

HA NOI PEOPLE'S COMMITTEE
TRANSPORT AND URBAN PUBLIC WORKS SERVICES

LAND USE IN URBAN TRANSPORT PLANNING FOR HANOI CITY

In 1998, the Prime Minister approved “Mater Plan for Ha Noi Capital” at the Decision No. 108/QD-Ttg.

In accordance to this Mater Plan, the Ministry of Transport (MOT) have made a detailed Master Plan for the Urban Transport Development in Hanoi City which is being submitted for appraisal.

During past 5 years, large urbanization scale and a dramatic increase of road transport in Ha Noi and neighboring areas have raised many new issues/problems that need being studied to revise the Master Plan in conformity to the practice.

The traffic congestion issue caused by an insufficiency of integrated road network, and costs for compensation and clearance which are 5 times higher than those for construction of transport facilities in the urban area require principle standards on land use in the transport development planning in Hanoi City.

The Study on Hanoi Regional Planning conducted by the Ministry of Construction, and proposals for revising the Hanoi Integrated Development and Environmental Program (HAIDEP) funded by JICA have provided scientific and practical recommendations on land use as follows:

**Urban Development Targets related to the Land-use for transport
in Hanoi up to 2020**

No.	Targets	At the Decision No. 108/QD-Ttg	Recommended Revises
1	Population - Entire Hanoi - Urban area	3.9 mil. pers 2.8 mil. pers	4.5 mil. pers 3.9 mil. pers
2	Average GDP per capita	USD 1337	USD 1737
3	Urbanized land area	25,000 ha	39,000 ha
4	Average housing floor area per capita (m²)	15 m ² per person	18 m ² per person
5	Civil construction land	6,500 ha 26 m ² per person	10,300 ha 26 m ² per person
6	Public and commercial land	2,200 ha	3,800 ha
7	Industry land	3,840 ha 74 m ² per person	4,100 ha 67 m ² per person
8	Park – Green area	4,000 ha 16 m ² /person	6,300 ha 16 m ² /person
9	Educational, cultural, historical areas.	930 ha	1,900 ha
10	Others	7,530 ha	12,580 ha
	Total	25,000 ha	39,000 ha

Basing on the above targets, the Master Plan for the Urban Transport Development in Hanoi City has to obtain 2 basic objectives, as follows:

1. To eliminate traffic congestion in the urban area by 2020; and
2. To meet the standards of South East Asia capitals in term of transport infrastructure and public transport system.

Main Targets of the Master Plan for the Urban Transport Development by 2020

No.	Targets	At the Decision No. 108/QĐ-Ttg		Recommended Revises		Remarks
		Road length (km)	Road density (km/km ²)	Road length (km)	Road density (km/km ²)	
1	Road Network					
-	Old inner-city	138	4.42	183	5.9	- Residential area: 4 km of road/km ² - Commercial area: 6 km of road/km ² - Industry area: 1 km of road/km ²
-	New inner-city	128	1.07	250	2.1	
-	Suburb	108	0.84	212	6.3	
2	Road area/total land area					
-	Old inner-city	10.3%		18.1%		
-	New inner-city	6.3%		10.6%		
-	Suburb	4.1%		7.5%		
3	Terminals and parking area (static transport)	3-5%		3%		Of which, the share of public parking places is 10 - 30% of the total parking need
4	Total land area for urban transport	≥25%		20-25%		
5	Public transport share (%)	2020: 50%		- 2010: 30% - 2020: 55- 60%		Of which, tramway system serves 0.5-0.9 mil. passengers per day

Key investments in Hanoi urban transport development under the Master Plan:

1. Execution of the motto “Investment Socialization” to rapidly develop bus route network and number of buses for handling over 30% of people’s daily trips; decrease of the number of motorbikes and reduction of private car using.
2. Improvement of inadequate distribution of the road transport network in 9 inner-city districts
 - The street network in old and ancient quarters is fairly complete, with road area per land area rate of 23% (meeting the general plan target).
 - In urban areas which were developed in subsidized economy period (in Hai Ba Trung, Dong Da and a part of Ba Dinh districts), the average road area is only from 8 to 12%, and traffic congestion is frequent and in large scale. Thus, the investment will be prioritized for improvement and widening of roads/streets, and new construction of roads in accordance with the detail plan approved by the Municipal People’s Committee.
 - Concentrate on the synchronous and complete construction of roads to meet the standard of urban road - class II (50m wide). Ring Road 1 is co-functional to be the East-West trunk-road running from Cau Giay, along De La Thanh to O Cho Dua and to Nguyen Khoai Dike (to connect to Vinh Tuy Bridge).

This road will deal with the historical remaining problem (caused by urbanization process in Hanoi) which is a land strip located between Tay Son - Nguyen Luong Bang - Ton Duc Thang route and Le Duan - Giai Phong route, with only 3% of road area per urban land area rate, resulting in frequently traffic congestion in peak hours on East-West streets/roads.
3. Improvement, widening and continuous extension of Ring Road 2 and Ring Road 3 to divide traffic flows and organize the transport in the light of separating inter-provincial transport from urban transport.
4. Using of foreign investment resources (ODA, WB) to prioritize projects of public mass transit development (bus, tram) to form a public multi-modal transport system in order to meet transport demands in the short term and sustainable development in the long term.
5. Development of new urban areas, industrial zones, and commercial, economic and service centres under the motto “Synchronous Transport Development”, and in advance development of urban technical infrastructure to restrict illegal land use, arisen compensation and clearance costs as well as create significant budgets from the urban land use bidding.
6. Timely and synchronous construction of Thanh Tri, Vinh Tuy and Nhat Tan bridges to meet inter-provincial transport demands through Hanoi, and develop urban areas towards the north of Red River.

7. Development of following public mass transit tram routes:
- Nhon - Ha Noi Station
 - Yen Vien - Ha Noi Station
 - Ha Dong - Ha Noi Station
 - Giap Bat - Ha Noi Station
 - Noi Bai airport - Thuy Khe - Ho Guom - Hanoi Station (as HAIDEP proposal)
 - Van Dien - Bo Ho and Ha Dong - Kim Ma BRT (Bus Rapid Transit)

All the above tram routes run through 3 typically urbanized areas of Hanoi, including ancient quarter, developed area in the subsidized economy duration and constructed area in the open economy.

All the tram routes are flexible, running on elevation, on the ground and underground to utilize land area and reduce compensation costs.

Hang Co station (with a total area of more than 20 ha) needs to be improved and modernized into a several storeyed transit centre for all means of urban land transport.

Thus, the operation of underground spaces and mass transit organization on bridges would be a basic and sustainable solution to spare land for urban transport in Hanoi.

8. Execution of the motto “Investment Socialization” to rapidly and synchronously develop a static transport system in response to the increase in the number of private cars in the inner city.
- Stimulation of the parking socialization development on the base of culvertizing possible river and ditches in the inner city.
 - Promotion of the construction of multi-storeyed garages in residential areas.

Underground garages with large capacity (2-3 storeys) are required for high-rise hotels and offices to get cars off the sidewalks and streets.

Land area for terminals and parking areas are to be used in combination with the land fund for parks – green trees and public service facilities in order to limit the land use and attract more investment.

TRANSPORT AND URBAN PUBLIC WORKS SERVICES

Deputy director

Dr. Tran Danh Loi