JR-CENTRAL

CENTRAL JAPAN RAILWAY COMPANY **Annual Report 2018**

CENTRAL JAPAN RAILWAY COMPANY

Annual Report 2018

For the Year Ended March 31, 2018

CENTRAL JAPAN RAILWAY COMPANY Annual Report 2018

Management Philosophy

Contribute to the development of Japan's main transportation artery and social infrastructure

Japan's Main Transportation Artery

JR Central's mission is to undertake high-speed, large-capacity passenger transport between Tokyo, Nagoya, and Osaka. "Japan's main transportation artery" refers to this passenger transport. Since the artery runs through this area of Japan, which plays an important role as the center of the country's economy and culture, it is possible that stagnancy in the main transportation artery will cause Japan's economic and societal movements in general to also stagnate. JR Central must continue to carry out its mission of managing Japan's main transportation artery today and in the future through operation of the Tokaido Shinkansen and the Chuo Shinkansen.

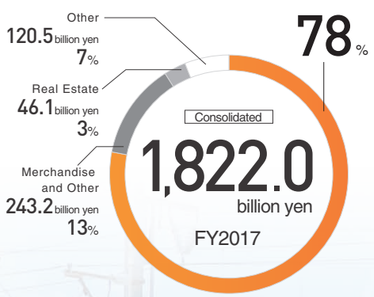
Social Infrastructure

On a broader perspective, JR Central also undertakes the mission of supporting the social infrastructure. That is, along with the management of Japan's main artery, we take a locally oriented approach in operating a network of conventional lines in the Tokai Region, centered on the Nagoya and Shizuoka areas, and manage affiliated business focused on the local communities, thereby supporting the people in these areas. We will remain committed to operating conventional lines while managing and further enhancing affiliated businesses.

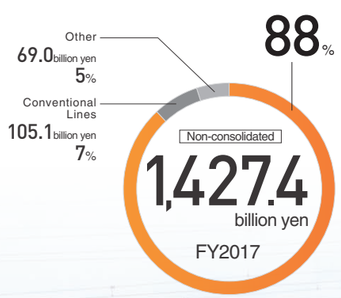
Operating Revenues Composition

The transportation business accounts for approximately 80% of consolidated operating revenues and earnings from the Tokaido Shinkansen account for roughly 90% of non-consolidated operating revenues.

Transportation 1,412.1 billion yen



Tokaido Shinkansen 1,253.2 billion yen



Note 1: Consolidated operating revenues composition is based on revenues from external customers
Note 2: The total of items in the breakdown may not be 100% due to rounding.

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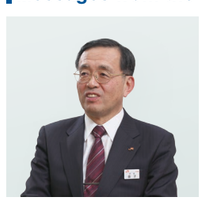

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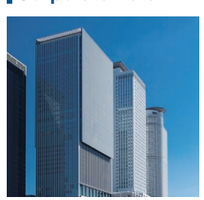

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* Environmental, Social, and Governance.
Companies appropriately considering/responding to ESG issues and the existence of shareholders who make investments in response to such efforts by the companies are thought to lead to the solution/improvement of global environmental issues and social issues and even to the sound development/expansion of capital markets, thus contributing to the establishment of a sustainable society.
Source: Japan Exchange Group, Inc.

[Remarks regarding forecasts, etc.]

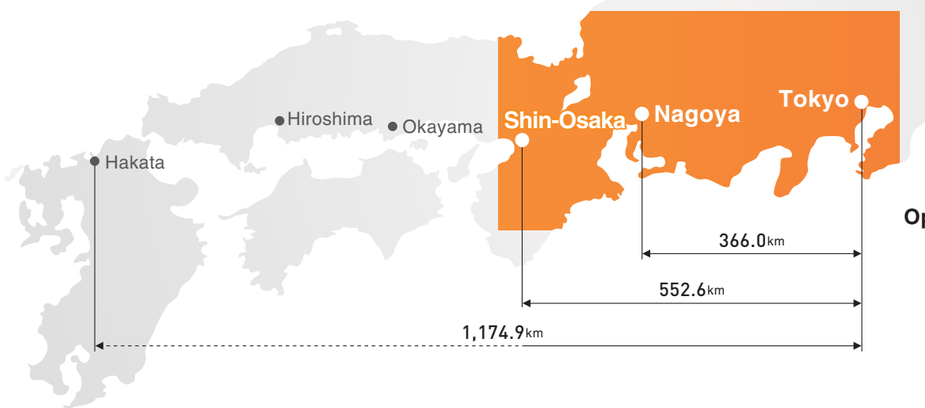
Future plans, forecast figures, etc. in this report are an outlook based on the information that is currently available for JR Central and may contain risks and uncertainty. Examples of potential risks and uncertainty include economic trends, business environment developments, consumption trends, competition situation for JR Central and subsidiaries, and changes in relevant laws and legal provisions. This report is compiled based on information available as of the end of May 2018 in principle.

- In this report, figures of financial information are truncated, while statistical data and all percentages are rounded.
- FY2017 signifies the fiscal year ended March 31, 2018.

Market Area Characteristics and Transportation Capacity

Representing a powerful presence in the inter-city transportation market, one that is unrivaled all over the world.

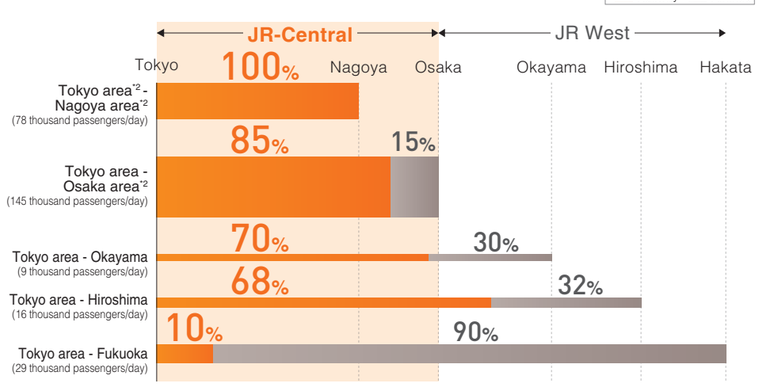
Tokaido Shinkansen



Operating area

JR Central boasts an overwhelming market share within its operating areas

Market Share*1 (against Airlines)



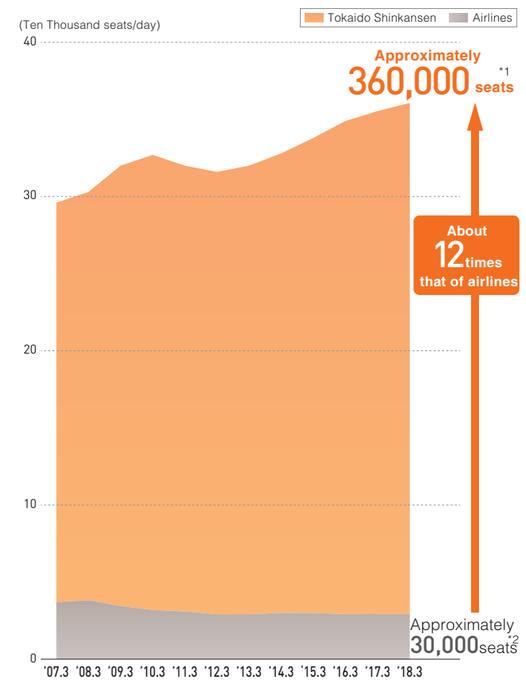
(Example)

Shinkansen Operating Kilometers	(Reference*3)
Tokyo ~ Nagoya	New York ~ Washington D.C. (LGA-IAD)
366.0km	369km
Tokyo ~ Shin-Osaka	Los Angeles ~ San Francisco (LAX-SFO)
552.6km	542km
Tokyo ~ Hakata	New York ~ Chicago (LGA-ORD)
1,174.9km	1,180km

*1 Market share is calculated by JR Central based on the Inter-prefectural data of the inter-Regional Passenger Mobility Survey, published by the Ministry of Land, infrastructure, Transport and Tourism for FY2016.
*2 Tokyo area: Tokyo, Kanagawa, Chiba, Saitama, Ibaraki / Nagoya area: Aichi, gifu, Mie / Osaka area: Osaka, Kyoto, Hyogo, Nara
*3 Based on the U.S. Department of Transportation website

An overwhelming capacity for transporting passengers along its main route, from Tokyo to Osaka

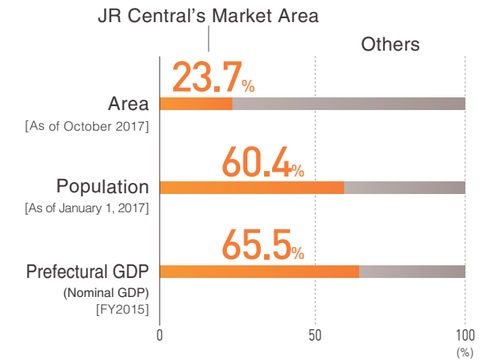
Changes in daily transportation capacity (comparison between the Tokaido Shinkansen and airline transportation services operating between the Tokyo Metropolitan area and the Osaka region)



*1 Tokaido Shinkansen: The number of passenger seating provided (including extra train services) on through-service "Nozomi" and "Hikari" lines operating between Tokyo Station and Shin-Osaka Station in each respective fiscal year.
*2 Airlines: Calculated by JR Central based on information pertaining to specified Japanese air carriers (Ministry of Land, Infrastructure, Transport and Tourism) for FY2006 to FY2017.

Japan's population and economic activity are concentrated in the area covering the Tokyo Metropolitan area, the Nagoya region, and the Osaka region

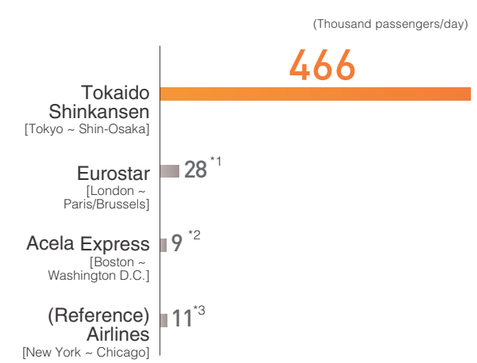
Percentages of our market area in Japan as a whole



[Source]
JR Central's market area is calculated taking the following prefectures into account
Tokyo, Kanagawa, Chiba, Saitama, Ibaraki, Shizuoka, Yamanashi, Nagano, Aichi, Mie, Gifu, Shiga, Osaka, Kyoto, Hyogo, Nara
Population: Ministry of Internal Affairs and Communications "Population, Demographics and Number of Households Derived from Basic Resident Registration"
Total production by prefecture: Cabinet Office "Report on Prefectural Accounts"

An inter-city transportation capacity that is unrivaled all over the world

Comparison with overseas transportation services



[Source]
*1 Calculated by JR Central based on figures provided on the Eurotunnel website (2017.1-2017.12)
*2 Calculated by JR Central based on figures provided by the National Fact Sheet: FY2017 (Amtrak)
*3 Calculated by JR Central based on figures provided on the U.S. Department of Transportation website (2017.1-2017.12)

Enhancing Our Competitive Strength

Transportation Service

We succeeded in lifting the maximum speed of our services from 220 km/h, to 270 km/h, and then to 285 km/h. We successively increased the number of services for our fastest speed train, the "Nozomi", through increased investment in rolling stock and ground facilities. We established an operational system running up to 10 up and down "Nozomi" services each hour. We continued to introduce new rolling stock incorporating the latest technology.

FY2003
- Shinagawa Station on the Tokaido Shinkansen is opened
- Maximum speed of all Tokaido Shinkansen trains increased to 270 km/h
- Shift to train scheduled centered on "Nozomi"

FY2006
- "Express Reservation" service expands to the total length of Tokaido and Sanyo Shinkansen lines

FY2007
- Put the Series N700 into commercial service

FY2007
- The "EX-IC" service starts for the Tokaido Shinkansen

EX予約 PRESS

FY2009
- The "EX-IC" service expands to the Sanyo Shinkansen
- Corporate member service starts

FY2012
- The "PLUS EX" service starts

プラスPLUS EX

FY2012
- Put N700A into commercial service
- Extend platforms at Shin-Osaka Station

FY2013
- Revise the timetable to have a maximum of 10 "Nozomi" services running per hour for nearly all operating hours

FY2014
- Increase of the maximum speed to 285 km/h

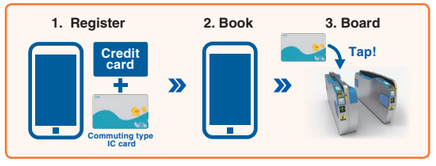
Passenger Service

We expanded the lineup and sections covered by the "Express Reservation" online reservation service, establishing it as a core Tokaido Shinkansen service. And we improved convenience through our ticketless boarding service EX-IC. We aim to improve convenience for light users and overseas visitors to Japan with our new online reservation and ticketless boarding service, the "smartEX", introduced at the end of September 2017.

FY2017
- Running tests using N700S validation test vehicles starts

FY2017
- The "smartEX" service starts for the Tokaido Shinkansen and the Sanyo Shinkansen

スマートEX



FY2019
- All rolling stock to be N700A type rolling stock capable of traveling at a maximum speed of 285 km/h (plan)

Thoroughgoing preparations against future aging degradation of the Tokaido Shinkansen and large-scale disasters
▼
Japan's main transportation artery needs to be duplicated

The area covering the three major cities (Tokyo, Nagoya, and Osaka) will effectively form one massive mega-city with a drastic reduction in travel times brought on by the introduction of the Superconducting Maglev System
▼
With this expansion of the sphere of activity, our lifestyle will undergo a massive change in terms of the way business is conducted and how we use our spare time, opening the door for a wide range of possibilities

○Operating speed
500 km/h

○Time required (fastest)

Tokyo ~ Nagoya City	Tokyo ~ Osaka City
40 minutes	67 minutes

○First stage (Shinagawa Station ~ Nagoya Station)

Tokaido Shinkansen	1 hr 26 min*
Chuo Shinkansen (Superconducting Maglev System)	40 minutes

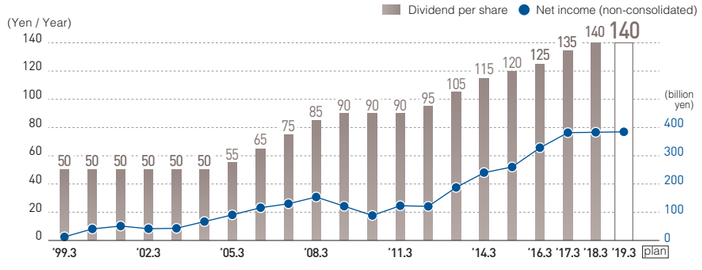
*As of the March 2018 timetable revision (arrival time based on the fastest trains in service)

Chuo Shinkansen Project Outline

The project has been proceeding at JR Central's own expense, using the Superconducting Maglev System developed by the Company. We will first establish a connection between Tokyo and Nagoya City, before expanding this service to Osaka City under the premise of ensuring sound management and providing stable dividends. Once launched, JR Central will manage this service in an integrated manner together with the Tokaido Shinkansen.

Providing stable dividends

Our policy on dividends has always been to decide the specific dividend amount in accordance with the management environment/performance in each FY based on the principle of continuously providing stable dividends.



*1: The planned figures for FY2018 are as of the publication of the financial report for FY2017.
*2: With respect to the amount of dividend per share for FY2012, given the adoption of the unit share system of splitting 1 share of common stock into 100 shares and setting one (1) unit of shares as 100 shares effective October 1, 2012, the amount was calculated on assumption that the stock split was conducted at the beginning of the period.
*3: The amount of dividend per share for FY2011 and prior is shown by dividing the amount by 100 for the ease of comparison with the amount for FY2012 and thereafter.

To all persons reading the Central Japan Railway Company Annual Report 2018

In the railway business, JR Central sets the highest priority on ensuring safe and reliable transportation under its management philosophy of "Contribute to the development of Japan's main transportation artery and social infrastructure. " JR Central's fundamental policy is to continue executing the long-term mission to integrally maintain and develop the Tokaido Shinkansen, which serves as Japan's main transportation artery, and the conventional line network in the Tokai region through continuous efforts, such as providing services that are preferred by customers and streamlining of work, as well as to operate the "three generations of railways" by constructing the Chuo Shinkansen to make Japan's main transportation artery a dual system.

The railway business, which is the core business of the JR Central Group, requires long-term massive capital investment and technological development with considerable lead times. Due to such a business structure, it is vital that we manage our railway business based on a long-term outlook rather than pursuing short-term profitability. Therefore, we are promoting mid-to-long term projects in a well-planned manner while simultaneously providing high quality services in our daily railway operations and aiming to enhance our management base.

K. Tsuge

Chairman and Representative Director
Koei Tsuge

Shin Kaneko

President and Representative Director
Shin Kaneko

Ensuring Safe and Reliable Transportation

In the railway business, JR Central will place top priority on ensuring safe and reliable transportation, and pursue derailment and deviation countermeasures for the Tokaido Shinkansen by implementing derailment prevention guards for the entire line using an improved method that assures higher safety. We will also move forward with the implementation of earthquake countermeasures, such as anti-falling measures on suspended ceilings in stations and renovation and anti-quake reinforcement of the Nagoya Workshop, etc. We will also steadily proceed with our large-scale renovation work for the Tokaido Shinkansen. In addition, JR Central will make further efforts to prevent accidents by being sensitive to, and looking deeply into, risks inherent in facilities and construction work, and re-inspecting safety mechanisms. At the same time, we will repeatedly perform practical training to be able to respond properly in the advent of a disaster or other extraordinary situation.

Enhancing Transportation Services

In terms of the Tokaido Shinkansen, we will continue scheduling trains flexibly by utilizing the "10 Nozomi Timetable" (operating up to 10 "Nozomi" services in both directions) to meet demands with a focus on time frames or seasons with increased customer use. JR Central will also continue introducing the N700A (3rd edition) as well as reflecting the features of the 3rd-edition model, such as the enhancement to shorten the stopping distance of the Earthquake Brake on existing rolling stock. Meanwhile, We will move forward with the examination to implement timetables that offer increased convenience and stability toward operating all Tokaido Shinkansen trains with a maximum speed of 285 km/h by the end of FY2019. Additionally, we will provide information on train services, such as the departure status at each station and traveling status of individual trains, on the JR Central website.

In terms of conventional line, we will flexibly increase the frequency or the number of cars of train to meet demands for "Shinano," "Hida" and other limited express trains.

We will also indicate traveling points of trains on the website as well as move forward with the preparations for the expanded area of usage for TOICA in the spring of 2019.

In terms of passenger-related facilities, JR Central will initiate work to install movable platform fences on the Tokaido Shinkansen platforms No. 20 through No. 26 at Shin-Osaka Station. Meanwhile, for conventional lines, we will advance verification testing for movable platform fences at Kanayama Station, and examine specifications with a view to installing such fences.

We will complete installing braille blocks that indicate where platform edges are located on the platforms of conventional lines in stations servicing 3,000 or more passengers by moving up the installation plan by two years. We will continue to move forward with the installation of barrier-free facilities, such as elevators and multi-functional toilets, at stations on conventional lines.

Enhancing Sales and Marketing

In sales and marketing, JR Central will take initiatives so that more customers become aware of the convenience of "Express Reservation" and "smartEX" and use these services. We will also promote tourist products, such as "EX Nozomi Family Hayatoku," to widely spur demand. JR Central will enhance tourism campaigns and products that convey the attractiveness of Kyoto, Nara, Tokyo, Hida, Ise-Shima and others. We will coordinate with local governments, travel agencies, and other parties through the "Aichi Destination Campaign" and work to develop attractive sightseeing materials and products and operate sightseeing trains. Furthermore, to see that customers from overseas can conveniently use our railroad services, we will promote expanded use of "smartEX" services for foreigners visiting Japan, as well as work to boost sales of sightseeing value tickets, etc. JR Central will also take initiatives to expand coverage of Free Wi-Fi service in stations and on trains and introduce station numbering for conventional lines.

Promoting the Chuo Shinkansen Project Using the Superconducting Maglev System

The Chuo Shinkansen that employs the Superconducting Maglev System will enable us to continue our mission of operating a high-speed railway linking the Tokyo Metropolitan areas, Chukyo regions and Kinki regions, which is also the lifeline of our business. It is being planned in order to ensure the future foundation of the company.

With respect to the Chuo Shinkansen Project, JR Central will maintain sound management and stable dividends, and take steady steps with a greater sense of seriousness toward completing the project while demonstrating flexibility. We will also continue promoting close coordination with local communities and carry out measurement, design, acquisition of land, etc., according to plan. Furthermore, JR Central will continue to steadily move ahead with construction work, including tunnel and emergency exit excavation and diaphragm wall work, of the Southern Alps tunnel, Shinagawa Station, Nagoya Station, tunnels in mountainous areas, emergency exit sites in urban areas, and other locations where work is challenging and construction periods will be long. At the same time, we will steadily proceed with the various types of construction work in areas where necessary preparations have been completed, such as electrical work, etc. based on the Construction Implementation Plan (2) between Shinagawa and Nagoya Stations of the Chuo Shinkansen that was approved in March 2018, by giving serious consideration to construction safety and environmental protection. In addition, we will promote efforts to establish sophisticated and efficiency operation and maintenance systems for the Chuo Shinkansen.

Refining Superconducting Maglev Technology and Reducing Costs

In regard to the Yamanashi Maglev Line, we will proceed with verification testing, etc. to establish a maintenance system that responds to commercial services by alternately operating 2 trainsets and continuing to conduct long distance running tests by using rolling stock and facilities in commercial line specifications. We will also strive to further refine the Superconducting Maglev technology and reduce the costs for the construction, operation, and maintenance of commercial lines. We will also continue conducting the "Superconducting Maglev Ride" in a well-planned manner to further promote understanding of Superconducting Maglev.

Overseas deployment of high-speed railway systems

In our projects for the overseas deployment of high-speed rail systems, we will promote technical assistance, including formulation of technological specifications, to the main development entity of the Texas Project in the U.S. through the local subsidiary (High Speed Railway Technology Consulting Corporation) while bolstering promotional activities for the use of the Superconducting Maglev system in the Northeast Corridor Project in the U.S. and continuing to proceed with the technical consulting services for the Taiwan High Speed Rail. We will also promote initiatives to establish the Japanese high-speed rail system, which is based on the core principle of "Crash Avoidance", as a global standard.

Technological Development and Enhancement of Technical Capability

In an effort to promote technological development, JR Central will conduct running tests using N700S validation test vehicles and perform final checks toward finalizing the specifications for mass-production cars. We will also move forward with the new production of a testing vehicle for next-generation limited express rolling stock that uses the hybrid system for conventional lines. Furthermore, we will implement more advanced and power-saving inspections and maintenance that utilizes condition monitoring technology, as well as promote technical development that can lead to cost reductions for maintenance and upgrading of facilities. At the same time, we will pursue technological development to further heighten safety against disasters, etc.

Developing Affiliated Businesses

In businesses other than the railway business, JR central will operate JR Central Towers and JR Gate Tower in a uniform manner and respond to diverse needs by demonstrating synergistic effects to the fullest, including existing businesses, to boost earnings. We will also make efforts to further strengthen the earning capability of the JR Central Group by revitalizing station building commercial facilities and merchandise businesses, promoting businesses by making effective use of land owned by the Company, and striving to further increase earnings and enhance competitiveness.

Engagement in Global Environment Preservation

In regard to global environmental issues, JR Central will not only make the public aware of the superiority of railways to the global environment, but also continue promoting various policies that contribute to engagement in global environment preservation, such as introduction of the N700A, which enables significant energy conservation, as well as working toward resource and energy conservation in our daily operations.

We will strive to promote efficiency and reduce costs throughout our business execution activities, including capital investments, with a view to enhancing our management strength.

Realize Management Philosophy at a Higher Level

President and Representative Director
Shin Kaneko

Management

Please tell us your aspirations as President of the Company.

- Last year, upon the 30th anniversary of JR Central's founding, we set forth a new management philosophy: "Contribute to the development of Japan's main transportation artery and social infrastructure."
- JR Central has thus far continued to undertake the operation of the Tokaido Shinkansen, which connects the central cities of the Japanese economy –Tokyo, Nagoya and Osaka- and the conventional lines primarily in the regions surrounding Nagoya and Shizuoka, while carrying out affiliated businesses that have high synergistic effects with the railway business in each of these locations. Furthermore, we are currently undergoing construction of the Chuo Shinkansen, which will undertake a bypass function of the Tokaido Shinkansen. As such, our commitment to contribute to the development of Japan's main transportation artery and social infrastructure is actually not something we newly formulated last year, but is a reconfirmation of the Company's roles and mission. JR Central has made significant growth to date while carrying out the mission reflected in this management philosophy. I, as President of the Company, believe that we must continue to strive to realize this philosophy at an even higher level.
- Looking back on the initiatives JR Central has taken to date, our top priority, more than anything else, has been placed on ensuring safe and reliable transportation. This has consistently been our top-priority management objective and the major premise for all business activities. For this reason, the majority of our capital investment each year is safety related, and our capital investment related to safety since the foundation of our Company has amounted to 3.5 trillion yen as of the end of FY2017. Furthermore, safety is the primary theme in our technological development and employee education. As a result, we believe that the level of trust in the Company in terms of safety has improved significantly.
- We have always placed safety first, as the major premise of all activities, and have not only been improving our services to expand the usage of our services but also been taking measures to reduce costs and enhance efficiency, as a result of which our revenues and profits increased. And We have been able to achieve a favorable cycle of using our earnings as the base to further investment to ensure safety and reinforce our services, as well as significantly strengthen our management platform. It is as a result of strengthening our management platform that we are currently able to proceed with the construction work for the Chuo Shinkansen Project at our own expense.
- Our growth to date can be recognized as a culmination of various initiatives taken by each of the departments. In other words, I feel that our accomplishments thus far were brought about as a result of reinforcing 3 key capabilities; "capability to safely proceed with business activities," "capability to provide even better services" and "capability to work efficiently at low cost." Therefore, I feel that it is important for JR Central to continue strengthening these capabilities to further develop and reinforce the Company going forward.

Tokaido Shinkansen

Passenger volume for the Tokaido Shinkansen is improving steadily, marking another record high in FY2017. How do you feel about these circumstances?

- While the Japanese economy has continued to show signs of growth, we also feel that many of the measures we put in place to enhance our competitiveness over the mid to long-term have borne fruit.
- Ever since the Company was founded, we have continued to consistently work toward strengthening our transportation capacity. The number of services per day in FY2017 marked a record high of 368. The "10 Nozomi Timetable"(operating up to 10 Nozomi services in both directions), which made this high level of transportation capacity possible, was achieved after spending a period of over five years installing additional platforms at Shin-Osaka Station, increasing station loopback equipment, and implementing other measures to bring it to fruition. The continual introduction of new rolling stock, and the enrichment of our sales and marketing strategies, including the introduction of "smartEX," a new online reservation and ticketless boarding service for the Shinkansen introduced last year, also help support the current high level of service of our Shinkansen trains.

What kind of service enhancement measures do you have in place for the Tokaido Shinkansen over the mid to long-term?

- We will continue to improve customer convenience by boosting the advantages provided by the Tokaido Shinkansen in order to continue fulfilling its mission.
- From a transportation perspective, we will offer more flexible train services to meet consumer demand, as well as continue to add rolling stock and pursue upgrading work to reflect features of the latest rolling stock, such as enhancements to shorten the stopping distance of the Earthquake Brake, on existing rolling stock. At the end of FY2019, all of the Shinkansen rolling stock will be the N700A type, which can travel at a speed of 285 km/h. This will allow us to set an attractive timetable that offer increased convenience and stability and we will proceed with our study toward revising the timetable in 2020.
- From a marketing perspective, we plan to begin providing information on train services, such as traveling points and delays of individual trains on our website at the end of FY2018. We will continue to enhance the convenience of the online reservation and ticketless boarding service.

What will N700S, the next series of rolling stock for the Tokaido Shinkansen, be like? Can you provide us with details on the schedule for adding this next set of rolling stock?

- The N700S - a new series to be introduced following the N700 full model changeover - comes equipped with the latest technology designed to improve safety and reliability, while better conserving energy.
- With the N700S we have developed a "standard rolling stock" that is adaptable to rolling stock of varying trainset lengths through the optimal placement of underfloor equipment, made possible by painstaking efforts to reduce the size and weight of the equipment used.
- The first trainsets, which was completed in March 2018, are used as validation test vehicles to perform the final confirmation tests of new technologies that will be incorporated in the next series of commercial rolling stock (mass produced vehicles). Following this, they will be used as testing vehicles to promote technological development in an aim to further brush up Shinkansen technologies. We plan to introduce the next series of commercial rolling stock (mass produced vehicles) in FY2020.

Conventional Lines

Can you tell us of what initiatives you have in place to expand the use of conventional lines?

- In regards to conventional lines, we have steadily improved services such as introducing new rolling stock, and increasing the frequency of trains. In terms of "Shinano", "Hida", and other limited express trains, we will strive to increase the use of our train services by flexibly increasing the frequency and the number of train cars to meet demand at busy times and for nearby events, while also strengthening ties with local communities to achieve this.
- In anticipation of the replacement of diesel railcars currently used for the "Hida" and other trains, the Company will newly develop a test vehicle for the next-generation limited express rolling stock that uses the hybrid system, the first of its kind for JR Central, by the end of 2019 and conduct test runs to establish relevant technologies. We are aiming to commercially operate the country's first hybrid-type railway rolling stock that runs at speeds of up to 120 km/h, while enhancing safety and comfort of such trains, and are taking steps toward a target of launching mass-produced vehicles in FY2022.
- From the perspective of strengthening ties with local communities, we are also rolling out "Shupo" campaigns intended to introduce the many tourist attractions situated around our railway lines in an attempt to further promote the use of limited express trains on conventional lines, and "Sawayaka Walking" events, which are free walking courses covering sightseeing spots near our railway lines that start from our stations. During this year, we will also coordinate with local governments, travel agencies and other parties through the "Aichi Destination Campaign" organized by the 6 JR operators, and work to develop attractive sightseeing materials and products and operate sightseeing trains in an effort to expand the use of our services, including the Shinkansen.

Chuo Shinkansen

Full-scale construction work has begun in respective areas of the line. Can you please reiterate the significance of the Chuo Shinkansen Project?

- The Chuo Shinkansen Project is designed to continue to fulfill the Company's founding mission into the future through the operation of a high speed train service that links the Tokyo Metropolitan area with the Chukyo and Kinki areas (Tokyo ~ Nagoya ~ Osaka).
- Over 50 years have passed since the inauguration of the Tokaido Shinkansen, which currently fulfills this role, and the time has come when we must consider drastic measures to respond to aging in the future and large-scale disasters. In the wake of the Great East Japan Earthquake, the need for a new line which enables us to offer multiple routes in our main transportation artery has become even more important to prepare for the risk from natural disasters. This is the very reason why we decided to complete the Chuo Shinkansen as quickly as possible, as it can be used as an alternate to the role of the Tokaido Shinkansen by utilizing the Superconducting Maglev System, which we have developed, under the condition that we bear the cost of its construction. JR Central will operate the Chuo Shinkansen in an integrated manner along with the Tokaido Shinkansen.

What risk factors do you foresee for the Chuo Shinkansen Project, and how do you feel they can be overcome?

- We gradually complete this project in a flexible manner while ensuring sound management and stable dividends. With construction on the Chuo Shinkansen taking place over the long-term, naturally this brings inherent risks in terms of fluctuations in the economic climate, namely fluctuations in business conditions, interest rates, prices, labor costs, and land value. However, we aim to deal with this by strengthening our management base by improving profitability, streamlining business operations, reducing costs, and by further curtailing construction costs for the Chuo Shinkansen specifically.
- From the perspective of mitigating management risk, we secured long-term, fixed- and low-interest rate financing for a total of 3 trillion yen through long-term loans using the Fiscal Investment and Loan Program (FILP) in FY2016 and FY2017.

▶Reference P.83
Long-Term Loan Using the Fiscal Investment and Loan Program (Long-term debt for the Chuo Shinkansen)

Affiliated Businesses

Please tell us initiatives regarding affiliated businesses.

- We have improved our revenue base by engaging in businesses that are expected to generate synergistic effects with the railway business, such as in areas that make full use of the good location of railway stations.
- The development of Nagoya Station, which boasts the highest number of passengers of any our stations, forms a pillar of our affiliated businesses. Opened in 2000, JR Central Towers has already established itself as a Nagoya landmark, and has greatly contributed to the economic development of the Chubu region. JR Gate Tower, which stands adjacent to the Towers, fully opened in 2017 and has been receiving a great number of visitors to date. We will make efforts to respond to diverse needs by operating JR Central Towers and JR Gate Tower in a uniform manner and demonstrating synergistic effects to the fullest.
- We will continue to expand our revenues and profits in cooperation with group companies.

Dividends

What is Company policy on dividends?

- Our policy on dividends has always been to decide the specific dividend amount in accordance with the management environment and performance in each fiscal year based on the principle of continuously providing stable dividends in a manner characteristic to the railway business, which emphasizes management based on a long-term perspective.
- This stance will not change during construction or after the launch of the Chuo Shinkansen.

Key Measures and Capital Investment FY2018

1 Ensuring Safe and Reliable Transportation

▶P.14

Capital investment amount: 147.0 billion yen

JR Central will work to further reinforce structures along with earthquake countermeasures.

- Advance construction work for the installation of derailment-prevention guards for the entire Tokaido Shinkansen line as part of implementing derailment- and deviation-prevention measures based on an improved method that ensures higher safety.
- Proceed with the implementation of measures to prevent suspended ceilings at stations from falling in an earthquake and rebuilding or reinforcing the quake resistance of the Nagoya Workshop, etc.
- 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.

JR Central will advance initiatives to prevent accidents and better respond to extraordinary situations.

- Make further efforts to prevent accidents by being sensitive to and looking deeply into risks inherent in facilities and construction work and re-inspecting safety structures.
- Repeatedly perform practical training to be able to respond to various conditions expected in the advent of a disaster, or other extraordinary situations.

Large-scale renovation

Training for recovering a derailed passenger car

Reference

Laying derailment-prevention guards:	FY2018 approximately 99 km
Large-scale renovation:	FY2018 37.0 billion yen (FY2016 to FY2019 145.0 billion yen)
Fall-prevention for ceilings in stations:	All 17 Shinkansen stations, 30 conventional line stations (FY2016 to FY2026 approximately 13.0 billion yen)

2 Enhancing Transportation Services

▶P.18

Capital investment amount: 50.0 billion yen

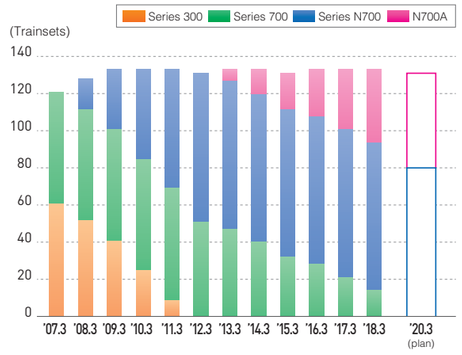
JR Central will proceed with initiatives to achieve timetables that offer greater convenience.

- 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.
- Proceed with the launch of the N700A (3rd edition), while moving forward with enhancement work to reflect features of the third-edition trainsets, such as reducing the stopping distance of the Earthquake Brake on existing trains.
- Move forward with the examination to implement timetables that offer increased convenience and stability toward operating all Tokaido Shinkansen trains with a maximum speed of 285 km/h by the end of FY2019.
- Flexibly increase the frequency and number of cars in train services to meet demand for express trains, such as for Shinano and Hida.

N700A-type rolling stock

Wide-View Shinano

Shift in the number of trainsets by series for the Tokaido Shinkansen



Reference

N700A (3rd edition):	FY2018 7 trainsets (Launch 20 trainsets from FY2016 to FY2019)
Enhancement work to reflect the features of the third-edition trainsets:	FY2018 52 trainsets (applicable for 111 trainsets from FY2017 to FY2019)

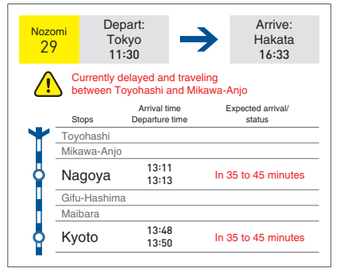
JR Central will move ahead with the implementation of facilities, etc. so that customers can use railways with a greater sense of security.

- Initiate work to install movable platform fences on the Shinkansen platforms No. 20 through No. 26 at Shin-Osaka Station. Meanwhile, for conventional lines, advance verification testing for movable platform fences at Kanayama Station, and examine specifications with a view to installing such fences.
- Complete installing braille blocks that indicate where platform edges are located on the platforms of conventional lines in stations servicing 3,000 or more passengers by moving up the installation plan by two years.
- Promote the installation of barrier-free facilities at stations of conventional lines, such as elevators and multifunction toilets.

JR Central will advance initiatives so that customers can use railways with greater convenience.

- Begin providing information on train services, such as traveling points and any individual train delays on the Shinkansen and conventional lines, and the departure status at each Shinkansen station, on the JR Central website.
- Move forward with the preparations for the expanded area of usage of TOICA in the spring of 2019.

Movable platform fences undergoing verification testing at Kanayama Station



Sample illustration of information (on Shinkansen) posted on the website

Reference

Installation of movable platform fences at Shin-Osaka Station:	To be completed in FY2022 for platforms #20 through #26. *Completed installations on platform #27
Verification testing of movable platform fences at Kanayama Station:	To be performed until the fall of 2018
Expansion of TOICA's area of coverage:	Tokaido Line (between Kashiwabara and Samegai), Gotenba Line (between Shimo-soga and Ashigara), Kansai Honsen (between Minami Yokkaichi and Kameyama)
Braille blocks that indicate where the platform edges are located Stations servicing 5,000 or more passengers Stations servicing 3,000 to 5,000 passengers	 Installation completed To complete installation in FY2018 (two years ahead of plan)

3 Promoting the Chuo Shinkansen Project Involving Superconducting Maglev System

▶P.22

Capital investment amount: 250.0 billion yen

With regard to the Chuo Shinkansen Project involving the Superconducting Maglev System, JR Central will proceed steadily with the construction work in respective areas of the line while giving 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 with a greater sense of seriousness 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 and emergency exit excavation and diaphragm wall work, of the Southern Alps tunnel, Shinagawa Station, Nagoya Station, tunnels in mountainous areas, emergency exit sites in urban areas, and other locations where work is challenging and construction periods will be long. At the same time, steadily proceed with the various types of construction work in areas where necessary preparations have been completed, such as electrical work, etc., based on the Construction Plan (2) between Shinagawa and Nagoya Stations of the Chuo Shinkansen Line that was approved in March 2018, by giving serious consideration to construction safety and environmental protection.
- Promote efforts to establish sophisticated and efficient operation/maintenance systems for the Chuo Shinkansen.

Inclined shaft excavation at the Southern Alps tunnel (Nagano Section)

Diaphragm wall construction at Shinagawa Station

Shaft excavation at Kita-Shinagawa emergency exit

Reference

Diaphragm wall:	A continuous reinforced-concrete wall constructed to protect the surrounding grounds before going ahead with a large-scale excavation.

Key Measures and Capital Investment FY2018

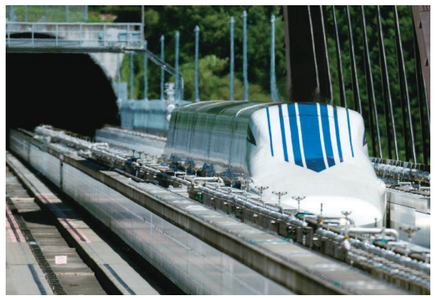
4 Brushing Up Superconducting Maglev Technology and Cost Reduction

▶P.24

Capital investment amount: 4.0 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 with commercial line specifications and continue conducting long-distance running tests.
- Proceed with verification, etc. toward establishing a maintenance system that can handle commercial services. At the same time, work to further refine the Superconducting Maglev Technology and reduce costs for construction, operation and maintenance.
- Continue conducting "Superconducting Maglev Ride" in a well-planned manner and take steps to further promote understanding of Superconducting Maglev.



Series L0

Superconducting Maglev Ride

Reference

Long-distance running tests for the Yamanashi Maglev Line:	Cumulative running distance of 2.28 million km (as of February 28, 2018)

5 Enhancing Sales and Marketing

▶P.26

Capital investment amount: 11.0 billion yen

JR Central will take initiatives to attract more customers to use online reservation services for the Shinkansen.

- Take initiatives so that more customers become aware of the convenience of Express Reservation and smartEX and use these services.
- Promote tourist products, such as "EX Nozomi Family Hayatoku," to widely spur demand.

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.
- Coordinate with local governments, travel agencies and other parties through the "Aichi Destination Campaign" organized by the 6 JR operators, and make efforts to develop attractive sightseeing materials and products and operate sightseeing trains.

JR Central will take initiatives so that customers from overseas can conveniently use its railroad services.

- Promote expanded use of "smartEX" services for foreigners visiting Japan as well as work to boost sales of sightseeing value tickets, etc.
- Expand coverage of the Free Wi-Fi service in stations and on trains in order to put in place an environment where users can make online reservations and obtain train service/sightseeing information on their smartphones, etc.
- Introduce station numbering for conventional lines.

"TRY! EX" poster

Sakura (cherry blossoms) version of the Kyoto Campaign (Kajuji Temple)

Sticker to indicate the availability of the Free Wi-Fi service at stations

Reference

Number of members of "Express Reservation":	3.37 million; Number of persons registered in "smartEX": 610,000 (both as of February 28, 2018) Total usage: 170,000 items/day (actual for February)
Free Wi-Fi service coverage:	On the Tokaido Shinkansen N700A type and Express "Hida", in 17 Shinkansen stations and in 24 conventional line stations (including 6 stations servicing both Shinkansen and conventional lines)
Number of stations applicable for station numbering:	176 conventional line stations

6 Promoting Technological Development, Engagement in Global Environment Preservation, Deploying the High-Speed Railway System Overseas

▶P.28

Capital investment amount: 1.0 billion yen

JR Central will strengthen efforts in technological development that contributes to enhancing safety and reducing costs and in promoting global environment preservation.

- Conduct running tests using N700S validation test vehicles and perform final checks toward finalizing the specifications for mass-production cars.
- Move forward with the new production of a testing vehicle for next-generation limited express rolling stock that uses the hybrid system for conventional lines to increase safety and comfort, as well as promote a reduction in total costs.
- Implement more advanced and power-saving inspections and maintenance that utilize condition monitoring technologies. Also, promote technical development that can lead to cost reductions for maintenance and upgrading of facilities.
- Carry out technological development to further heighten safety against disasters, etc.
- Promote various policies that contribute to global environment preservation, such as shifting to the N700A and other energy-saving rolling stock.

JR Central will work to deploy the high-speed railway system overseas.

- Promote technical assistance, including formulation of technological specifications, 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 the renovation work for the operation control system, etc. for the Taiwan High Speed Rail.
- Advance initiatives to make the Japanese high-speed railway system, which is based on the principle of Crash Avoidance, a global standard.

Verification test vehicle for N700S

Providing technical assistance by HTeC

Reference

N700S:	Considering launch of commercial trainsets in FY2020
Next-generation limited express rolling stock that uses the hybrid system for conventional lines:	Complete the running test vehicle at the end of 2019 and perform testing for about a year. Consider launching the mass-production vehicle in FY2022.

7 Steadily Promoting Affiliated Businesses

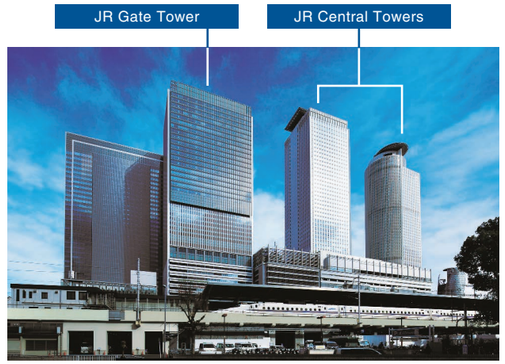
▶P.30

Capital investment amount: 32.0 billion yen

(including capital investment of 29.0 billion yen by consolidated subsidiaries)

JR Central will promote affiliated businesses, with JR Central Towers and JR Gate Tower at the core, to further enhance customer satisfaction.

- Operate JR Central Towers and JR Gate Tower in a uniform manner and respond to diverse needs by demonstrating synergistic effects to the fullest, including existing businesses, to boost earnings.
- Revitalize merchandizing businesses and commercial facilities of station buildings, work to make effective use of land owned by the Company and strive to further increase earnings. In addition, take initiatives to expand business zones, such as developing lots under the viaduct, to strengthen the earnings base.



JR Central Towers and JR Gate Tower

Central Garden Residence Gifu Kano

東京グルメゾン TOKYO GOURMET ZONE

Reference

Tokyo Gourmet Zone:	Scheduled to open on the 2nd floor of First Avenue Tokyo Station in June 2018
Central Garden Residence Gifu Kano:	Start selling in March 2018

Ensuring Safe and Reliable Transportation

Ensuring safe and reliable transportation marks the foundation of the railway business. If we were to cause a major accident, the trust placed in the Company would be lost in an instant, and the Company's very existence would be put in danger. With this frame of mind, the Company has worked to ensure safety across all its operations since its founding.

Total safety-related investments have now exceeded 3.5 trillion yen in total, accounting for approximately 70% of all annual capital investment when excluding investments made towards the Chuo Shinkansen. We will also continue with steadfast initiatives aimed at further improving the technical skills and safety consciousness of employees, such as by implementing practical training and large-scale recovery training in preparation for emergency situations, etc.

▶Refer to P. 53 for further related information (Column 1 "Learning safety from accidents")

Renovation and upgrade of structures and other facilities

Tokaido Shinkansen

● Large-scale renovation

Our civil engineering structures are sufficiently maintained through daily and thorough inspections and repair. However, in future, it will be inevitable to replace many of the facilities due to aging. We received the approval of the Minister of Land, Infrastructure, Transport and Tourism for our allowance reserve plan for the large-scale renovation of Shinkansen infrastructure based on the Nationwide Shinkansen Railway Development Act, and began building the reserve from 2002. Along with this, we have advanced our research on a new construction method, led by our Komaki Research Center. As a result of our R&D efforts, we developed a new construction method that allows us to significantly reduce the impact on train operations during construction work, and to considerably cut construction costs. With this method in place, JR Central began the renovation work in FY2013, ahead of the original schedule*1.We are expecting to engage in renovations for a period of about 10 years. We began with the implementation of "measures to inhibit aging damage"*2. While checking the effect of those measures, perform "overall renovations"*3 as necessary.

The reserve of 350 billion yen accumulated by FY2012 is appropriated at a rate of 35 billion each year from FY2013.

We will continue to actively incorporate the results of our R&D efforts and make improvements, etc. to construction methods, thereby bringing down related costs in making sure steps forward with our construction work.


Large-scale renovation

*1 Received the approval of the Minister of Land, Infrastructure, Transport and Tourism for our allowance reserve plan for the large-scale renovation of Shinkansen infrastructure in FY2012 and began the renovation work in FY2013.
*2 "Measures to inhibit aging damage": Measures to extend the life of structures by inhibiting the occurrence of cracking and other damage from aging.
*3 "Overall renovation": Replacement of components, etc. .

Conventional Lines

● Counter-disaster measures and other efforts

JR Central's conventional lines operate not only in urban areas but also along steep natural slopes and other varied terrain. As such, we have been making efforts to adopt measures against falling rocks, heavy rainfall, and other disaster situations. In FY2018, we will continue to take measures against falling rocks, such as newly installing falling rock detection nets and protective equipment, and against heavy rainfall, such as reinforcing slope protection and newly installing drainage facilities.

We will also continue to advance our efforts to improve safety devices on grade crossings together with making replacements due to aging in order to enhance safety.

Further reinforcement of earthquake countermeasures

Tokaido Shinkansen

● Implementation of derailment and deviation countermeasures

We are promoting derailment and deviation countermeasures to prevent expansion of damage from derailment caused by an earthquake. These measures come in a dual system where the highest priority is set on preventing rolling stock from derailment with "derailment prevention guards", and when derailment cannot be avoided, it prevents the rolling stock from a major derailment with "deviation prevention stoppers".

In regard to measures for ground facilities, we are installing "derailment prevention guards" as well as adopting measures for civil engineering structures to have the derail prevention guards function effectively. While we expect to complete implementing these measures to the entire line by FY2028, considering the nature of these measures, we will continue to study the possibility of completing the work as early as possible.

As for measures adopted for rolling stock, "deviation prevention stoppers" have already been installed on all of our Shinkansen rolling stock.


Derailment prevention guards

● Reinforcement of structures

JR Central has been implementing earthquake-resistance measures for various civil engineering structures and buildings related to transportation by the Shinkansen so as to prevent the Shinkansen from going out of service for a long period of time in the event of a major earthquake.

Since 2010, we have been carrying out large-scale renovation work for the Hamamatsu Workshop, which conducts general overhauls* of Shinkansen rolling stock. This includes rebuilding and reinforcement so that the general overhaul function can be maintained even in the event of a major earthquake. Most of renovation work has already been completed, and we have been conducting general overhauls using the new inspection and repair lines since January 2017.

Reviewing the inspection and repair lines in conjunction with this renovation work resulted in improving operating efficiency. As a result, the number of days required for the general overhauls has been reduced from 15 days to 14 days, enabling us to use rolling stock for operating trains more promptly.

Measures taken and progress

Measures taken	Progress (as of the end of FY2017)
Elevated track columns, bridge piers, and embankments	Completed * Except for some areas under discussion(Elevated track columns: Approximately 19,600; Bridge piers: Approximately 900 units; Embankments: Approximately 9.4 km)
Bridge railing (Fall prevention)	Under way (Completed about 2,110 beams out of about 2,215 beams concerned)
Station buildings	Completed * Except for some areas under discussion
Rolling stock workshops, etc.	Rolling stock depot buildings: Completed Hamamatsu Workshop: Rebuilding and reinforcement of buildings under way Plan to complete by the end of FY2018

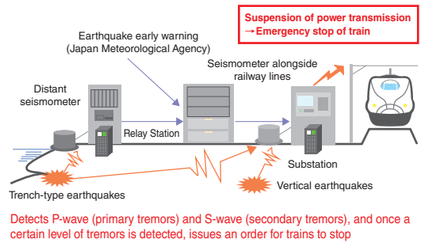
* General overhauls (Shinkansen): Overhauls required for Shinkansen rolling stock within 36 months or under the distance of 1,200,000 km.

● Initiatives to stop trains quickly

In order to prevent expansion of damage caused by earthquakes, it is important to stop trains quickly. JR Central adopts an earthquake prevention system*1 which detects tremors, automatically stops power transmission, and issues an order to moving trains to make an emergency stop. We also made improvements to the "Earthquake Brake" on rolling stock in an effort to reduce the stopping distance at the time of an earthquake. For the next-generation Shinkansen rolling stock N700S, which we are looking to launch in FY2020, we will make improvements to ATC and the brake system to further reduce the stopping distance at the time of an earthquake by roughly 5% compared to the stopping distance of N700A (3rd edition). ▶ (refer to P. 20)

*1 After introducing the "Urgent Earthquake Detection and Alarm System (UrEDAS)" before other companies, we introduced the "Tokaido Shinkansen Earthquake Rapid Alarm System (TERRA-S)" in 2005, thereby improving the system in the speed of the alarm, etc. In 2019, we plan to further accelerate the speed of the alarm by utilizing information from the Seafloor Observation Network for Earthquakes and Tsunamis.

Tokaido Shinkansen Earthquake Rapid Alarm System (TERRA-S)



Conventional Lines

● Reinforcement of structures

In order to minimize the impact of earthquakes also on conventional lines, we are implementing earthquake-resistance measures on various civil engineering structures.

Measures taken and progress

Measures taken	Progress (as of the end of FY2017)
Elevated track columns and bridge piers	Earthquake-resistance reinforcements under way in sections where there are at least 10 departures per peak hour, and in sections where a long, strong earthquake vibration is expected, as in the case of the Tokai Earthquake * Elevated track columns: Completed approximately 5,075 columns concerned * Bridge piers: Completed two out of the four bridge piers concerned
Bridge railing (prevention of falling from bridges)	Earthquake-resistance reinforcements under way in sections including those where there are at least 10 departures per peak hour and where a long, strong earthquake vibration is expected, as in the case of the Tokai Earthquake * Completed about 1,975 beams out of about 1,985 beams concerned
Station buildings	Implementation of earthquake-resistance measures under way for station buildings servicing at least 5,000 passengers per day * Completed for 74 stations out of 76 stations concerned
Rolling stock workshops, etc.	Nagoya Workshop: Rebuilding and reinforcement of buildings under way * Plan to complete by the end of FY2021

● Initiatives to stop trains quickly

Information from the aforementioned earthquake prevention system will be used for conventional lines to detect the initial weak tremors in case of an earthquake, and give a warning to the driver's cabin of trains traveling in segments that are likely to be impacted significantly by the earthquake. Every driver who received the warning would immediately hit the brake and stop the train. Furthermore, we have been strengthening the functions of seismometers since FY2016. We will be able to issue warnings to trains more quickly than before.

Common Initiatives for the Tokaido Shinkansen and Conventional lines

● Earthquake-resistance measures for ceilings of stations

In order to heighten safety at stations in case of an earthquake, we install anti-falling measures on suspended ceilings*1 at stations that service a large number of customers. *2

We prevent suspended ceilings from falling by firmly joining the building frame and the ceiling with wires and taking other measures.

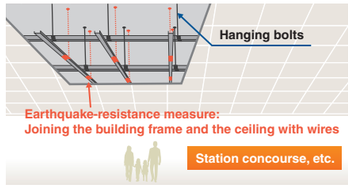


Illustration of anti-falling measure

*1 A type of ceiling with a structure that hangs from the building frame
*2 Applicable for all 17 stations of the Shinkansen and 30 stations of conventional lines that service at least10,000 customers per day

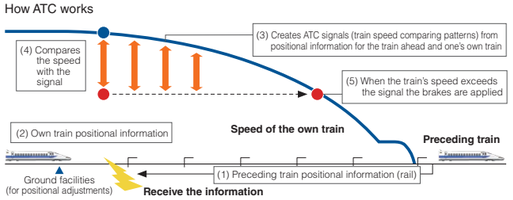
Operation Management and Safety Measures

Tokaido Shinkansen

● Features of Japanese high-speed rail system

The Japanese high-speed rail system led by the Tokaido Shinkansen is based on a principle of Crash Avoidance, which is the biggest feature for ensuring safety. This principle has been derived to prevent the possibility of a collision by using (1) dedicated tracks for high speed passenger rail service, which completely exclude freight and commuter rail and have no grade crossings, and (2) an Automatic Train Control (ATC) system, which automatically controls the speed limit of high-speed trains and prevents collisions from happening.

How ATC works



● Operational control systems

The safe and punctual operation of the Tokaido Shinkansen is supported by a number of systems, mainly the Computer Aided Traffic Control (COMTRAC*). These systems accurately process a massive amount of information, such as the operational status of trains and utilization status of facilities, controls overall transportation services, and thoroughly manages the safety.

* COMTRAC (COMputer-aided TRAffic Control): COMTRAC is the system that controls train routes, manages train operations, and operates and manages the allocation of staff (drivers and conductors) and rolling stock. Based on input data prescribing the operational conditions for each train (such as station departure and arrival time, platform, and order) in the computer, the system can monitor the status of all trains in operation at all times.

● Shinkansen General Control Center

At the Shinkansen General Control Center in Tokyo, various directives, such as transportation, operations, facilities, electrical power, and signals, utilize the before-mentioned systems and work in close cooperation to support the safety and reliability of the Shinkansen.

Also, the Shinkansen Second General Control Center, with the same functions as the General Control Center in Tokyo, has been established in Osaka with the cooperation of JR West. This Center is to be used in the event that the Shinkansen General Control Center becomes inoperable due to a disaster, thereby strengthening our crisis management in emergency situations. Equipment at the Second General Control Center is on stand-by at all times with the power on. They are usually utilized for education and training of directors and maintenance staff. The Tokaido Shinkansen has been doubling various facilities for ensuring safe and reliable transportation. We also reinforce our crisis management ability by doubling control centers.

● The Shinkansen Multiple Inspection Train (Dr. Yellow)

We have also introduced the "Shinkansen Multiple Inspection Train (Dr. Yellow)" to test ground facilities, such as electrical facilities and tracks. This rolling stock, which is based on the Series 700, aids safe and reliable transportation by efficiently conducting high precision inspections at speeds of 270km/h.

Dr. Yellow

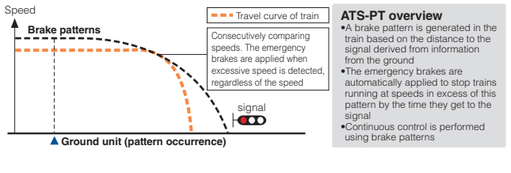
Conventional Lines

● ATS-PT (Automatic Train Stop)

ATS-PT continuously checks the speed for conventional lines according to the distance between the train and the signal, the curve, and the points. It ensures safety by automatically applying emergency brakes in situations where the train risks overrunning. We completed the introduction of ATS-PT to all of our conventional lines* in 2012.

* Introduced on the Meisho Line (Ieki ~ Ise-Okitsu section), which had been put out of service from October 2009 due to natural calamities, in conjunction with the recommencement of services in March 2016.

ATS-PT function



● Operation management systems

Our Company currently incorporates operation management systems into most lines run on conventional lines. The operation management system includes CTC (Centralized Traffic Control)*1 and the PRC (Programmed Route Control)*2. These manage train schedules, signal control, train tracing, and operation performance data, etc. These systems enable us to manage train and station information in a centralized manner at control centers. Such centralization not only enables normal train management but also allows orders and directives to be issued more rapidly even in emergency situations. We completed the replacement of the operation management system for the Tokaido Line(Shizuoka district) in FY2017.

*1 CTC: The CTC system not only remotely and integrally controls station signaling equipment, etc. in order to efficiently manage train operations, but also has the function of conducting real-time monitoring of the operational status of trains.
*2 PRC: Equipment that automatically controls the route for each train via CTC, using daily operation plan information and the position of each train.

● Tokai General Control Center (Nagoya) / Shizuoka General Control Center

JR Central's 12 conventional lines are operated and managed by two control centers; the Tokai General Control Center in Nagoya and the Shizuoka General Control Center. Each center monitors the operational status of trains and the utilization status of facilities 24 hours a day.

● Introduction of tablet devices for drivers

In FY2017, we implemented tablet devices (so-called CAST*) for drivers on conventional lines. We are looking to further improve safety and promote speedy responses to any interference in transportation by introducing the tablet devices. The device is able to provide steering control support through notification of slowdown sections, etc. by using screen diagrams, text, and voice narration, as well as communicating information via electronic data.

*CAST:Crew Assistance System Tokai

● Multiple Inspection Train and Track Inspection Train (Dr. Tokai)

We efficiently monitor facility status with regard to the maintenance of railway tracks and electrical facilities on conventional lines, using the "Multiple Inspection Train" and "Track Inspection Train (Dr. Tokai)". We efficiently and thoroughly manage and maintain facilities by using the new devices, etc., the installations of which were completed in line with the upgrade timing of inspection equipment in 2016.

Dr. Tokai

Education and training

● Technical skills training

To ensure safe and reliable transportation, we implement safety education and training for staff engaging in train operations and facility maintenance. We conduct education and training especially for staff engaging in train operations (such as drivers, conductors, directors, and those who handle signals or operate switch stands) according to the content and time stipulated for each duty.

We introduce simulators, which can perform operations simulation training, etc. for emergencies, to field offices for drivers and conductors. We also conduct various training sessions using ground facilities, such as actual rolling stock, overhead contact lines, and signaling equipment, so that employees on each system can swiftly and accurately respond to emergencies.

● Emergency conditions response training

We conduct various training every year as an opportunity for us to enhance the fast-response restoration structure in case of accidents and to learn the work of other systems. We conducted practical training in FY2017, such as passenger evacuation guide training sessions, information communication training sessions, training sessions simulating repair of derailed rolling stock, and line facility restoration training, based on the assumption of natural disasters, such as earthquakes, and train fires.

Derailment recovery training

Tsunami evacuation guidance training

● Employee training in preparation for contingencies

From FY2016 we started training all employees to go beyond the call of duty in working together with staff, etc., to respond appropriately in ensuring our customers' safety should employees happen to be present when unforeseen circumstances occur while traveling to and from work, or while on a business trip. We will continue to train employees every year in the specific measures to take in an emergency, including the mental readiness needed to respond in such a manner.

Employee training in preparation for contingencies

● Other training

The General Education Center offers education on specialized knowledge and skills for each function, and provides sessions for various qualifications and trains conductors and drivers.

It also hosts effective training beyond the borders of professions, holds lectures for both Shinkansen and conventional lines and enhancing lectures involving borders of systems, etc.

Training for Shinkansen conductors

Other initiatives

● Safety audits

Internal audits are performed on the Company's business organizations and affiliated companies from three main standpoints. The confirmation of the level of compliance with laws and regulations, etc., the confirmation of systems in place to prevent train and labor accidents that occurred in the past, and the confirmation of the state of accident prevention measure implementation. We strive to prevent violations of laws and regulations, the fading out of past countermeasures, and rules from losing their substance before an incident occurs by having a third party inspect our business operations and share these results.

Enhancing Transportation Services

Tokaido Shinkansen

Since its inauguration in 1964, approximately 6.2 billion people have used the Tokaido Shinkansen, the transportation artery linking Japan's three largest metropolitan areas, Tokyo, Nagoya, and Osaka. The Tokaido Shinkansen has literally supported Japan's economic growth. We will continue operating Japan's main transportation artery while ensuring safe and reliable transportation as the first priority.

JR Central strives to improve its transportation service to fulfill its mission of integrally maintaining and developing the Tokaido Shinkansen, which serves as Japan's main transportation artery, and the conventional line network in the Tokai region. With continual long-term capital investments, we have improved the Tokaido Shinkansen service not only by bolstering safety and accuracy, but also by the high speed, frequency, and capacity, such as by boosting speeds to 285 km/h, or introducing the "10 Nozomi timetable" (operating up to 10 "Nozomi" services in both directions). We will look to further maintain and enhance the competitive advantages offered by the Tokaido Shinkansen as the earnings received from this service are vitally important in proceeding with the Chuo Shinkansen Project.

Characteristics of the Tokaido Shinkansen

Safety

0 accidents

- No accidents resulting in fatalities or injuries of passengers on board since operations commenced
- Improvement of safety awareness and skills through human resources education and training
- Continual investment in safety-related facilities

Punctuality

0.7 minutes

- Average delay time: 0.7 minutes / 1 train in service

Note: Results for FY2017. Including delays caused by natural disasters, etc.

High Speeds

285 km/h

- Maximum speed: 285 km/h
- Tokyo ~ Shin-Osaka: 2 hours 22 minutes

Note: Accurate as of the March 2018 timetable revision (arrival time based on the fastest trains in service)

▶Refer to P. 53 for further related information (Column 2 "Shortening of arrival time by speed increase")

High Frequency and High Capacity

368 services,
466,000 passengers

- Number of train services per day: 368

Note: Results for FY2017 (including extra trains)

- Number of passengers per day: 466,000

Note: Results for FY2017

- Number of seating available: 1,323 seats/train

Environmental feasibility

Approx. **1/8**
Approx. **1/12**

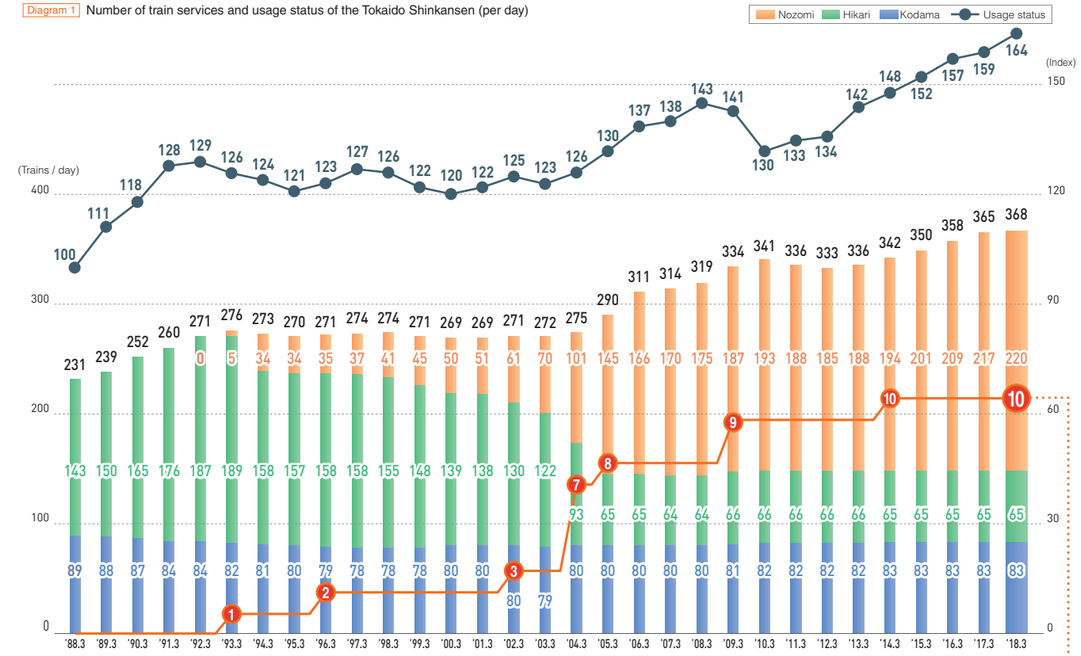
- The energy consumption amount per seat when traveling between Tokyo and Osaka is approximately 1/8th of that of an aircraft
- The CO_2 emission rate for the same is around 1/12th

Note: Comparison between the "Nozomi" Series N700 Tokaido Shinkansen and a B777-200 jet

Comfort

- Wide open, quiet space

Diagram 1 Number of train services and usage status of the Tokaido Shinkansen (per day)



Note 1. Departures shown include extra trains. Note 2. Usage status is shown by means of an index with the sectional transportation volume for FY1987 as 100.
Note 3. Station stops **Nozomi**: Shinagawa, Shin-Yokohama, Nagoya, and Kyoto **Hikari**: Same as "Nozomi", plus a few additional stations **Kodama**: Stops at each station
Note 4. The sum of figures for "Nozomi", "Hikari", and "Kodama" may not agree with the total due to rounding.

Maximum number of the fastest train, "Nozomi" one way per hour

Diagram 2 The Tokaido Shinkansen Service (Comparison with airline transportation service)

(As of April 2018)

Tokyo - (Operating Kilometers)		Osaka (552.6 km)	Okayama (732.9 km)	Hiroshima (894.2 km)	Fukuoka (1,174.9 km)
Travel Time*1	Shinkansen	2hr 22min*3	3hr 09min	3hr 44min	4hr 46min*4
	Airlines*2	1hr 05min (approx. 2 hr 40 min)	1hr 10min (approx. 3 hr)	1hr 20min (approx. 3 hr 10 min)	1hr 35min (approx. 2 hr 50 min)
Number of services and departures/arrivals per day	Shinkansen*5	250	128	100	69
	Airlines	108	20	36	142

*1 Travel times are in the case of the fastest service *2 Travel times in parentheses include transfer and access times between city centers and airports *3 Travel time between Tokyo and Shin-Osaka stations
*4 Travel time between Tokyo and Hakata stations *5 Number of services excludes extra services

"10 Nozomi Timetable" and offering extra trains flexibly

Since the introduction of "Nozomi" in 1992, JR Central has increased the number of services for "Nozomi", which is the fastest train of Tokaido Shinkansen, with the aim of improving our transportation service. In 2014, we created the "10 Nozomi timetable", which enabled a maximum of 10 "Nozomi" services operated each hour, for almost all time frames. This was made possible due to the fact that the renovation construction to add a new track, a new platform, and two more draw-out tracks from 2 to 4, for which back-to-back maintenance is possible, in Shin-Osaka Station was completed, and that we now have a certain number of trainsets for the N700A type*. This kind of capital investment over a mid to long-term span is needed to increase the number of services available. We currently operate up to 15 Shinkansen per hour one way with up to 10 "Nozomi" - the fastest train - mainly during the time frames with increased customer use. We offer flexible services to meet the demands.

We were able to increase the number of daily services offered by 1% over the previous year to 368 in FY2017 by scheduling trains in this manner. We also recorded the highest number of services offered in one day, 433, on August 10, 2017 at the height of the Summer holiday season.

* General term for rolling stock both for the Series N700 which reflect the key remodeled functions adopted for N700A, and for N700A.

Increasing the speed of the Tokaido Shinkansen

Thanks to the revised timetable in 2015, we were able to increase the speed for the first time in 23 years. The maximum speed of the Tokaido Shinkansen increased to 285 km/h. Due to this, the travel time required between Tokyo and Shin-Osaka was shortened by 3 minutes, which is as short as 2 hours and 22 minutes. The new timetable has not only improved convenience but also improved the timetable recovery capability in cases of emergency and other such situations.

With the timetable revision in March 2018, over 90% of all regular trains are operated with the N700A type rolling stock that can travel at speeds up to 285 km/h. We plan to continue sequentially increasing the number of trains running at 285km/h in line with the progress of upgrading rolling stock and modification work.

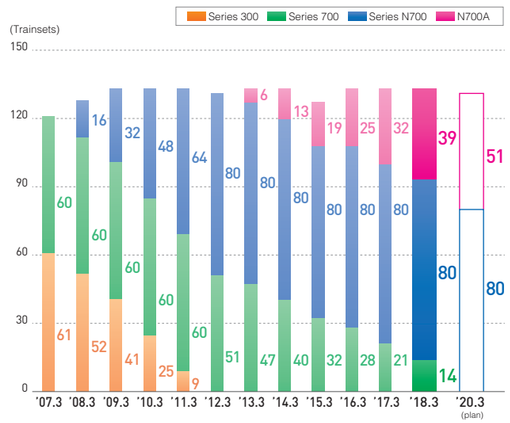
Introduction of the latest N700A and upgrading of existing rolling stock

We have continued to introduce the N700A, which employs the results of our unique technological developments, as the rolling stock to replace Series 700. We have begun introducing the N700A (3rd edition) from FY2016. With a view to further enhancing the safety and stability of the N700A (3rd edition), we have been undertaking enhancement work on the trainsets, such as heightening functions to prevent equipment malfunction on rolling stock by reinforcing the monitoring function, in addition to further reducing the stopping distance of the Earthquake Brake by 5% compared to the brake used in the already launched N700A. These functions will not only be made available on newly produced rolling stock, but also on the existing N700A type rolling stock by remodeling and adding similar features.

These measures are due to be completed by the end of FY2019, resulting in all of our Shinkansen rolling stock being the N700A type capable of running at a maximum speed of 285km/h. Having all rolling stock being capable of running at a consistent maximum speed enables us to decrease restrictions on setting timetables and set timetables more flexibly, thereby allowing us to shorten travel time. In addition, since this also enables us to strengthen our recovery capability when a train is delayed, we can anticipate improvements in convenience and stability of timetables. Going forward, we will specifically consider setting a timetable that would further enhance convenience and stability.

Meanwhile, in order to further enhance security, we completed installing security cameras in the passenger cars and deck passageways of our N700A type rolling stock at the end of 2017.

Shifts in the number of trainsets by series for the Tokaido Shinkansen
(From March 2007 to March 2020 (plan))



Note: The trainset figures are as of the end of each fiscal year (excluding retrained trains, etc.)

Development of the next-generation rolling stock, N700S

In March 2018, we completed the development of the N700S validation test vehicles for the next-generation Shinkansen rolling stock, reflecting a full-scale model changeover for the first time since the Series N700 and have begun running tests. These validation test vehicles are used to perform final checks of new technologies to be reflected in the next-generation commercial rolling stock. Following this, they will be used as testing vehicles to promote technological development in an aim to further brush up the Tokaido Shinkansen and the Sanyo Shinkansen. We are currently reviewing plans to commercially introduce the next series of commercial rolling stock around FY2020.

We will improve the ATC and brake system for N700S to further reduce the stopping distance of the Earthquake Brake by 5% compared to that used in N700A (3rd edition) in order to further enhance safety. In addition, we will heighten functions to prevent accidents in advance by improving the monitoring of equipment on running rolling stock. At the same time, we will aim at further enhancing the precision and efficiency of inspections by transmitting a greater volume of data recorded by rolling stock to the ground, and conducting more detailed analyses of rolling stock conditions at the "rolling stock analysis center". In terms of service, we will make efforts to further improve comfort, placing electric outlets for mobile devices at all seats, and taking other steps.

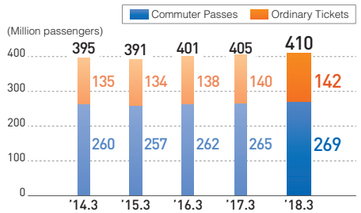
We have developed a standard rolling stock that is adaptable to rolling stock of varying trainset lengths by painstaking efforts to reduce the size and weight of underfloor devices. Since it will be possible to provide rolling stock that meet the needs of various lengths of trainsets without making a major modification, we can expect cost reduction and quality improvement due to the expansion of manufacturer production size. We are also considering installing a battery-based self-propelled system. This system will enable a train to move from a bridge or elsewhere to a safe place in a self-propelled mode even when experiencing power outage for a long period of time due to an earthquake, etc.

N700S validation test vehicles

Conventional Lines

We operate a network of 12 conventional lines, which form an integrated network with the Tokaido Shinkansen. These lines have contributed to the development of communities and the regional economy in the Tokai region, mainly around Nagoya and Shizuoka.

Shifts in the number of passengers on conventional lines



Improvement of service on conventional lines

In regards to conventional lines, we have steadily improved services by increasing speeds, introducing new rolling stock, and improving the frequency of trains. With regard to the limited express trains, we have introduced "Wide-View" rolling stock and established the "Wide-View" limited express network, which forms an integrated network with the Shinkansen, by ensuring connections with the Shinkansen. In terms of the popular "Wide-View Shinano", "Wide-View Hida" and other limited express trains, we are flexibly increasing the frequency and the number of train cars in service to meet demand at busy times and for nearby events.

In terms of local trains, we are striving to increase the frequency and number of cars per train in service during peak-demand morning and evening periods, establish a rapid train system, and adjust services so that they are offered in certain intervals. Through initiatives such as the above, we will strive to offer timetables that are easier for customers to use.

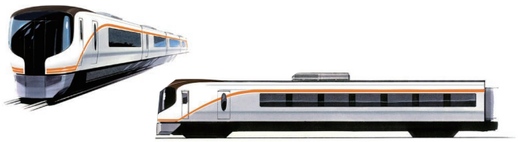
Limited Express Train "Wide-View Shinano"

New production of next-generation limited express train rolling stock (testing vehicle) using the hybrid method

In anticipation of the replacement of electric cars currently used for the "Hida" and "Nanki" limited express trains, we will newly develop a testing vehicle for the next-generation limited express rolling stock that uses the hybrid system, the first of its kind for us, by the end of 2019 and conduct test runs to establish relevant technologies. We are aiming to commercially operate the country's first hybrid-type railway rolling stock that runs at speeds up to 120 km/h, while enhancing the safety and comfort of such trains. We are currently reviewing plans to commercially introduce mass-produced vehicles by FY2022.

The hybrid method utilizes a combination of power generated by the engine and the power stored in a storage battery during braking, etc., to rotate the motor for running the train. By adopting this method, we do not need the rotary components unique to diesel railcars and can achieve increased safety and reliability. In terms of comfort, we can improve quietness and comfort by not having to make the gear changes unique to diesel railcars, reducing the number of engines, etc.

Exterior illustration



* Design is illustration only.

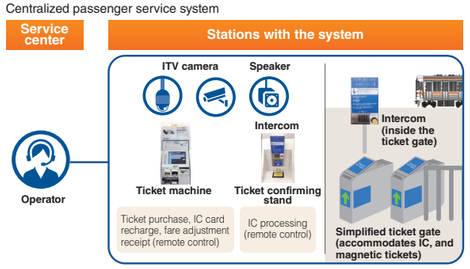
Introduction of centralized passenger service system

To further enhance customer convenience and establish an efficient structure in line with customer use, we introduced the centralized passenger service system at 6 stations on the Taketoyo Line in October 2013 and at 8 stations on the Tokaido Line (between Okazaki and Toyohashi stations) in October 2017 and have been smoothly operating the system.

At stations with the centralized passenger service system, we provide such service functions as purchase of tickets, fare adjustment, and recharging of IC cards at all hours that trains are in service. In addition, a full-time operator at the service center monitors the status of the station via surveillance cameras as well as handle fare adjustments, responding to inquiries from customers, providing necessary assistance, and making announcements. If a customer requires guidance, etc., on site, the staff will go to the site and respond to the customer's needs.

Given that there are many customers who purchase reserved seat tickets for the Shinkansen, we newly installed a ticket machine for reserved seats with support at Koda Station. The ticket machine not only allows customers to easily purchase reserved seat express tickets, etc., but also allows the operator to respond remotely so that customers may purchase discount tickets, etc., that require certificates.

Centralized passenger service system



*If a ticket requires a fare adjustment or cannot be used through the automatic ticketing gates, the operator will provide guidance via the intercom.
*If trouble arises, such as a ticket becoming jammed, station staff will go to the site to troubleshoot.

Promoting the Chuo Shinkansen Project Using the Superconducting Maglev System

We are promoting the Chuo Shinkansen Project using the Superconducting Maglev System based on the Nationwide Shinkansen Railway Development Act (hereinafter referred to as "the Act") to continually carry out our mission of operating a high-speed railway linking the Tokyo Metropolitan area, Chukyo, and Kinki regions, which is the lifeline of our business, and to ensure the future foundation of the company.

Significance of the Chuo Shinkansen Project using the Superconducting Maglev System

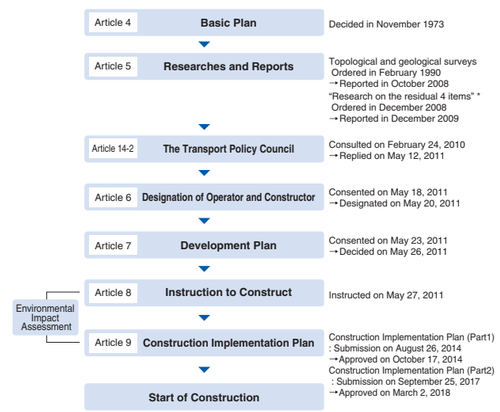
- Promoting the Project while ensuring sound management and providing stable dividends

50 years have passed since the inauguration of the Tokaido Shinkansen, which serves as Japan's main transportation artery. Therefore, we must consider drastic measures to respond to aging in the future and large-scale disasters based on the fact that it takes a long time to construct and build a new railway line. In the wake of the Great East Japan Earthquake, the need for a new line that enables us to offer multiple routes in our main transportation artery has become even more important to prepare for the risk from natural disasters. This is the reason we decided to complete the Chuo Shinkansen as quickly as possible, as it can be used as an alternate to the role of the Tokaido Shinkansen by utilizing the Superconducting Maglev System, which we have developed, under the condition that we bear the cost of its construction. We will operate the Chuo Shinkansen in an integrated manner along with the Tokaido Shinkansen.

While steadily working towards the successful completion of this project and maintaining our ability to react in a flexible manner, we will make necessary investments to ensure safe and reliable transportation, and to enhance competitiveness in the railway business, as well as ensure sound management and provide stable dividends. We will first realize the project between Tokyo and the City of Nagoya, where we have received approval for the construction plan, and strive to further extend to the City of Osaka.

In order to confirm that the principles of a privately owned company, such as freedom of management and autonomy of capital investment, would not be hindered by application of the Act, we referred fundamental clauses regarding application of the Act to the Ministry of Land, Infrastructure, Transport and Tourism and received a reply in January 2008 indicating that those principles would not be hindered.

Diagram 1 Flow of work based on the Nationwide Shinkansen Railway Development Act



* "Research on the residual 4 items"
●Items related to transportation capacity in response to the transportation demand
●Items related to the development of facility and rolling stock technologies
●Items related to construction costs ●Other necessary items

►Contents of Development Plan (Note) The estimated amount of expenditures for construction does not include interest.

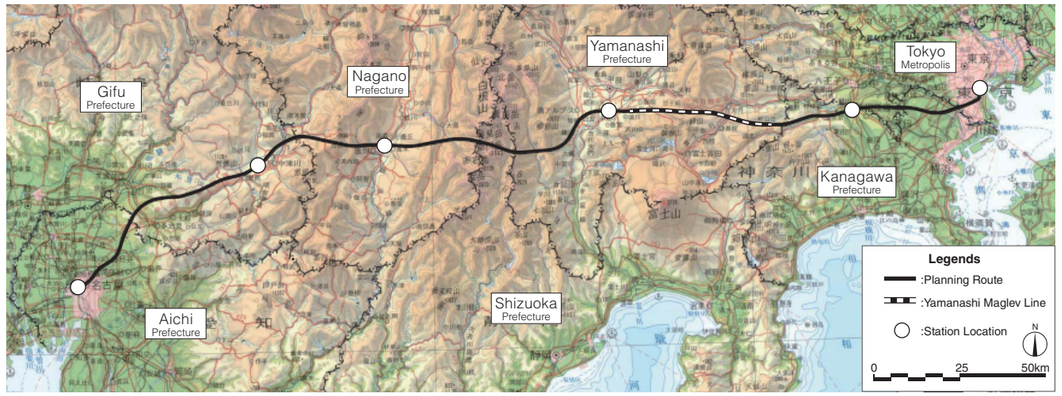
Construction line	Chuo Shinkansen	
Section	Tokyo - Osaka City	
Technology used for running	Superconducting magnetic levitation technology	
Maximum design speed	505 km / h	
Estimated amount of costs required for construction (including rolling stock costs)	9,030 billion yen	
Other necessary items	Main areas passed through	Kofu City area, south-central Akaishi Mountains (Southern Alps), Nagoya City area, Nara City area

►Outline of the Construction Implementation Plan (Part2) of the Chuo Shinkansen section between Shinagawa and Nagoya

Section	Between Shinagawa and Nagoya
Station Location	Shinagawa Station, Kanagawa Prefecture Station (provisional name), Yamanashi Prefecture Station (provisional name), Nagano Prefecture Station (provisional name), Gifu Prefecture Station (provisional name), Nagoya Station
Line extension	285.6km
Construction costs	4,853.6 billion yen [Total construction costs of 5,523.5 billion yen (Includes rolling stock costs. Excludes the construction costs for the existing Yamanashi Maglev Line)]
Expected completion year	2027

Progress of the Project

Diagram 2 Route of the Chuo Shinkansen (Between Tokyo and the City of Nagoya)



This map is copied from a Japanese map (with a scale of 1 to 1,000,000) published by the Geographical Survey Institute with their authorization. (Authorization number: H25 Jo Fuku, 310)

According to the Act, JR Central follows the procedures for the Chuo Shinkansen (between the Tokyo Metropolis and the City of Osaka) as shown in Diagram 1. Since receiving the order for construction in May 2011, we have taken the procedures of environmental assessment between Tokyo and the City of Nagoya, which is promoted as the first stage. In August 2014, we submitted the final Environment Impact Statement to the Minister of Land, Infrastructure, Transport and Tourism (the Minister) and made a public announcement. In addition, we simultaneously made necessary preparations to apply for the approval of the construction implementation plan along with the environmental assessment procedures. We submitted the application for the approval of the Construction Implementation Plan (Part 1) mainly on civil engineering structures for the Chuo Shinkansen section between Shinagawa and Nagoya to the Ministry on the same day as the submission of the final Environment Impact Statement, and received approval in October of the same year. Subsequently, in September 2017, we submitted the application for the approval of the Construction Implementation Plan (Part 2) primarily on electrical facilities and received approval on March 2018.

We have continued to hold briefings introducing our project for individual municipalities and self-government associations along the planned route to explain the ways in which we work with local communities in as detailed a manner as possible, and introduce region-oriented information etc. Further, we have proceeded carefully with preparations toward initiating construction work, including conducting center line surveys, implementing designs and holding discussions, acquiring land, concluding construction contracts, and conducting briefings.

Construction contracts were concluded mainly for sections where construction is difficult and requires a long period of time, such as the Southern Alps tunnel and the Shinagawa and Nagoya terminal stations, and for emergency exits that serve as the starting point of the shield machine when excavating tunnels for the main line in urban areas.

Among such locations, we have begun civil engineering work on a full scale in places where the required preparations have been completed, such as the Southern Alps tunnel (Yamanashi section, Nagano section), Shinagawa Station (north section, south section, non-excavation section), and Nagoya Station (central east section, central west section).

We will continue to go forward with our plan based on the major premise of strictly ensuring sound management, and by focusing on construction safety, environmental protection, and coordination with local communities.

The Act on the Japan Railway Construction, Transport and Technology Agency, Independent Administrative Agency was revised in November 2016, and a system in which the Agency provides JR Central with the loans for part of the funds required for the construction of the Chuo Shinkansen was put in place. We borrowed a total of 3 trillion yen before July 2017 as scheduled.

We will see that sound management and stable dividends are strictly maintained by securing freedom of management and autonomy of investment, and effectively make use of long-term, fixed and low-interest rate financing to reduce management risk as we actively move ahead with the construction efforts. After launching the service to Nagoya Station, we will continue on to promptly initiate the construction of the route to Osaka with a view to exerting full efforts to move up live operation of the entire line by up to 8 years.

Excavation at Southern Alps tunnel (Yamanashi section)

Reducing costs thoroughly while ensuring safety

We are responsible for the entire construction cost of the Chuo Shinkansen, therefore all construction expenses and costs will be examined by the internally established "Chuo Shinkansen Construction Cost Reduction Committee", which will thoroughly reduce costs while ensuring safety. At the same time, we will flexibly distribute resources in an optimal fashion in accordance with the managerial environment.

Superconducting Maglev System and engagement in global environment preservation

Tokyo and Osaka will be connected in as fast as 67 minutes by the Chuo Shinkansen using the Superconducting Maglev System, and the actual travel time required to move between the centers of Tokyo and Osaka City can be shortened to approximately half of airplanes. In addition, the amount of CO_2 emissions that Superconducting Maglev System produces per seat between Tokyo and Osaka is approximately one-third of airplanes. As this shows, Superconducting Maglev is a transport system suitable for the 21st century in which global environment preservation is becoming more and more important.

Refining Superconducting Maglev Technology and Reducing Costs

Accumulated traveling distance (Yamanashi Maglev Line)

Approx. **2.41** million km

Accumulated investment amount (includes consumption tax in part)

687.6 billion yen

JR Central has promoted technological development based on our long-term belief that the Superconducting Maglev System is the most suitable for use on the Chuo Shinkansen due to its speed and advanced technology.

The Superconducting Maglev System Technology has been completed as a practical technology. We will continue to make efforts in further brushing up the Superconducting Maglev System Technology, including improving comfort and enhancing efficiency of maintenance, toward the opening of the Shinagawa-Nagoya route of the Chuo Shinkansen, as well as work to reduce costs for the construction, operation, and maintenance of commercial lines.

Initiatives with the Yamanashi Maglev Line

We started running tests on the initial 18.4 km section of the Yamanashi Maglev Line in April 1997. The level of the Superconducting Maglev Technology was evaluated in multiple stages, resulting in the Superconducting Magnetic Levitation Technological Practicality Evaluation Committee of the Ministry (hereinafter, the Evaluation Committee) acknowledging that the Superconducting Maglev Technology had already achieved levels sufficient for commercial service in July 2009. The Minister established the technological standards of the Superconducting Maglev in December 2011.

Work extending the Yamanashi Maglev Line to 42.8 km and fully renewing the facilities was completed in August 2013, and running tests were started with the Series L0 (el zero) rolling stock based on commercial line specifications. In April 2015 we recorded the maximum daily running distance of 4,064 km, and beat our own world record for the fastest running train with a record of 603 km/h. In February 2017, the Evaluation Committee confirmed its evaluation that the technology development required for commercial lines was completed.

We will continue to make efforts in further brushing up Superconducting Maglev System Technology, including improving comfort and enhancing efficiency of maintenance for the practical technologies already established, as well as work to reduce costs for the construction, operation, and maintenance of commercial lines.

Superconducting Maglev Ride

We have been conducting "Superconducting Maglev Ride" since FY2014, and approximately 80,000 people to date have experienced the high-speed travel at 500 km/h, and the high level of performance of Superconducting Maglev Technology, with many giving their positive impressions, such as "traveled in extreme comfort" and "wishing for early launch of the service." Diagram 1 We will also continue promoting "Superconducting Maglev Ride" in a well-planned manner.

Investment in the Yamanashi Maglev Line and Superconducting Maglev technological development

We have invested heavily in developing the practical technologies required to establish Superconducting Maglev commercial lines. We will proceed with initiatives to realize Superconducting Maglev Project in the Northeast Corridor of the United States while constructing Superconducting Maglev-based Chuo Shinkansen ourselves. The construction, operation and maintenance for these projects all rely on technologies we have developed.

▶Investment in the Yamanashi Maglev Line and Superconducting Maglev technological development

	Accumulated investment amount
Special investments for the Yamanashi Maglev Line *1	**170.6** billion yen
Extension of the Yamanashi Maglev Line and upgrading of facilities *2	**338.3** billion yen
Investment in proprietary Superconducting Maglev technological development *3	**178.7** billion yen
Total	**687.6** billion yen

*1 Special investment of 196.5 billion yen (including consumption tax) planned for test infrastructure (above-ground facilities for general purpose use), etc., such as civil engineering structures along initial sections of track. The above amount is the amount paid from FY1990 to FY2017.
*2 355 billion yen (including tax) in construction costs planned as a new investment framework for work extending the Yamanashi Maglev Line to 42.8 km and renewing the facilities. The above amount is the amount paid from FY2006 to FY2017.
*3 The above amount is the amount paid separate to the amounts listed for *1 and *2 from FY1987 when the company was founded to FY2017.

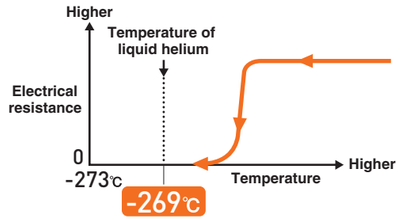
● Progress on the Superconducting Maglev System Technology

June 1990	JR Central applies to the Minister of Transport for the approval of the construction plan of the Yamanashi Maglev Line and gains approval.
April 1997	Running tests start on the Yamanashi Maglev Line.
March 2000	The Superconducting Magnetic Levitation Technological Practicality Evaluation Committee of the Ministry of Transport (hereafter, the "Evaluation Committee") acknowledges that "there is potential from a technological standpoint that the technology could have practical applications"
December 2003	JR Central records the world speed record for a manned rail vehicle at 581 km/h
November 2004	JR Central performs exercises of trains passing each other at 1,026 km/h relative to one another
March 2005	The Evaluation Committee of the Ministry of Land, Infrastructure, Transport and Tourism acknowledges that "the core technologies for practical application have been established"
September 2006	A facility investment plan is established to extend the Yamanashi Maglev Line and upgrade facilities
January 2007	Application for changes of "Yamanashi Maglev Line Construction Plan" is approved by the Minister of Land, Infrastructure and Transport (hereafter, the "Minister")
July 2009	The Evaluation Committee of the Ministry of Land, Infrastructure, Transport and Tourism acknowledges that "the technologies required for commercial services have been established from a comprehensive and systematic standpoint, and it is possible to move forward with detailing the specifications for commercial services and the technical standards"
May 2011	The Minister of Land, Infrastructure, Transport and Tourism determines development plans for the Chuo Shinkansen (between Tokyo and the City of Osaka), which is based on a Superconducting Magnetic Levitation System
December	The Minister establishes the technical standards for Superconducting Maglev
August 2013	Work extending the Yamanashi Maglev Line to 42.8km and renewing the facilities is completed, and running tests starts with the Series L0
April 2015	JR Central records a travel distance of 4,064 km in one day JR Central records the world speed record for a manned rail vehicle at 603 km/h
February 2017	The Evaluation Committee of the Ministry of Land, Infrastructure, Transport and Tourism evaluates that "the technology development required for commercial lines was completed"

Diagram 1 Superconducting Maglev Ride

● What is superconductivity?

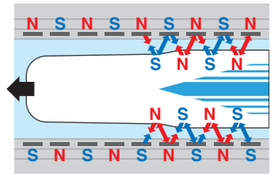
Superconductivity is the phenomenon that the electrical resistance of certain materials approaches zero at very low temperatures. When an electrical current is applied to a coil in a superconductive state (superconducting coil), this current continues to flow almost indefinitely, resulting in the creation of a very large magnetic field. Niobium-titanium alloy has been used for the Superconducting Maglev and superconductive state is achieved when cooling it with liquid helium to a temperature of minus 269°C.



● The Principles of the Superconducting Maglev System

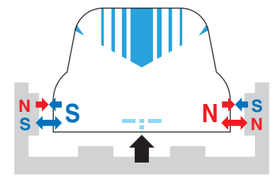
Propulsion System

By passing current through the Propulsion Coils on the ground, a magnetic field (north and south poles) is produced, thus the vehicle is propelled forward by the attractive force of opposite poles and the repulsive force of same poles acting between the ground coils and the Superconducting Magnets built into the vehicles.



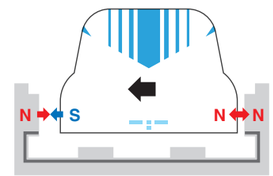
Levitation System

The Levitation and Guidance Coils are installed on both sides of the guideway (track). When the on-board Superconducting Magnets pass through at high speed, an electric current is induced in the Levitation and Guidance Coils, causing them to become electromagnets. This generates a force that both pushes and pulls up the vehicle.

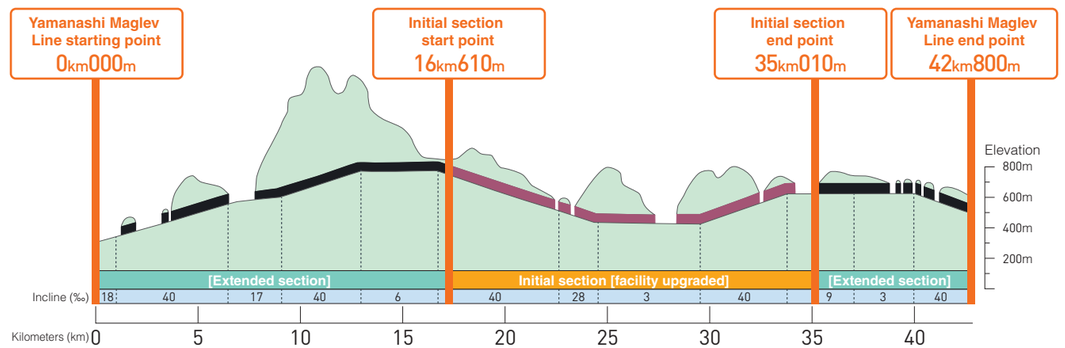


Guidance System

The Levitation and Guidance Coils on both sides of the guideway keep the vehicle in the center of the guideway at all times by exerting an attractive force on the far side of the vehicle and a repulsive force on the near side when the vehicle moves off center to either side.



● Overview of the Yamanashi Maglev Line



Enhancing Sales and Marketing

"Express Reservation" and "smartEX" are reservation services that are mainstream sales services that enable seat reservations and the changing of reservations easily online while eliminating the need to pick up tickets, thereby making the most use of the high volume Tokaido Shinkansen. In particular, "smartEX", which we introduced in September 2017, is an online reservation and ticketless boarding service that can be used by following a simple registration procedure. The service offers greater convenience also for non-members of Express Reservation and for foreign tourists visiting Japan, etc., when using the Tokaido Shinkansen.

In terms of tourism, we will roll out measures to stimulate demand, such as the Kyoto campaign, and continue to strengthen our relationship with local residents and travel agencies at tourist spots in our operating areas. We will also strive to increase Shinkansen ridership by providing attractive travel products and bolstering initiatives aimed at various members.

Number of uses of online reservation services*1 per day*2	Number of "Express Reservation" members *2	Number of persons registered to "smartEX" *2
176,000 uses	3.39 million	0.72 million

*1 The number of uses of "Express Reservation" and "smartEX"
*2 As of March 2018

Improving Convenience for the Tokaido Shinkansen

Promoting online reservation and ticketless boarding services

In an effort to have customers more conveniently use the Tokaido Shinkansen, JR Central takes initiatives to promote online reservation and ticketless boarding services.

We provide the "Express Reservation" service for customers who frequently ride the Shinkansen for business or other reasons. Members of the service can smoothly ride the Shinkansen by simply touching their member IC card at the automatic ticketing gates after reserving their seats with a smartphone or other device beforehand. There is no need to stop at the ticket counter of a station, which allows customers to significantly reduce the total transit time, plus enjoy the benefit of using the Shinkansen at a discounted member price. Additionally, as members can change their reservation as many times as they want without any additional charges, they can always select the train that best suits their need from a vast selection of trains including the "Nozomi", which has a maximum of 10 departures every hour.

We also offer "smartEX" with no membership fee for customers who only occasionally use the Shinkansen, including people traveling to visit their hometowns, tourists, and foreigners visiting Japan, so that they can also use the convenient online reservation and ticketless boarding service. This ticketless service enables customers to board the Tokaido Shinkansen and the Sanyo Shinkansen by simply registering their credit cards and the widely-used commuting type IC card from their smartphone, etc. As a result, we offer greater convenience for even more customers to use the Shinkansen.

Reservations for reserved seats using these services currently account for over 30% of all reservations. We will continue to promote greater use of online reservation and ticketless boarding services.

Shifts in usage of online reservation services.

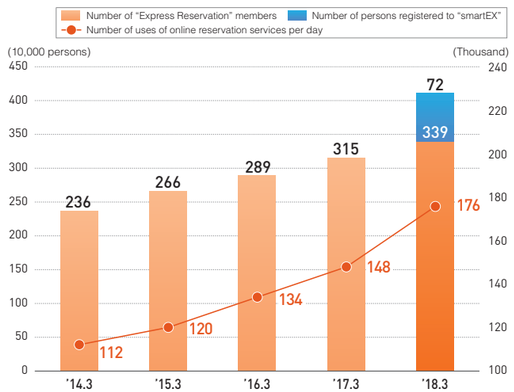
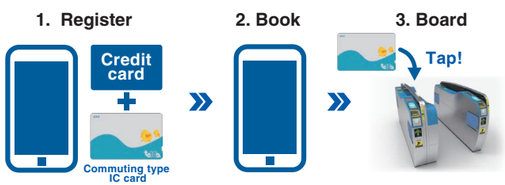


Illustration of using "smartEX"



Stimulating Tourist Demand

Deployment of tourism campaigns

We have continuously implemented travel campaigns, such as the Kyoto Campaign, for Kyoto and Nara, which are the largest and most sustainable tourist resources in our market area, and we are promoting the use of the Shinkansen mainly from the Tokyo Metropolitan area to the Kansai region. In particular, we run promotional advertisements for the "Kyoto Campaign" based on a concept of enabling customers to re-acknowledge Japanese beauty and profundity.

In our "Tokyo Bookmark" Campaign to promote the use of the Shinkansen to visit Tokyo from the Kansai and Chukyo areas, we also introduce tourism information on Tokyo, travel items, etc., on the website. In addition, we are working on coming up with attractive products associated with Hida, Ise-Shima and other locations.

In addition, we will coordinate with local governments, travel agencies and other parties through the "Aichi Destination Campaign" organized by the 6 JR operators between October and December 2018, and make efforts to develop attractive sightseeing materials and products and operate sightseeing trains.

Kyoto Campaign

Enhancement of tourist products for the users of "Express Reservation" and "smartEX"

For customers using these services, we are expanding tourist products that offer the use of the Shinkansen at discounted prices when customers plan ahead for sightseeing and other purposes.

For example, by launching various products, such as "EX Nozomi Family Hayatoku" and other services that offer a discount for family or friends traveling together using the Shinkansen, although the travel dates, number of seats, sections of travel and hours of boarding may be limited, we are stimulating demand for Shinkansen use.

"50+ (Fifty Plus)" travel plan

Given the aging population in Japan, the senior age group, which is said to have more leisure time and disposable income than other age groups, is growing. We expanded the target group to include persons aged 50 and above, and has been operating a travel club "50+", which anyone over 50 years old can participate in. The number of members as of the end of 2017 totaled approximately 910,000, and approximately 210,000 members enjoyed "50+" brand products.

We not only inform the members of seasonal tourism information through the magazine and the website but also offer affordable travel products that use the Tokaido Shinkansen.

Efforts toward foreign tourists

To have visitors to Japan also use our online reservation and ticketless boarding service "smartEX" for the Tokaido Shinkansen and the Sanyo Shinkansen, we introduced a service that enables visitors to reserve seats for the Shinkansen prior to their departure from their home country by downloading a special smartphone application*. As a result, visitors to Japan can more conveniently use the Tokaido Shinkansen and the Sanyo Shinkansen.

We also collaborate with municipalities located along the lines and other transportation companies to promote the sales of excursion packages for foreign tourists visiting Japan, targeting areas such as "Takayama and Hokuriku", and "the Ise, Kumano, and Wakayama" areas. We also offer travel products, etc., using the "FLEX JAPAN" brand to stimulate tourism along our lines, with a focus on the Tokaido Shinkansen. Specifically, we offer a product, for example, that offers a round-trip non-reserved seat ticket between Tokyo and Kyoto or Osaka plus a one-day tourist ticket at the destination as a set.

We have been operating "Japan Highlights Travel", a portal site that has a collection of tourism information on areas along the Tokaido Shinkansen to stimulate travel demand in cooperation with local municipalities and tourist associations along the line. The website may be viewed also in English and Chinese (traditional Chinese) in addition to Japanese.

In addition, to make our train services more user-friendly and to have customers use the services with a sense of security, we will introduce station numbering for conventional line stations that are used by many visitors to Japan, by September 2018.

We will also work to expand coverage of the Free Wi-Fi service in stations and on trains to put in place an environment where users can make online reservations and obtain train service and sightseeing information on their smartphones, etc., for pleasant traveling. As of March 2018, the Free Wi-Fi service is available in all stations on the Shinkansen and in 24 conventional line stations that service a large number of visitors to Japan. We plan to launch the Free Wi-Fi service on the Tokaido Shinkansen and Express "Hida" sequentially from the summer of 2018.

*As of April 30, 2018, the service is available in seven countries and regions.

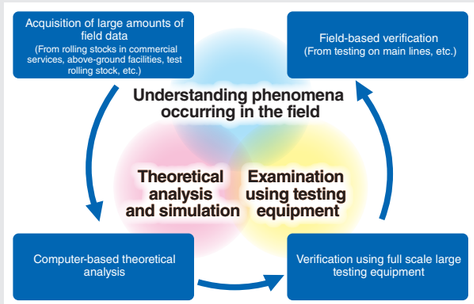
Japan Highlights Travel

Technological Development and Enhancement of Technical Capability

The railway business is supported by employees who thoroughly execute their tasks using various skills and cooperation with each other, and supported by various types of equipment, such as rolling stock, civil engineering structures, tracks, and electric and signal communications equipment, functioning seamlessly. In order to further ensure safety and strengthen the future managerial foundation, it is vital to continue developing core technologies which serve as the base of the foundation.

Looking ahead, we will continue to proceed with development using the latest technology in relation to rolling stock and other equipment towards further improving safety and enriching our transportation service, and have this lead back to the building of an efficient management structure that emphasizes reducing unnecessary costs.

Basic railway R&D cycle



Promoting Technological Development

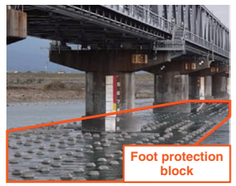
To proactively deepen the existing railroad technologies, JR Central pursues development of technologies that support the future of the Company, and takes initiatives to enhance technical capabilities and develop human resources. At the Komaki Research Center, which opened July 2002, by leveraging the development capability using actual-size testing equipment, which is the main distinctive feature of the research center, we have made accomplishments in proprietary technology development, including the development of new rolling stock (refer to page 20 for features of the N700S; refer to page 21 for features of the next-generation limited express rolling stock using the hybrid method), the development of countermeasures against derailment and deviation for the Tokaido Shinkansen, the development of large-scale renovation methods for civil engineering structures in relation to our Shinkansen trains, and the development of high-speed heavy simple catenary for Shinkansen.

In FY2018, we will conduct running tests using the N700S validation test vehicles, which are the next-generation rolling stock of the Tokaido Shinkansen, and perform final checks toward finalizing the specifications for mass-production cars. In regard to conventional lines, we will move forward with the new production of a testing vehicle for next-generation limited express rolling stock that uses the hybrid system for conventional lines to increase safety and comfort, as well as promote a reduction in total costs. Furthermore, we will implement more advanced and power-saving inspections and maintenance that utilize condition monitoring technology, as well as promote technical development that can lead to cost reductions for maintenance and upgrading of facilities. At the same time, we will pursue technological development to further heighten safety against disasters, etc.

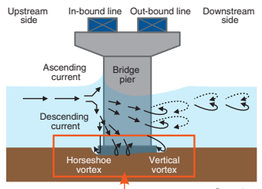
Development of block measurement device for foot protection for the Shinkansen Fujikawa Bridge using 3D laser scanner

In the event of swollen rivers caused by heavy rain in a typhoon, etc., there is the risk of scouring occurring in the ground surrounding the bridge piers, causing damage, such as slanting of bridge piers. We have installed about 40,000 foot protection blocks at the Tokaido Shinkansen line's Fujikawa Bridge placed over the fast-flowing Fuji River as a means to protect bridge piers from scouring. In the event of a swollen river due to heavy rain, we must check for any dislocation or sinking of foot protection blocks.

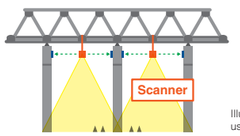
Conventionally, we needed to perform photography measurement, etc., from a helicopter when conducting the check, which required time and effort. However, the development and implementation of the device using a 3D laser scanner to measure the locations of foot protection blocks for the Fujikawa Bridge in FY2017 has enabled us to identify the locations of foot protection blocks more quickly, accurately, efficiently and safely than under the conventional method.



Foot protection block



Scouring



A phenomenon where the river floor is scraped by a vortex

Illustrated image of measurement using a 3D scanner

Development of movable platform fences for conventional lines

Since conventional lines come in diverse rolling stock models and number of trainsets with doors located in different places, we have been continuing to examine and develop movable platform fences that can accommodate the circumstances of JR Central's conventional line platforms.

In the type that opens and closes in the left-right directions, we have the largest-level movable platform fences for conventional lines that have an opening width of over 4 meters. For the opening and closing of fences, we use sensors to detect the number of trainsets on a train and the stopping position and automatically open the fences while having the train conductor operate the closing of fences. In this way, our movable platform fences can accommodate trains with a varying number of trainsets.

In developing these fences, we focused on safety given the wide opening while paying attention to reducing weight, enhancing the speed of opening and closing, and keeping costs low.

In January 2018, we installed test fences on the platform of Kanayama Station of the Tokaido Line and began verification testing. Based on the results of this testing, we will aim to install the movable platform fences on the platforms of Kanayama Station on the Tokaido Line at the earliest possible time.

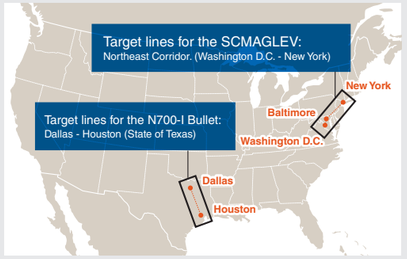
Movable platform fence testing machine

Overseas deployment of high-speed railway systems

We currently offer consultation to overseas high-speed railway projects and take associated initiatives by utilizing our comprehensive technologies in the highest level high-speed railway system in the world with the aim of realizing overseas deployment of high-speed rail systems. We believe that the overseas deployment of our high-speed railway system will be a meaningful project that enables Japanese manufacturers to maintain and strengthen their technology and skills through the expansion of the international high-speed railway market, and will lead to the stable provision of materials and equipment, and to technological innovation and cost reductions in railway-related equipment.

We target countries and regions where it can be expected to introduce total systems involving new high-speed passenger railway lines in which our superior high-speed railway systems can be used to their full potential. Furthermore, we realize the need for target countries and regions to have a complete legal system where intellectual property rights and the sanctity of agreements are established as socially-accepted ideas, a stable political situation, and the economic strength to invest in large-scale infrastructure investments. Therefore, the U.S. is currently the main target for promotional activities.

Target lines for overseas expansion



Consulting & Coordination business

Our policy regarding the overseas expansion high-speed railway systems is that we do not lead the implementing body of development projects but contribute to projects primarily through consulting. Specifically, we propose the deployment of high-speed railway as a total system, which includes civil engineering structures, tracks, electrical equipment, signaling equipment, rolling stock, operation management systems, maintenance and repair, etc., to overseas markets. We not only formulate technical specifications and provide support and consultation to ensure safe and reliable operation of the high-speed railway by supplying various manuals regarding operations and maintenance, and conducting education and training for staff, etc., but also coordinate with relevant Japanese companies when projects become concrete.

The N700-I Bullet and SCMAGLEV

We are proposing high-speed railway systems called the "N700-I Bullet" and "SCMAGLEV" to overseas markets. The N700-I Bullet is a Tokaido Shinkansen total system based on the principle of "Crash Avoidance", of which the Series N700 rolling stock is the main component. The SCMAGLEV is a Superconducting Maglev System completed by us that can realize commercial services at a high speed of 500 km/h.

● The Texas Project

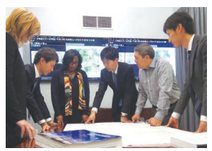
The Texas Project, which is set to use the N700-I Bullet, is a business venture which aims at linking two major city centers, Dallas and Houston, with high-speed rail. The main development body, Texas Central Partners (TCP), is pursuing business development activities through the procurement of construction funds and the formulation of preliminary designs. The project is steadily moving forward as indicated in the release of the Draft Environmental Impact Statement (DEIS) in December 2017.

In order to support the business development activities from a technological perspective, we established a local subsidiary, High-Speed-Railway Technology Consulting Corporation (HTeC) in May 2016. In October of the same year, HTeC entered into a technical assistance agreement with TCP and began providing technical consulting for the business development activities performed by TCP, such as formulation of specifications, preparation of management and maintenance plans, creation of preliminary designs for stations and maintenance facilities, and development of personnel training and educational programs.

● The Northeast Corridor Project

An SCMAGLEV line is supposed to be adopted for Northeast Corridor that connects Washington D.C. and New York, and we are currently initiating promotional activities to ensure that the initial segment from Washington D.C. to Baltimore goes ahead as a project based on cooperation of both the Japanese and U.S. governments. In 2015, the U.S. government approved a federal grant of 27.8 million USD for the State of Maryland to cover the cost of research for the aforementioned segment, and the procedure for environmental impact assessment by the Federal Railroad Association, etc. began in late 2016. The Japanese government launched research activities for this project in FY2016. There has been a rise in awareness and support toward this project in the governments of both Japan and the U.S.

The U.S. Secretary of Transportation, the Governor of Maryland, and other VIPs, have experienced riding on the Yamanashi Maglev Line and expressed high recognition of the quality of the technology. We will provide full support from a technological perspective when the project moves to a more specific phase.



Meeting between HTeC and TCP

Technical consulting for Taiwan High Speed Rail

In response to a request for technical assistance from Taiwan High Speed Rail Corporation, which operates Taiwan's high-speed rail system based on the Japanese high-speed rail system, we started providing technical consulting in FY2014 and completed three projects by FY2016. Since May 2017, we have been providing technical consulting for implementation of Traffic Control System Upgrade conducted by Taiwan High Speed Rail Corporation.

Making efforts to promote Japanese high-speed rail systems as a global standard

We will continue to promote initiatives to establish the Japanese high-speed rail system, which is based on the core principle of "Crash Avoidance", as a global standard, through the International High-Speed Rail Association (IHRA).

Developing Affiliated Businesses

JR Central Towers (center/right) and JR Gate Tower (left)

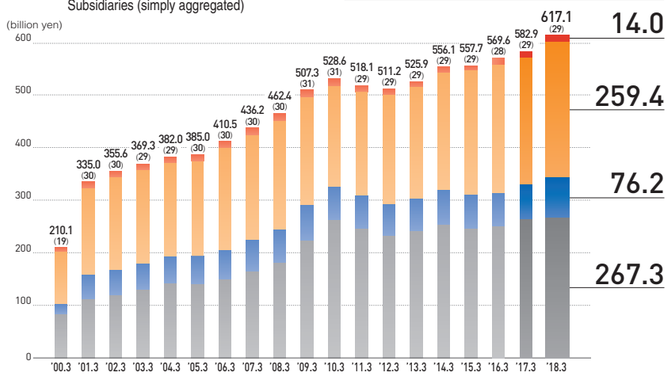
As seen in JR Central Towers and the JR Gate Tower in Nagoya Station, we have improved our revenue base by engaging in businesses that are expected to generate synergistic effects with the railway business, such as in areas that make full use of the good location of railway stations. We will continue to expand our revenues and profits in cooperation with group companies.

Line-ups of JR Central Group affiliated business

The JR Central Group undertakes businesses in the areas of Transportation, Merchandise and Other, Real Estate, and Other. The Transportation segment involves railway and bus businesses. The Merchandise and Other segment manages department stores and provides sales services for goods and food in stations and trains, utilizing the merit of having good railway station locations to attract customers. The Real Estate segment develops commercial facilities in stations and areas under elevated track columns, and also leases real estate such as station buildings. In the Other segment, we manage hotels, travel agencies, and advertising agencies, etc. We also manufacture rolling stock and maintain, inspect, and repair our railway facilities in this segment.

Operating revenues of consolidated subsidiaries, excluding JR Central, totaled 617.1 billion yen (simply aggregated) in FY2017.

Diagram 1 Shifts in the Operating Revenues of Consolidated Subsidiaries (simply aggregated)



Note: Each figure in parentheses indicates the number of consolidated subsidiaries at the end of FY

Development of Nagoya Station boasting the highest number of passengers among our stations

The development of Nagoya Station, which boasts an average 220,000 passengers per day, the highest number of passengers of any our stations, forms a pillar of our affiliated businesses.

At Nagoya Station, we opened JR Central Towers (hereinafter, "Towers") right above the station in 2000 and then fully opened JR Gate Tower (hereinafter, "Gate Tower") adjacent to the Towers in April 2017.We will continue to operate Towers and Gate Tower in a uniform manner and take initiatives to demonstrate synergistic effect through clearly segragating the concepts of businesses of both facilities, to increase earnings through business cooperation, and to maximize profits by pursuing efficient management.

● JR Central Towers

Towers, the skyscraper complex with a height of 245 meters and a total floor area of approximately 417,000 m², built right above Nagoya Station at a total cost of roughly 200 billion yen, is the core of our affiliated businesses. Our three consolidated subsidiaries run a department store, a hotel and offices. After the full opening in 2000, earnings of our affiliated businesses increased significantly. Diagram 1

As for the department store business, JR Tokai Takashimaya Co., Ltd., belonging to the Merchandise and Other segment, operates JR Nagoya Takashimaya, which attracts many visitors by leveraging the store's location directly above the station. In February 2017, we completed large-scale renewal work for the first time since the opening, in anticipation of the opening of "Takashimaya Gate Tower Mall" at Gate Tower (as described hereafter), and reopened in March 2017.

With regard to the hotel business, Nagoya Marriott Associa Hotel is run by JR Tokai Hotels Co., Ltd. (wholly-owned subsidiary of JR Central, belonging to the Other segment).The location directly above the station allows for a spectacular high-rise view and the high-grade facilities have gained wide acclaim. This has led to the hotel maintaining a high occupancy rate of more than 80% in FY2017 (annual average), and we are working to increase earnings by performing flexible yield control.

The office business is run by JR CENTRAL BUILDING CO., LTD. (wholly-owned subsidiary of JR Central, belonging to the Real Estate segment), which owns the Towers property. Since its opening, the offices have continually recorded a high occupancy level, which remained at near full occupancy during FY2017.

● JR Gate Tower

Gate Tower, standing adjacent to Towers, is a high-rise complex comprising commercial facilities, a hotel, offices, a bus terminal, and parking lots, along with other facilities. The height is approximately 220 meters, and the total floor area is approximately 260,000 m². It is roughly 60% of the scale of Towers. The total business cost is approximately 105 billion yen. In November 2016, occupancy of offices began, followed by the opening of "Takashimaya Gate Tower Mall" and "Nagoya JR Gate Tower Hotel" along with other facilities in April 2017. Gate Tower, along with Towers, has created a highly convenient and attractive urban space, further invigorating the area around the Nagoya Station.

JR Gate Tower

Takashimaya Gate Tower Mall

The "Takashimaya Gate Tower Mall" is operated by JR Tokai Takashimaya Co., Ltd., which undertakes the department store business at Towers. The mall has over 150 fashion and goods stores in categories and price ranges that are not covered by the current JR Nagoya Takashimaya. The combined number of visitors to the facility plus JR Nagoya Takashimaya increased significantly to 1.5 times from the same time the year before (April to March), when only JR Nagoya Takashimaya was in place, and we are pleased to welcome a great number of customers. As a result, the total net sales for the two facilities including JR Nagoya Takashimaya for the year ending February 2018 amounted to 155.7 billion yen.

"Nagoya JR Gate Tower Hotel" is run by JR Tokai Hotels Co., Ltd., which undertakes the hotel business at Towers. With a total of 350 rooms, the hotel focuses on lodging that provides a sense of high quality and great functions, while offering the convenience of being directly connected to the station, as well as providing a comfortable sleeping environment. For the year ending March 2018, the guest room occupancy rate exceeded 90% (annual average) as a result of welcoming many guests.

Given the convenient location of offices above the Nagoya Station where the Chuo Shinkansen will be in service in the future, the state of occupancy of the office section is almost full. In addition to a restaurant floor that boasts one of the largest number of restaurants offered in Japan (in conjunction with Towers), an electronics retail store, clothing stores, a fitness club, a childcare facility, medical care facilities and other facilities are also tenants. From the standpoint of pursuing efficient management by the JR Central Group, JR CENTRAL BUILDING CO., LTD. undertakes the management and operation of the overall building in the same manner as done for Towers.

The combined operating revenues of these three companies were 197.7 billion yen in FY2017 (simply aggregated).

Other initiatives

As JR Central primarily holds Tokaido Shinkansen stations and related facilities in the Tokyo Metropolitan area and the Kansai region, we have to date engaged in developing a business which effectively uses the limited space available, such as the area inside Shinkansen stations and under elevated tracks. In FY2018, we will open "Tokyo Gourmet Zone" - a new gourmet spot full of various restaurants and bars, including bistros, Spanish bars and beer halls - at the "First Avenue Tokyo Station" in Tokyo Station.

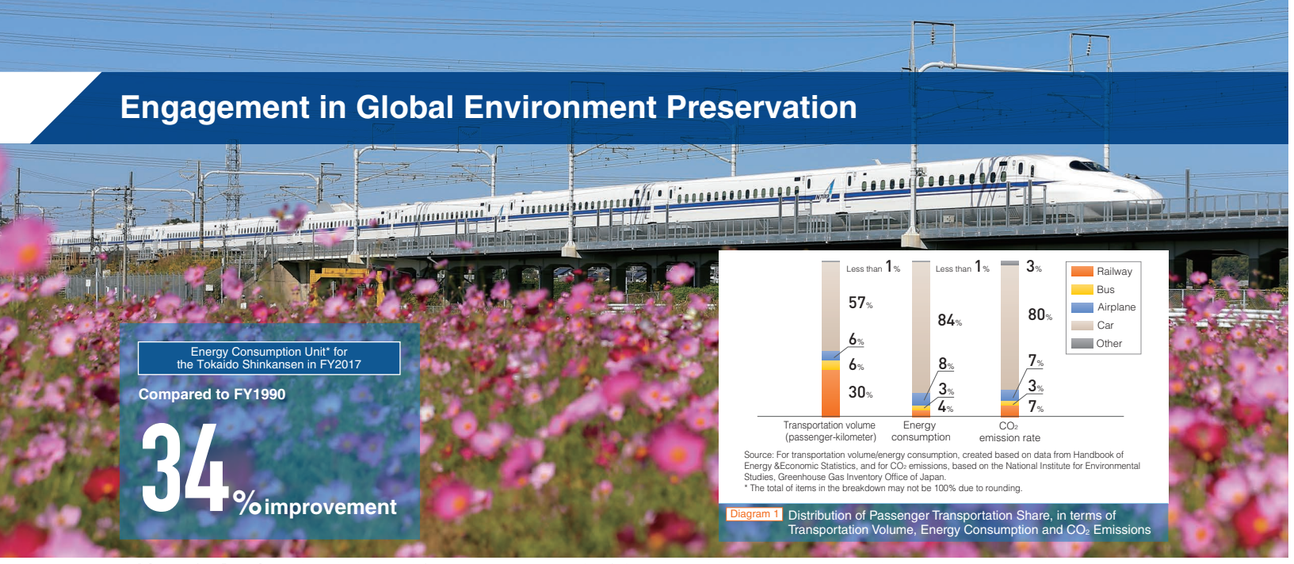
In addition, we are proceeding with our development efforts in places other than Nagoya Station in the Tokai region where we operate conventional lines. In FY2017, we conducted renovation work at station buildings, including "MAY-ONE" at Hamamatsu Station and the main "PARCHĒ" building at Shizuoka Station. In FY2018, we will renovate other station buildings, such as the food section of PARCHĒ. At the same time, we will proceed with the development of areas under elevated tracks in the Sasajima District in Nagoya and others.

We are also working to invigorate our real estate and logistics businesses by making effective use of land we own and taking other initiatives. In FY2018, we will sell the apartments of the "Central Garden Residence Gifu Kano," a condominium facility built on a lot in Gifu where JR Central's corporate housing used to be.

We will continue to move ahead with these initiatives going forward in an effort to further enhance our earning power and reinforce our competitiveness.

Central Garden Residence Gifu Kano

Engagement in Global Environment Preservation



Source: For transportation volume/energy consumption, created based on data from Handbook of Energy &Economic Statistics, and for CO_2 emissions, based on the National Institute for Environmental Studies, Greenhouse Gas Inventory Office of Japan.
* The total of items in the breakdown may not be 100% due to rounding.

Diagram 1 Distribution of Passenger Transportation Share, in terms of Transportation Volume, Energy Consumption and CO_2 Emissions

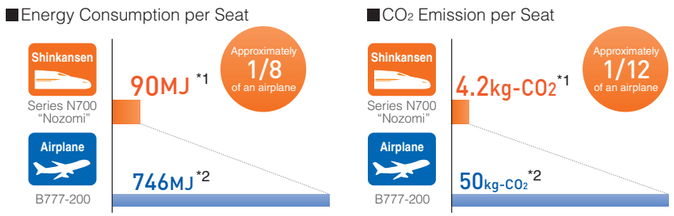
* JR Central defines Energy Consumption Unit as the "Amount of energy consumed when running 1 car for 1 kilometer", due to total rolling stock kilometers being the value which is the most relevant to our business activities.

Railways have the outstanding characteristic of being highly energy efficient compared to other transportation modes and having minimal adverse impact on the global environment. In addition to directly reducing the load on the environment by further improving energy efficiency in its railway operations, such as by lowering power consumption in rolling stock, JR Central also considers suppression of the load placed on the environment across its entire Transportation section, brought about by having as many passengers as possible opt to use railway services that reduce the burden on the global environment, as linked to efforts related to the engagement in global environment preservation.

Environmental Superiority of Railway

The problem of global warming is an issue that should be dealt with on a global scale. While it is regarded that CO_2, among greenhouse gasses, in particular has the largest impact on global warming, railways account for only 7% of CO_2 emissions despite undertaking 30% of the country's overall passenger transport volume. Diagram 1 Compared with an airplane (B777-200), the Tokaido Shinkansen (Series N700 "Nozomi") consumes approximately 1/8th of the amount of energy per seat when traveling between Tokyo and Osaka, and discharges about 1/12th of the CO_2 emissions. The data shows that the Tokaido Shinkansen has overwhelming environmental superiority. Diagram 2

Diagram 2 Comparison of the Tokaido Shinkansen and Airplanes (between Tokyo and Osaka)



*1 Calculation based on running performance of Series N700 Nozomi (Tokyo - Shin-Osaka) conducted by JR Central.
*2 Calculated by JR Central using ANA's "Annual Report 2011" B777-200 (Haneda - Itami/Kansai Airport) for reference.

Guidelines and Objectives

● Environmental Action Guidelines

JR Central has established a set of Environmental Action Guidelines consisting of the following seven items as part of its engagement in global environment preservation.

1. Provide comfortable transportation services to promote further use of railways, which offer superior global environment preservation
2. Promote technological development that contributes to global environment preservation
3. Use fuel and energy efficiently
4. Promote waste control and recycling
5. Appropriately manage chemical substances
6. Procure environmentally friendly goods and materials
7. Contribute to society and raise awareness for global environment preservation

● Environmental goal

JR Central has formulated the Implementation Plan of Low Carbon Society Phase II, in which our Energy Consumption Unit(*) as of FY2030 will be improved by 25% compared with that of FY1995 (refer to the Japan Business Federation (Keidanren) website for further details), and is striving to make sure that the plan is executed. Up to now we established a Voluntary Plan in which we achieved our target of a 15% reduction in energy consumption as of the end of FY2010, and we have proactively developed and introduced energy-conserving rolling stock. We will continue promoting proactive initiatives, such as the continuous development and introduction of energy-conserving rolling stock, while setting train services flexibly through the 10 Nozomi Timetable (operating up to 10 Nozomi services in both directions), etc. to meet the needs of passengers.

* JR Central defines Energy Consumption Unit as the "Amount of energy consumed when running 1 car for 1 kilometer", due to total rolling stock kilometers being the value which is the most relevant to our business activities.

Initiatives with the Shinkansen

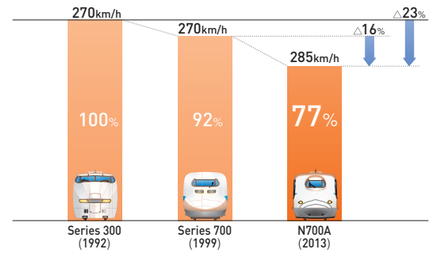
● Introducing Energy-Conserving Rolling Stock

We are proactively developing and introducing energy-conserving rolling stock in our effort to further reduce the Shinkansen's energy consumption. We have introduced 80 Series N700 trainsets in an intensive manner for five years since FY2007. 39 trainsets of the latest N700A rolling stock have been introduced as of FY2017, with a further 12 trainsets scheduled to be introduced from FY2018 to FY2019.

Energy consumption volume for the N700A to travel between Tokyo and Shin-Osaka at the maximum speed of 285 km/h is 23% less than that for Series 300, and 16% less than that for Series 700, which travel at the maximum speed of 270 km/h. It means that the N700A has significantly improved energy consumption while increasing the speed. The result is that our Energy Consumption Unit at the end of FY2017 improved by approximately 34% compared with that of FY1990. We will aim to further achieve energy efficiency by promoting the introduction of the N700A.

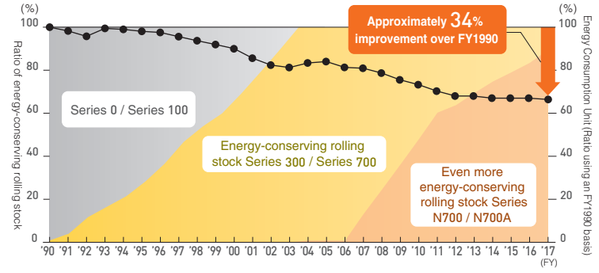
With the adoption of a drive system using silicon carbide (SiC), lighter rolling stock, reduced travel resistance and other features on the next-generation Shinkansen rolling stock N700S, which we plan to launch commercially in FY2020, we expect to be able to cut energy consumption even further.

Diagram 3 Comparison of Electricity Consumption by Tokaido Shinkansen Rolling Stock Type



* Note: Simulated run from Tokyo to Shin-Osaka at the maximum speed above

Diagram 4 Shifts in the Ratio of the Tokaido Shinkansen Energy-Conserving Rolling Stock and Energy Consumption Unit



● Great environmental performance of Series N700A type

N700A type* trains have been highly improved in environmental performance as well as in terms of speed and comfort due to the introduction of the following technologies.

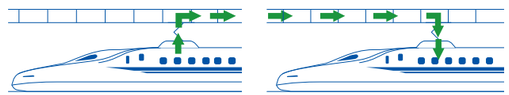
*General term for rolling stock both for the Series N700 which reflects the key remodeled functions adopted for N700A, and for N700A.

1	**Reduction in running resistance** Diagram 5	We reduce the running resistance by introducing a nose shape with great aerodynamic attributes, using flush windowpanes, which have no unevenness between the outside panel and windowpane, and installing coverall hoods between all cars, etc.
2	**Reducing rolling stock weight**	A light and simple-structured bolsterless bogie is used, with light aluminum alloy used for the body frame. Furthermore, we employed a high performance and small alternating-current traction motor. Through these changes, we have reduced the rolling stock weight.
3	**Introducing the Body Inclining System**	The Body Inclining System is introduced to N700A type for the first time in the Shinkansen in order to increase the speed at curves currently subject to speed restriction. This system makes it possible to increase speed while securing comfort and shortening travel time, and to simultaneously cut power consumption by reducing the frequency of speed acceleration and deceleration.
4	**Expansion of Electric Power Regenerative Braking System** Diagram 6	We adopt the Electric Power Regenerative Braking System, in which the motor is used as a generator during braking to produce electricity and return it to the catenary. While 12 of the 16 cars in one trainset of Series 700 were regenerative, 14 of the 16 cars in one trainset of N700A type are regenerative. The Electric Power Regenerative Braking System provides all of the braking power needed for one trainset during normal braking except during braking at slow speed immediately before stopping.
5	**Lighter, smaller blower-less CI in all motor cars**	The power converter (CI) converts electricity from the catenary and sends it to the motor at the time of acceleration, and returns the electricity generated by the motor back to the catenary at the time of deceleration. JR Central was the first to put the blower-less power converter, which uses airflow from running for air cooling, into practical use in the Shinkansen and uses the system in part of the rolling stock of Series N700. For N700A, these CI were made 17% smaller and lighter and are installed on all motor cars.
6	**Optimization of cabin lighting and introduction of LED lighting**	In the cabins of regular cars on the N700A, lighting has been optimized in accordance with the bright seat colors. LED lights with a dimmer function have also been installed in the toilets and powder rooms. These measures have contributed to achieving a reduction in lighting energy consumption by approximately 20% compared to Series N700. We have been installing LED lights in passenger cabins of rolling stock introduced in FY2016 and thereafter to reduce power consumed for lighting.
7	**Using eco-friendly materials**	Approximately 90% (weight ratio) of the waste generated after scrapping the Shinkansen rolling stock is recyclable. With the N700A, 100% recyclable polyester has been used for seat cushions, and conventional fiber-reinforced plastic (FRP) bogie skirts, which cover bogies to lower air resistance, have been replaced with stainless steel ones to utilize highly recyclable materials.

Diagram 5 Reduction in Running Resistance (Coverall Hoods)

Series 700 (Not Equipped with Coverall Hoods)
N700A (Equipped with Coverall Hoods)

Diagram 6 Electric Power Regenerative Braking System



Brakes (Power generation)
The motor is used as a generator during braking to produce electricity and return it to catenary

Power running (Power consumption)
The regenerated power returned to catenary is reused when accelerating other trains

● Enhancement of electricity supply efficiency by replacing ground facilities

By replacing the electricity compensation devices from FY2011 to FY2020, which inhibit voltage reduction as rolling stock travels away from a substation, with a facility with less electricity loss, we expect to be able to reduce the electricity use on the Shinkansen by approximately 3%.

Also, by replacing part of the frequency converters from FY2014 to FY2021, which convert 50 Hz electricity to 60 Hz electricity required to operate the Shinkansen, with a stationary type with less loss, we expect to be able to reduce Shinkansen electricity consumption by approximately 2%.

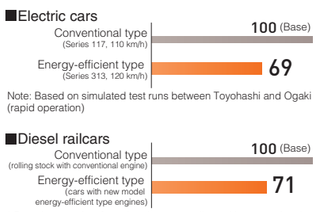
Initiatives with Conventional Lines

● Introducing Energy-Conserving Rolling Stock

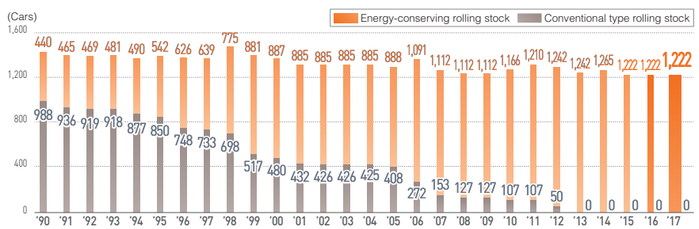
JR Central has also been striving to conserve the energy of rolling stock on conventional lines. We will promote the introduction of rolling stock with better energy efficiency by introducing the Electric Power Regenerative Braking System, higher efficiency power control conversion methods, lighter rolling stock, etc. to electric cars, and will do the same for diesel railcars by introducing lighter rolling stock and high mileage diesel engines, etc. As a result of these initiatives, all of the conventional line rolling stock is energy-conserving rolling stock. For our new rolling stock (Series 313 5th edition; Series Ki-Ha 25 2nd edition), we will look to further reducing the load on the environment by using LED lights.

In anticipation of the replacement of the 85 Series diesel rail cars currently used for the "Hida" limited express and other trains, the Company will newly develop testing vehicles for the next-generation limited express rolling stock that uses the hybrid system, and conduct test runs to establish relevant technologies from the end of 2019. The next-generation limited express train rolling stock (testing vehicle) is expected to achieve an approximately 15% improvement in fuel efficiency and reduction in exhaust fumes, such as CO_2 and NOx, by making use of power stored in batteries when accelerating and stopping. We are currently reviewing plans to commercially introduce mass-produced vehicles by FY2022. (Refer to P. 21 for further details.)

Comparison of electricity consumption and diesel fuel consumption of cars on conventional lines (electric cars and diesel railcars)



Shift in the introduction of energy-conserving rolling stock on conventional lines (electric cars and diesel railcars)



* Values denote the number of rolling stock as of the end of each fiscal year (they include some event trains, retained trains, and test trains).

Common Initiatives for the Shinkansen and Conventional Lines

● Energy-saving by replacing high-pressure mercury lamps with LED

JR Central had conventionally used high-pressure mercury lamps for lighting in stations, railroad crossings, and other railway facilities. However, we are proceeding to replace high-pressure mercury lamps with LED lamps. We plan to complete the replacement process by the end of 2020, as a result of which we will cut our annual power consumption associated with lighting of railway facilities by approximately 70% (down 20 million kWh) compared to the level prior to the replacement work. At the same time, we expect to also reduce the annual CO_2 emission volume by approximately 70% (down 10,000 t) compared to the prior level, thereby decreasing environmental burden.

Legal Compliance

JR Central has established a system to comply with relevant environmental laws.

● Management of chemical substances

Based on the PRTR Law (Pollutant Release and Transfer Register Law), we report the amount of emissions and transfer of relevant substances to local municipalities and manage those substances appropriately.

● Measures against soil contamination

In FY2017, specific hazardous substances were detected exceeding the standard value from part of the soil when we conducted soil surveys in the former corporate housing site in Kariya. We reported the matter to relevant administrative agencies and took appropriate measures. We will submit a report should any substances exceeding the standard value set be detected in such surveys, and will take appropriate measures as instructed by laws and regulations and the administrative authorities.

Effective Use of Resources/Use of Natural Energies and Introduction of Energy-Efficient Facilities

JR Central promotes effective utilization of resources through the 3R (Reduce, Reuse, and Recycle) initiative, etc. Specifically, we aim to reduce emissions from waste materials during construction, utilize rain water, recycle tickets and uniforms, and recycle rolling stock, etc.

In addition, we strive to leverage natural energies and introduce energy-efficient facilities when constructing new buildings and renovating existing buildings.

● Green Procurement Guidelines

JR Central implements a green procurement policy, prioritizing the procurement of eco-friendly materials. To this end, we established the JR Central Green Procurement Guidelines to enhance coordination with our business partners and work with them to contribute towards global environment preservation. URL http://global.jr-central.co.jp/en/company/material_procurement/guide-line.html

Facility and workshop status

● JR Gate Tower

With the JR Gate Tower, the construction of which was completed in February 2017, we worked on creating an energy-efficient environment within the entire building and reduce the environmental burden by introducing regional air-conditioning systems, adopting LED lighting, installing solar power generation panels, creating green areas in the 15th-floor rooftop garden and on roofs of low-rise buildings, etc. We not only achieved "Rank S" in environmental performance, which is the highest rank on the "CASBEE (Comprehensive Assessment System for Built Environment Efficiency)" scale, but also reduced approximately 25% of CO_2 emissions from the building compared to standard model buildings, according to the CASBEE Nagoya 2010 standard.

● General Education Center

At the General Education Center, which was newly built in September 2011, we aim to conserve energy by introducing a ventilation system which uses ice thermal storage achieved by the utilization of nighttime electricity service as its heat source and LED lighting, etc. Furthermore, we designed the building to effectively use natural energy by improving external insulation efficiency through arranging a rooftop garden and taking advantage of natural wind and light as much as possible. As a result, we were able to obtain "Rank S", which is the highest assessment level under the "CASBEE".

General Education Center (rooftop gardening)

● SCMAGLEV and Railway Park

At the SCMAGLEV and Railway Park, which opened in March 2011, we introduced a solar energy generation system on the expansive roof. The system has a generation capacity of approximately 500 kW, or roughly 630,000 kWh annually, which can cover approximately 30% of the SCMAGLEV and Railway Park's energy needs.

SCMAGLEV and Railway Park (solar power generation system)

● Hamamatsu Workshop

The Hamamatsu Workshop, which conducts general overhauls of Shinkansen rolling stock, has been conducting renovation construction since July 2010. In FY2015 the rooftop of the workshop was used to install a solar power generation system with the capacity to generate approximately 300 kW or about 300,000 kWh annually. In addition, we implemented a highly efficient substation facility, boilers, and other equipment in FY2015.

Meanwhile, in regard to painting for the body of trains, although we had been using oil-based paint containing volatile organic compounds, we adopted a new painting facility which now allows us to use water-based paint that is harmless to the environment, thereby reducing environmental burden. Furthermore, we implemented the country's first water-based paint coating robot to improve the working environment for our employees.

● Nagoya Workshop

JR Central has been taking anti-earthquake measures and upgrading facilities since February 2014 in the Nagoya Workshop where general overhauls, etc. of conventional line rolling stock are conducted. We aim to reduce approximately 20% of electricity consumption for the entire workshop by introducing high ceiling LED lighting and highly efficient transforming equipment as energy saving measures.

Activity status for FY2017

● Environmental accounting

The investments, costs, and their principal effect involved in environment preservation activities during FY2017 are estimated as listed below.

Environmental accounting

Classification	Main Initiatives	Environment preservation cost (100 million yen) *1 Investment	Expenditures	Notes
Global environment preservation cost	●Introduction of energy-conserving rolling stock ●Improved energy-efficiency at stations and office buildings, etc.	426.6	75.0	●Energy-conserving rolling stock ratios: 100% (Shinkansen electric cars), 100% (conventional line (electric cars and diesel railcars)) Energy efficiency of Series N700A ▲23% (more efficient than Series 300), New production of N700S validation test vehicles, Replacing lamps of railway facilities with LED lamps
Research and development cost	●Development of energy-conserving rolling stock ●Development related to environment preservation along railway lines, etc.	0.1	143.3	●Energy efficiency of Series N700A ▲23%(more efficient than Series 300) * Comparison between the Series 300 (traveling at 270 km/h) and the N700A (traveling at 285 km/h)
Resource recycling cost	●Proper disposal and recycling of station and train refuse, etc. ●Proper disposal and recycling of items generated by workshops and construction work	0.3	52.3	●Recycle rate of Shinkansen rolling stock: Approximately 90% ●Recycle rate of uniforms: Basically 100%
Environment conservation cost along railway lines	●Countermeasures for noise and vibration ●Proper management of environmental load substances, etc.	131.9	38.9	●Protection of the surrounding environment by modifying noise-blocking walls and increasing their height, shaving rail surfaces, etc.
Management activity cost	●Environmental advertising ●Environmental management education etc.	0.0	0.1	●Acquisition of ISO14001 certification in Technology Research and Development Department
Social activity cost	●Support and cooperation for organizations and other groups undertaking environment preservation	0.0	0.0	●Participation in environmental partnership organizing club (EPOC)
Total *2		558.9	309.6	

*1. Fractions below 10 million yen are omitted.*2. Totals do not add up due to rounding.

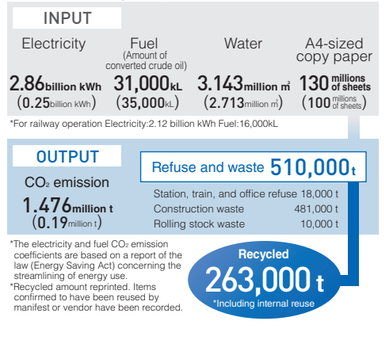
[Approach to environment preservation cost]
●Compilation is applicable only to JR Central. ●The applicable period is April 1, 2017 to March 31, 2018.
●"Environmental Accounting Guidelines 2005", a publication of the Ministry of the Environment, was consulted with regard to aspects of style.
●Depreciation is not included in the calculations for expenditures.
●In the event of multiple-purpose expenditures, the full amount with greater environment preservation effect is included in the calculation.

● Environmental load in business activities

The main resources and energy utilized as well as waste generated during JR Central's business activities during the year FY2017 are as shown below.

INPUT/OUTPUT

* Figures in parentheses are for consolidated subsidiaries



Human Resources Development


Female employees at work


General Education Center (Mishima City, Shizuoka Prefecture)


Sufficient childcare support system

Turnover rate

Around 1%

JR Central views its employees as its greatest management resource. It is the people who operate railways that protect the safety of railways. The railway business is also referred to as experience engineering, and employee skills development does not happen short term. Therefore, we focus on human resources development and skills development from a long-term perspective based on long-term employment in order to develop employees with the awareness to thoroughly execute their duties and great skills.

We also provide various welfare benefits beyond that called for by law, including programs for health management and nursing care and childcare support. By making efforts to secure favorable work-life balance for employees, we encourage employees to continue working and demonstrate their strengths at JR Central.

As a result of these initiatives, we have an extremely high employee retention rate despite the fact that we employ many new employees every year, as the labor turnover rate of approximately 1% indicates.

Basic Policy of Human Resources Development

JR Central's Basic Policy of Human Resources Development is based on three fundamental principles: Discipline, technical capability, and sense of unity. Given these three fundamental principles, we develop human resources that undertake the businesses of the Company. The basic education system mainly involves on-the-job training (OJT), in which employees learn the knowledge and skills required for work through daily operations in each workplace. They also acquire additional knowledge and skills through group training, which is held in the General Education Center*1, etc., and various self-betterment opportunities, such as internal and external correspondence training systems, etc., that help employees learn knowledge and skills on their own.

In OJT, we have in place the "N-OJT" program particularly for employees in younger generations to attain specialized knowledge and technical skills. Under the N-OJT program, we take a fine-tuned approach in developing employees by using the so-called the "List", which indicates the requirements to attain in order to be regarded as being qualified and the attained level, and the "Chart" for recording each individual's development plan, details of guidance, and results of guidance. Meanwhile, approximately 250 group training sessions were held in FY2017 and about 9,500 employees*2 attended these sessions. Taking this number multiplied by the number of days of training sessions held came to roughly 78,000 man days. This means that we provided approximately 4 days of training per employee in a year. To promote self-betterment, we offered 30 internal correspondence training courses to employees of JR Central, its group companies, etc. Approximately 7,200 employees in total voluntarily participated in these courses.

We will remain committed to enhancing educational opportunities by continuously working to brush up various training programs and measures aimed at human resources development.

*1 With focus on safety and service, the General Education Center conducts training for employees, including personnel from affiliated companies that are engaged in railway operations.
*2 Simple aggregation of the number of persons participating in each training program or course.

Initiatives for Promoting Health Management of Employees and Eliminating Labor Accidents

It is the duty of JR Central to maintain and promote healthy minds and bodies of employees and to secure an environment in which employees can be motivated to work. To date, we have taken a number of initiatives in addition to providing health check-ups, etc. required under law. Such initiatives include measures to promote sound mental health, measures against life-style related diseases and sleep apnea syndrome, subsidies for fees for complete physical check-ups and influenza vaccinations, and efforts to maintain reasonable working hours.

As for measures to maintain sound mental health, we take various steps to prevent mental disorders based on the "JR Central Plan for Promoting Healthy Minds." We also hold training sessions based on employee level concerning ways to put in place the division of roles and coordination among relevant departments, methods to make improvements to the workplace environment, and so on. Furthermore, we conduct stress checks for all employees at the annual checkup as well as following a change in assignment, etc.

In regard to measures against lifestyle-related diseases, we have been providing specific health checkups and specific health guidance for employees aged 40 and above since FY2008. In FY2015, we expanded the target of guidance to also include employees below the age of 40 and have since been offering guidance on various matters as necessary from the perspective of taking measures early.

In February 2018, JR Central was recognized under the "Certified Health and Productivity Management Organization Recognition Program - White 500" for these initiatives by the Ministry of Economy, Transportation and Industry under the Ministry's program to accredit enterprises that carry out excellent health management.

In April 2018, we formulated the "Health Promotion Guidelines" as a company-wide policy on measures to promote sound physical and mental health. Based on the Guidelines, we will continue to work on establishing systems that encourage employees to work with enthusiasm regardless of their age or gender, and will support autonomous initiatives taken by employees and workplaces to promote health. At the same time, we will repeatedly perform verifications and improvements based on objective data in an effort to promote sound health.

We have also been actively taking initiatives to eliminate labor accidents and have significantly reduced the number of accidents compared to the level at the time of founding of the Company. We set "priority execution items" each fiscal year and promote elimination of labor accidents on a corporate-wide basis. Specifically, we continue to provide education on safety at our General Education Center and at each of our workplaces, as well as conduct research activities led by employees of field offices to prevent labor accidents in the group.

Promoting female employees in active roles

At JR Central, there is no gender bias in terms of the content of work performed, and a number of female workers are undertaking active roles in the Company.

Due to the characteristics of the work involved, the railway business requires so-called late-night work (work between 10 p.m. and 5 a.m.). However, the Labor Standards Act at the time of the Company's establishment prohibited late-night work by women in principle, excluding some job types. Due to this situation, the ratio of female employees as of the end of FY1996 was only 1.3%. Subsequently, in response to the revision of the Labor Standards Act in 1997, we have actively employed female employees. As of the end of FY2017, the number of female employees was approximately 2,100 (approximately 10% of all employees), reflecting a significant increase.

Support for maintaining balance between child care, nursing care, and work

JR Central has been actively making efforts to enhance various programs so that employees, regardless of gender, can maintain a good home-work balance and be motivated to work with enthusiasm in active roles over many years. In 2006, JR Central became the first company in the transport and railway industry to receive the "Minister of Health, Labour and Welfare Effort Award" as a Family Friendly Corporation*1. We have continued to make further efforts even after receiving the award and many of our programs greatly exceed the level required by law.

For example, pregnant workers may take pre-birth leave of 9 weeks*2 (6 weeks under law) and may take childcare leave until a child reaches the age of three*2 (until a child reaches the age of one under law), or for six months*2 after a child enters elementary school. We establish and carry out an action plan*3 for maintaining and improving the ratio of employees taking childcare leave. In FY2016, the ratio of females taking childcare leave was 100% and that of males was 6.41%.

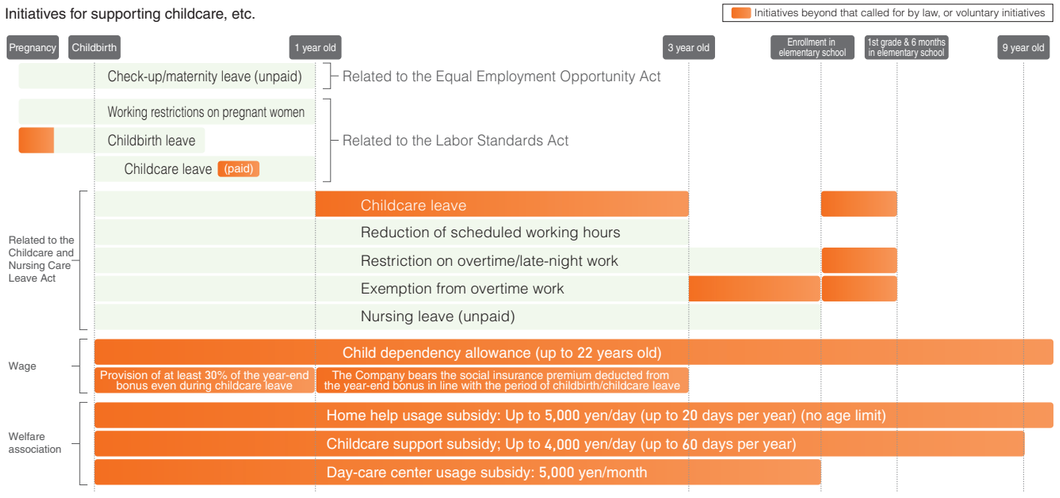
Meanwhile, if the need to take care of a family member arises, employees may take nursing care leave of up to 365 days*2 (93 days under law).

JR Central puts in place an adequately supportive environment for employees to achieve a good balance between work and private life in various perspectives by establishing different types of social welfare benefit programs*4, offering a wide range of leave periods, and introducing other measures. A number of employees actually make use of these support programs.

Effective FY2017, we will introduce a system to rehire former employees who had resigned for reasons including childcare and nursing care as long as a certain set of conditions are satisfied. We continue to move forward with our efforts to foster an environment in which employees can demonstrate their skills in active roles by making use of the welfare programs we offer.

*1 A system introduced by the Ministry of Health, Labour and Welfare in which companies are rewarded for taking initiatives to establish various programs to support employees in achieving a good balance between work, childcare and nursing care, and for putting in place a mechanism in which employees have the option of selecting diverse, flexible working styles.
*2 Treatment differs in part depending on the type of employee.
*3 Based on the Act on Advancement of Measures to Support Raising Next-Generation Children and the Act to Advance Women's Success in their Working Life, JR Central formulated an action plan for the fifth period from FY2016 to FY2020. Under this action plan, we set targets on childcare leave, including 100% of female employees to take childcare leave, and 3% or more of male employees to take childcare leave. Given that we achieved the targets set in our action plan for the period from FY2005 to FY2014, which was formulated based on the Act on Advancement of Measures to Support Raising Next-Generation Children, and fulfilled certain requirements, we were certified by the Minister of Health, Labour and Welfare as a Childcare Support Company.
*4 We offer various benefits, including a monetary gift of 200,000 yen when an employee gives birth, a subsidy of up to 5,000 yen per month per child for day-care, a childcare support benefit of offering 50% (up to 4,000 yen) of the cost required when using a babysitter, etc., nursing care relief money of 3,000 yen per day during the period of nursing care leave, and a nursing care subsidy of up to 2,000 yen per month per person when using the nursing-care service, etc. set forth under the Long-Term Care Insurance Act. (Treatment differs in part based on the type of employee.)

Initiatives for supporting childcare, etc.



Healthy labor-management relations

JR Central currently complies with the various laws and regulations, including the Labor Union Act, and has signed labor agreements with all four labor unions currently in place. [Total union membership of 19,400 employees as of March 31, 2018].We hold joint management council meetings and engage in collective bargaining based on these labor agreements, and will continue to strive to build healthy and stable labor management relations.

Cooperation with Local Communities / International Exchanges / Promotion of Culture & Art and Lifelong Learning

Railways, which are a mode of public transportation, are extremely closely connected to local communities. We are enhancing the convenience of stations, which are the gateway to local communities, as well as contributing to local communities, through operating medical facilities and museums, etc. in the Nagoya region, where our head office is located, in addition to rolling out sales and marketing efforts and operating websites that spread the attractive features of communities located along our railway lines by selling locally produced goods, etc. Furthermore, we interact with experts on railways from other countries and engage in activities toward promoting culture, art, and lifelong learning.

Contribution to Local Communities

Initiatives to improve the level of convenience and accessibility of stations, etc.

JR Central cooperates with the requests from local municipalities to establish new stations, improve station buildings, develop plazas in front of stations, and promote railway elevation projects, etc., thereby contributing to community development.

Based on relevant laws, such as the so-called Barrier-Free Act, JR Central cooperates with governments and municipalities to jointly establish and improve facilities to enable all passengers, including persons with disabilities and elderly passengers, to use our services safely and with a sense of security.

As part of our initiatives taken in stations, we are proceeding with our plan to eliminate uneven ground by installing elevators, etc. and to install multi-functional toilets sequentially in stations used by 3,000 or more passengers per day. Basically in all of the stations, installations have been completed or are under way. We have completed installation of guiding blocks for visually impaired persons and braille blocks that prevent such persons from falling from platforms. Furthermore, in regard to braille blocks, we are sequentially replacing them with the type of braille blocks that indicate where platform edges are located. In addition, to further increase the safety of platforms, since FY2011 we have been moving ahead with the installation of movable platform fences at Nozomi stations that service a high number of passengers. We plan to complete the installations on platforms No. 20 to No. 26 of Shin-Osaka Station in FY2022, which will complete the installations at all Nozomi stations. As for conventional lines, we are engaged in the development of movable platform fences compatible to the platforms of lines we operate.

Further, nearly all of JR Central's trains include support facilities for passengers using a wheelchair.

Our station staff members offer assistance and guidance, whenever necessary, to customers with disabilities using our facilities.

Setting general hospitals for local communities (Nagoya Central Hospital)

As an acute care hospital, Nagoya Central Hospital, located in Nakamura-ku, Nagoya, performs over 1,500 surgeries year round, providing some of the most advanced medical care services available using the latest medical equipment. The hospital is also a committed emergency health care provider, coordinating with local ambulance services to take in over 3,500 ambulance calls per year. Looking ahead, the Nagoya Central Hospital will look to leverage its distinctive features and expertise to further contribute to the local community.

Nagoya Central Hospital

Participating in programs to vitalize local communities

●SCMAGLEV and Railway Park
- A museum of memories and dreams -

We opened the "SCMAGLEV and Railway Park" in March 2011 in Kinjo Futo, Minatoku, Nagoya, as part of our participation in the "Monozukuri (manufacturing) Culture Exchange Area Project", hosted by the City of Nagoya.

At the "SCMAGLEV and Railway Park", we introduce the progress of the high-speed railway technology through displays of rolling stock mainly of the Tokaido Shinkansen, as well as conventional lines and Superconducting Maglev. The number of visitors exceeded 4.4 million by the end of Fy2017.

SCMAGLEV and Railway Park

●Roll out of initiatives in coordination with communities located along our lines

As part of sales and marketing, we are deepening ties with communities located along our lines while rolling out initiatives such as the "Shupo" campaign, "Sawayaka Walking", and "Japan Highlights Travel".

Further, as an initiative aimed at revitalizing local communities along the railway lines we operate, in October 2016 we began selling locally produced goods on our "IIMONOTANBOU" website that introduces attractive features of local communities through local delicacies in cooperation with producers in communities.

Shupo

Japan Highlights Travel

IIMONOTANBOU website

International Exchanges

JR Central proactively undertakes a wide range of international operations, such as gathering mainly railway information from around the world via the company's network of overseas offices (Washington D.C. , London, and Sydney), exchanging technological and management information with specialists in various countries, and issuing press releases overseas as part of our PR activities, etc.

We also offer technical cooperation in the field of railways in response to government requests, and promote human resources development by hosting interns from overseas universities and international organizations, etc.

Accepting interns from foreign universities

Promotion of culture, art, and lifelong learning (JR Tokai Lifelong Learning Foundation)

JR Tokai Lifelong Learning Foundation is a public interest incorporated foundation established in October 1990 with the purpose of contributing to society through promotion of culture, art, and lifelong learning. The Foundation's main activities include holding exhibits of artwork of Hoshun Yamaguchi, known as a pioneer in new Japanese art at Hoshun Yamaguchi Memorial Hall which opened in Hayama-machi, Kanagawa in October 1991, and disclosing the ateliers and gardens that offer seasonal flowers and trees for public viewing. Further, in an effort to support lifelong learning, the Foundation engages in a wide range of cultural activities, including holding classes for painting, photography, etc. and organizing classes to learn about history and culture.

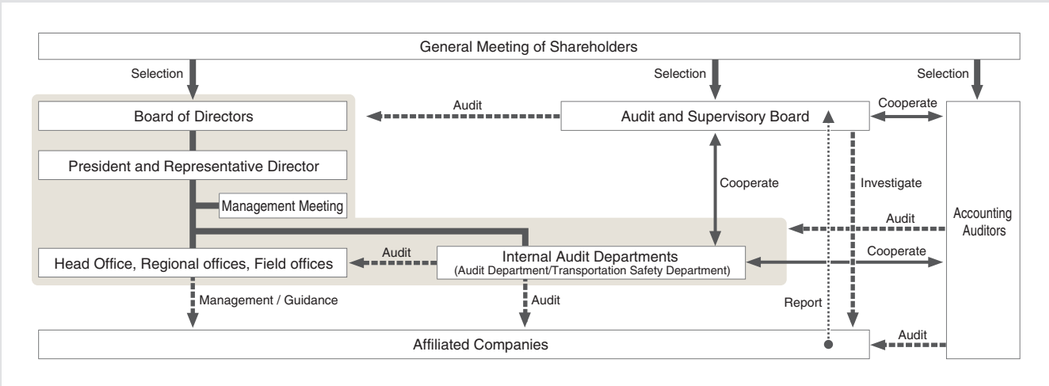
Hoshun Yamaguchi "Ryokutei" 1927

Hoshun Yamaguchi "Bokyo (esquisse)" 1953

Corporate Governance

JR Central strives to enhance our corporate governance to ensure soundness, efficiency, and transparency of management, to implement long-term development of the company, and to enhance sustainable corporate value.

JR Central's Corporate Governance System



Overview of Corporate Governance System

The Board of Directors of JR Central is composed of 17 members (three of whom are outside directors).JR Central also employs an auditor system, and its Audit and Supervisory Board consists of five members (four of whom are outside auditors). (The figures are as of June 22, 2018.)

The Board of Directors meets at least once a month, and makes legal and appropriate decisions upon fully discussing important business issues as well as issues stipulated by the law, following explanation about the background of issues discussed, and the progress status for such. It also monitors the work of directors. To broaden deliberations, we have also established a Management Meeting in which important issues related to management are discussed in advance of the meetings of the Board of Directors. We request Audit and Supervisory Board Members to attend meetings of the Board of Directors, the Management Meeting and other important meetings, as we endeavor to ensure the legality of management measures during the deliberation process. Further, JR Central strives to ensure the appropriate execution of business by managing and providing guidance to affiliated companies where necessary.

Although we introduced the corporate officer system in May 2003, we introduced an executive system in June 2012 with the aim of further accelerating decision-making, enhancing discussions, and further clarifying roles for directors and corporate officers, who are responsible for operation, in order to appropriately respond to changes in the business environment in a timely manner.

Audit and Supervisory Board Members not only attend important meetings such as the Board of Directors and the Management Meetings, but also inspect the state of execution carried out at head offices, railway operations divisions, branch offices, field offices, and affiliated companies based on plans enacted by the Audit and Supervisory Board to strictly promote their audit work. To ensure effective audits by the members of the Audit and Supervisory Board, JR Central also provides an assistant system in which our employees are assigned as full-time staff to support auditors work.

Internal audits are performed by the Audit Department on the overall work of JR Central, its affiliated companies and related companies from the perspective of compliance, efficiency and effectiveness of operations. The audits are performed by checking business materials, contracts and other documents, observing operations, interviewing related persons and taking other methods, and the results are reported to management. In addition, to prevent operational and labor accidents, safety audits are performed by the Transportation Safety Department, and the results are also reported to management.

Based on generally accepted accounting standards, JR Central has appropriate accounting audits made by Deloitte Touche Tohmatsu LLC, which has been selected to be our accounting auditor.

Audit and Supervisory Board Members, internal audit departments, and accounting auditors cooperate with each other by exchanging information periodically or as necessary and receive necessary information from each department involved in internal control to confirm the status of implementation of each item stipulated in the Fundamental Corporate Governance Policies.

● Outside Directors and Outside Audit and Supervisory Board Members

Based on our policy to make the most appropriate execution system for Outside Directors and Outside Audit and Supervisory Board Members, JR Central appoints three Outside Directors and four Outside Audit and Supervisory Board Members. The Company determines the level of independence of Outside Directors and Outside Audit and Supervisory Board Members based on the criteria for independence established by the Japan Exchange Group, Inc. in order to ensure that the opinions provided by Outside Directors and Outside Audit and Supervisory Board Members are formed from an independent standpoint, and are based on the high degree of experience and insight accumulated outside the Company.

JR Central receives beneficial opinions about the execution of our business from Outside Directors and Outside Audit and Supervisory Board Members who provide advice based on their various experience and great insight gained outside of the company from their independent standpoints, both in and outside of the Board of Directors meetings and meetings of the Audit and Supervisory Board. We utilize the advice given by Outside Directors and Outside Audit and Supervisory Board Members to execute audits by Audit and Supervisory Board Members, internal audits, safety audits, accounting audits, as well as items stipulated in the Fundamental Corporate Governance Policies.

Each Outside Director and Outside Audit and Supervisory Board Member is submitted to the Tokyo Stock Exchange and the Nagoya Stock Exchange as an independent officer who does not have any conflicts of interest with general shareholders.

■ Election of Outside Directors and Outside Audit and Supervisory Board Members [As of June 22, 2018]

	Name	Reasons for election
Directors	**Fujio Cho**	Mr. Cho was appointed as an Outside Director because of his corporate management experience and his great insight.
Directors	**Kenji Koroyasu**	Mr. Koroyasu was appointed as an Outside Director because of his experience as a public prosecutor and lawyer, and his great insight.
Directors	**Takashi Saeki**	Mr. Saeki was appointed as an Outside Director because of his corporate management experience and his great insight.
Audit and Supervisory Board Member	**Hajime Ishizu**	Mr. Ishizu was appointed as an Outside Audit and Supervisory Board Member because of his experience in transportation administration and his great insight.
Audit and Supervisory Board Member	**Hiroyuki Ota**	Mr. Ota was appointed as an Outside Audit and Supervisory Board Member because of his experience in police administration and his great insight.
Audit and Supervisory Board Member	**Shigeo Kifuji**	Mr. Kifuji was appointed as an Outside Audit and Supervisory Board Member because of his experience as a public prosecutor and lawyer and his great insight.
Audit and Supervisory Board Member	**Kunihiro Nasu**	Mr. Nasu was appointed as an Outside Audit and Supervisory Board Member because of his experience as a lawyer and his great insight.

■ State of main posts held concurrently by Outside Directors and Outside Audit and Supervisory Board Members [As of March 31, 2018]

	Name	Name of other company, etc.	Titles
Directors	**Kenji Koroyasu**	Furukawa Electric Co., Ltd.	Outside Audit and Supervisory Board Member
Directors	**Takashi Saeki**	FamilyMart UNY Holdings Co., Ltd.	Outside Director
Audit and Supervisory Board Member	**Shigeo Kifuji**	The Ogaki Kyoritsu Bank, Ltd.	Outside Audit and Supervisory Board Member
Audit and Supervisory Board Member	**Shigeo Kifuji**	ISHII IRON WORKS CO., LTD.	Outside Director (Audit Member)
Audit and Supervisory Board Member	**Shigeo Kifuji**	Mori Building CO., LTD.	Outside Audit and Supervisory Board Member

■ Activity status of Outside Directors and Outside Audit and Supervisory Board Members [FY2017]

	Name	Principal activity
Directors	**Fujio Cho**	Attended 15 out of 16 meetings of the Board of Directors held in FY2017. In the Board of Directors meetings, he has stated his opinions based on his experience in corporate management, etc.
Directors	**Kenji Koroyasu**	Attended 15 out of 16 meetings of the Board of Directors held in FY2017. In the Board of Directors meetings, he has stated his opinions based on his experience as a public prosecutor and lawyer, etc.
Directors	**Takashi Saeki**	Attended all 16 meetings of the Board of Directors held in FY2017. In the Board of Directors meetings, he has stated his opinions based on his experience in corporate management, etc.
Audit and Supervisory Board Members	**Hajime Ishizu**	Attended all 16 meetings of the Board of Directors, and attended all 14 meetings of the Audit and Supervisory Board held in FY2017. In the Board of Directors meetings and meetings of the Audit and Supervisory Board, he has stated his opinions based on his experience in transportation administration, etc.
Audit and Supervisory Board Members	**Hiroyuki Ota**	Attended all 16 meetings of the Board of Directors, and attended all 14 meetings of the Audit and Supervisory Board held in FY2017. In the Board of Directors meetings and meetings of the Audit and Supervisory Board, he has stated his opinions based on his experience in police administration, etc.
Audit and Supervisory Board Members	**Shigeo Kifuji**	Attended all 16 meetings of the Board of Directors, and attended all 14 meetings of the Audit and Supervisory Board held in FY2017. In the Board of Directors meetings and meetings of the Audit and Supervisory Board, he has stated his opinions based on his experience as a public prosecutor and lawyer, etc.

● Content of Compensation for Officers

Compensation for officers is comprised of certain basic compensation and a bonus. Basic compensation is based on comprehensive consideration of the title, length of service, etc., and the bonus is based on the performance and commissioned work, etc. of each FY. Each amount is appropriately decided in Board of Directors meetings within the range of compensation, etc., which was decided in the 25th Ordinary General Meeting of Shareholders held on June 22, 2012. Furthermore, compensation for Outside Directors comprises the fixed basic compensation only.

Compensation for Audit and Supervisory Board Members is comprised solely of certain basic compensation. The appropriate amount is decided through discussions of Audit and Supervisory Board Members within the range of compensation, etc., which was decided in the 20th Ordinary General Meeting of Shareholders held on June 22, 2007.

■ Total amount of compensation, etc. by officer classification, total amount of compensation, etc. by type, and number of target officers [FY2017]

Classification	Basic Compensation		Bonus		Total amount for the compensation/ bonus, etc. (Million yen)
	Number of target officers (People)	Total amount (Million yen)	Number of target officers (People)	Total amount (Million yen)	
Directors (Excluding Outside Directors)	13	586	13	240	826
Audit and Supervisory Board Members (Excluding Outside Auditors)	2	76	-	-	76
Outside Officers	6	129	-	-	129

Respond to the Corporate Governance Code

JR Central has announced its stance on, and the initiatives it has put in place, in relation to the Corporate Governance Code (hereafter, "the Code") found within Corporate Governance Report*.

Of the principles set forth in the Code, those that are not implemented are principles that assume the formulation of midterm management plans and the presentation of numerical targets (**supplementary principle 4-1-2** and **principle 5-2**). The reason for this as provided in the report is as follows.

"In the railway business, the core pillar of JR Central's business, ensuring safe and reliable transportation is an issue of utmost importance, and all aspects of our business, from our daily business operations, to employee training and capital investment, are implemented with the highest priority given to increasing the level of reliability of the services we provide and, as such, we do not implement a system of management whereby company-wide mid-term business plans are formulated and managerial targets are pursued in a manner that can neatly serve as a cross-sectional look at the state of the business at set moments.

While JR Central neither formulate mid-term management plans nor establish numerical targets in this manner, the Company does promote its railway business from a long-term perspective. Specifically, in addition to the construction of the Chuo Shinkansen, which is now underway, other measures that require a long-term capital investment, such as large-scale renovation for the Tokaido Shinkansen, the implementation of earthquake countermeasures, and plans to upgrade rolling stock in service, are established with a long-term perspective in mind, and we are steadily proceeding forward these projects. Plans and results of other major measures are announced publicly as appropriate, and steady progress continues to be made in these areas. We will continue to announce annual income and expenditure plans, key measures, and capital investment plans each year in light of our immediate management environment, and will continue to steadily enhance our management foundation in order to firmly maintain a sound management outlook based on efficient operational management stemming from the securing of safe and reliable transportation."

Further, matters disclosed based on each principle of the code are as follows.

* Corporate Governance Report can be found on the Japan Exchange Group, Inc. website.

Disclosure based on Corporate Governance Code principles

General principle	Supplementary principle	Disclosed contents
Principle 1-4 Cross-shareholdings		**[1] Policy concerning cross-shareholdings** JR Central holds cross-shareholdings based on a general consideration of the necessity of such from the perspective that maintaining and strengthening long-term, stable business relations through the holding of shares will lead to the smoother execution of business operations and increases in corporate value over the mid- to long-term. **[2] Criteria for the exercising of voting rights** In terms of the exercising of cross-shareholding voting rights, JR Central closely examines the content of each resolution and decides how to vote in consideration of improving the corporate value of the Company over the mid- to long-term and the sustainable growth of business partners, etc.
Principle 1-7 Related party transactions		All transactions involving Directors which may pose a conflict of interest, and transactions between Directors and the Company, require the approval of, and reporting to, the Board of Directors as stipulated in relevant laws and regulations and rules governing the Board of Directors. Every year confirmations are made on a regular basis with officers as to whether related party transactions have been made between officers or relatives and the Company.
Principle 3-1 Full disclosure		**[1]** • JR Central was founded in 1987 as part of the reform of the national railway system with a mission of integrally maintaining and developing the Tokaido Shinkansen, which serves as Japan's main transportation artery linking Tokyo, Nagoya and Osaka, and the conventional line network in the Tokai region with a central focus around Nagoya and Shizuoka. Furthermore, JR Central revised its management philosophy to "Contribute to the development of Japan's main transportation artery and social infrastructure" in April 2017 to reflect the direction the Company should aim at in line with the expanding scope of business activities going forward, including the operation, etc. of the three generations of railways, i.e. conventional lines, the Tokaido Shinkansen, and the Chuo Shinkansen. • In the railway business, JR Central sets the highest priority on ensuring safe and reliable transportation. JR Central's fundamental policy is to stably and fully execute the long-term social mission described in detail above through the continuous efforts of providing services that are preferred by customers as well as streamlining of work, etc. This Management Philosophy is included in the Messages from the Management section of the Annual Report, and can be found at the following URL. ▶ **Annual Report** URL http://global.jr-central.co.jp/en/company/ir/annualreport/ • Specific measures to be implemented in the current business year based on this Management Philosophy are described in Key Measures and Capital Investment, and can be found at the URL below. ▶ **Key Measures and Capital Investment** URL http://global.jr-central.co.jp/en/company/achievement/capital-investment/key-measures.html **[2]** The basic outlook on corporate governance is described in 1.1. Basic Outlook in the Corporate Governance Report. **[3]** Details on the policy and procedures concerning the setting of Director compensation are described in 2.1. [Director Compensation-related] Disclosure of Policy for Determining the Amount of Compensation and the Calculation Method for Such in the Corporate Governance Report. **[4]** The election of Directors and Audit and Supervisory Board Members is conferred to General Shareholders Meetings following a resolution of the Board of Directors concerning the appropriate election of candidates deemed to be the most fit for the role as selected based upon a general consideration of their abilities, knowledge, and work history, etc. **[5]** Directors and Audit and Supervisory Board Members are elected in an appropriate manner in consideration of the work history, etc. written in the General Shareholders Meeting Reference Materials.
Principle 4-1 Roles and responsibilities of the Board of Directors	Supplementary principle **4-1 1**	The Board of Directors is involved in decision making processes concerning matters stipulated in relevant laws and regulations and the articles of incorporation, matters put in their charge at a general shareholders' meeting, and important matters related to the execution of business. A specific outline of such matters is established in the rules governing the Board of Directors. Further, the Board of Directors clearly defines the division of duties and job functions for each department based on internal regulations, clarifies the scope of authority for Directors and corporate officers, while also defining the division of roles of Directors and areas in which corporate officers are put in charge.
Principle 4-9 Independence standards and qualification for Independent Directors		The Company determines the level of independence of Outside Directors and Outside Audit and Supervisory Board Members based on the criteria for independence established by the Japan Exchange Group, Inc. in order to ensure that the opinions provided by Outside Directors and Outside Audit and Supervisory Board Members are formed from an independent standpoint, and are based on the high degree of experience and insight accumulated outside the Company.
Principle 4-11 Premises for ensuring the effectiveness of the Board of Directors and the Audit and Supervisory Board	Supplementary principle **4-11 1**	The appointment of Directors is conferred to General Shareholders Meetings following a resolution of the Board of Directors concerning the appropriate election of candidates deemed to be the most fit for the role as selected based upon a general consideration of their abilities, knowledge, and work history, etc. The number of Directors elected, and the division of Director roles, etc. are determined taking into consideration the level of progress of each project based on a policy of establishing the most appropriate management structure for the execution of the Company's business activities.
	Supplementary principle **4-11 2**	The status of Directors and Audit and Supervisory Board Members holding important concurrent positions is as described in business reports and General Shareholders Meeting Reference Materials. All currently held positions bear no hindrance on the Director or Audit and Supervisory Board Members' ability to fulfill the roles and responsibilities of such a position for the Company.
	Supplementary principle **4-11 3**	The Board of Directors of the Company meets once or more a month to make legal and appropriate decisions upon fully discussing important business issues as well as issues stipulated by law, following explanation about the background of issues discussed, and the progress status for such. Further, the status of the execution of duties by Directors is monitored by having Directors report back on business functions under their charge when needed. JR Central receives valuable broad-view advice on management from Outside Directors, which is brought into consideration in regulating the management of the Company. Additionally, round-table conferences for opinion exchanges between Outside Directors, Outside Audit and Supervisory Board Members and members of management are set up ahead of meetings of the Board of Directors in order to further improve the effectiveness of the Board of Directors. Through the above-mentioned initiatives, we find at meetings of the Board of Directors that the effectiveness of the entire Board of Directors is ensured to a satisfactory degree.
Principle 4-14 Director and Audit and Supervisory training	Supplementary principle **4-14 2**	All Directors and Audit and Supervisory Board Members of the Company have the sufficient ability and insight to fulfill their roles and responsibilities, and perform their duties with an appropriate sense of responsibility as entrusted by all shareholders, while continuing to refine their skills and knowledge by actively participating in external training programs, etc. JR Central takes necessary measures to ensure that all Directors and Audit and Supervisory Board Members perform the duties required of them, such as in instances where relevant laws and regulations are revised, for example, by making the content of such revisions commonly known through meetings, etc., and by holding training events to share management issues faced by the Company so that the Company can make decisions concerning such issues in an appropriate manner.
Principle 5-1 Policy for constructive dialog with shareholders		JR Central has established a Policy for Promoting Constructive Dialog with Shareholders as follows. • JR Central positions the General Meeting of Shareholders as an important opportunity for dialog with shareholders and strives to improve the quality of questions and answers sessions in the meeting as a means of contributing to sustainable growth and enhancing corporate value over the mid- to long-term. All dialog with shareholders is overseen by the General Manager of the Administration Department, and questions, opinions and requests from shareholders are responded to in the form of an individual meeting or over the telephone, etc. where it is reasonable to do so. • Of this, dialog with institutional investors is overseen by the Director General of the Corporate Planning Division, and the IR team is placed in the Management Supervision Department of Corporate Planning Division in order to further improve shareholder dialog by organically coordinating with the Administration, Finance, Legal Departments, etc. Dialog response is the purview of the IR team, and a response is made together with members of management and Directors, where reasonable, based on a general consideration of the requests and interests, etc. put forth by the institutional investor. Specifically, we strive to improve upon dialog measures by not only holding individual meetings but also holding conference calls and facility tours, etc., where necessary, in addition to holding financial results briefings biannually. • We also strive to enrich the broader provision of information to shareholders by sending reports on information presented at financial results briefings biannually, on top of posting this information on our website. Moreover, we work to ensure that a sufficient degree of information concerning decisions made on important measures and important capital investments reaches as large a number of stakeholders as possible using the mass media services to deliver detailed information at press conferences held by the President, and by presenting such information to the press. • The content of discussions with shareholders is reported to members of management and, if necessary, feedback is given to the Board of Directors. • Under no circumstances is insider information communicated during discussions with shareholders. Furthermore, the 14-day period in the lead up to the day in which financial results are announced each quarter is designated as a silent period, in which the Company refrains from discussing financial results.

Fundamental Corporate Governance Policies

JR Central resolved the Fundamental Corporate Governance Policies* in the Board of Directors meetings.

*The Fundamental Corporate Governance Policies can be found at the URL below.

URL http://global.jr-central.co.jp/en/company/about/governance.html

Compliance/Whistle-blowing system

JR Central not only stipulates internal regulations based on the law, etc. but also conducts employee education on various occasions with the aim of thoroughly complying with the law, etc. when executing work. In addition, we also have established a whistle-blowing system. We have whistle-blowing contact points not only within the Company but also in an external law firm in order to establish a system in which employees, etc. can report any violation of the law, etc. at work. We also post fliers describing the whistle-blowing system and contact information for the contact points in all workplaces with the aim of widely disseminating the system.

Risk-management system

JR Central has established the Railway Safety Promotion Committees, etc. at the head office, railway operation divisions, branch offices, and in each area from the perspective of preventing train and labor accidents, and formulating and promoting safety measures through an integrated organization that stretches from the head office to each field office.

JR Central also manages a control center, which plays a key role in information communication, on call 24 hours a day at each railway operation division to respond to emergencies, such as accidents and disasters, and has also established a fast-response restoration structure in which employees can be gathered anytime according to the scale or impact of an accident or disaster. Additionally, in preparation for emergencies such as large-scale natural disasters, we have established the second Shinkansen General Control Center that can substitute for the Shinkansen General Control Center for the Tokaido Shinkansen.

Response to internal control related to financial reporting

We periodically investigate the system and execution situation, etc. within JR Central and JR Central Group companies in accordance with a basic framework offered by the Business Accounting Council in order to confirm that they are effectively functioning. JR Central also engages in efforts to maintain the level of internal control related to financial reporting by providing feedback from these investigations to duties.

Concept of capital policy and shareholder return

Our policy on dividends has always been to decide the specific dividend amount in accordance with the management environment and performance in each FY based on the principle of continuously providing stable dividends. JR Central considers that shareholder returns through dividends are appropriate in principle, and we do not plan to purchase additional treasury stock at this point.

We will finance our projects by issuing corporate bonds and borrowing, in addition to the long-term loan totaling 3 trillion yen acquired using the Fiscal Investment and Loan Program (FILP) to promote the construction of the Chuo Shinkansen, and we do not plan to use treasury shares or pursue capital increase at this point.

Summary of the 31th Ordinary General Meeting of Shareholders (Held June 22, 2018)

The following resolutions were passed at the 31th Ordinary General Meeting of Shareholders held June 22, 2018.

(1) Content of the resolved matters:

Proposal 1 : Appropriation of retained earnings	(i) Matters concerning year-end dividends Seventy (70) yen per common share of the Company (ii) Other matters concerning the appropriation of retained earnings: •Line item relating to retained earnings showing an increase and the amount thereof General reserve: 360,000,000,000 yen •Line item relating to retained earnings showing a decrease and the amount thereof Retained earnings carried forward: 360,000,000,000 yen
Proposal 2 : Election of seventeen (17) Directors	Messrs. Koei Tsuge, Shin Kaneko, Yoshiki Suyama, Shun-ichi Kosuge, Mamoru Uno, Hideyuki Shoji, Yoshiyuki Kasai, Yoshiomi Yamada, Takanori Mizuno, Toshio Otake, Akihiko Ito, Mamoru Tanaka, Hiroshi Suzuki, Torkel Patterson, Fujio Cho, Kenji Koroyasu, and Takashi Saeki were elected as Directors.
Proposal 3 : Election of one (1) Audit and Supervisory Board Member	Mr. Kunihiro Nasu was elected as Audit and Supervisory Board Member.

(2) Number of votes, indicating approval, disapproval, and abstention regarding the resolved matters, requirements for the resolved matters to be adopted, and results of voting:

Proposal	Approval (number of votes)	Disapproval (number of votes)	Abstention (number of votes)	Approval Rate (%)	Result of Voting
Proposal 1	1,735,745	12,916	128	98.46	Approved
Proposal 2					
Koei Tsuge	1,625,926	114,761	8,102	92.23	Approved
Shin Kaneko	1,661,897	78,791	8,102	94.28	Approved
Yoshiki Suyama	1,690,052	57,543	1,198	95.87	Approved
Shun-ichi Kosuge	1,690,052	57,543	1,198	95.87	Approved
Mamoru Uno	1,690,051	57,544	1,198	95.87	Approved
Hideyuki Shoji	1,689,997	57,598	1,198	95.87	Approved
Yoshiyuki Kasai	1,692,136	55,460	1,198	95.99	Approved
Yoshiomi Yamada	1,691,930	55,666	1,198	95.98	Approved
Takanori Mizuno	1,690,026	57,570	1,198	95.87	Approved
Toshio Otake	1,690,000	57,596	1,198	95.87	Approved
Akihiko Ito	1,689,969	57,627	1,198	95.87	Approved
Mamoru Tanaka	1,689,007	58,589	1,198	95.81	Approved
Hiroshi Suzuki	1,689,000	58,596	1,198	95.81	Approved
Torkel Patterson	1,692,448	55,148	1,198	96.01	Approved
Fujio Cho	1,659,654	87,943	1,198	94.15	Approved
Kenji Koroyasu	1,700,002	48,669	128	96.44	Approved
Takashi Saeki	1,704,503	44,163	128	96.69	Approved
Proposal 3					
Kunihiro Nasu	1,747,818	864	128	99.15	Approved

(Note) The requirements for the proposals to be resolved were as follows:
1. For proposal 1, a majority of votes indicating the approval of the shareholders who attended the meeting was required.
2. For proposals 2 and proposal 3, a majority of votes indicating the approval of the shareholders who attended the meeting with the attendance of shareholders representing 1/3 or more of all voting rights that can be exercised were required.

(3) Reason for not adding some of the votes of shareholders who attended the ordinary general meeting of shareholders to the final number of votes:

The votes of shareholders who attended the general meeting of shareholders on the meeting date, but have not been confirmed as to whether they indicated approval, disapproval or abstention, were not added to the final count because the requirements for the proposals to be resolved were already met by adding the votes from the exercise of voting rights as of the day before the general meeting of shareholders was held to the votes of shareholders who attended the general meeting of shareholders, which were confirmed as approvals or disapprovals, and the proposals were duly adopted in accordance with the Companies Act.

Board of Directors, Audit and Supervisory Board Members, and Corporate Officers (as of June 22, 2018)

Chairman and Representative Director
Koei Tsuge

President and Representative Director
Shin Kaneko

Executive Vice President and Representative Director
Yoshiki Suyama

Executive Vice President and Representative Director
Shun-ichi Kosuge

Executive Vice President and Representative Director
Mamoru Uno

Executive Vice President and Representative Director
Hideyuki Shoji

Board of Directors and Audit and Supervisory Board Members

Chairman and Representative Director
Koei Tsuge

President and Representative Director
Shin Kaneko

Executive Vice Presidents and Representative Directors

Yoshiki Suyama Director General of the Corporate Planning Division and in charge of the Administrative Departments

Shun-ichi Kosuge in charge of the General Technology Division, and in charge of the Overseas High Speed Railway Project

Mamoru Uno (Ph.D.) in charge of the Chuo Shinkansen Promotion Division

Hideyuki Shoji in charge of the Shinkansen and Conventional Lines Operations Division, in charge of Transportation Safety Section

Chairman Emeritus and Director
Yoshiyuki Kasai

Counselor and Director
Yoshiomi Yamada

Directors
Takanori Mizuno
Toshio Otake (Ph.D.)
Akihiko Ito
Mamoru Tanaka
Hiroshi Suzuki
Torkel Patterson
Fujio Cho (Outside)
Kenji Koroyasu (Outside)
Takashi Saeki (Outside)

Full-time Audit and Supervisory Board Members
Hidenori Fujii
Hajime Ishizu (Outside)
Hiroyuki Ota (Outside)

Audit and Supervisory Board Members
Shigeo Kifuji (Outside)
Kunihiro Nasu (Outside)

Corporate Officers

Senior Corporate Executive Officers

Sumio Atsuchi In charge of the Secretarial Department, the Audit Department, the Public Relations Department, the Administration Department and the Marketing Division

Takanori Mizuno Director General of the Chuo Shinkansen Promotion Division and in charge of controlling the Construction Section

Corporate Executive Officers

Motoaki Terai Director General of the Maglev Systems Development Division of the Chuo Shinkansen Promotion Division

Toshio Otake (Ph.D.) Director General of the General Technology Division and in charge of controlling the Tracks and Structures Section

Atsuhito Mori Deputy Director General of the General Technology Division, General Manager of the Technology Planning Department of the General Technology Division and in charge of controlling the Electrical Engineering Section

Shin Iwata Deputy Director General of the Chuo Shinkansen Promotion Division and General Manager of the Chuo Shinkansen Construction Department of the Chuo Shinkansen Promotion Division

Akihiko Ito Director General of the Business Promotion Division and in charge of the Property Management Department

Mamoru Tanaka Director General of the Shinkansen Operations Division and in charge of controlling the Rolling Stock Section

Corporate Officers

Hajime Ikuta Deputy Director General of the Chuo Shinkansen Promotion Division

Yutaka Hatano Deputy Director General of the Maglev Systems Development Division of the Chuo Shinkansen Promotion Division and General Manager of Yamanashi Maglev Center of the Maglev Systems Development Division of the Chuo Shinkansen Promotion Division

Hiroto Takeuchi (Ph.D.) Deputy Director General of the Chuo Shinkansen Promotion Division and Deputy General Manager of the Chuo Shinkansen Construction Department of the Chuo Shinkansen Promotion Division

Shunsuke Niwa General Manager of the Public Relations Department

Tatsuhiko Yamada General Manager of the Finance Department

Atsushi Honda (Ph.D.) General Manager of the Construction Department, General Manager of the Nagoya Construction Subdivision of the Chuo Shinkansen Construction Department of the Chuo Shinkansen Promotion Division

Tomohisa Furuhashi General Manager of the Transportation Safety Department and in charge of controlling the Transportation Section

Hiroshi Suzuki Director General of the Conventional Lines Operations Division

Masayuki Ueno Deputy Director General of the Shinkansen Operations Division and General Manager of the Rolling Stock Department of the Shinkansen Operations Division

Takayuki Oyama Director General of the Shizuoka Branch Office

Manabu Ishibashi Deputy Director General of the Corporate Planning Division and General Manager of the Information Systems Department of the Corporate Planning Division

Tatsuya Okajima Deputy Director General of the General Technology Division and General Manager of the Technology Research and Development Department of the General Technology Division

Kenichi Niimi Deputy Director General of the Chuo Shinkansen Promotion Division and General Manager of the Planning and Promotion Department of the Chuo Shinkansen Promotion Division

Yoshihiko Uchida Deputy Director General of the Chuo Shinkansen Promotion Division and Deputy General Manager of the Chuo Shinkansen Construction Department of the Chuo Shinkansen Promotion Division

Hiroshi Oshima Deputy Director General of the Maglev Systems Development Division of the Chuo Shinkansen Promotion Division

Shigeki Miyamoto Deputy Director General of the Maglev Systems Development Division of the Chuo Shinkansen Promotion Division

Masami Nitta General Manager of the Administration Department

Masahiro Yamamoto General Manager of the Legal Affairs Department

Masaya Sugiura Director General of the Marketing Division

Akihiko Nakamura Deputy Director General of the Business Promotion Division

Hajime Kobayashi Deputy Director General of the Business Promotion Division

Hiroshi Matsuo General Manager of the General Education Center

Atsushi Tsujimura Deputy Director General of the Shinkansen Operations Division and General Manager of the Transportation and Marketing Department

Michihiro Matsuzaki Director General of the Kansai Branch Office

Corporate Data

Profile

Name

Central Japan Railway Company (JR Central)

Established

April 1, 1987

Business activities

Railways business, Affiliated businesses

Key data

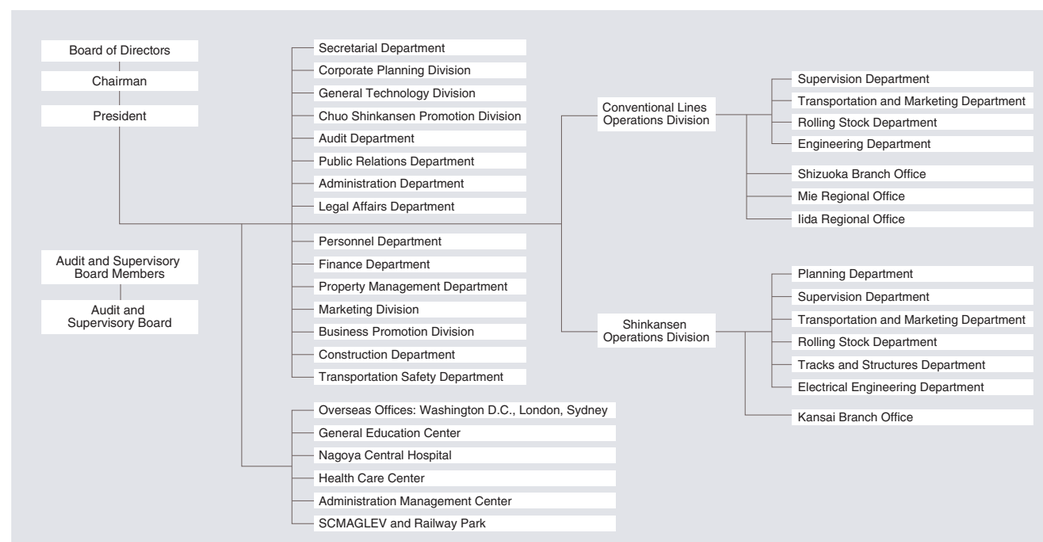
(As of the end of March 2018)

Capital	112.0 billion yen
Operating Revenues	1,427.4 billion yen
Number of Shares Outstanding	206 million
Share Listings	Nagoya / Tokyo Stock Exchange
Number of Shareholders	90,495
Number of Employees	18,116
Operating Kilometers	1,970.8km
Number of Stations	405
Number of Rolling Stock	4,840
Double-and Multi-Tracked Section	55.1%(1,086.8km)
Electrified Section	76.7%(1,511.0km)
CTC System Adoption Rate	97.5%(1,922.3km)
Automatic Signaling System Adoption Rate	97.8%(1,927.3km)

Head Office and Other Main Offices

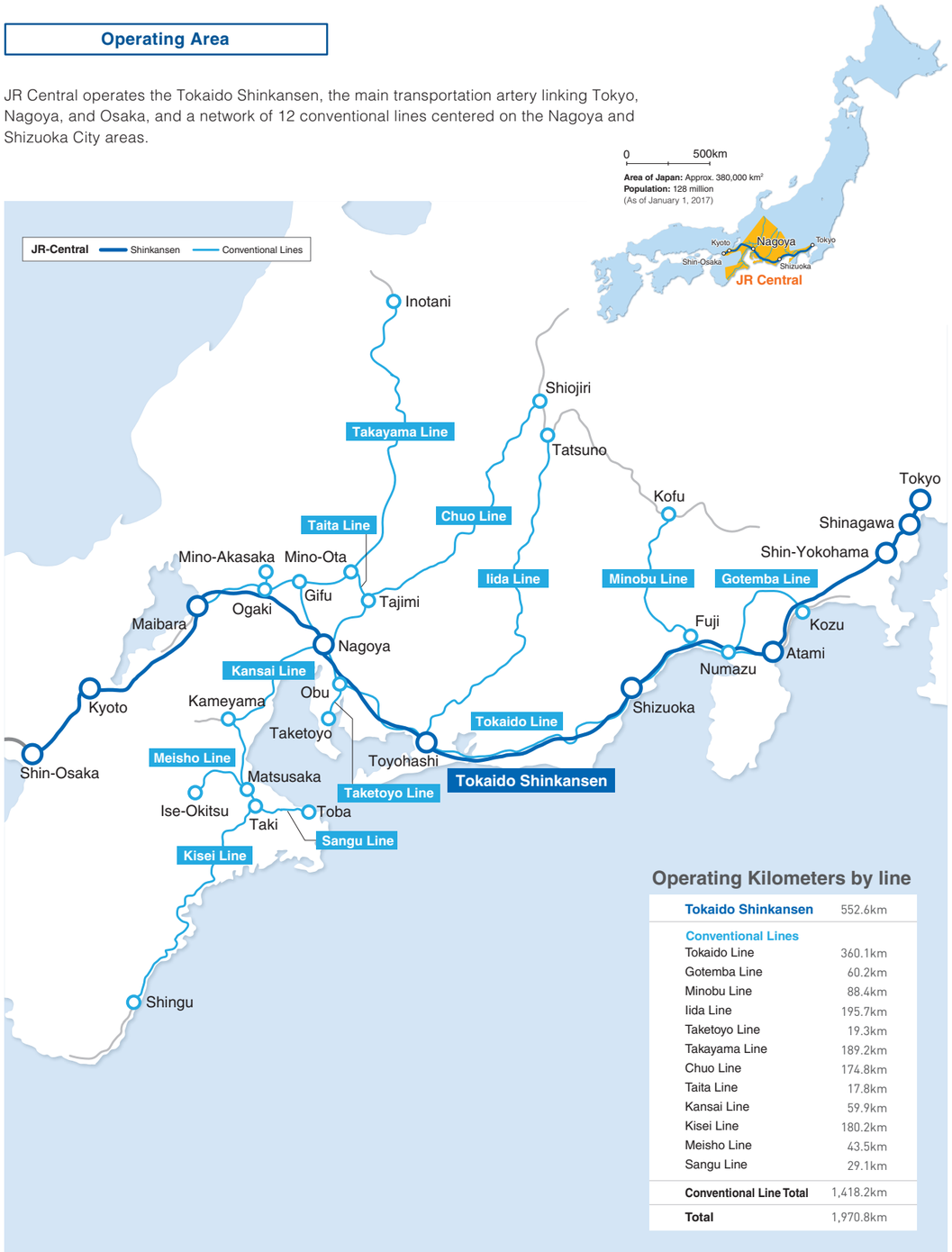
Head Office	Meieki 1-1-4, Nakamura-ku, Nagoya-shi, Aichi 450-6101, Japan JR Central Towers
Head Office (Tokyo)	JR Central Shinagawa Building -A Wing 2-1-85, Konan, Minato-ku, Tokyo 108-8204, Japan
Conventional Lines Operations Division	JR Central Taiko Building, Meieki 1-3-4, Nakamura-ku, Nagoya-shi, Aichi 453-8520, Japan
Shizuoka Branch Office	4, Kurogane-cho, Aoi-ku, Shizuoka-shi, Shizuoka 420-0851, Japan
Mie Regional Office	Ust-Tsu 12F, 700, Hadokoro-cho, Tsu-shi, Mie 514-0009, Japan
Iida Regional Office	5356, Kami-Iida, Iida-shi, Nagano 395-0000, Japan
Shinkansen Operations Division	Marunouchi Chuo Building, 1-9-1, Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan
Kansai Branch Office	Shin-Osaka Hankyu Building 10F, 1-1-1, Miyahara, Yodogawa-ku, Osaka-shi, Osaka 532-0003, Japan
Washington D.C. Office	900 17th Street, N.W., Suite 520, Washington, DC 20006, U.S.A.
London Office	6th Floor, 4 Eastcheap, London, EC3M 1AE, U.K.
Sydney Office	Suite 5.01A, Level5, 20 Hunter Street, Sydney, NSW 2000, Australia

Organization Chart



Operating Area

JR Central operates the Tokaido Shinkansen, the main transportation artery linking Tokyo, Nagoya, and Osaka, and a network of 12 conventional lines centered on the Nagoya and Shizuoka City areas.



Operating Kilometers by line

Tokaido Shinkansen	552.6km
Conventional Lines	
Tokaido Line	360.1km
Gotemba Line	60.2km
Minobu Line	88.4km
Iida Line	195.7km
Taketoyo Line	19.3km
Takayama Line	189.2km
Chuo Line	174.8km
Taita Line	17.8km
Kansai Line	59.9km
Kisei Line	180.2km
Meisho Line	43.5km
Sangu Line	29.1km
Conventional Line Total	1,418.2km
Total	1,970.8km

History

1987	**April**	• Central Japan Railway Company (JR Central) is established.
1988	**March**	• Three stations are established on the Tokaido Shinkansen (Shin-Fuji, Kakegawa, Mikawa-Anjo) • JR Tokai Bus Company is established (now a consolidated subsidiary). In April of the same year, automobile transport business is transferred to the company.
1989	**March**	• A new model diesel railcar is introduced to the Hida Express on the Takayama Line.
1990	**February**	• JR Central starts topographical and geological surveys along the Chuo Shinkansen following orders from the Minister of Transport.
	June	• JR Central applies to the Minister of Transport for approval of the construction plan of the Yamanashi Maglev Line and gains approval.
1991	**October**	• JR Central takes over the Tokaido Shinkansen facilities.
1992	**March**	• The first Nozomi begins commercial service on the Tokaido Shinkansen using Series 300 rolling stock.
	July	• JR Tokai Hotels Co., Ltd. is established (now a consolidated subsidiary).
	December	• JR Central Department Store Co., Ltd. is established. Company name changed to JR Tokai Takashimaya Co., Ltd. in September 1997 (now a consolidated subsidiary).
1994	**June**	• JR CENTRAL BUILDING CO., LTD. is established (now a consolidated subsidiary).
1997	**April**	• Running tests start on the Yamanashi Maglev Line.
	October	• JR Central lists on the first section of the Nagoya, Tokyo, and Osaka stock exchanges (integrated with the Tokyo Stock Exchange in July 2013) and also on the Kyoto Stock Exchange (merged with the Osaka Stock Exchange in March 2001).
1999	**March**	• Series 700 rolling stock is introduced on the Tokaido Shinkansen Nozomi.
	December	• Construction of JR Central Towers is completed
2000	**March**	• JR Nagoya Takashimaya opens (operated by JR Tokai Takashimaya Co., Ltd.).
	May	• Nagoya Marriott Associa Hotel opens (operated by JR Tokai Hotels Co., Ltd.).
2001	**March**	• JR Tokai Real Estate Co., Ltd. is established (now a consolidated subsidiary).
	December	• JR Central is excluded from the jurisdiction of the JR Law through the enactment of amendment to the JR Law.
2002	**July**	• A new research center is constructed in Komaki City in Aichi Prefecture.
2003	**October**	• Shinagawa Station on the Tokaido Shinkansen opens. The timetable is drastically revised by the increase of the maximum speed on all Tokaido Shinkansen trains to 270km/h.
2005	**July**	• The Japan National Railways (JNR) Settlement Headquarters, an independent division within the Japan Railway Construction, Transport and Technology Agency (JRTT), sells 600,000 shares of JR Central.
2006	**March**	• New Automatic Train Control (ATC) system is introduced to the Tokaido Shinkansen.
	April	• JR Central repurchases 268,686 shares of its treasury stock based on a decision made by the Board of Directors, authorized by the articles of incorporation. • The JNR Settlement Headquarters within the JRTT completes the sale of all of its shares of JR Central by selling 286,071 shares of common stock of the company.
2007	**January**	• Application for changes to the Yamanashi Maglev Line Construction Plan is approved by the Minister of Land, Infrastructure and Transport (hereafter, the "Minister")
	July	• JR Central introduces the new Series N700 rolling stock for the Tokaido Shinkansen Nozomi services.
2008	**October**	• JR Central makes NIPPON SHARYO, LTD. a consolidated subsidiary. • JR Central submits a report to the Minister of Land, Infrastructure, Transport and Tourism (the "Minister") concerning topographical and geological surveys of the Chuo Shinkansen in response to the order received in 1990.
	December	• JR Central starts conducting the remaining four surveys under Article 5 of the Nationwide Shinkansen Railway Development Act (hereinafter referred to as "the Act") related to the Chuo Shinkansen in response to the order by the Minister.
2009	**May**	• JR Central cancels 90,000 shares of treasury stock.
	December	• JR Central submits a report regarding the remaining four surveys under Article 5 of the Act related to the Chuo Shinkansen in response to the order by the Minister received in 2008.
2011	**May**	• The Minister designates JR Central as the operator and constructor of the Chuo Shinkansen between Tokyo and Osaka City. • The Minister approves the development plan and instructs JR Central to construct the Chuo Shinkansen.
2012	**May**	• JR Central cancels 90,000 shares of treasury stock.
2013	**February**	• JR Central introduces the new Series N700A rolling stock for the Tokaido Shinkansen Nozomi services.
	August	• Extension of the Yamanashi Maglev Line to 42.8km and upgrading of facilities are completed, and running operation is restarted.
2014	**October**	• The Minister approves the Construction Implementation Plan (Part 1) between Shinagawa and Nagoya along the Chuo Shinkansen.
2015	**March**	• The Taketoyo Line (between Obu and Taketoyo stations) is electrified. • Increase in the maximum speed of the Tokaido Shinkansen to 285km/h.
2016	**November**	• Applies for long-term loan totaling 3 trillion yen (plan) using the Fiscal Investment and Loan Program (FILP) for the construction of the Chuo Shinkansen to the Japan Railway Construction, Transport and Technology Agency.
2017	**February**	• Construction of JR Gate Tower is completed.
	April	• Takashimaya Gate Tower Mall (operated by JR Tokai Takashimaya Co., Ltd.), Nagoya JR Gate Tower Hotel (operated by JR Tokai Hotels Co., Ltd.) open along with other facilities, resulting in the full-opening of JR Gate Tower.
2018	**March**	• The Minister approves the Construction Implementation Plan (Part 2) between Shinagawa and Nagoya along the Chuo Shinkansen.

Summary of Performance

Segment-by-Segment Performance for FY2017

Based on the management philosophy of "Contribute to the development of Japan's main transportation artery and social infrastructure," the JR Central Group continues to put top priority on ensuring safe and reliable transportation in its core railway business and works to further enhance its services. At the same time, the Group strives to take various initiatives, such as enhancing the business execution capabilities of employees, reinforcing facilities, and promoting efficiency while reducing costs across all areas of business execution, including capital investments, with a view to strengthening earning power. As a result, the overall railway performance for the term (passenger-kilometers) rose favorably in terms of both business and tourism use, increasing by 3.1% YoY to 64.212 billion passenger-kilometers. Operating revenue also increased by 3.7% YoY to 1,822.0 billion yen, ordinary income increased by 3.5% YoY to 583.5 billion yen, and net income attributable to owners of the parent increased by 0.7% YoY to 395.5 billion yen.

Long-term debt amounted to 4,856.2 billion yen mainly due to the long-term debt for the Chuo Shinkansen of 1,500 billion yen. The amount of long-term debt excluding the long-term debt for the Chuo Shinkansen was 1,856.2 billion yen, down 39.2 billion yen from the end of the previous fiscal year.

The year-end dividend was set at 70 yen, as announced in January 2018. As a result, the annual dividend came to 140 yen per share.

Business performance in each segment was as follows.

1) Transportation

JR Central steadily moved forward with the large-scale renovation work of the Tokaido Shinkansen while continuously working to achieve cost reductions to maintain and enhance the soundness of civil engineering structures. We also took steps to implement earthquake countermeasures, which included the initiation of construction work for the installation of derailment prevention guards for the entire Tokaido Shinkansen as part of implementing derailment and deviation countermeasures based on an improve method that ensures higher safety. We also worked 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"(operating up to 10 Nozomi services in both directions) and welcomed a large number of customers using our services. Furthermore, we proceeded with the launch of the N700A (3rd edition), while moving forward with the enhancement work to reflect features of the third-edition trainsets, such as reducing the stopping distance of the Earthquake Brake, on existing rolling stock. We also completed the construction to install additional security cameras in passenger cars, etc. In addition, we completed the incremental installations of movable platform fences on the No. 23 platform at Shinagawa Station and on the No. 1 platform at Shin-Yokohama Station. We also newly produced the N700S validation test vehicles and began running tests. Meanwhile, JR Central introduced new portable tablets for train conductors and revised operations onboard trains as part of its initiatives to ensure safe and reliable transportation and further enhance transportation services.

In terms of conventional lines, we have continued proceeding with earthquake countermeasures, such as anti-earthquake constructions in the Nagoya Workshop, which conducts general overhauls for conventional line rolling stock, etc., in addition to anti-quake reinforcement for elevated track columns, etc. We have also systematically promoted measures against rainfall, measures against falling rocks, and the improvement of safety devices on grade crossings. Regarding anti-quake reinforcement for elevated track columns, we have completed the reinforcements in sections where a long, strong earthquake vibration is expected, as in the case of the Tokai Earthquake. We flexibly increased the frequency or the number of train cars to meet demands for the "Shinano", "Hida", and other limited express trains. Further, we proceeded with the development of movable platform fences to accommodate our conventional lines, which have varying models and numbers of train cars, and began conducting verification testing at Kanayama Station. At the same time, we completed introduction of braille blocks that indicate where platform edges are located on the platforms of conventional line stations servicing 5,000 or more passengers by moving up the installation plan by three years from the initial plan. In addition, we began using the centralized passenger service system between Okazaki Station and Toyohashi Station on the Tokaido Line and completed the replacement of the operation management system in the Shizuoka district. Meanwhile, JR Central introduced new portable tablets for train drivers on all lines as part of its initiatives to ensure safe and reliable transportation and further enhance transportation services.

As part of our initiatives common to the Shinkansen and conventional lines, we proceeded with the implementation of measures to prevent suspended ceilings at stations from falling and conducted practical training to be able to respond to various conditions expected in the event of a natural disaster, or other extraordinary situation. Additionally, we expanded the coverage of our Free Wi-Fi service to all stations on the Tokaido Shinkansen and some stations on conventional lines. Furthermore, taking the opportunity of the 30th anniversary of the Company's founding, we held commemorative events, such as train depot and training facility tours and work experience events at stations. We also adopted a new uniform for customer service staff.

As part of our sales and marketing efforts, we introduced "smartEX" , a new online reservation and ticketless boarding service on the Tokaido Shinkansen and the Sanyo Shinkansen that can be used also by non-members of Express Reservation, in Japan in September 2017. Subsequently, from October, we also began offering the service to visitors to Japan with the aim of expanding the use of our service. We also took steps to enhance our Express Reservation service by introducing discounted roundtrip products and revising the terms of use of existing discounted products. We continued to promote sales of tourist products and worked to spur demand, including use of our products and services by families and groups, as well as distributing the "IC Hayatoku Type 21" at a special price commemorating our 30th anniversary.

We rolled out tourism campaigns covering Kyoto, Nara, Tokyo, Hida, Ise-Shima, etc. by highlighting local tourist resources and expanding travel products associated with the campaigns. JR Central also promoted sales in cooperation with communities, such as the "Shinshu Destination Campaign" in coordination with Nagano Prefecture, etc., the "Japan Highlights Travel" campaign in coordination with Hamamatsu-shi, Shizuoka Prefecture, associated with Naotora Ii, and the "Shupo" Campaign. In addition, we worked to expand the network of stores accepting electronic money with TOICA.

Due to the successive use of the railway for business and tourism, performance for the Tokaido Shinkansen increased by 3.5% YoY to 54.756 billion passenger-kilometers for FY2017. For conventional lines, it increased by 1.0% YoY to 9.456 billion passenger-kilometers.

In our bus business, we have worked to create products tailored to customers' needs and ensure profitability with safety as the first priority.

As a result of the aforementioned, operating revenues for the term increased by 3.2% YoY to 1,424.0 billion yen, and operating income increased by 5.0% YoY to 623.0 billion yen.

2) Merchandise and Other

In our merchandise and other businesses, we opened the "Takashimaya Gate Tower Mall" in April 2017, offering a broad range of stores including those that appear for the first time in the Tokai district, to attract new customers. We also worked to strengthen our earning power by having "JR Nagoya Takashimaya" and "Takashimaya Gate Tower Mall" collaborate in deploying sales and marketing measures that meet the needs of customers.

As a result of the aforementioned, operating revenues for the term increased by 7.7% YoY to 255.3 billion yen, and operating income increased by 9.6% YoY to 8.2 billion yen.

3) Real Estate

In our real estate business, we opened the JR Gate Tower full scale in April 2017 and began operation of the "Gate Tower Plaza Restaurant Mall," with BIC CAMERA, UNIQLO, GU and other stores. Furthermore, we strengthened the competitiveness and selling power of commercial facilities at stations by carrying out the renovation of part of the restaurant zone at Nagoya Station in addition to the renovation of the PARCHĒ building at Shizuoka Station and the MAY-ONE building at Hamamatsu Station. In addition, we proceeded with the sale of housing lots in our development project of land in Gifu where the Company housing used to be, as well as began the sale of apartments in the "Central Garden Residence Gifu Kano".

As a result of the aforementioned, operating revenues for the term increased by 13.7% YoY to 78.0 billion yen, and operating income increased by 2.1% YoY to 18.5 billion yen.

4) Other

In our hotel business, we began operation of the "Nagoya JR Gate Tower Hotel" in April 2017. We have also worked to put in place attractive products and reinforce our sales capabilities at the "Nagoya Marriott Associa Hotel" and other existing hotels. At the same time, we strived to provide higher quality services to respond to the needs of customers who are visitors to Japan.

With our travel business, we have proactively marketed attractive travel products and promoted sales of such products in collaboration with travel campaigns for Kyoto, Nara, Tokyo, Hida, Ise-Shima, etc.

In our rolling stock manufacturing business, we have endeavored to increase orders for and the manufacture of rolling stock, construction machinery, and other items. As for the large railway rolling stock deal for the U.S., for which NIPPON SHARYO, LTD. received the order in November 2012, given the difficulty faced in carrying out the deal as planned due to technical issues, it was decided that another rolling stock manufacturer would undertake the production. Hence, in November 2017, we entered into a settlement agreement to ultimately resolve the case with Sumitomo Corporation, etc., the parties directly accepting the order in this deal.

As a result of the aforementioned, operating revenues for the term increased by 3.0% YoY to 261.6 billion yen, and operating income increased by 684.3% YoY to 13.2 billion yen.

Efforts for FY2018

In the fiscal year ending March 2019, we will continue to place top priority in ensuring safe and reliable transportation in our railway business and steadily move forward with the implementation of counter-earthquake measures, including the derailment and deviation countermeasures for the Tokaido Shinkansen, large-scale renovation work for civil engineering structures, and the launch of the N700A (3rd edition). At the same time, we will take initiatives to increase the user convenience of our railway services by enhancing the information on train services provided via the Company website, expanding the coverage of our Free Wi-Fi service in stations and on trains and taking other steps. We will also examine train timetables toward having all of our Tokaido Shinkansen trains travel at the highest speed of 285 km/h by the end of FY2019, proceed with the running tests for the launch of the N700S mass-production rolling stock in FY2020, and move forward with the new production of a test vehicle for the next-generation limited express rolling stock that uses the hybrid system for conventional lines. Meanwhile, 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. We will take steady steps forward also in pursuing overseas deployment of high-speed railway systems. Simultaneously, JR central will operate JR Central Towers and JR Gate Tower in a uniform manner and demonstrate synergistic effects to boost earnings. To smoothly move forward with these initiatives, JR Central will continue to work on strengthening its earning power and achieving ceaseless improvement in its technological capabilities. We will also strive to enhance efficiency and reduce costs in all areas of our business execution, including making capital investments, with a view to enhancing our management capabilities.

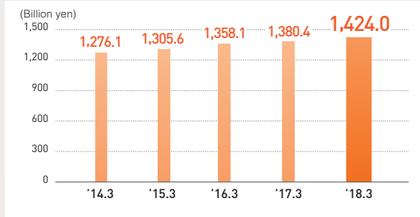
■Performance forecast for FY2018 (consolidated)

	(Billion yen)	(YoY)
Operating Revenues	1,844.0	101.2%
Operating Income	663.0	100.1%
Ordinary Income	584.0	100.1%
Net income attributable to owners of the parent	404.0	102.1%

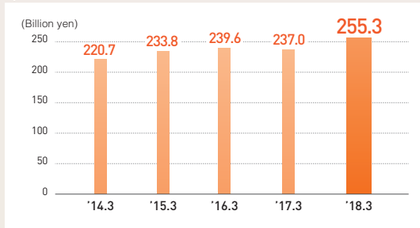
Note: As of the release of the financial report for FY2017.

■Shifts in Operating Revenues

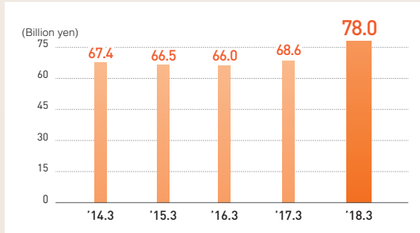
1) Transportation



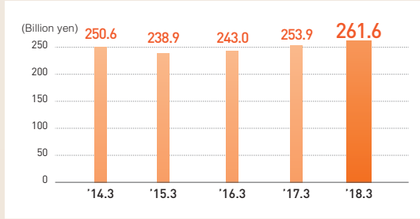
2) Merchandise and Other



3) Real Estate



4) Other



Note: Operating revenues by segment include sales to other segments in addition to sales to external customers

Financial Highlights

▶ Consolidated

	FY2013	FY2014	FY2015	FY2016	FY2017
	(Billion yen)	(Billion yen)	(Billion yen)	(Billion yen)	(Billion yen)
Operating Revenues	¥1,652.5	¥1,672.2	¥1,738.4	¥1,756.9	¥1,822.0
Operating expenses	1,157.9	1,165.6	1,159.7	1,137.4	1,160.0
Operating Income	494.6	506.5	578.6	619.5	662.0
Income before income taxes	402.7	404.6	508.1	560.0	561.8
Net income attributable to owners of the parent	255.6	264.1	337.4	392.9	395.5
Depreciation and amortization	276.2	271.5	242.3	225.3	216.0
Capital expenditure*1	200.1	214.5	238.3	329.9	325.6
Total assets	5,178.1	5,217.9	5,268.5	7,052.6	8,908.6
Total equity	1,802.2	2,063.9	2,352.5	2,726.7	3,084.7
Equity	1,753.7	2,020.1	2,316.3	2,692.4	3,055.4
Equity Ratio	33.9%	38.7%	44.0%	38.2%	34.3%
Operating income/Total assets	9.5%	9.7%	11.0%	10.1%	8.3%
Return on Equity	15.7%	14.0%	15.6%	15.7%	13.8%
	(Yen)	(Yen)	(Yen)	(Yen)	(Yen)
Earnings per Share	¥1,299	¥1,342	¥1,714	¥1,996	¥2,015
Annual Dividends per share	115	120	125	135	140

*1: Increase in tangible fixed assets and intangible fixed assets

▶ Non-consolidated

	FY2013	FY2014	FY2015	FY2016	FY2017
	(Billion yen)	(Billion yen)	(Billion yen)	(Billion yen)	(Billion yen)
Operating Revenues	¥1,277.2	¥1,306.6	¥1,357.9	¥1,380.7	¥1,427.4
Railways Business	1,268.5	1,297.8	1,349.7	1,371.9	1,414.8
Affiliated Businesses	8.6	8.7	8.2	8.8	12.5
Operating expenses	816.3	831.1	800.3	784.9	802.1
Railways Business	808.9	826.5	794.1	779.9	793.5
Affiliated Businesses	7.4	4.6	6.1	4.9	8.6
Operating Income	460.8	475.4	557.6	595.8	625.2
Income before income taxes	370.7	397.8	491.7	541.1	549.5
Net income	240.3	260.2	328.6	381.8	384.4
Depreciation and amortization	260.3	255.8	227.0	210.9	198.6
Total capital investments	229.0	257.2	259.1	330.8	384.5
Total assets	4,986.0	5,013.4	5,059.4	6,814.3	8,726.4
Total equity	1,661.3	1,931.0	2,219.9	2,582.8	2,929.8

Other Related Materials

• List of consolidated subsidiaries (Table 1)

Segment	Company Name	Capital (Million yen)	Capital Ratio (%)	Main Business
Transportation	JR Tokai Bus Company	1,747	100.0	Bus services
	JR TOKAI LOGISTICS COMPANY	300	90.0	Logistics business
	Tokai Transport Service Company	295	100.0	Railway business, entrusted business
Merchandise and Other	JR Tokai Takashimaya Co., Ltd.	10,000	59.2	Department store operations
	JR-CENTRAL PASSENGERS Co., Ltd.	998	100.0	Wholesale and retail sales, food and beverage service
	Tokai Kiosk Company	700	100.0	Wholesale and retail sales
	Tokai Food Service co., Ltd.	295	51.6	Food and beverage service
	JR Tokai Corporation	100	70.0	Wholesale and retail sales
Real Estate	JR CENTRAL BUILDING CO., LTD.	45,000	100.0	Real estate leasing
	JR Tokai Real Estate Co., Ltd.	16,500	100.0	Real estate leasing and sales
	Shin-Yokohama Station Development Co., Ltd.	9,304	100.0	Real estate leasing
	Toyohashi Station Building Co., Ltd.	1,880	52.5	Real estate leasing
	Tokyo Station Development Co., Ltd.	1,750	100.0	Real estate leasing
	Shizuoka Terminal Development Company Limited	624	67.0	Real estate leasing
	HAMAMATSU TERMINAL DEVELOPMENT CO., Ltd.	600	76.8	Real estate leasing
	Nagoya Station Area Development Corporation	480	100.0	Real estate leasing
	JR DEVELOPMENT AND MANAGEMENT CORPORATION OF SHIZUOKA	363	100.0	Real estate leasing
	JR Development and Management Corporation of Kansai	30	100.0	Real estate leasing

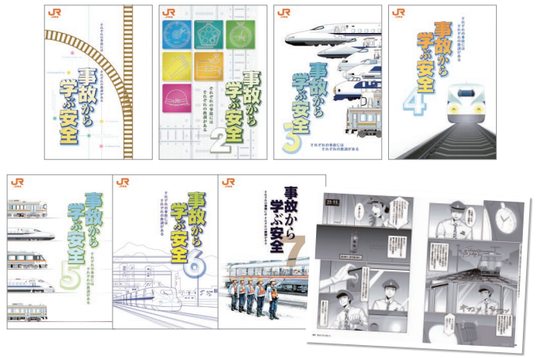
Segment	Company Name	Capital (Million yen)	Capital Ratio (%)	Main Business
Other	JR Tokai Hotels Co., Ltd.	14,000	100.0	Hotel business
	JR Tokai Tours	490	70.0	Travel agency services
	JR TOKAI AGENCY CO., LTD.	61	90.0	Advertising
	NIPPON SHARYO, LTD.	11,810	51.2	Manufacturing of railway rolling stock
	JR TOKAI CONSTRUCTION Co., Ltd.	300	100.0	Construction
	CHUOH LINEN SUPPLY Co., Ltd.	150	87.6	Linen supply services
	JR TOKAI Information Systems Company	100	100.0	Development, improvement and maintenance of systems
	The Japan Mechanised Works and Maintenance of Way Co., Ltd.	100	92.1	Track maintenance and inspection
	JR Tokai Financial Management Co., Ltd.	80	100.0	Contracted accounting operations and financial business
	Tokai Rolling Stock & Machinery Co., Ltd.	80	88.4	Rolling stock and machinery inspections and repair
	JR Central Consultants Company	50	100.0	Construction consulting business

Note: Two affiliated companies, SHINSEI TECHNOS CO., LTD. and RAILWAY INFORMATION SYSTEMS CO., LTD., are accounted for by the equity method.

• Learning safety from accidents (Column 1)

"Learning Safety from Accidents" is a booklet that has been published seven times since FY2007 that introduces, in illustrations, past accidents and disasters in an easy to understand format. The booklet is distributed to the General Education Center and field offices for use in training and workplace OJT.

This booklet is prepared based on a theme of how past events have been used as lessons, and serves as an educational tool used to aid readers in gaining an accurate understanding why the current rules and equipment are established in the manner they are.



• Shortening of arrival time by speed increase (Column 2)

With the inauguration of the Tokaido Shinkansen in 1964, the time required to travel between Tokyo and Osaka was shortened to 3 hours and 10 minutes from 6 hours and 30 minutes (4 hours at the time of inauguration). Furthermore, with the introduction of the "Nozomi" in 1992, that time was shortened to 2 hours and 30 minutes.

In October 2003, the investment in rolling stock and ground facilities that we had continuously engaged in for approximately 15 years culminated with the upgrading of the maximum speed of all trains to 270 km/h and the drastic timetable revision that resulted in a maximum of seven Nozomi services operating each hour.

With the introduction of the "10 Nozomi Timetable (operating up to 10 Nozomi services in both directions)" in 2014 and the increase in maximum speed to 285 km/h in 2015, the shortest travel time between Tokyo and Osaka has now been reduced to 2 hours and 22 minutes.

Acceleration by increasing the speed of the Tokaido Shinkansen

		Tokyo - Osaka Shortest travel time
October 1, 1964	Series 0 210km/h	4 hr (3 hr 10 min in the following fiscal year)
November 1, 1986	Series 100 220km/h	2 hr 52 min
March 14, 1992	Series 300 270km/h	2 hr 30 min
March 14, 2015	N700A 285km/h	2 hr 22 min

Management's Discussion and Analysis of Consolidated Financial Condition and Results of Operations (MD&A)

1) Overview of FY2017

In FY2017, amid the continuing satisfactory level of railway use, JR Central strived to enhance services placing the top priority on ensuring safe and reliable transportation in the railway business, which is the core of our operations.

In our railway business, in terms of the Tokaido Shinkansen, we have steadily proceeded a large-scale renovation and earthquake countermeasures, such as countermeasures to derailment and deviation. Also, we utilized the "10 Nozomi Timetable" to schedule trains flexibly. Furthermore, we have introduced the N700A(3rd edition) and reflected the features of the third-edition trainsets on existing rolling stock.

In terms of the conventional lines, we have systematically promoted earthquake countermeasures, such as anti-earthquake reinforcement for elevated columns, etc., measures against rainfall and falling rocks, and improvement of safety devices on grade crossings. Also, we flexibly increased the frequency and the number of train cars to meet demand for the "Shinano", "Hida", and other limited express trains.

In terms of sales and marketing, we have promoted proactive initiatives, such as measures to expand our tourist products in order to stimulate demand for use of our services.

In non-railway business, we worked to enhance existing businesses. We have conducted integrated management of both the JR GATE TOWER, which fully opened in April 2017, and the JR CENTRAL TOWERS and carried out active sales and advertising promotion.

Our commitment to the aforementioned series of measures led to continuing favorable railway transportation volume for both business and tourism, resulting in increase in transportation revenues for JR Central, while we saw an increase in revenue from the opening of the JR GATE TOWER. As a result, overall consolidated operating revenues increased. Overall consolidated operating expenses increased because of increase in expenses relating to the JR Central's technological development and the opening of the JR GATE TOWER. Moreover, non-operating income/loss worsened due to an increase in interest expenses from the long-term debt for the Chuo Shinkansen construction.

Despite the increase in consolidated operating expenses and non-operating loss, both revenue and income increased for FY2017 with operating revenue ending at 1,822.0 billion yen, operating income at 662.0 billion yen, and net income attributable to owners of the parent at 395.5 billion yen.

2) Operating Performance

a) Operating Revenue

Operating revenue increased by 65.0billion yen (3.7%) YoY to 1,822.0 billion yen.

In terms of our transportation business, JR Central's transportation revenues increased by 42.4billion yen (3.2%) YoY to 1,358.3 billion yen. Passenger volume on the Tokaido Shinkansen increased by 3.5% YoY, pushing up transportation revenues 3.4% YoY to 1,253.2 billion yen. Passenger volume on conventional lines increased by 1.0% YoY with transportation revenues increasing 1.1% YoY to 105.1 billion yen.

In our non-transportation businesses, operating revenues for the merchandise and other segment, real estate segment, and other segment increased respectively by 7.7%, by 13.7%, and by 3.0% YoY.

b) Operating Expenses

Operating expenses increased by 22.5 billion yen (2.0%) YoY to 1,160.0 billion yen because of an increase in expenses relating to the Company's technological development and the opening of the JR GATE TOWER despite of decrease in depreciation and amortization associated with the Yamanashi Maglev Line.

c) Operating Income

Operating income increased by 42.4 billion yen (6.9%) YoY to 662.0 billion yen.

d) Non-Operating Income/Loss

Non-operating income/loss worsened 22.8 billion yen over the FY2016 due to an increase in interest expenses from the long-term debt for the Chuo Shinkansen construction.

e) Net Income Attributable to Owners of the Parent

As a result, net income attributable to owners of the parent increased by 2.5 billion yen (0.7%) YoY to 395.5 billion yen.

3) Cash Flow

Cash and cash equivalents (hereinafter, "capital") as of the end of FY2017 increased by 367.8 billion yen YoY to 782.4 billion yen.

Capital gained from operating activities increased by 29.0 billion yen YoY to 609.5 billion yen due to a decrease in income tax paid and the fact that non-consolidated transportation revenues of JR Central increased as the use of JR Central's services for business as well as tourism maintained high levels.

Capital expended through investing activities decreased by 233.0 billion yen YoY to 1,676.4 billion yen due to an increase in proceeds from the reversal of money held in trust for the Chuo Shinkansen construction and a drop in expenditures (net) associated with fund management.

Capital gained from financing activities increased by 9.5 billion yen YoY to 1,434.7 billion yen mainly due to a decrease in the amount of liquidation of long-term debt and payables despite a drop in the amount of bonds issued.

(Reference)

Substantial free cash flow (amount obtained by subtracting an expenditure for purchase of property, plant, and equipment, and intangible assets, etc. (306.9 billion yen) within net cash used in investing activities from net cash provided by operating activities (609.5 billion yen)) increased by 52.1 billion yen YoY to 302.5 billion yen.

4) Long-Term Debt and Payables

During FY2017, the balance of long-term debt and payables increased to 4,856.2 billion yen both on a consolidated and non-consolidated basis, mainly due to borrowing of 1,500.0 billion yen in long-term debt for the Chuo Shinkansen construction. The balance of long-term debt and payables other than long-term debt for the Chuo Shinkansen construction decreased by 12.8 billion yen to 1,856.2 billion yen on a non-consolidated basis.

When JR Central purchased the Tokaido Shinkansen facilities in October 1991, we were burdened with total long-term debt and payables of more than five times our annual transportation revenues, including the liabilities inherited from Japanese National Railways at the time of its break-up and privatization. We regarded reducing long-term debt and payables as our most important financial task, and we have endeavored to trim debt and payables as rapidly as possible. Consequently, the 5,456.2 billion yen in total long-term debt and payables at the end of March 1992, immediately after we acquired the Tokaido Shinkansen assets, has been reduced to 1,856.2 billion yen (excluding long-term debt for the Chuo Shinkansen construction).

JR Central will continue working to enhance the earning capability and make every effort to pursue efficiency and cost reduction across all operations including capital investment while steadily promoting efforts to strengthen our managerial foundation for various businesses, such as the Tokaido Shinkansen, and to construct the Chuo Shinkansen. At the same time, we will strive to improve our financial strength as the entire group by, among others, procuring capital effectively as well as efficiently.

5) Net Asset Balance

Net asset balance at the end of FY2017 increased by 358.0 billion yen over the end of FY2016 to 3,084.7 billion yen, and our equity ratio decreased from 38.2% at the end of FY2016 to 34.3% at the end of FY2017.

6) Capital Procurement

In order to procure capital from various sources and facilitate smooth fundraising, we have acquired issuer credit ratings from Moody's Japan, Rating and Investment Information, Inc., Standard and Poor's Ratings Japan K.K. and Japan Credit Rating Agency, Ltd. The rating is respectively Aa3, AA, AA-, and AAA.

Furthermore, in order to secure short-term liquidity, we have established a commitment of 100 billion yen as of the end of FY2017.

Consolidated Balance Sheet

Central Japan Railway Company and Consolidated Subsidiaries — March 31, 2018

ASSETS	Millions of Yen (Note 2) 2018	Millions of Yen (Note 2) 2017	Thousands of U.S. Dollars (Note 2) 2018
CURRENT ASSETS:			
Cash and cash equivalents (Note 12)	**¥ 782,454**	¥ 414,559	**$ 7,381,641**
Money held in trust for the Chuo Shinkansen construction (Notes 3.d and 12)	**2,840,931**	1,472,741	**26,801,235**
Marketable securities (Notes 4 and 12)		138,700	
Trade receivables (Note 12)	**102,021**	94,776	**962,462**
Allowance for doubtful accounts	**(13)**	(16)	**(122)**
Inventories	**38,116**	36,706	**359,584**
Prepaid expenses and other	**41,258**	34,087	**389,226**
Total current assets	***3,804,768***	*2,191,555*	***35,894,037***
NONCURRENT ASSETS:			
Investments and other assets:			
Investment securities (Notes 4 and 12)	**294,242**	137,711	**2,775,867**
Investments in and advances to unconsolidated subsidiaries and affiliates (Note 4)	**18,212**	17,076	**171,811**
Asset for retirement benefits (Note 8)	**5,652**	4,123	**53,320**
Deferred tax assets (Note 3.w and 11)	**166,438**	163,368	**1,570,169**
Prepaid expenses and other	**74,634**	50,395	**704,094**
Total investments and other assets	***559,181***	*372,674*	***5,275,292***
Property, plant and equipment (Note 3.g):			
Buildings and structures	**4,827,013**	4,791,770	**45,537,858**
Machinery, rolling stock and vehicles	**1,415,850**	1,409,173	**13,357,075**
Land	**2,354,570**	2,355,373	**22,212,924**
Construction in progress	**401,234**	273,653	**3,785,226**
Other	**178,720**	176,531	**1,686,037**
Total	***9,177,390***	*9,006,502*	***86,579,150***
Accumulated depreciation	**(4,632,657)**	(4,518,056)	**(43,704,311)**
Net property, plant and equipment	***4,544,732***	*4,488,445*	***42,874,830***
Total noncurrent assets	***5,103,914***	*4,861,120*	***48,150,132***
TOTAL ASSETS (Note 5.)	***¥ 8,908,682***	*¥ 7,052,675*	***$ 84,044,169***

See notes to consolidated financial statements.

March 31, 2018

LIABILITIES AND EQUITY	Millions of Yen (Note 2) 2018	Millions of Yen (Note 2) 2017	Thousands of U.S. Dollars (Note 2) 2018
CURRENT LIABILITIES:			
Short-term loans payable (Notes 5 and 12)	**¥ 27,509**	¥ 25,563	**$ 259,518**
Current portion of long-term debt (Notes 5 and 12)	**82,047**	100,574	**774,028**
Current portion of long-term debt of the employee—stock ownership plan trust (Notes 3.m, 10 and 12)	**5,400**		**50,943**
Current portion of long-term accounts payable—railway facilities (Notes 7 and 12)	**5,126**	4,824	**48,358**
Trade payables (Note 12)	**227,523**	200,298	**2,146,443**
Provision for bonuses	**28,218**	28,074	**266,207**
Income taxes payable (Note 12)	**109,783**	86,788	**1,035,688**
Advances received	**44,234**	43,215	**417,301**
Other	**72,979**	66,011	**688,481**
Total current liabilities	***602,823***	*555,352*	***5,687,009***
NONCURRENT LIABILITIES:			
Long-term debt (Notes 5 and 12)	**1,225,134**	1,241,031	**11,557,867**
Long-term debt for the Chuo Shinkansen construction (Notes 3.d, 6 and 12)	**3,000,000**	1,500,000	**28,301,886**
Long-term debt of the employee stock ownership—plan trust (Notes 3.m, 10 and 12)	**15,100**		**142,452**
Long-term accounts payable—railway facilities (Notes 7 and 12)	**543,897**	549,028	**5,131,103**
Provision for large-scale renovation of the Shinkansen infrastructure (Note 3.k)	**175,000**	210,000	**1,650,943**
Liability for retirement benefits (Note 8)	**201,006**	205,423	**1,896,283**
Other (Note 11)	**60,980**	65,110	**575,283**
Total noncurrent liabilities	***5,221,118***	*3,770,594*	***49,255,830***
CONTINGENCIES (Note 15):			
EQUITY (Notes 9 and 18):			
Common stock—authorized, 824,000,000 shares; issued, 206,000,000 shares in 2018 and 2017	**112,000**	112,000	**1,056,603**
Capital surplus	**53,498**	53,498	**504,698**
Retained earnings	**2,976,434**	2,608,511	**28,079,566**
Treasury stock—at cost, 10,173,749 shares in 2018 and 9,200,886 shares in 2017 (Note 3.m and 10)	**(121,687)**	(103,159)	**(1,147,990)**
Accumulated other comprehensive income:			
Unrealized gain on available-for-sale securities	**38,011**	28,832	**358,594**
Deferred loss on hedges	**(3)**	(1)	**(28)**
Remeasurements of defined benefit plans (Note 8)	**(2,842)**	(7,229)	**(26,811)**
Total	***3,055,410***	*2,692,451*	***28,824,622***
Noncontrolling interests	***29,329***	*34,277*	***276,688***
Total equity	***3,084,739***	*2,726,729*	***29,101,311***
TOTAL LIABILITIES AND EQUITY	***¥ 8,908,682***	*¥ 7,052,675*	***$ 84,044,169***

See notes to consolidated financial statements.

Consolidated Statement of Income

Central Japan Railway Company and Consolidated Subsidiaries — Year Ended March 31, 2018

	Millions of Yen (Note 2)			Thousands of U.S. Dollars (Note 2)
	2018	2017	2016	**2018**
OPERATING REVENUES	**¥ 1,822,039**	¥ 1,756,980	¥ 1,738,409	**$ 17,189,047**
OPERATING EXPENSES (Note 3.n):				
Transportation, other services and cost of sales (Note 3.k)	**966,688**	954,512	982,295	**9,119,698**
Selling, general and administrative expenses	**193,326**	182,903	177,436	**1,823,830**
Total operating expenses	***1,160,015***	*1,137,415*	*1,159,732*	***10,943,537***
Operating income	***662,023***	*619,564*	*578,677*	***6,245,500***
OTHER INCOME (EXPENSES):				
Interest and dividend income	**3,314**	2,030	2,790	**31,264**
Interest expense (Note 7)	**(78,722)**	(60,285)	(65,533)	**(742,660)**
Other—net (Note 3.o)	**(24,762)**	(1,279)	(7,832)	**(233,603)**
Other expenses—net	***(100,171)***	*(59,534)*	*(70,575)*	***(945,009)***
INCOME BEFORE INCOME TAXES	**561,852**	560,029	508,101	**5,300,490**
INCOME TAXES (Note 11):				
Current	**183,663**	160,669	165,344	**1,732,669**
Deferred	**(11,710)**	8,098	11,754	**(110,471)**
Total income taxes	***171,952***	*168,768*	*177,098*	***1,622,188***
NET INCOME	**389,899**	391,261	331,003	**3,678,292**
NET (LOSS) ATTRIBUTABLE TO NONCONTROLLING INTERESTS	**(5,603)**	(1,652)	(6,437)	**(52,858)**
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	***¥ 395,502***	*¥ 392,913*	*¥ 337,440*	***$ 3,731,150***

	Yen			U.S. Dollars
	2018	2017	2016	**2018**
PER SHARE OF COMMON STOCK (Note 3.u):				
Basic net income	**¥ 2,015.48**	¥ 1,996.52	¥ 1,714.64	**$ 19.01**
Cash dividends applicable to the year	**140.00**	135.00	125.00	**1.32**

See notes to consolidated financial statements.

Consolidated Statement of Comprehensive Income

Central Japan Railway Company and Consolidated Subsidiaries — Year Ended March 31, 2018

	Millions of Yen (Note 2)			Thousands of U.S. Dollars (Note 2)
	2018	2017	2016	**2018**
NET INCOME	**¥ 389,899**	¥ 391,261	¥ 331,003	**$ 3,678,292**
OTHER COMPREHENSIVE INCOME (LOSS) (Note 16):				
Unrealized gain (loss) on available-for-sale securities	**9,521**	6,507	(16,719)	**89,820**
Deferred (loss) gain on hedges	**(4)**	2	42	**(37)**
Remeasurements of defined benefit plans	**4,704**	2,020	(1,898)	**44,377**
Share of other comprehensive income in affiliates	**78**	63	(105)	**735**
Total other comprehensive income (loss)	***14,299***	*8,595*	*(18,681)*	***134,896***
COMPREHENSIVE INCOME	**¥ 404,198**	¥ 399,856	¥ 312,322	**$ 3,813,188**
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Owners of the parent	**¥ 409,065**	¥ 401,667	¥ 319,842	**$ 3,859,103**
Noncontrolling interests	**(4,866)**	(1,810)	(7,520)	**(45,905)**

See notes to consolidated financial statements.

Consolidated Statement of Changes in Equity

Central Japan Railway Company and Consolidated Subsidiaries — Year Ended March 31, 2018

	Thousands	Millions of Yen (Note 2)									
						Accumulated Other Comprehensive Income					
	Outstanding Number of Shares of Common Stock	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Unrealized Gain on Available-for-Sale Securities	Deferred Loss on Hedges	Remeasurements of Defined Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, APRIL 1, 2015	196,799	¥112,000	¥53,500	¥1,927,407	¥(103,156)	¥38,663	¥ (24)	¥ (8,192)	¥2,020,196	¥43,770	¥2,063,967
Net income attributable to owners of the parent				337,440					337,440		337,440
Dividends from surplus, ¥120 per share				(23,640)					(23,640)		(23,640)
Purchase of treasury stock	(0)				(0)				(0)		(0)
Changes in the ownership interest by purchases of shares of consolidated subsidiaries			(1)						(1)		(1)
Net change in the year						(16,436)	21	(1,183)	(17,597)	(7,601)	(25,199)
BALANCE, MARCH 31, 2016	196,799	112,000	53,499	2,241,207	(103,157)	22,227	(2)	(9,375)	2,316,397	36,168	2,352,566
Net income attributable to owners of the parent				392,913					392,913		392,913
Dividends from surplus, ¥130 per share				(25,610)					(25,610)		(25,610)
Purchase of treasury stock	(0)				(2)				(2)		(2)
Changes in the ownership interest by purchases of shares of consolidated subsidiaries			(0)						(0)		(0)
Net change in the year						6,605	1	2,146	8,753	(1,891)	6,861
BALANCE, MARCH 31, 2017	196,799	112,000	53,498	2,608,511	(103,159)	28,832	(1)	(7,229)	2,692,451	34,277	2,726,729
Net income attributable to owners of the parent				395,502					395,502		395,502
Dividends from surplus, ¥140 per share				(27,580)					(27,580)		(27,580)
Purchase of treasury stock	(1,121)				(21,365)				(21,365)		(21,365)
Disposal of treasury stock	149		0		2,838				2,838		2,838
Changes in the ownership interest by purchases of shares of consolidated subsidiaries			(0)						(0)		(0)
Net change in the year						9,178	(2)	4,387	13,562	(4,947)	8,615
BALANCE, MARCH 31, 2018	*195,826*	*¥112,000*	*¥53,498*	*¥2,976,434*	*¥(121,687)*	*¥38,011*	*¥ (3)*	*¥ (2,842)*	*¥3,055,410*	*¥29,329*	*¥3,084,739*

	Thousands of U.S.Dollars (Note 2)									
					Accumulated Other Comprehensive Income					
	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Unrealized Gain on Available-for-Sale Securities	Deferred Loss on Hedges	Remeasurements of Defined Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, MARCH 31, 2017	$1,056,603	$504,698	$24,608,594	$ (973,198)	$272,000	$ (9)	$(68,198)	$25,400,481	$323,367	$25,723,858
Net income attributable to owners of the parent			3,731,150					3,731,150		3,731,150
Dividends from surplus, $1.32 per share			(260,188)					(260,188)		(260,188)
Purchase of treasury stock				(201,556)				(201,556)		(201,556)
Disposal of treasury stock		0		26,773				26,773		26,773
Changes in the ownership interest by purchases of shares of consolidated subsidiaries		(0)						(0)		(0)
Net change in the year					86,584	(18)	41,386	127,943	(46,669)	81,273
BALANCE, MARCH 31, 2018	*$1,056,603*	*$504,698*	*$28,079,566*	*$(1,147,990)*	*$358,594*	*$(28)*	*$(26,811)*	*$28,824,622*	*$276,688*	*$29,101,311*

See notes to consolidated financial statements.

Consolidated Statement of Cash Flows

Central Japan Railway Company and Consolidated Subsidiaries — Year Ended March 31, 2018

	Millions of Yen (Note 2)			Thousands of U.S. Dollars (Note 2)
	2018	2017	2016	**2018**
OPERATING ACTIVITIES:				
Income before income taxes	**¥ 561,852**	¥ 560,029	¥ 508,101	**$ 5,300,490**
Adjustments for:				
Income taxes—paid	**(159,463)**	(183,562)	(133,119)	**(1,504,367)**
Depreciation and amortization	**216,027**	225,386	242,369	**2,037,990**
Equity in earnings of affiliates	**(603)**	(363)	(560)	**(5,688)**
Proceeds from contribution for construction	**(9,981)**	(2,641)	(3,944)	**(94,160)**
Loss on reduction of noncurrent assets	**10,222**	2,566	4,244	**96,433**
Loss on retirement of noncurrent assets	**8,746**	13,433	8,769	**82,509**
Gain on sales of noncurrent assets—net	**(11,737)**	(341)	(1,322)	**(110,726)**
Changes in assets and liabilities:				
Decrease in provision for large-scale renovation of the Shinkansen infrastructure	**(35,000)**	(35,000)	(35,000)	**(330,188)**
(Increase) decrease in trade receivables	**(7,244)**	(9,278)	5,743	**(68,339)**
(Increase) decrease in inventories	**(971)**	1,946	1,421	**(9,160)**
Increase in trade payables	**17,675**	10,409	1,324	**166,745**
Increase in advances received	**1,018**	434	1,644	**9,603**
Increase in liability for retirement benefits	**1,040**	764	1,657	**9,811**
Other—net	**18,015**	(3,216)	165	**169,952**
Net cash provided by operating activities	***609,595***	*580,565*	*601,495*	***5,750,896***
INVESTING ACTIVITIES:				
Placement of time deposits		(78,700)	(162,900)	
Withdrawal of time deposits		110,700	244,900	
Payments for money held in trust for the Chuo Shinkansen construction	**(1,500,000)**	(1,500,000)		**(14,150,943)**
Proceeds from cancellation of money held in trust for the Chuo Shinkansen construction	**131,810**	27,259		**1,243,490**
Purchases of marketable securities		(555,100)	(120,000)	
Proceeds from redemption of marketable securities	**138,700**	416,400	120,000	**1,308,490**
Purchases of property, plant and equipment	**(280,424)**	(305,151)	(236,164)	**(2,645,509)**
Proceeds from contribution for construction	**3,130**	6,022	4,909	**29,528**
Purchases of investment securities	**(142,004)**	(19,600)	(2,013)	**(1,339,660)**
Proceeds from sales of investment securities	**423**	33	5,262	**3,990**
Other—net	**(28,124)**	(11,410)	(24,300)	**(265,320)**
Net cash used in investing activities	***(1,676,489)***	*(1,909,547)*	*(170,305)*	***(15,815,933)***
FORWARD	**¥(1,066,893)**	¥(1,328,981)	¥ 431,190	**$(10,065,028)**
FINANCING ACTIVITIES:				
Net increase (decrease) in short-term loans payable	**1,946**	877	(5,712)	**18,358**
Proceeds from long-term debt	**95,277**	140,288	215,141	**898,839**
Repayments of long-term debt	**(129,740)**	(112,236)	(322,464)	**(1,223,962)**
Proceeds from long-term debt for the Chuo Shinkansen construction	**1,500,000**	1,500,000		**14,150,943**
Payments for long-term accounts payable—railway facilities	**(4,829)**	(77,668)	(98,163)	**(45,556)**
Cash dividends paid	**(27,580)**	(25,610)	(23,640)	**(260,188)**
Purchases of treasury stock (Note 3.w)	**(21,365)**	(2)	(0)	**(201,556)**
Proceeds from sales of treasury stock	**3,056**			**28,830**
Cash dividends paid to noncontrolling interests	**(79)**	(79)	(79)	**(745)**
Other—net (Note 3.w)	**18,103**	(379)	(7,927)	**170,783**
Net cash provided by (used in) financing activities	***1,434,788***	*1,425,188*	*(242,847)*	***13,535,735***
NET INCREASE IN CASH AND CASH EQUIVALENTS	**367,894**	96,207	188,343	**3,470,698**
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	**414,559**	318,352	130,002	**3,910,933**
CASH AND CASH EQUIVALENTS INCREASED BY MERGER WITH AN UNCONSOLIDATED SUBSIDIARY		0	7	
CASH AND CASH EQUIVALENTS, END OF YEAR	***¥ 782,454***	*¥ 414,559*	*¥ 318,352*	***$ 7,381,641***
ADDITIONAL CASH FLOW INFORMATION:				
Interest paid	**¥ 74,240**	¥ 58,812	¥ 65,636	**$ 700,377**

See notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Central Japan Railway Company and Consolidated Subsidiaries

1.INCORPORATION OF CENTRAL JAPAN RAILWAY COMPANY

Central Japan Railway Company (Tokai Ryokaku Tetsudo Kabushiki Gaisha, the "Company") was incorporated on April 1, 1987, as a private business company, pursuant to the Law for Japanese National Railways Restructuring enacted upon the resolution of the Japanese Diet.

The business of the Japanese National Railways (the "JNR") was succeeded by the following newly established organizations: seven railway companies including the Company, the former Shinkansen Holding Corporation (a predecessor entity to the Railway Development Fund (1991–1997), which was subsequently succeeded by the Corporation for Advanced Transport and Technology (the "CATT") (1997–2003) and in turn by the Japan Railway Construction, Transport and Technology Agency (the "JRTT")), the former Railway Telecommunication Co., Ltd., Railway Information Systems Co., Ltd., and the Railway Technical Research Institute (the "RTRI") which reorganized as a public interest corporation as of April 1, 2011. The JNR itself became the JNR Settlement Corporation (the "JNRSC"). All of the assets and liabilities of the JNR were transferred to such organizations, including the JNRSC.

Prior to December 1, 2001, the Law Concerning Passenger Railway Companies and the Japan Freight Railway Company (the "Law") required that authorization be obtained from the Minister of Land, Infrastructure, Transport and Tourism (the "Minister of Transport") regarding fundamentals such as: (1) commencement of business other than railway and its related business, (2) the appointment or dismissal of representative directors and corporate auditors, (3) the issuance of new shares and bonds, (4) long-term loans payable, (5) amendments to the Articles of Incorporation, (6) operating plans, (7) sales of material assets, (8) appropriations of earnings and (9) merger or dissolution. As of December 1, 2001, since the Law was revised and the Company was no longer in scope of the Law, the Company was not required to obtain the aforementioned authorizations.

On October 8, 1997, the Company's shares were listed on the Nagoya and Tokyo stock exchanges in Japan. The JNRSC, which held all 2,240,000 of the Company's outstanding shares prior to the listing, sold 1,353,929 shares in the initial public offerings. Pursuant to the Law for Disposal of Debts and Liabilities of the JNRSC enacted in October of 1998, the Company's shares held by the JNRSC were transferred to Japan Railway Construction Public Corporation (the "JRCPC"). On October 1, 2003, the CATT and the JRCPC were fully integrated, pursuant to the Law of Japan Railway Construction, Transport and Technology enacted on October 1, 2003, and designated as the JRTT. In July 2005, the JRTT sold 600,000 shares of the Company. On April 5, 2006, the JRTT also sold its remaining 286,071 shares of the Company. As a result of this sale, all of the Company's shares held by the JRTT were sold.

The shares above do not reflect the effect of the hundred-for-one stock split effective as of October 1, 2012.

2.BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations, and in accordance with accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2017 and 2016 consolidated financial statements to conform to the classifications used in 2018.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which the Company is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥106 to $1, the approximate rate of exchange as of March 31, 2018. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate. Japanese yen figures of less than one million yen are rounded down to the nearest million of yen, except for per share information, and U.S. dollar figures of less than one thousand U.S. dollars are also rounded down to the nearest thousand of U.S. dollars, except for per share information.

3.SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a.Principles of Consolidation

—The accompanying consolidated financial statements as of March 31, 2018, include the accounts of the Company and its 29 (29 in 2017 and 28 in 2016) significant subsidiaries (together, the "Companies").

On May 10, 2016, the Company established JR Central Financial Management Co., Ltd., which became a consolidated subsidiary from the fiscal year ended March 31, 2017.

Under the control and influence concepts, those companies in which the Company, directly or indirectly, is able to exercise control over operations are consolidated, and those companies over which the Company has the ability to exercise significant influence are accounted for using the equity method.

Investments in two affiliates are accounted for using the equity method. Investments in the remaining unconsolidated subsidiaries and affiliates are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

The difference between the cost of acquisition and the fair value of the equity of an acquired subsidiary at the date of acquisition is fully amortized when incurred.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Companies is also eliminated.

A certain consolidated subsidiary has adopted a fiscal year ending on February 28, which is different from that of the Company. The necessary adjustments for preparing consolidated financial statements as of the Company's year-end were appropriately made, such as adjustments for significant intercompany accounts and transactions which occur between the fiscal year-end of the subsidiary and that of the Company.

b.Business Combinations

—Business combinations are accounted for using the purchase method. Acquisition-related costs, such as advisory fees or professional fees, are accounted for as expenses in the periods in which the costs are incurred. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date. A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of noncontrolling interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted is accounted for as capital surplus as long as the parent retains control over its subsidiary.

c.Cash Equivalents

—Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value. Cash equivalents include time deposits, certificates of deposit and others, all of which mature or become due within three months of the date of acquisition.

d.Money Held in Trust for the Chuo Shinkansen Construction and Long-Term Debt for the Chuo Shinkansen Construction

— The Company has received loans from the JRTT for promoting the construction of the Chuo Shinkansen, and the money is placed in the trust fund to segregate it from other money.

e.Inventories

— Inventories are stated at the lower of cost, principally determined by the retail method for merchandise, by the specific identification method for land and buildings held for sale in lots, by the specific identification method for work in process and by the moving-average cost method for materials and supplies, or net selling value.

f.Marketable and Investment Securities

—Marketable and investment securities are classified and accounted for, depending on management's intent, as follows: (1) held-to-maturity debt securities, for which there is a positive intent and ability to hold to maturity, are reported at amortized cost; and (2) available-for-sale securities, which are not classified as the aforementioned securities, are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity.

Nonmarketable securities classified as available-for-sale securities are carried at cost, determined by the moving-average method. For other-than-temporary declines in fair value, investment securities are reduced to net realizable value by a charge to income.

g.Property, Plant and Equipment

—Property, plant and equipment are stated at cost. Certain contributions in aid for construction of railways and other property are deducted directly from the cost of the related assets. The accumulated contributions deducted from the cost of property, plant and equipment as of March 31, 2018 and 2017 amounted to ¥289,130 million ($2,727,641 thousand), and ¥279,789 million, respectively.

Depreciation is computed substantially by the declining-balance method over the estimated useful lives of the assets. Additional depreciation is provided for the Shinkansen rolling stock based on kilometers traveled.

The range of useful lives is principally from 2 to 60 years for buildings and structures, and from 2 to 20 years for machinery, rolling stock and vehicles.

Depreciation of certain railway structures, except for the Shinkansen railway facilities, is computed by the replacement-accounting method.

h.Long-Lived Assets

—The Companies review their long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

i.Software Costs

—Software costs are amortized by the straight-line method mainly over five years.

j.Deferred Charges

—Bond issuance costs are fully charged to income as incurred.

k.Provision for Large-Scale Renovation of the Shinkansen Infrastructure

—Provision for large-scale renovation of the Shinkansen infrastructure is provided based on the Nationwide Shinkansen Railway Development Law. In accordance with the Nationwide Shinkansen Railway Development Law and Regulations, the Company reversed the provision in the amount of ¥35,000 million ($330,188thousand) for the year ended March 31, 2018 and ¥35,000 million for the years ended March 31, 2017 and 2016.

l.Retirement and Pension Plans

—The Company and 28 consolidated subsidiaries have unfunded retirement plans covering substantially all of their employees. Six consolidated subsidiaries have noncontributory defined benefit pension plans and one consolidated subsidiary has a defined contribution pension plan, some of those subsidiaries also have unfunded retirement plans. Some of the subsidiaries adopt the simplified accounting method for calculation of liability for retirement benefits and retirement benefit expenses.

Liability for retirement benefits is mainly calculated based on the projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses are amortized on a straight-line basis mainly over five years, which is within the average remaining service period. Prior service costs are amortized on a straight-line basis mainly over five years, which is within the average remaining service period.

m.Employee stock ownership plan

—In accordance with Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force No. 30, "Practical Solution on Transactions of Delivering the Company's Own Stock to Employees etc. through Trusts," at year-end, the Company shall record (1) the Company stock held by the employee stock ownership trust as treasury stock in equity, (2) all other assets and liabilities of the employee stock ownership trust on a line-by-line basis, and (3) a liability/asset for the net of (i) any gain or loss on delivery of the stock by the employee stock ownership trust to the employee shareholding association, (ii) dividends received from the entity for the stock held by the employee stock ownership trust, and (iii) any expenses relating to the employee stock ownership trust.

n.Research and Development Costs

—Research and development costs are charged to income as incurred. Research and development costs charged to income were ¥58,797 million ($554,688 thousand), ¥66,609 million and ¥75,199 million for the years ended March 31, 2018, 2017 and 2016, respectively.

o.Other Income (Expenses)

—Other income (expenses) in the consolidated statement of income for the year ended March 31, 2018 includes settlement of the railway rolling stock production business of ¥26,445 million ($249,481 thousand). As for NIPPON SHARYO, LTD., a consolidated subsidiary of the Company, the large railway rolling stock project for the U.S.A was taken over by another manufacturer. Accordingly, NIPPON SHARYO, LTD. recognized a loss resulting from the conclusion of the contract to pay the settlement money to Sumitomo Corporation and Sumitomo Corporation of Americas.

p.Leases

—Lease assets of finance leases that were not deemed to transfer ownership of the leased property are depreciated and amortized by the straight-line method over the lease period.

q.Income Taxes

—The provision for income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted tax laws to the temporary differences.

The Companies applied ASBJ Guidance No. 26, "Guidance on Recoverability of Deferred Tax Assets," effective April 1, 2016. There was no impact from this for the year ended March 31, 2017.

r.Appropriations of Retained Earnings

—Appropriations of retained earnings are reflected in the consolidated financial statements for the following year upon shareholders' approval.

s.Consumption Tax

—Unless otherwise stated, all figures are presented net of tax.

t.Derivatives and Hedging Activities

—The Companies use derivative financial instruments mainly to manage exposure to market risks of changes in foreign currency exchange rates and in interest rates. Foreign currency swaps are utilized by the Companies to reduce foreign currency exchange rate risks. Interest rate swaps are utilized by the Companies to reduce interest rate risks. Interest rate and currency swap contracts are utilized by the Company to reduce interest rate and foreign exchange risks. The Companies do not enter into derivatives for trading or speculative purposes.

Foreign currency swaps, which qualify for hedge accounting and specific matching criteria, are not remeasured at market value, but the hedged debt is translated at the contracted rates of the foreign currency swaps. Interest rate swaps, which qualify for hedge accounting and meet specific matching criteria, are not remeasured at market value, but the differential paid or received under the swap agreements is recognized and included in interest expense. When interest and currency swap contracts meet the above criteria, hedged debt is translated at the contracted rates, and the differential paid or received under the swap agreement is recognized and included in interest expense.

u.Per Share Information

—Basic net income per share is computed by dividing net income attributable to owners of the parent available to common shareholders by the weighted-average number of common shares outstanding for the period.

The net income attributable to owners of the parent available to common shareholders used in the computation for 2018, 2017 and 2016 was ¥395,502 million ($3,731,150 thousand), ¥392,913 million and ¥337,440 million, respectively. The average number of common shares used in the computation for 2018, 2017 and 2016 was 196,233,039 shares, 196,799,182 shares and 196,799, 236 shares, respectively. The average number of shares of the Company held by the employee stock ownership trust for the year ended March 31, 2018 was 566,089 shares, and it has been deducted from the weighted-average number of shares outstanding during the fiscal year.

Diluted net income per share is not presented in the accompanying consolidated financial statements as the Companies do not have any dilutive securities.

Cash dividends per share presented in the accompanying consolidated statement of income are dividends applicable to the respective years, including dividends to be paid after the end of the year.

v.New accounting pronouncements

—On March 30, 2018, the ASBJ issued ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition. " The core principle of the standard and guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity should recognize revenue in accordance with that core principle by applying the following steps:

Step 1: Identify the contract(s) with a customer
Step 2: Identify the performance obligations in the contract
Step 3: Determine the transaction price
Step 4: Allocate the transaction price to the performance obligations in the contract

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

The accounting standard and guidance are effective for annual periods beginning on or after April 1, 2021. Earlier application is permitted for annual periods beginning on or after April 1, 2018.

The Company expects to apply the accounting standard and guidance for annual periods beginning on April 1, 2021, and is in the process of measuring the effects of applying the accounting standard and guidance in future applicable periods.

w.Changes in presentation

(Earlier Application of "Partial Amendments to Accounting Standard for Tax Effect Accounting")

—On February 16, 2018, the ASBJ issued ASBJ Statement No. 28, "Partial Amendments to Accounting Standard for Tax Effect Accounting," which requires deferred tax assets and deferred tax liabilities to be classified as investments and other assets and noncurrent liabilities, respectively. Deferred tax assets were previously classified as current assets and investments and other assets, and deferred tax liabilities were previously classified as current liabilities and noncurrent liabilities under the previous accounting standard. The revised accounting standard is effective for annual periods beginning on or after April 1, 2018.

Earlier application is permitted for annual periods ending on or after March 31, 2018. The Company applied the revised accounting standard as of March 31, 2018, and deferred tax assets of ¥18,787 million which were previously classified as current assets as of March 31, 2017 have been reclassified as investments and other assets in the accompanying consolidated balance sheet.

(Consolidated Statements of Cash Flows)

—"Purchase of treasury stock" was included in "other—net" under financing activities of the consolidated statement of cash flows for the years ended March 31, 2017 and 2016. Since the amount increased significantly during the year ended March 31, 2018, such amount is disclosed separately in the financing activities of the consolidated statement of cash flows.

As a result, the amounts of ¥(381) million and ¥(7,928) million recorded as "Other—net" under financing activities of the consolidated statement of cash flows for the years ended March 31, 2017 and 2016 were reclassified to "Purchases of treasury stock" in the amounts of ¥(2) million and ¥(0) million and to "Other—net" in the amounts of ¥(379) million and ¥(7,927) million, respectively, in the consolidated statement of cash flows for the years ended March 31, 2017 and 2016.

x.Accounting Changes and Error Corrections

—In December 2009, the ASBJ issued ASBJ Statement No. 24, "Accounting Standard for Accounting Changes and Error Corrections" and ASBJ Guidance No. 24, "Guidance on Accounting Standard for Accounting Changes and Error Corrections." Accounting treatments under this standard and guidance are as follows: (1) Changes in Accounting Policies—When a new accounting policy is applied following revision of an accounting standard, the new policy is applied retrospectively unless the revised accounting standard includes specific transitional provisions, in which case the entity shall comply with the specific transitional provisions. (2) Changes in Presentation—When the presentation of financial statements is changed, prior-period financial statements are reclassified in accordance with the new presentation. (3) Changes in Accounting Estimates—A change in an accounting estimate is accounted for in the period of the change if the change affects that period only, and is accounted for prospectively if the change affects both the period of the change and future periods. (4) Corrections of Prior-Period Errors—When an error in prior-period financial statements is discovered, those statements are restated.

4. MAKETABLE AND INVESTMENT SECURITIES

Marketable securities as of March 31, 2017 consisted of certificates of deposit. Information regarding investment securities with readily determinable fair values classified as available-for-sale and held to maturity as of March 31, 2018 and 2017, was as follows:

	Millions of Yen			
	2018			
	Cost	Unrealized Gain	Unrealized Loss	Fair Value
Securities classified as:				
Available for sale:				
Equity securities	¥ 83,782	¥ 56,940	¥ 1,970	¥ 138,752
Trust fund investment and other	276	60		336
Held to maturity	140,000	136	26	140,110
Total	*¥ 224,058*	*¥ 57,137*	*¥ 1,997*	*¥ 279,198*

	Millions of Yen			
	2017			
	Cost	Unrealized Gain	Unrealized Loss	Fair Value
Securities classified as:				
Available for sale:				
Equity securities	¥ 81,778	¥ 43,271	¥ 2,128	¥ 122,921
Trust fund investment and other	276	61		337
Held to maturity				
Total	*¥ 82,054*	*¥ 43,333*	*¥ 2,128*	*¥ 123,258*

	Thousands of U.S. Dollars			
	2018			
	Cost	Unrealized Gain	Unrealized Loss	Fair Value
Securities classified as:				
Available for sale:				
Equity securities	$ 790,396	$ 537,169	$ 18,584	$ 1,308,981
Trust fund investment and other	2,603	566		3,169
Held to maturity	1,320,754	1,283	245	1,321,792
Total	*$2,113,754*	*$ 539,028*	*$ 18,839*	*$ 2,633,943*

The information for available-for-sale securities whose fair value is not readily determinable as of March 31, 2018 and 2017, is disclosed in Note 12.

The impairment losses on investments in an unconsolidated subsidiary for the years ended March 31, 2016, were ¥19,061 million. The impairment loss on investment securities for the year ended March 31, 2018 and 2017 was not presented as the effect was immaterial.

Investment securities of ¥4,486 million ($42,320 thousand) as of March 31, 2018 were pledged as collateral for issuing a letter of credit on railway rolling stock production business.

5. SHORT-TERM LOANS PAYABLE AND LONG-TERM DEBT

The interest rates applicable to short-term loans payable were 0.10% as of March 31, 2018, 0.12% as of March 31, 2017, and 0.16% as of March 31, 2016.
Long-term debt as of March 31, 2018 and 2017, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
The Company			
Unsecured 2.39% bonds due 2026	**¥ 29,790**	¥ 29,789	**$ 281,037**
Unsecured 2.31% bonds due 2027	**9,992**	19,984	**94,264**
Unsecured 2.3% bonds due 2027	**14,994**	14,994	**141,452**
Unsecured 2.39% bonds due 2028	**19,987**	19,986	**188,556**
Unsecured 2.391% bonds due 2028	**30,000**	30,000	**283,018**
Unsecured 2.646% bonds due 2038	**10,000**	10,000	**94,339**
Unsecured 2.166% bonds due 2029	**30,000**	30,000	**283,018**
Unsecured 2.312% bonds due 2029	**30,000**	30,000	**283,018**
Unsecured 2.556% bonds due 2039	**10,000**	10,000	**94,339**
Unsecured 2.321% bonds due 2029	**30,000**	30,000	**283,018**
Unsecured 2.157% bonds due 2029	**40,000**	40,000	**377,358**
Unsecured 2.375% bonds due 2039	**10,000**	10,000	**94,339**
Unsecured 2.212% bonds due 2030	**30,000**	30,000	**283,018**
Unsecured 2.111% bonds due 2030	**20,000**	20,000	**188,679**
Unsecured 1.797% bonds due 2030	**10,000**	10,000	**94,339**
Unsecured 2.083% bonds due 2031	**20,000**	20,000	**188,679**
Unsecured 1.895% bonds due 2031	**10,000**	10,000	**94,339**
Unsecured 1.824% bonds due 2032	**10,000**	10,000	**94,339**
Unsecured 1.725% bonds due 2033	**10,000**	10,000	**94,339**
Unsecured 1.807% bonds due 2033	**15,000**	15,000	**141,509**
Unsecured 1.786% bonds due 2033	**15,000**	15,000	**141,509**
Unsecured 1.629% bonds due 2033	**10,000**	10,000	**94,339**
Unsecured 1.623% bonds due 2034	**15,000**	15,000	**141,509**
Unsecured 1.584% bonds due 2034	**15,000**	15,000	**141,509**
Unsecured 1.502% bonds due 2034	**20,000**	20,000	**188,679**
Unsecured 1.309% bonds due 2032	**15,000**	15,000	**141,509**
Unsecured 1.917% bonds due 2044	**10,000**	10,000	**94,339**
Unsecured 1.362% bonds due 2034	**20,000**	20,000	**188,679**
Unsecured 1.014% bonds due 2035	**20,000**	20,000	**188,679**
Unsecured 1.685% bonds due 2045	**10,000**	10,000	**94,339**
Unsecured 1.196% bonds due 2035	**15,000**	15,000	**141,509**
Unsecured 1.297% bonds due 2035	**15,000**	15,000	**141,509**
Unsecured 1.21% bonds due 2035	**15,000**	15,000	**141,509**
Unsecured 1.018% bonds due 2036	**15,000**	15,000	**141,509**
Unsecured 0.421% bonds due 2036	**10,000**	10,000	**94,339**
Unsecured 0.001% bonds due 2020	**10,000**		**94,339**
Unsecured 0.02% bonds due 2020	**10,000**		**94,339**
U.S. dollar 4.25% bonds due 2045 issued abroad	**36,418**	36,397	**343,566**
U.S. dollar 2.8% bonds due 2022 issued abroad	**68,110**	68,097	**642,547**
Unsecured loans from Japanese banks and others, with interest rates ranging from 0.61% to 4.65% (2018), from 0.61% to 4.8% (2017), due 2017 to 2045	**572,886**	590,982	**5,404,584**
Subsidiaries			
Unsecured and secured loans from Japanese banks and others, with interest rates ranging from 0.53% to 2.8% (2017), due 2017 to 2022		26,373	
Total	***1,307,181***	*1,341,606*	***12,331,896***
Less current portion	**(82,047)**	(100,574)	**(774,028)**
Long-term debt, less current portion	***¥ 1,225,134***	*¥ 1,241,031*	***$ 11,557,867***

Unsecured and secured loans from Japanese banks and others of the subsidiaries were early repaid in full prior to maturities during the year ended March 31, 2018.
Annual maturities of long-term debt outstanding at the principal amounts as of March 31, 2018, were as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019	¥ 82,047	$ 774,028
2020	110,493	1,042,386
2021	78,369	739,330
2022	130,359	1,229,801
2023	87,777	828,084
Thereafter	818,815	7,724,669
Total	*¥1,307,861*	*$ 12,338,311*

The Company has entrusted cash for the repayment of a portion of its outstanding bonds based on debt assumption agreements with financial institutions; however, the Company is not released from the primary responsibility for the liability by these agreements. The outstanding bonds covered by these agreements as of March 31, 2018 and 2017, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
Secured 2.825% bonds due 2017		¥ 49,800	
Secured 2.18% bonds due 2018	**¥ 29,900**	29,900	**$ 282,075**
Secured 2.6% bonds due 2020	**49,800**	49,800	**469,811**
Unsecured 2.39% bonds due 2022	**18,995**	18,995	**179,198**
Unsecured 2.2% bonds due 2022	**18,200**	18,200	**171,698**
Unsecured 1.74% bonds due 2022	**20,000**	20,000	**188,679**
Unsecured 1.42% bonds due 2017		10,000	
Unsecured 1.15% bonds due 2022	**25,000**	25,000	**235,849**
Unsecured 1.31% bonds due 2033	**10,000**	10,000	**94,339**
Unsecured 2.015% bonds due 2023	**9,000**	9,000	**84,905**
Unsecured 2.2% bonds due 2024	**9,900**	9,900	**93,396**
Unsecured 2.19% bonds due 2019	**9,900**	9,900	**93,396**
Unsecured 1.875% bonds due 2019	**20,000**	20,000	**188,679**
Unsecured 2.21% bonds due 2024	**9,650**	9,650	**91,037**
Unsecured 1.775% bonds due 2020	**20,000**	20,000	**188,679**
Unsecured 1.77% bonds due 2017		20,000	
Unsecured 2.14% bonds due 2018	**18,400**	18,400	**173,584**
Unsecured 2.405% bonds due 2026	**9,900**	9,900	**93,396**
Unsecured 2.04% bonds due 2018	**18,800**	18,800	**177,358**
Unsecured 1.78% bonds due 2017		20,000	
Unsecured 1.78% bonds due 2017		20,000	
Unsecured 1.75% bonds due 2017		20,000	
Unsecured 2.31% bonds due 2027	**10,000**		**94,339**
Unsecured 1.69% bonds due 2018		10,000	
Unsecured 1.79% bonds due 2020	**19,900**	19,900	**187,735**
Unsecured 1.83% bonds due 2018	**10,000**	10,000	**94,339**
Unsecured 1.557% bonds due 2019	**19,800**	19,800	**186,792**
Unsecured 1.667% bonds due 2019	**10,000**	10,000	**94,339**
Unsecured 1.472% bonds due 2020	**14,100**	14,100	**133,018**
Total	***¥ 381,245***	*¥ 521,045*	***$ 3,596,650***

The aforementioned bonds for which the Company entered into debt assumption agreements have been derecognized in the consolidated balance sheet and disclosed as contingent liabilities (see Note 15).

The Company has credit commitments from banks. Total unused credit available to the Company as of March 31, 2018, was ¥100,000 million ($943,396 thousand).

All assets of the Company were pledged for the above secured bonds of ¥79,700 million ($751,886 thousand), as an enterprise mortgage, which gives the holder thereof a security interest in all assets junior to that of other present or future secured creditors, but senior to that of general creditors.

6. LONG-TERM DEBT FOR THE CHUO SHINKANSEN CONSTRUCTION

Long-term debt for the Chuo Shinkansen construction is a loan in total of ¥3,000,000 million from the JRTT using the Fiscal Investment and Loan Program (the "FILP") in accordance with the Order for Enforcement of the Act on the Japan Railway Construction, Transport and Technology Agency (the "JRTT Act") for promoting the construction of the Chuo Shinkansen.

The average interest rates of long-term debt for the Chuo Shinkansen construction as of March 31, 2018, were 0.86%.

Annual maturities of long-term debt for the Chuo Shinkansen construction as of March 31, 2018, were as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019		
2020		
2021		
2022		
2023		
Thereafter	¥ 3,000,000	$ 28,301,886
Total	*¥ 3,000,000*	*$ 28,301,886*

7. LONG-TERM ACCOUNTS PAYABLE—RAILWAY FACILITIES

Long-term accounts payable—railway facilities were incurred in the amount of ¥5,095,661 million in 1991 for the purchase of the Shinkansen railway ground facilities and serially repaid to the JRTT. Payment terms are 25.5 years for ¥4,494,466 million and 60 years for ¥601,195 million. Payment terms and interest rates of the payables were determined based on the agreements on the purchase of the Shinkansen railway ground facilities. The Company had paid off ¥4,494,466 million by January 2017.

The average interest rates of long-term accounts payable—railway facilities excluding current portion as of March 31, 2018, were 6.49%.

Annual maturities of long-term accounts payable—railway facilities as of March 31, 2018, were as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019	¥ 5,126	$ 48,358
2020	5,443	51,349
2021	5,781	54,537
2022	6,141	57,933
2023	6,526	61,566
Thereafter	520,003	4,905,688
Total	*¥ 549,024*	*$ 5,179,471*

Interest expense on the aforementioned long-term accounts payable—railway facilities amounted to ¥35,839 million ($338,103 thousand), ¥37,523 million and ¥41,718 million for the years ended March 31, 2018, 2017 and 2016, respectively.

8. RETIREMENT AND PENSION PLANS

Employees whose service with the Company and consolidated subsidiaries is terminated are entitled to retirement and pension benefits determined by reference to accumulated points during their employment calculated by their position or basic rates of pay at the time of termination, length of service and other conditions under which the termination occurs. Some of the subsidiaries adopt the simplified accounting method for calculation of liability of retirement benefits and retirement benefit expenses.

a. The changes in defined benefit obligation for the years ended March 31, 2018, 2017 and 2016, were as follows:

	Millions of Yen			Thousands of U.S. Dollars
	2018	2017	2016	**2018**
Balance at beginning of year (as previously reported)	**¥ 226,417**	¥ 228,531	¥ 226,219	**$ 2,136,009**
Current service cost	**15,768**	15,510	15,065	**148,754**
Interest cost	**918**	934	1,099	**8,660**
Actuarial losses	**(919)**	1,451	4,323	**(8,669)**
Benefits paid	**(19,888)**	(20,009)	(18,232)	**(187,622)**
Prior service cost	**(53)**		(66)	**(500)**
Others			121	
Balance at end of year	***¥ 222,243***	*¥ 226,417*	*¥ 228,531*	***$ 2,096,632***

The retirement benefit expenses recognized by the consolidated subsidiaries, which adopt the simplified accounting method, are included in the current service cost.

b. The changes in plan assets for the years ended March 31, 2018, 2017 and 2016, were as follows:

	Millions of Yen			Thousands of U.S. Dollars
	2018	2017	2016	**2018**
Balance at beginning of year	**¥ 25,117**	¥ 24,920	¥ 26,647	**$ 236,952**
Expected return on plan assets	**333**	322	321	**3,141**
Actuarial gains (losses)	**1,288**	(411)	(2,124)	**12,150**
Contributions from the employer	**1,111**	1,100	997	**10,481**
Benefits paid	**(960)**	(815)	(921)	**(9,056)**
Balance at end of year	***¥ 26,890***	*¥ 25,117*	*¥ 24,920*	***$ 253,679***

c. Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets as of March 31, 2018 and 2017, was as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
Funded defined benefit obligation	**¥ 23,483**	¥ 23,204	**$ 221,537**
Plan assets	***(26,890)***	*(25,117)*	***(253,679)***
Total	**(3,407)**	(1,912)	**(32,141)**
Unfunded defined benefit obligation	***198,760***	*203,213*	***1,875,094***
Net liability arising from defined benefit obligation	**195,353**	201,300	**1,842,952**
Liability for retirement benefits	**201,006**	205,423	**1,896,283**
Asset for retirement benefits	**(5,652)**	(4,123)	**(53,320)**
Net liability arising from defined benefit obligation	***¥ 195,353***	*¥ 201,300*	***$ 1,842,952***

d. The components of net periodic benefit costs for the years ended March 31, 2018, 2017 and 2016, were as follows:

	Millions of Yen			Thousands of U.S. Dollars
	2018	2017	2016	**2018**
Service cost	**¥ 15,768**	¥ 15,510	¥ 15,065	**$ 148,754**
Interest cost	**918**	934	1,099	**8,660**
Expected return on plan assets	**(333)**	(322)	(321)	**(3,141)**
Recognized actuarial losses	**4,418**	4,695	3,840	**41,679**
Amortization of prior service cost	**24**	33	36	**226**
Net periodic benefit costs	***¥ 20,796***	*¥ 20,851*	*¥ 19,721*	***$ 196,188***

The retirement benefit expenses recognized by the consolidated subsidiaries, which adopt the simplified accounting method, are included in service cost.

e. Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2018, 2017 and 2016, were as follows:

	Millions of Yen			Thousands of U.S. Dollars
	2018	2017	2016	**2018**
Actuarial losses (gains)	**¥ 6,626**	¥ 2,832	¥ (2,607)	**$ 62,509**
Prior service cost	**77**	33	102	**726**
Total	***¥ 6,704***	*¥ 2,866*	*¥ (2,504)*	***$ 63,245***

f. Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2018 and 2017, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
Unrecognized actuarial losses	**¥ (1,380)**	¥ (8,006)	**$ (13,018)**
Unrecognized prior service cost	**96**	19	**905**
Total	***¥ (1,283)***	*¥ (7,987)*	***$ (12,103)***

g. Plan assets

(1) Components of plan assets

Plan assets as of March 31, 2018 and 2017, consisted of the following:

	2018	2017
Equities	**55 %**	54 %
General security account	**27**	28
Bonds	**11**	12
Others	**7**	6
Total	***100 %***	*100 %*

The employee retirement benefit trust for the Companies' contributory pension plans accounted for 47% and 46% of total plan assets for the years ended March 31, 2018 and 2017, respectively.

(2) Method of determining the expected rate of return on plan assets

The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

h. Assumptions used for the years ended March 31, 2018, 2017 and 2016, were set forth as follows:

	2018	2017	2016
Discount rate	**Mainly 0.4%**	Mainly 0.4%	Mainly 0.4%
Expected rate of return on plan assets	**1.2% to 2.0%**	1.2% to 2.0 %	1.2% to 2.0%

i. Defined Contribution Plan

Total contribution by the Companies for the defined contribution plan was ¥125 million ($1,179 thousand) for the year ended March 31, 2018, ¥121 million for the year ended March 31, 2017, and ¥117 million for the year ended March 31, 2016.

9.EQUITY

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

a.Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the Company has prescribed so in its articles of incorporation. However, the Company does not meet all the above criteria.

The Companies Act permits companies to distribute dividends-in-kind (noncash assets) to shareholders subject to a certain limitation and additional requirements.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of equity after dividends must be maintained at no less than ¥3 million.

b.Increases/Decreases and Transfer of Common Stock, Reserve and Surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals to 25% of the common stock. The Company has already appropriated defined amount as a legal reserve or additional paid-in capital. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus and retained earnings-unappropriated can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

c.Treasury Stock and Treasury Stock Acquisition Rights

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the Board of Directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders which is determined by a specific formula.

Under the Companies Act, stock acquisition rights are presented as a separate component of equity.

The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

10.EMPLOYEE STOCK OWNERSHIP PLAN

The Company holds the Employee Stock Ownership Plan by transactions of delivering its own stock to the JR Tokai Employee Shareholding Association (the "Shareholding Association") through trusts for the purpose of improving the employee benefit program for employees participating in the Shareholding Association and revitalizing the Shareholding Association.

(1)Transaction outline

The Company introduced an "Employee Stock Ownership Plan (employee shareholding association purchase-type)" (the "Plan") in September, 2017. To introduce the Plan, the Company, as the trustor, entered into a Stock Benefit Trust (Employee Shareholding Association Purchase-type) Agreement (the "Trust Agreement") with Mizuho Trust & Banking Co., Ltd. as the trustee (hereinafter the trust to be established pursuant to the Trust Agreement is referred to as the "Trust"). Mizuho Trust & Banking Co., Ltd. will enter into an agreement with Trust & Custody Services Bank, Ltd. to re-entrust the administration of trust assets such as securities with Trust & Custody Services Bank, Ltd. as the re-trustee.

Trust & Custody Services Bank, Ltd. will collectively acquire the equivalent number of the Company's shares that the Shareholding Association is expected to purchase for four years after introducing the Plan, and place them in the trust account E established at Trust & Custody Services Bank, Ltd. ("Trust Account E"), and thereafter, will sell the Company's shares to the Shareholding Association upon its acquisition of shares. If the amount equivalent to the net gains on the sale of the Company's shares to the Shareholding Association by the Trust Account E accumulates within the trust assets of the Trust by the time of termination of the Trust, such money will be distributed as the residual assets to members of the Shareholding Association who meet the beneficiary requirements (employees).

Meanwhile, the Company will act as guarantor for the borrowing undertaken by the trust bank to purchase the Company's shares, and will repay any outstanding portion of the loan if there are remaining borrowings equivalent to the loss on the sale of the shares at the time of termination of the Trust due to a decrease in the market price of the Company's shares or otherwise.

(2)The Trust held the treasury stock and long-term debt, which was included in the consolidated balance sheet as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2018	2018
Treasury stock	¥ 18,527	$ 174,783
(shares)	(972,900)	
Long-term debt of the employee stock ownership plan trust	¥ 20,500	$ 193,396

(3) Annual maturities of long-term debt of the employee stock ownership plan trust as of March 31, 2018, were follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019	¥ 5,400	$ 50,943
2020	5,400	50,943
2021	5,400	50,943
2022	4,300	40,566
2023		
Thereafter		
Total	*¥ 20,500*	*$ 193,396*

11. INCOME TAXES

The Companies are subject to Japanese national and local income taxes which, in the aggregate, resulted in a normal effective statutory tax rate of approximately 30.6% for the year ended March 31, 2018 and 2017, and 32.7% for the year ended March 31, 2016.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities as of March 31, 2018 and 2017, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Deferred tax assets:			
Depreciation and amortization	¥ 72,739	¥ 70,090	$ 686,216
Liability for retirement benefits	63,408	64,762	598,188
Software	11,168	9,812	105,358
Loss on write down of investment securities	9,742	9,715	91,905
Provision for bonuses	8,591	8,619	81,047
Unrealized profit on property, plant and equipment	7,459	7,600	70,367
Accrued railway usage charges	3,015	3,257	28,443
Other	44,840	37,481	423,018
Total	*220,966*	*211,339*	*2,084,584*
Less valuation allowance	(34,715)	(32,515)	(327,500)
Deferred tax assets	*186,250*	*178,823*	*1,757,075*
Deferred tax liabilities:			
Unrealized gain on available-for-sale securities	16,411	12,104	154,820
Deferred gain on transfer of certain fixed assets	4,308	4,911	40,641
Other	5,079	6,764	47,915
Deferred tax liabilities	*25,799*	*23,780*	*243,386*
Net deferred tax assets	*¥ 160,450*	*¥ 155,043*	*$ 1,513,679*

Net deferred tax assets as of March 31, 2018 and 2017, were reflected in the accompanying consolidated balance sheets under the following captions:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Investments and other assets	¥ 166,438	¥ 163,368	$ 1,570,169
Noncurrent liabilities—other	(5,987)	(8,324)	(56,481)
Net deferred tax assets	*¥ 160,450*	*¥ 155,043*	*$ 1,513,679*

Reconciliations between the normal effective statutory tax rate and the actual effective tax rate reflected in the accompanying consolidated statements of income for the years ended March 31, 2016, were as follows:

	2016
Normal effective statutory tax rate	32.7%
Increase in valuation allowance	1.6
Effect of tax rate reduction	1.6
Deduction of R&D promotion tax system	(1.4)
Other—net	0.3
Actual effective tax rate	*34.9%*

Since the difference between the normal effective statutory tax rate and the actual effective tax rate was not significant, reconciliations were not presented for the years ended March 31, 2018 and 2017.

New tax reform laws enacted in 2016 in Japan changed the normal effective statutory tax rate for the fiscal year beginning on or after April 1, 2016 and 2017, from approximately 31.9% to 30.6% and the normal effective statutory tax rate for the fiscal year beginning on or after April 1, 2018, to approximately 30.3%. The effect of these changes was to decrease deferred tax assets, net of deferred tax liabilities, in the consolidated balance sheet as of March 31, 2016, by ¥7,794 million and to increase income taxes - deferred in the consolidated statement of income for the year then ended by ¥8,162 million.

12. FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

a. Policy for Financial Instruments

The Companies use financial instruments, mainly debt which includes bank loans, bonds and others, based on their capital financing plan. Cash surpluses, if any, are invested in low risk financial assets.

Derivatives are used, not for speculative purposes, but to manage exposure to financial risks as described in Note 13.

b.Nature and Extent of Risks Arising from Financial Instruments

Money held in trust for the Chuo Shinkansen construction is set to segregate loans from the JRTT from other cash on hand for purposes of promoting the construction of the Chuo Shinkansen. The trust property is comprised of cash and cash equivalents.

Trade receivables are exposed to customer credit risk.

Investment securities, mainly held to maturity debt securities and equity instruments of customers and suppliers of the Companies, are exposed to the risk of market price fluctuations.

Payment terms of trade payables and income taxes payable are within one year.

Short-term bank loans are used to fund the Companies' ongoing operations. Bonds and long-term loans are used for renewal of long-term debt and capital spending. Please see Note 5 for a maturity analysis for bank loans and bonds payable.

Long-term debt for the Chuo Shinkansen construction is a loan in the amount of ¥3,000,000 million from the JRTT using the FILP in accordance with the JRTT Act for purposes of promoting the construction of the Chuo Shinkansen.

Long-term debt of the employee stock ownership plan trust is a loan which the Trust borrowed from financial institutions.

Long-term accounts payable—railway facilities were incurred in the amount of ¥5,095,661 million in 1991 for the purchase of the Shinkansen railway ground facilities and serially repaid to the JRTT. Payment terms are 25.5 years for ¥4,494,466 million and 60 years for ¥601,195 million. Payment terms and interest rates of the payables were determined based on the agreements from the purchase of the Shinkansen railway ground facilities. The Company had paid off ¥4,494,466 million by January 2017.

Derivatives include foreign currency swaps, which are used to manage exposure to market risks of changes in foreign exchange rates of foreign currency denominated long-term debt, and interest rate swaps, which are used to manage exposure to market risks of changes in interest rates of long-term debt. Please see Note 13 for details on derivatives.

c.Risk Management for Financial Instruments

Credit Risk Management

Credit risk is the risk of economic loss arising from a counterparty's failure to repay or service debt according to the contractual terms. The Companies manage their credit risk from trade receivables by monitoring of payment terms and balances of major customers by each business administration department to identify the default risk of customers in the early stage. With respect to held-to-maturity debt securities, the Companies manage exposure to credit risk by limiting debt securities to high credit rated bonds.

Market Risk Management

Investment securities are managed by monitoring market values and the financial position of issuers on a regular basis.

Foreign currency swaps are used to manage exposure to market risks of changes in exchange rates of foreign currency long-term debt. Interest rate swaps are used to manage exposure to market risks of changes in interest rates of long-term debt.

d. Fair Values of Financial Instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, other rational valuation techniques are used instead. Also, please see Note 13 for the details of fair value for derivatives.

(1) Fair Value of Financial Instruments

	Millions of Yen		
March 31, 2018	Carrying Amount	Fair Value	Unrealized Gain/(Loss)
Cash and cash equivalents	¥ 782,454	¥ 782,454	
Money held in trust for the Chuo Shinkansen construction	2,840,931	2,840,931	
Trade receivables	102,021	102,021	
Investment securities	279,088	279,198	¥ 110
Total	*¥ 4,004,495*	*¥ 4,004,605*	*¥ 110*
Short-term loans payable	¥ (27,509)	¥ (27,509)	
Trade payables	(227,523)	(227,523)	
Income taxes payable	(109,783)	(109,783)	
Long-term debt	(1,307,181)	(1,456,992)	¥ 149,810
Long-term debt for the Chuo Shinkansen construction	(3,000,000)	(2,995,100)	(4,899)
Long-term debt of the employee stock ownership plan trust	(20,500)	(20,459)	(40)
Long-term accounts payable—railway facilities	(549,024)	(1,180,003)	630,979
Total	*¥ (5,241,523)*	*¥ (6,017,372)*	*¥ 775,849*

	Millions of Yen		
March 31, 2017	Carrying Amount	Fair Value	Unrealized Gain/(Loss)
Cash and cash equivalents	¥ 414,559	¥ 414,559	
Money held in trust for the Chuo Shinkansen construction	1,472,741	1,472,741	
Marketable securities	138,700	138,700	
Trade receivables	94,776	94,776	
Investment securities	123,258	123,258	
Total	*¥ 2,244,035*	*¥ 2,244,035*	
Short-term loans payable	¥ (25,563)	¥ (25,563)	
Trade payables	(200,298)	(200,298)	
Income taxes payable	(86,788)	(86,788)	
Long-term debt	(1,341,606)	(1,490,449)	¥ (148,842)
Long-term debt for the Chuo Shinkansen construction	(1,500,000)	(1,420,263)	79,736
Long-term accounts payable—railway facilities	(553,853)	(1,184,867)	(631,013)
Total	*¥ (3,708,110)*	*¥ (4,408,231)*	*¥ (700,120)*

	Thousands of U.S. Dollars		
March 31, 2018	Carrying Amount	Fair Value	Unrealized Gain/(Loss)
Cash and cash equivalents	$ 7,381,641	$ 7,381,641	
Money held in trust for the Chuo Shinkansen construction	26,801,235	26,801,235	
Trade receivables	962,462	962,462	
Investment securities	2,632,905	2,633,943	$ 1,037
Total	*$ 37,778,254*	*$ 37,779,292*	*$ 1,037*
Short-term loans payable	$ (259,518)	$ (259,518)	
Trade payables	(2,146,443)	(2,146,443)	
Income taxes payable	(1,035,688)	(1,035,688)	
Long-term debt	(12,331,896)	(13,745,207)	$ 1,413,301
Long-term debt for the Chuo Shinkansen construction	(28,301,886)	(28,255,660)	(46,216)
Long-term debt of the employee stock ownership plan trust	(193,396)	(193,009)	(377)
Long-term accounts payable—railway facilities	(5,179,471)	(11,132,103)	5,952,632
Total	*$ (49,448,330)*	*$ (56,767,660)*	*$ 7,319,330*

Cash and Cash Equivalents and Marketable Securities

The carrying values of cash and cash equivalents and marketable securities approximate fair value because of their short maturities.

Money Held in Trust for the Chuo Shinkansen Construction

The fair value of money held in trust for the Chuo Shinkansen construction is determined based on financial assets which are held by the trust property. Their carrying values approximate fair value because the trust property consists of a deposit.

Investment Securities

The fair values of investment securities are measured at the quoted market price of the stock exchange for the equity instruments, and at the quoted price obtained from the financial institution for certain debt instruments. Fair value information for investment securities by classification is included in Note 4.

Trade Receivables and Payables, Short-Term Loans Payable and Income Taxes Payable

The carrying values of trade receivables and payables, short-term loans payable and income taxes payable approximate fair value because of their short maturities.

Long-Term Debt Including Current Portion, Long-Term Debt for the Chuo Shinkansen Construction and Long-Term Debt of the Employee Stock Ownership Plan Trust Including Current Portion

Domestic bonds are measured at the quoted market prices. Fair values of foreign currency bonds are measured in combination with foreign currency swaps, which qualify for hedge accounting and meet specific matching criteria and are accounted for by the method stated in the Note 3.t, by discounting the aggregated values of the bonds in combination with foreign currency swaps at the Companies' assumed bond issuing rate.

Fair values of long-term debt with floating interest rates are measured in combination with interest rate swaps or interest rate and currency swaps, which qualify for hedge accounting and are accounted for by the method stated in the Note 3.t, by discounting the aggregated values of the principals and interests at the Companies' assumed borrowing rate.

The fair values of other debt, long-term debt for the Chuo Shinkansen construction and long-term debt of the employee stock ownership plan trust are determined by discounting the cash flows related to the debt at the Companies' assumed bond issuing rate or corporate borrowing rate.

Long-Term Accounts Payable—Railway Facilities Including Current Portion

Considering the legal characteristics, all terms and conditions of accounts payable-railway facilities are stipulated in the special law, and as no active market exists for this type of obligation, the fair values of these payables are determined by discounting the cash flow estimated for each due date at the Company's assumed bond issuing rate.

(2) Financial Instruments Whose Fair Value Cannot be Reliably Determined

	Carrying Amount	
March 31, 2018	Millions of Yen	Thousands of U.S. Dollars
Investments in equity instruments that do not have a quoted market price in an active market:		
Investment securities	¥ 15,154	$ 142,962
Investments in unconsolidated subsidiaries and affiliates	12,694	119,754
Total	*¥ 27,848*	*$ 262,716*

	Carrying Amount
March 31, 2017	Millions of Yen
Investments in equity instruments that do not have a quoted market price in an active market:	
Investment securities	¥ 14,452
Investments in unconsolidated subsidiaries and affiliates	12,757
Total	*¥ 27,210*

e. Maturity Analysis for Financial Assets and Securities with Contractual Maturities

	Millions of Yen		
March 31, 2018	Due within One Year	Due after One Year through Five Years	Due after Five Years
Cash and cash equivalents	¥ 782,454		
Money held in trust for the Chuo Shinkansen construction	2,840,931		
Trade receivables	102,021		
Investment securities		¥ 20,000	¥ 120,000
Total	*¥ 3,725,406*	*¥ 20,000*	*¥ 120,000*

	Thousands of U.S. Dollars		
March 31, 2018	Due within One Year	Due after One Year through Five Years	Due after Five Years
Cash and cash equivalents	$ 7,381,641		
Money held in trust for the Chuo Shinkansen construction	26,801,235		
Trade receivables	962,462		
Investment securities		$ 188,679	$ 1,132,075
Total	*$ 35,145,339*	*$ 188,679*	*$ 1,132,075*

f. Annual Maturities of long-term debt, long-term debt for the Chuo Shinkansen construction, long-term debt of the employee stock ownership plan trust and long-term accounts payable—railway facilities

Please see Note 5 for annual maturities of long-term debt, Note 6 for long-term debt for the Chuo Shinkansen construction, Note 10 for long-term debt of the employee stock ownership plan trust and Note 7 for long-term accounts payable—railway facilities.

13.DERIVATIVES

The Companies enter into foreign currency swap agreements to manage exposure to market risks of changes in foreign exchange of foreign currency bonds, and interest rate swap agreements to manage exposure to market risks of changes in interest rates of certain liabilities.

Derivative transactions are mainly entered into to hedge foreign exchange exposures and interest rate exposures incorporated within their business. Accordingly, market risk in these derivatives is basically offset by opposite movements in the value of hedged liabilities.

Because the counterparties to these derivatives are limited to major international financial institutions, the Companies do not anticipate any losses arising from credit default.

Derivative transactions entered into by the Companies have been made in accordance with internal policies and have been subject to due internal formalities.

Derivative Transactions to Which Hedge Accounting Is Applied

		Millions of Yen		
March 31, 2018	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency swaps:(fixed amount payment in yen, fixed amount receipt in U.S. dollars)	Foreign currency bonds	¥ 105,175	¥ 105,175	*
Interest rate swaps:(fixed rate payment, floating rate receipt)	Bank loans	¥ 110,000	¥ 75,500	*
Interest rate and currency swaps: (fixed rate / amount payment in yen, floating rate receipt and fixed amount receipt in U.S. dollars)	Foreign currency bank loans	¥ 49,769	¥ 49,769	*

		Millions of Yen		
March 31, 2017	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency swaps:(fixed amount payment in yen, fixed amount receipt in U.S. dollars)	Foreign currency bonds	¥ 105,175	¥ 105,175	*
Interest rate swaps:(fixed rate payment, floating rate receipt)	Bank loans	¥ 140,401	¥ 115,601	*
Interest rate and currency swaps: (fixed rate / amount payment in yen, floating rate receipt and fixed amount receipt in U.S. dollars)	Foreign currency bank loans	¥ 46,563	¥ 44,063	*

		Thousands of U.S. Dollars		
March 31, 2018	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency swaps:(fixed amount payment in yen, fixed amount receipt in U.S. dollars)	Foreign currency bonds	$ 992,216	$ 992,216	*
Interest rate swaps:(fixed rate payment, floating rate receipt)	Bank loans	$ 1,037,735	$ 712,264	*
Interest rate and currency swaps: (fixed rate / amount payment in yen, floating rate receipt and fixed amount receipt in U.S. dollars)	Foreign currency bank loans	$ 469,518	$ 469,518	*

* Foreign currency swaps, interest rate swaps, or interest rate and currency swaps which qualify for hedge accounting are accounted for in combination with hedged items such as the foreign currency bonds, long-term debt, or foreign currency bank loans and the fair values of these swaps are included in those of hedged items in Note 12.

14.LEASES

As a lessee, the minimum rental commitments under noncancelable operating lease as of March 31, 2018 and 2017 were due as follows.

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
Due within one year	**¥ 468**	¥ 474	**$ 4,415**
Due after one year	**2,716**	3,165	**25,622**
Total	***¥ 3,184***	*¥ 3,640*	***$ 30,037***

As a lessor, the minimum rental commitments under noncancelable operating leases as of March 31, 2018 and 2017, were due as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
Due within one year	**¥ 5,704**	¥ 4,471	**$ 53,811**
Due after one year	**25,334**	15,064	**239,000**
Total	***¥ 31,038***	*¥ 19,535*	***$ 292,811***

15.CONTINGENCIES

As of March 31, 2018, the Company has joint and several obligations with the RTRI to make payments on long-term debt of ¥4,531 million ($42,745 thousand) borrowed by the RTRI. The proceeds are being used for the enhancement of technological development of the Maglev system. In addition, as of March 31, 2018, the Company is contingently liable for guarantees of loans of RTRI amounting to ¥13,400 million ($126,415 thousand).

As discussed in Note 5, based on debt assumption agreements with financial institutions, the Company has transferred the debt repayment obligations for certain bonds to such financial institutions. As of March 31, 2018, the Company had contingent obligations of ¥381,245 million ($3,596,650 thousand) for the bonds.

16.OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss) for the years ended March 31, 2018, 2017 and 2016, were as follows:

	Millions of Yen			Thousands of U.S. Dollars
	2018	2017	2016	**2018**
Unrealized gain (loss) on available-for-sale securities:				
Gain (loss) arising during the year	**¥ 13,824**	¥ 8,490	¥ (24,160)	**$ 130,415**
Reclassification adjustments to profit or loss	**(0)**	(23)	0	**(0)**
Amount before income tax effect	**13,824**	8,466	(24,160)	**130,415**
Income tax effect	**(4,303)**	(1,959)	7,440	**(40,594)**
Total	***¥ 9,521***	*¥ 6,507*	*¥ (16,719)*	***$ 89,820***
Deferred (loss) gain on hedges:				
(Loss) gain arising during the year	**¥ (4)**	¥ 2	¥ 65	**$ (37)**
Amount before income tax effect	**(4)**	2	65	**(37)**
Income tax effect			(22)	
Total	***¥ (4)***	*¥ 2*	*¥ 42*	***$ (37)***
Remeasurements of defined benefit plans:				
Adjustments arising during the year	**¥ 2,261**	¥ (1,862)	¥ (6,381)	**$ 21,330**
Reclassification adjustments to profit	**4,442**	4,729	3,876	**41,905**
Amount before income tax effect	**6,704**	2,866	(2,504)	**63,245**
Income tax effect	**(1,999)**	845	605	**(18,858)**
Total	***¥ 4,704***	*¥ 2,020*	*¥ (1,898)*	***$ 44,377***
Share of other comprehensive income in affiliates				
Gain (loss) arising during the year	**¥ 39**	¥ 27	¥ (122)	**$ 367**
Reclassification adjustments to profit	**38**	36	17	**358**
Total	***¥ 78***	*¥ 63*	*¥ (105)*	***$ 735***
Total other comprehensive income (loss)	***¥ 14,299***	*¥ 8,595*	*¥ (18,681)*	***$ 134,896***

17.SEGMENT INFORMATION

Under ASBJ Statement No. 17, "Accounting Standard for Segment Information Disclosures" and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Segment Information Disclosures," an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity for which separate financial information is available and such information is evaluated regularly by the chief operating decisionmaker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

a. Description of Reportable Segments

The Companies' reportable segments are those for which separate financial information is available and regular evaluation by the Companies' management is being performed in order to decide how resources are allocated among the Companies.

The Companies are composed of three reportable segments by nature of products and services: Transportation, Merchandise and Other and Real Estate are disclosed.

The Transportation segment manages the Companies' railway operations, such as the Tokaido Shinkansen and conventional railway operations in the Tokai area, bus operations and others. The Merchandise and Other segment includes a department store in JR Central Towers, retail sales in trains and stations and others. The Real Estate segment include real estate leasing business, such as station building leasing and real estate sales in lots.

b. Methods of Measurement for the Amounts of Operating Revenues, Profit (Loss), Assets, Liabilities and Other Items for Each Reportable Segment

The accounting policies of each reportable segment are consistent with those disclosed in Note 3, "Summary of Significant Accounting Policies." Reportable segment profit represents operating income. Prices of intersegment transactions or transfers are determined based upon arm's length transactions.

c. Information about Operating Revenues, Profit (Loss), Assets, Liabilities and Other Items

	Millions of Yen							
	2018							
	Reportable Segment							
	Transportation	Merchandise and Other	Real Estate	Total	Other	Total	Reconciliations	Consolidated
Operating revenues:								
External customers	¥ 1,412,182	¥ 243,228	¥ 46,117	¥ 1,701,528	¥ 120,510	¥ 1,822,039		¥ 1,822,039
Intersegment transactions or transfers	11,869	12,164	31,902	55,936	141,115	197,052	¥ (197,052)	
Total	*¥ 1,424,051*	*¥ 255,393*	*¥ 78,020*	*¥ 1,757,465*	*¥ 261,626*	*¥ 2,019,091*	*¥ (197,052)*	*¥ 1,822,039*
Segment profit	¥ 623,077	¥ 8,224	¥ 18,534	¥ 649,836	¥ 13,208	¥ 663,045	¥ (1,021)	¥ 662,023
Segment assets	8,191,415	119,640	371,961	8,683,018	398,838	9,081,856	(173,173)	8,908,682
Other:								
Depreciation and amortization	190,763	4,009	17,164	211,936	4,090	216,027		216,027
Amounts of investments in equity in affiliates	9,648			9,648		9,648		9,648
Increase in property, plant and equipment and intangible assets	305,974	5,732	8,673	320,379	5,224	325,604		325,604

	Millions of Yen							
	2017							
	Reportable Segment							
	Transportation	Merchandise and Other	Real Estate	Total	Other	Total	Reconciliations	Consolidated
Operating revenues:								
External customers	¥ 1,368,604	¥ 227,201	¥ 41,244	¥ 1,637,050	¥ 119,929	¥ 1,756,980		¥ 1,756,980
Intersegment transactions or transfers	11,798	9,888	27,400	49,087	134,036	183,124	¥ (183,124)	
Total	*¥ 1,380,403*	*¥ 237,089*	*¥ 68,645*	*¥ 1,686,138*	*¥ 253,966*	*¥ 1,940,104*	*¥ (183,124)*	*¥ 1,756,980*
Segment profit	¥ 593,192	¥ 7,501	¥ 18,144	¥ 618,838	¥ 1,684	¥ 620,522	¥ (958)	¥ 619,564
Segment assets	6,295,736	111,093	376,295	6,783,124	369,461	7,152,585	(99,910)	7,052,675
Other:								
Depreciation and amortization	205,970	3,463	12,147	221,581	3,804	225,386		225,386
Amounts of investments in equity in affiliates	9,048			9,048		9,048		9,048
Increase in property, plant and equipment and intangible assets	270,710	12,786	39,720	323,217	6,706	329,924		329,924

	Millions of Yen							
	2016							
	Reportable Segment							
	Transportation	Merchandise and Other	Real Estate	Total	Other	Total	Reconciliations	Consolidated
Operating revenues:								
External customers	¥ 1,346,347	¥ 230,670	¥ 38,618	¥ 1,615,635	¥ 122,774	¥ 1,738,409		¥ 1,738,409
Intersegment transactions or transfers	11,815	9,025	27,471	48,312	120,252	168,564	¥ (168,564)	
Total	*¥ 1,358,162*	*¥ 239,695*	*¥ 66,089*	*¥ 1,663,947*	*¥ 243,026*	*¥ 1,906,974*	*¥ (168,564)*	*¥ 1,738,409*
Segment profit (loss)	¥ 556,892	¥ 8,747	¥ 15,637	¥ 581,276	¥ (1,722)	¥ 579,554	¥ (876)	¥ 578,677
Segment assets	4,648,963	105,259	342,344	5,096,567	212,356	5,308,923	(40,378)	5,268,544
Other:								
Depreciation and amortization	222,474	3,481	12,477	238,433	3,936	242,369		242,369
Amounts of investments in equity in affiliates	8,705			8,705		8,705		8,705
Increase in property, plant and equipment and intangible assets	202,549	7,855	24,338	234,743	3,635	238,379		238,379

	Thousands of U.S. Dollars							
	2018							
	Reportable Segment							
	Transportation	Merchandise and Other	Real Estate	Total	Other	Total	Reconciliations	Consolidated
Operating revenues:								
External customers	$ 13,322,471	$ 2,294,603	$ 435,066	$ 16,052,150	$ 1,136,886	$ 17,189,047		$ 17,189,047
Intersegment transactions or transfers	111,971	114,754	300,962	527,698	1,331,273	1,858,981	$ (1,858,981)	
Total	*$ 13,434,443*	*$ 2,409,367*	*$ 736,037*	*$ 16,579,858*	*$ 2,468,169*	*$ 19,048,028*	*$ (1,858,981)*	*$ 17,189,047*
Segment profit	$ 5,878,084	$ 77,584	$ 174,849	$ 6,130,528	$ 124,603	$ 6,255,141	$ (9,632)	$ 6,245,500
Segment assets	77,277,500	1,128,679	3,509,066	81,915,264	3,762,622	85,677,886	(1,633,707)	84,044,169
Other:								
Depreciation and amortization	1,799,650	37,820	161,924	1,999,396	38,584	2,037,990		2,037,990
Amounts of investments in equity in affiliates	91,018			91,018		91,018		91,018
Increase in property,plant and equipment and intangible assets	2,886,547	54,075	81,820	3,022,443	49,283	3,071,735		3,071,735

Notes: 1. Other includes business in hotel, travel, advertising, rolling stock production and construction which are not included in a reportable segment.
2. Reconciliations are as follows:
a. The amount of the elimination of intersegment transactions included in the reconciliations was ¥(1,021) million ($(9,632) thousand), ¥(958) million and ¥(876) million for the years ended March 31, 2018, 2017 and 2016, respectively.
b. The reconciliations for segment assets include corporate assets, which are not allocated to a reportable segment, and the elimination of intersegment transactions.
Corporate assets principally consist of investment securities and certificates of deposit. The amounts of corporate assets were ¥441,612 million ($4,166,150 thousand), ¥426,429 million and ¥320,737 million for the years ended March 31, 2018, 2017 and 2016, respectively.
The elimination of intersegment transactions consists of intersegment receivables and others. The amounts of the elimination were ¥614,785 million ($5,799,858 thousand), ¥526,340 million and ¥361,116 million for the years ended March 31, 2018, 2017 and 2016, respectively.
3. Segment profit (loss) is reconciled to operating income in the consolidated statement of income.
4. Information about products and services was omitted since equivalent information was disclosed above.
Information about geographical areas was not presented since the Companies have no significant overseas operations.

18.SUBSEQUENT EVENTS

Appropriations of Retained Earnings

The following appropriation of retained earnings as of March 31, 2018, was approved at the Company's shareholders' meeting held on June 22, 2018. The total amount of dividends includes ¥68 million ($641 thousand) in dividends to be paid to the Trust.

	Millions of Yen	Thousands of U.S. Dollars
Year-end cash dividends, ¥70 ($0.66) per share	¥ 13,790	$ 130,094

Nonconsolidated Balance Sheet (Unaudited)

Central Japan Railway Company — March 31, 2018

ASSETS	Millions of Yen (Note 1)		Thousands of U.S. Dollars (Note 1)
	2018	2017	**2018**
CURRENT ASSETS:			
Cash and cash equivalents	**¥ 772,744**	¥ 398,157	**$ 7,290,037**
Money held in trust for the Chuo Shinkansen construction	**2,840,931**	1,472,741	**26,801,235**
Marketable securities		138,700	
Trade receivables	**49,823**	42,385	**470,028**
Supplies	**11,151**	11,377	**105,198**
Prepaid expenses and other	**39,009**	35,273	**368,009**
Total current assets	***3,713,661***	*2,098,634*	***35,034,537***
NONCURRENT ASSETS:			
Investments and other assets:			
Investment securities	**275,306**	120,622	**2,597,226**
Investments in and advances to subsidiaries and affiliates	**239,179**	189,615	**2,256,405**
Deferred tax assets	**151,383**	147,556	**1,428,141**
Prepaid expenses and other	**39,053**	31,721	**368,424**
Total investments and other assets	***704,923***	*489,516*	***6,650,216***
Property, plant and equipment (Note 2):			
Railway business property	**8,050,659**	8,025,536	**75,949,613**
Construction in progress	**420,438**	268,681	**3,966,396**
Other	**216,992**	214,626	**2,047,094**
Total	***8,688,090***	*8,508,843*	***81,963,113***
Accumulated depreciation	**(4,380,236)**	(4,282,636)	**(41,322,981)**
Net property, plant and equipment	***4,307,853***	*4,226,206*	***40,640,122***
Total noncurrent assets	***5,012,776***	*4,715,723*	***47,290,339***
TOTAL ASSETS	***¥ 8,726,438***	*¥ 6,814,357*	***$ 82,324,886***

LIABILITIES AND EQUITY	Millions of Yen (Note 1)		Thousands of U.S. Dollars (Note 1)
	2018	2017	**2018**
CURRENT LIABILITIES:			
Short-term loans payable	**¥ 147,249**	¥ 108,421	**$ 1,389,141**
Current portion of long-term debt	**82,047**	93,374	**774,028**
Current portion of long-term debt of the employee stock ownership plan trust	**5,400**		**50,943**
Current portion of long-term accounts payable—railway facilities	**5,126**	4,824	**48,358**
Trade payables	**182,958**	164,866	**1,726,018**
Provision for bonuses	**21,340**	21,360	**201,320**
Income taxes payable	**102,291**	81,263	**965,009**
Prepaid fares received	**31,570**	30,243	**297,830**
Inter-line fares received	**476**	185	**4,490**
Other	**52,445**	38,051	**494,764**
Total current liabilities	***630,906***	*542,590*	***5,951,943***
NONCURRENT LIABILITIES:			
Long-term debt	**1,225,134**	1,221,858	**11,557,867**
Long-term debt for the Chuo Shinkansen construction	**3,000,000**	1,500,000	**28,301,886**
Long-term debt of the employee stock ownership plan trust	**15,100**		**142,452**
Long-term accounts payable—railway facilities	**543,897**	549,028	**5,131,103**
Provision for large-scale renovation of the Shinkansen infrastructure	**175,000**	210,000	**1,650,943**
Provision for retirement benefits	**179,242**	179,160	**1,690,962**
Other	**27,277**	28,879	**257,330**
Total noncurrent liabilities	***5,165,651***	*3,688,926*	***48,732,556***
EQUITY:			
Common stock—authorized, 824,000,000 shares; issued, 206,000,000 shares in 2018 and 2017	**112,000**	112,000	**1,056,603**
Capital surplus	**53,500**	53,500	**504,716**
Retained earnings:			
Legal reserve	**12,504**	12,504	**117,962**
Unappropriated	**2,837,396**	2,480,566	**26,767,886**
Treasury stock-at cost, 9,972,129 shares in 2018 and 8,999,266 shares in 2017	**(120,733)**	(102,205)	**(1,138,990)**
Unrealized gain on available-for-sale securities	**35,211**	26,474	**332,179**
Total equity	***2,929,880***	*2,582,839*	***27,640,377***
TOTAL LIABILITIES AND EQUITY	***¥ 8,726,438***	*¥ 6,814,357*	***$ 82,324,886***

See notes to nonconsolidated financial statements.

Nonconsolidated Statement of Income (Unaudited)

Central Japan Railway Company — Year Ended March 31, 2018

	Millions of Yen (Note 1)			Thousands of U.S. Dollars (Note 1)
	2018	2017	2016	**2018**
OPERATING REVENUES:				
Railway business	**¥ 1,414,884**	¥ 1,371,906	¥ 1,349,713	**$ 13,347,962**
Other	**12,560**	8,863	8,278	**118,490**
Total operating revenues	***1,427,444***	*1,380,770*	*1,357,991*	***13,466,452***
OPERATING EXPENSES:				
Railway business	**793,541**	779,970	794,126	**7,486,235**
Other	**8,608**	4,978	6,175	**81,207**
Total operating expenses	***802,150***	*784,949*	*800,301*	***7,567,452***
Operating income	***625,293***	*595,821*	*557,689*	***5,898,990***
OTHER INCOME (EXPENSES):				
Interest and dividend income	**3,194**	2,233	2,899	**30,132**
Interest expense	**(79,105)**	(60,177)	(65,379)	**(746,273)**
Other—net	**208**	3,273	(3,426)	**1,962**
Other expenses—net	***(75,702)***	*(54,670)*	*(65,907)*	***(714,169)***
INCOME BEFORE INCOME TAXES	**549,591**	541,150	491,782	**5,184,820**
INCOME TAXES:				
Current	**172,961**	151,746	155,787	**1,631,707**
Deferred	**(7,780)**	7,505	7,335	**(73,396)**
Total income taxes	***165,181***	*159,252*	*163,123*	***1,558,311***
NET INCOME	***¥ 384,410***	*¥ 381,898*	*¥ 328,658*	***$ 3,626,509***

	Yen			U.S. Dollars
	2018	2017	2016	**2018**
PER SHARE OF COMMON STOCK:				
Basic net income	**¥ 1,956.94**	¥ 1,938.56	¥ 1,668.31	**$ 18.46**
Cash dividends applicable to the year	**140.00**	135.00	125.00	**1.32**

See notes to nonconsolidated financial statements.

Nonconsolidated Statement of Changes in Equity (Unaudited)

Central Japan Railway Company — Year Ended March 31, 2018

	Thousands	Millions of Yen (Note 1)						
				Retained Earnings				
	Outstanding Number of Shares of Common Stock	Common Stock	Capital Surplus	Legal Reserve	Unappropriated	Treasury Stock	Unrealized Gain on Available-for-Sale Securities	Total Equity
BALANCE, APRIL 1, 2015	197,000	¥ 112,000	¥ 53,500	¥ 12,504	¥1,819,258	¥(102,203)	¥ 36,037	¥1,931,097
Net income					328,658			328,658
Dividends from surplus, ¥120 per share					(23,640)			(23,640)
Purchase of treasury stock	(0)					(0)		(0)
Net change in the year							(16,205)	(16,205)
BALANCE, MARCH 31, 2016	197,000	112,000	53,500	12,504	2,124,277	(102,203)	19,831	2,219,910
Net income					381,898			381,898
Dividends from surplus, ¥130 per share					(25,610)			(25,610)
Purchase of treasury stock	(0)					(2)		(2)
Net change in the year							6,643	6,643
BALANCE, MARCH 31, 2017	197,000	112,000	53,500	12,504	2,480,566	(102,205)	26,474	2,582,839
Net income					384,410			384,410
Dividends from surplus, ¥140 per share					(27,580)			(27,580)
Purchase of treasury stock	(972)					(21,365)		(21,365)
Disposal of treasury stock			0			2,838		2,838
Net change in the year							8,736	8,736
BALANCE, MARCH 31, 2018	*196,027*	*¥ 112,000*	*¥ 53,500*	*¥ 12,504*	*¥2,837,396*	*¥ (120,733)*	*¥ 35,211*	*¥ 2,929,880*

	Thousands of U.S. Dollars (Note 1)					
			Retained Earnings			
	Common Stock	Capital Surplus	Legal Reserve	Unappropriated	Treasury Stock	Unrealized Gain on Available-for-Sale Securities	Total Equity
BALANCE, MARCH 31, 2017	$ 1,056,603	$ 504,716	$ 117,962	$23,401,566	$ (964,198)	$ 249,754	$24,366,405
Net income				3,626,509			3,626,509
Dividends from surplus, $1.32 per share				(260,188)			(260,188)
Purchase of treasury stock					(201,556)		(201,556)
Net change in the year			0		26,773		26,773
						82,415	82,415
BALANCE, MARCH 31, 2018	*$ 1,056,603*	*$ 504,716*	*$ 117,962*	*$ 26,767,886*	*$ (1,138,990)*	*$ 332,179*	*$ 27,640,377*

See notes to nonconsolidated financial statements.

Notes to Nonconsolidated Financial Statements

Central Japan Railway Company

1. BASIS OF PRESENTATION OF NONCONSOLIDATED FINANCIAL STATEMENTS

The accompanying nonconsolidated financial statements have been prepared in accordance with the provisions set forth in the Companies Act, the Japanese Financial Instruments and Exchange Act, the Law for Railway Business Enterprise and their related accounting regulations, and in accordance with accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

In preparing these nonconsolidated financial statements, certain reclassifications and rearrangements have been made to the nonconsolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2017 nonconsolidated financial statements to conform to the classifications used in 2018.

The nonconsolidated financial statements are stated in Japanese yen, the currency of the country in which the Company is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥106 to $1, the approximate rate of exchange as of March 31, 2018. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate. Japanese yen figures of less than one million yen are rounded down to the nearest million of yen, except for per share information, and U.S. dollar figures of less than one thousand U.S. dollars are also rounded down to the nearest thousand of U.S. dollars, except for per share information.

2. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment as of March 31, 2018 and 2017, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	**2018**
Land	**¥ 2,326,709**	¥ 2,327,331	**$ 21,950,084**
Buildings	**609,112**	604,025	**5,746,339**
Structures	**3,788,243**	3,767,978	**35,738,141**
Rolling stock	**898,687**	891,142	**8,478,179**
Machinery and equipment	**641,905**	647,563	**6,055,707**
Lease assets	**2,993**	2,119	**28,235**
Construction in progress	**420,438**	268,681	**3,966,396**
Total	***8,688,090***	*8,508,843*	***81,963,113***
Accumulated depreciation	**(4,380,236)**	(4,282,636)	**(41,322,981)**
Net property, plant and equipment	***¥ 4,307,853***	*¥ 4,226,206*	***$ 40,640,122***

Property, plant and equipment are stated at cost.

Depreciation is computed by the declining-balance method over the estimated useful lives of the assets. Additional depreciation is provided for the Shinkansen rolling stock based on kilometers traveled.

The range of useful lives is principally from 3 to 50 years for buildings, from 4 to 60 years for structures, from 10 to 20 years for rolling stock and from 4 to 17 years for machinery and equipment.

Depreciation of certain railway structures, except for the Shinkansen railway facilities, is computed by the replacement-accounting method.

Deloitte.

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of
Central Japan Railway Company:

We have audited the accompanying consolidated balance sheet of Central Japan Railway Company and its consolidated subsidiaries as of March 31, 2018, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Central Japan Railway Company and its consolidated subsidiaries as of March 31, 2018, and the consolidated results of their operations and their cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 2 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

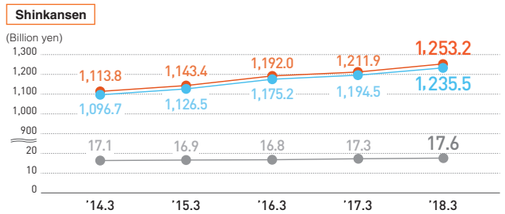
Deloitte Touche Tohmatsu LLC

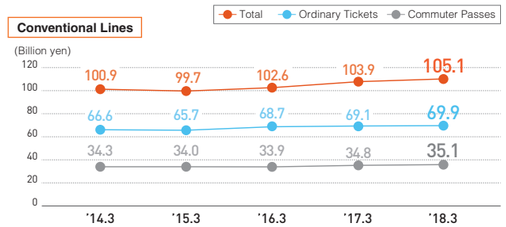
June 22, 2018

Member of
Deloitte Touche Tohmatsu Limited

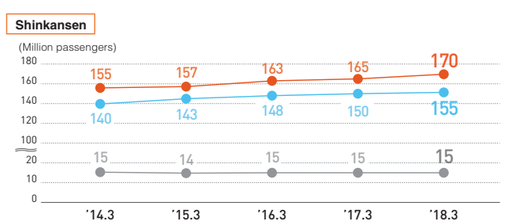
Financial and Transportation Data

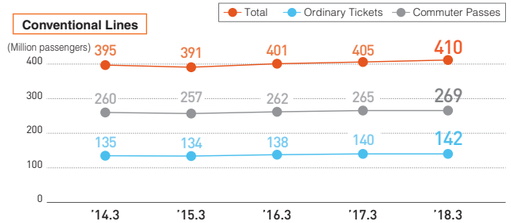
Transportation revenues



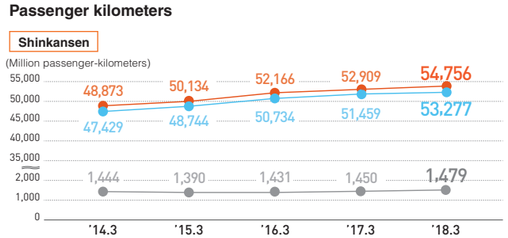


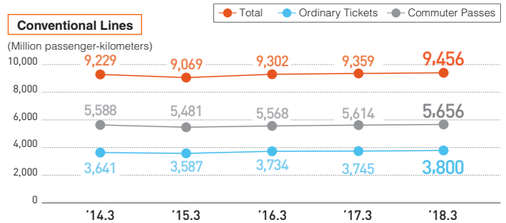
Passenger Ridership



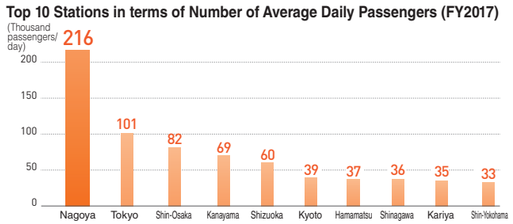


Passenger kilometers



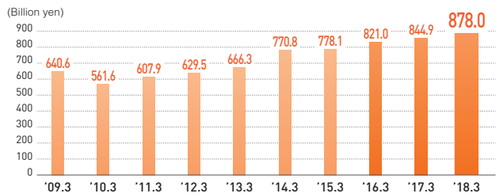


Top 10 Stations in terms of Number of Average Daily Passengers (FY2017)



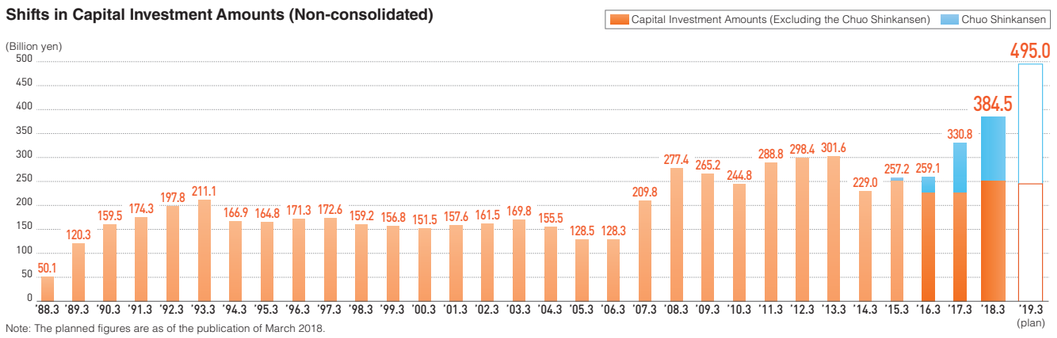
Note: The figures for Tokyo, Shin-Osaka, Kyoto, Shinagawa, and Shin-Yokohama Stations indicate Shinkansen passengers only.

Shifts in EBITDA (consolidated)



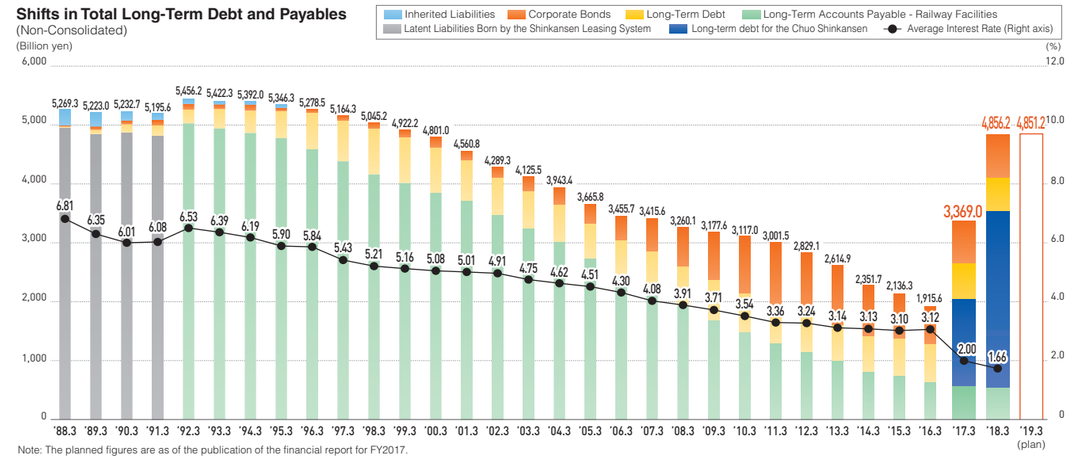
Note: EBITDA figures are calculated as the sum of operating income and depreciation and amortization

Shifts in Capital Investment Amounts (Non-consolidated)



Note: The planned figures are as of the publication of March 2018.

Shifts in Total Long-Term Debt and Payables
(Non-Consolidated)



Note: The planned figures are as of the publication of the financial report for FY2017.

Long-Term Loan Using the Fiscal Investment and Loan Program (Long-term debt for the Chuo Shinkansen)

In November 2016, JR Central applied for a long-term loan using the Fiscal Investment and Loan Program (hereinafter, "FILP Loan") for 3 trillion yen (plan) to Japan Railway Construction, Transport and Technology Agency ("JRTT") to promote the construction of the Chuo Shinkansen. We proceeded to borrow funds in five lots sequentially thereafter and secured financing for a planned total of 3 trillion yen in July 2017.

The advantage we gain from the FILP loan lies in mitigating three management risks, which are interest-rate increase risk, financing risk, and redemption risk. Specifically, since we can secure long-term, fixed- and low-interest rate funds, we are able to mitigate the risk of interest rates rising in the future and fix interest payments at a low level for a long period of time.

Under the original plan, roughly 3 trillion yen of the construction cost for the route between Shinagawa and Nagoya, which is approximately 5.5 trillion yen, was expected to require new financing. However, by securing the amount through the FILP Loan, we have the funds needed until live operation in Nagoya without being considerably impacted by future economic conditions and interest rate fluctuations, thereby reducing financing risk.

Furthermore, since the FILP Loan matures after the construction period of the Chuo Shinkansen, during which time a large amount of funds is needed, we are able to build up cash from operating activities to provide for the redemption of liabilities, thereby also mitigating redemption risk.

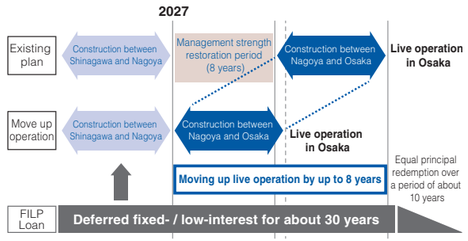
In the material submitted to the Transport Policy Council of the Ministry of Land, Infrastructure, Transport and Tourism in 2010, we indicated in our outlook that a period of 8 years after live operation in Nagoya will be set to recover management strength. After reducing long-term debt by a certain amount, construction on the route between Nagoya and Osaka will be initiated while seeing that sound management and stable dividends are strictly maintained, and ensuring that the balance of long-term debt does not exceed 5 trillion yen throughout the project period until live operation of the entire line. By utilizing this FILP Loan, we are able to reduce this period for restoring management strength and promote construction efforts in an aim to moving up live operation of the entire line by up to 8 years.

The Chuo Shinkansen Project is pursued based on the premise that JR Central, as a private corporation, covers full cost of construction, while securing management autonomy in investment and seeing that sound management and stable dividends are strictly maintained until the construction work is fully completed. The FILP Loan poses no change to this premise.

As for the terms of the FILP Loan, the weighted average rate is 0.86%, which is fixed throughout the entire period, and the annual interest expenses are 25.7 billion yen. The repayment method is equal principal payment over a period of roughly 10 years after deferring the payment of principal for about 30 years,

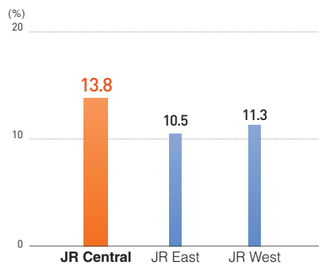
The funds procured from the FILP Loan will be applied only for the cost of construction of the Chuo Shinkansen. We ensure the transparency of funds by setting a trust aimed at segment-based management.

Illustrated plan of moving up live operation

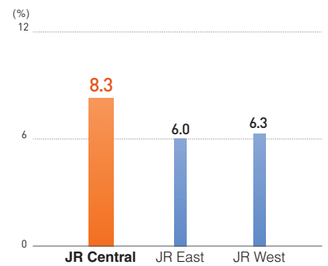


Financial Data Comparison of Three JR Companies (Consolidated)*1

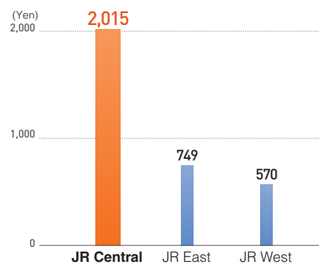
Return on Equity



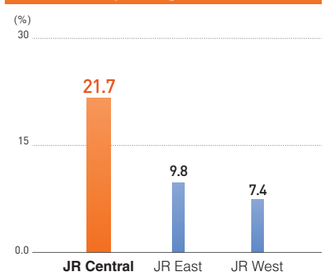
Operating Income/Total Assets



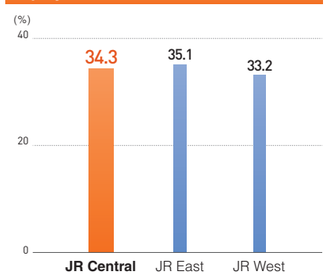
Earnings per Share



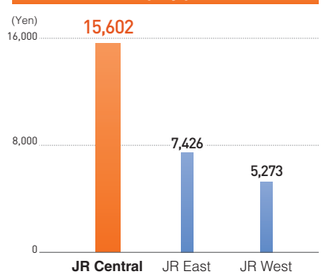
Net Income/Operating Revenues



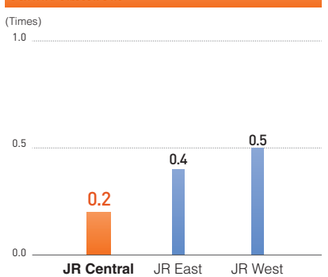
Equity Ratio



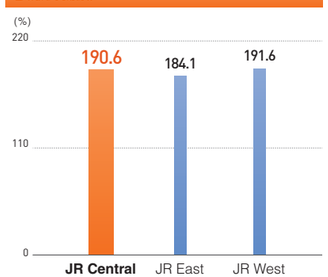
Shareholders' Equity per Share



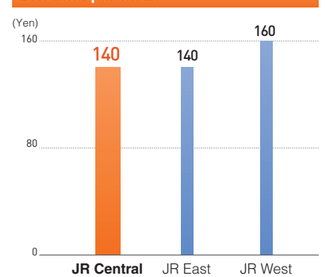
Asset Turnover



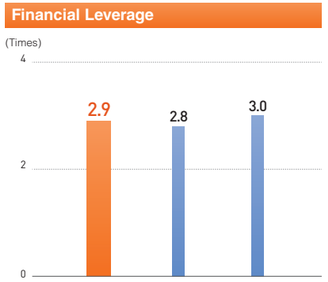
Debt Ratio



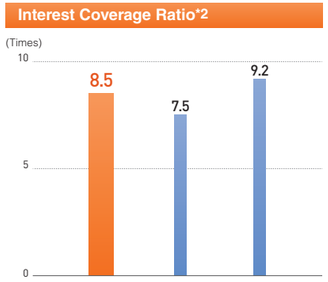
Dividend per Share



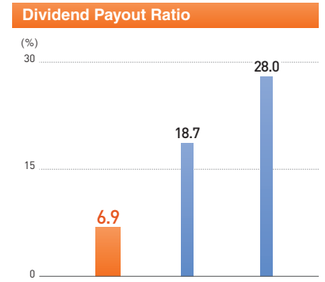
Financial Leverage



Interest Coverage Ratio*2



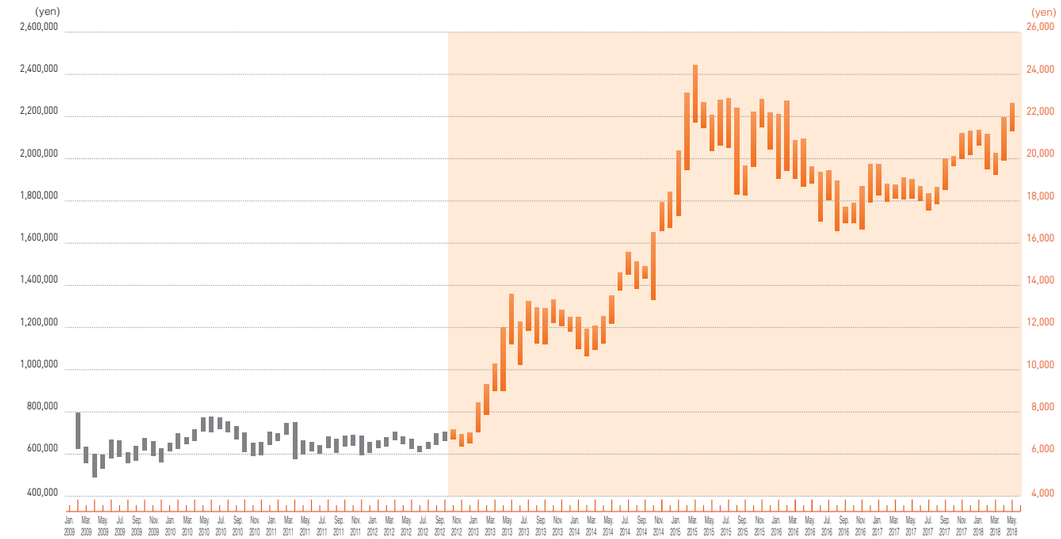
Dividend Payout Ratio



*1 Figures are calculated by JR Central based on Financial Report of all JR companies for FY2017.
*2 (Operating income + Interest and dividend income) / Interest expense

Stock Information

Shifts in JR Central's Stock Price



Note: On October 1, 2012, the Company implemented a 100-for-1 stock split and employed a share unit system by which one share unit equals 100 shares.
Please refer to the left axis for stock prices before September 2012 and the right axis for stock prices after October 2012.

Major Shareholders

Name	Number of shares held	Percentage of total issued shares
Mizuho Bank, Ltd.	9,783,300	4.97%
The Master Trust Bank of Japan, Ltd. (Trust Account)	9,298,000	4.72%
Japan Trustee Services Bank, Ltd. (Trust Account)	8,253,000	4.19%
The Nomura Trust and Banking Co., Ltd. (Holder in Retirement Benefit Trust for The Bank of Tokyo-Mitsubishi UFJ, Ltd.)	7,125,000	3.62%
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	6,678,100	3.39%
Nippon Life Insurance Company	5,000,000	2.54%
Toyota Motor Corporation	4,000,000	2.03%
The Dai-ichi Life Insurance Company, Ltd	3,423,900	1.74%
Japan Trustee Services Bank, Ltd. (Trust Account 5)	3,421,900	1.74%
Sumitomo Mitsui Banking Corporation	3,230,000	1.64%
Total	60,213,200	30.56%

Note: In addition to the above, JR Central holds 8,999,229 shares of treasury stock.

[As of March 31, 2018]

JR Central has been included in the following index for socially responsible investment (SRI).

MSCI 2018 Constituent MSCI Japan ESG Select Leaders Index

MSCI Japan ESG Select Leaders Index is a SRI index consisting of companies with high Environmental, Social, and Governance (ESG) performance relative to their sector peers, provided by MSCI.

ECPI Sense in sustainability

ECPI Indices is a SRI index provided by ECPI, which investigates ESG performance and provides its rating information. ECPI's main offices are located in Luxembourg and Italy.

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