

5. Increase in the traffic convenience/accessibility in the bay area

1. Overview

We improve the transportation network by introducing the BRT*, etc. before the Tokyo 2020 Games, in order to strengthen access to waterfront areas where the demand for public transportation is expected to further increase.

In addition, we develop the environment for bicycle use to improve the excursion in the bay area, such as diffusion and promotion of bike-sharing* and establishment of recommended bicycle routes.

Furthermore, we work to promote initiatives to revitalize water transportation and improve convenience of the bay area through the development of wharfs and the implementation of social experiments in anticipation of establishing sea routes connecting the center of Tokyo, waterfront areas and Haneda.

2. Legacy in a nutshell

With the introduction of next-generation transportation systems such as BRT and automated driving, etc., we will deal with the increase of traffic demand in the waterfront areas and realize a safe and comfortable city.

In addition, everyone will be able to travel freely and safely using bicycles with the help of networking of bicycle traffic spaces in the bay area and linking with public transportation, etc.

Moreover, the formation of a water transportation network and creation of lively areas around the wharfs will establish water transportation as a familiar means of transportation for tourism and travel.

These initiatives will develop, the convenience of transportation in the bay area will be improved.

Stakeholders	Bus operators, road managers, traffic managers, water transportation operators, etc.
Type of legacy	Urban Planning
Geographical scope	Tokyo
Timing scope	Long term
Responsible for implementation	TMG
Source of legacy	Candidature file, Action Plan for 2020, Future Tokyo: Tokyo's Long-Term Strategy

Associated SDGs	3-Good Health and Well-Being, 6-Clean Water and Sanitation, 9-Industry, Innovation, and Infrastructure, 10-Reduced Inequalities, 11- Sustainable Cities and Communities, 13-Climate Action, 15-Life on Land
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3. Development

(1) Why

Prior to the decision to host the Tokyo 2020 Games, TMG has been working on the development of transportation infrastructure, including the extension of wide-area arterial roads, Tokyo Waterfront Area Rapid Transit, and the Waterfront New Transit "Yurikamome", in order to improve the transportation convenience in the bay area. In anticipation of the delivery of the Games, the preparation of the competition venues and the Olympic and Paralympic Village and the development of the former Olympic and Paralympic Village are planned in the bay area, and the traffic demand is expected to further increase, so it is necessary to develop a transportation network meeting the increased demand.

(2) When

FY2014	The "Basic Policy on Public Transportation Connecting the Center of Tokyo and the Waterfront City -Necessity of Medium-scale Transportation Centered on BRT-" was formulated *This indicates the policy of TMG for the development of medium-scale public transportation meeting the traffic demand expected in anticipation of the Tokyo 2020 Games in the area from the center of Tokyo to the waterfront city via Kachidoki
FY2015	The "Basic Plan for BRT Connecting the Center of Tokyo and the Waterfront City" was formulated *This indicates the basic concept necessary for BRT operation
	The BRT operators were selected
	The recommended bicycle routes were established in anticipation of the Tokyo 2020 Games
	The wide-area mutual utilization of bike-sharing started
FY2016	The "Operation Plan for BRT Connecting the Center of Tokyo and the Waterfront City" was formulated *This indicates how to proceed with BRT operation and specific operation details

	The social experiments for vitalizing water transportation and environmental development to promote private operations started
FY2018	The "Operation Plan for BRT Connecting the Center of Tokyo and the Seaside Sub-center" was revised *The operation plan formulated in FY2016 was revised based on changes in surrounding conditions
FY2020	Pre-operation of BRT (first stage) started

(3) Who

TMG

(4) How

① Development of the transportation network through introduction of BRT, etc. for the purpose of flexibly dealing with traffic demand

- In anticipation of the operation of BRT, based on the "Operation Plan for BRT Connecting the Center of Tokyo and the Waterfront City", we will conduct local adjustment and discussions with related parties (related wards, road managers, traffic managers, burying work companies, etc.) regarding facility development, etc., and we renovated station squares along the Rinkai Line (at Tokyo Teleport Station and Kokusai-Tenjijo Station) where the bus stop facilities are installed.
- Pre-operation of BRT (1st stage) started in October 2020. The 2nd stage of the pre-operation will begin after the Games, and in FY2022 or later, after the opening of the town that leverages the Olympic and Paralympic Village, full-scale operation will start. Fuel-cell vehicles will be introduced in stages.

<BRT pre-operation> (1st stage)>^[1]

<BRT pre-operation (1st stage)>^[2]

*During the traffic regulation period for the Tokyo 2020 Games in the peripheral areas of the venues (From mid-June to mid-September 2021)



[1] Partly based on Tokyo BRT pamphlet (TMG)

[2] Tokyo BRT pamphlet (TMG)

<BRT pre-operation> (2nd stage)^[3]
After the Tokyo 2020 Games



<Full-scale operation>^[4]

In FY2022 or later, after the opening of the town that leverages the Olympic and Paralympic Village



<Image of Tokyo BRT>^[5]



Non-articulated bus (fuel-cell vehicle)



Articulated bus

- In anticipation of the BRT, we empirically introduce the technology of next-generation urban transportation system (ART) such as automated driving for "safety and security" in public transportation that is planned to be developed in the "Strategic Innovation Creation Program (SIP)" being promoted by the Cabinet Office.
- We deal with traffic demand accurately by expanding bus routes such as metropolitan buses quickly and flexibly according to the development status of the waterfront area.
- We opened the ground road of the Ring Road No.2 in March 2020
- Moreover, in order to improve the convenience of access for the entire waterfront area, we deepen the discussion on the railway network in consideration of Report No. 198 of the Transport Policy Council.

② Establishing an environment for bicycle use that enhances excursion

- Based on the "Tokyo Bicycle Traveling Space* Development Promotion Plan",

[3][4][5] Tokyo BRT pamphlet (TMG)

etc., we proceed with the development of bicycle traveling spaces along metropolitan and harbor roads, etc.*

- In the vicinity of the competition venues, etc., we improve the convenience and comfort of users by developing recommended cycling routes that connect bicycle traveling spaces along national, metropolitan, and ward roads. In this approach, the subsidy system for wards provides financial support in addition to technical aspects and promote the development of ward roads.

<Example of development using roadways>^[6]



- Based on the characteristics of bicycle use in Tokyo, we work with the national government and ward administrations to create a network of bicycle traveling spaces throughout Tokyo.
- We expand the scope of the development of cycling environment in marine parks* so that people can enjoy cycling safety and comfortably while feeling the attraction of the sea.
- Regarding the bike-sharing, we cooperate with ward administrations and bicycle sharing service providers to promote the expansion of the current coverage of service to improve convenience for the users.

<Cycle port>^[7]



③ Promoting the utilization of water transportation by developing wharfs, etc.

- We promote regular expansion of the sea routes by water transportation operators understanding user needs, experiment results, etc. through "Social Experiments on Water Transportation" and implementing effective PR on water transportation, etc.



<Social experiment of using sea routes for commuting>^[8]

[6][7][8] Future Tokyo: Tokyo's Long-Term Strategy (TMG)

- By promoting the creation of new sea routes, etc., we vitalize water transportation as a familiar means of transportation for tourism and travel, and stimulate demand through the creation of liveliness around the wharfs.
- At the wharfs which serve as a base of water transportation, we further promote the free access to public piers and utilization of disaster prevention wharfs, increase guidance signs, etc., from the nearest station and nearby facilities in cooperation with local ward administrations and related organizations.
- We opened the newly-constructed dock at the Hinode Terminal to water transportation operators, and promoted the activation of water transportation through cooperation in the development of passenger waiting areas and lively open spaces and various events conducted by private companies.
- We enhance the water transportation network that connects waterfront bases by installing new wharfs where people gather lively.
- Through the integrated development including waterfront spaces at the water transportation terminal along the Sumida River, which serves as a transfer base to the Nihonbashi River, and at Daiba and Hinode, etc., we create a new flow of people and revitalize the waterfront area.
- Centering on the Sumida River, we promote initiatives such as the improvement of access from the bridge along the river, continuation of terraces, development of nighttime lighting, strengthening of the flow of people in the waterfront area leading to the Tokyo Bay area, and progression of the leading project in the "Lively Guidance Area*".
- We implement the formation of waterfront landscape in the area where many tourists gather along the Nihonbashi River and the Kanda River.
- We create lively waterfront by encouraging private companies to use waterfront spaces by increasing the usage results of the special zones system, including Kawa Terrace (river terrace) and open-air cafes.
- Regarding marine parks, we promote development for new opening, and redevelopment of existing parks that serve as a competition venue of the Tokyo 2020 Games or a travel route for spectators.
- We promote efforts to create liveliness in cooperation with private companies at marine parks.
- We promote greening of waterfront spaces such as waterfront areas and rivers to further enhance the water and green network.
- In September 2020, the Tokyo International Cruise Terminal that can

accommodate the world's largest cruise ships opened in the new Tokyo waterfront subcenter. By posting ads on foreign cruise magazines and distributing videos, we transmit the attractions of Tokyo and the Tokyo Port effectively.

- We collaborate with the designated administrator of the Tokyo International Cruise Terminal to introduce Japanese culture and hold receptions and other events to entertain visitors to Japan. We also work to realize smooth acceptance operations of passenger ships using ICT, etc.

(5) Benefits

The following achievements will enhance access to the waterfront area, leading to the improvement of the transportation convenience in the bay area.

In addition, the development of the environment for bicycle use will allow any pedestrians, bicycles, and cars to pass safely and without anxiety, promote the utilization of environmentally friendly bicycles, and contribute to CO₂ reduction, which will also lead to the health promotion of citizens.

Furthermore, the facilitation of travel among sightseeing spots by bicycle and the creation of liveliness around the wharfs will contribute to tourism promotion.

- The BRT will be operated to strengthen transportation between the center of Tokyo and the waterfront areas.
- The Ring Road No.2 opens.
- The bicycle traveling spaces will be developed.
- The usage area for bike-sharing will expand.
- The water transportation that enhances Tokyo's attractiveness will be activated, and the sea routes connecting the center of Tokyo, the waterfront areas, and Haneda will become established as a familiar means of transportation for tourism and travel.
- Constant liveliness along the Sumida River will be created in the four areas of Asakusa, Ryogoku, Tsukuda / Etchujima, and Tsukiji.
- The Ryogoku River Center will start operation.

4. Facts and figures

Strengthening of the connection between the center of Tokyo and the waterfront	<ul style="list-style-type: none"> • The "BRT business plan for connecting the center of Tokyo and the waterfront areas" was revised (August 2018) • The name "Tokyo BRT" was decided (November
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areas	<p>2018)</p> <ul style="list-style-type: none"> • The design of symbol marks, stopping facilities, vehicles, etc. were determined (January 2019) • Designing of stopping facilities and terminals was implemented in anticipation of the start of pre-operation in FY2020 • Start date of the pre-operation (1st stage) was announced (February 2020) • In consideration of the spread of COVID-19, the pre-operation, which was scheduled to start on May 24, 2020 (Sunday) was postponed • Pre-operation (1st stage) started on October 1, 2020 (Thursday)
Development of the Ring Road No.2	The overground part of the Ring Road No.2 opened (between Toyosu and Tsukiji) (March 2020)
Development of the bicycle traveling space	<p>The development of approx. 257 km of priority development sections, etc. completed (in total)</p> <p>The development of approx. 164 km of the bicycle recommended route completed (in total)</p>
Expansion of the use of bike-sharing	Wide-area mutual utilization was implemented in 19 wards and 7 cities in Tokyo (January 2021)
Revitalization of water transportation in order to enhance the appeal of Tokyo	<ul style="list-style-type: none"> • Information collection of migration spots in waterfront areas and migration spots around wharfs connected to the water transportation service • A pamphlet "OZ Magazine Special Edition" for PR was issued, information posted on the Tokyo water transportation website was enhanced, and events were noticed on the Tokyo water transportation SNS account • "Nihonbashi Theatrical Tour Special Cruise", a nighttime planned cruise, and planned tours in collaboration with events of the Tokyo Hinode Pier were implemented • Collaboration events with waterfront lines using "Hashidanshi" contents • "Comfortable commuting by water transportation in mid-summer", a social experiment of commuting by

	<p>water transportation, was implemented</p> <ul style="list-style-type: none"> • Questionnaire survey results and aggregate results of the social experiments were analyzed, and outsourcing of survey on the use of water transportation was implemented • Planned tours in collaboration with events, etc., were operated • Examination and test installation of information signage regarding piers (Takeshiba, Ariake, Hinode) • In order to expand the piers, the development at Odaiba completed, development of Uminomori started, and surveys, etc. were conducted at other places (6 places) • Public piers were opened (at 6 places in total) (April 2021) • Disaster prevention piers were opened to the public (at 6 places in total) (April 2021) • The development of small ship terminals , etc. completed (Hinode)
Promotion of the constant creation of liveliness in the Sumida River	In order to create liveliness in each area, coordination with related organizations, etc. was implemented
Development of the Ryogoku River Center	The development of the Ryogoku River Center was completed (as of November 2020)

(Items in the table are achievements to March 2020 unless otherwise noted)

5. Explanation of Terms

BRT	An abbreviation for Bus Rapid Transit. A new public transportation system that has transportation capabilities and functions comparable to trams and new transportation systems with flexibility thanks to adopting articulated buses, IC card systems, etc.
Bike-sharing	A service using shared bikes that allows users to rent and return bicycles at different docking stations established

	within a designated area
Bicycle traveling space	Traveling space for bicycles that are developed by means of installation of bicycle lanes that use part of the roadway or a method of separating pedestrians and bicycles by introducing planting zones and coloring pavements on the sidewalk
Harbor roads, etc.	This corresponds to not a road under the Road Act, but a road to be maintained and managed as a port facility that is positioned as a harbor transportation facility described in Article 2, Paragraph 5, Item 4 of the Port and Harbor Act, and is necessary for the management of a port that has been announced based on the Tokyo Port Management Ordinance. This also includes landfill roads (planned roads prescribed in the Tokyo Metropolitan Waterfront Area Development Regulations) developed when the Port and Harbor Authority reclaimed land from the sea
Marine park	A park formed by development of reclaimed land based on the Tokyo Marine Park Ordinance, where the citizens can interact with the sea and nature and enjoy recreation. This includes seaside parks, pier parks, and green road parks.
Lively guidance area	4 areas (Asakusa, Ryogoku, Tsukuda / Etchujima, and Tsukiji)

6. References

- Towards 2020 –Building the Legacy- (PR Edition)
- Towards 2020 –Building the Legacy - (Main Part)
- New Tokyo. New Tomorrow. –The Action Plan for 2020-
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- Future Tokyo: Tokyo's Long-Term Strategy
- Grand Design for Urban Development
- Tokyo Bicycle Utilization Promotion Plan