

## **Key Measures and Capital Investment in the Fiscal Year Ending March 31, 2018**

JR Central will revise its management philosophy on April 1, 2017 when the Company marks the 30th anniversary of its founding. Under the new management philosophy of “Contribute to the development of Japan’s main transportation artery and social infrastructure,” we will take various initiatives in order to carry out our mission of operating “three generations of railways”: conventional lines, the Tokaido Shinkansen, and the Chuo Shinkansen.

In the fiscal year ending March 31, 2018 (FY2017), we will place the highest priority on ensuring safe and reliable transportation while steadily moving forward with our efforts in promoting earthquake countermeasures. These include derailment and deviation countermeasures that are expanded to cover the entire Tokaido Shinkansen line. We will also carry out large-scale renovation work on civil engineering structures, and introduce N700A (3rd edition). We will also encourage customers to use “smartEX”, a new online reservation and ticketless boarding service for the Shinkansen to be launched at the end of September 2017.

We will proceed steadily with the Chuo Shinkansen Project involving the Superconducting Maglev System, while giving serious consideration to safety, the environment, and coordination with local communities. Furthermore, in order to promote construction of the Chuo Shinkansen, we will procure long-term debt using the Fiscal Investment and Loan Program. Meanwhile, overseas we will also make sure we advance our initiatives for high-speed railway and Superconducting Maglev projects.

With respect to JR Gate Tower, which will fully open in April 2017, we will operate the facility with JR Central Towers in a uniform manner, provide attractive services, and boost earnings.

In order to steadily move forward with these initiatives, JR Central will continue to work on strengthening its earning power and achieving ceaseless improvement in its technological level. It will also strive to enhance efficiency and reduce costs by exercising wisdom over business execution on the whole, including making capital investment, with a view to enhancing management capabilities.

### **I. Key Measures (refer to the attachment)**

- Ensuring safe and reliable transportation
- Enhancing transportation service
- Promoting the Chuo Shinkansen Project involving Superconducting Maglev System
- Brushing up Superconducting Maglev Technology and reducing costs
- Enhancing sales and marketing

- Strengthening technological capability, engaging in global environment preservation, and pursuing overseas projects
- Steadily promoting affiliated businesses
- Taking initiatives for the 30th anniversary of our founding

## **II. Capital Investment Amount**

Consolidated: 457.0 billion yen; non-consolidated: 434.0 billion yen

\* Capital investment excluding that for the Chuo Shinkansen (non-consolidated) amounts to 275.0 billion yen, of which 182.0 billion yen is investment relating to safety.

# Ensuring Safe and Reliable Transportation

## JR Central will work to further reinforce earthquake countermeasures.

(Capital investment amount: 143.0 billion yen)

- Advance construction work for **the installation of derailment-prevention guards** for the Tokaido Shinkansen based on **the new policy of expanded implementation to cover the entire line.**
- For conventional lines, continue to proceed with the implementation of **quake-resistant measures for elevated track columns, etc.** and **rebuilding or reinforcing the quake resistance of the Nagoya Workshop, stations, etc.**
- In order to prevent suspended ceilings from falling in an earthquake, take steps to put in place **fall-prevention measures for ceilings** at stations of the Shinkansen and conventional lines.



Derailment-prevention guards

## JR Central will move forward with the renovation and upgrade of structures and other facilities.

- Steadily proceed with **large-scale renovation** of the Tokaido Shinkansen while making efforts to achieve cost reductions by introducing the results of technological development and improving construction methods.
- For conventional lines, continue to proceed with the implementation of **measures against falling rocks** and **improving safety devices on railway crossings**. Also, **complete replacing operation management systems for the Tokaido Line in the Shizuoka area** in the fall of 2017.



Large-scale renovation

## JR Central will advance its initiatives to more appropriately cope with natural disasters, etc.

- To be able to respond to various conditions expected in an extraordinary situation, repeatedly perform **practical training**.
- In cases where train operations will likely be significantly impacted by a typhoon etc., take initiatives for **curtailing scheduled services, avoiding any impact at an early stage,** and **promptly resuming operation while providing passengers with information in a prompt, precise manner.**



Training for recovering disconnected overhead contact lines

# Enhancing Transportation Service (1)

(Capital investment amount: 47.0 billion yen \*Total for (1) and (2))

JR Central will proceed with initiatives to enhance the convenience and comfort of railways.

## Shinkansen

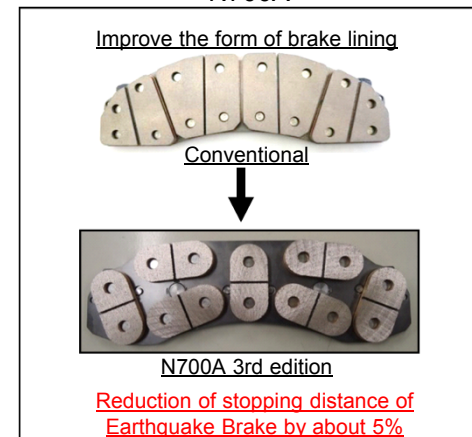
- Continue to work on setting more flexible train services in accordance with demand during seasons and time frames with increased customer use by applying **the 10 “Nozomi” Timetable**.
- Continue to proceed with the **launch of N700A (3rd edition)**, while initiating enhancement work to reflect the features of the third-edition trainsets, such as reducing the stopping distance of the Earthquake Brake, on existing trains.

## Conventional lines

- Flexibly increase the frequency and number of cars of train services to meet demand for **express trains, such as Shinano and Hida**.
- Work to further enhance the convenience of customers using the Tokaido Line (between Okazaki Station and Toyohashi Station). Also, in order to build an efficient structure in line with customer use, introduce the **centralized passenger service system** in October 2017.



N700A



Feature of N700A (3rd edition)



Wide-View Shinano

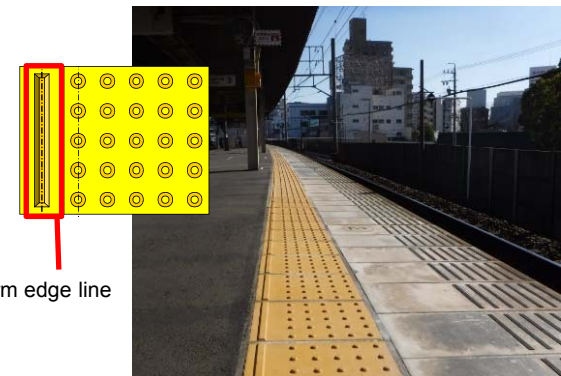
## Enhancing Transportation Service (2)

JR Central will advance initiatives so that customers can use railways with a greater sense of security.

- **Complete installing additional security cameras** in passenger cars of N700A, etc. and promote further enhancement of security.
- **Begin operation of movable platform fences** to be additionally installed in Shinagawa and Shin-Yokohama stations of the Tokaido Shinkansen. At the same time, proceed with the **development of movable platform fences** to accommodate conventional lines that come in varying models and the number of cars of a train with a view to conducting verification testing at Kanayama Station.
- Complete **installing braille blocks that indicate where platform edges are located** on the platforms of conventional lines in stations servicing 5,000 or more passengers by moving up the installation plan by three years.
- Continue to move forward with the installation of **barrier-free facilities** at stations of conventional lines, such as elevators and multifunction toilets.



Movable platform fences  
(Nagoya Station)



Platform edge line

Braille blocks that indicate where  
platform edges are located

(Reference) - Verification testing of movable fences at Kanayama Station: Scheduled to start in early 2018

- Braille blocks that indicate where platform edges are located  
Stations servicing 10,000 or more passengers: Installation completed  
Stations servicing 5,000 to 10,000 passengers: To complete installation in FY2017 (three years ahead of plan)  
Stations servicing 3,000 to 5,000 passengers: To complete installation in FY2018 (two years ahead of plan)

# Promoting the Chuo Shinkansen Project Involving Superconducting Maglev System

(Capital investment amount: 159.0 billion yen)

With regard to the Chuo Shinkansen Project involving the Superconducting Maglev System, proceed steadily with the construction work at full speed in respective areas of the line. At the same time, give serious consideration to safety, the environment, and coordination with towns and cities along the planned route.

- As for the Chuo Shinkansen Project, **maintain sound management and stable dividends** and take steady steps toward completing the project while demonstrating flexibility.
- Continue **promoting close coordination with local communities and carry out measurement, design, acquisition of land, etc.** according to plan.
- **Steadily move ahead with construction work, including tunnel excavation and diaphragm wall work**, of the Southern Alps tunnel, Shinagawa Station, and Nagoya Station, where work is challenging and construction period will be long. Also do this work on sections where the necessary preparation has been completed, **while also giving serious consideration to safety and environmental protection.**
- Promote efforts to establish sophisticated and efficient operation/maintenance systems for the Chuo Shinkansen.
- In order to promote construction of the Chuo Shinkansen, procure **long-term debt using the Fiscal Investment and Loan Program.**



Construction of the Southern Alps tunnel (Yamanashi section)



Ground-breaking ceremony (Nagano Prefecture)

(Reference) • FY2016 Conducted ceremony to pray for safety/ground-breaking ceremony  
November 1: Southern Alps tunnel (Nagano section)  
December 13: Hiyoshi tunnel, Gifu Prefecture (Minamigaito section)  
December 19: Nagoya Station (Central east section, Central west section)

• Long-term debt using the Fiscal Investment and Loan Program  
November 29, 2016, January 16, 2017, March 10, 2017: Borrowing of 500.0 billion yen on each date  
Plan to borrow 1.5 trillion yen also in FY2017

# Brushing Up Superconducting Maglev Technology and Cost Reduction

(Capital investment amount: 5.0 billion yen)

JR Central will continue brushing up Superconducting Maglev Technology and pursuing cost reduction.

- With the Yamanashi Maglev Line, alternately operate two trainsets by using rolling stock and facilities having commercial line specifications and continue conducting **long-distance running tests**.
- Proceed with verification, etc. toward establishing a maintenance system that can handle commercial services. Also, work to further **refine the Superconducting Maglev Technology** and **reduce costs for construction, operation and maintenance**.
- Continue promoting “**Superconducting Maglev Ride**” in a well-planned manner and, as an initiative commemorating the Company’s 30th anniversary, host **classes for children along with the Ride**.



Series L0



Superconducting Maglev Ride

## Enhancing Sales and Marketing

(Capital investment amount: 19.0 billion yen)

JR Central will work to further enhance convenience for the Tokaido Shinkansen, including the launch of the “smartEX” service.

- Introduce “**smartEX**”, a new online reservation and ticketless boarding service for customers other than Express members and customers from overseas, at the end of September 2017 and encourage them to use the service.
- Continue to market EX Family Hayatoku and other **tourist products** for **Express Reservation and PLUS EX** along with **50+** in order to spur demand for tourism.



“smartEX” logo

JR Central will make use of the tourist attractions along railway lines to actively deploy sales and marketing measures.

- **Enhance tourism campaigns and products that convey the attractiveness** of Kyoto, Nara, Tokyo, Hida, Ise-Shima, etc.
- Actively engage in sales and marketing activities such as promoting products using events held along railway lines.
- Promote merchandise sales activities and provide further information to **overseas customers**.
- Enhance coordination with local communities through the **Sawayaka Walking event, Shupo publication and Japan Highlights Travel website**, etc. while making efforts to promote the use of conventional train services, such as Shinano and Hida.



Sakura (cherry blossoms) version of Kyoto Campaign (Nijo Castle)



# Strengthening Technological Capability, Engagement in Global Environment Preservation, Pursuing Overseas Projects

(Capital investment amount: 1.0 billion yen)

## JR Central will continuously strive to enhance its technological capabilities and promote global environment preservation.

- Newly produce **N700S validation test vehicles** and prepare to perform running tests for the final checking of the new technology to be reflected in the next set of commercial trainsets.
- Implement **more advanced and power-saving inspection and maintenance** that utilize condition monitoring technologies. Also, move further ahead with **technical development that can lead to cost reductions** for large-scale renovation, earthquake countermeasures, upgrading equipment and other uses.
- Pursue **technological development to more accurately respond to disasters**, e.g., landslides.
- Promote various policies that contribute to **global environment preservation**, such as shifting to N700A and other energy-saving rolling stock.



N700S (sample illustration)

## Overseas we will advance our initiatives in high-speed railway and Superconducting Maglev projects.

- Promote **technical assistance** to the main development entity of the **Texas Project in the U.S.** through the local subsidiary (HTeC) while bolstering **promotional activities** for the use of the Superconducting Maglev system in the **Northeast Corridor Project in the U.S.**
- Continue to proceed with the **technical consulting services** for **Taiwan High Speed Rail**.
- Advance **initiatives to make the Japanese high-speed rail system**, which is based on the principle of Crash Avoidance, **a global standard**.



President of HTeC presenting the company profile

(Reference) • N700S: Scheduled to perform running tests starting in FY2018 and considering to launch commercial rolling stock in FY2020.

• Principle of Crash Avoidance : Concept of eliminating the possibility of a collision by using a combination of two mechanisms: (i) dedicated tracks for high-speed passenger rail service with no railway crossings, and (ii) an Automatic Train Control (ATC) system, which controls the speed of trains and definitely prevents any collision from happening.

# Steadily Promoting Affiliated Businesses

(Capital investment amount: 28.0 billion yen  
(including capital investment of 23.0 billion yen by consolidated subsidiaries))

With the new addition of JR Gate Tower, JR Central will promote affiliated businesses to further enhance customer satisfaction.

- Smoothly start businesses in **JR Gate Tower, which will fully open in April 2017, operate the facility with JR Central Towers in a uniform manner**, and provide attractive services, including existing businesses, to boost earnings.
- Revitalize commercial facilities of station buildings and stimulate merchandise businesses, promote businesses by making effective use of land owned by the Company, and strive to further increase earnings and enhance competitiveness.
- Revitalize local communities by boosting the use of **IIMONOTANBO** website that sells attractive locally produced products found along the train routes.
- Make efforts to develop our agriculture business to provide even safer and more reliable food products.

JR Central Towers

JR Gate Tower



JR Central Towers and JR Gate Tower



Takashimaya Gate Tower Mall  
(sample illustration of double-height space)

## Initiatives for the 30th Anniversary

JR Central will continue to be thankful to its customers and all related persons and do its best to carry out the mission of the Company with a determination to continue contributing to the future of Japan.

- In order to respond to new issues, such as the operation of three generations of railways, including the Chuo Shinkansen, and to continue carrying out the mission of the Company, **revise the management philosophy**, which was formulated at the time of the Company's founding.
- **Renew the service staff uniform** to one that is more functional while maintaining the concept of safety, reliability, and refinement.
- **Hold events**, such as train depot tours and experiencing work at stations, mainly during the summer vacation period to have people enjoy the world of railways even more.
- **Sell commemorative products**, including IC Hayatoku Type 21 tickets with greater discounts for Express Reservation members and newly set family tour packages during the Golden Week Holidays.



30th anniversary logo mark



New uniform Summer uniform for the station crew



Experiencing work at a station (sample illustration)

(Reference) • New management philosophy: Enforce on April 1, 2017

• New uniform: Introduce on June 1, 2017

• IC Hayatoku Type 21

Sell at a price commemorating the 30th anniversary (30% off the prescribed fare/charge)  
Period of use: April 1, 2017 to April 30, 2017