

Enhancing the Functions of Networks for Exchange Among People and Goods

Development of Road Networks

Roads play a crucial role in not only aiding the smooth flow of people and vehicles as they go about their daily lives and business, but in numerous other capacities as well, such as forming the framework of built-up areas, providing space for water supply and sewer pipes and other city infrastructure, acting as firebreaks, and providing greenery in the form of road-side trees.

The systematic and efficient formation of a road network is essential to resolve traffic congestion in Tokyo and to revitalize the National Capital Region. In order to achieve this goal, the TMG has been building roads designated under the City Planning Act (city-planned roads) and the three ring expressways of the National Capital Region.

Development Policy for City-Planned Roads

Roads totaling some 3,200 kilometers in Tokyo have been designated for development under the City Planning Act, but as of March 31, 2016, only about 63 percent has been completed. For the systematic construction of city-planned roads, the TMG, the special wards, 26 cities, and 2 towns in March 2016 jointly formulated the “Development Policy for City-Planned Roads in Tokyo (4th Construction Plan),” which is a 10-year plan.

Key Elements

(1) 4th Construction Plan (selection of roads for priority development)

Taking into account both regional and local needs, six criteria were used to select 320 sections totaling 226 kilometers of roads for priority development by fiscal 2025. In making the selection, all pertinent factors were considered, including the project’s sustainability and feasibility.

(2) Review of the future city-planned road network

The necessity of road projects for which work has not yet started was reviewed based on 15 criteria. Those projects that did not meet any of the criteria (9 sections totaling about 4.9 kilometers) were designated as “routes (sections) for review.” The necessity of these roads will be evaluated again based on local needs.

(3) Re-examination of road plans

Among road projects that were confirmed to be necessary, 28 routes totaling around 30.4 kilometers were designated as “routes (sections) for re-examination of plans” for review of the details of the project, including the width and structure of the road.

Regarding the course, width and structure of the roads, the TMG will continue to implement necessary procedures and preparations for the development of city-planned roads, while taking into account the various issues surrounding each route.

(4) Further easing of restrictions on construction

Deregulation was expanded to allow construction of structures up to three floors in all areas of city-planned roads, including roads for priority development (excluding some cities and wards).

(5) Basic Policy for City-Planned Roads in Tokyo (tentative name)

The TMG is examining what form remaining road projects for which work has not yet started should take, and working toward formulating a basic policy.

Current status of city-planned roads
(as of March 31, 2017)

Area	Planned road extension km	(Completion ratio) Completed road extensions km	Road extension under construction km	Uninitiated road extension km
Special ward area	1,769	(65.4%) 1,157	161	450
Tama area	1,431	(61.0%) 873	129	427
Islands	10	(100%) 10	0	0
Total	3,210	(63.5%) 2,040	290	878

- ※ Urban expressways and roads designated for automobile traffic only are not included.
- ※ Totals in each column may not match due to rounding.
- ※ Uninitiated road extensions include almost completed road extensions.

Promoting Construction of the Three Ring Expressways of the National Capital Region

Tokyo Metropolitan Expressway Central Circular Route

This circular route is approximately 47 kilometers long and links areas within an approximate 8 to 10 kilometer radius from the center of Tokyo. With the section linking the No. 3 Shibuya Route to the Wangan Route completed in March 2015, the Central Circular Route fully opened to traffic.

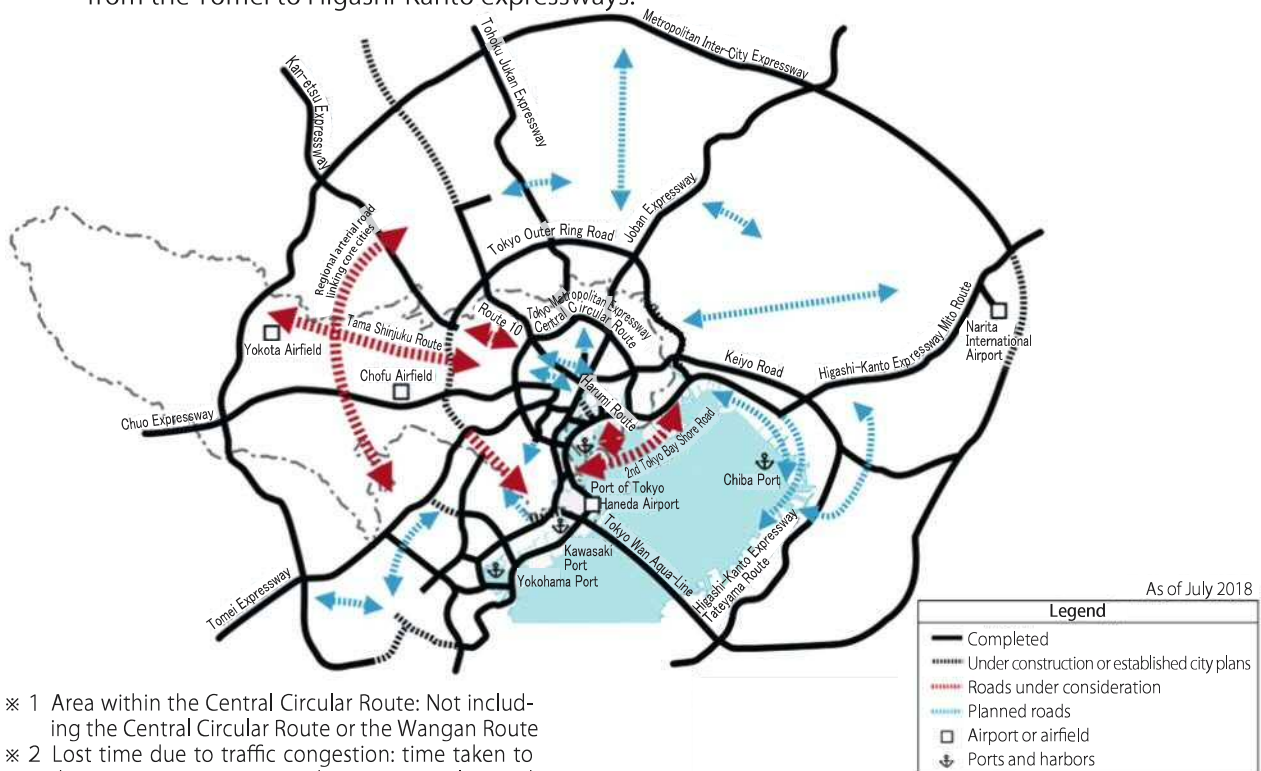
This has resulted in less concentration of traffic in the city center. The volume of traffic in the area within the Central Circular Route (*1) has declined by 5 percent and time lost due to traffic congestion (*2) has gone down by about 50 percent. Among other benefits, the time required to travel to Haneda Airport from Shinjuku during rush hour has been reduced by about 21 minutes.

Tokyo Outer Ring Road (Gaikan)

This route is approximately 85 kilometers long and links areas within an approximate 15-kilometer radius from the center of Tokyo. With the completion of the Misato Minami Interchange-Higashi-Kanto Expressway section in June 2018, roughly 49 kilometers of the route between Oizumi Junction and Koya Junction is now in service. In April 2007, the city plan for the section between the Kan-etsu Expressway and the Tomei Expressway was changed from an elevated route to an underground route and the project became ready for implementation in May 2009. Currently this project is being carried out by the central government and the East and Central Japan Expressway companies. Regarding the section between the Tomei Expressway and Wangan Roadway, the TMG is working with the central government and other related agencies with the aim of formulating a concrete plan as soon as possible to maximize the ring road's functionality as a circular route.

Metropolitan Inter-City Expressway (Ken-o-do)

This route is approximately 300 kilometers long and extends over Tokyo and its four surrounding prefectures at a 40- to 60-kilometer radius from the center of Tokyo. With the opening of the section from Takaosan Interchange to Sagamihara-Aikawa Interchange in June 2014, the entire 24.6 kilometer portion of the expressway that runs through Tokyo (Ome Interchange to Sakaigawa, Kanagawa Prefecture), opened to traffic. In February 2017, the entire portion running through Ibaraki Prefecture opened to traffic, with the Metropolitan Inter-City Expressway now linking expressways from the Tomei to Higashi-Kanto expressways.



- ※ 1 Area within the Central Circular Route: Not including the Central Circular Route or the Wangan Route
- ※ 2 Lost time due to traffic congestion: time taken to destination minus time taken at normal speed multiplied by total volume of cars

Note: Based on The National Capital Region Development Plan

Development of Railway and Automated Guideway Transit Systems

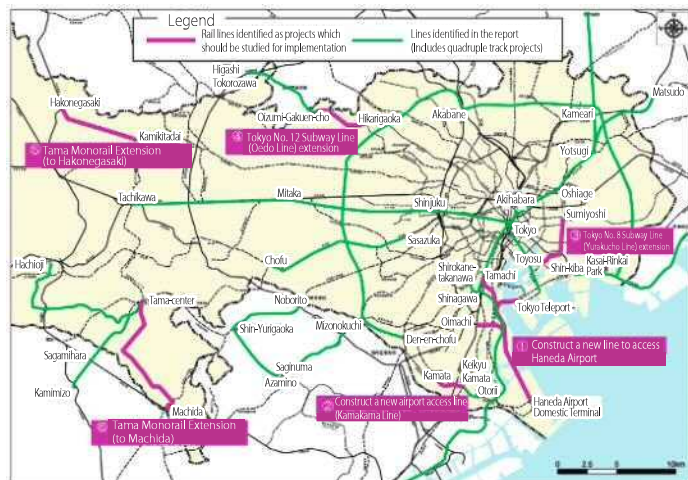
Tokyo's railway and AGT systems are unrivalled in the world in their extensive network, precision, and safety. The TMG will continue its efforts to further improve the networks, make it easier to transfer between train lines, provide more barrier-free environments and services, and solve issues with railway crossings.

Enhancing the Railway Network

Development of Tokyo's railways has been advanced based on reports issued by the national government's council for study of transportation policy.

Tokyo is currently studying matters, such as project schemes, centered mainly on six lines identified in the Council on Transportation Policy Report (Number 198), issued in April 2016, as projects which should be studied for implementation.

In April 2018, the TMG established a reserve fund to prepare for construction of new rail lines in Tokyo and other programs with the aim to use this to finance projects such as the aforementioned six lines.



*Rail lines identified as projects which should be studied for implementation (6 lines)

Improvement of Subway Lines

The construction of subway lines has been implemented based on a central government council's report.

In addition, the TMG is working to promote the improvement and integration of subway services, and increase passenger convenience.

Examples of Past Development

Tsukuba Express/Nippori-Toneri Liner

The Tsukuba Express was developed to ease crowding on JR Joban Line trains, enhance the public transportation network in the northeastern portion of Tokyo, and promote the growth of the areas along the line. The line, which links Akihabara and Tsukuba, opened in August 2005. The Nippori-Toneri Liner was planned to resolve the inconvenience of poor public transport in northeastern Tokyo and contribute to the development of the areas along the line. Linking Nippori and Minumadai-shinsuikoen, the line opened in March 2008.

Rinkai Line/Yurikamome

The Rinkai Line and AGT Yurikamome were planned with aims that include enhancing the public transportation network in Tokyo Waterfront City and contributing to the promotion of development of the areas along the lines. Through mutual use of JR Saikyo Line operation facilities, the Rinkai Line opened between Shin-kiba and Tokyo Teleport in March 1996, between Tokyo Teleport and Tennozu Isle in March 2000, and between Tennozu Isle and Osaki in December 2002. The Yurikamome began operations between Shimbashi and Ariake in November 1995, and between Ariake and Toyosu in March 2006.

Tama Monorail

The Tama Monorail was planned to enhance the public transportation network in the Tama area and strengthen mutual cooperation between core cities. The section between Tachikawa-kita and Kamikitadai, and the section between Tachikawa-kita and Tama Center opened in November 1998 and January 2000, respectively.

TOKYO BRT: Linking the City Center and the Waterfront Area

The TMG is planning to introduce TOKYO BRT (bus rapid transit) as a new public transit service linking the city center to the waterfront area centering on Ring Road No. 2.

Expectations are that areas such as Kachidoki, Harumi, Toyosu and the Waterfront City will develop as a new face of Tokyo, which offers residential space and also increased capabilities as a MICE (Meetings, Incentive travel, Conventions, Exhibitions) destination. However, there are places where access to rail services is poor and some stations and their surrounding areas are heavily congested during rush hour. Moreover, transportation needs in the area will likely increase further in part because around 6,000 housing units are scheduled to be created in the repurposing of the Athletes' Village following the Olympic and Paralympic Games Tokyo 2020.



Articulated bus (Image)

To respond to these situations, the TMG in April 2016 formulated the Business Plan for BRT Linking the City Center and Waterfront City. This plan was revised in August 2018 based on changes in the surrounding circumstances that followed.

The revised plan stipulates that preliminary operations, operations to respond to increased demand for transportation in the waterfront area prior to the opening of the Ring Road No. 2 tunnel, are to begin on a portion of the route in fiscal 2020. The plan calls for full operation of BRT services, ensuring speed and on-time service, to begin after fiscal 2022, when the tunnel opens. In preparation for the start of operations, based on the business plan, coordination with local communities and negotiations with relevant parties (relevant special wards, road management authorities, and traffic management authorities, and entities owning or operating underground facilities) about facility construction and other matters will be conducted.

Basic Policy for Railway Crossing Measures

Approximately 1,050 level railway crossings still remain in Tokyo, causing traffic congestion and many other problems. The Basic Policy for Railway Crossing Measures was formulated in June 2004 with the aim to enhance Tokyo's attractiveness as a global city and to promote urban renewal.

In this basic policy, 394 level crossings were selected as priority areas for study and project implementation by fiscal 2025. Among these priority areas, 20 sections were then selected to be examined for construction of two-level crossings by elevating or lowering the tracks, and 83 sections were selected to be examined for other measures such as two-level crossings using road elevation or tunneling, provision of pedestrian overpasses or underpasses, shorter bell warnings of train approach, and road-widening across the tracks. The early implementation of measures for railway crossings is presently being pursued based on this basic policy.



Example of large-scale project for two-level crossings (Keikyū Line near Ring Road No. 8)
Photos provided by the Bureau of Construction



Example of road-widened crossing

Jisa Biz Campaign to Promote Off-Peak Commuting

Train congestion remains to be a problem in the greater Tokyo area, with congestion rates exceeding 180 percent on some railway sections. In order to increase the productivity of society, easing congestion on packed trains is an important issue, and it is crucial to work to create a comfortable commuting environment. In light of this, the TMG launched the Jisa Biz Campaign in fiscal 2017 with the aim of having many people experience a more comfortable commute. During the campaign period, concerted efforts are made to alleviate train congestion. For example, some companies encourage their employees to commute during off-peak hours through a review of work styles, allowing them to start working earlier or later than usual or to telework. Railway operators take such measures as offering benefits to off-peak commuters and showing commuters which trains / times of day are the most crowded using visual aids.

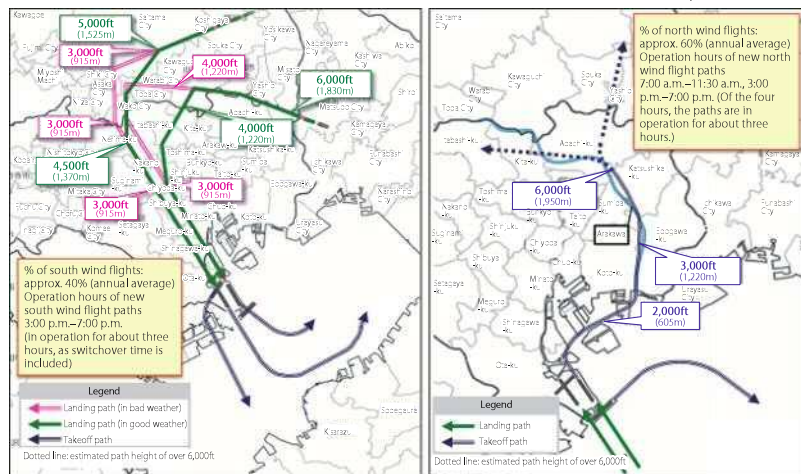
Promotion of Aviation Policies

It is essential to bolster the airport functions of the National Capital Region for Tokyo to develop as a global city. The TMG is taking many initiatives to address this challenge. These include efforts to strengthen functionality at Haneda Airport and increase its international flights, and to have Yokota airspace returned to Japan.

Enhancing Functionality of Haneda Airport and Increasing International Flight Services

The TMG had been lobbying the central government to re-expand and introduce regular international flights to Haneda Airport, and had also cooperated in a variety of ways including providing the central government with interest-free loans for construction of a new runway. As a result, Runway D and the International Terminal opened for service in 2010, and regularly scheduled international services commenced. In 2014, the annual number of arrival and departure slots at Haneda was increased to 447,000. However, Haneda Airport is currently operating at full capacity, except during the late night and early morning hours. Therefore, it is not possible to increase the number of arrival and departure slots under current operations.

In order to strengthen Tokyo's international competitiveness and meet the needs of the Olympic and Paralympic Games Tokyo 2020, as well as air travel beyond the Games, Haneda Airport's capacity has to be expanded to facilitate additional international flights. Regarding the central government's 2014 proposal to revise airplane flight paths, the TMG is requesting that the central government give consideration to the residents of areas affected and take thorough safety and noise prevention measures. In these ways, the TMG is taking steps to enhance Haneda Airport's functions and international connectivity.

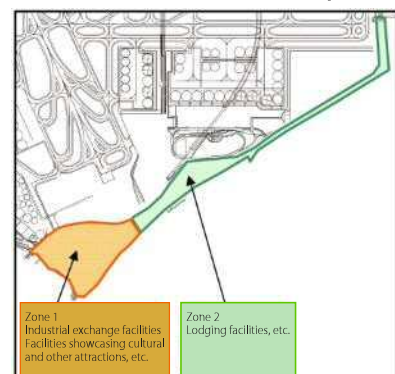


Proposed flight paths (based on data from the Ministry of Land, Infrastructure, Transport and Tourism)

Development of the Vacant Land Formerly Part of Haneda Airport

In October 2010, the TMG, jointly with the central government and local wards, compiled a plan for developing the land left vacant after completion of the Haneda Airport offshore development project and the re-expansion project, and has been taking concrete initiatives. In Zone 1 of the site, along with infrastructure development through a land readjustment project, Ota-ku is proceeding with the development of industrial exchange facilities and other facilities. In Zone 2, the central government is developing lodging and other facilities through public-private projects.

While coordinating with the relevant parties, the TMG will continue to work to develop the vacant land, with the aim of completing most of the project by 2020.



Development of vacant land at Haneda Airport

Reversion of Yokota Airspace

Yokota airspace, currently controlled by the U.S. Forces in Japan in Japan, is a vast space that extends over Tokyo and nine other prefectures. In September 2008, part of the airspace was returned to Japan. Still, in order to ensure air traffic that is safer and more efficient, and has less adverse noise impact, full reversion of Yokota airspace, realignment of airspace in the National Capital Region, and unified air traffic control by Japan is indispensable. To this end, the TMG will continue urging the national government to negotiate with the U.S. government for total reversion of the airspace.

Transportation Policies

In addition to developing key transportation infrastructure, such as roads, railways, and airports, with the aim to realize transportation that is smooth and comfortable, befitting the global city of Tokyo and efficient logistics, the Bureau also implements the following initiatives.

Promotion of the Smooth Biz Initiative

To realize a society where everyone can actively work and lead vibrant lives, it is necessary to aim to create a comfortable commuting environment and improve the productivity of companies, taking both tangible and intangible approaches, including devising new transportation behavior for Tokyo residents and companies, promoting telework, and efficient logistics. To that end, the TMG has created the “Smooth Biz” concept as the Tokyo model for new workstyles and company activities. For firm establishment of the model, the TMG is advancing a combination of initiatives aimed at alleviating transportation congestion during the Tokyo 2020 Games, such as Travel Demand Management (TDM), which aims to reduce and redistribute traffic, telework, and “Jisa Biz,” which promotes off-peak commuting.

Transportation Projects Toward Building an Integrated Transportation System

The TMG is pursuing integrated transportation policies which consider not only the needs of the Olympic and Paralympic Games Tokyo 2020, but also Tokyo’s post-Games transportation requirements. By steadily implementing concrete measures aimed at making Tokyo’s transportation system truly user-centric, the TMG will realize a world-class transportation system which is easy for all to use.

(1) Upgrading the Functions of Transportation Nodes

Major stations where many different rail and bus services are concentrated have problems such as discontinuous and difficult to understand signage, differences in floor levels on connecting routes and other drawbacks. Collaboration between the providers of transport services and the management of the station facilities is necessary to implement improvements to benefit everyone including foreign visitors and elderly people.

To this end, for example at Shinjuku Station, a council of stakeholders was set up in June 2015, and in cooperation with the municipal government improvements are underway such as better placement and consistency of signage, and making routes to change trains barrier-free.

The TMG also aims to expand such endeavors to other major stations, such as Ikebukuro and Shibuya stations.

(2) Road Usage

For Tokyo to increase its appeal as a mature city, it is necessary to create comfortable and spacious pedestrian areas in the city center and other central areas where various people gather.

While constructing major roads to reduce through traffic in the city, the TMG, in cooperation with local municipalities and other relevant entities, will continue to create vibrant pedestrian areas that befit a mature city.

The TMG is also supporting efforts to enhance pedestrian areas through the establishment of open cafes and holding events, as well as to expand these improvements into new areas.



Image of pedestrian area

(3) Development of Water Transport

Water transport should be developed to make the most of Tokyo's waterfront, one of its greatest attractions, and encourage tourists from Japan and overseas to enjoy it. To achieve this, it is important to take steps to introduce a wide range of routes linking the tourist attractions and other facilities in the waterfront area so that water transport can become an easy-to-use way to sightsee and get around.

In order to increase the number of attractive routes across the water, measures are being taken toward introducing new water lanes linking the city center, the Waterfront City area, and Haneda Airport, among others.

The TMG is also working to enhance access from nearby stations through measures including improved signage, generate vitality around ferry piers, and improve awareness regarding water transport, among other efforts.



Social experiment aimed at enhancing water transport

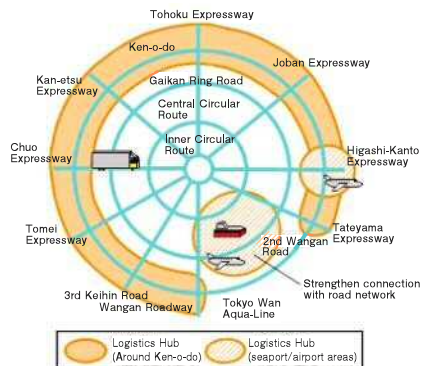


Pier

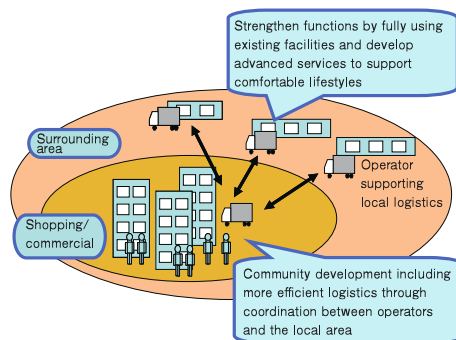
Promotion of Logistics Measures

Logistics is an important infrastructure supporting industry and daily life. In February 2006, the metropolitan government formulated the Comprehensive Vision for Logistics, presenting the basic concepts behind future policies for logistics. Along with strategically promoting efficient logistics, the TMG is now studying new logistics measures as set forth in the Grand Design for Urban Development, released in September 2017

Various logistics measures are being taken to achieve efficient logistics that can increase community vibrancy and support comfortable lifestyles, in addition to the creation of a regional logistics network covering land, air, and sea.



Development of a Regional Distribution Network of Land, Sea, and Air Transportation



Efficient logistics increasing community vibrancy and supporting comfortable lifestyles

Promotion of Comprehensive Measures for Parking

In January 2007, the TMG released a Comprehensive Manual to Resolve Parking Problems, which compiled the basic concepts to deal with parking issues and included case studies of measures taken for parking. Based on this manual, the metropolitan government is, in cooperation with the municipalities and other organizations, implementing comprehensive measures dealing with parking issues.

To reduce the occurrence of trucks parking on roads to load and unload cargo, one cause of traffic congestion, the Bureau of Urban Development is implementing measures to gain cooperation from parking lot operators to use coin-operated parking facilities to establish space for trucks to load and unload cargo.



Coin-operated parking lot providing space for truck loading/unloading