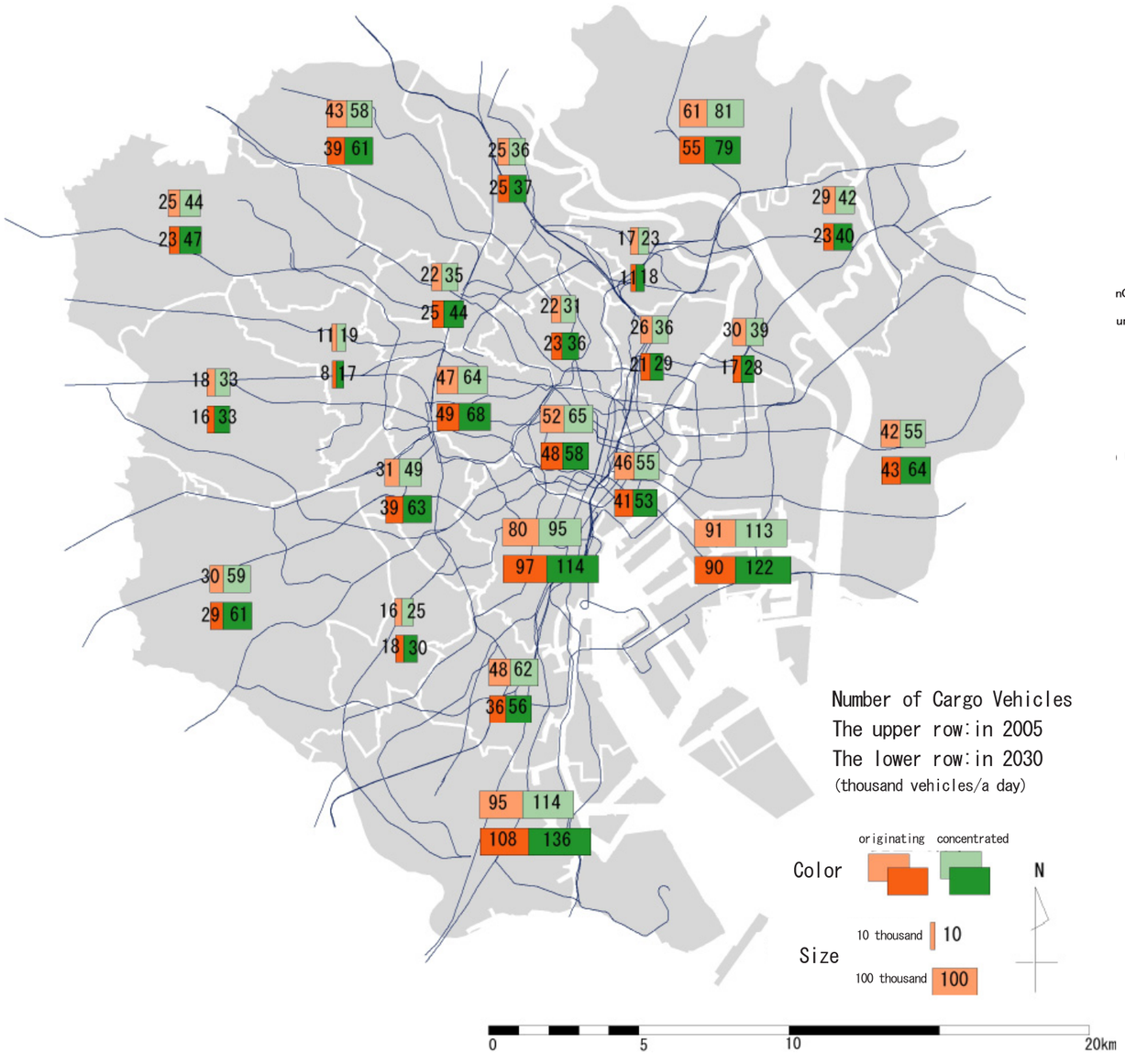
Future increases in deliveries, etc., will create an increase in cargo coming into residential areas which, in turn, will increase cargo vehicle traffic and surface freight handling in residential areas. In particular, freight handling parking areas will need to be allocated for large-scale housing complexes, such as ultra high-rise housing, where cargo concentration will increase significantly.

<Cargo Vehicle Traffic Number Estimates for Tokyo in 2030>

By ward, vehicle traffic numbers are large for waterfront areas

- The area with the largest amount of vehicular traffic in 2030 will be Ota Ward, followed by Koto Ward
- The largest increase in vehicle number between 2005 and 2030 will be in Ota Ward (36,300 vehicles) , followed by Minato Ward (35,800 vehicles). The largest percentage increase will be in Shibuya Ward (25.7%), followed by Minato Ward (20.8%)

In terms of the number of cargo vehicles originating and concentrated in each ward between 2005 and 2030, as the figure below shows, the vehicle traffic numbers for the waterfront areas of Ota Ward, Koto Ward and Minato Ward are significant. Amongst the inlands wards as well, vehicle traffic numbers are large for Adachi and Itabashi wards, where truck terminals are located. In terms of the degree of change between 2005 and 2030, significant increase will be seen in Shibuya, Minato and Ota Wards.

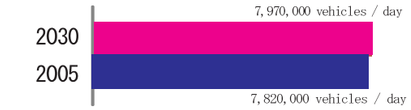


Number of Cargo Vehicles Originating and Concentrated in Each Ward from 2005 to 2030

<Automobile Traffic Number Estimates for 2030 >

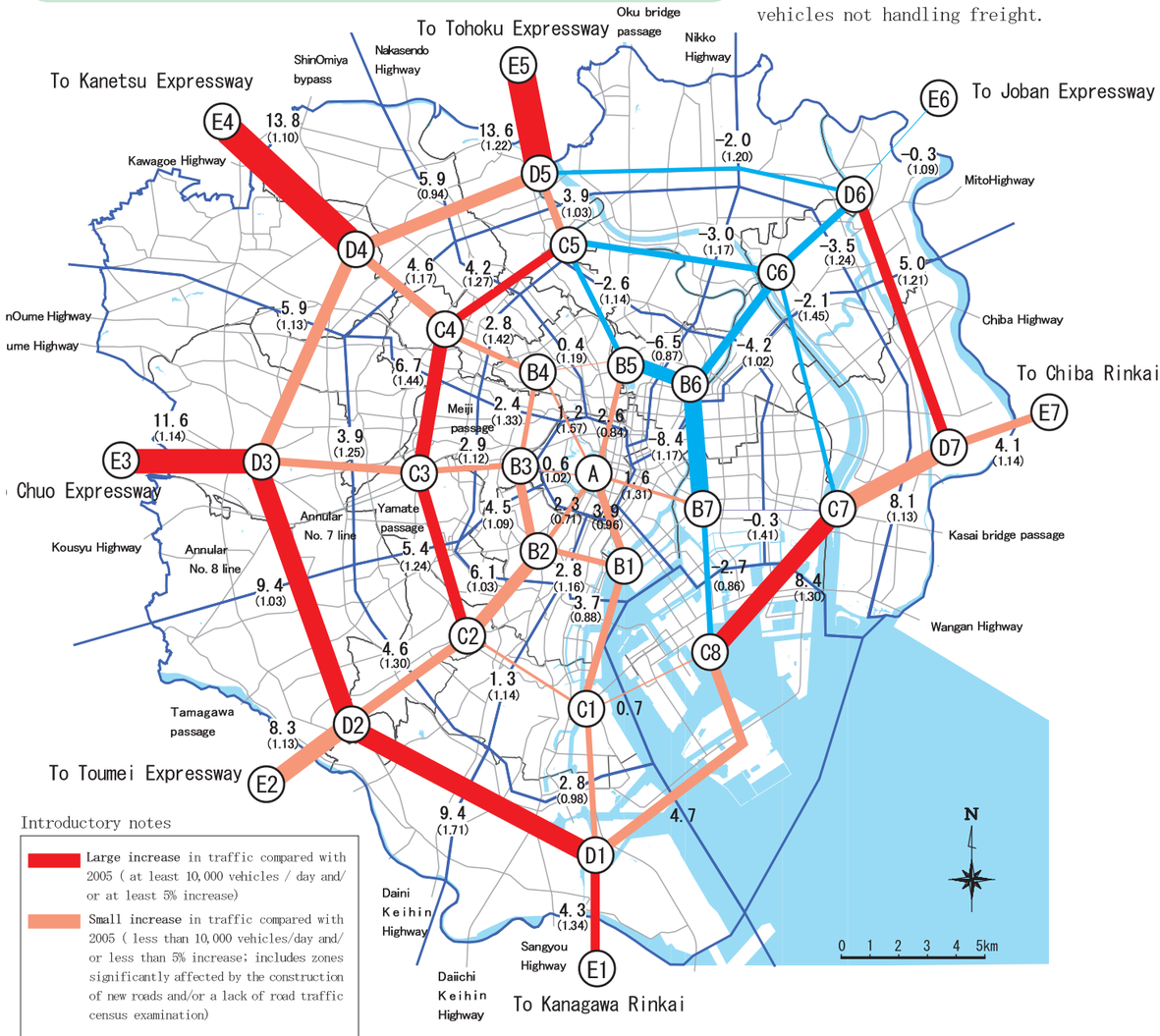
Significant increase in automobile traffic numbers (both cargo and passenger vehicle) for eleven zones

- In 2030, per day automobile traffic numbers (including cargo and passenger vehicles driving in zones which lie both within and outside the 23 wards) are estimated to increase by 150,000 vehicles (2.0%) compared with 2005 to 7.97 million vehicles total.
- Traffic congestion countermeasures are particularly needed in eleven zones (bounded by the Kan-Etsu Expressway and the inner wards; the Ota Ward beltway zone) where per day automobile traffic numbers are expected to increase by 10,000 or more (and/or by 5% or more) compared with 2005.



Automobile Traffic Number Estimates for the 23 Wards

Total number of cargo and passenger vehicles in the zones of Tokyo's 23 wards. Focuses on cargo vehicles on the highways and includes vehicles not handling freight.



Introductory notes

- **Large increase** in traffic compared with 2005 (at least 10,000 vehicles / day and/ or at least 5% increase)
- **Small increase** in traffic compared with 2005 (less than 10,000 vehicles/day and/ or less than 5% increase; includes zones significantly affected by the construction of new roads and/or a lack of road traffic census examination)
- **Decrease** in traffic compared with 2005
- (Ch) Zone Number

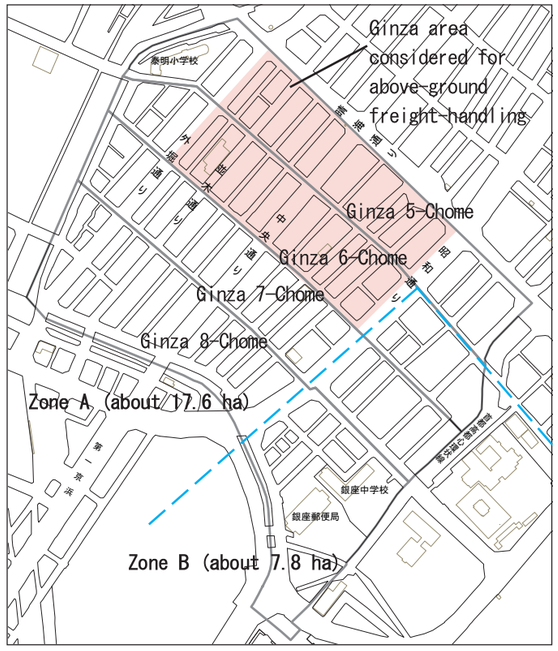
Increase in Number of Automobiles between 2005 and 2030 (for zones within and outside the 23 wards bounded by highways)

Of those zones in the figure for which no increase in vehicles is given, zones B1-C8 are anticipated to see a 61,000 vehicle increase, and zones B1-B7 will see a 60,000 vehicle decrease. This is the result of new road construction (i.e., the extension of Harumi Street in 2006).

<Future Terminal Distribution – Case Study: Blocks No. 5-8 in Ginza Ward>

Following rebuilding carried out in accordance with Ginza's rules, there will be a 745 freight handling vehicle parking space shortage between Ginza blocks No. 5 – 8

・Following rebuilding in Zone A, which is meant to entice commercial facilities to Ginza, there is expected to be a 645 vehicle space shortage, and in Zone B, which is meant to entice residential buildings, there is expected to be a 91 vehicle space shortage. There will be a 745 freight handling vehicle parking space shortage between Ginza blocks No. 5 – 8.



Amount of Cargo Traffic Produced Following Rebuilding and Amount of Parking Shortage

	Total Number of Cargo Vehicles		Total Number of Parking Spaces Needed		Planned Number of Parking Spaces Secured	Amount of Parking Shortage	
	concentrated (vehicles/a day)	originating (vehicles/a day)	originating + concentrated C1	concentrated C2	Required No. of Attendant Spaces D	originating + concentrated C1-D	concentrated C2-D
Ginza blocks No.5-8	5745	8831	1057	540	312	745	228
Zone A	5248	8415	966	462	312	654	150
Zone B	496	416	91	78	0	91	78

Response: Establish shared freight handling spaces and a distribution center in response to redevelopment and rebuilding.

・Take freight directly into and out of a shared freight handling area and distribution center directly off of Showa Street, underneath redeveloped buildings.

・Install dedicated freight elevators to take freight into and out of existing buildings as well as perform collection and deliver in the surrounding area.

・Utilize the shared freight handling areas as public facilities so that they provide added volume to the redeveloped and rebuilt buildings into which they are installed.

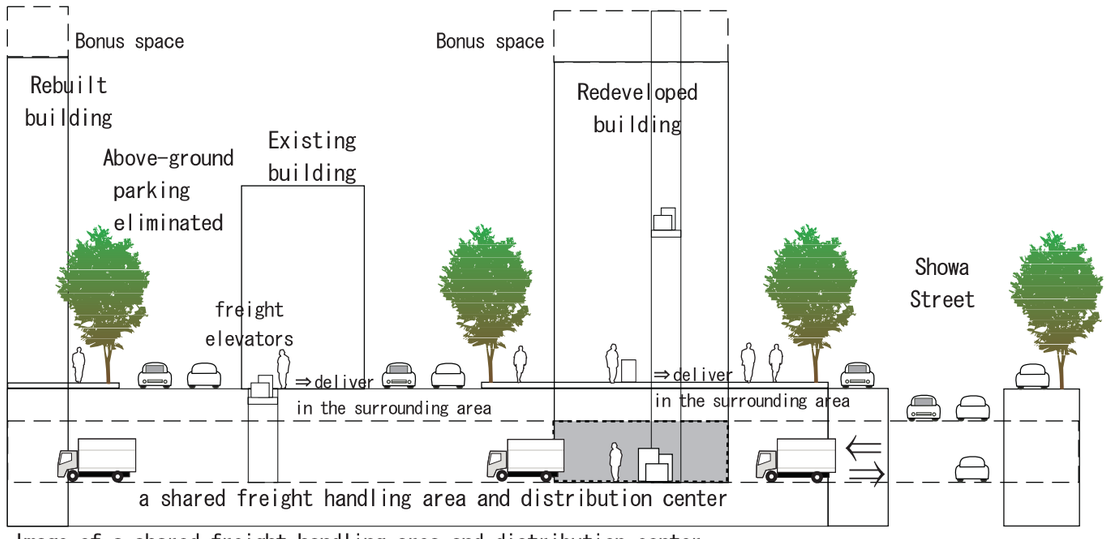


Image of a shared freight handling area and distribution center

Proffered Measures for Addressing Terminal Distribution

Relatively simple measures:

・Refurbish existing parking lots to allow 200 freight handling parking spaces to be secured. However, a height limit of 2m means only smaller cargo vehicles can use these spaces.

・Use traffic regulations to delineate separate transit areas and times for cargo vehicles and shoppers. Because a lot of the traffic in Ginza is comprised of visitors, the streets are far less busy during the early morning and late night, allowing for their usage for freight handling. Also, the decreased amount of street parking is a great benefit in that it creates better safety for shoppers.

Large-scale approaches:

・Secure 42 parking spaces by installing a dedicated, shared freight handling area under the road (Namiki Street, Ginza Mihara Street). Because no time restrictions are needed, it can be effectively used in combination with traffic regulations.

・Add extra space to redeveloped and rebuilt buildings in response to installed shared freight handling areas and distribution centers, and secure space for use as freight handling areas to be jointly used with surrounding buildings.

・Make joint use of newly installed distribution centers to perform pick-up and delivery to the surrounding existing buildings.

・Establish pick-up and delivery centers for shared pick-up and delivery, thereby reducing the number of cargo vehicles that come into the Ginza area.

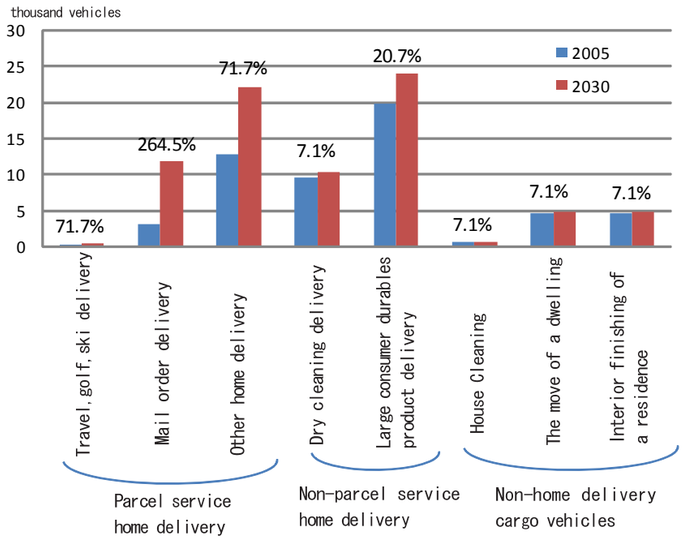
<Terminal Distribution for Future Residential Buildings>

Freight Handling Parking Areas Needed for Large-scale Apartment Buildings

A large increase in residences compared with the current level is predicted, and consideration has been given to logistics focused on these residences, in particular the number of freight handling parking spaces need for large-scale apartment complexes containing numerous residences.

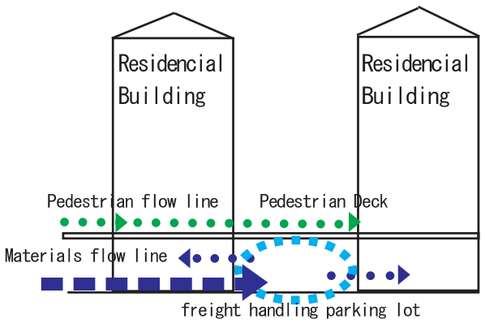
・In 2030, a 1,000 unit, large apartment complex will require eight freight handling spaces (assuming one space per 125 units)

・For large housing developments, freight handling parking will need to be effectively managed through such approaches as the consolidated placement of freight handling parking lots



Prediction of the freight car arrival-and-departure number classified by kind of loads of a residence

Numbers are the rate of increase from 2005 to 2030.



Consolidated placement of freight handling parking lot which keeps flow lines separate

Placement and Operation of Freight Handling Parking Lot

1. Lease freight handling parking areas on a monthly basis to courier companies who will use them frequently and for extended periods.
2. Perform consolidated placement of freight handling parking areas according to the number of units in large-scale apartment complexes and in locations which do not require cargo to be stored for long periods of time so as to ensure effective parking area management.