

### Building safe and reliable railways that offer peace of mind

# **Steady implementation of the JR-West Group**

The JR-West Group Railway Safety Think-and-Act Plan 2022, which was inaugurated in fiscal 2019, was formulated as a plan to pursue safety by going back to first principles, and it was motivated by a desire to ensure that we will never again allow an accident such as that on the Fukuchiyama Line to occur.

On the basis of fostering the spread of safety-first awareness, we will work over a five-year period to enhance railway systems that maintain safety by enhancing organizational safety management and practicing safety think-and-act initiatives by each individual. By realizing safety management with all employees participating, we will strive to prevent serious incidents and labor accidents.



Head of operations; Vice President, Representative Director, and Executive Officer; Senior General Manager of Railway Operations Keijiro Nakamura



Head of operations; Director and Senior Executive Officer; Deputy Senior General Manager of Railway Operations of Transport Safety Department

Hiroaki Maeda

### Objectives of the JR-West Group Railway Safety Think-and-Act Plan 2022, and progress under the plan

	Objectives			FY2019	FY2020	FY2021	FY2022
Objectives over the 5 years through FY2023	Train accidents that result in casualties among customers	Zero	0	0	0	0	0
	Train labor accidents that result in fatalities among employees	Zero	0	1	0	0	0
FY2023 objectives	Train accidents involving people that result in casualties among customers*2	Further 10% reduction	9	11	8	5	4
Further 10% decrease from objective in Safety Think-and-Act Plan 2017*1	Accidents at level crossings	Further 10% reduction	22	24	17	11	17
	Transportation disruptions due to internal factors	Further 10% reduction	126	170	167	145	142

- \*1 Further 10% decrease from the objectives achieved in Safety Think-and-Act Plan 2017
- 2 An expansion of scope from the objective "Train accidents with casualties on platforms" in Safety Think-and-Act Plan 2017

### JR-West Group Railway Safety Think-and-Act Plan 2022

Safety management with all employees participating

### Each employee considers specific risks

To ensure the safety of not only customers but also fellow group employees, each JR-West Group employee must take a moment to think with regard to potential risks. Only then can we ensure that our decisions and actions prioritize safety above all else.

### Enhancement of railways systems that maintain safety

Object-based

- ■Maintenance-related investments to ensure upkeep and improvement of ■Investments and technological
- developments for increased safety levels ■Investments for reduced labor through mechanization and system-based change
- Policy-based
- ■Compliance with subjective rules and improvement of technical capabili
- ■Establishment of measures to effectively reduce worker-caused errors
- ■Improvement of response flexibility with a focus on safety first

### Enhancement of organizational safety management

- ■Improvement of quality of risk assessment ■Enhancement of safety management
- ■Development of means to establish and maintain realistic rules



### Implementation of safety think-and-act by each individua

- Creation of an environment that facilitates reporting of problems/concerns
- ■Establishment of self-management and self-improvement practices
- Implementation of measures that can be enacted as a group
- ■Understanding and putting into practice efforts developed in the wake of the derailment accident on the Fukuchivama Line as well as safety-related policies
- ■Improvement in sensitivity to safety and development of judgmental skills and actions that prioritize safety

Fostering the spread of safety-first awareness

## Instilling an awareness of safety as the top priority

Railway Safety Think-and-Act Plan 2022

Every person in the JR-West Group will keep the derailment accident on the Fukuchiyama Line foremost in their minds and, with an understanding of safety-related policies, will increase their awareness of safety by considering risks in a concrete

manner. By taking real action without hesitation, such as halting trains and stopping work when we feel that a situation may be dangerous or when safety cannot be confirmed, we will create a culture that prioritizes safety.

Ways we boost safety

Learning from incidents occurring at other sites (Goto Depot, Chugoku Regional Head Office)

We hold monthly discussions based on incidents that have occurred at other sites so that we can think about how we should react if a similar incident were to occur at

Videos are used to make it easier to envision situations, allowing facilitators to empower participants to think for themselves by, for example, pausing the video at key moments and asking them to think about specific risks and how they could properly be addressed.

Through this program, we are working to spread awareness that safety is the top priority, such as by ensuring that any employee would stop operations without hesitation if faced with a decision that prompted confusion.

### Videos are used to envision each situation



### A discussion about how to respond



### Putting our safety-first think-and-act approach into practice

Through education and related programs undertaken to date, employees have developed a better understanding of the importance of our safety-first think-and-act approach. However, some employees have not actually faced a problem situation themselves. We thus decided to have employees envision specific situations and think about how to address them. The program's format, which uses methods like video to make it easier to imagine actual situations, invites participants to share their thoughts.

I feel that the program, which has employees to think for themselves about how to deal with

various situations, is helping them learn from each other.

We'll further hone workers' ability to deal with emergencies by, for example, adding new learning materials.

Assistant manager, Goto Depot, Chugoku Regional Head Office Daiki Tanaka



### Raising awareness of the overriding importance of safety as we learn from each other

We learn by actively sharing our thoughts so that we hear good ideas that we might not have come up with ourselves. And since it's based on actual incidents, it's easy to see how you might face a similar situation. I feel that my own awareness has changed—for example, when I ride the train these days, I find myself looking for the emergency button in the carriage.

We'll continue to put our safety-first think-and-act approach into practice by actively participating in this program.

Rolling stock management staff, Goto Depot. Chugoku Regional Head Office Tooru Kubo



21 West Japan Railway Group Integrated Report 2022 West Japan Railway Group Integrated Report 2022 22

### Building safe and reliable railways that offer peace of mind

## **Steady implementation of the JR-West Group Railway Safety Think**

### **Enhancement of organizational safety management**

To improve the functions of railway systems for maintaining safety, we are constructing organization-wide mechanisms to ensure safety, such as safety management systems and risk assessment\*1, implemented at the managerial, technical and operational levels, based on an awareness of safety as the top priority. We also work to ensure that these mechanisms

function effectively, without deterioration over time, and are continuously enhanced.

Specifically, we will improve the quality of risk assessments, which help to prevent serious incidents and labor accidents, and construct systems for safety management reviews\*2, and then utilize a PDCA cycle to improve these continuously.

### Ways we boost safety

At the Osaka Construction Office, we've been providing feedback to each construction site in the form of good practices and areas needing improvement when we carry out training exercises. Recently we've been working to visualize emergency response skills as a way to further improve those skills.

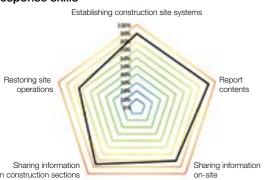
Specifically, we're identifying strengths and weaknesses and using them to more actively implement initiatives and give employees a sense of accomplishment by awarding points in various areas, for example "establishing construction site systems," as feedback.

We'll continue working to improve our emergency response skills while refining our visualization effort as well.

### Emergency response training



Worksheet for visualizing emergency response skills



- \*1 Risk assessment: The process of identifying, evaluating, and prioritizing risks and then discussing appropriate measures for all prioritized risks
- \*2 Safety management review: A system under which management reviews and evaluates the construction and improvement of safety management systems

Visualizing emergency response skills

### Visualization helps improve employees' emergency response skills

When reflecting on the training we've conducted in the past, I've felt that it's been difficult to identify areas where we did better than in the previous training session. By identifying the elements necessary in order to respond in the event of an emergency and then assigning points for each, we've made it possible to discover improvements as well as areas needing improvement at a glance. By indicating the necessary arrangements in a specific manner, we've taken steps to increase the precision of scoring.

Feedback from participants indicates that this effort has helped them identify their own weaknesses, so I feel it's having an effect.

In addition, by sharing results with other construction sections, we're encouraging sites to learn from each other. Going forward, we'll work to realize further improvements in emergency response skills by, for example, increasing the precision of scoring further.

Transport Safety Division, Osaka Construction Office

Masaki Nishikawa

### Enriching our training program based on the strengths and weaknesses we've visualized

Scoring emergency response skills and using them to provide feedback has made it easy to identify which areas should be given priority in future improvement efforts. In addition, I feel that it's proven convincing to employees and allowed them to ascertain their own issues.

For example, when it became apparent that the speed with which information is shared at the construction section was a weakness, that led to specific improvements, such as the use of a chat tool.

We'll continue to enrich the content of our training programs to further boost our emergency response skills.

Assistant director, Hiroshima Station Building Construction Section, Osaka Construction Office Junichi Tahara

## Safety think-and-act by each individual

Each of us endeavors to report and share information on safety—which leads to organizational safety measures—using this information to evaluate and implement self-management.

While encouraging and commending the efforts made by every person to improve safety, we publish examples where

people have been particularly creative or ingenious at each work site, disseminating them across the organization through work presentations and in-house publications and adopting their ideas as safety measures.

Ways we boost safety

-and-Act Plan 2022

Creating an environment conductive to reporting with 2D barcodes (Morinomiya Train Drivers Unit, Kansai Regional Head Office; others)

Whereas train crew members use special forms to report information that they feel is concerning, the Morinomiya Train Drivers Unit has enabled crew members to file reports by email after scanning 2D barcodes with a tablet. Since crew members can file reports from the field when they become aware of potential concerns, the measure is helping identify more risks.

There's also a move on the part of other sites to adopt this system. For example, the Kusatsu Train Drivers and Conductors Unit actively commends crew members who report valuable information. Those reports are shared with other crew members to facilitate additional reports and identify risks.

### 2D barcode for reporting

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### Studying risks based on reports



Commending crew members who have provided valuable reports



### Taking steps so drivers can report information of concern more easily

We began using 2D barcodes so that drivers could file reports immediately from the field when they feel concerned. The ability to attach photos to the reports is helping us more precisely assess conditions in the field.

This system has increased the amount of information we receive from drivers, and it's helping us identify and address specific risks.

We plan to share information more effectively by using 2D barcodes and other technology for other reports and for communicating information to drivers.

Assistant manager, Morinomiya Train Drivers Unit, Kansai Regional Head Office

Junichi Kuroki



### Adopting the Morinomiya Train Drivers Unit's system

When I read about the Morinomiya Train Drivers Unit's system on an internal information-sharing site, I felt that we should adopt it, too. A discussion with my boss led to a decision to try it ourselves, so I contacted Mr. Kuroki. the Morinomiya unit's assistant manager, for details.

The number of reports has risen at the Kusatsu Train Drivers and Conductors Unit, and I feel the measure is having an effect. We too plan to pursue additional initiatives using

tablets in the future.

Driver, Kusatsu Train Drivers and Conductors Unit, Kansai Regional Head Office Kazuyuki Tsuneto



West Japan Railway Group Integrated Report 2022