



November 25, 2021

- Introducing the expertise and experience of railway operations to the world -

**Tokyo Metro will launch an online course “Tokyo Metro Academy”  
The first course will be held in March 2022 for the field of train operations.**

Tokyo Metro Co., Ltd. (Head Office in: Taito Ward, Tokyo; President: Akiyoshi Yamamura; "Tokyo Metro" below) will launch an online course, “Tokyo Metro Academy,” to railway operators around the world. We will introduce Tokyo Metro’s expertise and experience in railway operations that Tokyo Metro has cultivated to date to achieve safe and stable operations on urban railways. Our aim is to contribute to the development of a sustainable society through the advancement of the global railway business by responding to the various needs of operators with online courses.

**Plans for Tokyo Metro Academy**

**March 2022: “Train Operations: Effective Improvement Method of Punctuality -Train Timetables, Station Operations, and Facilities-” (now accepting applications)**

From August 2022, we plan to hold seven courses on railway businesses and affiliated business in succession (opening of application is planned for April 2022).

Tokyo Metro has been providing various technical cooperation and support to railway operators around the world for some time, utilizing our expertise and experience in the operation and maintenance of urban railways, which have supported safe, stable, and high-density transportation. When we held a free online course geared towards worldwide railway officials that provided the essence of our initiatives, 590 participants from 34 different countries in the world participated, indicating a high level of interest.

Based on this achievement, Tokyo Metro Academy will have lectures regarding initiatives of Tokyo Metro geared toward worldwide railway officials. There will also be discussion time including experts from Tokyo Metro and we will answer all kinds of questions from the participants. Please note that there is a fee for this course.



# “Train Operations: Effective Improvement Method of Punctuality

## -Train Timetables, Station Operations, and Facilities-”

### 1. Course contents



On the Tozai Line, one of the busiest lines of Tokyo Metro, we will introduce a series of processes that have improved punctuality in train operations through a combination of various measures based on the results of train delay surveys. The measures which have been implemented include analysis by Buffer Index (an index for evaluating the quality of train delays), reviews of train timetables, changes in station operations, and improvements in various facilities.

Course contents (plan)	Summary of train operations
	Transportation planning basics
	Evaluation and analysis methods for train delays
	Improvement measures for train delays ✓ Intangible measures (Train timetables and Station operations) ✓ Tangible measures (Signaling, Rolling stock and Station facilities)
Discussion, Q&A, Survey	

### 2. Dates

Total of three days: March 3 (Thu), 10 (Thu), and 17 (Thu), 2022 (The same content will be presented on each day.)

\* Recommended course date for each time zone

		March 3, 2022 (For APAC time zones)	March 10, 2022 (For EMEA time zones)	March 17, 2022 (For NCSA time zones)
JST (Tokyo)	UTC+9	3:00 p.m. – 6:00 p.m.	7:00 p.m. – 10:00 p.m.	7:00 a.m. – 10:00 a.m.
ICT (Hanoi, etc.)	UTC+7	1:00 p.m. – 4:00 p.m.*	5:00 p.m. – 8:00 p.m.	5:00 a.m. – 8:00 a.m.
CET (Brussels, etc.)	UTC+1	7:00 a.m. – 10:00 a.m.	11:00 a.m. – 2:00 p.m.*	11:00 p.m. (Mar. 16) – 2:00 a.m. (Mar. 17)
EDT (Washington, D.C., etc.)	UTC-4	–	–	6:00p.m. – 9:00 p.m. (Mar 16)*
EST (Washington, D.C., etc.)	UTC-5	1:00 a.m. – 4:00 a.m.	5:00 a.m. – 8:00 a.m.	-

### 3. Participants

People (managers/experts) involved with railways around the world, including railway operators, suppliers, consultants, members of government agencies and educational/research institutes, etc.

### 4. Language

English

### 5. Location

Online (Cisco Webex)

For details on the online courses, how to apply for participation, and other information, please refer to the attachment.

-This news release has been delivered to the Ministry of Land, Infrastructure, Transport and Tourism Press Club, the Tokiwa Club, and the Foreign Correspondents' Club of Japan.

For inquiries regarding this matter, please contact:

Tokyo Metro Public Relations Dept., Public Relations Section Noguchi/Asano  
International Relations Dept., Y. Shimizu/Muroi

TEL: 03-3837-8277 (Mobile: 080-1247-0114)

TEL: 03-3837-7271



# Contributing to the sustainable development of world's railway businesses!

## Tokyo Metro Academy: Online courses where you can learn the expertise and experience of railway operations of Tokyo Metro

Tokyo Metro Academy will introduce the expertise and experience in railway operations that Tokyo Metro has cultivated to date to achieve safe and stable operations on urban railways for railway operators around the world. Our aim is to contribute to the development of a sustainable society through the advancement of the global railway business by responding to the various needs of operators with online courses.

Tokyo Metro has been providing various technical cooperation and support to railway operators around the world for some time, utilizing our expertise and experience in the operation and maintenance of urban railways, which have supported safe, stable, and high-density transportation.

As Tokyo Metro Academy, we held the first online course (introduction of the essence of our initiatives) in June 2021. We had 590 participants from 34 different countries of the world. Many of the participants expressed their interest in the expertise and experience of Tokyo Metro, saying that they would like to learn more in detail and would like to develop content for lectures in their own countries.

Based on this achievement, Tokyo Metro Academy will have lectures regarding initiatives of Tokyo Metro geared toward worldwide railway officials. There will also be discussion time including experts from Tokyo Metro and we will answer all kinds of questions from the participants.

The first course will be held in March 2022 for the field of train operations. (now accepting applications). From August 2022, we plan to hold seven courses on railway businesses and affiliated business in succession (opening of application is planned for April 2022).



**Our initiatives, experiences, achievements, and expertise**

**Online Courses**

**Disclosed information can be utilized by participants in their future work.**

**In the near future, we are planning to offer many professional courses.**

Please follow us!



**2022-No.1**  **Train Operations** **Effective Improvement Method of Punctuality -Train Timetables, Station Operations, and Facilities-**

### SUMMARY

Conventionally, train delays are mainly evaluated by the amount (i.e. delay time). However, in terms of “whether or not the delay will affect subsequent trains,” the same delay time has very different meanings depending on whether it occurs during the morning rush hours or the off-peak hours.

To reduce delays, the train timetable personnel must determine which parts of the train timetable should be modified and to what extent, while taking various conditions into consideration. Tokyo Metro came up with a new index, the “Buffer Index (= the amount of delay of the train in question divided by the margin between the trains),” which evaluates train delays by quality instead of quantity.

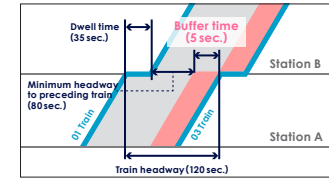
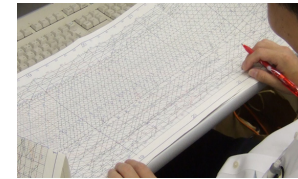
On the Tozai Line, one of the busiest lines of Tokyo Metro, we will introduce a series of processes that have improved punctuality in train operations through a combination of various measures based on the results of train delay surveys. The measures which have been implemented include analysis by Buffer Index (an index for evaluating the quality of train delays), reviews of train timetables, changes in station operations, and improvements in various facilities.

### TAKEAWAY

By learning Tokyo Metro’s case study in detail, participants can use it as a reference when considering a solution for train delays.

### LECTURE CONTENTS

TOPICS	CONTENTS
<b>1) Summary of train operations</b>	Summary of train operations on the nine lines of Tokyo Metro, and the past transportation records
<b>2) Transportation planning basics</b>	Basic concept of creating train timetables <ul style="list-style-type: none"> <li>• Preconditions (line conditions, rolling stock and ground equipment, number of passengers, etc.)</li> <li>• Setting of running time, dwell time, running headway, etc.</li> </ul>
<b>3) Evaluation and analysis methods for train delays</b>	Detailed analysis using the Buffer Index based on the overall picture of delays from the actual train data and field survey results
<b>4) Improvement measures for train delays</b>	Implemented measures including reviews of train timetables, changes in station operations, improvements in various facilities (signaling, rolling stock, station facilities) and their effectiveness (44% improvement on max delay time) to improve the delay on the Tozai Line, the busiest Tokyo Metro line, based on the analysis results
<b>Discussion, Q&amp;A, Survey</b>	



**COURSE DATES** March 3, 10, and 17, 2022 (The same content will be presented on each day.)

		<b>March 3, 2022</b> (For APAC time zones)	<b>March 10, 2022</b> (For EMEA time zones)	<b>March 17, 2022</b> (For NCSA time zones)
<b>JST (Tokyo)</b>	<b>UTC+9</b>	3:00p.m. – 6:00p.m.	7:00p.m. – 10:00p.m.	7:00a.m. – 10:00a.m.
<b>ICT (Hanoi, etc.)</b>	<b>UTC+7</b>	1:00p.m. – 4:00p.m.	5:00p.m. – 8:00p.m.	5:00a.m. – 8:00a.m.
<b>CET (Brussels, etc.)</b>	<b>UTC+1</b>	7:00a.m. – 10:00a.m.	11:00a.m. – 2:00p.m.	11:00p.m. (March 16) – 2:00a.m. (March 17)
<b>EDT (Washington, D.C., etc.)</b>	<b>UTC-4</b>	-	-	6:00p.m. – 9:00p.m. (March 16)
<b>EST (Washington, D.C., etc.)</b>	<b>UTC-5</b>	1:00a.m. – 4:00a.m.	5:00a.m. – 8:00a.m.	-

 : Recommended times to take the course for each time zone

### LECTURERS



#### KOHEI USHIDA

Joined Tokyo Metro in 1984. Ushida has worked on various overseas projects based on his experience as a station attendant, conductor, driver, transport dispatcher, transport planner, and driver trainer. He has also contributed to the development of the Buffer Index.



#### YOSHIKI SHIMIZU

Joined Tokyo Metro in 2006. Shimizu studied train timetable analysis at a university. After joining Tokyo Metro, he has worked on the planning and design of power supply facilities based on the contents of the train timetable.

#### Participants

People (managers/experts) involved with railways around the world, including railway operators, suppliers, consultants, members of government agencies and educational/research institutes, etc.

#### Language

English (Lectures will be in English. Q&A and panel discussion will be conducted with the help of JP<->EN interpretation.)

#### Price

45,000 JPY (Japanese Yen) Note : Applications within Japan are subject to the tax separately.

#### Certification

Attendance Certificate (digital) will be issued.

# How To Apply for Online Courses



## 1

### Apply to Participate

You can apply to participate in this course from the reservation website. Please access the reservation website using the following Link. (\*The same content is presented each day.) Choose a convenient date for you, and proceed with the application and payment for the course.

■ **March 3, 2022 3:00p.m. JST/1:00p.m. ICT/7:00a.m. CET/1:00a.m. EST**  
Link: [Application page](#)

■ **March 10, 2022 7:00p.m. JST/5:00p.m. ICT/11:00a.m. CET/5:00a.m. EST**  
Link: [Application page](#)

■ **March 17, 2022 7:00a.m. JST/5:00a.m. ICT/11:00p.m. (16th) CET/6:00p.m. (16th) EDT**  
Link: [Application page](#)

When your payment has been confirmed, the host will send you an invitation email. For the details about application and payment methods, there is a link to the PDF on the reservation website. Please refer to the PDF.



## 2

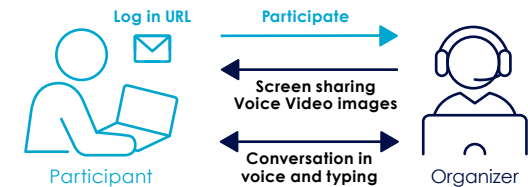
### Application Start Date

You can apply to participate starting Nov 25, 2021.  
\*Application deadlines are 10 days before each course date.

## 3

### Course Participation (Virtual classroom: Cisco Webex)

You can participate in the course by accessing the URL contained in the invitation email that you will receive after your application. Please access this URL at the correct date and time of the course.



#### Please note

- Please agree to the Terms of Service in order to apply. Please refer to the aforementioned PDF on the reservation website for the Terms of Service.
- The application method from within Japan is different than from overseas. Please refer to the aforementioned PDF on the reservation website for more details.
- Click on the login URL in the invitation email before the scheduled course start time. Enter the required information, such as your name and email address, on the opened web page, then click "Join Now".
- When using for the first time, you will need to install the Cisco Webex module. Follow the on-screen instructions to install the required module.
- Participants are requested to prepare the tools needed for taking the Online Courses.

Contact us : [tokyometro-online-courses@tokyometro.jp](mailto:tokyometro-online-courses@tokyometro.jp)



# Tokyo Metro Company Profile

## Railway Business

### Transport Services that Support the City Function of Tokyo

(As of March, 2021 unless stated otherwise.)



9

Subway lines



Tokyo Metro  
Network **195 km**

Reciprocal through-services  
operated by other rail  
transport companies/**550.8 km**



**99.7%** (FY2020)

The on-time performance rate  
calculated from the arrival rate  
within **5 minutes** on all lines is 99.7%.



**7.55 million** (FY2019)  
**4.98 million** (FY2020)

**Average passengers per day**

A vital link in Tokyo's transportation network



**180**  
Stations

Operates nine subway lines  
and 180 stations in and  
around central Tokyo.

## COMPANY OUTLINE (As of March, 2021 unless stated otherwise.)

<b>Company Name</b>	Tokyo Metro Co., Ltd.
<b>Capital</b>	¥58.1 billion
<b>Stockholders</b>	National Government (53.4%), Tokyo Metropolitan Government (46.6%)
<b>Net Sales</b>	¥269.6 billion (FY2020)
<b>Number of Employees</b>	9,881 employees

## Affiliated Businesses

### Growth of the Tokyo Metro Group

#### Retail-related Business

The variety of new, convenient, user-friendly  
commercial facilities under development  
in stations for customers.



#### Advertising and IT Business

A wide range of media inside stations and  
trains, and wireless LAN services inside  
stations.



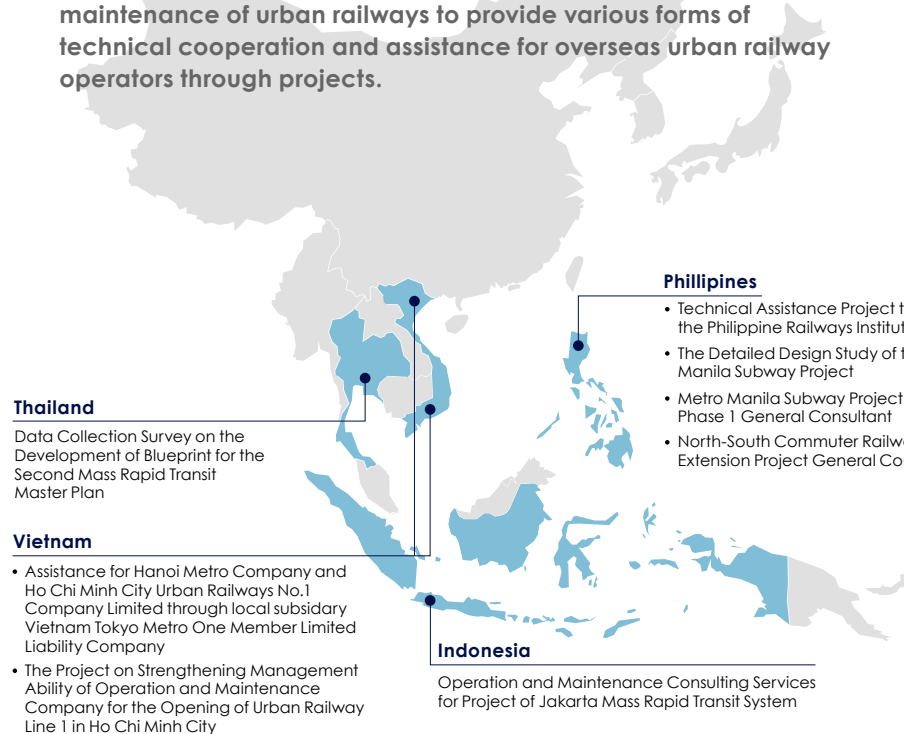
#### Real Estate Business

Developed office buildings, hotels, housing,  
a golf driving range, and rental storage  
primarily in areas near Tokyo Metro railway lines.



# Tokyo Metro Overseas Rail Business

Tokyo Metro is harnessing its expertise on the operation and maintenance of urban railways to provide various forms of technical cooperation and assistance for overseas urban railway operators through projects.



## Educational consulting

From an overview of each field to detailed content, Tokyo Metro can provide assistance that meets your needs. We are looking forward to hearing from you about your educational consulting needs.



Technical assistance for the establishment of training centers



Instructor training



Development of training programs



Customized online courses



Technical assistance for operations and maintenance

## Support for local urban railways in Philippines

In the Philippines, we are taking part in various urban railways improvement projects including a project in the Manila Metropolitan region in the Philippines to establish the Philippines Railways Institute and formulate the scheme to train personnel, in turn improving their managerial capabilities, in order to establish training system for urban railway staff.

