

Key Measures and Capital Investment in FY2015
(Year ending March 31, 2016)

While giving priority to ensuring that our railway business provides safe and reliable transportation, we will steadily promote earthquake countermeasures, such as measures to counter derailment and deviation of the Tokaido Shinkansen, large-scale renovations of the civil engineering structures, introduction of the N700A and modification of Series N700 rolling stock, and replacement of diesel trains, etc.

Our Chuo Shinkansen project which employs Superconducting Maglev technology shift from the planning phase into the construction phase. We will steadily move ahead the construction as soon as preparations have completed, such as the surveying, design and land acquisition, while giving serious consideration to safety, the environment and coordination with local communities.

At the same time, we will steadily move forward with the JR Gate Tower project in Nagoya Station and overseas projects that involve high-speed railway and our Superconducting Maglev system.

In order to steadily move forward to address various challenges, we shall continuously enhance management vitality by strengthening earning capability, improving technological competency, and pursuing efficiency and cost reductions at all levels including capital investment.

I. Key measures (refer to the attachment)

- Ensuring Safe and Reliable Transportation
- Enhancing Tokaido Shinkansen Transportation Services
- Enhancing Conventional Line Transportation Services
- Promoting the Chuo Shinkansen Project Employing the Superconducting Maglev System
- Refining Superconducting Maglev System Technology and Reducing Costs
- Enhancing Marketing Initiatives
- Strengthening Technological Capability, Pursuing Overseas Projects and Preserving the Global Environment
- Developing Affiliated Businesses

II. Capital Investments

Consolidated: 366.0 billion yen

Non-consolidated: 335.0 billion yen*

*The amount of capital investment except for the Chuo Shinkansen Project will be 242 billion yen (non-consolidated) of which 183 billion yen will be spent on safety-related investments.

Ensuring Safe and Reliable Transportation

(Capital Investment : 144 billion yen)

We will give priority to ensuring safe and reliable transportation, which is the foundation of the railway business.

<Equipment upgrades>

- Steadily moving ahead **large-scale renovation** to preserve and improve the soundness of civil engineering structures along the Tokaido Shinkansen in constant pursuit of cost reduction.
- **Upgrading equipment such as ATC systems and contact lines** on the Tokaido Shinkansen to further ensure safety, while introducing the latest technologies and reducing costs for upgrading and maintenance.
- Continuing on promoting the improvement **of the operation control system for the Shizuoka district on the Tokaido Line**, and the upgrading of level-crossing safety devices for conventional lines.

<Natural disaster countermeasures>

- Continuing **with measures to counter derailment and deviation** of the Tokaido Shinkansen and **the rebuilding of the Hamamatsu Workshop**.
- Continuing with making elevated track columns along conventional lines **quake-resistant, working on quake-resistant reinforcement work on the Nagoya Workshop and station buildings**, and introducing countermeasures for falling rocks.
- **Implementing practical training** in order to respond to various foreseen circumstances caused by natural disasters, such as earthquakes.



Large-Scale Renovation
(Installing rock bolts in inner wall of tunnel)



Derailment Prevention Guards



Tsunami Evacuation Training

[Note] - Large-scale renovation of the Shinkansen: 35 billion yen (FY2015)
- Derailment and deviation countermeasure for the Tokaido Shinkansen:
Derailment prevention guards along approx. 70km (FY2015)

- Shinkansen ATC system improvements: Total cost: 54.6 billion yen
- Quake-resistant renovations of the Nagoya Workshop: To be completed in March 2022

Developing Tokaido Shinkansen Transportation Services

(Capital Investment: 36 billion yen)

We will continue to enhance transportation services by flexibly setting train service based on the “10 Nozomi Timetable” and improving running speed.

- Continuing to flexibly set train service on “10 Nozomi Timetable,” in which at most ten Nozomi trains per hour can depart from the first station, to respond to demand especially during crowded hours.
- Improving convenience with the **maximum speed increase to 285km/h** implemented in March 2015, and enhancing the ability to resume normal operation when the timetable is disrupted by accidents.
- Promoting the introduction of **N700A**, and **completing modifications of Series N700**.
- Promoting **the installation of new movable platform fences** and begin to use them at Nagoya and Kyoto Stations, while also gradually **upgrading automatic ticket gates**.



Maximum Speed Increased to 285km/h



N700A



New Movable Platform Fences
(Nagoya Station)

[Note] - Introducing 31 N700A sets (6 sets in FY2015)
- Modifying Series N700: 80 sets completed (11 sets in FY2015)

- New movable platform fences:
Use of platforms #16 and #17 at Nagoya Station to successively go into use by the end of March 2016
Use of platforms #13 and #14 at Kyoto Station to successively go into use by the end of March 2016

Enhancing Conventional Line Transportation Services

(Capital Investment: 8 billion yen)

We will continue to develop transportation services through, for example, the steady introduction of new diesel rail cars.

- Establishing a more convenient transportation by efficiently using rolling stock with the **electrification of the Taketoyo Line** in March 2015.
- Continuing to newly manufacture **the Series Ki-Ha 25 diesel railcar** and gradually put it into service on the Kisei Line and Sangū Line.
- Completing repair of **the Meishō Line** that was damaged in October 2009 (between Ieki Station and Ise-okitsu Station), simultaneously with the erosion and flood control work done by Prefecture and the city, and then **reopening the entire line**.
- Continuously promoting installation of **barrier-free facilities** at stations, including elevators, multifunction toilets, and braille blocks that have lines indicating the platform edge side.



Completed Electrification of the Taketoyo Line



Series Ki-Ha 25 Diesel Railcar



Meishō Line Repair Work

[Note] Replacement with new diesel cars:
- Manufacturing 36 "Series Ki-Ha 25" diesel cars (FY2015)

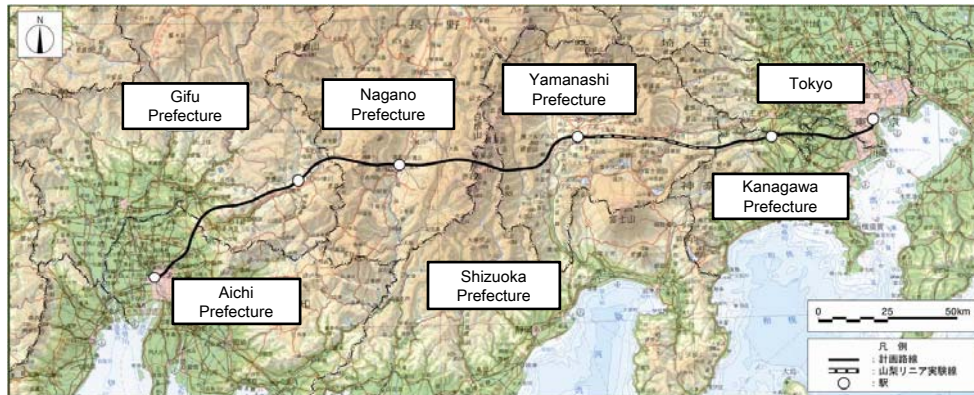
Installation of elevators and multifunction toilets:
- 4 elevators for 2 stations, multifunction toilets for 2 stations (FY2015)
*Especially for the newly elevated stations, 2 elevators will be installed in 1 station, and 1 multifunction toilet will be installed in 1 station.
- Replacement of braille blocks: 7 stations (FY2015)

Promoting the Chuo Shinkansen Project Employing the Superconducting Maglev System

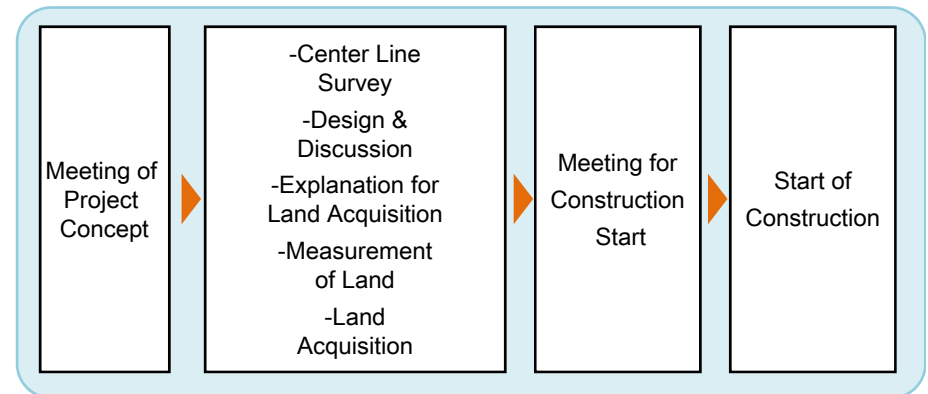
(Capital Investment: 93 billion yen)

Moving into the next step in the Superconducting Maglev System Chuo Shinkansen project as we shift from the planning phase into the construction phase, we will proceed to constructions while giving serious consideration to safety, the environment, and coordination with local communities.

- While keeping in close coordination with local communities, we will move forward in a planned manner with the surveying, design, and land acquisition required in advance to start the construction implementation plan of the Chuo Shinkansen between Shinagawa and Nagoya (part 1), which was approved by the Minister of Land, Infrastructure and Transportation in October 2014.
- Steadily moving ahead the construction of both the Shinagawa and Nagoya terminals as soon as preparations have completed, which will require a long time to build, while giving serious consideration to safety and the environment.
- Making efforts to construct an advanced and efficient operation/maintenance system for the Chuo Shinkansen.



The Chuo Shinkansen Route (between Tokyo and Nagoya)



Flow of Procedures Leading to Construction Commencement

[Note] - October 17, 2014: Approval of the construction implementation plan of the Chuo Shinkansen between Shinagawa and Nagoya (part 1)
- December 17, 2014: Safety invocation ceremony held prior to beginning construction on Shinagawa and Nagoya stations

Refining Superconducting Maglev System Technology and Reducing Costs

(Capital Investment: 3 billion yen)

We will continue to refine the Superconducting Maglev System technology and reduce costs.

- Taking turns using two sets of Series L0 with rolling stock and facilities upgraded to revenue service specifications in order to implement long-distance running tests at the Yamanashi Maglev Test Line.
- Continuing to examine how to establish a maintenance system that is suitable for commercial operation while also refining Superconducting Maglev System technology and making efforts to reduce costs associated with revenue service line construction, operation, and maintenance.
- Continuing to offer Superconducting Maglev System test rides in a planned manner.



Series L0



Superconducting Maglev System Test Ride

[Note] Series L0: all 14 cars introduced as of the end of November 2014
(4 leading cars, 10 middle cars)

Superconducting Maglev System test rides:
- 1st time: Offered for eight days during November and December 2014
- 2nd time: Offered for eight days in March 2015

Enhancing Marketing Initiatives

(Capital Investment: 4 billion yen)

We will proactively roll out enhanced marketing initiatives to increase revenue.

- Enhancing tourist products for **Express Reservation, PLUS EX, and 50+ members** in order to spur demand.
- Enhancing various marketing campaigns and products that take advantage of permanent tourist resources, such as **Kyoto and Nara**, and increasing use by conveying the appeal of these locations. We shall also proactively develop sales and marketing policies such as selling products that target inbound tourists.
- Spurring demand by **developing excursion packages that utilize the Tokaido Shinkansen, Takayama Line and Hokuriku Line** with the opening of Hokuriku Shinkansen.
- Enhancing coordination with communities by utilizing “Sawayaka Walking” events, “Shupo” and our portal site “**Japan Highlights Travel**”, which provides tourist information along the Tokaido Shinkansen, as we strive to increase passenger volume.



EX-IC



Kyoto Campaign



Excursion Package

[Note] - Number of Express Reservation and PLUS EX members: 2.63 million (as of the end of February 2015)
- Number of 50+ members: 750 thousand (as of the end of February 2015)

Strengthening Technological Capability, Pursuing Overseas Projects & Preserving the Global Environment

(Capital Investment: 1 billion yen)

We will continuously strive to enhance our technological capabilities, which are the foundation of railway management and development, as well as to pursue overseas projects using the high-speed railway and superconducting maglev systems, and to preserve the global environment.

- Continuing to **make further cost reductions for the upgrading of equipment, such as large-scale renovations, by technological development.**
- Continuing to **research and develop practical technologies** that will lead to more precise prediction and detection of large-scale natural disasters, development of transportation services, and labor and energy saving for inspections and maintenance.
- Engaging in marketing activities in regions and corridors that have been selected as viable targets for overseas projects using the high-speed railway or superconducting maglev systems by leveraging our comprehensive technological capabilities while also promoting **efforts to make Japanese high-speed railway, which is based on the principle of crash avoidance, an international standard.** Furthermore, we will continue to **provide technical consulting to the Taiwan High Speed Railway.**
- Promoting the use of the Superconducting Maglev System for the Northeast Corridor project in the United States.
- Promoting measures to contribute **to conservation of the global environment** such as replacing old rolling stock with energy-saving rolling stock.



Contact Line Test Installation



Multi-Axis Railway Structure Loading Test System

[Note] “Crash Avoidance” -System designed to prevent the possibility of a collision by using “dedicated tracks for high speed passenger rail service”, which completely exclude freight and commuter rail from being on the same tracks and have no grade crossings of any sort, and an “Automatic Train Control (ATC)” system, which automatically controls the speed of trains and definitely prevents any collision from happening.

Developing Affiliated Businesses

(Capital Investment: 43 billion yen)

(Including 31 billion yen to be invested by consolidated subsidiaries)

We will steadily move ahead with JR Gate Tower Project at Nagoya Station as we strive to increase competitiveness and revenue of our existing business.

- Steadily moving forward with **construction of JR Gate Tower with plans to erect the framework by the winter of this fiscal year**. We will also continue with the creation of management plans aimed at proactively increasing revenue as we move closer to the commencement of commercial operation, and also engage in advertising and PR activities.
- Increasing revenue by invigorating commercial facilities in the station building and stimulating merchandise businesses.
- Making continuous efforts to develop our agriculture business to provide safer and more reliable food products.



Illustration of JR Gate Tower (Right side)



Concept Drawing of Completed “Takashimaya Gate Tower Mall” (Left) and “Nagoya JR Gate Tower Hotel” (Right)

[Note] JR Gate Tower: - Winter FY2015: Framing construction
- November 2016: Office tenants move in
- April 2017 : Commencement of operation of “Takashimaya Gate Tower Mall” and “Nagoya JR Gate Tower Hotel”
(Total floor area: approx.260,000m², height approx.220m, 46 floors (above-ground), 6 floors(underground))