About JR East's railway business

March 18, 2025

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East Japan Railway Company

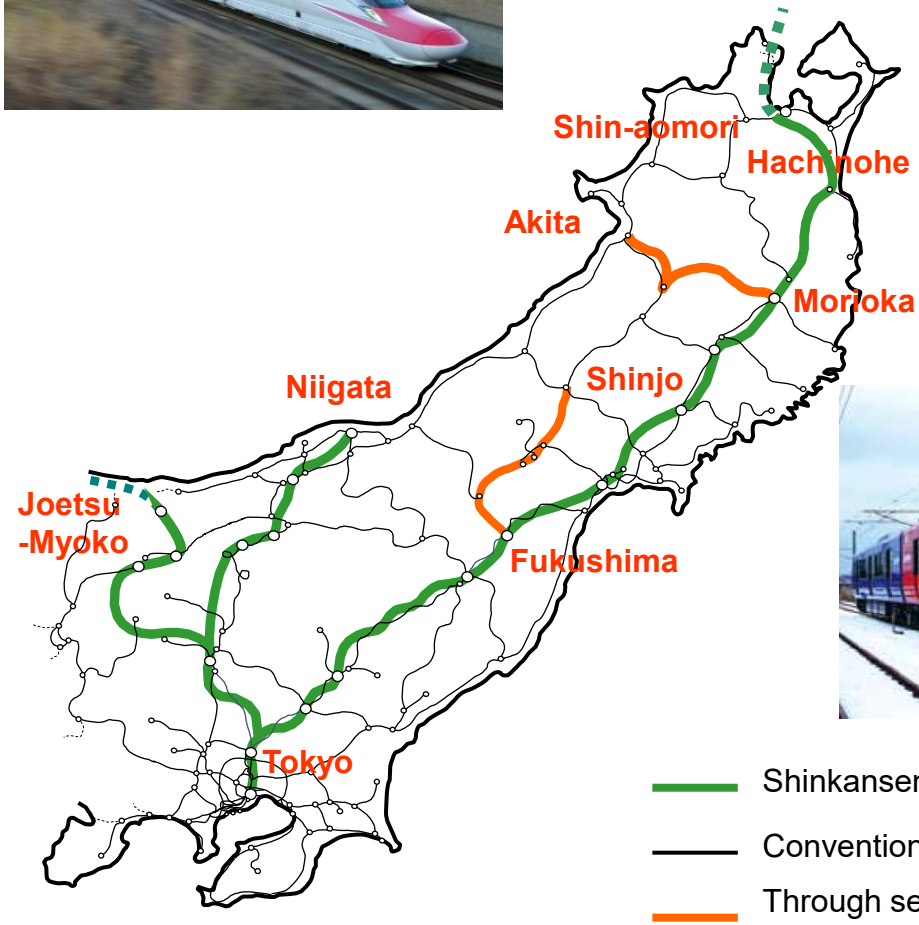
Agenda

1. Overview of JR East
2. Capital expenditures to ensure safety and improve productivity
3. Progress and outline of fare revision
4. Major measures related to future mobility
5. Management Issues
   - Status of discussions regarding local lines
   - Improper handling of railway vehicles wheel sets during assembly

Overview of JR East

* All figures are as of April 1, 2024.

No. of employees	:44,565
Operating kilometers	: 7,419 km
No. of stations	: 1,681
No. of trains	:11,847
No. of vehicles	:12,375



Shinkansen	:1,194 km	
Conventional Lines	:6,225 km	
Through service across Shinkansen and Conventional Lines (reposted)	: 276 km	
Total	:7,419 km	

Overview of JR East

No. of trains: Approx. 12,000/day

Train-kilometers:
Approx. 700,000 km/day

No. of customers:
Approx. 15.5 million/day

Frequency of signal checks:
Approx. 1,200,000 times/day

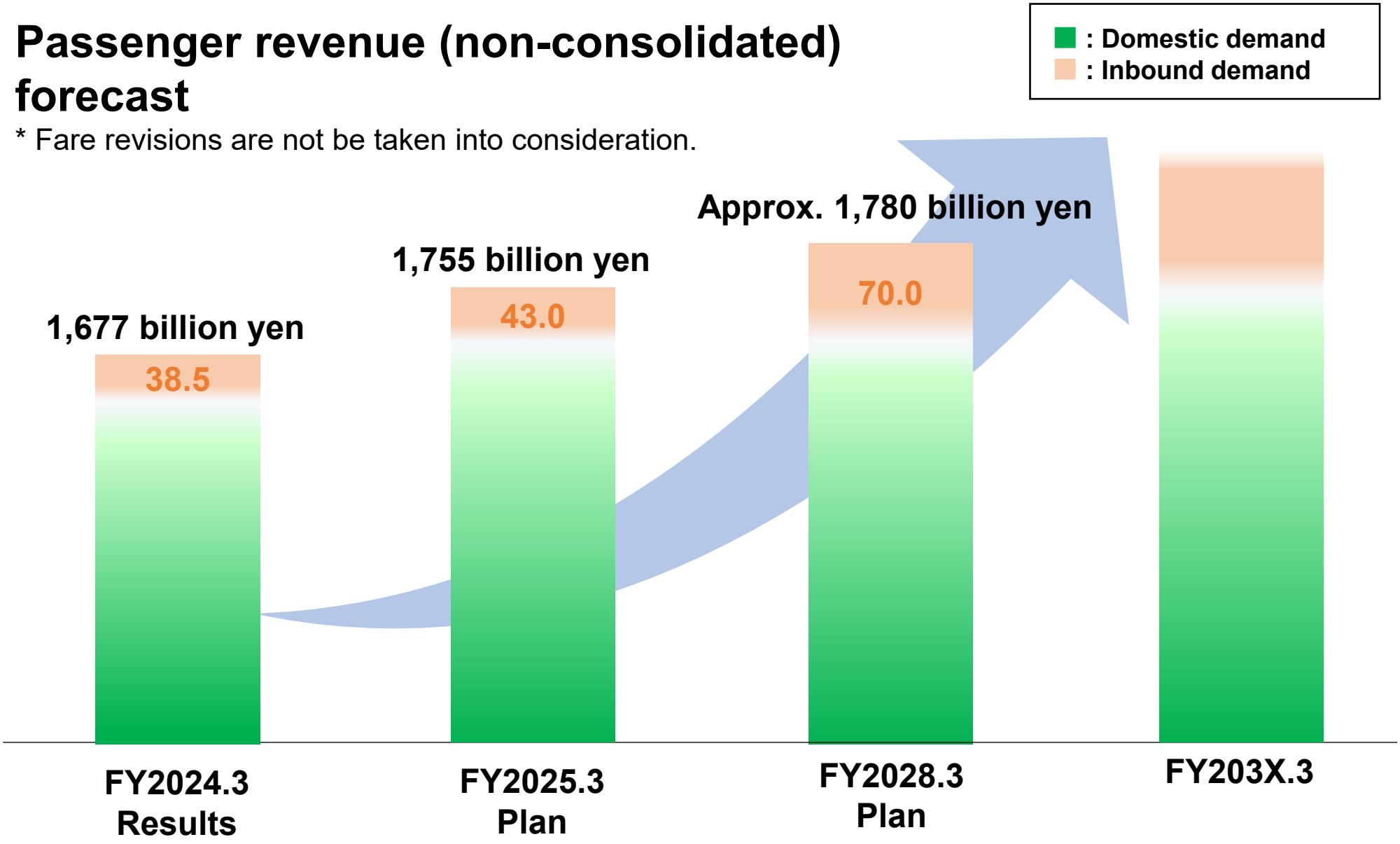
Frequency of door opening and closing:
Approx. 6 million times/day

Frequency of track closure:
Approx. 1,800 times/day

Frequency of railroad crossing opening and closing:
Approx. 700,000 times/day

Passenger revenue (non-consolidated) forecast

* Fare revisions are not be taken into consideration.

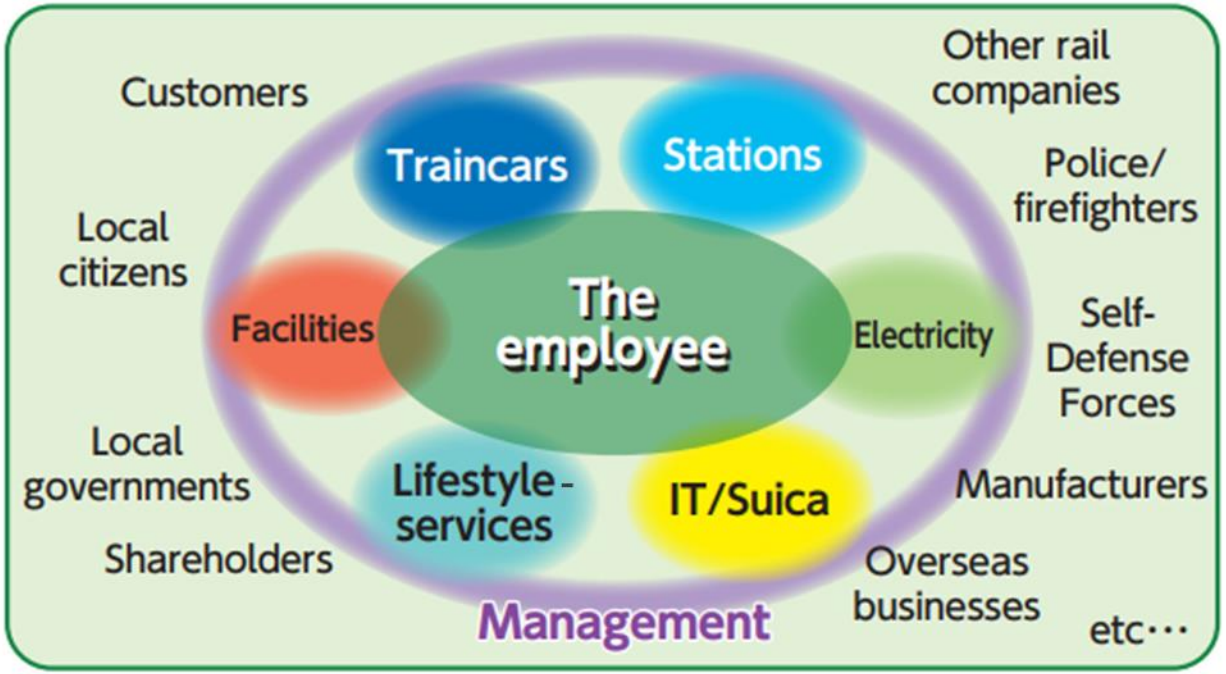


Capital expenditures to ensure safety and improve productivity

Overall picture of the “Group Safety Plan 2028”

Having formulated five-year safety plans since 1988, we are currently working to improve our safety levels by formulating the “Group Safety Plan 2028” (the 8th plan).

To build a safe foundation for our operations through the integration of our legacy of safety, safety mechanisms, and well-designed facilities, to achieve ever safer operations through a deeper understanding of nature of the previously unforeseen risks and causes.

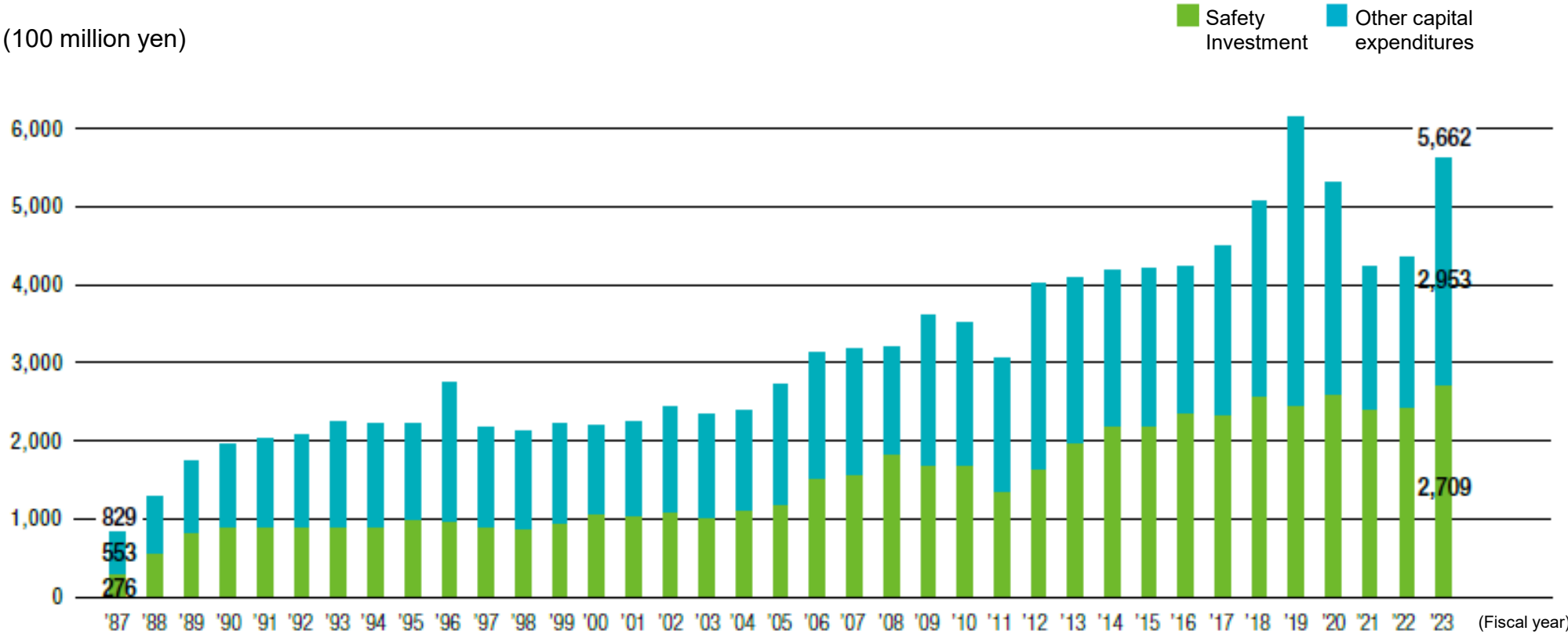


Capital expenditures to ensure safety and improve productivity

Trend in safety investments and other capital investments

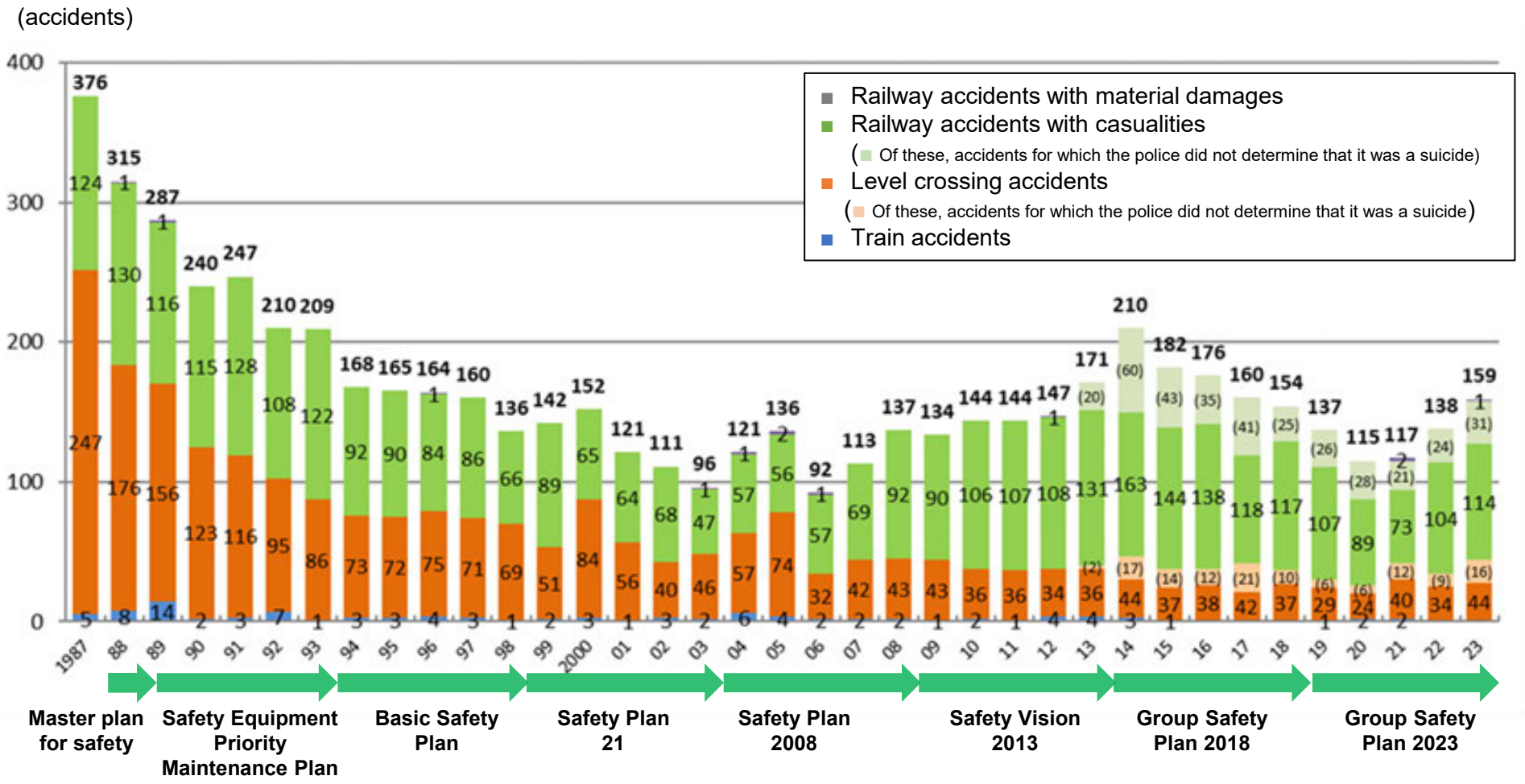
Since our founding, we have focused on safety investments, and have invested a total of approximately 5.5 trillion yen into safety.
Our Group Safety Plan 2028 estimates safety investments at approximately 1.3 trillion yen.

Trend in safety investment and other capital expenditures (JR East's Non-Consolidated Figures)



Capital expenditures to ensure safety and improve productivity

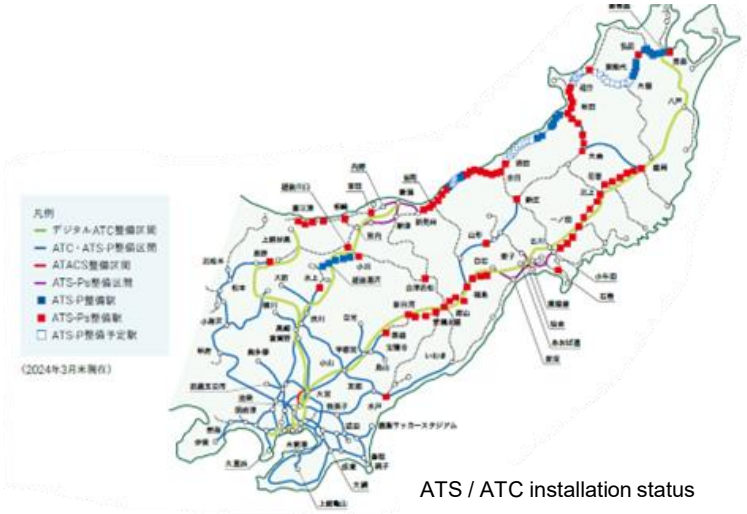
Occurerence of railway accident



Capital expenditures to ensure safety and improve productivity

Measures to prevent train collisions

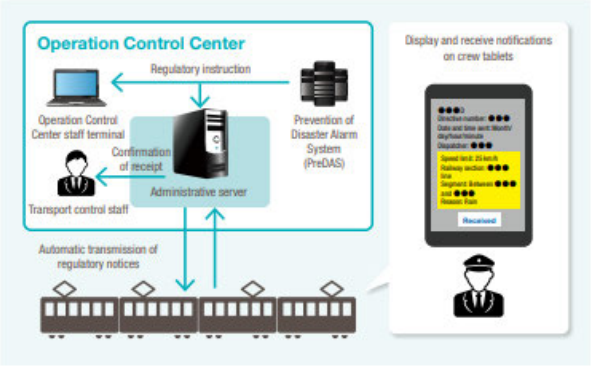
In order to prevent train collisions and other accidents, we have installed ATS (Automatic Train Stop) and ATC (Automatic Train Control) systems.



ATS / ATC installation status

Driving Restriction Notification System

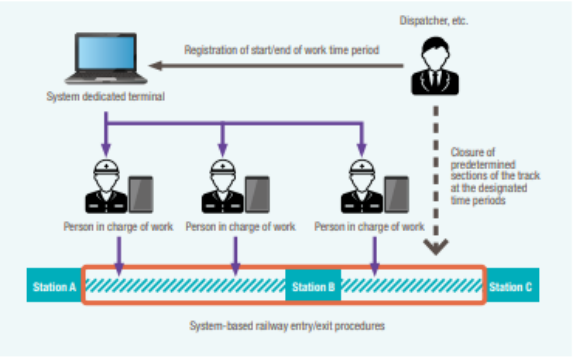
Previously, dispatchers would transmitted the restrictions to drivers by wireless when heavy rain or strong winds occur. However, we have introduced an automated notification system for such restrictions, helping to prevent human error.



Driving Restriction Notification System

Improving the safety of maintenance work

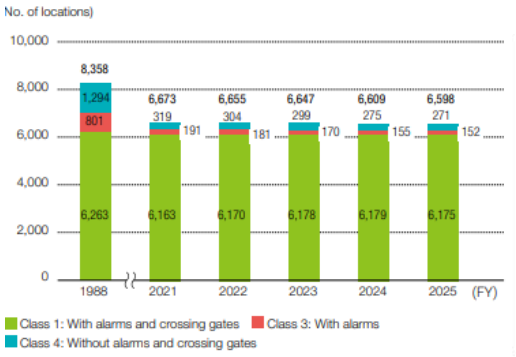
For the “track closure” procedure, which is followed when maintenance work is being carried out for equipment on a track, we have introduced a system in which a dispatcher or other person in charge closes the track beforehand, and the staff performing the work can then use the system to complete the procedures for entering and exiting the track.



Mechanism for track entry and exit procedures

Safety measures at level crossings

We are working on elevating, consolidating, and eliminating level crossings.
For Class 3 and Class 4 crossings that are difficult to abolish, we are working to convert them to Class 1 crossings.
We are also proceeding with the installation of obstacle detection devices and level crossing obstruction warning devices (emergency buttons).



Chenges to the number of level crossings (as of April 1)

Emergency button

Platform door installation

By the end of FY 2024.3, we completed installation of platform doors at 104 stations (117 stations by line segment) and 233 platforms, mainly on the Yamanote Line, Keihin-Tohoku Line, and Negishi Line.

Platform door

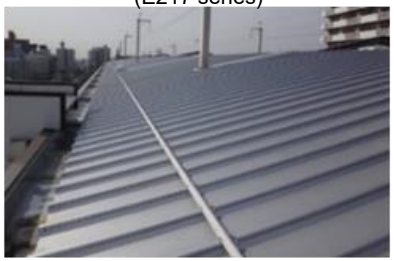
Capital expenditures to ensure safety and improve productivity

Strengthening equipment for conventional and Shinkansen lines and dealing with aging

We are currently updating various equipment and rolling stock, taking measures to prevent roofs from flying off or falling at stations and vehicle depots, and updating and strengthening equipment for Shinkansen lines.

Yokosuka / Sobu Line rapid train (E217 series)

Yokosuka / Sobu Line rapid train (E235 series)



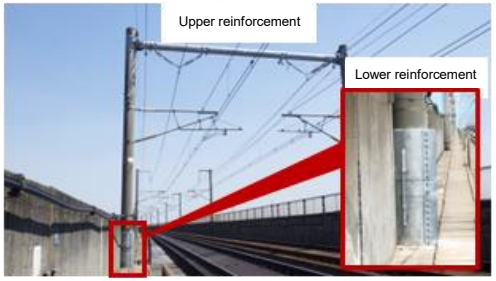
Measures to prevent roof flying off and falling (metal roof)

Replacing with elastic PC sleepers

Countermeasures for major earthquakes

Learning from past earthquake damage, we are systematically strengthening the earthquake resistance of structures in preparation for a major earthquake such as one directly beneath the Tokyo metropolitan area.

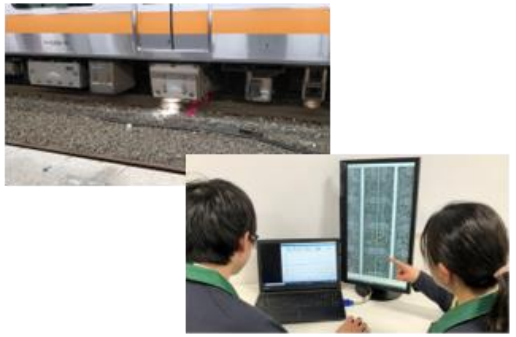
Earthquake-proofing for under railway viaduct columns



Earthquake-proofing for utility poles

Promoting CBM

We are expanding the scope of monitoring, such as of vehicles, tracks, and overhead lines, and working to carry out timely and appropriate maintenance.



Track equipment monitoring

Shinkansen track equipment monitoring vehicle

Productivity improvement

We are promoting the mechanization of construction work for equipment renewal work, etc., and are working to improve construction efficiency and reduce labor by securing nighttime work hours by moving up the last train time.

Manual work

Large machine operation

Measures against rainfall and strong winds

In response to natural disasters, which have become increasingly severe in recent years, we are working to ensure the safe operation of trains by capturing meteorological information using radar and other means, such as canceling train operations when regulatory limits are detected.
Additionally, we are promoting rainfall countermeasures, such as measures to prevent scouring of bridge piers and revetments, and sloping embankment measure (to prevent falling rocks and landslides).

Embankment slope protection work (sprayed frame work)

Fostering safety-oriented personnel

● Safety education and training

In order to improve employee safety awareness and skills, we have provided education and training at the JR East General Training Center, Comprehensive Training Center, Skill Training Center, and at each workplace through OJT (on-the-job training).

● Accidents History Exhibition Hall
(inside JR East General Training Center)

● Use of education and training facilities

Crew training simulator

"Accident Exhibition: An exhibition room for learning from accidents" (Tokyo PMO)

We provide education and training equipment to promote understanding of the "essence of work," and established educational facilities where employees can learn about the occurrence background of past serious accidents and incidents, as well as countermeasures, etc. at our headquarters and branches.

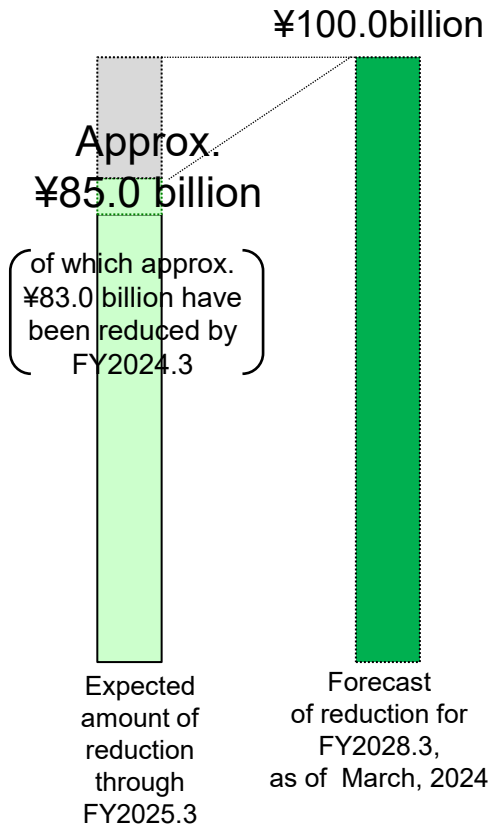
● Safety Storytellers (narrators of oral history)

Safety Storyteller Seminar

Management streamlining（Operation cost* reduction in railway business）

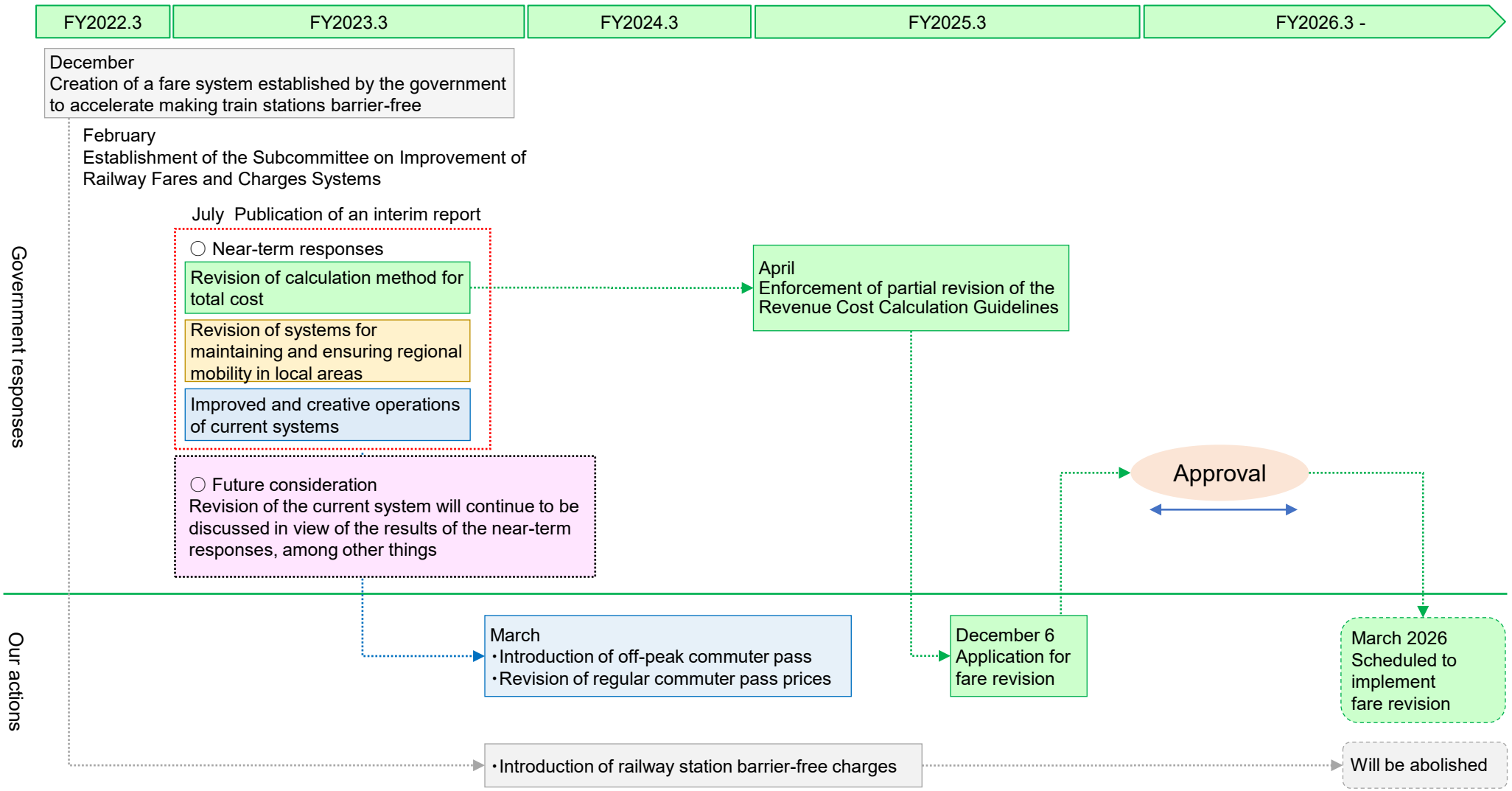
* Operating expenses less depreciation and taxes and dues

(¥ billion) Major structural reform activities in “Move Up” 2027	Result of reduction through FY2024.3	Expected amount of reduction through FY2025.3	Forecast as of 2024.3
・Streamline operation systems ・Establish an efficient sales system, etc. ・Increase driver-only operation, improve the configuration of JR ticket offices	-29.0	-31.0	-39.0
・Timetable revisions, etc.	-4.0	-4.0	-6.0
・Smart maintenance (CBM, etc.) ・System changes (use of new technologies, etc.) ・Revise fundamental components of operations (timetable revisions to move up the departure times of the last trains, etc.) ・Streamline facilities (reduce the number of ticket machines, etc.)	-17.0	-17.0	-21.0
・Establish efficient sales systems (ticketless, etc.) ・Structural reform of group companies (multi-tasking, etc.) ・Provide services in accordance with the usage (outsourcing of security services, guidance services, etc.)	-33.0	-33.0	-34.0
Total reduction of operating costs	-83.0	-85.0	-100.0



We have been working to reduce the operation cost of railway business in FY2028.3 by 100 billion yen as compared with FY2020.3, and it is expected that we will achieve the goal at this point already.

Progress and outline of fare revision



○Our policy

- After receiving approval from the government for the fare revision applied for in December, we will prepare for implementation in March 2026.
- We will continue to request the government to implement a simple and flexible system, such as notification of express charges for Shinkansen and introduction of a system that can respond to inflation in a timely manner, and to review the total cost method itself.

Progress and outline of fare revision

Outline of Fare Revision

Purpose

- ○ Since its foundation, JR East has fulfilled its mission as a railway operator by providing a wide range of transportation services through a broad railway network.
- ○ We have increased railway use by improving safety and service quality as well as expanding our railway network while also making management efforts, such as improving productivity and our financial position. As a result, we are still able to maintain the fare levels that were in place when the company was founded.
- ○ On the other hand, the business environment is expected to remain challenging due to such factors as a decrease in railway use due to the establishment of new lifestyles, increased expenses due to recent price hikes, a further decline in the population along railway lines, and the need to improve working conditions to secure and retain human resources.
- ○ To operate railways safely, in addition to safety investments and technological development, appropriate improvements and maintenance work for railway facilities, such as rolling stock, equipment, signals, and overhead lines, are necessary, and these require much effort and costs.
- ○ In these circumstances, it has become difficult to steadily secure the funds needed for making capital investments and repairs to respond to increasingly diverse customer needs, maintain and improve safety and services, update aging rolling stock and equipment, and address increasingly severe disasters and carbon neutrality.
- ○ Subject to our continued management efforts, in order to steadily implement the measures necessary to continue our business and operate a sustainable railway business, we have applied for approval to change the upper limit of railway passenger fares.

Outline of Fare Revision

- ◆ Scheduled implementation date: March 2026 (for the first time since the Company was founded in 1987)
- ◆ Scope of application: Single tickets and commuter passes (work commuter/school commuter)
- ◆ Revision and revenue increase rates: Revision rate: 7.1%, revenue increase rate: 5.0%
  (revenue increase amount: 88.1 billion yen/year)

* Starting fare (ticket)
  (Current) 150 yen
  → (As per application) 160 yen

Progress and outline of fare revision

Key points of the fare revision

Aiming at sustainable operations of railway business, JR East has submitted an application for fare revision for the first time since its foundation.

Scheduled for implementation in March 2026

Realizing a fare system that is easy to understand

- ✓ The fare categories of “specified train service area” and “inside the Yamanote loop” will be integrated into “trunk lines.”
- ✓ The single-ticket fare (excluding certain areas for the fare for small children) will be changed so that the IC fare will be lower than the paper ticket fare.

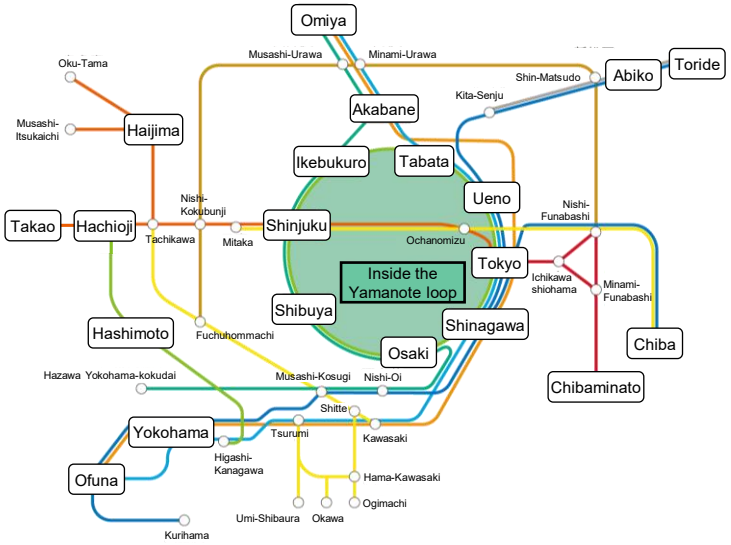
Fare revision (increase) for all areas

- ✓ The single-ticket fare and commuter pass fare for “trunk lines” and “local lines” will be revised.
- ✓ The discount rate for the six-month commuter pass fare will be lowered.

For the school commuter pass fare, consideration is given to the burden on the household budget.

- ✓ The school commuter pass fare will remain unchanged for “trunk lines” and “local lines” as consideration is given to the burden on the household budget.
- * For “specified train service area” and “inside the Yamanote loop,” the fare will be revised as these categories will be integrated into “trunk lines.”

Reference: Area map for the specified train service area and inside the Yamanote loop



■ Revision rate (price increase rate)

Singles tickets: 7.8%, Commuter pass: 12.0%, School commuter pass: 4.9%

<Breakdown> * Charges will not be revised.

Fare categories	Single tickets	Commuter pass	School commuter pass
Trunk lines	**4.4%**	**7.2%**	**Not revised**
Local lines	**5.2%**	**10.1%**	**Not revised**

* Revision rate for “specified train service area” and “inside the Yamanote loop” (integrated into “trunk lines”)

Fare categories		Single tickets	Commuter pass	School commuter pass
To trunk lines	**Specified train service area**	**10.4%**	**13.3%**	**8.0%**
	Inside the Yamanote loop	**16.4%**	**22.9%**	**16.8%**

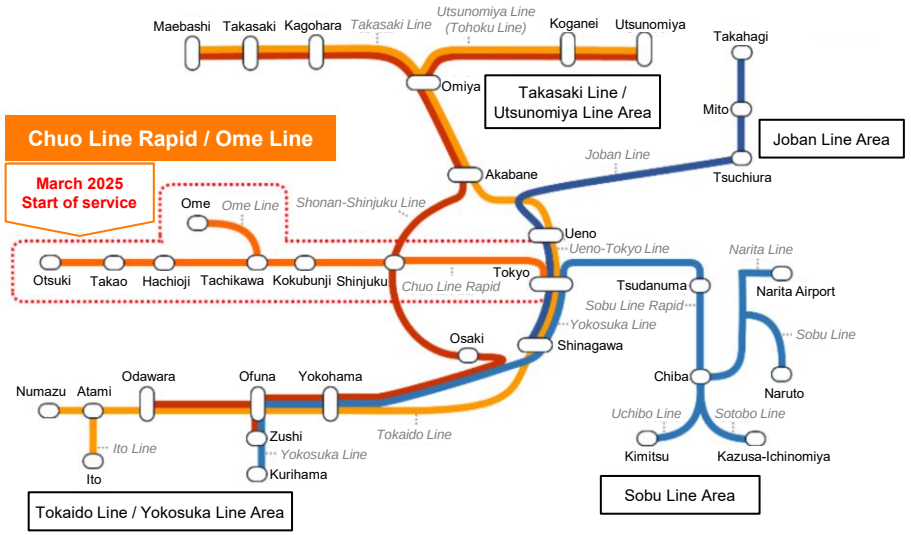
Major measures related to future mobility

Introduction of Green Cars to the Chuo Line Rapid

We have gradually introduced cars with connected green cars from October 2024, and began paid seating service in March 2025.
This expands the Green Car service to various destinations in the Tokyo metropolitan area, centering on Tokyo Station.

Introduction: March 2025
Expected revenue increase:
Approx. 8.0 billion yen per year
Investment: Approx. 86.0 billion yen

Sections of local train with green car service



Haneda Airport Access Line (tentative name)

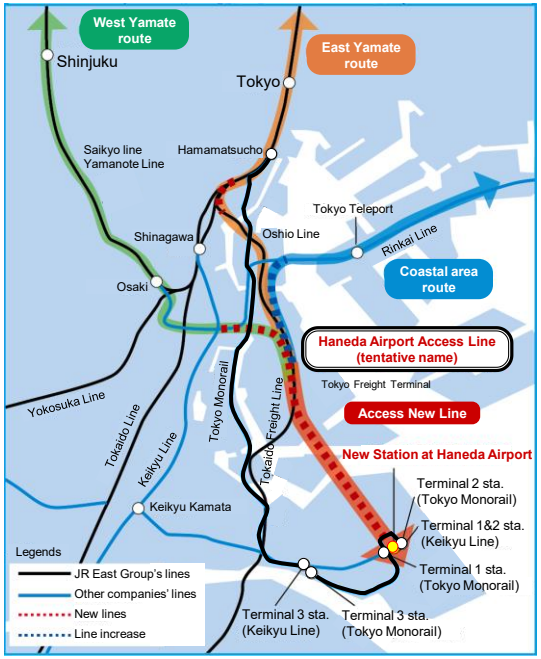
Construction of the “East Yamate route" and "Access New Line" has begun, with the aim of opening in FY 2032.3.

Schedule to open ：FY 2032.3
Approximate construction cost：Approx. 280.0 billion yen*

*The approximate construction cost includes the construction cost of the tunnel itself related to JR East (About 70.0 billion yen) among the national airport development projects.

Regarding the “Coastal area route”, we are discussing and coordinating with related parties with the aim of opening the “East Yamate route” at the same time.

Overview of Haneda Airport Access Line (tentative name)



Driver-only operation on conventional lines

From spring 2025, we will carry out driver-only operations in major line segments in the Tokyo metropolitan area.

<Specific implementation plan>

- Completed in March 15 2025: Joban Line (local trains) between Ayase Station and Toride Station, Nambu Line between Kawasaki Station and Tachikawa Station
- Spring 2026: Yokohama / Negishi Line, between Hachioji Station and Ofuna Station
  (Only the Yokohama Line E233 series 8-car trains will be used between Higashi-Kanagawa Station and Ofuna Station.)
- Until around 2030: Yamanote Line, Keihin Tohoku / Negishi Line, Chuo / Sobu Line (local trains), Saikyo / Kawagoe Line

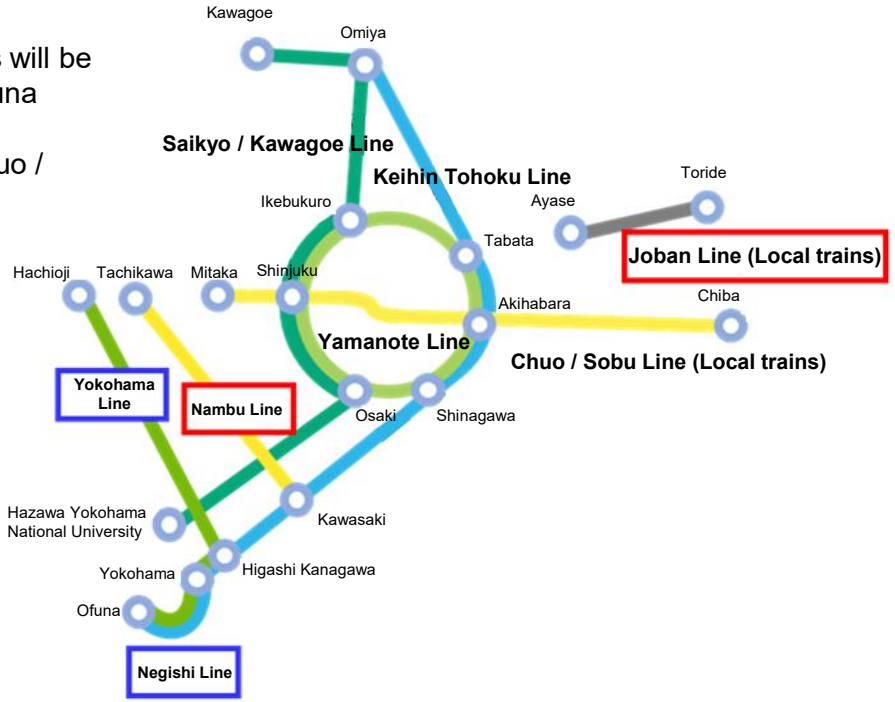
<Initiatives to improve safety with the implementation of driver-only train operation>

- To improve safety when trains depart, we will install a boarding / alighting confirmation monitor in the driver's seat, and for the first time for JR East, introduce a function that allows communication between passengers and the Transportation Control Center in the event of an emergency, and also allows the Transportation Control Center to directly make in-car announcements.
- We will promote the installation of platform doors on conventional lines in the Tokyo metropolitan area.

Examples of a boarding / alighting confirmation monitor (Nambu Line E233 series)

Example of platform door installation (Joban Line (local trains))

Line segments where driver-only operation is planned to be expanded by around 2030, in major line segments in the Tokyo metropolitan area



Major measures related to future mobility

Shinkansen autonomous / driverless operation

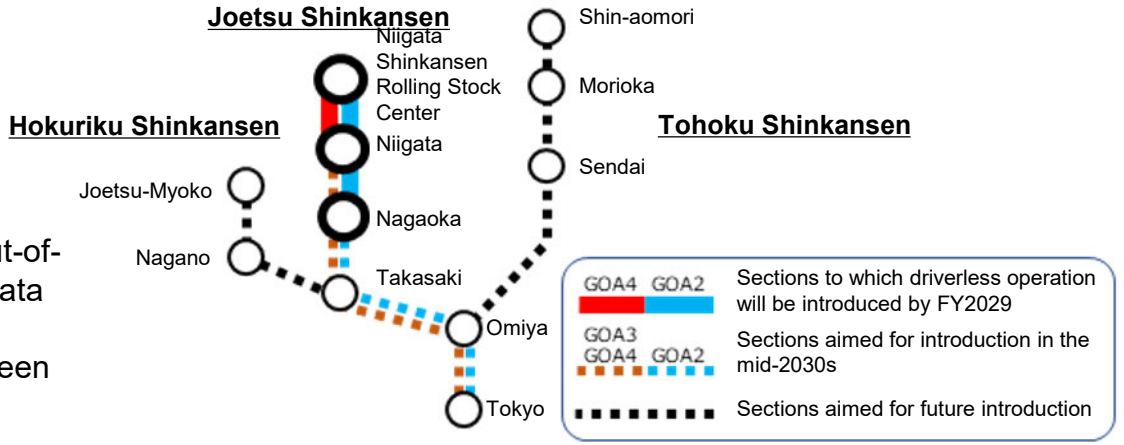
We are planning to introduce the world's first driverless operation for Shinkansen.

<Specific introduction plan>

- FY2029.3: Autonomous operation of operating trains and out-of-service trains between Nagaoka Station and Niigata Shinkansen Rolling Stock Center (GOA2)
- FY2030.3: Driverless operation of out-of-service trains between Nagaoka Station and Niigata Shinkansen Rolling Stock Center (GOA4)
- Mid-2030s:
  - Autonomous operation between Tokyo Station and Nagaoka Station (GOA2)
  - Driverless operation of operating trains between Tokyo Station and Niigata Station (GOA3)
    Driverless operation of out-of-service trains (GOA4)

<Effects of introduction>

- The introduction of autonomous operation is expected to improve safety and transport stability, as well as lead to energy-saving effects through more efficient train operation.
- The introduction of driverless train operation will enable more flexible train operations in response to demand and will enable crew members to engage in a variety of tasks.



[Reference] Grade of railway automation (classification by form of onboard working)

Grade of automation (Definition by IEC (JIS)*)	Image of form of onboard working (Main tasks of the crew are indicated in brackets [ ])	Domestic introduction status	Introduction plan for Joetsu Shinkansen
GOA0 On-sight train operation TOS		Streetcar	
GOA1 Non-automated train operation NTO	Driver (and conductor)	A typical line with railroad crossings, etc.	
GOA2 Semi-automated train operation STO	Driver (and conductor)	Some subway lines, etc.	[Operating trains / out-of-service trains] • FY2028: Nagaoka Station ~ Niigata Shinkansen Rolling Stock Center • Mid 2030s: Tokyo Station ~ Nagaoka Station
GOA2.5 (Automated train operation with attendant to perform emergency stop operations, etc.) * Not defined in IEC or JIS	An attendant in the driver's cab of the lead car [Emergency stop operation, evacuation guidance, etc.]	Some conventional lines	
GOA3 Driverless train operation DTO	On-board train attendant [for evacuation guidance, etc.]	Some monorails	[Operating trains] • Mid 2030s: Tokyo Station - Niigata Station
GOA4 Unattended train operation UTO	No attendant on board	Some new transportation systems	[Out-of-service trains] • FY2029: Niigata Station ~ Niigata Shinkansen Rolling Stock Center • Mid 2030s: Tokyo Station - Niigata Station

※IEC 62267 (JIS E 3802) : Definition based on the Automated Urban Guided Transport (AUGT) system
GOA : Grade Of Automation
TOS : On Sight Train Operation, NTO : Non-automated Train Operation,
STO : Semi-automated Train Operation, DTO : Driverless Train Operation, UTO : Unattended Train Operation

Major measures related to future mobility

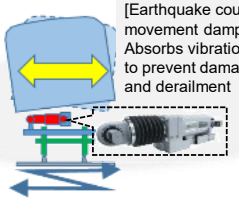
Development of the next-term Tohoku Shinkansen vehicle (E10 series)

- The next-term Tohoku Shinkansen vehicle (E10 series) is scheduled to be completed in autumn 2027 or later. After running tests, we aim to begin commercial operation in FY2031.3.
- For the next-term Tohoku Shinkansen vehicles, we will be designing the interior space and seating services with the aim to provide a more comfortable travel environment, including the introduction of services that expand on the “TRAIN DESK” concept.
- Maximum commercial operation speed: 320 km/h
- No. of vehicles: 10

Features of the next-term Tohoku Shinkansen vehicles (images for illustrative purposes only)

[Track inspection equipment]
Introduction of track inspection equipment that can monitor track conditions while the train is running

[Earthquake countermeasures lateral movement damper]
Absorbs vibrations during earthquakes to prevent damage to train vehicles and derailment

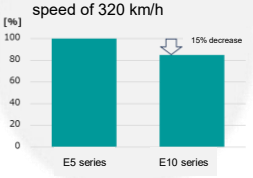


[Improved comfort during travel time]
Expanding on the “TRAIN DESK” concept in order to make travel time more meaningful

Green car (left) and regular car (right) updated for the 2030s

[High deceleration brake]
Realizes 15% decrease in braking distance compared to current conditions

Braking distance from initial speed of 320 km/h



Quest of highest Standards of Safety 1

Customer-oriented 2

Realizing a sustainable society 3

[Childcare support]
Installation of a nursing room

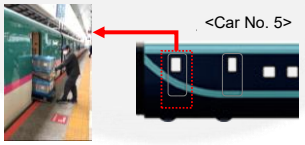
[Expansion of luggage storage area]
Support for customers with a lot of luggage

[New main circuit system]
Energy saving by adopting blowerless motor and SiC element

[Considerations for the introduction of autonomous operation]
Consideration and preparation for installing functions to realize autonomous operation

[Innovation in maintenance]
Introducing a system that can handle large volumes of data and support “smart maintenance”

[Support for luggage transportation]
Installation of doors for transporting luggage to enable loading and unloading at stations other than the starting and terminal stations



[Wheelchair accessible]
Expanding wheelchair space

Major measures related to future mobility (for Sustainable operations)

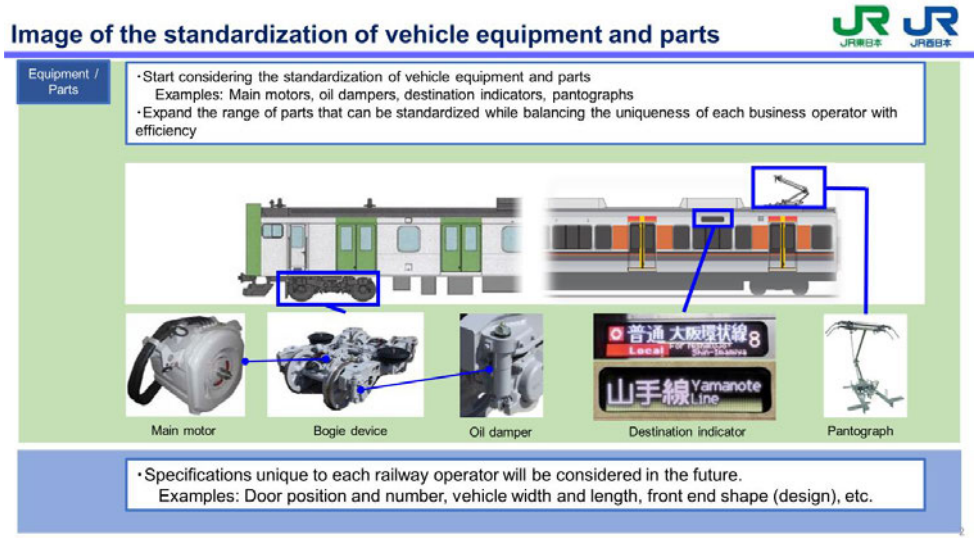
■ Collaboration with another company in the same industry (JR West)

① Start considering the standardization of vehicle equipment and parts

<Main collaboration details>

(1) Standardization of vehicle equipment and parts
We aim to strengthen the supply chain by standardizing vehicle equipment and parts, thereby contributing to improving the efficiency and productivity of the manufacturing processes of railcar manufacturers and suppliers.

(2) Exchanging ideas and opinions on sustainable railcar manufacturing
We will exchange ideas and opinions, aiming to streamline the design process and improve design technology for both companies. We will also actively exchange ideas and opinions with business operators, railcar manufacturers and suppliers who support this initiative.

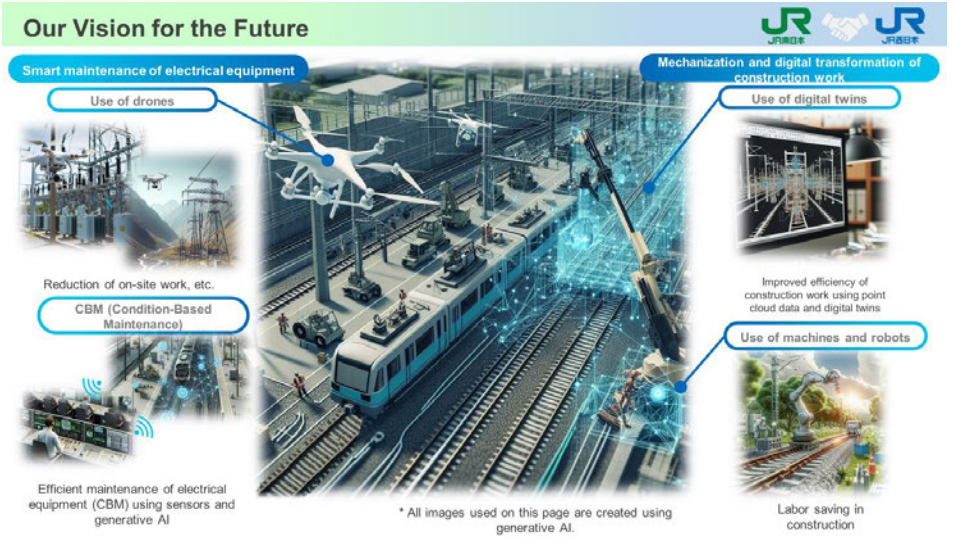


② Start collaboration on “realizing smart maintenance of electrical equipment” and “mechanization and digital transformation of construction work”

<Main collaboration details>

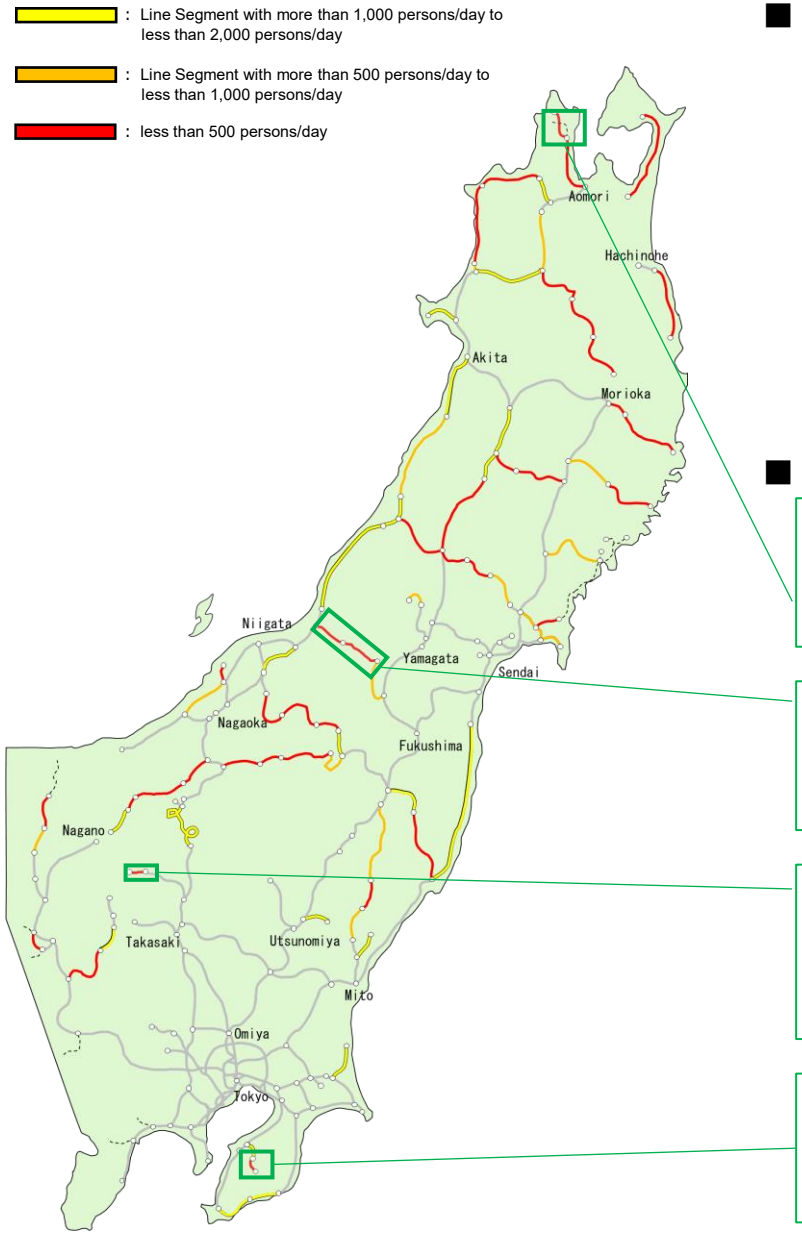
(1) Smart maintenance of electrical equipment
- Labor saving in facility management work using drones
- Improving the efficiency of maintenance work through CBM (condition based maintenance) using sensors and generative AI

(2) Mechanization and digital transformation of construction work
- Labor saving in construction using machines and robots
- Improved efficiency of construction work using point cloud data and digital twins



JR-EAST EAST JAPAN RAILWAY COMPANY

Status of discussion on regarding local lines



■ Operating results by line segment

・Subject of disclosure：
Line segment with average passenger figures of less than 2,000 persons/day

・Operating results：

FY	2020.3	2024.3
Number of sections subject to disclosure	35 lines, 66 sections	36 lines, 72 sections
Passenger revenues	5.8 billion	6.3 billion
Operating Expenses	75.2 billion	82.1 billion
Operating Loss	-69.3 billion	-75.7 billion

The balance figures may not agree with the calculation results of passenger revenues and operating expenses due to rounding.

■ Status of discussion with local governments

Line segment: Tsugaru Line, Kanita-Minmaya section (operation currently suspended)
Status: “Imabetsu / Sotogahama Regional Transportation Review Meeting” (Jan. 2023 - , held eight times), “JR Tsugaru Line City and Town Mayors’ Conference” (Feb. 2024 - , held three times)
Having reached an agreement to switch to automobile-based transportation, discussions are currently underway with the relevant local governments regarding the basic content of the agreement.

Line segment: Yonesaka Line, Imaizumi-Sakamachi section (operation currently suspended)
Status: “JR Yonesaka Line Restoration Review Meeting” launched (Sep. 2023 - , held four times)
Presenting the issues surrounding the four operation patterns (JR railway operation, vertical separation, bus conversion, and transfer to the third sector) and the estimated scale of the burden on the local community if the vertical separation method is adopted

Line segment: Agatsuma Line, Naganohara Kusatsuguchi-Omae section
Status: “JR Agatsuma Line Regional Transportation Review Meeting” (May 2024 - , held three times)
Conducted a questionnaire survey for high school students and their families, who account for 80% of users, to gain a detailed understanding of their actual commuting travel situations, etc. Establishing a working group to consider specific measures, we will consider measures to improve the convenience of regional transportation based on the survey results.

Line segment: Kururi Line, Kururi-Kazusakameyama section
Status: “JR Kururi Line Regional Transportation Review Meeting” launched (May 2023 - , held five times)
Chiba Prefecture, which serves as the secretariat, compiled the report with a view to shifting to automobile-based transportation. In the future, we will consider a specific transportation system at the Kimitsu City Regional Public Transportation Conference.

Improper handling of railway vehicle wheel sets during assembly

[Outline] It was discovered that there had been inappropriate handling, including rewriting data to fit within prescribed limits, even though the press-in force was out of the specified range in the assembly of a wheel set for a railway vehicle.

East Japan Railway Company

- Inappropriate handling from 2008 to 2017
- After the incident in 2017 was discovered, we promptly reviewed our work processes to prevent the rewriting of work records.
- After confirming the technical knowledge and finding that it does not violate ministerial ordinances, we did not make a press release or report to the national government or bureau based on our comprehensive judgment.
- Once again, we received administrative guidance on inspecting its safety management system to prevent recurrence and establishing a mechanism for prompt reporting.

Japan Transport Engineering Company, Ltd.

- Inappropriate handling until September 2024
- Received administrative guidance on establishing regulations, providing appropriate training, and preventing falsification of work records.

Improper handling of railway vehicle wheel sets during assembly

[Efforts to prevent recurrence]

To prevent recurrence after the incident, and in accordance with instructions from the Ministry of Land, Infrastructure, Transport and Tourism, we have taken the following measures:

Common to the JR East Group

- Implementing initiatives to raise compliance awareness among all JR East Group employees (Provided education and implemented awareness survey for all employees.)

East Japan Railway Company

- Conducting a factual investigation of vehicle maintenance
- Confirming that the reporting of legal requirements-related matters to the Ministry of Land, Infrastructure, Transport and Tourism and the Kanto Regional Transport Bureau is clearly stated in the internal notification.

Japan Transport Engineering Company, Ltd.

- Review of work processes, such as the development of rules and procedure manuals for press-fitting work in wheel and axle assembly work
- Repair of press machines

(Updated March 31, 2025) For a summary of the measures, please see the following release:
Measures Regarding an Incident in the Railway Vehicle Wheelset Assembly Operations