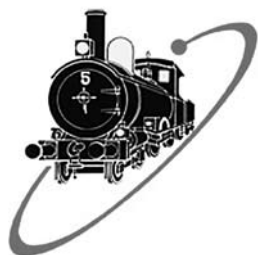


Tobu Museum of Transport and Culture

Kyoko Jinno

The Tobu Museum of Transport and Culture (the Museum) opened on 20 May 1989 as part of projects to commemorate the 90th anniversary of Tobu Railway. Now in its twenty-second year, the Museum is run by *Tobu Tetsudo Kyojokai*, a foundation of Tobu Railway, a private railway established in 1897. The company's network spans Tokyo and the four prefectures of Chiba, Saitama, Tochigi, and Gunma with 463.3 km of track and 205 stations; it carries an average of 2.37 million people a day (fiscal 2010).

The Museum is in Tokyo's Sumida Ward where Tobu Railway's head office is located, close to where the company first started. It is under the elevated tracks of the Tobu Isesaki Line Higashi-Mukojima Station. The grounds cover 4688 m² and the building floor area is 3983 m², including a mezzanine connected to the Museum hall



Tobu Museum Logo
(Tobu Museum)

by a passageway. The Museum was renovated in 2009 to celebrate its 20th anniversary; about 120,000 people visit annually, rising to about 142,000 in 2010 after renovation. The Museum celebrated its two-millionth visitor in October 2009.

Museum Concept

The Museum was established mainly to give something back to passengers using Tobu Railway. It also serves as a social studies venue that helps deepen children's knowledge about transportation. The Museum concept of 'participate, learn, and play' remains unchanged since its opening. In accordance with this concept, the Museum exhibits show the past, present, and future of Tobu Railway.

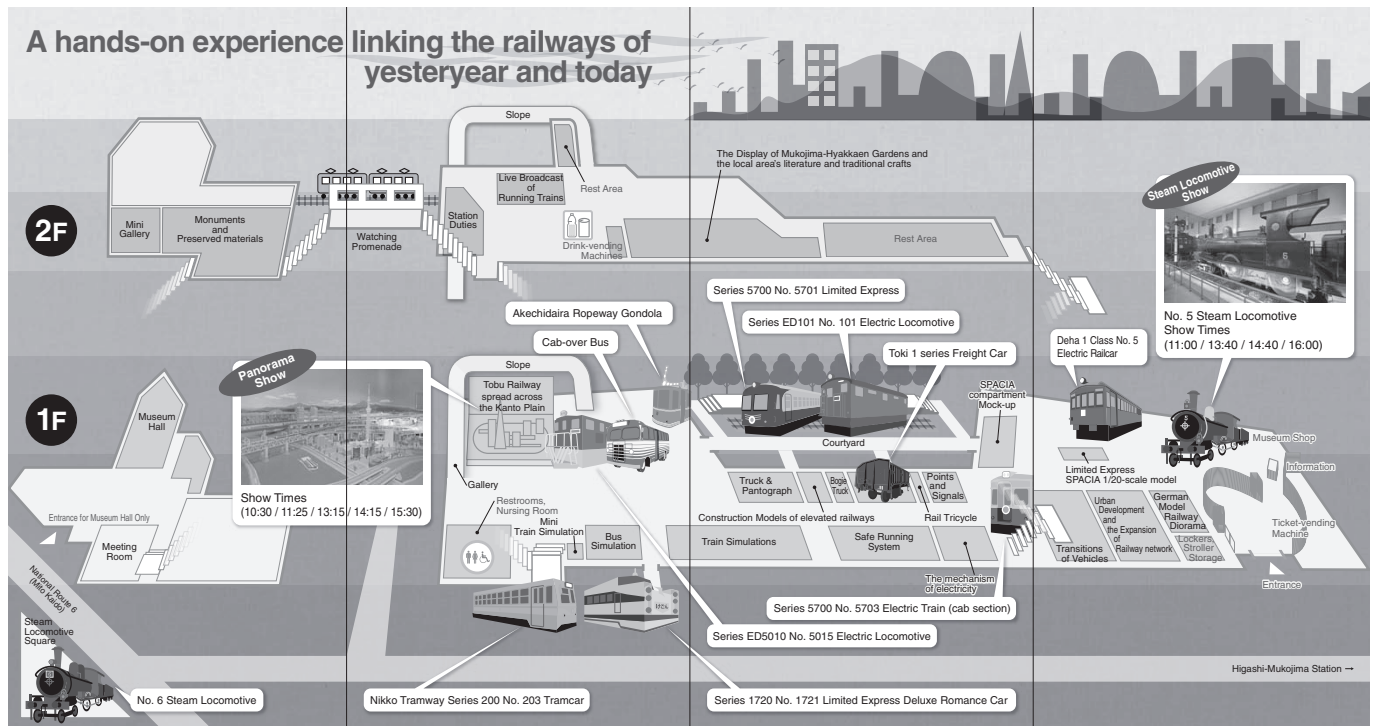
Overview of Displayed Rolling Stock

The Museum currently exhibits 12 preserved pieces of rolling stock (some cutaways). They are valuable parts



Tobu Museum entrance

(Tobu Museum)



Back of Tobu Museum leaflet

(Tobu Museum)

of Japan's industrial heritage and their preservation is a mission of transportation museums. Therefore, we have been making a major effort to collect and preserve rolling stock. In the early days, the Museum had 6 pieces: two steam locomotives (SLs) that had hauled trains when Tobu Railway first started, the company's first electric train, an electric locomotive, a bus, and an articulated tram. Two limited express carriages (one cutaway) and ropeway gondolas were displayed, after overcoming some restrictions on the ability to exhibit in the grounds. The long-sought-after first electric locomotive of Tobu Railway—the ED10 No. 101—along with a Series 5700 *Deluxe Romance Car* limited express carriage, and a *Toki 1* open wagon are preserved and exhibited. The details are described below.

No. 5 Steam Locomotive

The No. 5 SL is one of 12 ordered from the builder Beyer, Peacock & Company of Great Britain in 1890 at the start of Tobu Railway. Numbers 1 and 2 were tank locomotives and Nos. 3 to 12 were tender locomotives. Number 5 was the first SL to haul passenger carriages and freight wagons at the company's start. Beyer, Peacock & Company SLs



No. 5 steam locomotive restored to condition at delivery from Beyer, Peacock & Company in 1890
(Tobu Museum)

were known as some of the best locomotives of their day as exemplified by their curved nameplates attached to the first driving wheel splasher. Locomotive No. 5 was used later mainly for freight transport and was retired in 1965 and preserved when freight transport switched mainly to electric locomotives in the late 1950s. For preservation at the Museum, it was restored to the beautiful British style used at import. The Museum's SL show has an excitement and reality not seen elsewhere, and features the driver climbing into the cab, sounding the whistle and turning the wheels.



No. 6 SL in retirement condition outside Tobu Museum

(Tobu Museum)



Deha 1 Class No. 5 electric railcar, restored for display

(Tobu Museum)

No. 6 Steam Locomotive

The No. 6 SL is the same model as the No. 5 and they were imported together. It is preserved and displayed outdoors as it looked at retirement in 1965 after undergoing various modifications.

Deha 1 Class No. 5 Electric Railcar

The *Deha 1* No. 5 electric railcar, built in 1924 by the Nippon Sharyo Tokyo workshop, was one of the first 8 electric

railcars of Tobu Railway. The electrical components are by Westinghouse and the bogies are by J. G. Brill & Company. The carriage body is wood with a clerestory roof and five windows at the front, driver's cabs at both ends, drop side windows, and three passenger doors on each side. At the end of its service life, it was used as a factory shunting carriage until retirement in 1981. The train has been restored for display at the Museum. There are very few wooden trains preserved in Japan, making it an important exhibit.



Series ED5010 No. 5015 electric locomotive

(Tobu Museum)



Cab-over bus

(Tobu Museum)



Series 200 No. 203 tramcar of Nikko Tramway

(Tobu Museum)

Cab-over Bus

The Museum's cab-over bus was built by Fuji Heavy Industries in 1951. Tobu Railway started bus operations in 1933 through an affiliate. Although the shape is very like modern buses, part of the engine is in the passenger compartment next to the driver's seat and enclosed by a cover. This caused problems of noise, smell, and high temperature. On the other hand, it had advantages, such as a better view compared to cab-behind-engine buses and a wider passenger compartment for carrying more people. The wooden floor, semaphore-type signals, and bullet-shaped side lamps have a very nostalgic feel. It is a typical example of some of the last petrol-engine, fixed-route buses.

Series ED5010 No. 5015 Electric Locomotive

The Series ED5010 No. 5015 electric locomotive was built by Hitachi in 1959. Tobu Railway increased its stock of such locomotives in line with the electrification of freight transport, and the greatest number of the company's 43 ELs was the 14 units of the ED5010, making it the standard for Tobu Railway. Number 5015 served on the Tojo Line until 1984, hauling cement, gravel, and crushed stone. Tobu Railway stopped its freight haulage business in 2003.

Series 200 No. 203 Tramcar of Nikko Tramway

The Series 200 No. 203 tramcar operated on the Nikko Tramway line that opened in the Nikko area in 1910. The line was built to carry passengers and freight for Nikko Copper



Series 1720 No. 1721 Deluxe Romance Car (Tobu Museum)



Series ED101 No. 101 electric locomotive built by English Electric (Tobu Museum)



Series 5700 No. 5703 electric train cab (Tobu Museum)

Refinery. In the 1930s, Tobu Railway established a major tourist route consisting of the Tobu Nikko Line, Nikko Tramway, cable cars, and buses, attracting many tourists. With the postwar increase in tourism, the Series 200 was built in 1954 at the Tokyo workshop of Kisha Seizo. The two-car, three-articulated bogie train worked well for sightseeing, and it was built to handle the increase in transport. It was also used by local residents to get around, but Nikko Tramway eventually closed in 1968 after the explosive growth in personal motor transport and all the trams were retired. A few were transferred to Okayama Electric Tramway where they continued in service and No. 203 was preserved from Okayama.

Series 1720 No. 1721 Limited Express Deluxe Romance Car

The Series 1720 No. 1721 limited express carriage was built in 1960 by Naniwa Koki. It was an all-electric train consisting of lightweight limited express cars with excellent interior and ride comfort. The lead car had a nose shape like that of an automobile bonnet. It had air-conditioning in all cars, a buffet, and Japan's first salon car. It served in tourist transport to Nikko and Kinugawa for about 30 years, passing the torch to the new *Spacia* limited express inaugurated in 1990, and retired in 1991. Due to the lack of space, only the front half of the lead carriage is exhibited.

Cab of Series 5700 No. 5703 Electric Train

The Series 5700 No. 5703 electric train was built in 1953 by Naniwa Koki to become the first postwar limited express train, and features a vestibuled semi-streamlined form. With the arrival of new limited express trains, it was demoted to an ordinary express and used for extra rapid service runs and group transport. After retiring in 1991, the cab was preserved by the manufacturer before transfer to the Museum.

Series ED101 No. 101 Electric Locomotive

The Series ED101 No. 101 electric locomotive was built in 1928 by English Electric and became Tobu Railway's first EL in 1930. After serving on Tobu Railway, it was transferred in 1972 to Ohmi Railway in Shiga Prefecture where it served until 1986. After retirement, it was preserved and displayed at the Ohmi Railway Depot until eventually being returned to the Museum and restored for display. The compressor has been changed to a General Electric CP29, but that also is a valuable specimen today. The electric cam contacting mechanism of the controller is probably the oldest remaining example. The headlights were made by Golden Globe of



Series 5700 No. 5701 limited express

(Tobu Museum)



Akechidaira Ropeway gondola

(Tobu Museum)



Toki 1 freight wagon

(Tobu Museum)

the USA. Unfortunately, the pantographs are not the original GE type, having been changed with one each from Ohmi Railway and Jomo Electric Railroad.

Series 5700 No. 5701 Limited Express

The Series 5700 No. 5701 electric train is the first postwar limited express built in 1951 by the Tokyo workshop of Kisha Seizo. The 5700-5701 trainset built first was called the 'A' trainset. It had a modified Shonan-type streamline form with two windows at the front that was popular at the time, and it sported a cat-whisker like plate, earning it the 'cat whisker' nickname. The front end was later changed to a gangway door due to the operational inconvenience of the original form and the train was demoted to an ordinary express in 1956. Towards the end of its service, it was used for extra rapid service runs and group transport before being retired in 1991. It has been restored to its original form with a nostalgic look that has proved popular with railway fans.

Toki 1 Freight Wagon

The *Toki 1* open wagon was built in 1967. There were more of these wagons (222 in total) in service on Tobu Railway than any other type. After being retired, the 13-m long wagon was cut to about a third of its original length and used at the company's Sugito factory for weight measurement. The car is on display carrying equipment for derailment recovery that it was once fitted with. This is a one-of-a-kind wagon with vestiges of a freight wagon.

Akechidaira Ropeway Gondola

The Akechidaira Ropeway gondola was built in 1950 by Kawasaki Heavy Industries Rolling Stock Company. It was used on a ropeway opened in 1933 by Tobu Railway in Nikko. That ropeway is now run by an affiliate and is still a popular spot today thanks to its great view of nature around Nikko.



Series 50050 simulator

(Tobu Museum)



Train observation promenade

(Tobu Museum)



Tobu Railway diorama

(Tobu Museum)



History of rolling stock fleet

(Tobu Museum)



Tobu Museum with Tokyo Sky Tree under construction in background

(Tobu Museum)

Hands-on Exhibits

The Museum has very popular simulator mock-ups of three trains and one bus. The three train simulator videos were changed 2 years ago to feature four scenes that change occasionally. One of the trains simulates the Series 50050 with a one-handle driver's cab. It can also be transformed for use in driver training. The other two feature a popular Series 10030 railcar with driver and passenger cabins, as well as a 202-inch monitor, the largest in Japan.

There is also an O-scale model diorama with four controllers to experience driving model trains. A separate panoramic display features three HO-scale model controllers.

Attractions

The spectacular SL show features a dropping semaphore signal, train whistle, and rolling wheels of a steam locomotive.

The panorama show features Tobu Railway's stations, towns, and sightseeing facilities in a 14 × 7 m diorama. 150 N-scale model trains run through the diorama to introduce Tobu Railway's lines and services. There is even a model of the Tokyo Sky Tree which will open on 22 May 2012, near Tobu Museum as the world's tallest freestanding broadcast tower.

Other Exhibits

The 'Expansion of the Railway Network and History of Rolling Stock Fleet' corner exhibits photos, nameplates, railway models and more. It also features touchpanel monitors to play and learn, which are popular with children. The one-of-a-kind 'Train Observation Promenade' makes use of the Museum's location under an elevated railway to show the bogies of trains stopping at the station. Express and limited express trains thundering by close up is a real thrill for many visitors.

The Mukojima satellite corner introduces the area where the Tobu Museum is situated, well known for its famous sites and places associated with literature. In particular, it uses photographs and pictures of the Mukojima-Hyakkaen Gardens from the Edo era (1603–1867), popular with plant aficionados, litterateurs related to Mukojima, and the town's history. Thanks to the cooperation of the Sumida Ward Traditional Crafts Preservation Association, *mikoshi* portable shrines, dolls, ornamental hairpins, and other traditional crafts are exhibited.

Special Exhibits and Events

The Museum holds special events on a variety of themes every year that are visited by many people. Themes not covered by permanent exhibits are chosen to deepen knowledge of and promote interest in railways as well as to tell the history of railways that went hand-in-hand with people's lives. Through these projects, we aim to give people a greater connection with railways. Special exhibits so far have covered the transition of rolling stock and limited express trains of Tobu Railway, the history of current and closed lines, and other topics. Events for children are also held during school vacations with content that is participatory, hands-on, dynamic, and fun.

Archives

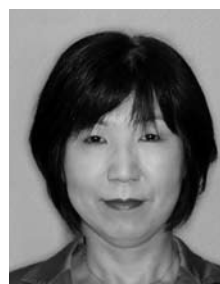
The Archives mainly preserve materials related to Tobu Railway. Materials include data on tramcars and cable cars that ran in Ikaho and Nikko as well as ropeways and other means of transport that Tobu Railway no longer operates. Materials on bus operations that were spun off in 2002 are

also preserved. These take a variety of forms and include actual cars as well as machinery and car equipment, diagrams, timetables, documents, tickets, posters, commemorative items, books, and photographs.

Moreover, train carriages and other materials are classified and preserved as commemorative items, semi-commemorative items, and preserved items according to their importance. This is done in accordance with the company's rules set down in 1963 on protecting commemorative items 'to preserve company-run facilities and other items commemorating the history of the growth of the company, keep them as company history, provide materials to later generations of employees, and contribute to the cultural enlightenment of regions along company lines.' Some of these materials are preserved or exhibited by the Museum.

Summary

The Museum is continuing to pursue the essence of its founding concept of 'participate, learn, and play'. In addition to the core visitors of families and railway fans, we have recently seen an increase in the numbers of visits by middle-aged and elderly people. We hope to be a museum that is loved by a broad range of people, from children to adults, from every walk of life. ■



Kyoko Jinno

Ms Jinno is a curator and Assistant Manager of the Exhibition Management Division at Tobu Museum of Transport & Culture.