

Easy-to-Access Rail—JR East's Initiatives

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Introduction

East Japan Railway Company (JR East) is continuing to develop new, high-quality services that are safe, on time, and easy to access. As called for by our new medium-term business plan, *New Frontier 2008—New Creation and Evolution*, our services also take our users' perspectives into account. One major goal is creating new value for customers; we are introducing new carriages to make this goal reality, as well as strengthening the role of our stations as transportation nodes under the slogan, 'Innovation in Stations.' This will bring new developments and improvements to stations such as higher-performance automatic ticket gates, and to station sites as a whole. These advances promote intermodal transport and are designed to satisfy the needs of Japan's aging population, making it easier for more people to travel by rail. By making our rail system easier to access, we are maximizing value for customers.

This article describes some steps JR East has taken in the last few years to make services accessible to older people as we move towards barrier-free, universal-design stations and passenger carriages.

Aims and Situation of Barrier-free Facilities

JR East is continuously improving its stations, carriages and services to make it easier for everyone, including the elderly, physically disabled, and families to travel by rail. These efforts are geared towards offering barrier-free facilities and seamless rail services that meet the needs of all users. Our efforts are of course complemented by collaboration with organizations promoting barrier-free technical developments and services.

Our transportation environment includes basic universal design (UD), promoting convenience and ease of access, which

Table 1 JR East Barrier-free Facilities (31 March 2006)

Lifts (shinkansen stations)	102 elevators at 34 stations
Lifts (narrow-gauge stations)	602 elevators at 272 stations
Escalators (shinkansen stations)	178 escalators at 35 stations
Escalators (narrow-gauge stations)	1311 escalators at 304 stations
Easy access station toilets	At 354 stations
Wheelchair ticket gates	At 870 stations
Stepless ramps	At 260 stations
Wheelchair stair lifts (Escal., etc.)	At 35 stations



Glass lift at Shinjuku Station

(JR East)



Double escalators at Shinjuku Station

(JR East)

is being incorporated as we upgrade or construct station buildings and carriages. We also collaborate with local governments on issues such as escalators and lifts to ensure that our stations will meet the provisions of the Barrier-Free Transportation Law by 2010 (Table 1).

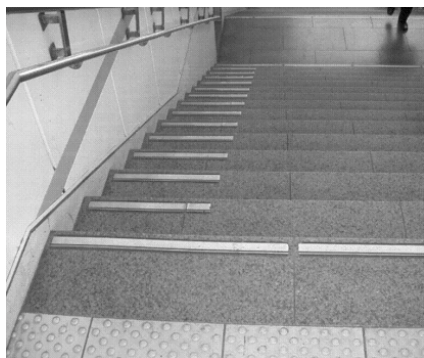
Using Passengers' Comments to Improve Services

To get a better understanding of problems confronting our users, we ask for their comments, either directly at station counters (our most important asset) or online. During FY2005, we received about a 250,000 comments to help plan solutions to problems. We have also conducted customer satisfaction surveys since FY1997 to quantify satisfaction levels, something that cannot be obtained just from comments of individuals.

Targeting More Comfortable and Convenient Services

Stations

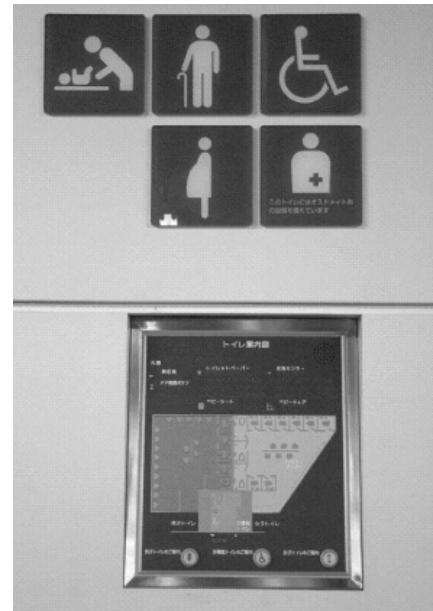
Since FY1998, escalators have been an essential part of improving services and we have waged a vigorous campaign to install them in all stations within about 50 km of central Tokyo. The 2000 Barrier-Free Transportation Law, which requires stations serving 5000 or more passengers per day as well as stations used extensively by the elderly and



Stair markings (JR East)



Easy access station toilet (JR East)



Sign and Braille map for toilet (JR East)

physically disabled to incorporate barrier-free principles, prompted us to classify lifts as basic barrier-free devices for less-mobile passengers. We are moving ahead with planned installation of lifts too and about 60% of our 497 stations in this category had lifts and other

mobility aids by late 2005. We are continuing this work to eliminate all level differences by FY2010 and are also moving forward with installation of escalators—which all users find convenient—in about 300 stations used by 10,000 or more passengers each day



Full-colour LED departure board at Shinjuku Station (narrow-gauge line) (JR East)



Full-colour LED departure board at Tokyo Station (shinkansen)

(JR East)



Ticket gate sign at Shinjuku Station

(JR East)



Ticket gate sign at Hakonegasaki Station on Hachiko Line

(JR East)

and where floor level differences are at least 5 m.

Soon after JR East was formed in 1987, the company instigated a policy of improvements to station toilets, but the Barrier-Free Transportation Law stimulated installation of public toilets boasting features, such as diapering tables, luggage shelves, handrails, and facilities for ostomates.

Passenger information is essential to ensure safety and its presentation must meet user needs. Therefore, we are continuing installation of Braille fare tables and maps, sculpted floor guides, and voice-guidance devices for visually impaired users. As another example, passengers have told us that some stairs are not conspicuous enough, so we developed more durable stair markings based on advice from an organization campaigning for safer stairs.

Whenever we construct or upgrade a JR East station, we change the design to make it more accessible and easier to navigate for all users. When introducing new station infrastructure and facilities, the extra functions must be squeezed into limited space, so the priority is to ensure that users can easily navigate their way within this infrastructure while using the facilities, because infrastructure services and human services are both essential components of station services.

Major connecting stations in Greater Tokyo serve many different lines, making it difficult for visitors to understand departure times and platform locations. As a result, we have decided to make transfers easier by using full-colour LED information panels. Some were installed at the South and New South exits of Shinjuku Station in 2004. In December 2005, when the shinkansen lines at Tokyo Station were upgraded and the new train schedules were introduced, the lines (to five different destinations) were identified using unique colours in conjunction with larger letters and brighter signs.

JR East is also introducing easy-to-understand signs to make ticket gates easier to find and platform stairs easier to see. JR East signs are colour-coded in green (the corporate colour) for boarding and yellow for exiting, facilitating navigation through complex stations. Signs to other private lines use the corporate color for that line.

Service managers at about 30 JR East stations, make rounds to assist aged passengers and people not accustomed to rail travel by providing information and guidance. In addition, service facilitators (mainly station staff) are trained to provide special care to users who could otherwise not comfortably access rail services.

Carriages

Even before the Barrier-free Transportation Law, some JR East carriages had facilities for wheelchair users and the visually and hearing impaired. Some shinkansen and limited express carriages have wheelchair stations where users can lock the wheelchairs and sit in their own space. Such carriages also have toilets with wide doors, low washbasins, plenty of floor space, handrails, etc., all designed with wheelchair users in mind.

Shinkansen and limited express passenger carriages introduced in the last few years have doors with an announcement when opening or closing. Series 209 and later carriages for commuter and suburban trains have a chime indicating which doors are opening as well as LED signs providing information visually for the hearing impaired. Shinkansen carriages have Braille signs, and six narrow-gauge lines have Braille signs to indicate carriage numbers and door locations. So-called 'silver seats' for the elderly on JR East carriages saw their name changed to 'priority seats' in May 1997 to reflect the fact that they are for a range of less mobile passengers, like passengers with small children, pregnant women, older people, etc. Although the number of priority seats



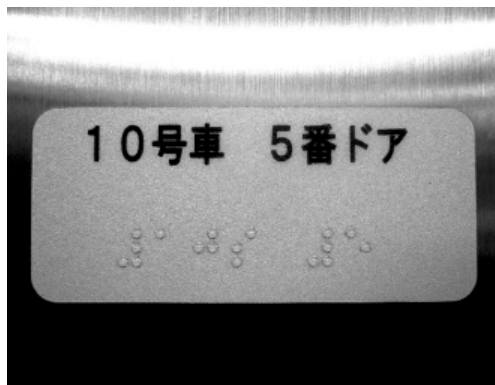
Concourse sign at Shinjuku Station

(JR East)

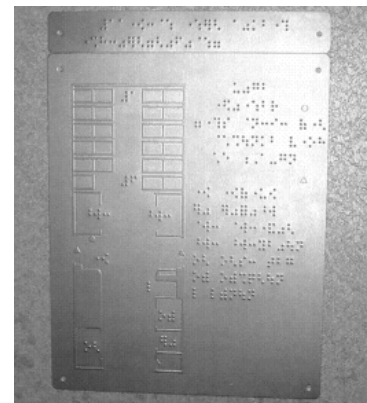


Platform sign at Shinjuku Station

(JR East)



Onboard Japanese and Braille sign (Door 5 of Carriage 10 of train on narrow-gauge line) (JR East)

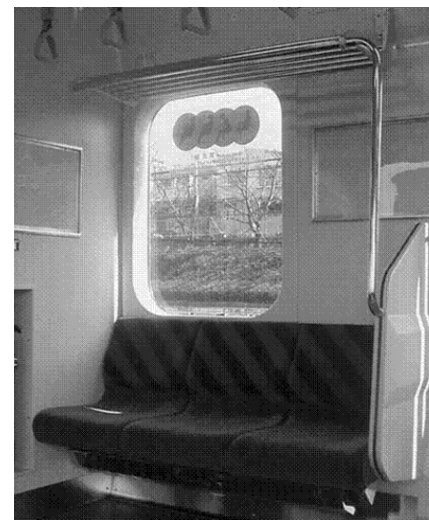


Braille map on shinkansen (JR East)



Onboard LCD panels (conventional line)

(JR East)



Priority seating

(JR East)

has been gradually doubled up to 2003, we have received comments that our trains should have more priority seats that should be better marked.

Information

To help users plan their journeys in advance, our website at <http://www.jreast.co.jp> offers information

on JR East services (including station facilities, departure times, barrier-free facilities, and how to obtain more information). We have also published the brochure, *A Guide to JR East's Barrier-Free Station Facilities*, outlining our barrier-free facilities, including station escalators and elevators, and restrooms with aids.

our diversifying passenger base with easy-to-use and easy-to-understand rail services based on our clear understanding of the links between railway hardware and services. ■



Onboard displays (route, present location, etc.)

(JR East)

Conclusion

I have outlined some of the barrier-free and UD initiatives JR East been taking in the last few years but this is still only the beginning. We intend to continue upgrading and innovating our services to meet the needs of Japan's aging population and the changing needs of our passengers and will endeavour to provide



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