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Tokyo Metropolitan Government

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# Introduction

In Summer, 2021, the Tokyo2020 Olympic and Paralympic Games were organized under the condition in which COVID-19 infection was widely spreading around the world. It was the first time in the history that the Games were postponed for one year and held without spectators.

In order to keep balance between safe, smooth transportation and stable social economic activities, Tokyo Metropolitan Government(TMG), as a host city, worked together with Tokyo 2020 Organizing Committee(Tokyo2020), the Government of Japan, and business industries and promoted the traffic management that consists of Travel Demand Management(TDM), Toll Rate Setting on Metropolitan Expressway, Traffic System Management(TSM) and so on.

Thanks to the cooperation from corporations and citizens, the traffic volume had been significantly reduced during the Games and the traffic management had worked properly; Tokyo2020 Games achieved safe and smooth transportation that contributed to the success of the Games.

This document summarizes the measures and achievements in the Tokyo 2020 Games transportation in order to bridge these, as the legacy, to the development of the city.





Transport Depot for buses and fleets, at the site of the former Tsukiji fish market

# **Outline of the Games & Transportation**

# Tokyo 2020 Games

#### Olympic Games Tokyo 2020

July 23 -August 8, 2021 (17 days) 11,417 athletes (from 205 NOCs\* and the Refugee Olympic Team) 42 venues, 33 sports, 339 events World records and best times: 7 sports, 26 events\*\*\*

NOC: National Olympic Committee
 \*\* NPC: National Paralympic Committee
 \*\*\*Includes the 6 rowing events with best times

#### **Tokyo 2020 Paralympic Games**

August 24 -September 5, 2021 (13 days) 4,403 athletes (from 161 NPCs\*\* and the Refugee Paralympic Team) 21 venues, 22 sports, 539 events World records: 6 sports, 158 events

## **Transportation for the Games**

Provided safe, smooth, efficient and reliable transportation services for athletes and stakeholders by utilizing digital technology.

Reduced environmental burdens by introducing low-pollution and fuel-efficient vehicles.



#### Vehicles for Stakeholders

2,654 vehicles including 150 accessible vehicles

	Buses for Athletes				
Number of Buses (on peak days)					
	Olympic Games (July. 28)	2,160			
	Paralympic Games (Aug. 28)	920*			

\*Including accessible vehicles: 260 with lifts and 70 with low floors



# **Outline of the Games & Transportation**

#### **Feature of the Games transportation**

Implemented the Games transportation centering on the traffic management without establishing dedicated lanes on expressways, taking into account the immense impact both on the Games stakeholders and the public.

#### **TOKYO 2020**



- No Olympic Park as seen in past Games
- Competition venues were located in the central area as well as the bay area where logistics bases were located.



# **Our History**

Established several frameworks, developed the transport operation plan and TDM promotion projects.



Conducted traffic management to balance business activities and the Games transportation.

## What is Traffic Management?

Traffic management consists of the following.

#### (1) Travel Demand Management (TDM)

Implement traffic demand reduction, decentralization, standardization.

#### (2) Traffic System Management (TSM)

Implement high-level operation control of traffic demands according to the road situation.

#### (3) Public transport Management

Implement safe and smooth transportation at the railways, etc.

# Why Traffic Management is necessary

Congestion is becoming serious on roads and railroads due to traffic demands of the Games vehicles etc. if not taking any countermeasures.

<Change of congestion loss time per vehicle

due to reduced amounts of traffic [Expressway]>



\* Result of simulation targeting vehicles traveling on metropolitan highways. (on the basis of Fridays in July, the same month for the Games)

**Objectives\***- Road transportation: Aim to attain better traffic environment equivalent to holidays by reducing traffic volume <general traffic in **Greater Tokyo**: by **10**%, the **Metropolitan Expressways**: by **up to 30**%> - Public transportation (Railways): Aim to attain a service level equivalent to the present time

# **Comprehensive Traffic Management**

Implemented comprehensive traffic management to ensure traffic flow adapting the circumstances and achieve the safe and smooth Games transportation.

	[Road traffic]			[P	ublic transport]
Games Transportation <between sites=""></between>	[Athletes, media, athletes organizations, etc.] ⇒Dedicated bus [IOC/IPC officers]⇒Special car [Games logist	[Spectators] ⇒ Shuttle bus, Park & Ride, etc.		[Staff and others] ⇒Railway	[Spectators] ⇒Railway(Redistribute spectators when entering/existing the venue)
<around venues=""></around>	<ul> <li>Set areas where detour is recommended for general vehicles</li> </ul>		ĺ	<ul> <li>Setting access routes between stations and competition venues</li> </ul>	
Traffic and Transport management	Traffic System Management(TSM) • Traffic regulations (Traffic volume control on motorways, setting sections closed to vehicles on general roads)			Public Transport Management • Operation management, passenger guidance at stations • Increasing carrying capacity • "Jisa Biz(time-shift)/telework, etc	
	<b>Travel Demand Management(TDM)</b> - Actions to reduce travel demand - • Actions to reduce travel demand targeting users of roads and public transport • Creating and implementing an action plan to avoid expected congestion			(TDM) I - ds and public transport ected congestion	
<b>Travel demand adjustment by Road Pricing</b> • Promoting a shift of traffic by introducing special evening rates • Controlling shifts to the Metropolitan Expressways by adding extra charges					

# **TDM Initiatives**

Requested corporations to take the following measures to avoid congestion.

# **Flow of People**

#### ✓ Tele-work

Ex: The way of working not to commute to busy central areas



#### Staggered work hours, and flex-time commuters

Ex: Choose an alternative time to avoid commuting in the morning during peak traffic periods.

#### ✓ Avoid crowded places

Ex: Check information on crowding

#### ✓ Holiday planning

Ex: Summer vacation in accordance with the Games period

# Flow of Goods

#### ✓ Change of delivery times

Ex: Deliver early in the first half of July to have a substantial amount of stock in advance



#### Circumvent or detour congested times and areas

Ex: Consider shipping plans which avoid congested times and routes during the Games time.

#### ✓ Cooperation across the supply chain

Ex: Work together with other companies to change delivery times, number of deliveries, simplify inspections, and shared distribution.

These TDM measures are also effective for preventing the spread of infections diseases.

## **TDM Initiatives**

Launched projects to support corporates' activities for promoting TDM.

# **2020TDM Promotion Project**

approx. **52,000** companies, and organizations participated.



#### **Briefing to companies**

approx.

Provided information about Game-time traffic and suggested **600** times actions based on the districts and industries.

#### Webinar

Provided information about social change under the COVID-19 circumstances and sustainabilities in addition to the Games info.

#### **Consultation free of charge**

approx.

Support each company in the analysis of traffic impact and in their planning.

**3,800** times

# **2020 Logistics TDM Executive Council**

Support and encourage SMEs and independent business owners in their logistic measures as the relevant information does not always reach out to them.

\* SME: Small and Medium-sized Enterprise

## Webinar/ Consultation free of charge

Provided consultations about logistics based on each company's environment; organised study meetings for the shopping districts.

#### **Promotions**

Distributed PR items for smaller and independent businesses.

#### **Recognition of "Logistics to the Future" activities**

Certificate and promote the advanced initiatives for the efficient logistics.



Multi-case usable for a mask

approx.

**120** times

# **TDM Initiatives**

Provided useful tools and information to avoid congestion and to continue corporates' activities.

#### Impact Map of Games Transport

Provided maps showing the impact of congestion on roads, railways, and the areas around competition venues during the Games unless measures are taken to reduce traffic volume.



## Time & Routes Searching System assuming delays during the Games

Get information on the required travel time under the Games circumstances by entering your departure/destination for any time.



## **E-mail Newsletter** approx. **150** times to approx. **52,000** companies and organizations

Provided information on traffic restrictions during the Games and measures to avoid congestion including useful information for preventing infectious diseases.

# **TDM Initiatives**

Implemented intensive PR and communicated daily the Congestion Forecast for tomorrow during the Games.

## **Intensive PR**

Encouraged people to avoid congestion and stay at home by using various PR tools from pre-Games time.



 Mass media: TV ads, Radio, Newspapers, Posters on trains, Digital signboards, Banners on roads, Flyer around venues
 Digital media: Business Web Magazine, WEB ads, YouTube and other Social Media

# **Congestion Forecast for Tomorrow**

Launched a portal site to provide real-time traffic information and congestion forecast for the following day throughout the Games. Used SNS, etc.



Communicated daily the information through Twitter and e-mail news magazine, during the Games

# **TDM Initiatives**

# **Smooth Biz**

Implemented the "Smooth Biz" initiative, which consists of telework, Jisa-Biz, and TDM, aimed at reducing traffic congestion and establishing an environment in which all people work lively and make a contribution to a society.



#### **Smooth Biz Promotion Period**

Set a period for promoting Smooth Biz

## **Smooth Biz Promotion Award**

Introduced advanced Smooth Biz initiatives

#### **Provided concrete supports**

Ex: Financial support for introducing telework, Reward for off-peak commuters by railroad operators



Promotional Video "Let's try Smooth Biz!"

# **TDM Initiatives**

# **Coordination of construction works**

Coordinated the construction tender timing and reduced the number of construction-related vehicles, in order to control the traffic congestion.

Beside public works, requested over 70 industrial groups for cooperation.

- Controlled access of construction vehicles
- Changed the vehicle ingress /engress timing to non-busy hours (e.g. early morning, night time)
- Temporary suspension of the construction work



# **Efforts at the Port of Tokyo**

Extended operating hours at the Container Terminal gates at the Port of Tokyo, so that the port-related vehicles were able to access, avoiding the daytime when a number of Games vehicles travelled.



#### Traffic System Management(TSM)

Conducted flexible traffic control mainly in the traffic peak time in the state with reduced traffic volume achieved by TDM and toll rate setting.

#### - Expressways

limited the number of open lanes at the tollgates and closed the entrances temporarily.

#### - General Roads

Introduced dedicated or priority lanes and took measures of parking, traffic signal cotrol around the venues depending on the traffic condition.



# Toll Rate Setting on Metropolitan Expressway

Implemented traffic demand adjustments through the toll rate changing utilizing the ETC\* system of the Metropolitan Express way.

\* ETC: Electronic Toll Collection System Introduced late night discounts for all vehicle types equipped with ETC and daytime additional toll rate for privately owned cars, etc.. (business use is not included)

⟨Jul.19-Aug9, Aug.24-Sep.5⟩

ETC equipped vehicles (Appx. 96 % ) **[Late Night discounts] 50%** discount **[Additional toll rates]** JPY **1,000** 



Implemented various traffic measures

## **Games Routes**

Established the Games Family transport routes as the "Olympic Route Network" (ORN) and the Paralympic Route Network" (PRN), connecting the Olympic/Paralympic Village, competition venues, etc.



# Traffic Measures around the venues

Established entry prohibited areas, traffic regulation areas, detour areas, dedicated lanes and priority lanes for the Games stakeholders around the competition venues.



# Transportation Operation Centre (TROC)

Established TROC that played a role of overall coordination of the Games transportation.

- 24 hour operation during the Games period as the headquarter of the transport.
- Monitored traffic conditions and Games Information through a TROC system.



# Collaboration

We worked together with Government of Japan, local governments., relevant authorities, economic and industry organizations.

#### **Partners**



Thanks to the cooperation of partners, TDM initiatives and relevant measures were significantly advanced.

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The traffic volume was decreased due to the TDM and other relevant measures, enabling the traffic management to work properly for the Games.

# **Traffic Volume in Greater Tokyo**

Traffic volume of roads and expressways in wider Tokyo metropolitan area



\* The average of the spot traffic volume in the main 6 roads

The rate of Change of the Spot traffic Volume

	Expressways	Roads
Weekdays	<b>-8</b> %	<b>-4</b> %
Holidays	<b>-20</b> %	<b>-10</b> %
All-day	<b>-13</b> %	<b>-6</b> %

\*Period: 2021. July. 19- Aug.9, 24-Sep. 5 Comparison with the same period in 2018

Source date from the Ministry of Land, Infrastructure, Transport and Tourism

# **Traffic Volume on Metropolitan Expressway**

- Number of Traffic (pre- Games) : the same level with 2019

- Number of Traffic (Games- time)

approx. 20 % decrease compared to 2019 (weekdays) (the same level of traffic with holidays in 2019)

- Congestion loss time (Games-time) :

# approx. 80 % decrease compared to 2019 (weekdays)



Source: Metropolitan Expressway Company Limited

Requesting people to stay at home and providing the congestion forecast decreased the crowd during Games.

## Railway Users (at peak time on weekdays)

**30-40% decrease from the** pre-pandemic **10-20% decrease from the** pre-Games time



\*The number of people passed gates of main terminal stations. Stations: Tokyo, Shinjuku, Shibuya, Shinagawa, Ikebukuro, etc.

## Population in high-priority areas

Population staying in high-priority areas\* at peak time **approx. 10% decrease** from the pre-Games time



(1) Shinjuku (2) Shibuya (3) Shinagawa (4) Hamamatsu-Cho, Tamachi (5) Shinbashi, Shiodome (6) Otemachi, Marunouchi, Yurakucho (7) Yaesu, Nihonbashi (8) Kanda, Akihabara, Ochanomizu (9) Kudanshita, Iidabashi (10) Bancho, Kojimachi (11) Aoyama, Omotesando (12) Akasaka, Roppongi (13) Kasumigaseki, Toranomon (14) Harumi, Ariake, Daiba, Toyosu, Oifuto (15) Ikebukuro (16) Osaki

Source: Ministry of Land, Infrastructure, Transport and Tourism

Promoted Barrier-free in the city, improving accessibility although the Games were held without spectators.

# **Barrier-free of Train Stations**

In line with the Tokyo 2020 Accessibility Guidelines, barrier-free measures were adopted at the stations around the competition venues.

- Installed elevators, enabling to ensure barrier-free routes from entrances to platforms.
- Installed platform screen doors at the stations around the venues and at the stations connecting to airports.

(Sendagaya Station near the National Stadium)



**Status of rail stations** \*As of March 2020 (JR, Private railways, subways)

- Eliminate differences in level on the floor by installing elevators 95.9%
   \* Around venues 100%
- Platform screen doors

Subways

approx. 80%

\* Around venues 100%

JR/Private railways approx. 30% \* Around venues 50%

- Multipurpose toilets 96.8% (except streetcars)

\* Around venues **100%** 

- Tactile paving 99.9% \* Around venues 100%

# TMG 2020 Action Plan

Tokyo Metropolitan Government(TMG) implemented its own "2020 Action Plan" including telework, reduction of vehicle use for businesses, and adjustments of constructions during the Games time.



Many corporations implemented measures during the Games, promoting flexible and various workstyles.

73%

74%

66%



Survey by TMG, for: corporations participating in 2020TDM Survey period: 2021. Aug.10-20, Sep.6-12

Small and Medium-sized Enterprises also implemented measures of efficient distribution.

#### Q. Did measures have a good effect on the logistics?



- Avoid traffic jam
- Delivered products on time
- Cooperated with other departments and corporations

Survey by TMG, Coverage: 110 Small-Medium-sized Enterprises participating in 2020TDM, webinar, consultation Survey period: 2021. Sep.13-Oct.7

Over **70**% of people took measures to avoid congestion, building a society to respect individuals' lifestyles.

#### Q. Did you take any measures during the Games?



(Iviain ivieasures/					
Telework <b>45</b> %	Check Congestion <b>44</b> %				
Off-peak	Forecast				
Commuting <b>44</b> %	Utilizing e-commerce <b>46</b> %				
Change	Utilizing Package drop, <b>53</b> %				
Workdays <b>39</b> %	Delivery Box				

Over 90 % of those who took measures answered they want to continue.

## Voice

These measure have a low-impact on the environment and bring us comfortable life.

Chiba/20's

Avoiding congestion is the way to ease stress. Tokyo/40's

Telework and Off-peak commuting are necessary to hedge the risk. Without telework and off-peak commuting, we can't work while raising our children.

Chiba/60's

I want to work for a corporation that promotes "Smooth Biz". Tokyo/50's

It is a good chance to make a society that respects each lifestyle. Chiba/20's

Survey by TMG, for: 10,000 people, from 15-69 years old, in Tokyo, Kanagawa, Saitama, Chiba and South of Ibaragi, Survey period: Sep.6-12, 2021



## Tokyo 2020 Traffic and Transport Technical Consideration Meeting

# **Recommendations for future policy development regarding transportation**

#### In making recommendations

Tokyo2020 transportation was successfully carried out thanks to the cooperation from many people. We would like to thank all those involved in traffic management.

These recommendations are the summaries of policies and measures that should be developed in order to broadly achieve better transportation in the future, and widely aimed at citizens, companies, governments, etc. as a legacy of the measures taken through the Tokyo2020 Games.

#### (Background of traffic management)

- We decided to work on the traffic management to make sure the most efficient use of the transportation infrastructure such as roads and railroads with the aim of providing safe and smooth transportation services to the Games stakeholders and keeping a balance with social and economic activities.
- This Meeting established "the basic concept for the safe and smooth transportation of the Tokyo 2020 Games" as a common basis for related organizations such as governments and businesses, and clarified objectives to be achieved through analysis and verification based on data.
   After repeated discussions in class connection, the Meeting proposed to implement comprehensive traffic

After repeated discussions in close cooperation, the Meeting proposed to implement comprehensive traffic management measures centered on traffic demand management (TDM), toll measures on the Metropolitan Expressway, and traffic system management (TSM).

- As a result of having the collaboration of citizens, companies, and business people to change the means and methods of movement and transportation associated with social and economic activities, smooth Games transportation was achieved by effective function of traffic management and alleviation of congestion during the Games.
- Furthermore a wide range of efforts to reduce traffic demand such as telework that many corporations prepared and put into practice at an early stage, effectively functioned as business continuity measures even after the spread of the COVID-19, and was also used to avoid congestion during the Games.



# **Recommendations for future policy development regarding transportation**

## **Recommendation 1**

In order to ensure appropriate traffic flow depending on the situation, it is important for the governments, citizens, companies, etc. to share values, goals, etc., and to implement comprehensive traffic management with the understanding and cooperation.

- Develop a rational basic strategy through scientific analysis and verification.
- On top of that, it is important for leaders to communicate in powerful and persuasive messages, and to share the values, purposes, goals, etc. of businesses and measures among the governments, citizens, and corporations, expanding the circle of understanding and cooperation and promoting the traffic management.
- Build a system in advance that can respond flexibly to temporal or local demand concentration and deterioration of traffic processing capacity such in the case of a largescale event or disaster by combining the data possessed by the business with the knowledge of experts.
- Enable users to select transportation means, time zones, routes, and costs that suit their purposes and values, and the dispersion and leveling of transportation demand through the accumulation of these movement will bring safer and smoother movement and transportation.
- Along with analyzing the situation of movement and transportation based on data and reflecting it in traffic management, have means and channels of information exchange to share and utilize the outcome easily.



# **Recommendations for future policy development regarding transportation**

## **Recommendation 2**

It is important for the governments to provide information and support for ensuring the business continuity of corporations for establishing a system that can maintain social and economic activities even in the event of a large-scale disaster such as a typhoon, a large earthquake, or an epidemic.

In addition, it is necessary for the managements of corporations to take initiatives in promoting the establishment of diverse and flexible work styles such as telework, staggered commuting hours and improving distribution efficiency, and to improve the environment where employees can work comfortably.

- In order to further popularize telework, which has made great strides under the COVID-19 outbreak, it is important to enhance support for industries considered difficult to implement and to promote the development of a telework environment other than at homes.
- In order to change the way employees work, it is necessary for the managements to change the labour rules and exert creative business management that enable telework, etc.

It is also important to promote communication among corporations so that they can gain the understanding from their business partners.



# **Recommendations for future policy development regarding transportation**

#### **Recommendation 3**

In order to further improve the efficiency of logistics, not only the conventional logistics that create economic value (business logistics), but also logistics that emphasizes social value(social logistics) that supports people's lives and safety while aiming to achieve social objectives and goals is necessary.

- Conventional business logistics alone, which aims to improve corporate profits and reduce costs, and improve services according to the convenience of shippers and citizens, will eventually cause a heavy burden on logistics activities (production, distribution, storage, sales) that support the economy and social life.
- These issues were recognized by the shippers and citizens during the Games, which led to the success of the Games with the cooperation from people in various positions while accepting some inconvenience. This is important to further improve the efficiency of logistics as social logistics measures taken which aim to achieve social objectives and goals.
- As the legacy of logistics measures related to the Games, it is important to improve the environment in which the government, logistics companies, and corporations / citizens who are shippers work together to achieve the efficiency of logistics and the spread of logistics (social logistics) that emphasizes social values such as reduction of environmental burdens and traffic accidents, maintenance of social and economic activities and ensuring people's lives and safety in the event of a disaster.



# **Recommendations for future policy development regarding transportation**

## **Recommendation 4**

To achieve a symbiotic society in which everyone can play an active role, it is important to widely expand barrier-free efforts in terms of tangible infrastructure throughout society so that we can move safely and smoothly regardless of disabilities as well as to promote an environment that ensures smooth communication with everybody (barrier-free in terms of intangible settings).

- Comprehensively promote barrier-free efforts from both tangible and intangible perspectives.
- Steadily promote barrier-free measures such as eliminating steps, improving the slope of pedestrian crossings, and installing elevators at stations.
- Continue and develop as much as possible, such as unifying the design of signs and signboards, multilingual descriptions, providing information on accessible routes, and providing human support that had been prepared for the Games.

# ARIGATO ZLT、これからも。

# **SEE YOU IN TOKYO!**

We look forward to seeing you in Tokyo in the near future.