

# 臺灣鐵路年報

TAIWAN  RAILWAYS

ANNUAL REPORT

2024

Wholehearted Commitment,  
Innovative Service



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# Messages from the Chairman and General Manager



# Chairman's Preface



The year 2024 marks a milestone for Taiwan Railways. We officially completed the transformation from the “Taiwan Railways Administration, MOTC” to the “State-Owned Taiwan Railway Corporation, Ltd.” This transition signifies not only a shift in organizational structure but also a fundamental reform of our business model. By adopting corporate governance practices, we aim to enhance organizational agility and operational efficiency, paving the way for stronger performance, greater competitiveness, and a path toward sound development and sustainable management.

This year brought a unique mix of challenges and opportunities. The global movement toward achieving net-zero carbon emissions by 2050 is accelerating industrial transformation. In Taiwan, the transportation sector ranks as the third-largest source of carbon emissions, with over 90% originating from road transport. In contrast, railways—due to their lowest energy use intensity—play a critical role in advancing low-carbon transportation. With its island-wide railway network and the valuable land resources surrounding its stations, Taiwan Railways is actively optimizing its transportation services and driving strategic development in station areas. These efforts not only inject new vitality into local cities but also promote multi-core spatial development across the nation—fostering balanced urban-rural growth and turning the vision of shared prosperity into reality.


Against this backdrop, we are actively supporting the government's initiatives to expand the high-speed rail and metropolitan MRT systems. An integrated, around-the-island railway network—anchored by Taiwan Railways and Taiwan High Speed Rail—is steadily taking shape. Drawing inspiration from the rail-centric models of Japan and Germany, we are committed to building a seamless, green, and low-carbon transportation network. As the nationwide railway network is further integrated with regional rail systems, we look forward to providing the public with more convenient and safer transportation services—driving sustainable national development, and enhancing the quality of life for all.

The reform and progress of Taiwan Railways would not be possible without the support of both the government and society. Backed by the government's "three commitments" (addressing debt burden, subsidizing expenditures, and investing in infrastructure) and "two guarantees" (protecting employment rights and ensuring freedom of employment status choice), comprehensive support has been provided throughout the corporatization process. This strong foundation has enabled us to overcome various challenges, embed a culture of safety among our workforce, and fully leverage both internal and external strengths—unlocking greater potential for future development.

Looking ahead, we will continue to prioritize the safety and well-being of our passengers, upholding the core value of "safety first, zero tolerance". At the same time, we will enhance service performance and promote sustainable operations. We also plan to further diversify our affiliated businesses, leveraging asset development to stimulate local growth—paving the way for shared prosperity between the railway and the communities it serves.

We extend our heartfelt thanks to every member of the Taiwan Railways team and all sectors of society for their unwavering support. Together, let us embark on a golden decade for Taiwan Railways—restoring public confidence and ushering in a new era of century-long pride and achievement.

**With sincere regards**

A handwritten signature in black ink that reads "Vic Tu". The signature is written in a cursive, slightly stylized font.

**Chairman**

# Message from the General Manager



On January 1, 2024, the State-owned Taiwan Railway Corporation, Ltd. was officially established—marking a bold new milestone for Taiwan Railways. The corporatization initiative has enabled us to adopt a more agile and business-oriented approach, enhancing operational efficiency and strengthening our competitiveness. At the same time, we remain firmly committed to our core objectives: ensuring safety, maintaining stability, and advancing transformation. Over the past year, we have continued to push forward on the path of reform and have achieved meaningful progress.

The global wave of net-zero carbon emissions presents both challenges and opportunities for Taiwan Railways. Given Taiwan's limited land area, high population density, and concentrated urban development, the nation is inevitably moving toward a rail-oriented society. Recognizing the advantages of railway transport in advancing low-carbon, green mobility, we are actively optimizing our transportation services and promoting comprehensive Transit-Oriented Development (TOD) around station areas. By maximizing the efficiency of our island-wide railway network and the land resources surrounding our stations, we not only support urban development but also contribute to balanced urban-rural prosperity.

In terms of station and fleet upgrades, we have fully deployed the EMU900 series of local trains, the EMU3000 series of intercity trains, the R200 series of diesel-electric locomotives, and the E500 series of electric locomotives—significantly enhancing overall transportation capacity and efficiency. At the same time, we have upgraded key communication and safety technologies, including the renewal of the island-wide optical network based on SDH (Synchronous Digital Hierarchy) and the optimization of level-crossing safety protection systems. These advancements contribute to a safer and more convenient travel environment for all passengers.

In terms of passenger services, we have completed the full rollout of new-generation automatic ticket vending machines. In line with government policy, we also introduced the TPASS commuter monthly pass and a frequent-traveler discount program to encourage greater use of public transportation. For passengers with special service needs, we continue to enhance barrier-free facilities and cultivate a more accessible, traveler-friendly environment—ensuring that every journey is both convenient and comfortable.

In our affiliated businesses, we introduced high-end Business Class seating and signature bento meals, launched the first TR LOUNGE in northern Taiwan at Nangang Station premium waiting services, and developed aesthetic tourism trains such as Sea Breeze and Mountain Mist—offering passengers a refined and distinguished travel experience. Additionally, in collaboration with Japan, we released a crossover bento co-branded with TA, not only enhancing the Taiwan Railways brand but also bringing a fresh, international dimension to our affiliated business ventures.

Looking ahead, we will continue to leverage both internal and external strengths, with safety as our core value, to realize our vision of sound corporate governance and modernized operations. Together with all our employees, I am committed to facing challenges with professionalism and passion—restoring public trust and ushering in a golden decade for Taiwan Railways. Our goal is to provide the public with safer, more reliable, and higher-quality transportation services while building a future of shared well-being and pride.

**With sincere regards**

A handwritten signature in black ink, reading "Feng Hui Sheng". The signature is written in a cursive, flowing style.

**General Manager**

# Chapter.1

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## Corporate Vision and Objectives





Since the establishment of Taiwan Railway Corporation, Ltd. on January 1, 2024, a full year has passed. At this meaningful milestone, we take the opportunity to reflect on our progress, continue advancing reforms, and remain open to diverse perspectives from both within and outside the organization. Through sound corporate governance and modern business management, we are committed to strengthening safety practices, improving service performance and punctuality, and delivering high-quality public transportation services—while also generating operational profit and building a sustainable, happiness-oriented enterprise. Looking ahead, we aspire to revitalize the century-old legacy of Taiwan Railway, leveraging this moment of corporatization to renew and elevate the brand.

To ensure operational safety, we have implemented a “dedicated safety organizational structure along with external supervision”, and are actively advancing a Five-Year Safety Enhancement Program to establish a comprehensive safety management system. This initiative centers on three core objectives: reducing the human error rate, increasing equipment availability, and improving the overall organizational safety system. These guiding goals provide the foundation for the effective implementation of all safety-related efforts.

Beyond ensuring safety, service enhancement remains a key objective for all our employees. Guided by concrete operational performance indicators, we are actively working to minimize the impact of travel disruptions on passengers. Despite various force majeure factors, Taiwan Railway has demonstrated a proactive attitude and strong commitment. After excluding uncontrollable variables, the punctuality rate has reached 97.45%, and we continue to review and refine our processes to achieve a 97.5% punctuality rate in 2025.



Transportation is the core business of Taiwan Railway. In 2024, new train models were gradually introduced into service, while a wide range of enhancements were made across both software and hardware at stations. Efforts were also made to strengthen train services, optimize timetables to improve transportation efficiency, develop signature bento offerings, promote rail travel and tourism, upgrade basic infrastructure and facilities, and drive asset development and product revitalization. At the same time, we are actively advancing the Smart Rail Ecosystem—undertaking comprehensive efforts across all areas that directly impact passengers, with a focus on elevating both quality and experience.

In terms of station services, we have not only introduced frequent-traveler discounts but also improved the quality of public restrooms—even providing toilet paper, a seemingly small detail that reflects our genuine attentiveness to passenger needs. Moving forward, we will continue to enhance our facilities, strengthen staff training, and improve service efficiency, all in the pursuit of building a high-quality and trusted brand image for Taiwan Railway.

Following corporatization, Taiwan Railway adopted a model of corporate governance focused on sustainable operation. A robust board governance system was swiftly established, along with the formation of functional committees to strengthen oversight and enhance decision-making effectiveness. We also implemented a performance evaluation mechanism based on management by objectives. With clearly defined KPIs and designated responsibility centers, each department and level of the organization can effectively align with operational goals. Through the PDCA (Plan-Do-Check-Act) cycle, continuous review and improvement are actively carried out across all areas.



In terms of manpower employment, we have adopted a flexible approach to recruitment exams, allowing us to promptly address staffing shortages. At the same time, we are actively advancing training standardization, the digitalization of instructional materials, the regionalization of teaching, and the professionalization of instructors to ensure the competence and suitability of new hires. We will continue to optimize our recruitment processes to attract more outstanding talent, working together to contribute to the ongoing development of rail transport.

As the operator of an island-wide railway network, Taiwan Railway has a responsibility to actively promote green transportation and uphold its commitment to environmental protection and saving the planet. Moving forward, we will respond to the national policy on transportation electrification by improving energy-saving and conservation efficiency. At the same time, we will carry out carbon footprint verification (CFV) and obtain carbon footprint labeling—two key steps toward achieving the long-term goal of Green Net Zero.

In pursuit of becoming a happiness enterprise, the priority is to improve employee satisfaction. We are addressing this through concrete actions such as encouraging employee innovation proposals, improving compensation, enhancing benefits to attract top talent, and prioritizing occupational safety and health. These efforts are designed to meet the needs of our employees and elevate overall satisfaction.

Taiwan Railway's vision for sustainable operation goes beyond becoming a leading brand in Taiwan's public transportation sector—it aims to build a safe, reliable, and people-centered enterprise. Through continuous innovation and improvement, we strive to deliver a higher-quality travel experience for our passengers. At the same time, by diversifying affiliated enterprises and expanding revenue streams, we are working to create a better working environment for our employees—ultimately realizing our goal of becoming a financially sustainable and happiness-driven enterprise.

# Chapter.2

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## Organizational Structure





# Organizational Structure

In the early period of Taiwan's retrocession, the operation and management of Taiwan's railway system were entrusted by the central government to the Taiwan Provincial Government. In 1945, the Taiwan Railways Administration Committee was established, followed by the formation of the Taiwan Railways Administration, MOTC in 1948. Beginning July 1, 1999, it was placed under the jurisdiction of the Ministry of Transportation and Communications. On January 1, 2024, it transformed into the State-owned Taiwan Railway Corporation, Ltd. (hereinafter referred to as TR). TR has established a Board of Directors consisting of a Chairman, Directors, and Supervisors. Internal units under the Board include the Auditing Office and the Office of the Secretariat.

Under the General Manager, TR is supported by Deputy General Managers and a Chief Engineer who assist in handling company operations. The organization comprises 17 departments, including:

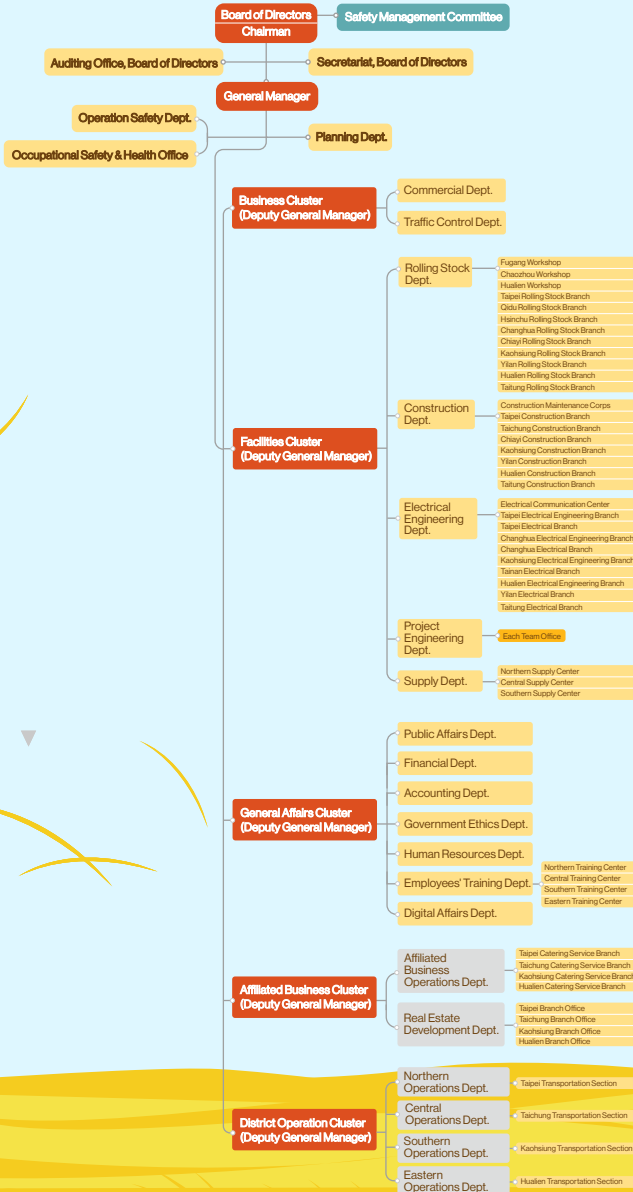
- Planning Dept.
- Operation Safety Dept.
- Occupational Safety and Health Office
- Commercial Dept.
- Traffic Control Dept.
- Rolling Stock Dept.
- Construction Dept.
- Electrical Engineering Dept.
- Project Engineering Dept.
- Supply Dept.
- Public Affairs Dept.
- Financial Dept.
- Accounting Dept.
- Government Ethics Dept.
- Human Resources Dept.
- Employees' Training Dept.
- Digital Affairs Dept.

In addition, TR has the following six branches and regional offices:

- Affiliated Business Operations Dept.
- Real Estate Development Dept.
- Northern Operations Dept.
- Central Operations Dept.
- Southern Operations Dept.
- Eastern Operations Dept.

TR also maintains a wide range of operational units such as workshops, branches, centers, crew corps, offices, and branch divisions. Within divisions like the Construction Branch, there are 49 dispatching units established across the organization to support field operations.

# Organizational Chart of Taiwan Railway Corporation, Ltd. (Phase 1)



- Board of Directors Committee
- Internal or Dispatching Unit
- Branch Offices
- Task Force

# Chapter.3

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## Taiwan Railway Through Data

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# 3-1 Overview of Taiwan Railway

## 1 Operating Kilometers

### Western Trunk Line

Keelung	← 125.4 →	Zhunan
Zhunan	← 90.2 →	Changhua (Coast Line)
Changhua	← 188.9 →	Kaohsiung

### Liujia Line

Zhuzhong	← 3.1 →	Liujia
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### Neiwan Line

North Hsinchu	← 6.5 →	Zhuzhong
Zhuzhong	← 20.0 →	Neiwan

### Pingtung Line

Kaohsiung	← 61.3 →	Fangliao
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### Pingxi Line

Sandiaoling	← 12.9 →	Jingtong
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### Taichung Line

Zhunan	← 85.5 →	Changhua(Mountain Line)
Chenggong	← 2.2 →	Zhuifen

### Jiji line

Ershui	← 29.7 →	Checheng
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### Hualien Port Line

Beipu	← 7.4 →	Hualien Port
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### South-Link Line

Fangliao	← 98.2 →	Taitung
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### North-Link Line

Su'aoxin	← 79.2 →	Hualien
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### Taitung Line

Hualien	← 150.9 →	Taitung
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### Shen'ao Line

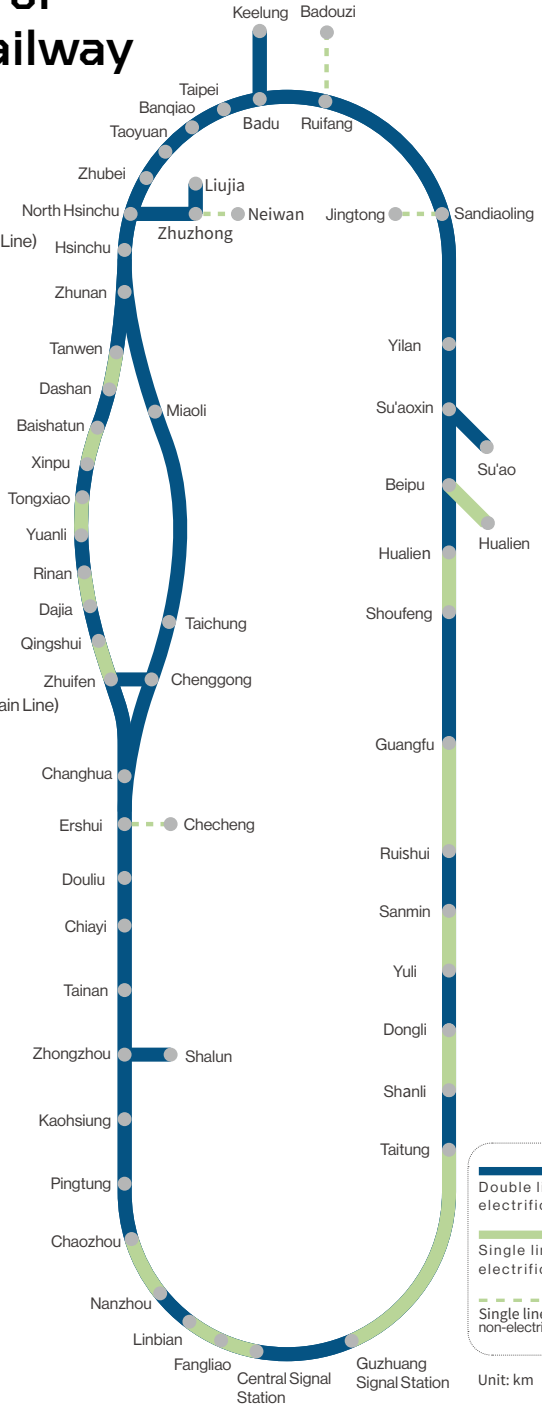
Ruifang	← 4.7 →	Badouzi
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### Yilan Line

Badu	← 93.6 →	Su'ao
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### Shalun Line

Zhongzhou	← 5.3 →	Shalun
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- Double line electrification
- Single line electrification
- Single line non-electrification

Unit: km



## Operating Kilometers

Total

**1,065**

Double-track  
electrified

**751.1**

Single-track  
electrified

**246.6**

Single-track  
non-electrified

**67.3**

Unit : km

## Stations

Total across the network  
(Including the newly  
added Fengming  
Station)

**242**

First-class  
stations

**28**

Third-class  
stations

**71**

Request/  
greeting  
stops

**46**

Second-class  
stations

**25**

Simple  
stations

**68**

Special-  
grade  
stations

**4**

## Level Crossings

Total

**418**

Type 1

**3**

Type 2

**18**

Type 3

**397**

## Bridges

**1,628**

Tunnels

**125**

## Personnel

Budgeted  
personnel  
quota

**17,351**

Active staff

**15,732**

## 2 Taiwan Railway Corporation - Enterprise Performance

Unit: billion (NTD)

33.577

Total Revenue

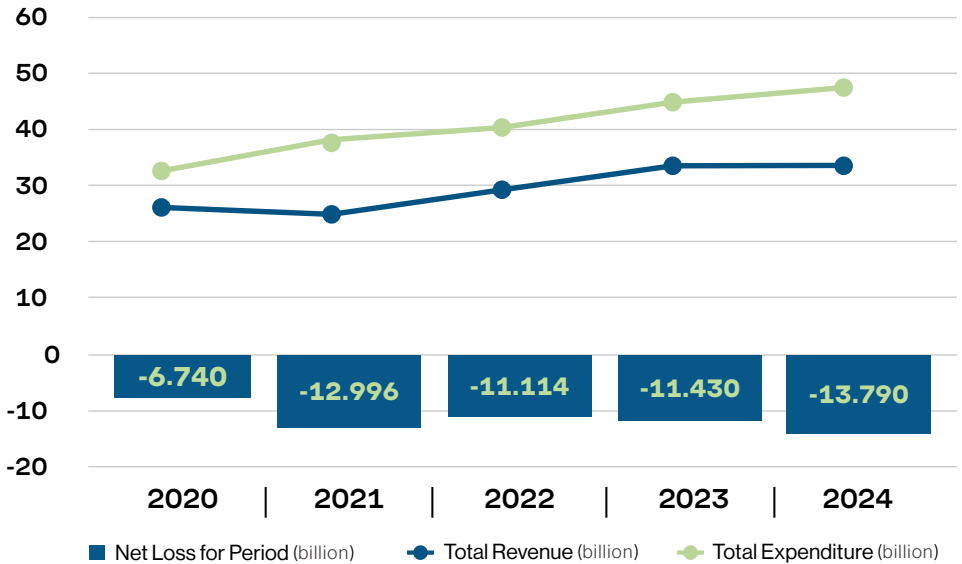
47.367

Total Expenditure

-13.790

Net Loss for Period

Unit: billion (NTD)



Year	2020	2021	2022	2023	2024
<b>Total Revenue</b> (billion)	25.969	24.626	29.070	33.445	33.577
<b>Total Expenditure</b> (billion)	32.709	37.622	40.184	44.875	47.367
<b>Net Loss for Period</b> (billion)	-6.740	-12.996	-11.114	-11.430	-13.790



# 3-2 Passenger and Freight Performance

## 1 Passenger Transport

### 1. Passenger Transport

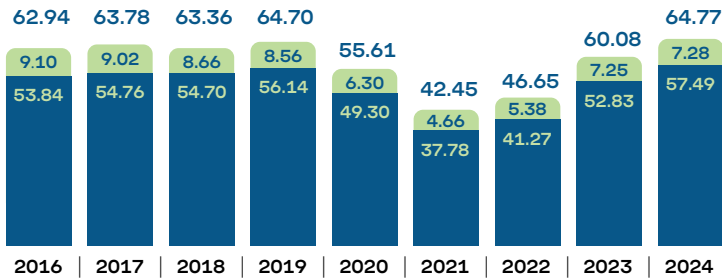
In 2024, Taiwan Railway (TR) recorded an average daily passenger volume of 647,700 passengers, representing a 7.8% increase compared to 2023. The total annual passenger volume reached 237 million.

#### ● Western Main Line

Primarily serves regional commute passenger transportation and inter-city transportation, accounting for approximately 88.8% of total ridership.

#### ● Eastern Main Line

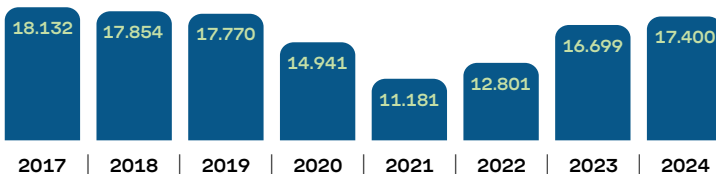
Serving as the primary external transportation backbone for Eastern Taiwan, efforts are continuously made to enhance train capacity, reduce travel time, and improve passenger comfort.



Unit: 10,000 passengers/day

### 2. Passenger Transportation Income

Taiwan Railway (TR) operated a total of 241 passenger transportation stations in 2024. The average daily passenger transportation income reached NT\$47.54 million, reflecting a 3.9% increase compared to 2023. The annual passenger transportation income totaled NT\$17.4 billion, accounting for 97.5% of TR's core business income.



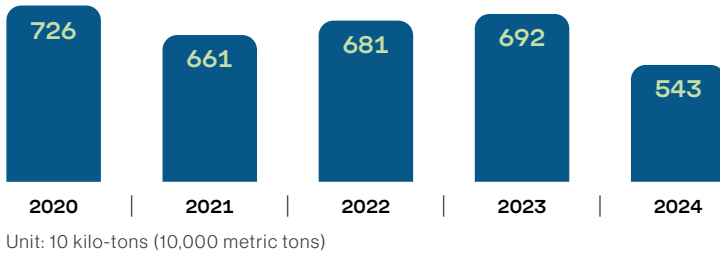
Unit: NT\$ billion

## 2 Freight Transport

### 1. Operational Performance – Tonnage of Freight

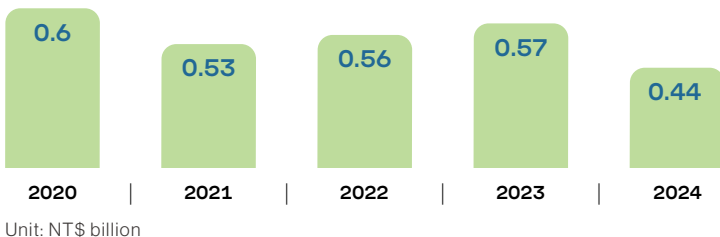
In 2024, the average daily freight volume was 14,800 metric tons, representing a 23.18% decrease compared to 2023. The total annual freight volume reached 5.43 million metric tons.

- To align with current operational practices, TR has revised the freight contract and parcel delivery contract, lowering the maximum parcel weight from 30 kg to 20 kg, in line with highway logistics companies, to protect employee safety. In response to the evolving vehicle product offerings in the market, new parcel categories such as vehicle parts and lightweight bulky items (Light Weight Cargo) have been added to reduce consignment disputes.
- Freight transport is mainly focused on bulk goods such as cement, limestone, and sand and gravel, primarily concentrated along the North Link Line Corridor, accounting for approximately 90% of total freight volume.



### 2. Freight Transport Revenue

There are 68 operational freight stations across the network. In 2024, daily cargo revenue averaged approximately NT\$1.19 million, representing a 23.18% decrease compared to 2023. The annual cargo revenue reached NT\$440 million, accounting for about 2.5% of core business revenue.



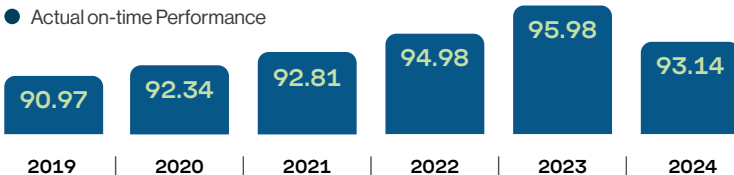
### 3 Punctuality Rate

In 2024, Taiwan Railway Corporation recorded a passenger train punctuality rate of 93.14%. The primary causes of delays were:

- Natural disasters: **44.0%**
- Level crossing accidents and casualties: **8.3%**
- Equipment failures: **33.8%**
- Reduced-speed operations: **3.3%**
- Object intrusion: **9.0%**

The punctuality rate fell short of expectations due to a series of natural events, including frequent earthquakes, mudslides between April and June, and multiple typhoons from July to September. These incidents led to extensive emergency repairs and restoration works on affected branch lines, which significantly impacted overall performance.

In August, Taiwan Railway Corporation coordinated the installation project of the Siaoingshui Bridge on the Heren–Chongde section of the west mainline, which required temporary line closures. In response, adjustments were made to the train schedule on the Eastern Main Line to reduce delays caused by single-track operations. Moving forward, we will continue to actively phase out aging rolling stock and outdated equipment to increase equipment availability. Key improvement efforts include the optimization of level crossings, track routes, and safety protection facilities. Enhancements will also focus on systems such as object intrusion warning systems and physical barriers, while introducing systematic technologies—such as rail temperature monitoring, journal temperature monitoring, and the Pantograph Condition Monitoring System (PCMS)—to monitor equipment status in real-time. These measures aim to reduce the risk of service disruption due to equipment malfunctions and to consistently provide safe and reliable transportation services.



## 4 Operational Safety

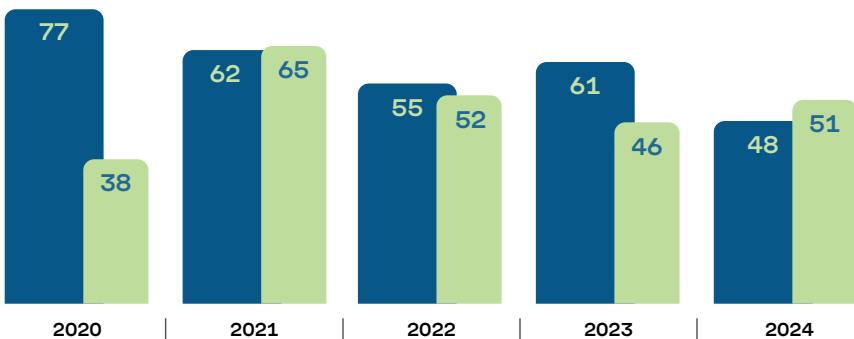
To advance the National Security Policy, strengthen supervision competency, and improve the monitoring of safety performance indicators for railway institutions, the Ministry of Transportation and Communications launched the Railway State Safety Program (RSSP) in 2022. With "Zero Passenger Deaths" as its core safety principle and aspirational goal, the program establishes national railway safety indicators along with corresponding target values to guide continuous improvement efforts.

In 2024, Taiwan Railway Corporation's performance against its Key Performance Indicators (KPIs) is summarized as follows:

	Major Accident Rate Resulting in Passenger Fatalities	Major Train Accident Rate	Major Level Crossing Accident Rate	Abnormal Incident Rate Caused by Human Error or Equipment Failure	Number of Operational Accidents
<b>Target Value 2024</b>	= 0	≤ 1.098	≤ 0.368	≤ 8.694	51
<b>Actual Value 2024</b>	0	0.813	0.188	9.856	48

### KPI for Operational Incidents

● Actual Value 2024      ● Target Value 2024



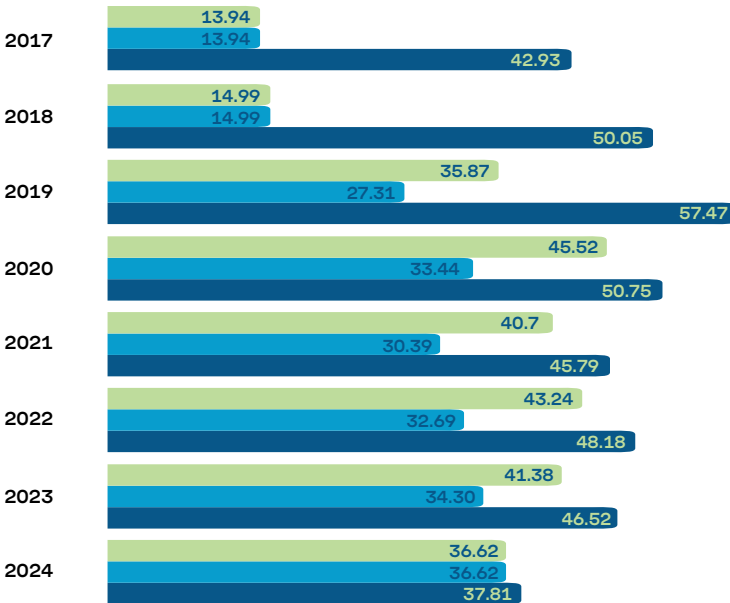


# 3-3 Affiliated Business Performance

## 1 Asset Development

In recent years, Taiwan Railway Corporation has actively promoted land development by encouraging private participation in public infrastructure projects, pursuing urban renewal, and establishing superficies. These efforts aim to enhance the operational performance of associated businesses. At the same time, TR continues to revitalize assets across traditional areas such as residential and commercial properties, land, base stations, emporiums, parking lots, advertising, filming sites, and photovoltaic power systems. These initiatives are designed to increase revenue and improve financial standing. In 2024, the Asset Development Division generated approximately NT\$3.2027 billion in operating income.

- Asset Development Division Revenue (including asset disposal income)
- Asset Development Division Revenue (excluding asset disposal income)
- Including Other Income (e.g., utility duct rental and related sources)



In 2024, an additional NT\$460 million was allocated to the Asset and Debt Management Fund in line with the corporatization of the Taiwan Railways Administration.

An additional NT\$460 million was allocated to the Asset and Debt Management Fund in line with the corporatization of the Taiwan Railway Administration, bringing the total to NT\$3.662 billion. (Revenue figures exclude one-time gains from real estate disposals in previous years and include adjustments for statutory fare concessions and rental shortfalls caused by land transfers to the Railway Bureau, MOTC. Expense figures exclude the financial impacts associated with corporatization policies—including interest expenses, early retirement benefits, employee welfare funds, operational depreciation, and land title transfer costs—as well as cost increases due to electricity price hikes and disaster-related losses in respective years.)

Unit: billion

Category	Business Description	Revenue (Pre- Tax)
<b>Investment Property</b>	Specific Use Area – J9 Land	0.061
<b>Royalty Income</b>	Promotion of private participation, emporiums, real estate, and land use rights	0.919
<b>For Lease operation</b>	Houses, land, base stations, emporiums, travel service spaces, machinery, parking lots, advertising, filming locations, and photovoltaic systems	2.184
<b>Gains on Disposals of Property</b>	Sale of fixed assets	0
<b>Others</b>	Interest and miscellaneous revenue	0.039
	<b>Total</b>	<b>3.2</b>



In response to environmental changes, Taiwan Railway Corporation is proactively leveraging the synergy between transportation infrastructure and asset development to maximize the public value of infrastructure projects. Through mechanisms such as asset development and associated business operations, TR follows the legal frameworks established by the Promotion of Private Participation in Infrastructure Projects Act and the Urban Renewal Act. These efforts are coordinated with government railway development initiatives, the Executive Yuan's accelerated urban renewal program, and local government urban development plans, allowing TR to carry out a wide range of development projects aligned with national and regional strategies.

As of now, land development projects carried out through the Promotion of Private Participation in Infrastructure and urban renewal have delivered notable results. In 2024, the operational performance of related land development generated approximately NT\$401.6 million in revenue. The breakdown of earnings is provided in the table below:

Unit: billion

Promotion of Private Participation in Infrastructure	2024 Revenue (Pre-Tax)	
	Land Rental Income	Royalty Income
BOT Development Project for Specific Use Area J9 Land at Taipei Station	0.061	—
Nangang Station BOT Project	0.06	0.103
Songshan Station Complex Building and Parking Tower BOT Project	0.049	0.065
Taipei Wanhua (East and West) Station Building BOT Project	0.043	0.003
Build-Operate-Transfer Project of Taichung Station Railway Cultural Park	0.003	0.013
<b>Subtotal</b>	<b>0.215</b>	<b>0.184</b>
<b>Total</b>		<b>0.4</b>

# 1 | Banqiao Station Commercial Complex Contract Renewal under Public-Private Partnership

## Overview and Anticipated Benefits of Investment Projects

This project benefits from its status as a co-constructed station with direct access to five major public transportation systems. Opened in 2010, the emporium spans B1, 1st, 2nd, 24th, and 25th floors, covering over 7,000 pings (approx. 23,000 square meters). Through years of collaboration between Taiwan Railway Corporation and private-sector partner Guan Cheng Co., Ltd. (hereinafter referred to as Guan Cheng), Banqiao Station has evolved into a vibrant hub at the heart of the Xinban Special District Shopping Area. It now serves as a convenient lifestyle center, offering a wide range of daily essentials—from cooking classrooms and relaxation massage services to outdoor dining and household and lifestyle goods—all in one place. In addition, several flagship restaurants at the station represent their first locations in Taiwan or New Taipei City, contributing to consistently strong foot traffic and steadily growing revenue.

This project's contract term is 16 years and is set to expire in March 2025. Under the Act for Promotion of Private Participation in Infrastructure Projects and relevant contractual provisions, Taiwan Railway Corporation reviewed the historical operational performance of Guan Cheng Co., Ltd., which met the qualifications for priority contract renewal. On May 28, 2024, TR completed the negotiation and signing procedures for the renewal with Guan Cheng. The extended contract term is 6 years, and it is expected to generate approximately NT\$159 million in annual revenue for TR.



Banqiao Station ROT Emporium

## 2 | Xinzuoing Station Commercial Complex Contract Renewal under Public-Private Partnership

### Overview and Anticipated Benefits of Investment Projects

This project is the first station-based shopping emporium in southern Taiwan, officially opened in 2013. Located at a vital transportation hub that connects Taiwan Railway, High Speed Rail, and the MRT, the emporium spans portions of the 2nd, 3rd, and 4th floors, covering over 2,200 pings (approximately 7,270 square meters).

Jointly operated by Taiwan Railway Corporation and the private partner Guanyou Life Co., Ltd. (hereinafter referred to as Guanyou), the project received early recognition, winning the 12th Golden Thumb Award for Outstanding Private Sector Participation, as well as an Excellence Award for Government Agency Partnership. Throughout its operation, Guanyou has consistently updated and refreshed the retail offerings to meet the evolving needs of commuters and business travelers alike.

This project's contract term was 13 years and expired in November 2024. Under the Act for Promotion of Private Participation in Infrastructure Projects and relevant contractual provisions, Taiwan Railway Corporation evaluated the operational performance of Guanyou Co., Ltd., which qualified for priority contract renewal. As a result, on May 26, 2024, TR and Guanyou completed the negotiation and signing process for a 5-year contract extension. The renewed contract is expected to generate approximately NT\$13 million in annual revenue for TR.



Xinzuoing Station ROT Emporium

# 3 | Transformation of Warehouses and Cultural Assets into Cultural and Creative Tourism Destinations

## Overview and Anticipated Benefits of Investment Projects

To support the development and revitalization of its assets, Taiwan Railway Corporation has undertaken the leasing of old warehouses. Additionally, to ensure the effective preservation and utilization of cultural heritage assets—including historic sites, historic buildings, and old houses and dormitories—TR collaborates with local governments to renovate these properties into art exhibition venues and new cultural landmarks, offering public spaces for leisure and community engagement. In 2024, a total of 24 properties were leased, generating rental income of approximately NT\$26.19 million.



Blue Ordinary Train Cultural and Creative Shop Located within the Zhudong “Cisal” Aboriginal Production and Marketing Park



Fusion Restaurant at Zhudong Musical Ley Line Park

1

### Miaoli Railway Museum

Integrating railway culture and Hakka culture, the site is currently under continued development and exhibition planning by two partner companies—(EI-CHIN DEVELOPMENT TRAD CO.,LTD and BLANK PLAN) CO.. The grand opening ceremony is scheduled for Q2 of 2025.



4

### Zhudong Indigenous Peoples Music and Cultural Park

In alignment with local regional revitalization efforts, this project aims to create a cultural base centered on Indigenous culture, music and the arts, and tourism and recreation—bringing the “Original Dream” vision to life.



2

### Changhua Roundhouse Park

The project has been entrusted to Jiege Enterprise Co., Ltd., which is actively continuing investment promotion and facility development efforts.



5

### Traveling Exhibition for Railway Cultural Heritage

In collaboration with local governments and museum districts, TR facilitates the matching of cultural artifact needs and manages the loan and entrusted custody of relevant railway heritage items for exhibition purposes.

3

### Chaozhou Railway Park

The project has been entrusted to EI-CHIN DEVELOPMENT TRAD CO.,LTD , which is actively promoting railway culture and organizing exhibition activities in coordination with local tourism development efforts.



# 4 | Green Energy Development (Solar Photovoltaic Equipment Leasing)

## In Progress and Expected Benefits

Through initiatives such as installing EV charging posts in parking lots, vending machines, and developing real estate and land projects, TR is actively promoting the installation of solar photovoltaic systems on building rooftops. As of now, contracts have been signed for a total installed area of approximately 26.82 hectares, with a combined capacity of around 38.8 MW. Efforts to expand this program will continue actively.

In 2024, the tender for the installation of solar photovoltaic power generation equipment at the employee parking lot of the Xinzuoing Joint Office Building (designed capacity: 800 kW) was unsuccessful. Another project at the Fugang Workshop A1 parking lot (designed capacity: 422 kW) also did not proceed. However, several solar photovoltaic lease-by-tender projects were completed and connected to the grid in 2024. These include:

- Hualien Electrical Branch (Taitung area) – rooftop and land installations near surrounding buildings (total capacity: 490 kW)
- Central Region Supply Workshop – total capacity: 367 kW
- Fengfu Station and Shalu Station – total capacity: 270 kW

Together, these projects are expected to generate an annual rental income of approximately NT\$35.49 million.

The tender process for solar power generation on the rooftop of the Phase II facility at the Chaozhou Railway Workshop is scheduled to begin in Q4 of 2025. Taiwan Railway Corporation will continue identifying suitable sites for the installation of solar photovoltaic systems, actively supporting the development of the emerging green energy industry.



Chairman Tu Wei conducted an inspection of the solar photovoltaic equipment.



## 5 | Green Energy Development (EV Charging Stations in Station Parking Lots)

### In Progress and Expected Benefits

To align with the government's electric vehicle (EV) strategy, Taiwan Railway Corporation has installed EV charging infrastructure at a total of 33 rental parking lots, including those at Taipei, Nangang, and Banqiao Stations (legal parking spaces), as well as near Taichung, Xinzuoing, Yilan, and Jiaoxi Stations. These installations, completed by parking area operators, include a total of 183 slow-charging ports (AC chargers) and 42 fast-charging ports (DC chargers).

In addition, a lease-by-tender project for a portion of land at Land Serial No. 8, Old Qidu Station Section, was launched and officially began operations in May 2024. This project is expected to generate approximately NT\$12.72 million in additional annual rental revenue for TR.



Nangang Parking Lot 1-Fast charging ports

# 6 | Major Investment Projects

## Government-Planned Urban Renewal Projects

Urban Renewal Projects (Planned by Government)		
Project Name	Site Area	Estimated Revenue
<b>Urban Renewal of Land around Taiwan Railway Yuanlin Station</b>	Renewal Unit Planning Area: 27,033.69 m <sup>2</sup> Establishment of Superficies: 24,272.69 m <sup>2</sup>	Development Royalties: NT\$30 million Operation Royalties: NT\$135 million Land Rent: NT\$204 million Total Estimated Revenue Over the Concession Period: NT\$370 million
<b>Urban Renewal Project for the Surrounding Land of Pingtung Train Station</b>	8,850 m <sup>2</sup>	Benefits from Returned Property and Land: Approximately NT\$1.764 billion
<b>Urban Regeneration Project of Taichung Train Station Surrounding Area</b> (7 plots of land including No. 991, Lianwu Section, East District, Taichung City) (Former Kuo-Kuang Bus Urban Renewal Case)	6,435 m <sup>2</sup>	Evaluating



Investor Presentation: Taichung Fuxing Road Land Development and Urban Renewal Project, August 16, 2024.

### ROT Investment Invitation Project for Fengshan Station Building

The third investment invitation announcement is scheduled for February 27, 2025 with submissions accepted until the end of June. The evaluation and selection process is expected to be completed by mid-August, with contract negotiations and signing with the most qualified applicant to be finalized by October. The project is expected to generate an annual revenue of approximately NT\$11.5 million.



### Investment Invitation Project for the Commercial Building at Kaohsiung Station

The investment invitation announcement is scheduled for March 7, 2025 with the contract signing with the selected bidder expected to be completed in the third quarter of 2025. Operations are projected to begin in the first quarter of 2027. The project is expected to generate an annual revenue of approximately NT\$150 million.





## 1. Leveraging Cross-Industry Collaboration to Enhance Railway Bento Synergy

By leveraging cross-industry collaboration under the concept of mutual benefit and co-creation, TR bento has formed strategic alliances with special holiday events, Japanese railway companies, and local governments to promote regional ingredients. Through these partnerships, a variety of co-branded specialty bentos have been innovatively developed. Participation in festival sales events has further enhanced the marketing of TR bentos, boosting the sales of the classic pork chop bento.

## 2. Railway Cultural and Creative Goods

In alignment with various festival activities, Taiwan Railway Corporation has launched a series of classic merchandise items, including:

- Launch commemorative products for the unveiling of the Corporation
- The popular "I Love Taiwan" round stainless steel bento box
- Pingxi Line DR1000 train-shaped lunch boxes, featuring both the 316 square bento set and 304 round bento set
- The "Blue Train Limited Edition" product series
- Cross-industry collaborations, such as: Taiwan Railway × Baishatun Mazu: the "Big Belly Success" golden shovel gift box
- Taiwan Railway × iPASS Card: the Edmondson-style "Acquire Points Successfully" ticket-shaped iPASS Card
- Additionally, the 2025 "Track, Continuation" calendar and desk calendar have been released as part of the creative product line.

Taiwan Railway  
Classic Station  
Commemorative  
Liquor



Mini Flip-Board Line Display  
(Railway Route Edition)

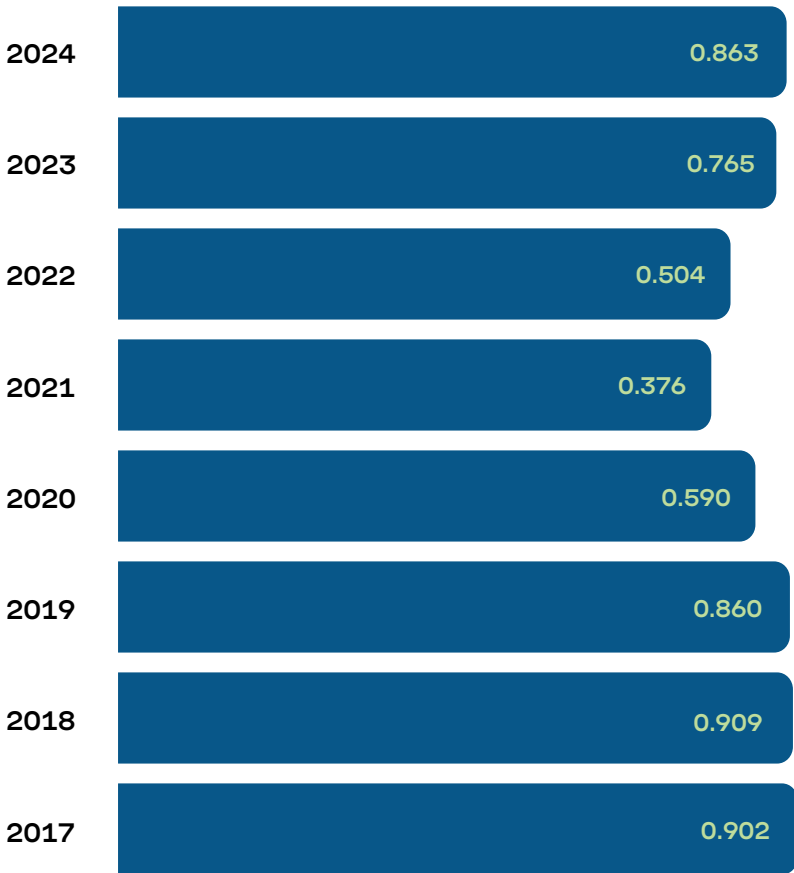


Golden Shovel  
Gift Set

### 3. 2024 Operational Highlights

A total of 37 innovative co-branded specialty TR bentos were launched, and participated in 25 festival sales events. To enhance the appeal of railway-themed merchandise, 110 new products were developed and 33 marketing events were held. In 2024, combined revenue from railway bentos and merchandise reached NT\$863 million, representing a 12.8% increase compared to 2023.

Bento and Merchandise Revenue Chart



Unit: billion

# Chapter.4

## Operational Achievements

- 
- |             |   |             |
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## 4-1 E500 New Train Model Launched and Winner of Japan's Good Design Award

Taiwan Railway Corporation introduced the new-style electric locomotive E500, which was honored in 2023 with two prestigious accolades from the internationally renowned Good Design Award: inclusion in the Best 100 Designs of the Year and the Good Focus Award [New Business Design], a special distinction presented by the Ministry of Economy, Trade and Industry (Japan). The E500 officially entered service on September 18, 2024, and a launch ceremony was held at Qidu Station on September 30, marking its formal debut.

The first E500 locomotive arrived at the Port of Hualien in September 2023, and a new train unveiling ceremony was held on October 28, 2023, at the Chaozhou Railway Cultural Park. As of 2024, a total of 18 E500 units have been delivered to Taiwan. Two trainsets, paired with new push-pull (PP) configurations, have already been put into operation. In line with Taiwan Railway Corporation's updated timetable, E500 deployment will gradually expand from the Western Main Line to the entire mainline network across Taiwan.

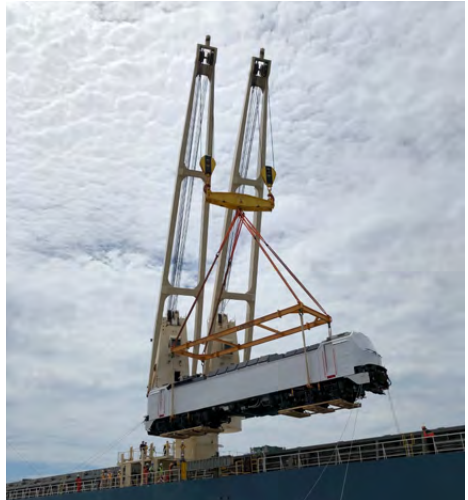


Exterior Design of the New E500 Electric Locomotive

A total of 68 E500 locomotives are planned for introduction. Designed for passenger and freight train traction, they will be deployed nationwide. As older electric locomotives are gradually phased out, the E500 is expected to contribute significantly to improving punctuality across the network.



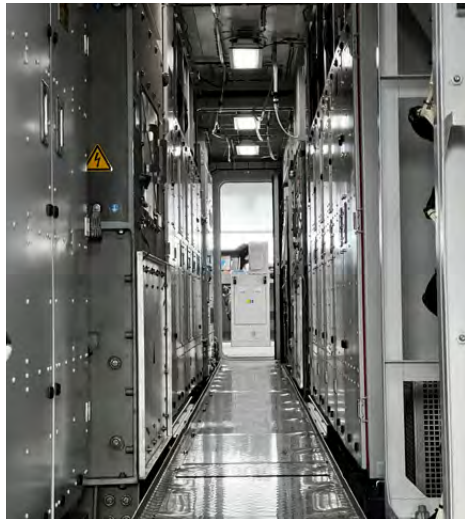
Presentation of the Good Design Award Certificate on Stage



First Locomotive Arrives at Port of Hualien



Front End of the New E500 Electric Locomotive



Interior Configuration of the E500 Locomotive



## 4-2 Mountain Mist and Sea Breeze Tourism Trains

The "Mountain Mist" and "Sea Breeze" trains feature the first-ever gradient color spray design in Taiwan's railway history. The livery of Mountain Mist evokes imagery of golden rice ears along the East Rift Valley, while Sea Breeze reflects the emerald shimmer of sunlight at the river-sea junction. This gradient design captures the misty, dreamlike quality of the land after rainfall, conveying a sense of shared memory and connection to our island home.

"Mountain Mist" and "Sea Breeze" can be seen as trains born from the land itself—from their names to their design, they are crafted to convey the spirit and stories of the island.



Front View of the Sea Breeze Train



Front View of the Mountain Mist Train



Arrival at Hsinchu Station During Launch Press Conference



On November 5, 2024, Taiwan Railway Corporation, in collaboration with Lion Travel Service, held a Sea Breeze meet-and-greet event on Platform 3 at Hsinchu Station. The event marked the official announcement that the Sea Breeze train would launch into operation on December 7. Distinguished guests in attendance included Vice Minister of Transportation and Communications Wu Sheng-Yuan, Kintetsu Railway Co., Ltd. Board Director Takahiro Sugaura, TR General Manager Feng Hui-Sheng, and Lion Group Managing Director Huang Hsin-Chuan, among others.



Sea Breeze Launch Press Conference – Officials and Guests Posed with the Sea Breeze Train



Sea Breeze Launch Press Conference – Group Photo of Officials and Distinguished Guests



## 4-3 Opening of the Nangang TR LOUNGE

The Nangang TR Lounge officially opened on February 1, 2024, becoming Taiwan Railway's first premium waiting lounge in northern Taiwan. Designed with the concept of "An Art Museum in a Lounge", the cloister area features rotating exhibitions of internationally renowned artworks. The space also embraces local cultural heritage, incorporating elements from Nangang's past as a tea-producing region, offering travelers an accessible luxury experience in a refined and relaxing environment.



Ribbon-Cutting and Opening Ceremony of the Nangang TR Lounge



Nangang TR Lounge Offers Comfortable and Elegant Seating (Area)





# 4-4 Ticketing Services

## 1 Convenient Ticket Booking Services

### 1. Ticket Booking and Pickup via Convenience Stores and Post Offices

To enhance ticketing convenience and reduce time and cost for passengers, Taiwan Railway Corporation introduced ticket booking and pickup services through post offices and the four major convenience store chains. As of December 1, 2023, passengers who pay online can collect their tickets at post offices or convenience stores. For ticket refunds, passengers simply bring the purchased ticket to the original booking channel, eliminating the previous need to visit a train station ticket window, and significantly improving convenience. In 2024, an average of 12,599 users per day utilized the booking and pickup service. Distribution by channel was as follows: Post Office: 0.27%, 7-Eleven: 69.87%, FamilyMart: 26.12%, Hi-Life: 2.85% and OK Mart: 0.89%.

### 2. 24-Hour Online and Voice Ticket Booking Service

As of December 2024, a total of approximately 19.59 million tickets were booked and later picked up through these channels.

## 2 Membership Services

As of 2024, Taiwan Railway Corporation's membership base reached a total of 2,583,023 members, including 2,560,776 individual members and 22,247 corporate members. A total of 293,325 successful bookings were made through the membership platform, with a success rate of 44.35%.

## 3 Installation of Automated Ticketing Equipment

To enhance service quality and ticket management, Taiwan Railway Corporation continues to advance the automation and upgrade of ticketing equipment. As of 2024, the deployment status across the entire railway network is as follows:

Category	Computer Ticketing Terminals (units)	Multifunction Ticket Vending Machines (units)	Automated Ticket Gates (units)	Upright Ticket Inspection Devices (units)	Onboard Handheld Fare Adjustment Devices (units)
Number of Stations	193	157	69	240	8 (Train Crew Unit)
Number of Units Installed	436	432	391	768	799



# 4-5 Railway Tourism and Travel Services

## 1 2023 Mid-Summer Formosa Train

The 2024 Mid-Summer Formosa steam train featured the iconic CT273 locomotive, known as the “Queen of Steam Locomotives”, pulling six Chu-Kuang Express cars. The train operated on the Yuli–Taitung route and made three trips during the summer: July 13, July 27, and August 10, 2024 (all Saturdays). Stops along the route included Yuli, Fuli, Chishang, Shanli, and Taitung.

Ride the Mid-Summer Formosa steam train through the stunning East Rift Valley, where each stop adds a unique charm to the journey. Along the way, the train calls at Fuli Station, famed as the “land of rice”, and the legendary Shanli Station, once described by writer Liu Ka-Shiang as “the station you can’t reach in legends”. Hidden in the valley near this quiet stop lies a quaint white chapel, inviting travelers to step into its peaceful surroundings. As passengers take in the breathtaking blend of lush fields and mountain mist, they can also explore local farmers’ markets at each station and appreciate the elegance of historic architecture—making this a truly immersive summertime railway adventure through Taiwan’s small towns.



Spotlight on the Elegance of the Steam Locomotive



Live Calligraphy Performance by the Chishang Calligraphy Association



Photograph of the Mid-Summer Formosa train with Engineer Bear



Indigenous Welcome Dance at Chishang Station

**2**

## **2024 Taiwan Island-Round Science Education Train**

In partnership with the National Science and Technology Council (NSTC), the Taiwan Railway Corporation co-hosted the “2024 Taiwan Island-Round Science Education Train” event. The opening and departure ceremony was held on October 21, 2024, at Taipei Station, marking the start of a six-day island-wide science journey. This year marks the ninth edition of the Science Education Train, which continues to serve as a bridge connecting science and transportation. With strong support from the NSTC, the initiative has expanded to more stations and continues to grow in participation year after year.

**3**

## **Launch of Environmental-Friendly Bicycle Trains**

In line with energy-saving and carbon reduction policies and to promote healthy leisure activities, Taiwan Railway Corporation has introduced environmentally friendly transport services and special bicycle train services, encouraging passengers to travel with the “Train + Bicycle” model to experience rail tourism across Taiwan. To support national policy, the number of bike-friendly train stations increased from 112 to 138 between 2021 and 2024.

These stations are equipped with bike guidance signage, bicycle-friendly pathways, and other accessible facilities. Additionally, passengers are allowed to bring bicycles on board, with a total of 310,369 bike-carrying passengers recorded in 2024.



**4**

## **Continued Operation of Group Charter Trains**

To promote rail tourism and provide comfortable, convenient travel services for both domestic and international travelers, Taiwan Railway Corporation operated a total of 319 group charter trains in 2024, serving 114,852 passengers and generating NT\$34,828,074 in revenue.

## 5 Continued issuance of the TR-PASS

To attract both domestic and international travelers to experience rail tourism, Taiwan Railway Corporation continued offering the TR-PASS in both the standard and student editions. Revenue figures for 2024 are as follows:

	 Standard Edition	 Student Edition
<b>Number of Passes Sold</b> (units)	8,478	6,501
<b>Revenue</b> (NT\$)	12,243,172	4,137,377

## 6 Joint issuance of the Taiwan PASS with the Tourism Administration, MOTC

To promote rail tourism, Taiwan Railway Corporation collaborated with the Tourism Administration, MOTC in 2024 to launch the "Taiwan PASS – Taiwan Railway Version", integrating TR's TR-PASS 5-Day Standard Edition to provide both domestic and international travelers with a convenient and cost-effective transportation option. Additionally, to revitalize rail tourism in the Hualien–Taitung region, TR introduced a limited-time "Taiwan PASS – Hualien Revitalization Edition" from July 1 to November 30, 2024, offering a buy-one-get-one-free promotion. A total of 8,656 sets (17,312 tickets) were sold, generating NT\$25,968,000 in revenue.

## 7 Joint issuance of the JOINT-PASS with Taiwan High Speed Rail

To facilitate business and leisure travel for international visitors to Taiwan, Taiwan Railway Corporation continued its collaboration with Taiwan High Speed Rail to issue the JOINT-PASS. In 2024, a total of 2,079 passes were sold, generating NT\$1,728,154 in revenue.

## 8 One-Day Pass for Branch Lines (TR-PASS)

Continued promotion of branch line tourism. In 2024, revenue from TR-PASS one-day passes for various branch lines were as follows:

Category	Northeast Coast	Pingxi-Shen'ao	Neiwan
<b>Number of Passes Sold</b> (units)	606	9,932	1,485
<b>Revenue</b> (NT\$)	62,278	721,240	125,370

## 9 Pingxi–Shen’ao Double Branch Line Railway One-Day TR-PASS integrated with Taipei FunPASS

To promote rail tourism, the Taiwan Railway Corporation collaborated with the Department of Information and Tourism, Taipei City Government to combine the Pingxi–Shen’ao Double Branch Line Railway One-Day TR-PASS with the Taipei FunPASS, an electronic travel ticketing service. By leveraging the marketing resources of the Taipei FunPASS, the collaboration aimed to boost awareness of the Shen’ao and Pingxi branch lines among international tourists. This initiative helped increase overseas visitors’ interest in and usage of the TR-PASS, thereby supporting rail tourism and enhancing passenger traffic on branch lines.

## 10 Presidential Saloon Car

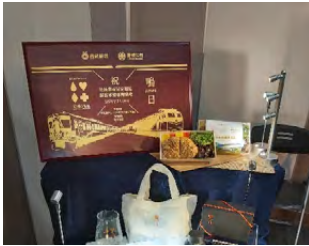
As part of the Executive Yuan’s Hualien–Taitung Revitalization Initiative, the Presidential Saloon Car was launched as a “cruise-style train” (Taiwan tourist shuttle). The inaugural journey took place on October 13, with routes operating on Sundays in October between Hualien and Fuli, and in November between Taitung and Ruisui. A total of 10 trips were operated, serving 471 passengers.



# 4-6 International Railway Partnerships

## 1 “Future-The Moving Kitchen” and Japan’s Seibu Railway’s “52 Seats of Happiness” restaurant train become sister trains

Taiwan Railway Corporation and Japan’s Seibu Railway signed a sister railway agreement on March 14, 2015. Over the years, both parties have continued to engage in mutual visits and exchanges. To commemorate the 9th anniversary of the partnership and further promote their tourist trains, a sister train signing ceremony was held on March 14, 2024, formalizing the bond between TR’s “Future-The Moving Kitchen” and Seibu Railway’s “52 Seats of Happiness” restaurant train.



“52 Seats of Happiness” Sister train commemorative merchandise



Sister train signing ceremony for “52 Seats of Happiness”

## 2 “Breezy Blue” and JR Shikoku’s “Blue Yoshinogawa Trolley” become sister trains

A decade ago, TR’s Songshan Station and Japan’s Matsuyama Station (Shikoku Railway Company) were established as sister stations, followed by the signing of an amicable railway agreement between the two companies eight years ago. To further promote tourist trains and strengthen Taiwan–Japan railway ties, TR and JR Shikoku held a sister train signing ceremony on April 19, 2024, officially linking TR’s “Breezy Blue” with JR Shikoku’s “Blue Yoshinogawa Trolley”.



Group photo of officials and distinguished guests at the sister train signing ceremony between “Breezy Blue” and JR Shikoku’s “Blue Yoshinogawa Trolley”





## 4-7 Introduction of New Signature Bento Flavors

With the concept of value co-creation, TR partnered with local city and county governments to promote regional collaboration. By incorporating Ocean Heart Ecolabel (HEART) certified seafood ingredients and aligning with policies to promote local agricultural specialties, TR launched a range of specialty bento boxes. These efforts were further enhanced through special holiday-themed activities and cross-sector collaborations (e.g., co-branded bento with sister railways such as JR in Japan). These co-branded specialties bentos helped promote local culinary culture, deepen the appeal of rail tourism, and strengthen both horizontal and vertical marketing impact. Leveraging We media marketing across partner channels, the campaign significantly enhanced overall brand exposure and economic value. In 2024, a total of 37 new co-branded specialty bentos were developed, featured in 25 special promotional events, generating revenue of NT\$803,478,758, marking a 12.78% increase over the previous year (NT\$712,439,774).



Jointly developed the “Taiwanese Official Cuisine Bento” in collaboration with Xinbeitou Station.



“Old-Fashioned Stainless Steel Bento” and “Cuffed Genesis” Co-branded Bento

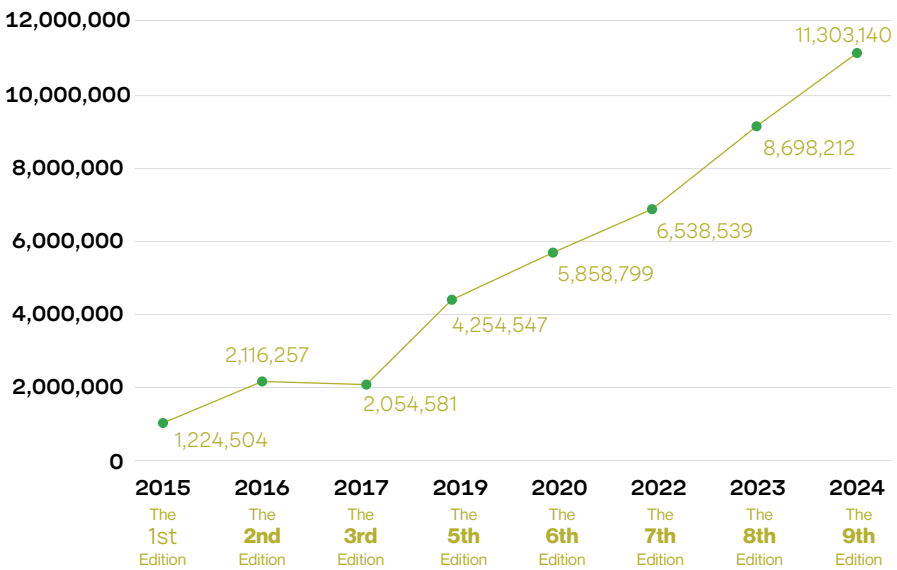




# 4-8 9th Railway Bento Festival

In 2024, the 9th Railway Bento Festival was held from June 7 to 10, featuring 58 domestic and international vendors. Exhibition sales reached NT\$11.30 million—an increase of 29.95% over the previous year. Revenue from railway-themed merchandise totaled NT\$2.25 million—marking a three-fold year on year surge. Attendance also grew, with approximately 442,000 visitors—a 6.23% increase compared to the prior year.

### Annual Railway Bento Festival Revenue



9th Railway Bento Festival





# 4-9 Expansion of E-Payment Options and Marketing Activities for TR Bento

## 1 Taiwan Pay “NT\$100 TR Bento at 20% Off” Promotion

To celebrate the official launch of the State-owned Taiwan Railway Corporation, Ltd. on January 1, 2024, TR kicked off a promotional campaign titled: “Pay with Taiwan Pay and enjoy 20% off on TR bentos priced at NT\$100 or more”. Running from December 26, 2023, to February 10, 2024, the campaign offered an instant 20% discount on any single purchase of TR bentos priced at NT\$100 or above when paid via Taiwan Pay. The campaign recorded 14,285 transactions, generating a total revenue of NT\$2,880,403.

## 2 “20% Off TR Bento with Taiwan Pay” – A Delicious Deal

To promote the use of mobile payments, TR launched the “Enjoy 20% Off TR Bento with Taiwan Pay” campaign. From September 26 to November 30, 2024, customers who used Taiwan Pay to purchase TR bentos priced at NT\$100 or more received an instant 20% discount per transaction. The promotion recorded 23,192 transactions, generating a total revenue of NT\$4,023,106.



“Pay with Taiwan Pay and enjoy 20% off on TR bentos priced at NT\$100 or more” and “Enjoy 20% off TR Bento with Taiwan Pay” campaign.



# 4-10 Highlights of Railway Cultural and Creative Merchandise

Taiwan Railway Corporation and KATO co-hosted a two-day railway model exhibition at the Taipei Main Station first-floor multifunction exhibition area, drawing enthusiastic crowds. The event, themed “Railway Model Dreamland,” featured multiple interactive zones, the Taiwan Railway Shop product sales area, and stage events. Experience areas included:

- KATO Exhibition Zone
- Railway Model Operation Experience Zone
- Scenic Model Display Zone
- Free DIY Scenic Model Zone
- MJ Model Railroad by A-Li Yuanshan
- Award-Winning Works from the Japan National High School Railway Model Competition
- Taiwan Railway Shop merchandise area

The exhibition created an immersive environment for both viewing and hands-on participation. The two-day event generated a total sales revenue of NT\$1,319,765.



TR × KATO Railway Model Exhibition



## 4-11 Integrated Electronic Ticketing Services

In 2024, TR recorded 173,734,902 electronic ticket users, averaging 475,986 passengers per day. Total revenue from electronic ticket usage reached NT\$5,397,182,794. To enhance convenience for passengers and promote eco-friendly, low-carbon transportation, TR has integrated a variety of electronic ticketing services, including:

### 1 TR Periodic Ticket

In line with the launch of the fourth-generation ticketing system, the TR Periodic Ticket—integrated with the electronic ticketing system—officially went live on August 1, 2024, expanding the range and functionality of TR's electronic ticket services. As of December 2024, a total of 10,674 periodic tickets were sold. To celebrate the launch of the TR Electronic Periodic Ticket, TR also introduced the TR Frequent Customer Card on July 29 and October 1, respectively.

### 2 Frequent Customer Rewards

Following the cancellation of the previous 10% discount for electronic ticket users, TR launched a new frequent customer reward program based on monthly accumulated rides and spending. This program went live on August 1, 2024, and by December 31, a total of 458,146 reward transactions had been issued, amounting to NT\$38,129,342 in cashback rewards. The daily average was 3,755 reward transactions.

### 3 Cancellation of the 10% Discount for Electronic Tickets

To align with the launch of the frequent customer reward program, the 10% discount previously applied to electronic tickets was replaced by a tiered cashback system. Starting from August 20, 2024, electronic ticket fares returned to their original price, with rewards offered based on usage tiers, incentivizing continued use among passengers.

## NFC (Virtual Ticket Card)

NFC technology has been applied to standard electronic tickets as well as the Executive Yuan's commuting monthly ticket (TPASS). On July 1, 2024, the Easy Wallet app launched its beep-to-ride service, and on September 26, TPASS for the Taipei–New Taipei–Keelung–Taoyuan region also became available for beep-to-ride use.



### TR Frequent Customer Card

Passengers who purchase an electronic periodic ticket plan will receive a commemorative-style electronic ticket as a complimentary gift.



## 4-12 Comprehensive Multi-Payment System

Mobile (QR code) payments were officially launched on December 1, 2022. On March 15, 2024, the Ticket Vending Machines (TVMs) were upgraded to support mobile (QR code) payment functionality. Starting June 3, 2024, TR expanded its service to include 11 mobile QR code payment platforms, namely:

Taiwan PAY, JKOS Pay, iPASS Money, O'Pay, Pi Mobile Wallet, LINE Pay, Easy Wallet, GAMA PAY, icash Pay, PX Pay Plus, and All Win Pay. These services allow passengers to purchase tickets by scanning QR codes, with back-end options to link credit cards, debit cards, or bank accounts for payment.



## 4-13 Independent Development of 50kg-N #8 Articulated PC Crossties

Currently, when the 50kg-N expansion joints used along TR's railway lines reach the end of their service life, they are typically replaced by replacing the entire track panel. However, under normal operating conditions, only the switch blades and stock rails, which experience wear and deformation due to long-term contact with train wheels, require replacement. Components such as PC crossties, base plates, and other accessories remain serviceable. If these non-rail components can be reused while ensuring track safety, this approach would enable cost savings without compromising structural integrity.

If expansion joints can be locally developed, then when the switch blades and stock rails of the expansion joints on railway lines become worn and unserviceable, they can be manufactured in-house, and only the worn components replaced. The benefit of this approach is that PC crossties, base plates, and other accessories can continue to be used. Compared to replacing the entire track panel, this method requires less manpower and significantly reduces replacement time, minimizing the risk of delays that could disrupt train operations.



Furthermore, the Construction Maintenance Corps currently possesses the equipment and manpower necessary to produce switch blades and stock rails for expansion joints within one month, which is much faster than external procurement lead times—an advantage for route maintenance operations. In conclusion, the in-house development of 50kg-N expansion joints can achieve both enhanced track safety and cost efficiency. Assuming a service life of approximately 10 years per expansion joint, and based on current reports from maintenance divisions, the estimated demand is around 20 sets, which translates to a potential cost savings of NT\$5,129,600 over 10 years.

In addition to these tangible savings, replacing only the switch blades and stock rails—instead of the entire expansion joint assembly—requires less manpower and shorter replacement time. This helps avoid exceeding overnight maintenance windows, which could otherwise result in train delays. The Construction Maintenance Corps can manufacture one set of switchblades and stock rails within one month, compared to at least three months required for public procurement. This rapid in-house production capability supports timely deliveries and is highly beneficial for track maintenance operations, ultimately contributing to enhancing the safety of TR's railway network.

1



Continuous welded rail (CWR) with expansion joints installed at both ends to accommodate rail movement.

2



Hydraulic rail cambering machine used for bending steel rails.

3



The bent steel rail is placed on a gauge; if it fits entirely within the groove, the bending curve is confirmed to be accurate.

4



Pre-processing computer simulation confirms that existing tools from the Construction Maintenance Corps can be used—no need to purchase new tool types.

5



Using CAD/CAM software to design the machining path, the CNC gantry machining center performs freeform surface processing, successfully completing the development of the expansion joint.

6



To ensure proper functionality, the expansion joint is assembled on a test bench. Pressure is applied using a jack, and a gauge is used to measure the force required to induce relative movement between the switch blades and stock rails.

7



The newly developed 50kg-N expansion joint being trial-installed at Yilan Shuangxi.



## 4-14 Establishment of Taiwan Railway Smart Integration Platform

To accelerate TR's digital transformation and enhance the effectiveness of smart rail development, TR is promoting the Consistency Data Interface Specification and the establishment of the TR Smart Railway Information Integration Platform (hereinafter referred to as the TR Cloud Platform). These efforts aim to drive standardization and digitalization across departments, integrate system information, and strengthen decision-making support, paving the way toward achieving full smart railway operations.

The TR Cloud Platform project was awarded in September 2024 and officially began construction in October. Following the specifications set by the Ministry of Transportation and Communications, the platform will collect and integrate data from internal systems, utilizing layer overlay applications. The project is planned over three years and will expand integrated services across five major domains:

- Safety management
- Train operation environment
- Preventive maintenance
- Passenger transport services
- Business management

The platform will enable data sharing and decision-making support. A pilot route information system between Zhubei and Xizhi is scheduled to be showcased by the end of 2025.

To ensure the smooth advancement of key smart rail initiatives, TR established the Smart Railway Development Promotion (PMO) Team in May 2024. This team supports the implementation of the TR Cloud Platform and facilitates system integration across departments, while also promoting digital optimization and smart transformation of professional systems and enhancing the overall digital environment. From July to December 2024, TR convened three sessions of the Smart Railway Development Advisory Committee, inviting experts and scholars in smart transportation and ICT fields to exchange insights on TR's vision, strategies, plans, and measures for smart rail development. The committee also provided professional guidance on the construction and implementation of the TR Cloud Platform, helping to build a unified consensus on the company's digital transformation.



On August 15, 2024, TR General Manager Feng Hui-Sheng was honored with the "ASOCIO 2024 DX Award" for Smart Transportation, recognizing his outstanding contribution to smart city development. This award highlights TR's dedicated efforts and achievements in the application of smart transportation technologies.



On July 22, 2024, TRA held its first Smart Railway Development Advisory Committee meeting since becoming a state-owned corporation.



General Manager Feng Hui-Sheng received the "2024 Smart City Outstanding Contribution Award" in the Smart Transportation category.



# 4-15 Implementation of Information Security Management System

## 1 Obtaining International Standard ISO/IEC 27001:2022 Certification

The State-owned Taiwan Railway Corporation, Ltd. (TR) continues to implement and enhance its information security management system to ensure that its security policies and objectives are effectively executed and communicated. The initiative aims to:

- Safeguard the network environment from external intrusion and damage
- Protect internal and external stakeholder data
- Prevent disruptions to core operations and critical infrastructure caused by cybersecurity incidents
- Enhance operational stability
- Comply with the international standard ISO/IEC 27001:2022 – Information technology – Security techniques – Information security management systems – Requirements.

TRA's core information and communication systems and data center verification sites successfully passed third-party audits conducted by SGS Taiwan Ltd. In 2023, TRA obtained the fourth-cycle validity certificate for the ISO/IEC 27001:2013 standard. On October 29, 2024, TRA further passed its first surveillance audit and completed the transition verification to ISO/IEC 27001:2022.



In 2024, TR's verification sites successfully obtained the ISO/IEC 27001:2022 Transition Certification.

## The signing of the "Memorandum of Understanding on National Cybersecurity Joint Defense and Information Sharing Cooperation"

On April 30, 2024, TR signed the "Memorandum of Understanding on National Cybersecurity Joint Defense and Information Sharing Cooperation" with the Ministry of Justice Investigation Bureau. The agreement aims to establish a collaborative cybersecurity defense network and enhance cyber resilience.

The signing ceremony was hosted by TR Chairman Tu Wei, with General Manager Feng Hui-Sheng and Chief Information Security Officer (CISO) Liu Shuang-Huo in attendance. The Investigation Bureau was represented by then Director Wang Chun-Li, who led the delegation. Through this MOU, both parties aim to deepen information exchange and collaborate on cyberattack and defense drills, achieving continuous cybersecurity operations—including early warning, incident response, and post-event recovery in the face of information security incidents.



TR–Ministry of Justice Investigation Bureau MOU Signing Ceremony for National Cybersecurity Joint Defense and Information Sharing Cooperation. Chairman Wei delivers remarks at the event. (From left to right: Then-Director of the Investigation Bureau Wang Chun-Li, TR Chairman Tu Wei, and General Manager Feng Hui-Sheng)



Group photo of representatives from Taiwan Railway (TR) and the Ministry of Justice Investigation Bureau.

# Chapter.5

## Major Projects and Investments

- 
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# 5-1 Safety Reforms

1

## Safety Management System (SMS)

### 1. Overview of Effective Implementation

To ensure operational safety and affirm Taiwan Railway's commitment to reform, an approach based on institutionalized and systematic management has been adopted to implement safety policies, risk management, safety assurance, and safety promotion. In addition, third-party safety assessments are conducted to review the effectiveness and progress of SMS (Safety Management System) implementation.

### 2. Key Achievements in Implementation

- **Supervision by Top Executives:**  
A dedicated task force has been appointed to regularly review hazard risk management, maintenance techniques, and rules and procedural regulations.
- **Autonomous Notification System:**  
An autonomous employee reporting mechanism has been established to enable real-time risk response.
- **SMS Status Stocktaking:**  
A comprehensive review of Standard Operating Procedures (SOPs), regulations, and operational forms has been conducted.
- **Safety Risk Database:**  
In December 2023, the SMIS system was established to enhance risk management, with 285 hazards and 1,502 hazard factors recorded to date.
- **Follow-up on Improvement Actions:**  
Regular meetings are held to review abnormal incidents and track the status of follow-up measures.
- **Operational Safety Technology Meetings:**  
Daily meetings are conducted to analyze the causes of accidents and incidents.
- **Safety Management System Execution Manual:**  
Updated to version 1.1 in August 2024, the manual has been approved for reference by the Railway Bureau.
- **Revision of the Operational Safety Plan:**  
The revised plan received approval in principle from the Ministry of Transportation and Communications (MOTC) in June 2024.

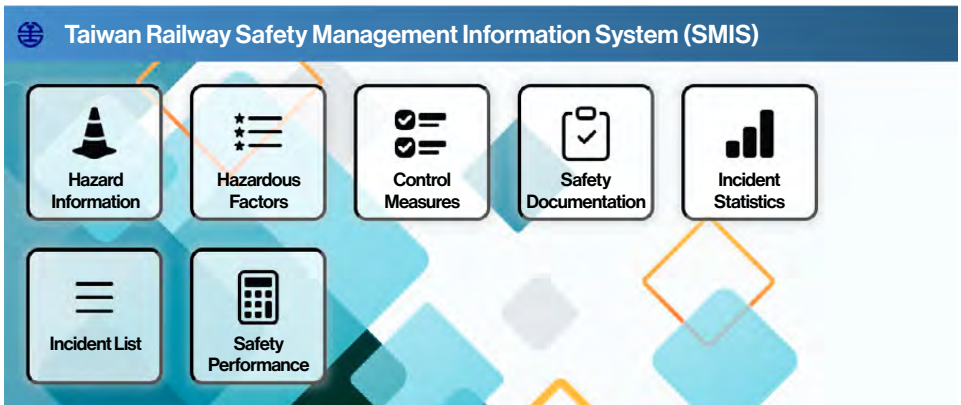




2024 SMS (Including Risk Management) Supervision and Audit Training Program

### 3. SMS (including Risk Management) Supervision and Audit Training

- First Half of 2024: A total of 4 sessions were held, with 890 participants.
- Second Half of 2024: A total of 4 sessions were held, with 912 participants.
- A professional service team provided 53 on-site consulting sessions.



Taiwan Railway Safety Management Information System (System Interface View)

### 4. Key Focus Areas Moving Forward

- Optimize SMIS Functionality:  
Expand the risk management database and interface with the traffic safety information system to develop a risk-focused supervision and safety management decision analysis function. Additionally, a new audit module will be introduced to improve the efficiency of audit tracking.

- **Implement Risk Management Procedures:**  
Revise the Safety Risk Assessment Matrix and restructure hazard factors. Enhance personnel training to continuously improve hazard identification, establish performance targets, and reduce the risk of critical hazard factors.
  
- **Compliance with the National Railway Safety Program (RSSP):**  
Each unit is required to establish a train operation safety incentive plan and corresponding performance targets to ensure alignment with the Safety Performance Indicators (SPIs) set by the RSSP.
  
- **Promotion of the PDCA Improvement Mechanism:**  
Bi-monthly evaluations are conducted to review the implementation progress of each department, with ongoing follow-up and continuous improvement actions.
  
- **Enhancement of Safety Culture:**  
Ongoing educational and training programs are conducted to reinforce awareness of the Safety Management System (SMS), cultivate a just culture, and strengthen the safety reporting mechanism.

Taiwan Railway will continue advancing the SMS to enhance risk management and safety culture, ensuring train operation safety and operational stability.

## 2 Current Implementation Status of the External Supervision Mechanism for TR's Safety Reform

### 1. Overview of Effective Implementation

- In response to the suggestions from the family members of the victims of the April 2nd incident, who advocated for the establishment of external oversight bodies to ensure continuous monitoring of TR's safety reform efforts, the former Taiwan Railways Administration (TRA) convened three preparatory meetings for the "External Supervision Mechanism of Safety Reform of Taiwan Railway", during which a draft of the Establishment Directions was formulated.

- From April 15 to 19, 2023, the Ministry of Transportation and Communications (MOTC), together with the former Taiwan Railways Administration (TRA), accompanied the victims' families on a visit to JR West Japan Railway Company, to learn from its post-accident safety reform experience following the April 25, 2005 Fukuchiyama Line accident.
- On May 2, 2023, after receiving the visit report, the Ministry of Transportation and Communications (MOTC) officially named the body the “External Supervision of the Taiwan Railway Safety Reform Committee”. The committee's meetings are convened and chaired by the MOTC.

## 2. Implementation Outcomes

- On June 30, 2023, the Ministry of Transportation and Communications (MOTC) convened the Kick-Off Meeting of the External Supervision of the Taiwan Railway Safety Reform Committee. During the meeting, the draft of the Operation Directions for the Committee was reviewed, revised, and approved. The composition of the committee members was also finalized.
- On July 6, 2023, the Ministry of Transportation and Communications (MOTC) officially issued the Operation Directions for the External Supervision of the Taiwan Railway Safety Reform Committee by official correspondence.
- To further strengthen TR's safety reform and enhance train operation safety, the Ministry of Transportation and Communications (MOTC) invited Professor Seiji Abe, Mr. Yasakazu Asano, and Mr. Hajime Matsumoto from Japan for a six-day visit to Taiwan from August 29 to September 3, 2023. Through a series of workshops and seminars, the experts exchanged insights with the MOTC and the former Taiwan Railways Administration, drawing on Japan's experience in railway safety reform.
- From June 2023 to December 2024, the External Supervision of the Taiwan Railway Safety Reform Committee convened its kick-off meeting and a total of 10 sessions, aiming to ensure substantial progress in TR's safety reform efforts.



The former Taiwan Railways Administration (TRA) accompanied the victims' families on a visit to JR West Japan Railway Company



Invited Professor Seiji Abe from Japan





# 5-2 Railway Safety Improvement Project : Reconstruction of Wencuobu Creek Bridge

## 1. Project Budget

- NT\$1.006 billion

## 2. Expected Project Benefits

- This project aligns with the Flood-Prone Area Management Plan led by the Water Resources Agency, MOEA, and aims to strengthen the railway bridge structure. The original Wencuobu Creek steel girder bridge was reconstructed into a prestressed concrete bridge and elevated structure. The new bridge spans 1,940 meters in total, with the deck raised by 2.2 meters. The river crossing section was redesigned with a 67-meter span and a non-falling pier design. The project also eliminated three level crossings—Liuying to South, Jhuyuan Pi, and Nongchang Road—thereby reconnecting communities divided by the railway and promoting local development. Additionally, it enhances water flow capacity to reduce the risk of flooding. The use of a ballastless track improves ride comfort and reduces long-term maintenance costs.

## 3. Project Progress

- Double-track switching was completed in June 2024, and the entire site was fully completed by the end of October 2024.



Wencuobu Creek Bridge Reconstruction Project (Aerial View)



# 5-3 Forward-Looking Infrastructure Project : Taiwan Railway Smart Electrification Upgrade Project

1

## Subproject 1

### 1. Project Name

- Procurement of 15 Overhead Catenary System (OCS) motor cars and 10 railway mobile crane cars

### 2. Construction Budget

- Approximately NT\$509 million

### 3. Project Overview

- In recent years, Taiwan Railway (TR) has expanded electrified rail mileage significantly with the addition of the Hua-tung Line, Ping-Chao Line, South Link Line, and branch lines such as Shalun and Liujia. This expansion has substantially increased the power maintenance workload, necessitating the procurement of new maintenance vehicles to improve efficiency and responsiveness during emergency repairs.
- Maintenance and improvement work on Overhead Catenary System (OCS) equipment relies heavily on OCS motor cars to transport personnel, tools, and materials to job sites. The newly procured vehicles were deployed in 2023 and 2024 to support line switching tasks coordinated with the Railway Bureau, including projects at Pingzhen Temporary Station, Zhongli Temporary Station, and Fengming Station, with outstanding performance.

### 4. Expected Project Benefits

- The first batch—5 OCS motor cars and 4 railway mobile crane cars—was delivered on October 2, 2023, and has been assigned to each power branch to maintain the reliability of the OCS power supply system.

- The second batch—5 OCS motor cars and 3 railway mobile crane cars—was delivered on February 2, 2024, and has also been allocated to power branches for ongoing maintenance of the electrification system.
- The third batch—5 OCS motor cars and 3 railway mobile crane cars—is scheduled for delivery by the end of April 2025. Progress will continue to be closely monitored to ensure timely delivery for field deployment.



The platform of the Overhead Catenary System (OCS) motor car is being tested using weights to assess its load-bearing capacity



Load-bearing test of the boom on railway mobile crane cars

### 1. Project Name

- Round-the-Island Automatic Telephone and Cable Dispatching Telephone System Renewal Project

### 2. Construction Budget

- Approximately NT\$420 million

### 3. Project Overview

- This project involves the full renewal of Taiwan Railway's aged digital PBX (Private Branch Exchange) systems—used for nearly 30 years to provide railway telephony services—including four central offices (Taipei, Changhua, Kaohsiung, Hualien), eight remote stations, and nearly 10,000 railway telephone extensions. The project also updates the cable dispatching telephone system, which supports dispatchers and operations rooms at stations classified Class 3 and above, as well as motive power depot driver's cabs. All systems will be upgraded to IP-based PBX (IPPBX), and all dispatch telephones will be replaced with IP telephony systems. Planned equipment includes: 56 switch gateways, 4 automatic switch workstations, 169 communication gateways, 4 network switch systems (1+1 configuration), 2 master train dispatching telephone devices, 21 integrated touch terminals for centralized dispatch control, and 19 maintenance workstation servers. The project commenced on March 21, 2024, and is scheduled for completion in 2026.

### 4. Expected Project Benefits

- The current round-the-island telephone and dispatching telephone systems were installed in 1991 and 2004, respectively. This renewal project will:
  - Replace outdated digital PBX with modern IP-based systems and network switches, enhancing communication efficiency and system capacity
  - Support future operational expansion at new stations
  - Upgrade dispatching telephony from copper wire to optical cable transmission, addressing impedance mismatch issues and improving transmission quality.
  - Enhance overall reliability and performance of Taiwan Railway's communication infrastructure.

A

## Renewal Project for the Round-the-Island Automatic Telephone and Cable Dispatching Telephone System

### AT Main Communication Equipment – Servers and Gateways



Switch Servers (2 in Taipei, 1 in Yilan, Qidu, and Hsinchu)

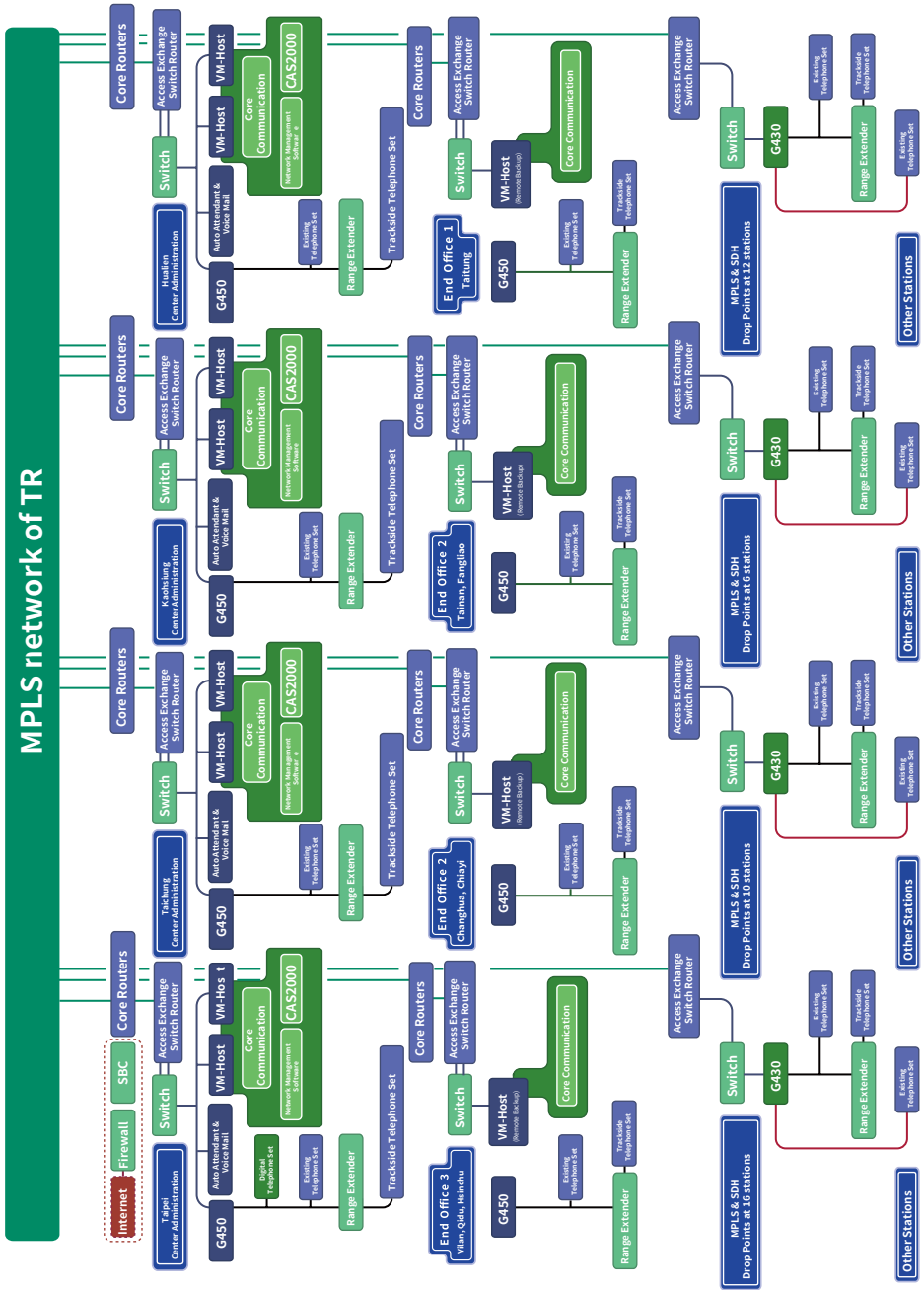


Avaya G430 Gateway Devices  
(Located in Su'aoxin, Ruifang, Banqiao, Taoyuan, etc.)



Avaya G450 Gateway Devices  
(Located in Taipei, Yilan, Qidu, and Hsinchu)

# Project System Architecture - Round-the-Island Automatic Telephone



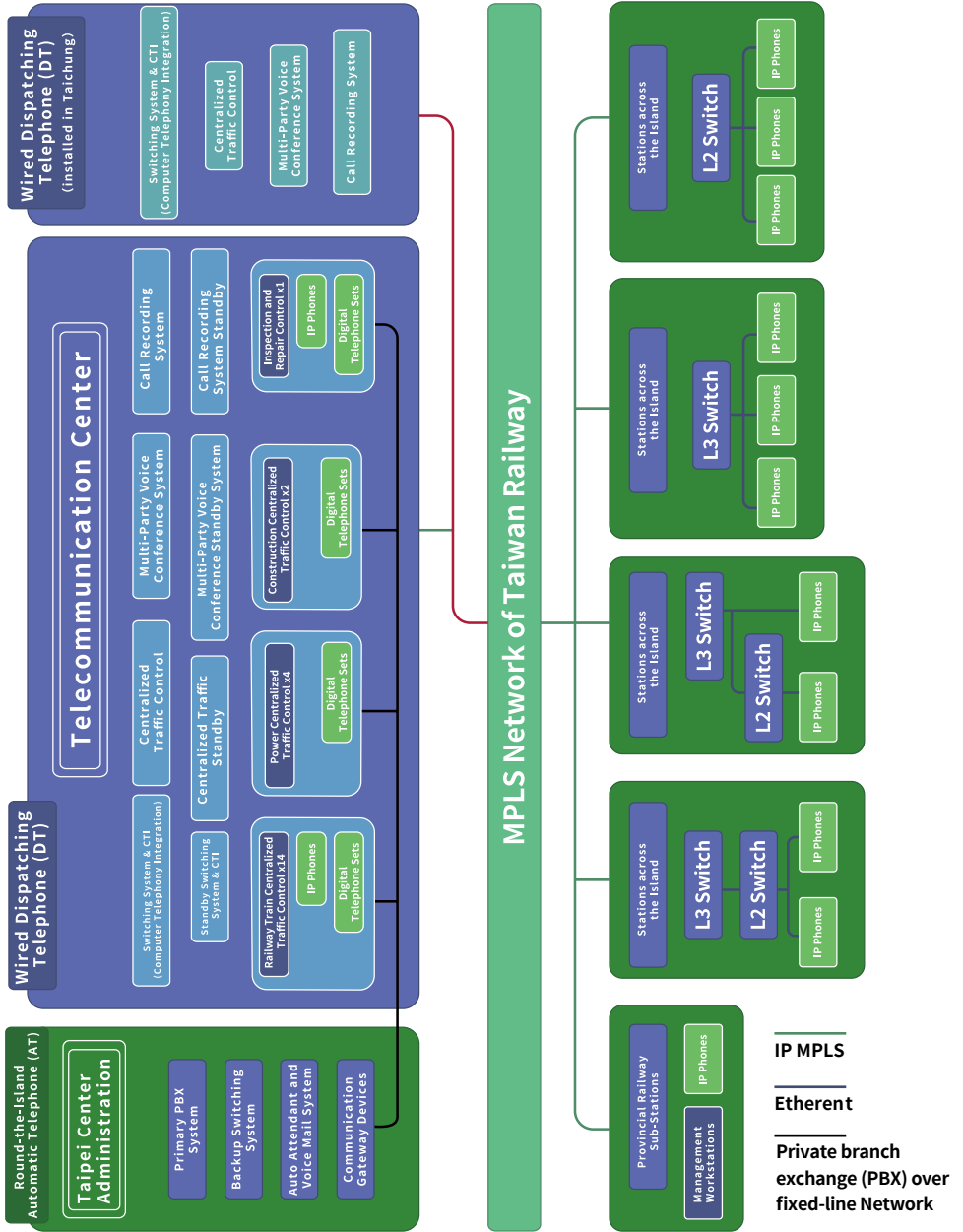
IP MPLS

Ethernet

Private branch exchange (PBX) over fixed-line Network

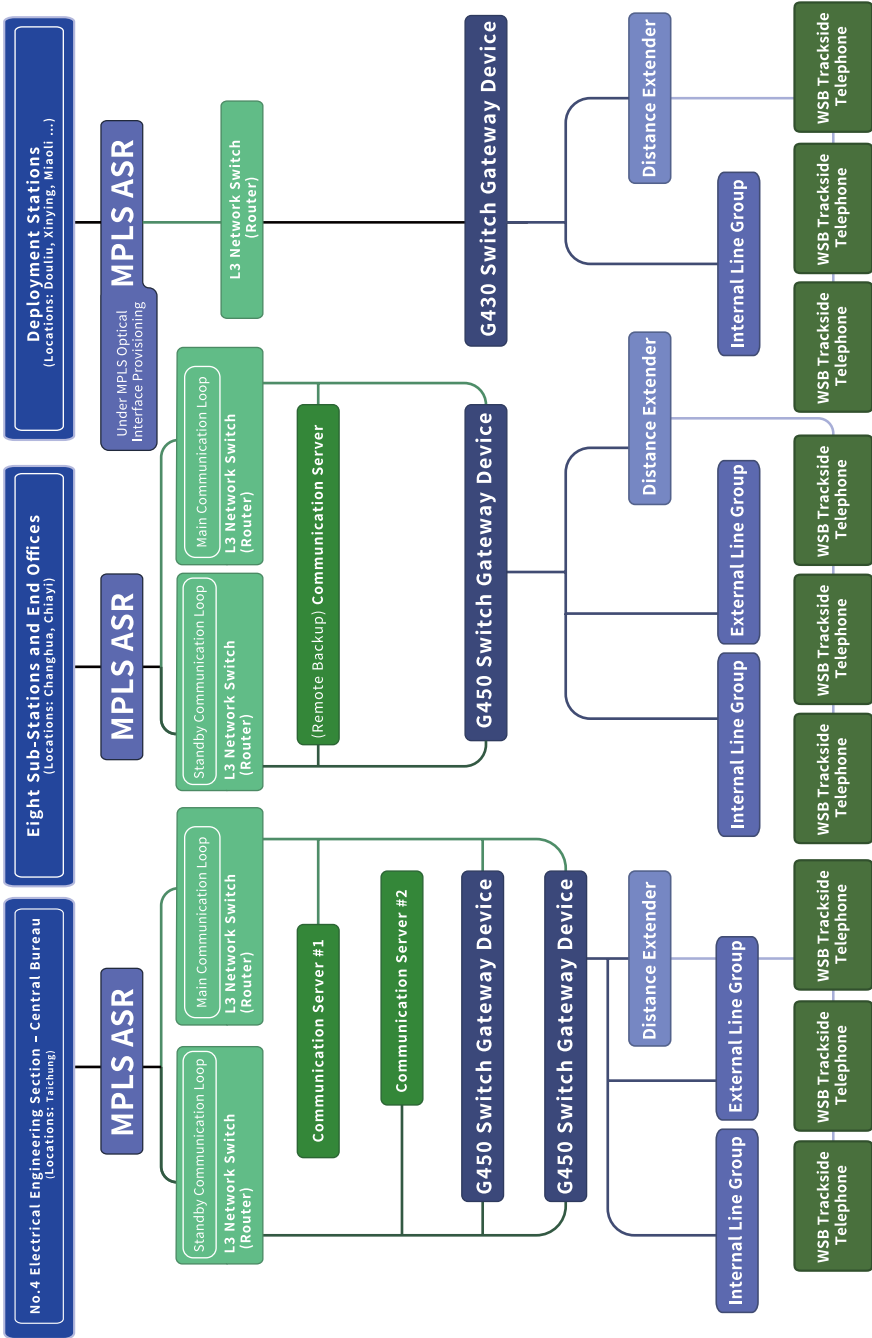
SDH via MPLS

# Wired Dispatching Telephone System (DT) Architecture Diagram





# AT Communication Equipment Configuration Diagram



B

## Round-the-Island Automatic Telephone and Cable Dispatching Telephone System Renewal Project

### AT Main Communication Equipment – Related Peripherals

01



03



01 Viking LLA4 Long-Range Telephone Extender

02 Layer 3 Network Switch Tailyn IMP-HF828-4X-2A

03 Avaya 9408 Digital Telephone Set

02



### DT Remote Terminal Unit

01



02



01 L2 PoE Switch: Extreme ISW 4GBP2GBT2-SFP

02 Avaya J179 IP Telephone

▲ Wired Dispatching Telephone System – Related Equipment

### 1. Project Name

- Installation of 1,424 Barrier Gate Sets (Including Installation)

### 2. Construction Budget

- NT\$480 million

### 3. Project Overview

- In response to the national localization policy and the need to enhance level crossing safety, Taiwan Railway (TR) has been actively advancing the Taiwan Railway Smart Electrification Upgrade Project since 2018. Among its key components is the modernization and smart upgrade of level-crossing equipment. Given that many barrier gates at level crossings have been in use for a prolonged period, a replacement has become essential. During the design phase, TR specifically explored localization strategies, incorporating bar gates into its domestic production initiative. This approach not only ensures stable and reliable product support and safe operation but also enhances maintenance efficiency and access to original manufacturer support through localization.
- The project was awarded on March 16, 2021, and commenced on March 17. It marks the first time that TR has independently specified material standards based on actual usage and future demand, with full domestic production of the barrier gates. Within 360 calendar days from the day after the award, prototype units were to be produced and tested. Upon passing the tests, the contractor was required to submit documentation for review within 90 calendar days, and, following approval, complete full delivery within 810 calendar days. As of December 2024, mass production of 1,424 sets has been completed along with the associated factory inspections. A total of 396 sets have been installed at level crossings, with full installation expected to be completed by July 2025.

## Electronic Control Unit Subsystem

1. Step-Down Voltage Regulator
2. Control Drive Module
3. Motion Sensing Module
4. Data Communication Module
5. Operation Display Module
6. Complies with IEC 61000-4-11 — Voltage Fluctuation Immunity Test
7. EMI Interference Testing

## Barrier Gate Subsystems

1. Telescopic Combined Pole
2. Articulated Barrier Arm

## Gear Drivetrain Subsystem

1. Primary Gearbox
2. Speed Reducer
3. Sealed Bearings — Require no lubrication or maintenance

## Servo Motor Subsystem

1. Servo Motor
2. Motor Encoder / Brake Unit
3. Complies with CNS 3622 — High/Low Temperature and Thermal Cycle Testing

## Cast Gearbox Housing Subsystem

1. High-Strength Cast Steel Housing
2. High Weather-Resistant Surface Coating (UV-resistant and salt spray protection)
3. Barrier Gate Mounting Base (includes buffering mechanism)
4. Complies with IEC 606529 — IP55 rating (protection against dust and water)
5. Complies with IEC 62498-3 (A1) Testing Standards

▲ Five Major Subsystems of the Level Crossing Barrier System

## 4. Expected Project Benefits

- Key improvements in the barrier gate equipment functionality include:
  - 01 Customizable appearance and compatibility with various types of barrier gate poles.
  - 02 Modular mechanism design using sealed bearings that require no oiling, with a dust- and waterproof structure. The system eliminates the need for counterweight adjustments, significantly reducing setup complexity and shortening on-site installation time.
  - 03 Servomotor adoption enables precise position and motion speed control. Combined with a counterweight-free design, it further streamlines the installation process and cuts down on adjustment work during setup.

04 Next-generation control system for barrier gates:

- Features isolated I/O control
- Integrated servomotor control
- Network communication
- Lightning protection
- Self-anomaly detection
- Broken rod detection
- Adjustable angle control

It also includes a high-speed processor for fast response, anti-interference and high-temperature resistance, and a fail-safe design. The system supports a wide range of current types, including AC/DC, bipolar electric current, and DC-pulse electric current.

05 Barrier gate diagnostics and logging functions:

- Records date, time, voltage, current, pole position (horizontal or vertical), and breakage status.
- Detects obstruction by foreign objects or rod breakage.
- Uses RJ-45 network transmission to notify the Railway Police Station in real-time and provide intelligent early warnings, expediting fault repairs and reducing dependency on maintenance personnel experience.



Exterior view of the complete barrier gate



Full internal view of the barrier gate

### 1. Project Name

- Renewal Project for Level Crossing Video Monitoring Systems, Automatic Protection Centralized Monitoring Devices, and Manually Operated Alarm Systems

### 2. Construction Budget

- NT\$1.27 billion

### 3. Project Overview

- This project aims to significantly enhance and upgrade the protective infrastructure for the round-the-island level crossings, including subsystems such as video monitoring systems, centralized monitoring of level crossings, and annunciator system mainframes. It also integrates the existing automatic obstacle detection systems, incorporating smart functions and big data analytics to enable preventive maintenance and timely replacements. These improvements are expected to reduce equipment failure rates and improve the efficient deployment of personnel. The project was awarded on July 14, 2022, commenced on November 7, 2022, with a construction period of 700 working days, and is scheduled for completion in November 2025.

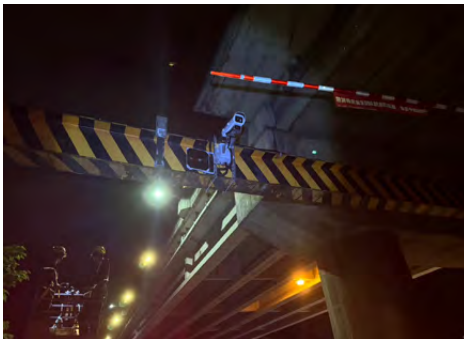
### 4. Expected Project Benefits

- The system's key functions are as follows:
  - 01 Integration of various level-crossing subsystems and interfaces with the intelligent alarm system.
  - 02 Real-time access to the operational status of level-crossing equipment, enabling data collection and system-wide status analysis to support predictive maintenance.
  - 03 Use of real-time video monitoring at level crossings to analyze and recognize pedestrians, bicycles, motorcycles, cars, large vehicles, and license plate numbers through intelligent image processing.
  - 04 Ability to remotely trigger emergency alerts at level crossings and perform system resets as needed.

- 05 Provide interlocking signals with roadway traffic lights and display text-based indicators on large direction signs at level crossings. This helps alleviate vehicle congestion and plug-back caused by heavy road traffic. It also includes features such as early warning of barrier gate malfunctions, obstacle intrusion detection with historical records, and the ability to transmit relevant information back to the management workstation.
- 06 Perform data storage and analysis, along with audio-visual alert notifications. The system is designed with future expandability in mind, allowing integration with mobile communication platforms (e.g., Team+ and LINE) to support push notifications and event playback.



Centralized Level Crossing Monitoring Equipment and Transmission/Receiver System (CMT) Fault Detection Unit



Comprehensive Field Monitoring Camera



Advanced Dome Camera





# 5-3 Forward-Looking Infrastructure Project : THSR Changhua Station and Taiwan Railway Transfer Shuttle Plan

## Total Budget

- Approximately NT\$7.214 billion

## Project Overview

- The project involves constructing the Tianzhong Branch Line, with a total new route length of approximately 3.135 km—comprising 1.475 km of elevated track, 1.5 km of embankment section, and 0.16 km of elevated station section. A new single-track line will be laid from Taiwan Railway's Tianzhong Station to connect with THSR Changhua Station. The branch will also link with the Jiji Line, where a train passing siding will be added to facilitate operations.

## Expected Project Benefits

- Establish a seamless transfer between THSR Changhua Station and the Taiwan Railway network. Integrate with the Jiji Line to support tourism development and regional connectivity.

## Implementation Outcomes

- The comprehensive planning report was approved by the Executive Yuan on October 28, 2022. Subsequent responsibilities for planning, supervision, and construction were transferred to the Railway Bureau, with a formal agreement signed on December 2, 2022. The basic design was approved by the Bureau on May 16, 2024.
- The preliminary project, focused on improvements to the existing Tianzhong Station, received detailed design approval on September 19, 2024, and the construction contract was awarded on November 22, 2024.





# 5-3 Forward-Looking Infrastructure Project : Jiji Branch Line Infrastructure Improvement Project (Taiwan Railway)

## 1. Total Budget

- NT\$3.589 billion

## 2. Project Overview

- The project encompasses the improvement of passenger transport facilities at stations along the Jiji Line, the strengthening of the track subgrade, and enhancements to tunnels and side slopes. These efforts aim to improve overall service quality on the branch line, enhancing passenger convenience, safety, and the quality of tourism experiences.

## 3. Project Overview

- Tunnel No.2 completed ring rolling on November 15, 2024, and is currently undergoing construction of the tunnel inverted arch. Tunnels No.1 and No.3 are simultaneously undergoing expanding excavation work.



Turnkey Project for Tunnel and Slope Improvement under the Jiji Branch Line Infrastructure Improvement Program



# 5-4 Track Structure Safety Enhancement Plan

## 1. Total Budget

- NT\$9.9003 billion

## 2. Project Overview

- This project involves the replacement of all 1,946 sets of wooden sleeper turnouts with PC sleeper turnouts, the renewal of 250 kilometers of steel rail, and the procurement of 68 units (sets) of track maintenance equipment.

## 3. Implementation Outcomes

- All turnout materials were fully delivered in 2024.
- All 250 kilometers of steel rail have been delivered.
- Procurement of 41 units of large and medium tamping machines, ballast regulators, and track stabilizers (with a tender budget of NT\$3.17 billion): the tender was awarded on September 22, 2023, and the first batch of 3 units (large tamping machine, medium tamping machine, and ballast regulator) was delivered on February 12, 2025.
- 20 engineering maintenance vehicles: The tender opened on October 4, 2024, and is currently under evaluation.
- 7 sets of track panel carriers: tender awarded on June 6, 2023. The first batch (3 sets) was delivered on August 21, 2024, and the second batch (4 sets) on February 11, 2025.





# 5-5 Feasibility Study for Yilan Line Route Improvement (Guishan–Waiao Section)

## 1. Total Budget

- NT\$3.835 billion

## 2. Project Overview

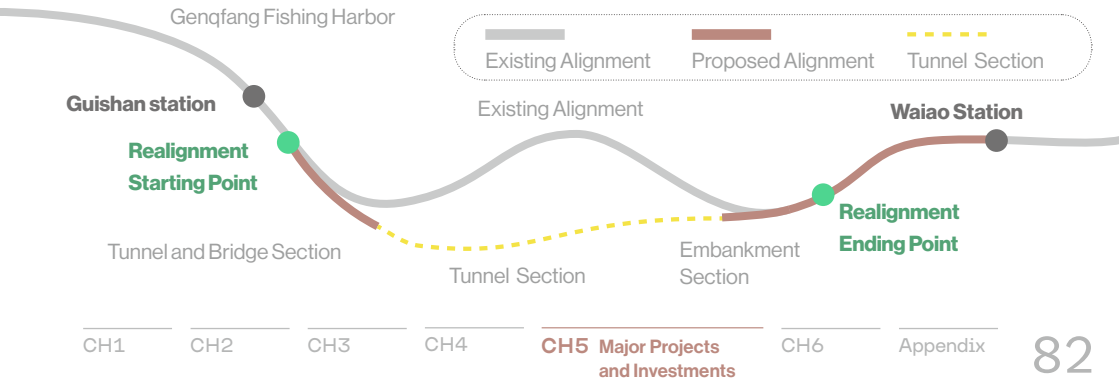
- The project entails constructing a long tunnel section starting from Guishan Station, with a horizontal curve radius greater than 1,000 meters, to avoid residential areas near the tunnel exit. The new track will reconnect with the existing line north of Wai'ao Station. The alignment of Wai'ao Station and the adjacent curve to the north will remain unchanged.

## 3. Project Timeline

- Due to the need to re-evaluate land acquisition and urban planning changes in response to the corporatization of Taiwan Railway, the project completion period has been extended from 7 to 9 years, pending the approval of the comprehensive planning by the Executive Yuan.

## 4. Implementation Outcomes

- The feasibility study was approved by the Executive Yuan on November 25, 2019.
- The comprehensive planning began on October 19, 2020. On June 4, 2024, Taiwan Railway submitted the revised report to the MOTC for review. On September 11, 2024, the MOTC returned the report with instructions to revise it based on comments from relevant agencies. The revised report is scheduled for submission in April 2025.
- Regarding the Environmental Impact Assessment (EIA), after the third review meeting convened by the MOTC on June 23, 2024, the EIA was submitted to the Environmental Protection Administration. It was officially approved on February 11, 2025.





# 5-6 Overall Feasibility Study for Yilan Line Improvements

## 1. Total Budget

- NT\$20.924 billion

## 2. Project Overview

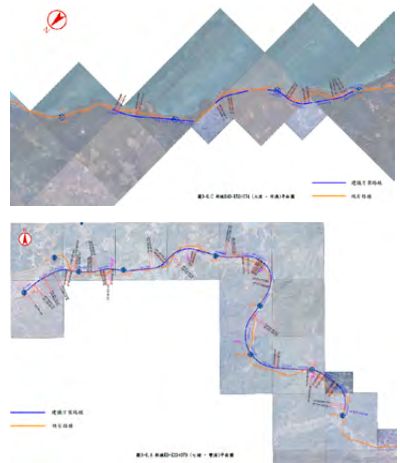
- The Yilan Line serves as a vital railway transport system in the northeastern region of Taiwan. However, due to geographical constraints, the line has a relatively high proportion of minimum curve radius sections, in addition to long and steep gradients and areas prone to geological disasters. This project aims to enhance operational efficiency, reduce route risks, improve small-radius curves, and eliminate bottleneck segments.

## 3. Project Timeline

- Short-term works: Improvement of Daxi and Gengfang tunnels, Track section from Guishan to Wai'ao. Estimated construction periods: 7 years and 9 years respectively.
- Long-term works: Improvement of the Houtong to Shuangxi section, with an estimated construction period of 12.5 years.

## 4. Implementation Outcomes

- A prior feasibility study on the Houtong-Shuangxi track alignment improvement was reviewed by the Ministry of Transportation and Communications (MOTC) on October 7, 2021, where it was concluded that further clarification was needed regarding project goals, quantifiable benefits, financial plans, and implementation strategies for the entire Yilan Line alignment.
- The interim report was approved on May 6, 2024, and TR is currently revising the final report per the MOTC's review on December 17, 2024, with submission scheduled by the end of April 2025.





# 5-7 Project Name : Key Bridge Safety Enhancement Plan

## 1. Total Budget

- NT\$5.669 billion

## 2. Project Overview

- This project is mainly coordinated with the river management plans of local governments and the River Management Branch. Due to failure to meet flood control and water conservancy standards, seven bridges, including the Shihliou Banxi Bridge, must be reconstructed. In addition, the Old Bridge Pier at Sancha River, which has undergone severe deterioration, is also scheduled for reconstruction. A total of eight bridges are to be rebuilt under this program.

## 3. Project Timeline

- Five years (2025–2029)

## 4. Implementation Outcomes

- On November 18, 2024, the project was approved by the Executive Yuan.
- According to the progress meeting convened by the Railway Bureau on November 27, 2024, titled “Progress on 24 delegated construction projects involving TR slopes, bridges, tunnels, and stations”, the Taiwan Railway Corporation (TR) is responsible for the planning stage. After planning is complete, the Railway Bureau branch offices will handle design and construction. TR is currently in the process of tendering service projects.





# 5-8 TR Train Procurement and Replacement Plan (2015–2024)

## 1. Total Budget

- NT\$99.73 billion

## 2. Project Overview

- The plan includes the procurement of:
  - 600 Inter-city Electric Multiple Units (EMU),
  - 520 air-conditioned Commute EMUs,
  - 60 branch line passenger cars
  - 127 locomotives.

The project was originally approved by the Executive Yuan via official correspondence referenced YUAN-TAI-JIAO-ZI-No.1040026871, dated May 22, 2015. Due to delays caused by the pandemic and other factors, the Executive Yuan approved the revised plan via official correspondence referenced YUAN-TAI-JIAO-ZI- No.1131019525, dated August 9, 2024, and the Ministry of Transportation and Communications (MOTC) issued an official correspondence referenced JIAO-YUN-ZI-No.1130024089 on August 19, 2024, confirming the revised plan submitted by Taiwan Railway (TR).

## 3. Implementation Outcomes

- - 520 Commute EMUs have been fully delivered.
  - 600 Inter-city EMUs were delivered by the end of 2024.
  - The procurement project for electric locomotives has successfully delivered 60 units. Detailed design work is underway currently.

## 4. Key Event

- To commemorate the arrival of the final EMU3000 trainset, Chairman Tu Wei, General Manager Feng Hui-Sheng, and Director of the Fleet Management Division Cheng Kuo-Hsi attended the port reception ceremony. Gratitude was extended to all personnel involved in the unloading and mechanical operations.



As the EMU3000 fleet is manufactured in Japan, a traditional Japanese “Daruma Eye-Dotting Ceremony” was held, symbolizing the spirit of perseverance. The ceremony, led by Chairman Tu Wei, General Manager Feng Hui-Sheng, Board Director Wu Chang-Chih, and Director Cheng Kuo-Hsi, embraced the Daruma spirit—“seven times down, eight times up”—as an encouragement for all TR personnel to remain resilient and continuously pursue excellence in safety and service following the corporatization of Taiwan Railway.



Eye Dotting Ceremony to Welcome the Final EMU3000 Trainset Arrival in Taiwan



# 5-9 Phase II Construction of Chaozhou Depot at Chaozhou Railway Workshop

## 1. Total Budget

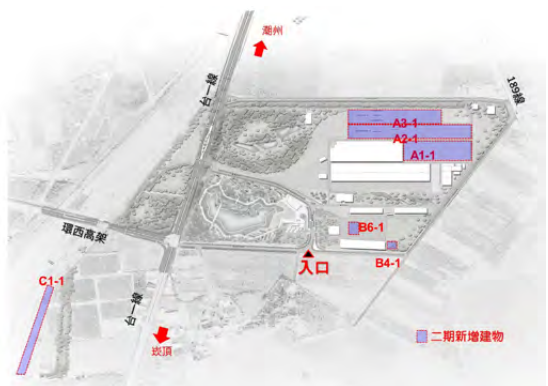
- NT\$12.1477 billion

## 2. Expected Benefits

- In line with the "Overall Purchase and Train Replacement Plan of Taiwan Railway (2015–2027)", the newly procured long-formation Electric Multiple Units (EMUs) began delivery and operation in 2020. According to maintenance requirements, these new trains must undergo Level 3 and 4 maintenance three years after entering service. As the maintenance capacities of the Fugang and Hualien Workshops have reached full utilization, the existing reserved land at the Chaozhou Workshop has been designated for the expansion of maintenance facilities specifically for Inter-city Electric Multiple Units. New maintenance equipment will also be procured to ensure the workshop's capacity and support safe train operations.

## 3. Project Progress

- CL131 (Preliminary Tender for Jacking Equipment): Installation and trial operation of jacking equipment were completed on December 16, 2024.
- CL111 (Preliminary Tender for Pile Foundation and Related Works): Construction began on April 11, 2024, with pile work currently underway.
- CL121 (Main Construction for Phase II of Chaozhou Railway Workshop): Official construction awarded on December 3, 2024.



# Chapter.6

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## Future Outlook



Following its corporatization, Taiwan Railway (TR) has adopted a business-oriented management model with four core strategies: ensuring safety, enhancing service, achieving sustainable operations, and becoming a happy enterprise. Centered around its core transport operations, TR places operational safety as its foremost priority. Through comprehensive digital transformation, TR is progressively evolving into a modern, passenger-centric, and efficient public transportation enterprise. With full dedication, TR is driving forward the “Five New Pillars”—new fleet, new services, new energy, new development, and new products—to deliver enhanced service experiences and boost passenger satisfaction.

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In terms of ensuring safety, TR has set a target to gradually reduce the number of train operation incidents each year from 2024 to 2028, aiming for a 50% reduction over five years. This will be achieved through the implementation of a Five-Year Safety Enhancement Plan, the introduction of a Safety Management System (SMS), and third-party evaluations. Additionally, TR has established the Railway Academy and launched the Safety Education Hall to strengthen safety education and professional training for both new and current employees. The company will also continue to enhance railway infrastructure, improving equipment reliability and preventing system failures.

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In terms of service enhancement, TR is promoting the TPASS 2.0 discount program, and will sequentially complete and launch the Information Display System for All Line Trains and Station Affairs from 2025 to 2027. In addition, the automatic ticket gate system will be

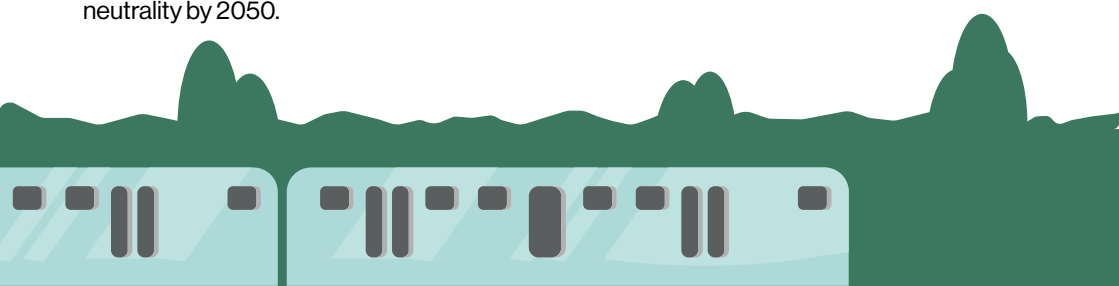


gradually implemented and launched from 2026 to 2027, aiming to provide passengers with more convenient services. By 2028, TR expects to achieve an average daily ridership of 700,000 passengers, with a punctuality rate exceeding 98%. Beyond its core transport services, TR is actively expanding its affiliated businesses. In addition to the current tourist trains such as Future-The Moving Kitchen, Island Star, Breezy Blue, and Sea Breeze, the Mountain Mist train is scheduled to enter service in 2025. TR will continue to explore and launch themed tourist trains tailored to different customer segments. Regarding railway bento and merchandise, TR will continue to increase revenue by expanding sales channels and diversifying product offerings. The goal is to have revenue from affiliated businesses account for more than 30% of total income by 2028.

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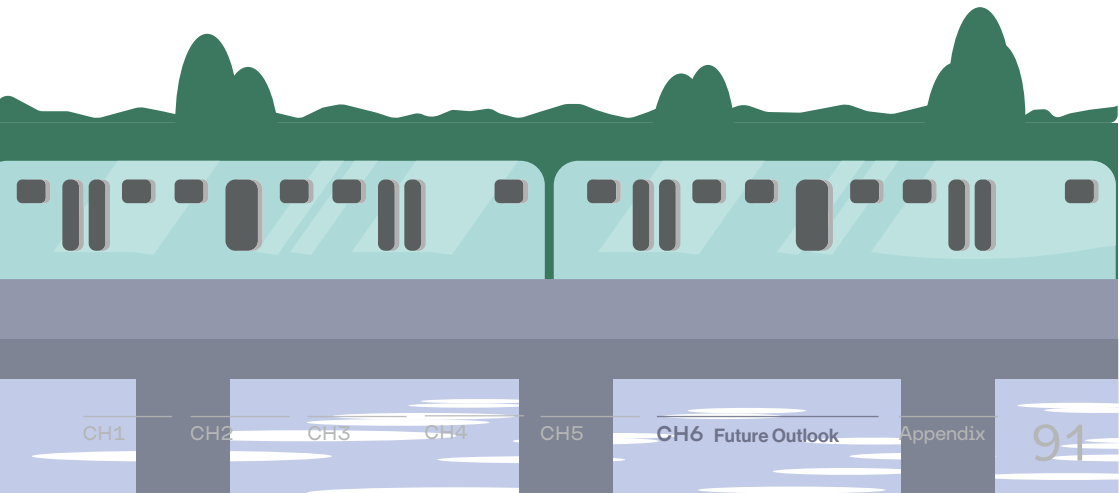
In terms of sustainable operations, TR aims not only to reverse its cash flow and overall financial performance through financial reforms but also to leverage its role as a low-carbon transportation network circling the island. In 2025, TR will complete greenhouse gas inventory reports for 32 stations classified as first-class and special-class stations, and finalize the carbon footprint assessments for three train types—Tze-Chiang Limited Express, Chu-Kuang Express, and Local Trains—to obtain official carbon footprint labels issued by the Ministry of Environment. By 2026, the scope of greenhouse gas accounting will be expanded to cover the entire company, with a carbon reduction roadmap to be established accordingly.

Looking forward, TR will implement an energy management system (EMS) and monitoring equipment, and continue to promote the installation of solar photovoltaic power systems to increase its share of green electricity. Using the 2023 emission level as a baseline, TR aims to reduce carbon emissions by 50% by 2040 and achieve carbon neutrality by 2050.



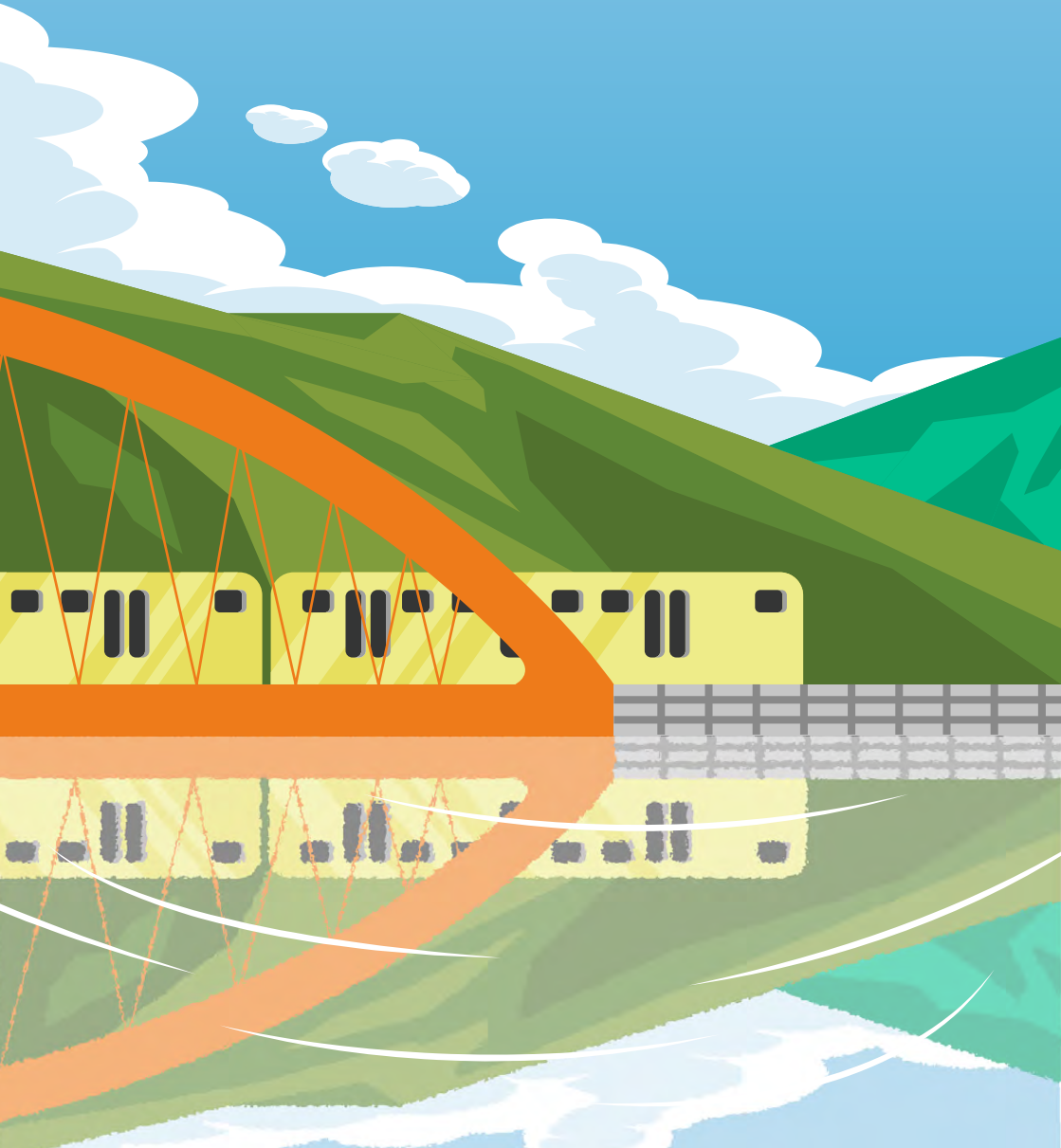
In building a happiness enterprise, Taiwan Railway (TR) will place future employee training at the heart of its transformation, aiming to enhance both professional competence and service quality. This will be achieved through digital training technologies that enable diversified and efficient learning models. TR will further upgrade the digital personnel training record system, integrating it with competency-based training roadmaps to ensure a seamless connection between training and career development. Regional training institutes will also expand and integrate practical training sites, broadening the scope of professional skills development to ensure technical continuity and innovation. At the same time, TR will actively improve employee compensation and benefits, while establishing a robust promotion and transfer system based on goal-oriented management and performance evaluation. These efforts aim to encourage employee retention, targeting an annual employee turnover rate of under 3% while enhancing service quality to achieve over 85% customer satisfaction.

While implementing the above four strategic goals, Taiwan Railway (TR) will fully leverage the advantages of its island-wide rail network and high-value land assets, activating a dual-engine approach of core business and affiliated businesses. This strategy aims to turn financial deficits into surpluses while fostering shared prosperity and sustainable development for the nation, local communities, and TR itself.



# Appendix

( Major Events of 2024 )





# Appendix Major Events of 2024

- 
- 01.01** On January 1, 2024, the State-owned Taiwan Railway Corporation, Ltd. was officially established.
- 
- At 10:30 AM, a plaque unveiling ceremony was held on the 1st-floor Multifunction Exhibition Area of the Taipei Main Station. Distinguished guests in attendance included President Tsai Ing-Wen, Premier Chen Chien-Jen, Former Premier Su Tseng-Chang, Vice Premier Cheng Wen-Tsan, Presidential Secretary-General Lin Chia-Lung, and Minister of Transportation and Communications Wang Kwo-Tsai.
- 
- Official establishment of the Northern, Central, Southern, and Eastern District Operation Offices.
- 
- Official establishment of the Northern, Central, Southern, and Eastern District Training Centers.
- 
- 01.05** Completion Ceremony of the Miaoli Railway Museum Park.
- 
- Distinguished guests including Premier Chen Chien-Jen and Minister of Transportation and Communications Wang Kwo-Tsai attended the ceremony. Chairman Tu Wei delivered a briefing on the park's construction and operational planning.
- 
- 01.06** TR Goes Global: Taiwan Railway Bento Boxes Sold at Keio Department Store in Japan, January 6–22.
- 
- 01.11** Deputy Minister Hu Hsiang-Lin of the MOTC convenes a meeting on "Renovation Budget for the Imperial Crown-Style Historic Building at Kaohsiung Station, in Coordination with the 2025 Launch of the Kaohsiung Station Special Zone Development".
- 
- 01.12** Chairman Tu Wei presides over the kickoff meeting for "2024 Presidential and Legislative Election Transportation Planning".
- 
- 01.19** Minister of Transportation and Communications Wang Kwo-Tsai receives a briefing from TR on the feasibility study for a cross-platform station building at Longtian Station.
- 
- 01.23** "SIRAYA" themed train makes its inaugural run.
- 
- 01.24** The new book "Excellence in Motion: 136 Years of Taiwan Railway" launched in limited release.

- 
- 01.30** Deputy Minister Hu Hsiang-Lin of the MOTC inspects renovation work at Tainan Station.
- 
- 02.01** Nangang Station TR Lounge officially opens.  
Deputy Minister Hu Hsiang-Lin of the MOTC, TR Chairman Tu Wei, and Lion Group Chairman Wang Wen-Chieh attended the event.
- 
- 02.07** Premier Chen Chien-Jen and Deputy Minister Hu Hsiang-Lin of the MOTC inspect the 2024 Lunar New Year transportation operations.
- 
- 02.08** Chairman Tu Wei inspects the northern marshaling yards, train crew units, Wudu freight yard, and regional emergency response teams.
- 
- 02.09** Chairman Tu Wei conducts Lunar New Year's Eve inspections in the northern and central regions.
- 
- 02.14** Deputy Minister Hu Hsiang-Lin of the MOTC visits Xinzuoing Station to inspect post-holiday transportation operations during the Lunar New Year.
- 
- 02.20** Deputy Minister Hu Hsiang-Lin of the MOTC inspects the Shanli Tunnel project in Taitung and Qingshui Tunnel project in Hualien.
- 
- 02.21** Collaboration with Greenray Theatre Company brings a new dimension to stage performances.
- 
- 02.22** Deputy Minister Hu Hsiang-Lin of the MOTC inspects the ground-anchored slope improvement project at Fulong-Shicheng, the new Shuangxi Bridge, and the curve improvement project at Xinma Station on the Yilan Line.
- 
- 02.27** Deputy Minister Hu Hsiang-Lin of the MOTC inspects the side slope restoration work and Tunnel No.2 ring rolling project on the Jiji Line.  
  
The third meeting of the first Board of Directors convened.
- 
- 02.29** First 2024 follow-up meeting on the TR Safety Reform Review.
- 
- 03.01** General Manager Feng Hui-Sheng leads a delegation to visit the Changhua County Government, offering professional assessment and support for the Changhua City railway elevation project.
- 
- 03.02** Written exams for staff recruitment are held across all regions nationwide.

03.04	Second meeting of the Safety Management Task Force.
03.05	Newly purchased E500 electric locomotives (E504, E505, E506) arrive in Taiwan.
03.13	2024 Model Worker Commendation Ceremony.  Deputy Minister Hu Hsiang-Lin of the MOTC convenes a meeting to discuss rational adjustment of the TR fare structure.
03.14	“Future-The Moving Kitchen” and Japan’s Seibu Railway “52 Seats of Happiness” sign partnership agreement.
03.16	Taipei Fleet Management Depot hosts “Railfan Experience Tour” event.
03.19	Deputy General Manager Chu Lai-Shun visits Baishatun Station to inspect transportation operations for the Baishatun Gongtian Temple Mazu Pilgrimage.
03.20	Smart City Summit & Expo 2024 – TR showcases achievements in safety technology initiatives.
03.21	New MMIS (Maintenance Management Information System) fully launched.  General Manager Feng Hui-Sheng convenes the first 2024 Meeting of the TR Universal Design Promotion Committee to review the outcome report of the 2023 Evacuation Drill for Passengers with Visual and Hearing Impairments and follow up on tracked cases.
03.22	Fourth meeting of the first Board of Directors convened.
03.23	Chairman Tu Wei visits Taichung Port to inspect freight operations.
03.25	Deputy Minister Hu Hsiang-Lin of the MOTC convenes a meeting on station reconstruction projects at Yuanli, Longtian, and Shanhua.
04.02	Minister Wang Kwo-Tsai and Deputy Minister Hu Hsiang-Lin of the MOTC, along with TR Chairman Tu Wei, attend the “Love Never Stops” memorial concert for the April 2nd TRA Train 408 accident.
04.03	Deputy Minister Hu Hsiang-Lin of the MOTC inspects the Taipei Station Emergency Response Center and transportation operations during the Tomb-Sweeping Festival holiday.  During the Tomb-Sweeping Festival transport period (April 3–8), a total of 232 additional train services were operated, with 24 extra carriages added. Total passenger revenue reached NT\$382,639,254, averaging NT\$63,773,209 per day. The total number of passengers transported was 4,184,874, averaging 697,479 passengers per day.

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TR restores service within 16 hours after the April 3rd Hualien earthquake.

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04.04 Vice Premier Cheng Wen-Tsan and Minister Wang Kwo-Tsai of the MOTC inspect earthquake damage in Hualien.

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04.09 Deputy Minister Hu Hsiang-Lin of the MOTC convenes the first 2024 Meeting of the Special Building Review Committee to review Tainan Station's underground construction project application.

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04.17 East Japan Railway Company and JRE Business Development Taiwan, Inc. pay a courtesy visit to TR.

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04.19 "Breezy Blue" and Japan's JR Shikoku "Blue Yoshinogawa Trolley" sign partnership agreement.

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TR collaborates with Greenray Theatre Company to launch co-branded "Cuffed Genesis" bento; actor Tang Tsung-Sheng serves as a one-day store manager for the launch.

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04.21 Team participates in the "2024 New Taipei City Railway Relay Marathon".

---

04.22 Deputy Minister Chen Yen-Po of the MOTC receives a briefing on June 3rd World Bicycle Day planning.

---

04.23 Fifth meeting of the first Board of Directors convened.

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04.25 Deputy Minister Hu Hsiang-Lin of the MOTC participates in the Legislative Yuan Finance Committee's site visit for Taichung development projects.

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Legislative Yuan Transportation Committee Chair Lee Kun-Tse conducts site inspection at Kaohsiung Station for planned operations of the future underground station.

---

04.26 General Manager Feng Hui-Sheng presides over the final coordination meeting with relevant units to confirm the details of TR's Five-Year Safety Enhancement Plan.

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04.29 General Manager Feng Hui-Sheng and Deputy General Manager Chu Lai-Shun co-chair the meeting to discuss the "Derailment Report of Train No.4816 on February 12, 2024", and "Vehicle Operation Plans", along with other company safety issues.

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04.30 Signed a Memorandum of Understanding on National Information and Communication Security Joint Defense and Information Sharing Cooperation with the Ministry of Justice's Investigation Bureau.

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MOTC convenes the 7th meeting of the External Oversight Committee for TR Safety Reform.

- 
- 05.01 Minister without Portfolio Wu Tse-Cheng of the Executive Yuan convenes briefing meeting on feasibility outcomes for Shulin railway grade separation project.
- 
- 05.06 Executive Yuan Secretary-General (and incoming MOTC Minister) Lee Meng-Yen receives TR business briefing on "Railway Safety and Operations".
- 
- 05.07 Deputy Minister Hu Hsiang-Lin of the MOTC inspects the TR Eastern District Operation Office.
- 
- 05.08 National Railway Museum and TR collaborate on video documentation and preservation of physical artifacts at the Beitou Staff Training Center.
- 
- 05.10 Incoming Deputy Minister Wu Sheng-Yuan of the MOTC receives a briefing on the "Post-Earthquake Reconstruction Plan for the North-Link Line" following the April 3<sup>rd</sup> disaster.
- 
- 05.15 College students enthusiastically participate in the "North District Railway Internship Experience Camp".
- 
- 05.17 Minister Wang Kwo-Tsai of the MOTC receives a briefing on the "Progress of TR Safety Reform" during the ministry affairs meeting.
- 
- 05.22 Chairman Tu Wei inspects restoration progress at the Heren section.
- 
- 05.24 First meeting of the Safety Management Committee convened.
- 
- 05.25 TR unveils first-of-its-kind arts and music piano area at Yingge Station.
- 
- 06.02 Westbound track switch completed for Wencuobu Creek Bridge reconstruction project.
- 
- 06.04 Sixth meeting of the first Board of Directors convened.
- 
- 06.05 Deputy Minister Wu Sheng-Yuan of the MOTC convenes meeting on "Side Slope Protection Measures for High-Risk Sections Where Railways and Highways Run in Parallel".
- 
- 06.07 President Lai Ching-Te inspects Duanwu Festival transport operations at Taipei Station Joint Disaster Response Center.
- 
- Deputy Minister Wu Sheng-Yuan of the MOTC attends TR's 2024 Railway Day celebration.
- 
- Deputy Minister Wu Sheng-Yuan of the MOTC attends TR's 9th Railway Bento Festival.
- 
- 06.10 TR's 9th Railway Bento Festival concludes successfully; Tokyo Best Actress Liu Chien-Wen makes surprise appearance at exhibition.

- 
- 06.12 Deputy Minister Chen Yen-Po of the MOTC convenes meeting on “Category C Side Slope Inspection Procedures”.
- 
- 06.16 TR’s temporary Zhongli Front Station officially opens as the overnight track switch is completed.
- 
- 06.18 Nangang Marshalling Yard Urban Renewal Project breaks ground, set to become a new landmark in the eastern gateway.
- 
- 06.19 Inaugural ceremony held for R200 diesel-electric locomotive.
- 
- 06.20 Minister Lee Meng-Yen of the MOTC inspects the TR Train Operations Control Center.
- 
- 06.21 Minister Lee Meng-Yen of the MOTC inspects the TR Emergency Response Center.
- Deputy Minister Wu Sheng-Yuan of the MOTC convenes the second 2024 Meeting of the Special Building Review Committee to review the Tainan Station underground construction project application.
- 
- 06.22 Premier Cho Jung-Tai of the Executive Yuan receives a briefing from TR on the “June 21 Train No.229 Landslide Incident”.
- 
- 06.26 2024 Annual Train Timetable Adjustment.
- Annual train timetable adjustment is effective from June 26. The capacity of westbound Tze-Chiang Limited Express increased by 4.2%, and eastbound service by 3%.
- Executive Yuan convenes second “2024 Follow-Up and Tracking Meeting on TR Safety Reform Review”.
- MOTC convenes 8th meeting of the External Oversight Committee for TR Safety Reform.
- 
- 07.01 Minister Lee Meng-Yen of the MOTC attends the Legislative Yuan Transportation Committee’s inspection of transportation projects in Taichung.
- TR launches EasyWallet app for contactless fare payment.
- 
- 07.04 Deputy Minister Wu Sheng-Yuan of the MOTC convenes a meeting to review the “TR’s Slope Inspection Report Following the April 3<sup>rd</sup> Hualien Earthquake”.
- TR signs MOU with Tzu Chi Foundation for public welfare and disaster response cooperation.
- 
- 07.11 Legislative Yuan Transportation Committee inspects the “Investment Promotion Status of the “Air Phoenix City” Project.

- 
- 07.13 The 2024 Mid-Summer Formosa steam train officially launched.
- 
- 07.16 Second meeting of the Safety Management Committee convened.
- 
- 07.17 Minister Lee Meng-Yen of the MOTC attends the Legislative Yuan Transportation Committee's inspection of transportation projects in Nantou.
- 
- 07.20 Minister Lee Meng-Yen of the MOTC attends the groundbreaking ceremony for Phase II of TR's Chaozhou Workshop project.
- Inauguration ceremony held for the display of the R38 diesel-electric locomotive and Hitachi 38-ton diesel rescue crane at Chaozhou Railway Park.
- 
- 07.22 Minister without Portfolio Chen Chin-Te of the Executive Yuan convenes third "2024 Follow-Up and Tracking Meeting on TR Safety Reform Review".
- 
- 07.25 Minister Lee Meng-Yen of the MOTC attends TR's Typhoon Gaemi emergency response command center.
- 
- 07.27 Premier Cho Jung-Tai of the Executive Yuan inspects post-Typhoon Gaemi railway and highway repair efforts in Hualien.
- 
- 07.28 Minister Lee Meng-Yen of the MOTC inspects embankment repair work at Bajhang River Bridge.
- 
- 08.01 TR launches Frequent Traveler Discount Program and Digital Season Ticket Service.
- Premier Cho Jung-Tai and Minister Lee Meng-Yen of the MOTC personally visited Houbi Station to inspect service launch preparations.
- 
- 08.06 Delivery of all EMU3000 intercity electric multiple units completed.
- Seventh meeting of the first Board of Directors convened.
- 
- 08.12 Deputy Minister Wu Sheng-Yuan of the MOTC convenes meeting on "Long-Term Disaster Prevention Plan for Landslides Along the Suhua Railway and Highway Corridor".
- 
- 08.14 Minister without Portfolio Chen Chin-Te of the Executive Yuan inspects the reconstruction of the K56 section and West Xiaoqingshui Creek Bridge.
- 
- 08.15 General Manager Feng Hui-Sheng receives the "2024 Smart City Outstanding Contribution Award" in the Smart Transportation category.



- 
- 08.16** Minister Lee Meng-Yen of the MOTC inspects train operation monitoring at the TR Hualien Track Maintenance Section.
- 
- 08.20** Premier Cho Jung-Tai inspects progress of infrastructure improvements on the TR Jiji Line.
- 
- 08.21** “2024 Taiwan-Japan 32 Same-Name Stations—Youth Train Bond Continuation” project held.
- TR and Breeze Center partner to support children with Down syndrome through the Down Syndrome Foundation R.O.C.
- 
- 08.26** Deputy Minister Wu Sheng-Yuan of the MOTC convenes the third 2024 Meeting of the “Special Building Review Committee to review new construction applications for Chiayi and Chiabei Stations”.
- Executive Yuan convenes the fourth 2024 Follow-Up and Tracking Meeting on TR Safety Reform Review.
- 
- 08.30** MOTC convenes the 9th meeting of the External Oversight Committee for TR Safety Reform.
- Press conference held to launch the 2024 Traffic Safety Month.
- 
- 09.02** Minister Chen Shih-Kai of the MOTC inspects TR Taichung Station.
- 
- 09.05** Launch of the NT\$2,300 Commuter Monthly Pass (Yilan–Taipei Plan).
- 
- 09.09** Deputy Minister Wu Sheng-Yuan of the MOTC convenes a meeting for a “Review Assessment Report on C+ Category Side Slopes and Debris-Flow-Prone River Crossings Along the TR Yilan–Hualien–Taitung Route”.
- 
- 09.10** Minister Chen Shih-Kai of the MOTC inspects the restoration progress of the TR Chongde section on the North-Link Line.
- Eighth meeting of the first Board of Directors convened.
- 
- 09.12** Deputy Minister Wu Sheng-Yuan and Deputy Minister Chen Yen-Po of the MOTC co-chair a meeting to discuss “Findings from Category C Side Slope Safety Inspections for Railways and Highways”.
- 
- 09.13** Minister Chen Shih-kai Inspects Mid-Autumn Festival transportation operations.
- 
- 09.23** Delegation of U.S. labor union leaders visits TR.
- 
- 09.27** MOTC conducts on-site verification of TR’s 2024 operational overview.
- 
- 09.28** Premier Cho Jung-Tai inspects “Post-Earthquake Emergency Repairs Following the April 3<sup>rd</sup> Disaster”.

09.30	Launch ceremony held for the E500 electric locomotive.
10.04	TR participates for the first time in the "Net-Zero Taiwan".
10.07	Deputy Magistrate Chiu Li-Li of Miaoli County visits Deputy Minister Wu Sheng-Yuan of the MOTC to discuss the proposed station at Cape of Good Hope.
10.13	Taiwan's only mobile museum—Presidential Saloon Car launches at Hualien Station.  Service to operate every Sunday in October between Hualien and Fuli, and in November between Taitung and Ruisui.
10.15	Third meeting of the Safety Management Committee convened.
10.17	Deputy Minister Wu Sheng-Yuan of the MOTC attends a meeting with Legislator Yang Chiung-Ying to discuss the Old Mountain Line reopening and Mountain-Coast Line planning.
10.19	TR launches a dedicated webpage for tourist trains on the official website.
10.21	Opening ceremony held for the 2024 Taiwan Island-Round Science Education Train.  Deputy Minister Wu Sheng-Yuan of the MOTC convenes a meeting on "Reconstruction and Mitigation Measures for Side Slope Disasters Along the TR Suhua Section.
10.22	Ninth meeting of the first Board of Directors convened.
10.25	Japan's Ichibata Group visits TR to strengthen Taiwan-Japan railway friendship.
10.26	TR signs a Memorandum of Understanding with the National Railway Museum Preparatory Office.
10.30	TR Chairman Tu Wei delivers a business report at the 1st Representatives Assembly of the 16th Taiwan Railway Enterprise Union Congress.
11.01	Minister Chen Shih-Kai of the MOTC visits the TR Emergency Response Center to inspect post-Typhoon Kong-rey conditions.
11.01-04	TR debuts at the ITF Taipei International Travel Fair.
11.04-10	First Rail Safety Week held; all personnel engage in enhanced safety preparedness and inspections.
11.05	Deputy Minister Wu Sheng-Yuan of the MOTC attends Sea Breeze train meet-and-greet event.

11.07	Deputy Minister Wu Sheng-Yuan of the MOTC receives a briefing from TR on “Progress and Implementation of Post-April 3rd Earthquake Recovery Work”.
11.08	TR’s Pingxi Line and Hiroshima Electric Railway Co., Ltd. of Japan established a sister railway partnership.
11.12	Fifth 2024 Follow-Up and Tracking Meeting on TR Safety Reform Review convened.
11.13	Deputy Minister Wu Sheng-Yuan of the MOTC hosts the TR stakeholder exchange forum.
11.14	Minister Chen Shih-Kai of the MOTC convenes the 1,934th Ministerial Affairs Meeting to hear the briefing on “Post-April 3rd Earthquake Emergency Repairs and Reconstruction of the North-Link Line”.
11.15	“Light Up Wishes – STARRY NIGHT Dream Night” public charity lighting event held.
11.18-21	Annual train operation competition held to enhance train drivers’ skills.
11.19	Minister Chen Shih-Kai of the MOTC inspects the progress of the West Xiaoqingshui Creek Bridge project.
11.29	TR and Japan’s Seibu Railway Co., Ltd. launch bilateral talent exchange program.
11.30	Minister Chen Shih-Kai of the MOTC attends the inauguration ceremony for TR’s temporary Fengming Station.  Steam train special departs to celebrate the “Centennial of Full Operation on the Yilan Line”.
12.01	TR collaborates with Lanyang Museum to host the Yilan Line centennial special exhibition.
12.03	Fourth meeting of the Safety Management Committee convened.
12.06-07	Held the 2024 TR Executive Strategy Retreat.
12.07	TR and KATO launch a new era in railway modeling: Dreamland Grand Opening.
12.09	“Future Railway Tourism Strategy Blueprint Forum” held.  Sanriku Railway Company of Japan visits TR to promote mutual exchange and share messages of love and gratitude.

- 
- 12.10 The Executive Yuan convenes a meeting “To Review Draft Subsidy Regulations for TR Operating Losses”.
- 
- 12.11 Deputy Minister Wu Sheng-Yuan of the MOTC inspects the progress of “TR’s West Xiaoqingshui Creek Bridge Emergency Restoration Project”.
- 
- 12.13 MOTC Chief Secretary Huang Ho-Ting leads the team to host “2024 MOTC Transportation Labor Union Exchange Workshop” at TR.
- 
- The Representative of the Swedish Office visits TR to exchange ideas on green transformation.
- 
- 12.14-15 Westbound track switch completed for main Yilan Line improvement project (Third Shuangxi and Xin She Bridges reconstruction).
- 
- 12.17 Tenth meeting of the first Board of Directors convened.
- 
- 12.18 Second 2024 meeting of the “TR Aesthetic Design Advisory Committee” held.
- 
- 12.21 Premier Cho Jung-Tai inspects “Emergency Restoration of TR’s West Xiaoqingshui Creek Bridge”.
- 
- Rail operation safety review meeting held to improve safety management system.
- 
- 12.24 Third 2024 meeting of the “Taiwan Railway Smart Rail Development Advisory Committee” held.

# Taiwan Railways Annual Report 2024

## Editorial Committee Member

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Vice Chairperson | Feng Hui-Sheng

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