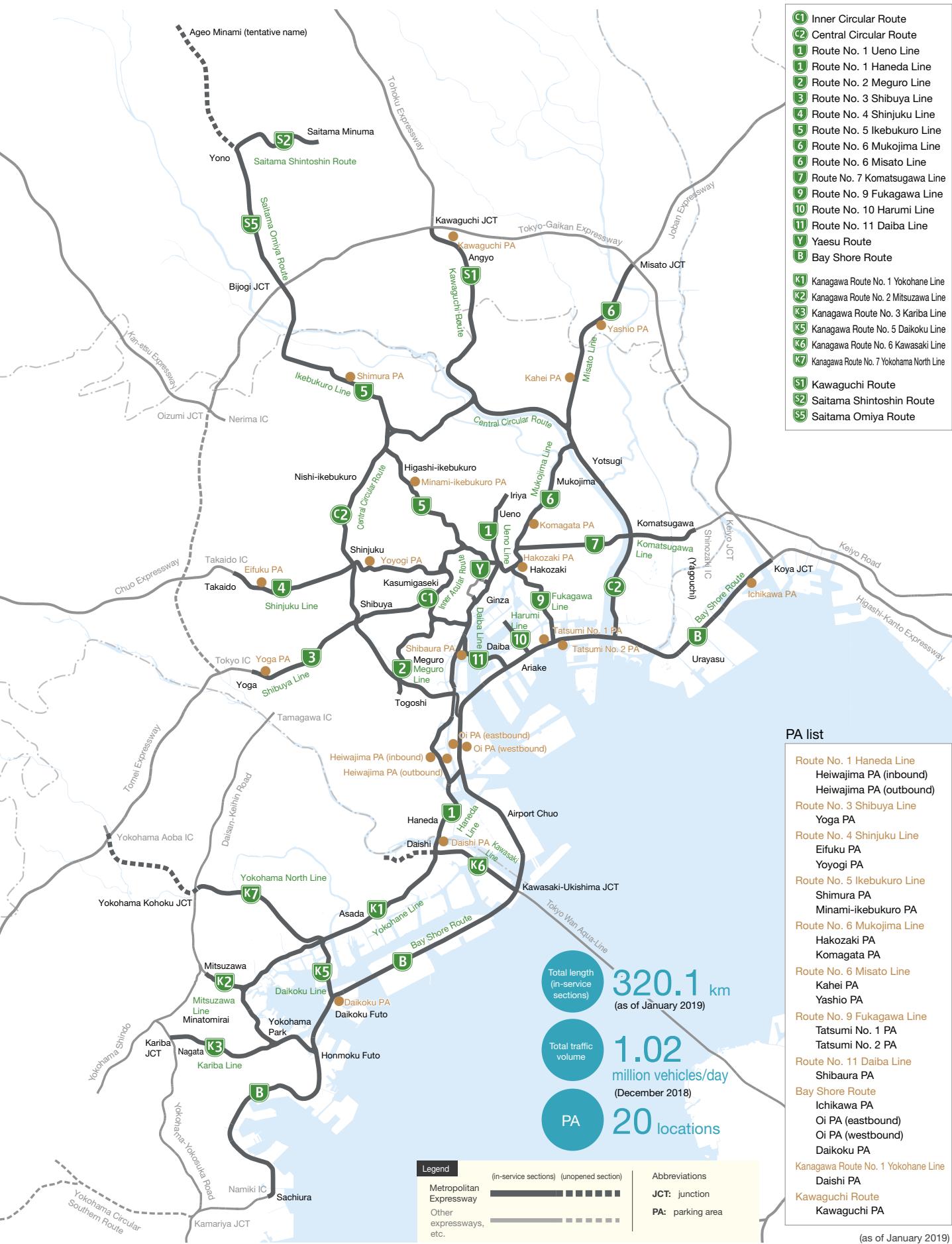


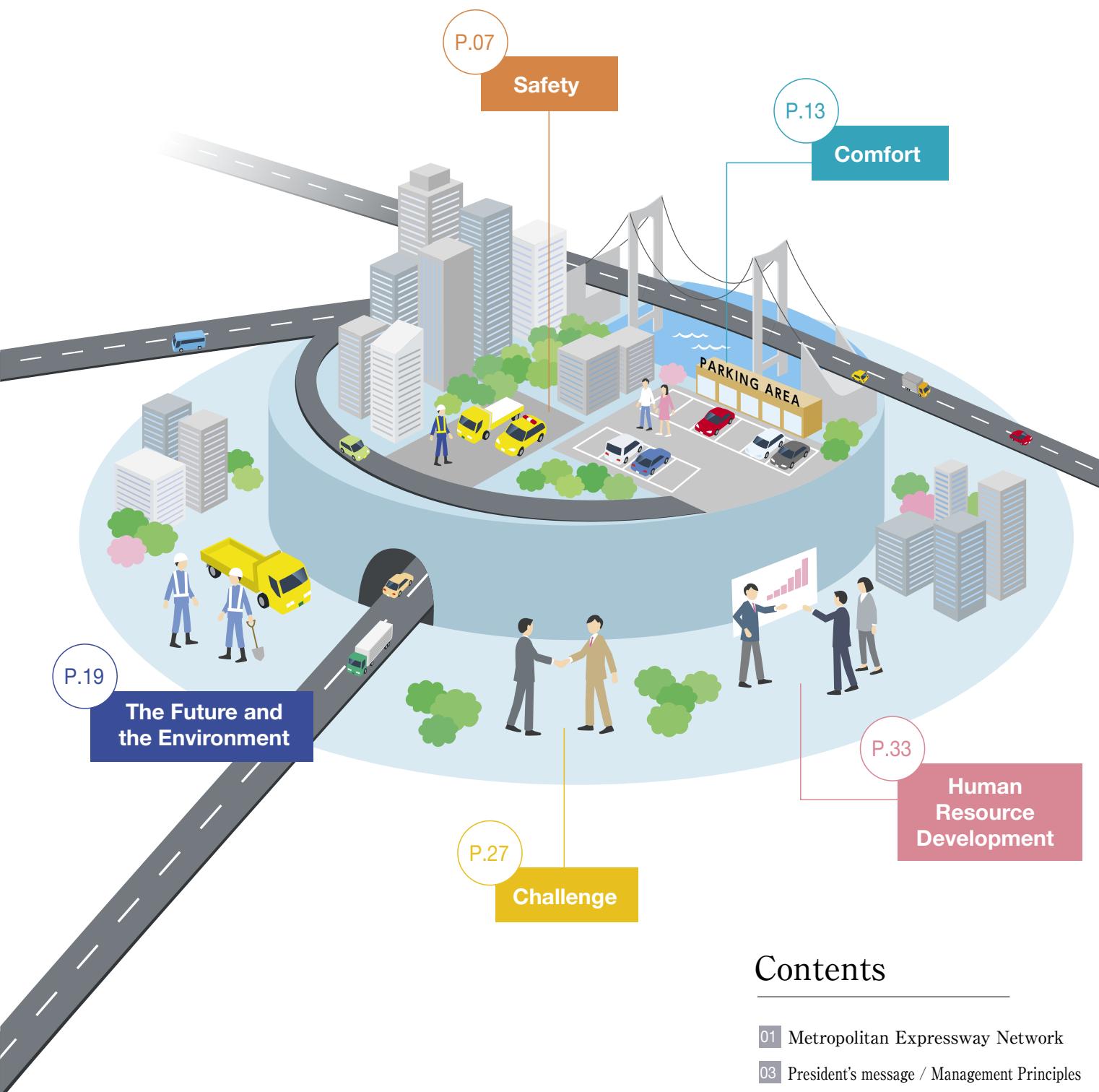
# Company Profile 2019-2020



# Metropolitan Expressway Network



(as of January 2019)



## Contents

---

- 01 Metropolitan Expressway Network
- 03 President's message / Management Principles
- 05 The Metropolitan Expressway: A History
- 07 Safety
- 13 Comfort
- 19 The Future and the Environment
- 27 Challenge
- 33 Human Resource Development
- 37 Corporate Profile

# Networking People, Communities, and Daily Lives



## President's Message

President

### Toshitaka Miyata

We, Metropolitan Expressway Company Limited (Shutoko), engage day and night in the construction, maintenance, and management of the major arterial road network in the Greater Tokyo Area, the Metropolitan Expressway. We believe that our mission is to always adopt our customers' points of view and provide high-quality services.

## Management Principles

### Basic Principle

We connect people, communities, and daily lives within the Greater Tokyo area through our safe and smooth Metropolitan Expressway network, contributing to the affluent and comfortable advancement of society.

### Management Principles

#### Customers first

In pursuit of safety and comfort, we provide high-quality services that guarantee customer satisfaction.

#### Coexistence with local communities

Our goal is to create a better environment and to develop local communities by working together with community members.

#### Social responsibility

We build relationships of trust with our customers, community members, and investors through our strong ethical perspective and high level of transparency.

#### Autonomous management

We manage our business efficiently and soundly, and assertively expand our operations into new business fields.

#### A vibrant work environment for employees

We create a work environment in which our employees can develop their own abilities, allowing them to cultivate a sense of pride and achievement.



In addition to the advancing aging of the Metropolitan Expressway's structural parts, it also experiences excessive usage, consisting of five times more heavy-vehicle traffic in comparison to local roads in Tokyo's 23 wards. As a direct consequence of this, we are actively moving ahead with large-scale renovation and repair projects as well as implementing comprehensive management covering daily inspections and repairs, etc., to ensure that structural safety is maintained in the long term. In addition to this, we carry out high-grade, efficient maintenance management with the use of ICT technology such as the i-DREAMs® smart infrastructure management system. We have also adopted initiatives in such areas as expanding our technical consulting projects using the technical skills we have built up through the maintenance management of the Metropolitan Expressway in this way both in Japan and overseas, and are now actively involved in the real estate industry and other areas outside the expressway industry.

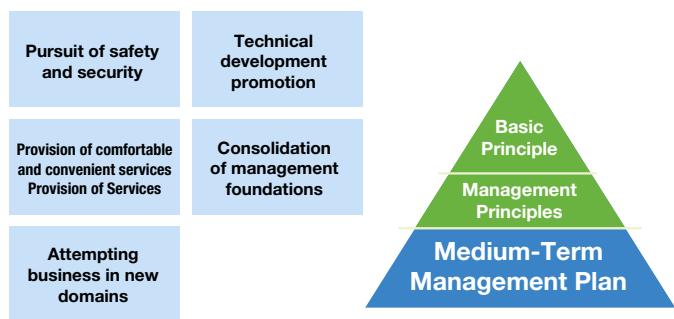
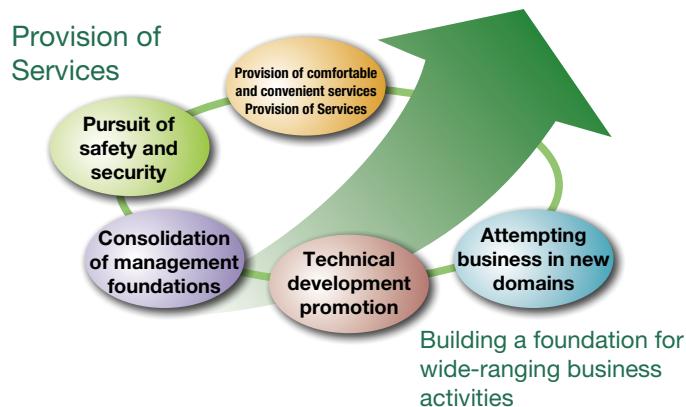
We are also moving ahead with improvement work on the Yokohama Circular Northwestern Route and other routes as well as establishing measures to prevent traffic congestion to ensure that all users can use the roads in comfort. We are also involved in a project to move the Metropolitan Expressway underground near Nihonbashi as part of a collaborative effort targeting town planning in the surrounding area.

Furthermore, in preparation for the 2020 Tokyo Olympics and Paralympics, while making efforts to improve our highway landscape, we will take a key role in the games' transportation network to contribute to their success.

Going forward, Shutoko will continue making contributions to creating a more affluent and comfortable society through our operations, networking people, communities, and daily lives in the Tokyo metropolitan area. We would very much appreciate your continued support and understanding.

## Medium-Term Management Plan (2018-2020)

The 2018-2020 Medium-Term Management Plan has raised the targets of "adopting our customers' points of view to provide safe, anxiety-free, and pleasant road services" and "establishing the foundation for wide-ranging business expansion to guarantee safe and stable corporate administration in the long-term," both of which are to be achieved within three years. The Shutoko Group will be making concerted efforts to achieve this goal.



# The Metropolitan Expressway: A History

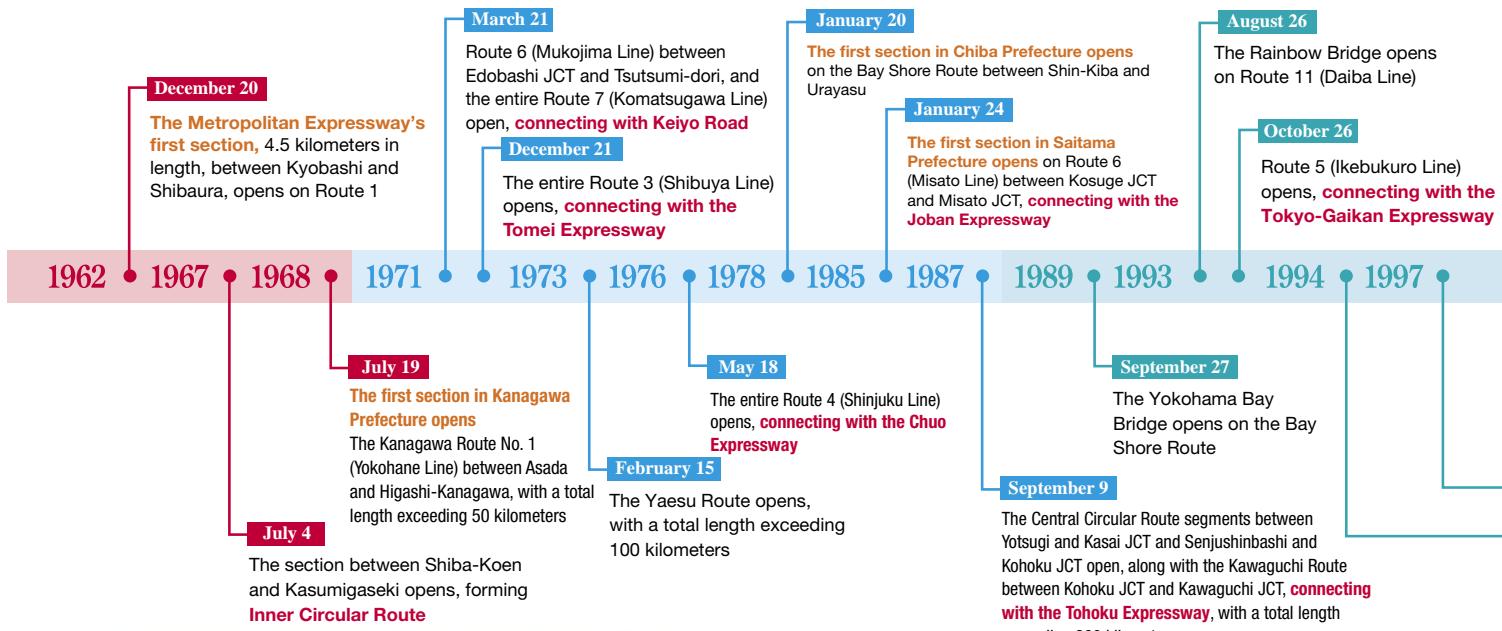
We have been developing the Metropolitan Expressway network since the early 1960s.

## Constructing the Inner Circular Route and radial routes

1962–1970 (Phase 1)

## Connecting with intercity expressways

1971–1988 (Phase 2)



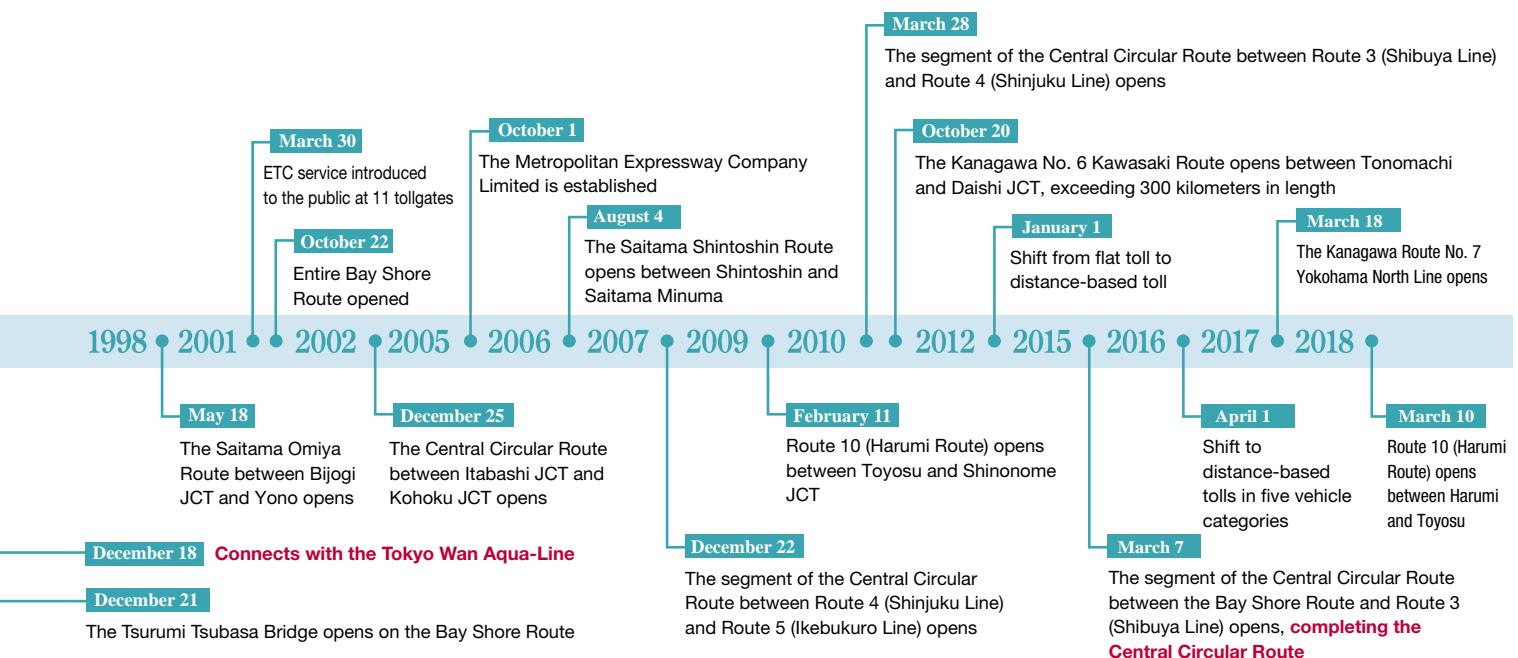
Opening ceremony for Route 6 (Misato Line) between Kosuge and Misato Junction, 1985



Opening ceremony for the Yokohama Bay Bridge on the Bay Shore Route, 1989

## Additional network expansion

### 1989– (Phase 3)



Central Circular Route  
Near Ohashi Junction



Yokohama North Line  
Near Namamugi Junction



Route 10 (Harumi Line)



Safety

**We Work 24 Hours a Day,  
365 Days a Year to Keep Our Customers Safe**

# Unceasing Maintenance and Management Are the Cornerstones of Safety

The daily tasks we carry out to ensure that our customers travel safely on the Metropolitan Expressway include meticulous inspections, damage repair and reinforcement work, road and facility cleaning, emergency and temporary responses related to road damage and fallen objects, and countermeasures for snow and ice in winter.

## Inspections

Inspections are the starting point for road maintenance and management. We systematically and efficiently perform repairs to ensure that road facilities are always sound, pinpointing damage in the early stages and using that inspection data to prioritize repair sites.

## Repairs and reinforcement

We also undertake reinforcement work to prolong the useful lifespan of structures in addition to repairing damage discovered during inspections. We perform our work at night or during periods when traffic volumes are low.

## Cleaning

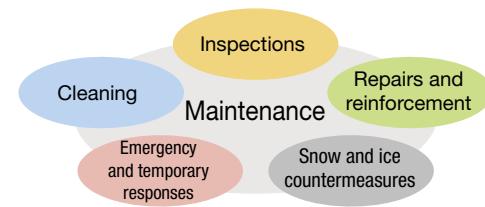
Even a single can left lying on the road can cause a major accident, so we clean the roads throughout the entire network to ensure safe travel. We also clean tunnels, parking areas, and other facilities to ensure your comfort when using the expressway system.

## Emergency and temporary responses

We have a 24-hour response team to repair road surface damage discovered during routine inspection patrols and facilities damaged due to traffic accidents, as well as to take care of emergency situations that arise as a result of natural disasters or other causes.

## Snow and ice countermeasures

We designate the period from December 1 to March 31 as a time for countermeasures against snow and ice to ensure safe winter travel. Depending on conditions, antifreezing agents are applied as advance measures to prevent accidents due to frozen road surfaces, and snow that has accumulated on road surfaces is removed.



Inspection with a cherry picker



Work to eliminate expansion joints



Tunnel wall cleaning



Road surface cleaning



Emergency and temporary responses



Spreading antifreezing agents

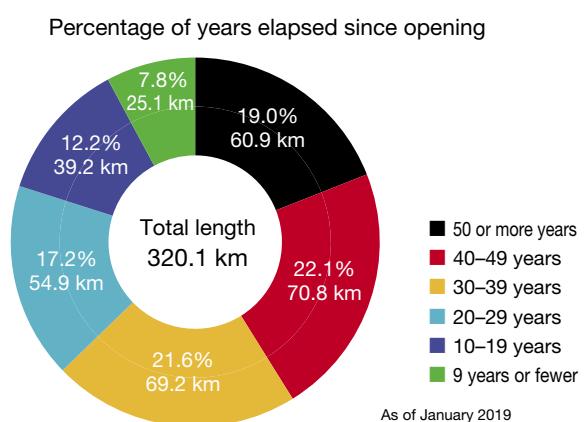
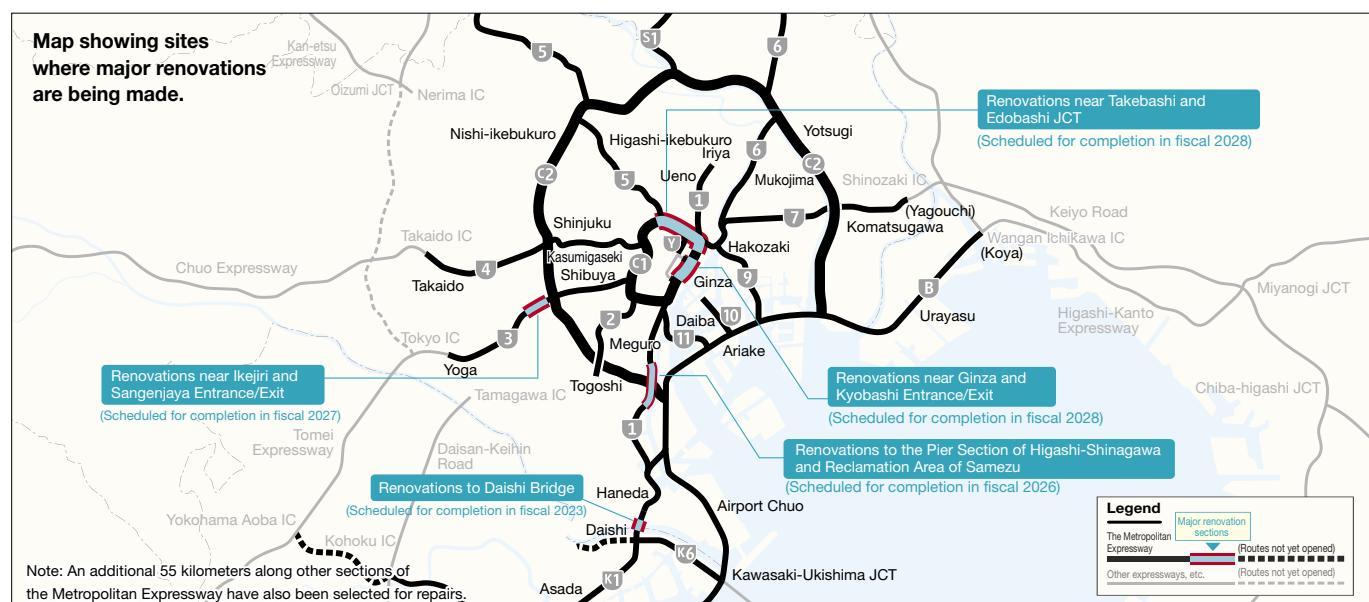
# We keep a constant eye on the future to ensure that the Metropolitan Expressway remains highly reliable over the long term

## Metropolitan Expressway Renovation Program

### Metropolitan Expressway Renovation Program

On January 15, 2013, a committee that was formed to research the way that major renovations to Metropolitan Expressway structures should be carried out passed along its recommendations to Shutoko.

The Metropolitan Expressway Renovation Plan was drawn up based on these proposals, and renovations are currently moving ahead after being approved by the Ministry of Land, Infrastructure, Transport and Tourism on November 20, 2014.



Program Type	Section	Length	Opened	Program Period
Major Renovations	The Pier Section of Higashi-Shinagawa and Reclamation Area of Samezu	1.9 km	fiscal 1963	fiscal 2014–2026
	Daishi Bridge	0.3 km	fiscal 1968	fiscal 2015–2023
	Ikejiri and the Sangenjaya Entrance/Exit	1.5 km	fiscal 1971	fiscal 2015–2027
	Takebashi and Edobashi junctions	2.9 km	fiscal 1964	fiscal 2015–2028
	Ginza and Kyobashi Entrance/Exit	1.5 km	fiscal 1962	fiscal 2015–2028
	Subtotal	8 km	—	
Major Repairs	No. 3 Shibuya Line, No. 4 Shinjuku Line, etc.	55 km	—	fiscal 2014–2024
Total		63 km	—	

### Renovations to Daishi Bridge

The expressway Daishi bridge, which crosses the Tama River, has many fatigue cracks throughout the whole bridge due to extreme use condition caused by the heavy traffic of many vehicles.

For renovation, replacement of the whole bridge has been determined, in order to ensure long-term durability, maintenance properties, and safety.



## Renovations to the Pier Section of Higashi-Shinagawa and Reclamation Area of Samezu

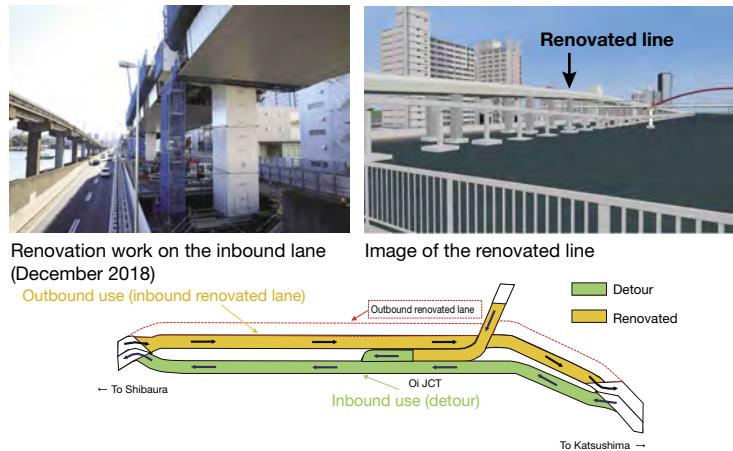
More than fifty years have passed since the Pier Section of Higashi-Shinagawa and Reclamation Area of Samezu on Route 1 of the Haneda Line were opened in 1963. Although regular inspections and repairs have been carried out, serious damage has occurred due to severe use conditions and the extremely corrosive environment, and the structure requires renovation (reconstruction). Consequently, to ensure long-term durability and future maintenance management, this zone is rebuilt in a location a certain distance from sea level, crossover structures (public roads, etc.) and parallel to the Tokyo monorail.

Moreover, to improve traffic safety, the road width is changed from 17 m to 18.2 m.

### Ensuring Traffic Flow by the Detour Pass

To reduce the effect on traffic, construction of the detour is set to ensure traffic flow.

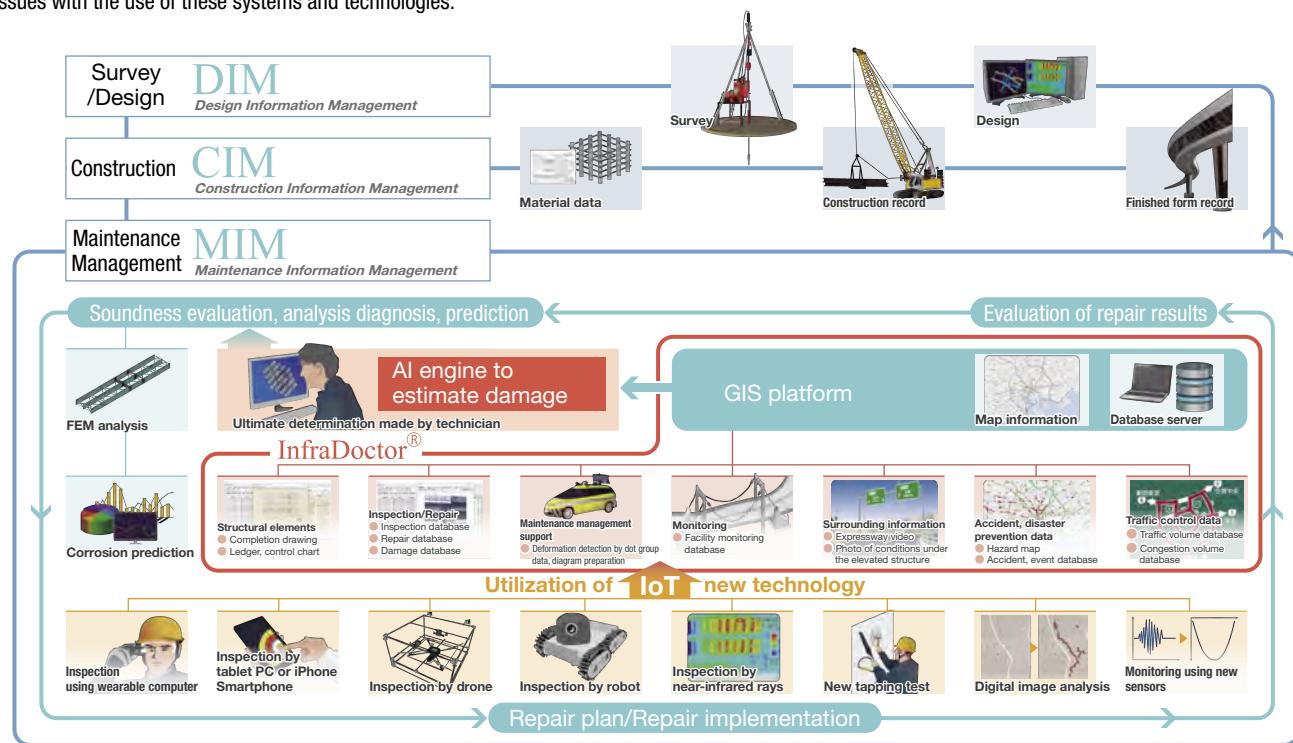
During the Tokyo Olympics/Paralympics 2020, the detour is planned to be used as the inbound lane of Route 1 of the Haneda Line, and after the outbound lane is renovated, it will be used as the future inbound lane. Use of the existing structure for both inbound and outbound traffic is not planned.



## High Level, Effective Maintenance and Management is Achieved by the New Smart Infrastructure Management System

### *i*-DREAMs® *intelligence-Dynamic Revolution for Asset Management systems*

*i*-DREAMs® is a smart infrastructure management system that not only integrates the information that is needed for maintenance management with a geographical information system (GIS)<sup>1</sup> platform,<sup>2</sup> it also enables efficient maintenance management by putting to use a combination of 3-D point cloud data<sup>3</sup> obtained from MMS,<sup>4</sup> information and communication technology (ICT),<sup>5</sup> and artificial intelligence (AI).<sup>6</sup> *i*-DREAMs® was launched in 2017, and even today we continue to develop further new technologies in order to contribute to society with even more efficient maintenance management systems. Roads are not the only forms of infrastructure that are aging. It is an issue that all infrastructure administrators share, and we are therefore engaged in providing support to solve these issues with the use of these systems and technologies.



<sup>1</sup> GIS (geographic information system): A system that makes it possible to perform sophisticated analyses and make speedy decisions through the visual tracking of geographical information plotted on maps

<sup>2</sup> Platform: A computing environment in which information is generated, collected, stored, distributed, shared, and used

<sup>3</sup> 3-D point cloud data: A cluster of data collected by scanning areas with lasers and recording the 3-D positioning data (three-dimensional coordinates) based on the signals bounced back from objects

<sup>4</sup> MMS (Mobile Mapping System): A mobile, high-precision three-dimensional measurement system that is installed on moving vehicles to efficiently obtain highly precise three-dimensional positioning information on buildings, roads, and other structures

<sup>5</sup> ICT (information and communication technology): The collective name for technology, etc., pertaining to data processing and communications

<sup>6</sup> AI (artificial intelligence): Software and systems modeled so that they can perform such human intellectual functions as memorization, reasoning, and learning

# Implementing Wide-Ranging, Meticulous Safety Measures

## Inspecting Steel Structures and Taking Countermeasures Against Fatigue Damage

We actively engage in efforts to counteract steel structural fatigue.

Increased volumes of heavy-vehicle traffic and other harsh conditions result in the structural parts of the Metropolitan Expressway becoming easily susceptible to fatigue damage.

We use nondestructive testing along with visual inspections to detect fatigue damage and ensure the Metropolitan Expressway's safety.



Work on preventing fatigue damage to steel floor plates being implemented



Ultrasonic flaw detection tests on steel floor plates



Magnetic particle flaw detection tests on steel floor plates

## Earthquake Damage-Prevention Measures

### Securing Emergency Access Roads

We are moving ahead with work involved in imbedding material for minimizing damage to bridges in the event of earthquakes and reinforcing the bearings (pedestals that support the bridge girders) and structures that prevent bridge collapse in order to make it possible to secure emergency access roads as swiftly as possible.

It is necessary for related organizations to collaborate in securing emergency access roads in the aftermath of an earthquake based on the Elimination of Road Obstacles Project for Epicentral Earthquake in the Tokyo Metropolitan Area (8-Directional Strategy)<sup>1</sup> in order to provide firefighting vehicles, ambulances, the Self-Defense Forces, and other emergency vehicles with free access. In addition to making sure that materials for repairing differences in road levels and other emergency repair equipment and materials are made available to secure emergency access roads as swiftly as possible, we are also implementing drills in securing emergency road access.

<sup>1</sup>Plans enacted by the Elimination of Road Obstacles Project for Epicentral Earthquake in the Tokyo Metropolitan Area Investigative Committee (participated in by the Ministry of Land, Infrastructure, Transport and Tourism; Metropolitan Tokyo; Shutoko; etc.)



Securing Emergency Access Roads in case of an earthquake (pictures of the training)



Comments

Hiroto Hoshina

East Tokyo Bureau, Civil Engineering Maintenance Design Section

Damage to steel bridges discovered during inspections is checked on-site, and repair work and reinforcement policies decided. Aging steel bridges on the Metropolitan Expressway are damaged in various ways, and appropriate decisions must be made for each and every area of damage. The sense of accomplishment experienced when these areas are repaired and reinforced is great.

We intend to continue building up high levels of technical skills to make sure that the Metropolitan Expressway is safer than ever.

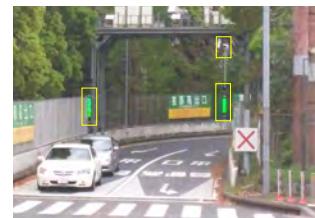
## Traffic Safety Measures

We carry out various traffic safety measures, including installing color-coded pavement and large warning signs to alert drivers. Signage and road surfaces that are color-coded according to direction of travel are other examples of this.

Additionally, we continue to promote ways to prevent pedestrians from entering the Metropolitan Expressway, as well as to prevent major accidents caused by wrong-way driving. That includes reinforcing measures to prevent U-turns or wrong-way driving at junctions, on ramps, and in other locations where vehicles merge. We have also developed a system to provide warnings when pedestrians enter expressways and when vehicles are driving in the wrong direction, and we are currently installing this in all areas.



Signs and road surfaces color-coded by the direction of travel Ohashi JCT



System installed to detect pedestrian entry or wrong-way driving and sound an alarm



Caution-evoking painted pavement near Kiba on Route 9 Fukagawa Line



Measures to prevent driving the wrong way when merging with the main traffic flow Misato JCT

## Tunnel Disaster Prevention and Safety Measures

We keep watch on tunnel interiors with the latest disaster prevention and safety equipment and our safety management organization.

The control center controls various equipment—including alarms and disaster prevention devices—to keep damage to a minimum and provide instructions to customers so that they can safely escape in the unlikely event that a fire breaks out inside a tunnel.

Additionally, we have a Metropolitan Expressway motorcycle patrol team—the first authorized emergency motorcycle unit run by a private company in Japan—to provide swift initial responses to accidents inside the Yamate Tunnel, improving safety inside the longest tunnel in Tokyo.



### Staff Comments

#### Kenta Watanabe

West Tokyo Bureau, Facility Control Center

I am in charge of monitoring equipment facility work in the West Tokyo area. Ventilation facilities and fire-extinguishing facilities in the Yamate Tunnel and other such tunnels are vital to operations. The main charm of my job is that I am involved in a wide range of facilities, including water supply and drainage facilities and air-conditioning facilities in buildings. I intend to continue carrying out my work on a daily basis without ever forgetting my roots.



Emergency exit



Water spray equipment



Control of vehicles in violation of the Vehicle Regulations Order      Traffic safety campaign      Ginza Willow Festival traffic safety event

## Implementation of the Capital Expressway Safety Month

Set “Expressway Safety Month in the Capital” for May-June of each year, and develop various activities in order to raise awareness for the improvement of the safety of all employees.



Capital expressway watching



Capital express inspection/Repair demonstration



## Comfort

**Striving to Support Drivers with  
More Comfort and Convenience**

# Implementing Various Innovations to Make Driving on the Metropolitan Expressway Smoother and More Comfortable

Striving to create a more comfortable Metropolitan Expressway in ways both tangible and intangible

## Ensuring Comfortable Travel

Traffic congestion was alleviated by implementing various initiatives, such as opening all of the Central Circular Route to traffic (March 2015) and converting the routes between Horikiri JCT and Kosuge JCT and between Itabashi JCT and Kumanochi JCT into four lane traffic (February and March 2018), although traffic jams still occur in uphill areas, where traffic merges, and in other areas where traffic is concentrated. We are actively promoting measures to prevent traffic congestion based on the Metropolitan Expressway Comfortable Driving Vision (enacted in February 2015), which consists of four plans, including congestion-alleviation measures, in order to ensure that all users are able to use the roads in comfort.

### ■ Installing “Escort” Lights

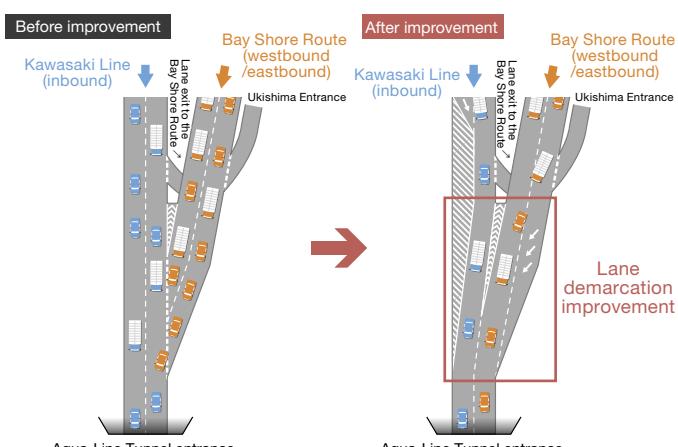
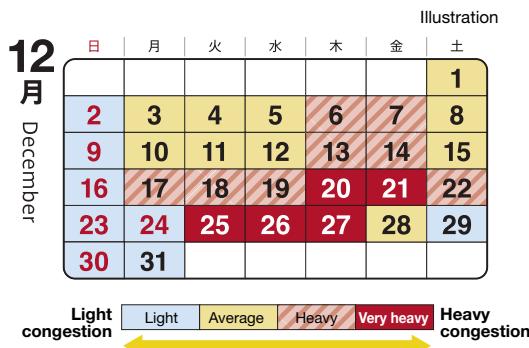
Guide lights installed alongside the road meant to encourage drivers to restore their driving pace—called “escort” lights—are displayed at speeds just a bit faster than the traveling speeds of drivers so that they do not reduce their speed and slow traffic down.



“Escort” Lights Near the Central Circular Route (Inner Route) Nakano-chojabashi

### ■ Traffic Jam Forecast Calendar

We will provide information about heavy traffic days with a traffic jam forecast calendar—available on our website and in leaflets—using past data to forecast congestion for each day at four levels, from light to very heavy.



# We Provide Traffic Information for a Comfortable Drive, and Promote Its Improvement

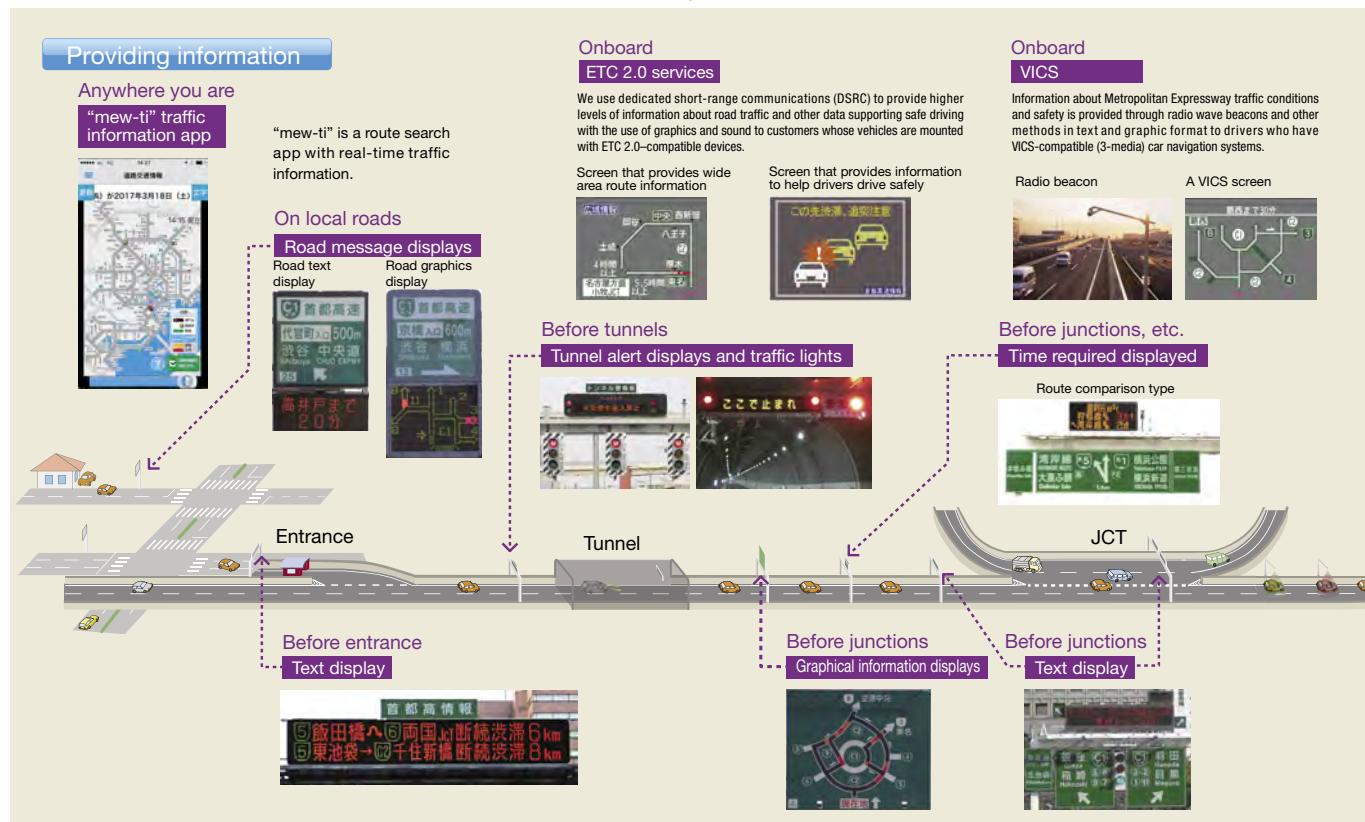
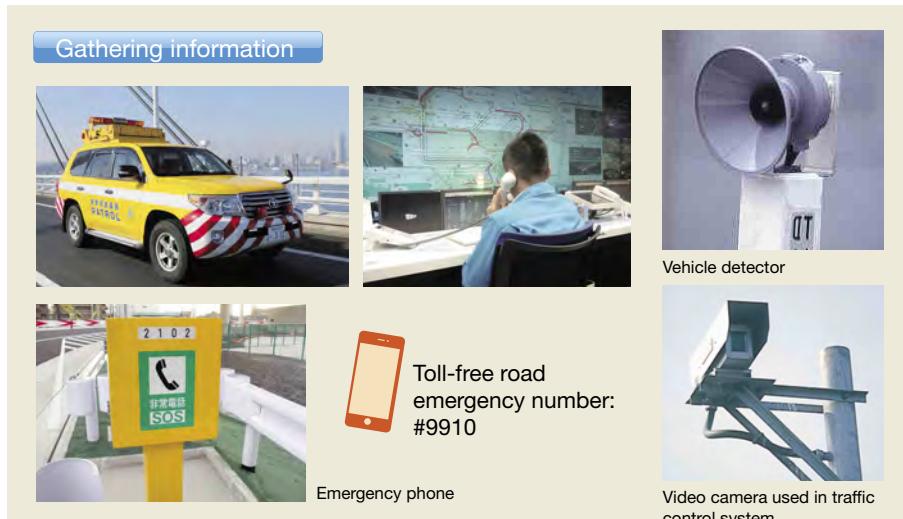
To support safe, comfortable, and smooth driving, we provide even higher level road traffic information.

## Traffic Control System and Providing Information

We monitor traffic 24 hours a day, 365 days a year, and our patrol vehicles also promptly handle accidents and retrieve fallen objects.

Employing our traffic control system, we rapidly process the data that we are constantly collecting to provide customers with road traffic information in real time.

Road traffic information is delivered on message displays above the expressway and various other kinds of media, depending on the location.



# Aiming at Providing a Diverse Range of Information

## Development of revolutionary information provision services and a platform for the provision of information

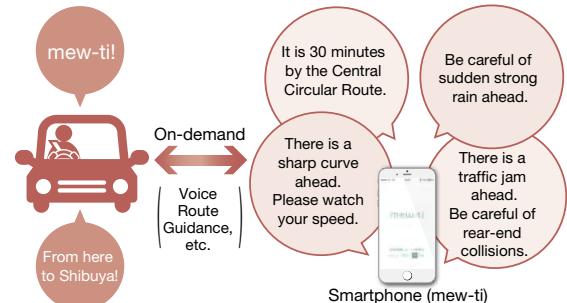
We are moving ahead with a variety of initiatives that will enable us to provide appropriate traffic information depending on the real-time position of vehicles. We are upgrading our mew-ti<sup>1</sup> application to make it possible to provide on-demand traffic information and guidance, including voice operations and guidance with the use of smartphones, etc.

In addition, we are also working on the development of a platform for providing traffic information incorporating the latest technologies in order to ensure that information with even higher levels of accuracy is available. Using technologies such as probe data<sup>2</sup> and artificial intelligence (AI), we will strive to provide more accurate information in real time and reflect that information on information board displays.

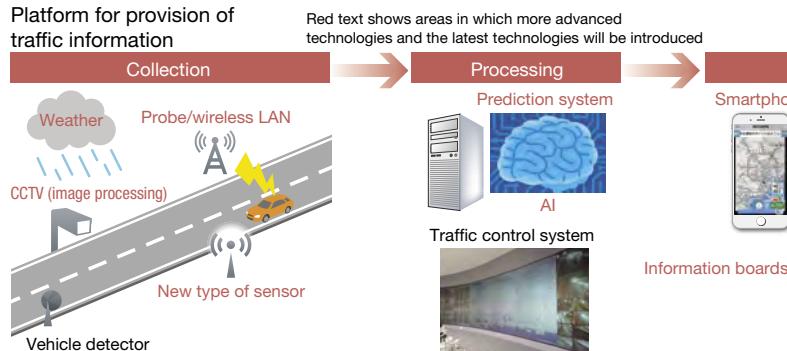
<sup>1</sup> Shutoko's real-time traffic information service

<sup>2</sup> Road traffic information generated with the use of vehicle position and speed data, etc.

### Traffic information and guidance (voice operation/guidance)



### Platform for provision of traffic information



## ■ Easy-to-understand road guidance

To enable us to provide our customers with easy-to-understand road guidance, we are proceeding with the introduction of an expressway numbering system<sup>3</sup> for road guidance signs and the revision of our entrance and exit numbering system.

In addition, we are moving ahead with the provision of traffic information via our mew-ti system in multiple languages in order to make it easier for overseas visitors to use.

<sup>3</sup> The use of route numbers for each expressway in order to realize road guidance that is easy for all road users to understand.

### Expressway numbering system



## ■ Provision of ETC 2.0 service

We are proceeding with the introduction of an ETC 2.0 service that provides sophisticated road traffic information and information to support safe driving through ITS spots (communications antennas). As of June 2018, the system was in operation in 176 places throughout the entire Metropolitan Expressway network.

mew-ti  
Shutoko's real-time traffic information service

Web browser version  
<http://search.shutoko-eng.jp>

Application version  
mew-ti real-time traffic information service

iPhoneアプリ  
ダウンロードはこちら  
iOS 9.0以上

Androidアプリ  
ダウンロードはこちら  
iOS 4.0以上

mew-ti  
the traffic information service provided by the Metropolitan Expressway and provides you with real-time traffic information. Try this service on your smartphone or PC.

It is possible to run searches with voice input from the top screen! NEW!

Tap on the microphone button OR Call out "mew-ti"

From ooo (entrance) to xxx (exit)

From here (current location) to xxx (exit)

"The usual entrance/exit"

From Horikiri JCT via the inbound route on Route No. 6 Mukojima Line ...



# Building an Even Better Metropolitan Expressway Along with Our Customers

## We Listen Closely to Our Customers and Provide High-Quality Services

We strive to improve customer satisfaction levels by always listening to their opinions and then reflecting these in the measures we implement.

### ■ Response to the voice of the customers

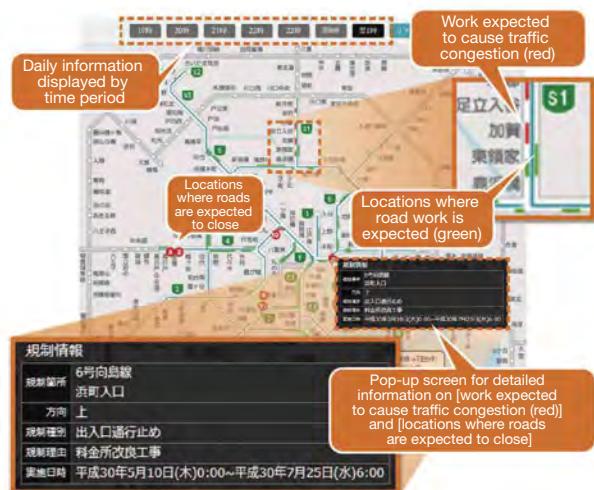
The Shutoko Customer Service Center (open 24 hours a day, 365 days a year) was established as a comprehensive window of inquiry for customers regarding Shutoko, and we always respond swiftly to these inquiries. We have also included an inquiry form (Green Post) on our website to enable us to monitor the voices of our customers and otherwise provide opportunities for us to listen to their opinions.

### ■ Examples of improvements as a result of responding to the voice of the customers

We seriously consider the requests and valuable opinions of our customers, and are carrying out improvements.

Voice of the customer I would like detailed information on the scope, times, and other pertinent details on road work.

Response measure We set up a new function and other measures on the Shutoko drivers' site to provide detailed information, such as displaying pertinent information for that day at specific times (7 p.m. to 1 a.m. the following day).



### Staff

#### Comments

#### Ryuki Kataoka

Kanagawa Operation Bureau, Sales and Road Management Section

I am in charge of management in conformance with the laws on roadways and the areas beneath elevated roads that are in effect in Kanagawa Prefecture. With regard to the Yokohama North Line in particular, which has not been open to traffic for very long, I ceaselessly continue to consult with related institutions, carry out legal procedures, and perform other such tasks, which fills my daily working life with lessons learned and stimulates me. I intend to continue doing everything within my power to apply safe and appropriate management while standing in the shoes of the people using the roads and the people who live alongside the roads.

## We strive to substantiate the information distributed to customers

We actively provide customers with information related to the Metropolitan Expressway via websites, SNS sites, the radio and other platforms.

### ■ Driving Campaigns

We conduct campaigns year-round that recommend enjoyable drives suited to the season. Working together with local governments, tourism associations, and sightseeing facilities around the Kanto area, we also provide suggestions about enjoyable outings.



Yamanashi Tourism and Products Fair  
Daikoku Parking Area

### ■ Telling Customers About Bargains and Fun

Along with the driving campaigns described above, we continually deliver information on our PR campaign website about recommended driving locations, nighttime views, and Metropolitan Expressway parking area events. Additionally, the Metropolitan Expressway's official Facebook page and mail magazine provides the latest Metropolitan Expressway information, including tips about outings.



### Issuing CSR Report

The Shutoko CSR Report is issued to the stakeholders, including customers, in order to widely publicize our approaches.



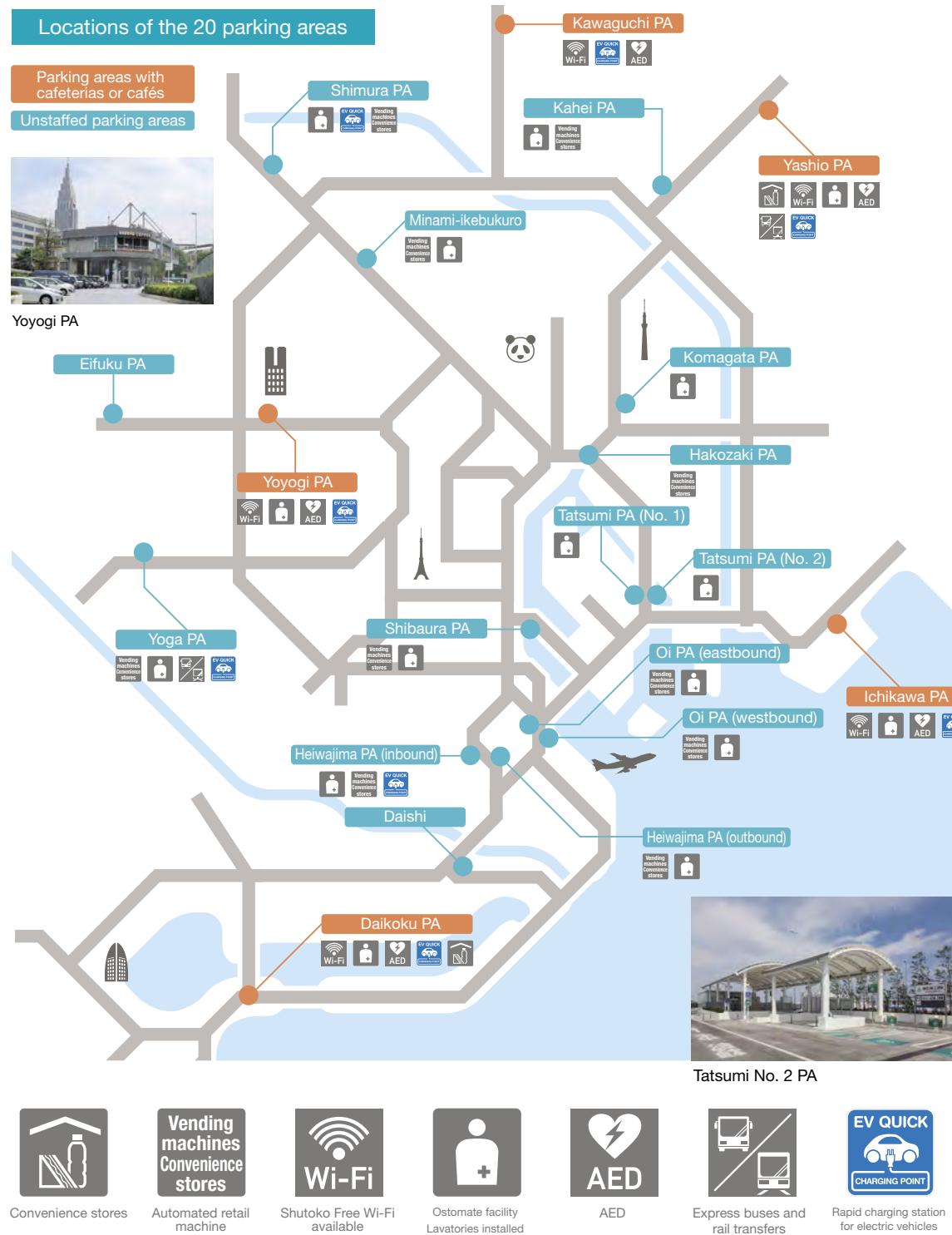
# Creating Appealing Urban Parking Areas

## Parking area

There are 20 parking areas, both large and small, on the Metropolitan Expressway.

We strive to maintain parking areas that all our customers can use in safety and comfort by making sure that they are equipped with restrooms, rest facilities, information areas, and other amenities that take universal design into consideration, in addition to using natural energy. We are also adopting various initiatives to install Western-style lavatories in the restrooms and provide multilingual signs within restrooms to make them easier for overseas visitors to use.

We operate urban parking areas where people can stop to rest while driving, and also provide various shops, automated retail machines that provide services 24 hours a day, and open terraces where customers can relax.





## The Future and the Environment

**By Smoothing the Flow of Road Traffic,  
We Contribute to People, Communities, and  
Daily Lives in the Greater Tokyo Area**

# Promoting Convenient, Comfortable and Environmentally Friendly Road Networks

## Efforts to Date

The effects of the Central Circular Route, all lanes of which were finally opened in March 2015, fifty years after the original plan was conceived, has helped to ease the traffic concentrated downtown, thereby reducing travel time and alleviating congestion.

Kanagawa Route No. 7 Yokohama North Line (hereinafter referred to as North Line) was opened in 2017, and it has improved access between certain areas, such as the Shin-Yokohama and Keihin coastal areas. Also, the Route No. 10 Harumi Line (between Harumi and Toyosu) was opened to traffic in 2018, and it has improved access to coastal areas and the metropolis. In addition, converting the routes between Horikiri Junction and Kosuge Junction and between Itabashi Junction and Kumanochō Junction to four-lane traffic has improved driving conditions along the Central Circular Route and helped alleviate traffic congestion.

The cumulative effects of establishing such a network has helped promote distribution efficiency and facilitated a wide-range of economic activities.

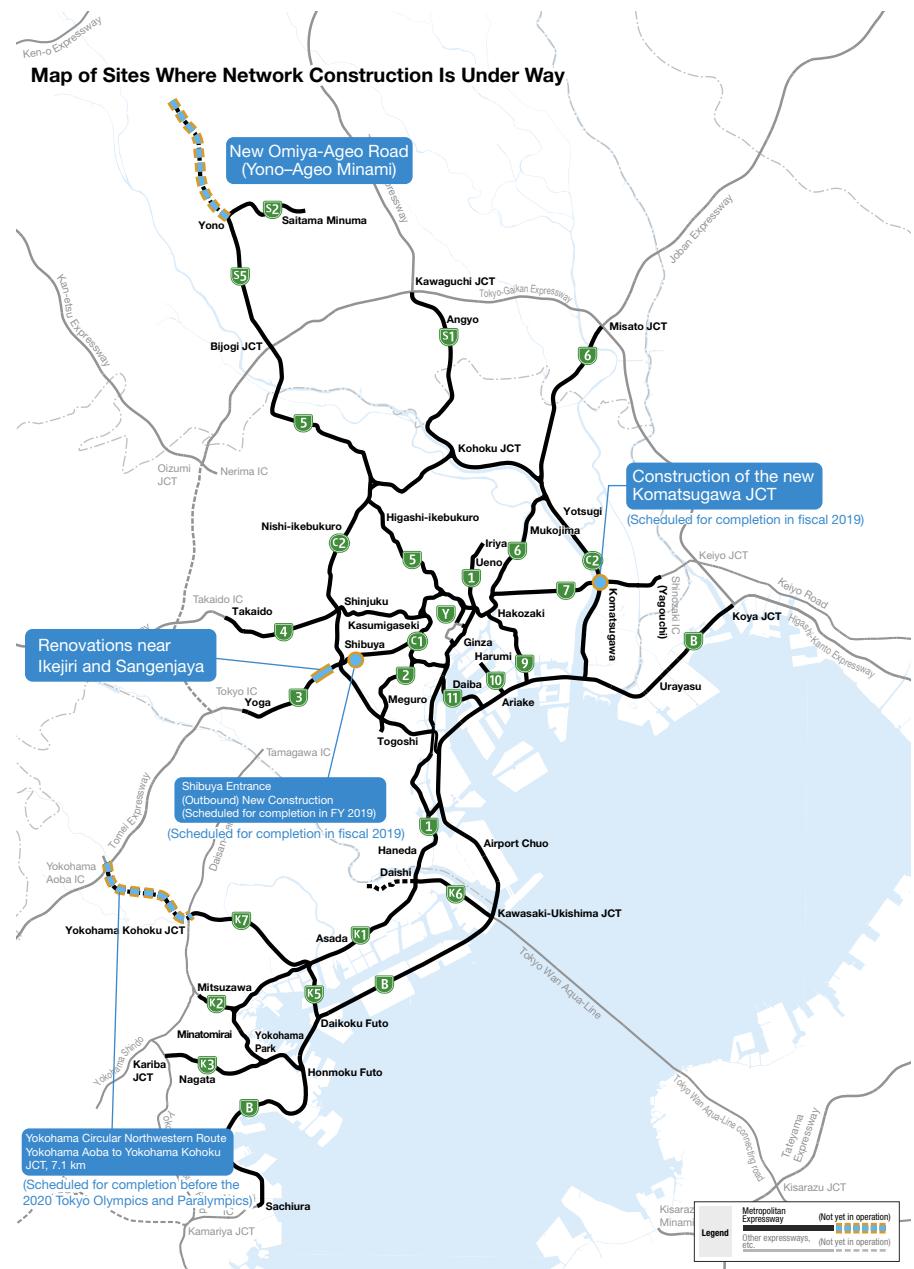
## Future Efforts

The Metropolitan Expressway can be used even more efficiently now that all lanes of the Central Circular Route are open and areas where traffic congestion was predominant have been converted to four lanes. We are also moving ahead with the construction of the new Komatsugawa Junction to obtain even greater efficiency from the Central Circular Route network.

Also, because there is no entrance heading toward the suburbs along approximately 7 kilometers of the Kasumigaseki to Ikejiri route, we are currently moving ahead with constructing a new Shibuya entrance (outbound) in order to improve access to the suburbs from the area surrounding Shibuya Station.

We are also moving ahead with the construction of the Yokohama Circular Northwestern Route (linking the Tomei Expressway with the Daisan-Keihin Road: hereinafter known as the Northwestern Route) not only to alleviate traffic congestion on surrounding roads, but also to connect the Tomei Expressway with Shin-Yokohama, which is one of Yokohama's main hubs, and the Keihin coastal area, to improve access between local communities and provide improved convenience over a wide area.

Work is also moving ahead on the construction of the New Omiya-Ageo Road (between Yono and Ageo Minami) in Saitama Prefecture. This project is expected to improve traffic access from areas alongside the Ken-o Expressway into the center of the city, alleviate the chronic traffic congestion that occurs along the Route 17 Bypass and Route 17, and reduce the number of traffic accidents, and we are striving to complete construction as early as possible.



# The Metropolitan Expressway: Convenient, Comfortable, and Environmentally Friendly

## Topics

### ■ Yokohama Circular Northwestern Route

(Scheduled for completion before the 2020 Tokyo Olympics and Paralympics)

Linking the Tomei Expressway with the Port of Yokohama Improved convenience expected over a wide area



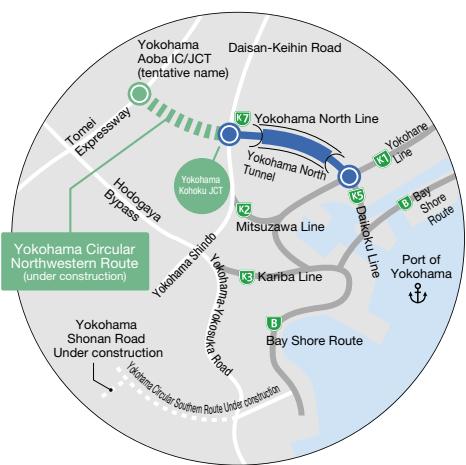
Near Yokohama Aoba IC/JCT (tentative name)



Near the Kitahassaku Ventilation Station



Near Yokohama Kohoku JCT

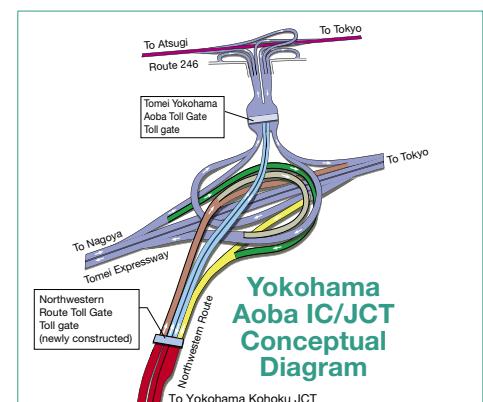
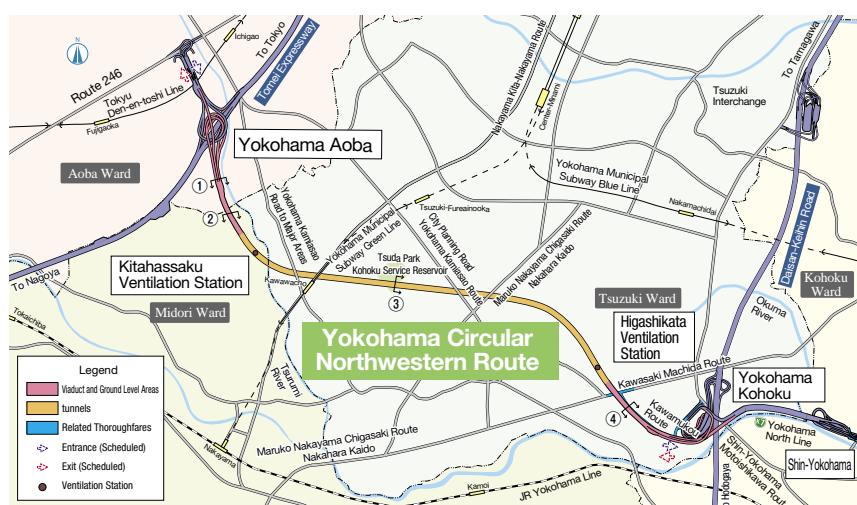


## Local Area Map

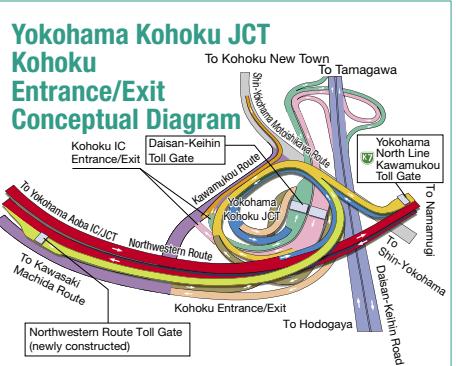
Yokohama Aoba Interchange/Junction (tentative name) and Yokohama Kohoku Junction are elevated structures located at both ends of the Northwestern Route, and both have their own entrances and exits.

Yokohama Aoba Interchange (tentative name) will be connected to Route 246, etc., via a toll gate that already exists on the Northwestern Route, and Yokohama Kohoku Junction will have a new Kohoku entrance/exit (tentative name) constructed for getting onto and leaving the Northwestern Route and North Line.

Ventilation stations will also be constructed near both ends of all tunnels.



Yokohama Aoba Interchange/Junction  
\*Interchange/Junction is a tentative name.



Yokohama Kohoku Junction, Kohoku Entrance/Exit  
\*The name of the entrance/exit is tentative.

## ■ Construction of the New Komatsugawa Junction

Scheduled for completion in fiscal 2019

The Komatsugawa Junction is a road connecting the Central Circular Route (to Saitama) with the Route No. 7 Komatsugawa Line (to Chiba).

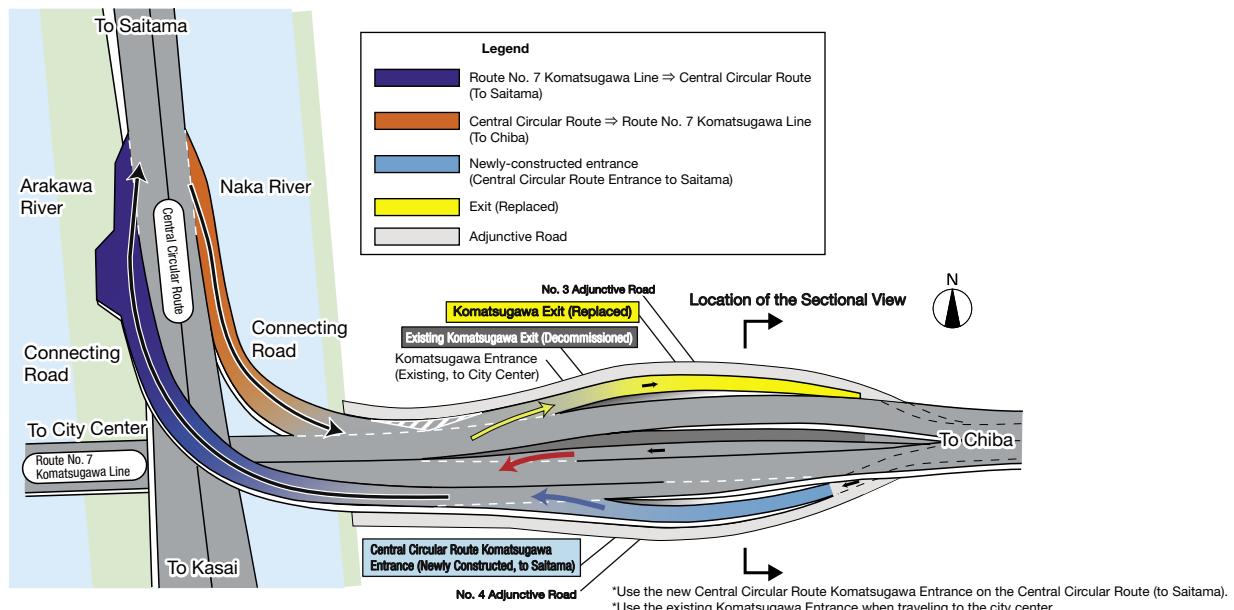
The completion of the Komatsugawa Junction will improve the reliability of the road network by providing the option of several different routes via the Central Circular Route, even when traffic restrictions are in effect and traffic jams occur on Route No. 7 Komatsugawa Line. It will also enable traffic connecting with the Central Circular Route and Keiyo Road via normal thoroughfares to complete their journeys via expressways, which is expected to alleviate traffic congestion in the areas surrounding these roads.



Near roads connecting with the Route No. 7 Komatsugawa Line



Near roads connecting with the Central Circular Route



### Staff

#### Comments

#### Chikako Amanuma

West Tokyo Bureau, Project Division,  
Project Survey and Environment Section

I am in charge of clerical work involving surveys and advertising for the reconstruction work on the Komatsugawa JCT, etc. My job involves publicizing traffic congestion countermeasures and detours when traffic restrictions and road closures caused by reconstruction work on existing roads are in effect in order to minimize the effects on traffic. I intend to create a Metropolitan Expressway in the future that encourages drivers to use it while concentrating on the safety and security of users.

# The Metropolitan Expressway: Convenient, Comfortable and Environmentally Friendly

## Networks Under Construction

### ■ Shibuya Entrance

Construction of the Shibuya Entrance (outbound) is to create an entrance in the suburban direction (Tomei Expressway direction) near Shibuya Station East Exit on Route 3, Shibuya Line.

Construction of the Shibuya Entrance will improve access from the center of Tokyo and near Shibuya Station to the suburban direction. Moreover, by transferring traffic that used to pass through the Ikejiri Entrance via Roppongi street and Route 246, which runs parallel to Shutoko, to the Shibuya Entrance, a reduction in traffic on the general roads around Shibuya Station is expected. Construction of the Shibuya Entrance is expected to reduce the required time to the Ikebukuro direction and the Haneda Airport direction.



Shibuya Entrance planned location  
(near Shibuya, Shibuya ward)

Scheduled for completion in fiscal 2019



Image of the completed line (Seen from the Shibuya 2-chome intersection toward Shibuya station)



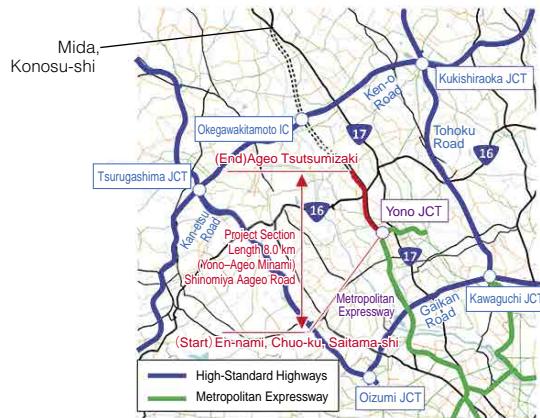
Image of the completed line (Seen from the Shibuya Police Station toward Roppongi)

### ■ New Omiya-Ageo Road (Yono-Ageo Minami)

The New Omiya-Ageo Road divides central Saitama Prefecture north to south and extends the limited expressway approximately 25.1 km from Ennami, Chuo-Ward, Saitama City, to Mida, Kounosu-City. Within this, a section approximately 8.0 km extending from Ennami, Chuo-Ward, Saitama City, to Tsutsumisaki, Ageo City, is under construction.

This construction section is to be integrated with the existing Shutoko network, and seeks to reduce traffic accidents and ease traffic congestion on Route 17 Omiya Bypass, as well as to improve traffic access in metropolitan Tokyo and central areas in Saitama prefecture.

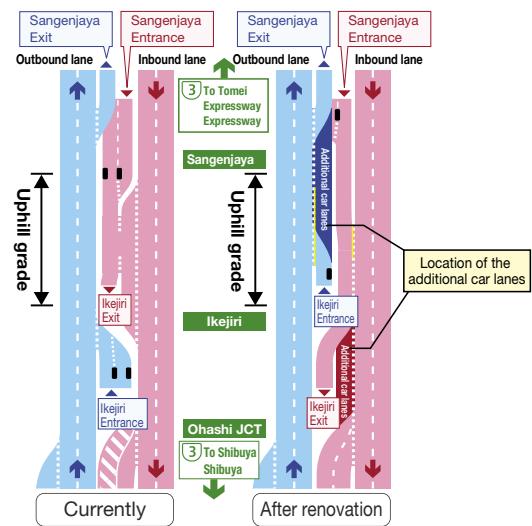
In the future, operations will proceed with the goal of early completion, in cooperation with the co-operator, Kanto Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism.



### ■ Renovation between Ikejiri and Sangenjaya Exit

User traffic near Ikejiri/Sangenjaya on Route 3 of the Shibuya Line is heavy, with decreased speed due to the incline and merging and exiting in a short section. There is much cross-traffic and congestion.

As well as setting additional car lanes between on and off ramps, the locations of the ramps will also be changed to improve efficiency in the bottleneck zone as much as possible.



# Developing world-leading state-of-the-art and creative urban expressway technology centered around maintenance management and renewal technologies

## Promoting Technical Development for Urban Expressways

The Metropolitan Expressway runs through urban areas where construction space is limited, while various measures must be taken to ensure a smooth and reliable road network, including repair and reinforcement of aging structures as well as enhancing seismic capacity. Additional measures are required, such as reducing noise and vibration in the driving environment as well as reducing environmental impact by promoting energy savings and utilizing renewable energy sources. Aiming at the development of superior maintenance, management, and renewal techniques to meet these requirements, multi-stakeholder collaboration extends among different entities, including the Highway Technology Research Center, governmental agencies, academia, and the private sector. Shutoko strives to contribute to the sound development of society by leveraging its research and development expertise to promote infrastructure projects that utilize community-based techniques and construction methods.

### ■ Aiming at technical development with due consideration for customers and the surrounding environment

Shutoko adopts new techniques to ensure smooth flow of traffic and comfortable driving while minimizing traffic restrictions that could cause congestion.

#### Viaduct widening technique without disrupting traffic in urban areas

Patent Number 4369506, 6266246 and Patent Application 2013-248746

During the road-widening project implemented between Itabashi JCT and Kumanochi JCT, which was subject to chronic traffic congestion, larger racket-type steel piers were newly installed on both sides of the existing piers that support the bridge girder. A technology based on a new concept in which hybrid structural footing is embedded with steel grids was used in addition to replacing the bridge girders. This allowed the viaducts to be widened within a limited space where it was not possible to create detours without requiring the road to be closed for an extended period.



Racket-type piers



Hybrid structural footing embedded with steel grid

#### Reinforcement technique (PCM paving<sup>1</sup>) and highly durable noise-reduction paving applied to ferroconcrete floor slabs

Patent Number 6270688 and 6276669

A new technique has been developed that achieves both repair work and increase in durability when applying reinforcement work to damaged ferroconcrete floor slabs. This reduces the length of time roads need to be closed and traffic restrictions in comparison to floor slab replacement work. Also, fine-particle porous asphalt, which ensures high durability and significantly reduces traffic noise, is used for floor slab paving, reducing the frequency of repaving work and lessening traffic noise.

<sup>1</sup> Polymer cement mortar paving



PCM paving work (Route No. 3 Shibuya Line)

#### Introducing illuminance measuring vehicle for road lighting maintenance technique

Replacing road lights with long-lasting LED lighting has reduced the traffic restrictions that used to be required with frequent bulb replacement. A special vehicle was developed to measure road illuminance while driving without requiring traffic restrictions as a simple method of confirming that long-life LED lights meet required illuminance levels. Measurements are taken on a regular basis to ensure that a favorable driving environment is maintained.



Measurement conducted by illuminance measuring vehicle

# Working to Create the Best Environments and Form Harmonious Relations with Local Communities

## Biodiversity Conservation Through the Regeneration of Nature

### ■ Ohashi Sato no Mori



A nature regeneration site installed on the roof of the Ohashi Ventilation Station based on a model of the original scenery that used to exist around the Megurogawa River.



June 2018 Rice planting



October 2018 Rice harvesting

Ohashi Sato no Mori is one of the sites included in an ecological network that connects the natural greenery around Yoyogi Park and other areas together.

Local elementary school children are invited to experience rice-growing (planting, harvesting and threshing rice), to hold nature observation classes and to try the rice they have grown, which contributes to multifaceted learning.

### ■ Minuma Tambo Shutoko Biotope



In collaboration with elementary and junior high schools located in the vicinity of the biotope, Shutoko is moving ahead with the Alder Tree Project to bring back the green hairstreak, the prefectural butterfly of Saitama threatened with the risk of quasi-extinction (Saitama Red Data Book).

By planting alder trees, favored by green hairstreaks and once abundant in the area, in the biotope, this nature restoration project aims at regaining the natural habitat for the green hairstreak species.

A biotope extending 1.7 kilometers and covering 6.3 hectares has been established beneath an elevated expressway in order to regenerate the ecosystem of the Minuma Tambo area of the Saitama Shintoshin Route, which is one of the few precious green zones remaining in the suburbs of the metropolis.

#### Animals that can be seen in the Minuma Tambo Shutoko Biotope



Japanese red fox



Tokyo Daruma pond frog



Penthorum



Green hairstreak

## Creation of comfortable stretches of road

### ■ Making Road Spaces Greener

We are establishing green zones around roadways near junctions and ventilation stations, etc., in order to create nicer urban panoramas, counteract the heat-island effect, and help prevent global warming.



Daishi Junction

Nishi-Shinjuku Ventilation Station  
(Wall Face)

## Distributing information on environmental initiatives

### ■ Shutoko Environmental Fair Held

The Shutoko Environmental Fair was held to provide users with easy-to-understand information on the environmental initiatives Shutoko is taking.

Shutoko Environmental Fair in Minato-Mirai  
(November 2018)

### ■ Distributing information on the shuto-E-co Website

Information is provided on the environmental initiatives Shutoko is taking on the shuto-E-co website. The site also hosts a blog written by employees and providing information on Shutoko's environmental initiatives, events, and other such details.  
<https://www.shutoko.jp/ss/shutoco/>



Image of the shuto-E-co website

## Social contribution activities

### ■ Community clean-ups

We carry out quarterly cleanups beneath elevated Metropolitan Expressway sections and around facilities and parking lots in urban development zones. Our goals are to maintain good relations with local communities and to conduct educational efforts related to road beautification.



Neighborhood cleanup

### ■ Social Contribution Events

We hold hands-on experience events targeting elementary school children so that they can obtain first-hand experience of the Metropolitan Expressway and provide support so that they can have fun learning about social mechanisms and broaden their knowledge of vocational matters.



Shutoko Children Future Project



## Challenge

**By Using Diverse Ideas and Technologies,  
We Develop a Broad Range of Businesses**

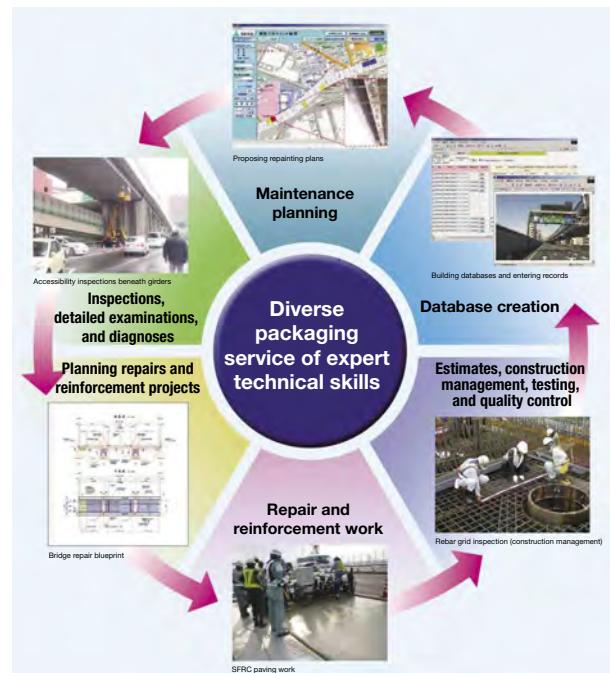
# Moving Ahead with Technical Consulting Projects in Japan and Overseas

We promote technical consultation projects in Japan and overseas while making the best possible use of the expert technological skills the Shutoko Group has built up through planning, construction, maintenance, management, and traffic operations over the course of the past fifty years.

## Domestic Technical Consulting Business

We provide technical consultations based on the specialized technical skills the Shutoko Group has, concentrating on the work involved in inspecting, diagnosing, planning repairs, and designing earthquake-resistant reinforcements on road structures managed by national and regional public corporations.

- Inspections, diagnostics, repair planning, earthquake-resistant reinforcement project planning, repair work, and construction management of road structures
- Investigating how to maintain the safety of construction adjacent to Metropolitan Expressway structures
- Dispatching specialized technicians to provide technical support
- Surveys and studies related to traffic planning and control (ITS)
- Examining the earthquake resistance of buildings and planning reinforcement projects
- Negotiation of public land, explanation of compensation, site acquisition process management, inquiry of compensation amount, preparation of land condemnation documents



### ■ Professional technologies possessed by the Shutoko Group

Detailed survey with diagnosis technology



Steel plate floor automatic ultrasonic testing equipment (SAUT)  
A nondestructive inspection technique to detect fatigue cracks occurring inside steel plates

Effective maintenance with new our technology



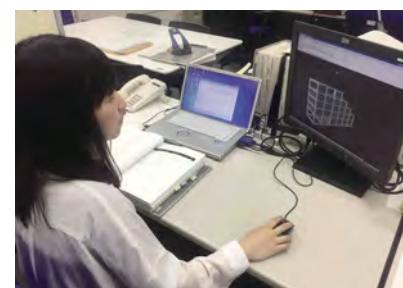
InfraDoctor  
An infrastructure management system that digitalizes the structure in three-dimensional point cloud data. Data is used with the inspection results ledger in the GIS platform.  
Photo of the measurement vehicle collecting three-dimensional dot group data

## In-house venture by first-class architecture offices

We continue to expand our business affairs, concentrating on public and private architectural design work.

In addition to the design, legal procedures and supervision of construction work on roadways, we have also built up enviable results in earthquake-resistance diagnostics and the design of reinforcements, particularly pertaining to private buildings located alongside main-line expressways, and we actively promote earthquake-proofing renovations.

Additionally, we have been appointed earthquake-proofing adviser by the Tokyo Metropolitan Government and the city of Yokohama, and we provide consultation services for building owners with regard to earthquake-proofing renovations.



# Moving Ahead with Technical Consulting Projects in Japan and Overseas

## Overseas Technical Consulting Business

### Expanding Our Technical Consulting Business Overseas

Kicking off with an order received from JICA in February 2010, we have been promoting our technical consulting operations abroad. We received an order for consulting work directly from Don Mueang Tollway Public Company Limited (Thailand) in January 2013. In addition, we continue to seek further development overseas.



Measuring ETC wireless transmissions at a Thai toll plaza



Information collection/confirmation survey for the maintenance of the urban traffic network in Douala, Cameroon

### We Are Also Involved in Overseas Road Investment Projects

In September 2011, JEXWAY, the Japan Expressway International Company Limited, was established by joint investment with three companies of NEXCO.

We have participated in overseas road investment projects through JEXWAY.

#### ■ Representative Office in Bangkok

Since June 2011, we have established a Representative office in Bangkok, Thailand, for further development of overseas projects. Centering on Thailand and surrounding countries, we promote international contribution in various fields such as maintenance management, traffic control, ITS, and technical consultation.



Street in Bangkok



Meeting including the locally hired staff

## Social contribution activities in Japan and abroad

### Contributions in Japan

The Workshop on Bridge Maintenance Management has been held regularly since 2009, targeting technical employees of the national and local governments, in order to expand use of Shutoko technologies in road infrastructure maintenance management.

In previous workshops, in addition to observation of on-site bridge maintenance management within the Shutoko Group, we work toward mutual technical improvement.



Workshop on Bridge Maintenance Technologies being held  
November 21, 2018

### International contributions

We have contracted a Memorandums of Understanding Regarding Technical Cooperation (MOU) starting with Cambodia's Ministry of Public Works and Transport in August 2009, and now also encompassing Thailand, Indonesia, France, Myanmar, Malaysia, and the Philippines, a total of 11 agencies in 7 countries.

From now on, we will continue to build new relationships with other agencies, which will lead to greater promotion of overseas projects.



Signing ceremony of the MOU with Projek Lintasan Kota Holdings Sdn Bhd (PROLINTAS) in Malaysia

Besides training carried out by JICA, etc., and receiving observations from government agencies from countries around the world, we carry out opinion exchanges for technical cooperation.

Moreover, we dispatch JICA experts to government agencies in developing countries through JICA, cooperating in the provision of technical guidance and training of human resources.

In recent years, we have carried out activities to introduce approaches used in Shutoko in order to promote traffic safety activities overseas.



Exchanging opinions on technical cooperation with the organizations involved in concluding the MOU with Indonesia



Participation in a traffic safety campaign in Thailand

# Operating Various Ventures to Contribute to People's Lives

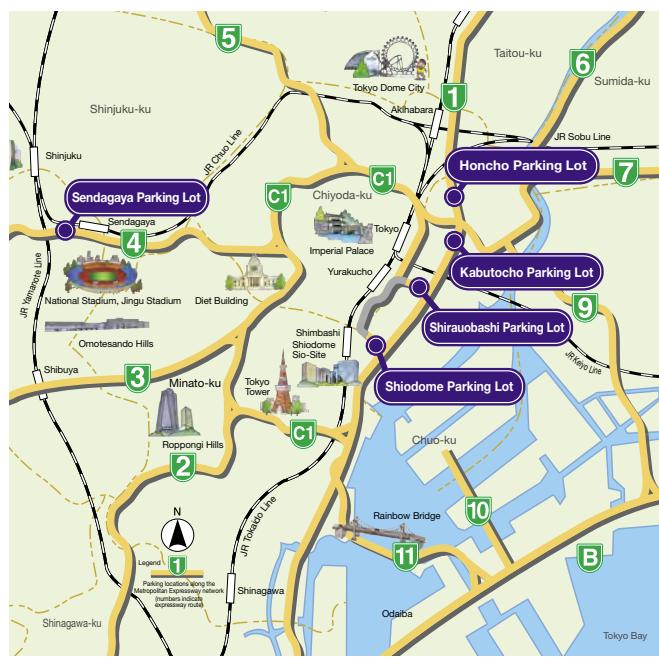
Together with our affiliates, the Shutoko Group runs various ventures and establishes new ones to establish a stable, long-term business foundation. We adopt the customer's point of view so that we can contribute to the lives of members in all communities.

## Parking Lot Business

### City Planning Parking Lots

We operate City Planning Parking Lots that underpin urban activities in five locations, with spaces for a total of 2,100 vehicles.

- Shiodome parking lot: 455 spaces
- Kabutocho parking lot: 939 spaces
- Honcho parking lot: 306 space
- Shirauobashi parking lot: 226 spaces
- Sendagaya parking lot: 236 spaces



### Parking Lot Business Using Sites Under Elevated Roads and Elsewhere

We operate and manage parking lots with space for a total of 5,600 vehicles in 59 locations beneath viaducts on the Metropolitan Expressway and other places. We have been installing surveillance cameras, adding equipment to enable us to handle digital cash, and taking other measures to enhance customer safety and convenience.



O-Path Ohashi parking lot



## Real Estate Business

We operate a total of three properties, including the Torias Shinyurigaoka and Evertow Chojamaru, that were built on the sites of our former company housing and research center, both of which are company assets, and the Evertow Libero Kamiikidai, for which the land was purchased. We intend to continue making the best use of our existing assets to develop our interests in the field of real estate.



Torias Shinyurigaoka, built on the site of our former company housing



Evertow Chojamaru, built on the site of our former research center

## Catering Business

We directly operate a total of five restaurants, including the Ginza MUN and the Roppongi MUN, both of which are Korean restaurants, and the COVER meat bistro in Ebisu. In addition to working on stabilizing the administration of these five restaurants, we intend to continue developing our interests in the direct operation of restaurants in the future.



Roppongi MUN

## Other Business Interests

### Self-Storage Business

Taking advantage of the space below Metropolitan Expressway viaducts, Shutoko Self-Storage Ebisu helps people living in the surrounding area by providing a location to store household goods. This also creates a more pleasant living environment—including an environment with wall plantings on the building—and contributes to a more affluent, comfortable lifestyle for members of the community.

### Sales Business

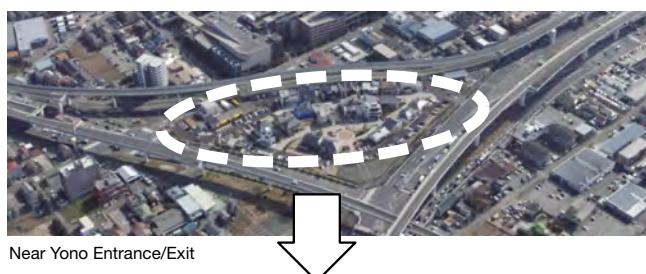
We develop and sell original Shutoko goods, such as recycled shoulder tote bags conceived by CIRCULATION SHUTOKO, which effectively uses the waste materials generated by Shutoko as part of our initiatives for taking the environment into consideration.

### Credit Card Business

We issue the AEON Shutoko card for general users and the Shutoko Business card for corporate users, both of which provide bargains when used.

### Yono Urban Promotion Complex

The Yono Urban Promotion Complex offers drivers a parking area, information center, free recreation facilities, restrooms, convenience stores, and other commercial facilities. In addition, there is a model home exhibition area that uses the space for events and whose theme is “creating lovely, high-quality townscapes.” Visitors can enjoy a carefree stroll in the attractive model homes section.



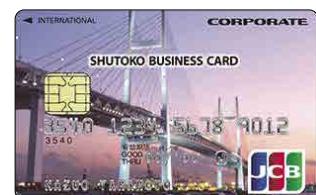
Shutoko Self-Storage Ebisu



Circulation Shutoko Project's "Hataraku tote bags"



AEON Shutoko card



Shutoko Business card

### Temp Staff Business

Shutoko Partners Co. Ltd. is a temp staff business and integrated personnel services company within the Shutoko Group. The company offers specific human resource services designed to enable optimum matchups among staff and companies who employ temp staff.

### Insurance Agency Business

We have expanded into the insurance agency business to provide an official agency for the Shutoko Group. Shutoko Insurance Support Co. Ltd. is a Shutoko Group insurance agency that has expanded into the insurance agency business to provide top-quality safety and security in accordance with the insurance needs of our customers.



## Human Resource Development

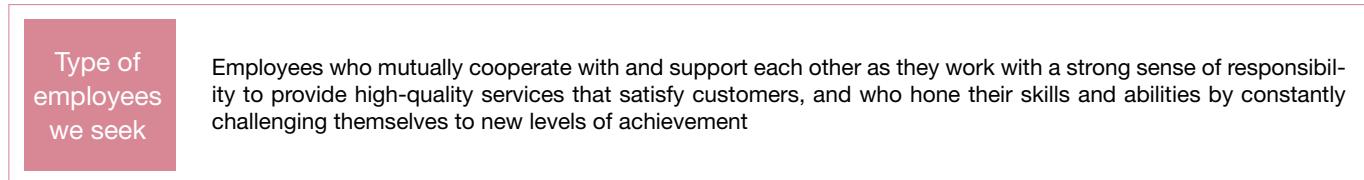
**Training Professionals to Sustain Our Operations  
and Improve Our Organizational Capabilities**

# Creating an Environment That Inspires Our Employees

## Promoting Human Resource Development

### Development of Human Resources Who Seek Continuous Growth as Individuals

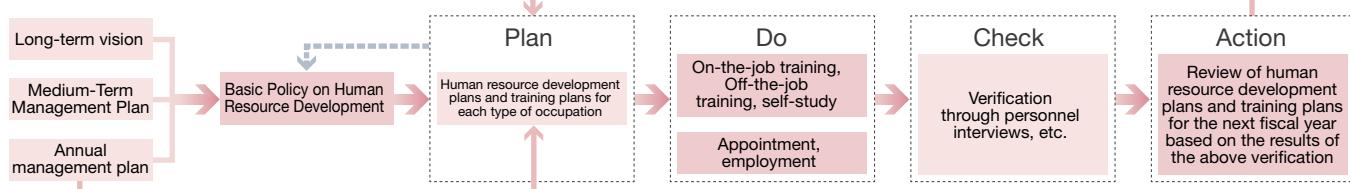
Human resource development in our company aims to systematically and structurally develop employees who will not only lead our future but make personal efforts to grow as individuals and be able to perceive their growth. This and other basic concepts are set forth in our “Basic Policy on Human Resource Development.”



### PDCA cycle for human resource development

To develop the types of employees we seek, we have established human resource training plans and study courses for each job type, and have established a system for supporting employee autonomous self-study efforts while involved in on-the-job training (OJT) and off-the-job training (Off-JT). Furthermore, to allow each and every employee to maximize their capabilities and put their skills and aptitudes to full use, we have established a PDCA cycle for human resource development that enables us to verify the effects of our support framework via personnel interviews and to make improvements to training plans for the following fiscal year.

#### PDCA cycle



### ■ OJT (on-the-job training)

We provide detailed support from the entire workplace for new employees by appointing senior employees as OJT leaders. New employees can look to these senior employees as their mentors and consult about matters from the basics of being a businessperson to in-depth matters regarding their duties. Our level-specific training programs also emphasize the importance and necessity of on-the-job training.

### ■ Off-JT (off-the-job training)

Our main training programs include “common studies” for improving the skills expected within each level of the hierarchy, “departmental studies” to enable departments to acquire specialized knowledge, abilities, and technical skills, and “external studies” in which employees are sent on training programs, etc., offered by outside agencies so that they can acquire specialized skills. We also provide continual study programs targeting managers to strengthen our management practices, and strive to improve our organizational management skills.

### ■ Self-study

We also provide financial assistance to defray the cost of correspondence course tuition fees and financial support for employees acquiring recommended qualifications. Additionally, we have established overseas and domestic exchange studies programs to promote skills that will enable employees to support the expressway business while at the same time be capable of responding to the evolution of a diverse range of business fields.



## Improving Technical Skills and Imparting Techniques

We are highly regarded in Japan and elsewhere for our advanced technical skills in three areas—the construction, use, and maintenance of expressways in the Tokyo metropolitan area—that Shutoko has accumulated over more than fifty years. We strive to improve our technical skills and impart related techniques so that we can steadily and flexibly handle projects that call for even more sophisticated technical skills, and provide customers with high-quality services.

### OJT

In-house workshops to improve basic and professional technology of young engineers, and VE activities for comprehensive technology improvement are continuously carried out.

In-house workshop

Activities that target young engineers in various professional fields are carried out, seeking to solve technical issues in design and construction.

VE (Value Engineering) activities

Team activities that seek functional improvements and cost optimization targeting a specific theme are carried out. To achieve annual activity goals, we hold company report meetings, as well as participate and make presentations at national VE meetings.



An in-house workshop



A VE national meeting

### OFF-JT

Practice-type training and actual operations training on the work site are carried out to strengthen on-site performance and improve application ability.

Moreover, annual technical achievements achieved through the activities of young engineers are summarized in theses and reports, as well as reported at presentation meetings, in order to share and pass down technical information.



Training



Technical presentation meeting

### Self-study support

For the continuous improvement of expert technology and application ability, these are actively submitted and presented, and acquiring certification is supported and encouraged.

Moreover, we support young engineers in their studies in Japan and abroad as they acquire expert knowledge and techniques that are necessary to respond to diversified and upgrading technologies.

#### Number of employees with major certifications \*As of January 1, 2019

Professional engineer

**61**

Steel infrastructure diagnosis engineer

**19**

First-class architect

**19**

Doctor

**8**

Concrete assessor

**44**

VE specialist

**3**

# Creating an Environment Where Employees Work Enthusiastically

## Promoting Work-Style Reforms

### Create a Positive and Dynamic Workplace that Ensures the Health and Well-Being of Employees

Fiscal 2018 represented the inaugural year of our work-style reforms, and we continue to promote work-style reforms that ensure both safety and peace of mind for all customers. We are utilizing these work-style reforms to create working environments in which all employees can provide a vital role while maintaining physical and mental health.

#### Preventing long working hours

Our company-wide initiatives to prevent long working hours include each division and section setting the target time to leave the office, while each employee submits an “office leave time declaration card” every morning that takes into account the task schedule of each day. In addition, respective workplaces work out specific measures to ensure appropriate working hours.

#### Flexible working arrangements and active communication

We promote flexible working arrangements, including staggered shifts, to ensure each employee can maintain a healthy work-life balance, securing sufficient time for child or nursing care as well as personal development opportunities. Recreational activities are organized by each workplace to improve the working environment through active communication.

## Enhanced Work and Lifestyle Support

### Substantiated Support System Encompassing Employee Health Management Initiatives

We carry out regular health checkups in alignment with the test standards observed during official hospital checkups and provide health maintenance guidance based on these results, including measures for preventing lifestyle diseases. In addition to implementing health management based on the Industrial Safety and Health Act, we have also adopted various sickness prevention activities. We have also appointed councilors in charge of promoting mental health throughout the company, and in addition to having established a system in which consultations are possible during working hours, we have also inaugurated a system of patrolling consultants who visit all workplaces and offer consultations. In addition, we have also prepared an environment that facilitates employee consultations, such as by setting up consultation centers that accept inquiries on a 24-hour basis outside the company.

#### Providing an environment conducive to success by promoting work-life balance

##### Work-life balance management

Our employees play important roles not only in their places of work but also in various social settings, ranging from housework to child care, nursing care, and volunteer and community engagement activities. Shutoko strives to create working environments that enable employees to perform their vital roles while maintaining both physical and mental health by striking a healthy work-life balance that takes into account individual factors such as lifestyles and life stages.

With regard to child-rearing, we recommend that all male employees take child-care leave and take an active part in raising their children, and a large number of male employees, in addition to their female counterparts, are active in these roles. The results we have achieved and the systems we have adopted in this field have been highly acclaimed, and we were certified as a “Platinum Kurumin” by the Minister of Health, Labor and Welfare in December 2017 in the category “Company Supporting Child-Rearing.”



##### Various programs that support work-life balance

Program	Description
Maternity leave (women)	From six weeks before the expected date of birth to eight weeks after the birth
Spousal maternity leave	Up to three days during the period between the date of hospitalization for childbirth until the official procedures connected with childbirth
Child-care participation leave for men	Up to five days during the period from six weeks before the expected date of birth until eight weeks after the birth
Parental leave	Until a child reaches three years of age
Time off to care for sick children	Five days per child, and a maximum of ten days a year to care for children up to the third year of elementary school
Nursing care leave	Five days per person, and a maximum of ten days a year to care for sick or injured family members



Health seminars

In collaboration with the Health Insurance Association, various seminars are organized to raise awareness for health and health care among employees.

#### We respect diversity and do our best to create an environment in which everyone can demonstrate their abilities to the fullest.

In addition to employing people with a broad range of perspectives, we strive to create workplaces in which all members of our diverse workforce can work enthusiastically.

# Corporate Profile

(as of January 1, 2019)

Company Name: Metropolitan Expressway Company Limited

Representative: President Toshitaka Miyata

Location: 1-4-1 Kasumigaseki, Chiyoda-ku, Tokyo

Date of Establishment: October 1, 2005

Capital: ¥13.5 billion

## Summary of Business:

- New construction, renovation, maintenance, repair, post-disaster restoration, and other express highway management
- New road construction, renovation, maintenance, repair, and other work on consignment from the national government, local governments, and other entities
- Operation, management, and other aspects of parking lots, expressway rest areas, and rental facilities located under elevated sections of highways

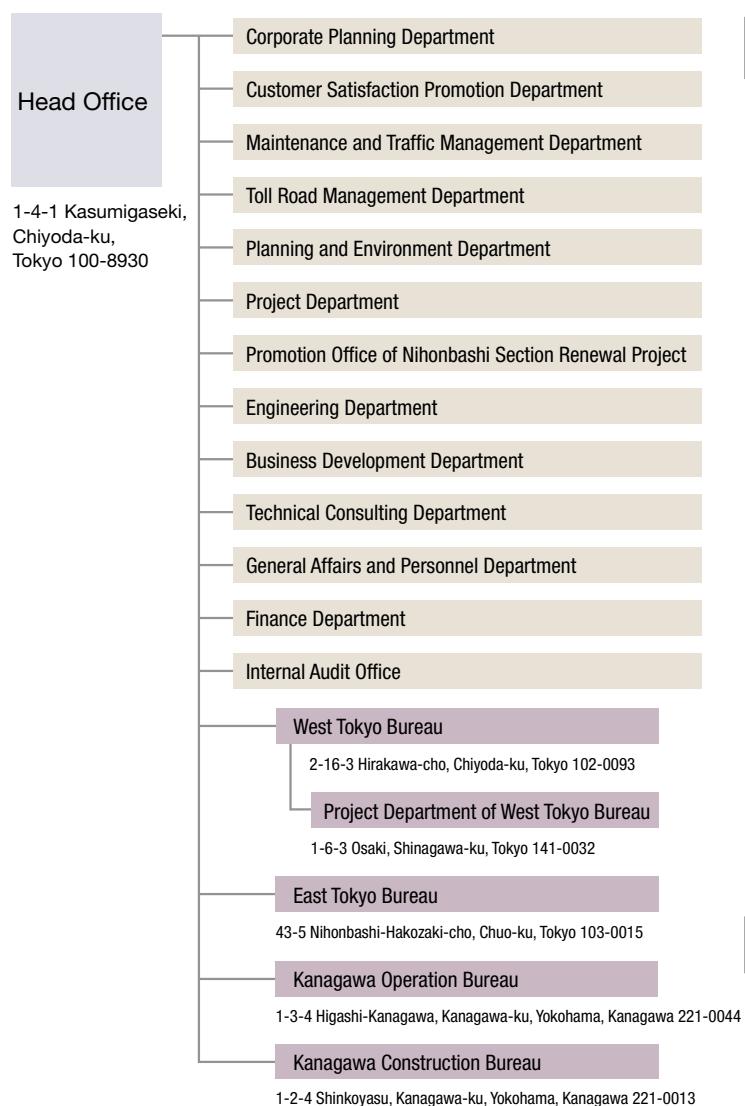
Employees: 1,087 people



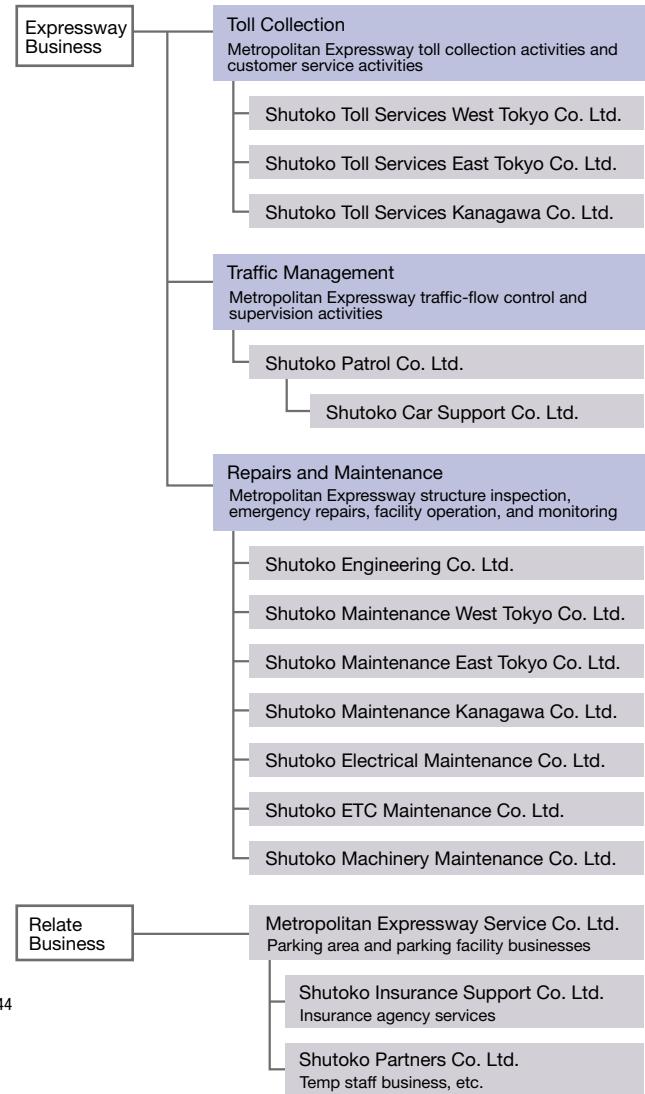
Triangular Stream Logo

This logo symbolizes the Metropolitan Expressway network that spreads out in three different directions from Tokyo to encompass Kanagawa, Chiba, and Saitama prefectures. It also represents the company's stance with regard to supporting people, communities, and lifestyles through network creation.

# Organization



# Shutoko Group Companies



## Main Businesses

### Expressway Business

#### Maintenance and Management

To provide safety and security to customers traveling on the Metropolitan Expressway, we maintain roads through repairs and reinforcements, cleaning, emergency response, and snow and ice removal.



Inspection and maintenance vehicles

#### Road Construction and Renovation

By building new routes and renovating existing ones, we strengthen the expressway network, alleviate traffic congestion, shorten travel times, and help achieve better logistical efficiency.



Near Yokohama Aoba IC/JCT (tentative name)

#### Major Renovation and Repairs

To address the aging of Metropolitan Expressway's structures, we conduct renovation and repair projects that include rebuilding road structures.



The Pier Section of Higashi-Shinagawa and Reclamation Area of Samezu

#### Toll collection

To ensure comfortable travel on certain routes, we conduct efficient toll collection through Electronic Toll Collection System (ETC).



Toll gate

### Relate Business

#### Parking lot and PA operation and management

We operate and manage parking lots and parking areas on the Metropolitan Expressway, making use of the space available beneath viaducts, etc.



Yoyogi PA

#### Technical consulting

Leveraging the technical expertise we have developed through our expressway business, we provide consulting services in Japan and abroad.



Inspections and diagnostics on structural components



Metropolitan Expressway Company Limited



This booklet is printed  
on recycled paper  
using vegetable oil-  
based ink.

June, 2019