JR East's five-route Shinkansen network linking Tokyo with five regional cities comprises the Tohoku Shinkansen, between Tokyo and Shin-Aomori, accounting for 713.7 operating kilometers; the Joetsu Shinkansen, between Tokyo and Niigata, 333.9 operating kilometers; the Nagano Shinkansen, between Tokyo and Nagano, 222.4 operating kilometers; as well as Shinkansen lines with trains operable on Shinkansen and conventional railway lines: the Yamagata Shinkansen, between Tokyo and Shinjo, 421.4 operating kilometers; and the Akita Shinkansen, between Tokyo and Akita, 662.6 operating kilometers.

JR East is taking steps to increase the convenience of its Shinkansen services further. Those efforts include implementing plans to introduce new-type railcars and increasing train services during such busy periods as the Golden Week spring

holidays, summer vacation period, and the year-end and New Year period. For fiscal 2012, traffic volume was 18,424 million passenger kilometers, and revenues from passenger tickets was ¥439.7 billion.

### New Series E5 Railcars Added to the **Tohoku Shinkansen Line**

New Series E5 railcars were put into service on the Tohoku Shinkansen Line in conjunction with timetable revisions in March 2012. Series E5 railcars couple with the GranClass first class service for a refined travel experience, while also offering greatly improved environmental performance and comfort as well as higher speeds. The railcars make travel more comfortable than it has ever been. Maximum speed on some trains will be raised to 320 km/h by the end of fiscal 2013, the fastest in Japan.

C Series E6 railcars for the Akita Shinkansen Line

### Higher Speeds for Tsubasa on the Yamagata Shinkansen Line

A portion of the railcars on Max Yamabiko trains that are coupled with Tsubasa were switched from Series E4 to Series E2 cars when timetables were revised in March 2012. This makes it possible to raise Tsubasa's maximum speed from 240 km/h to 275 km/h on nine of 16 roundtrip routes, meaning travel on Tsubasa is faster than ever before. The time required to travel from Tokyo to Yamagata on the fastest trains is now two hours and 29 minutes.

#### OUTLOOK

### **Construction of the Hokuriku Shinkansen Line Extension**

Construction of the Hokuriku Shinkansen Line from Nagano Station to Kanazawa Station is being managed by the Japan Railway Construction, Transport and Technology Agency (JRTT). JR East has been

REVIEW OF OPERATIONS TRANSPORTATION

# Shinkansen Network









contracted by JRTT to construct new elevated spans, bridges and other infrastructure in sections of the Nagano-Joetsu segment (provisional name) that cross or are adjacent to existing lines and return lines for out-of-service trains.

Work on the project is proceeding to meet the government's goal of putting the line into service in fiscal 2015. When complete the line will improve access to the Hokuriku region from the Tokyo metropolitan area and contribute to adjacent development.

### Series E6 Railcars for Introduction on the Akita Shinkansen Line

JR East will build 23 sets of Series E6 railcars for seven-car Shinkansen trains, a total of 161 cars, for the Akita Shinkansen. The new railcars will be dedicated starting in November 2012 and all 23 sets are slated for completion by the spring of 2014. They are scheduled to go into service starting in the spring of 2013.

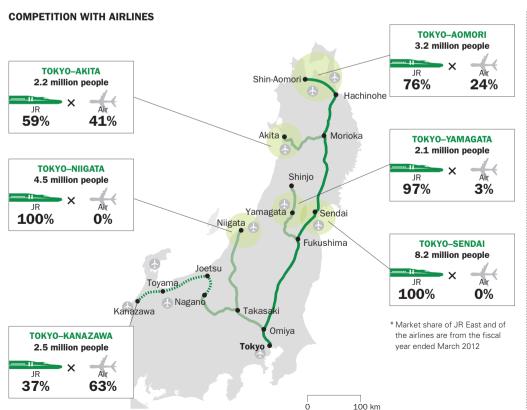
### Shinkansen Year 2012 Campaign

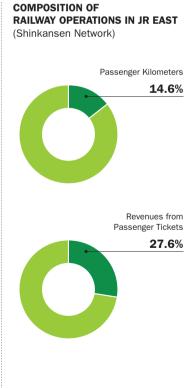
With the 30th anniversary of the Tohoku Shinkansen (Omiya-Morioka segment) on June 23, 2012 and the debut of Series E6 railcars on the Akita Shinkansen Line, it will be a milestone year for JR East's Shinkansen service. We are marking the occasion with the *Shinkansen YEAR2012 Campaign*, which will run from late May 2012 to March 2013.

The campaign will highlight the joy of traveling on the Shinkansen and promote nearby attractions and destinations through various programs and events while also looking back at Shinkansen history together with customers.

### EXPANSION OF JR EAST'S SHINKANSEN NETWORK







As well as being the area that best exploits the distinctive features of railways, the Kanto area network represents a large earnings base for JR East. By concentrating on strengthening the network by increasing through services as well as implementing measures to ease crowding, JR East is further improving service levels.

For example, JR East is increasing through services (services that join two existing services to allow passengers to travel further without changing trains) on the Shonan-Shinjuku Line, increasing train services during the morning rush hour, and improving seating services by introducing *Green Cars* on local train services.

The Kanto area network comprises 2,536.2 operating kilometers. In fiscal 2012, it accounted for 100,967 million passenger kilometers and revenues from passenger tickets of ¥1.087.0 billion.

#### TOPICS

# **Convenience Along the Tokyo Megaloop Enhanced**

JR East has taken initiatives to enhance train services on its "Tokyo Megaloop," which consists of the Musashino, Keiyo, Nambu and Yokohama lines. These lines, which together form an outer loop around Tokyo, are connected at many points with the lines that other railway companies operate. JR East will improve service convenience along its Megaloop as part of an effort to build up a railway network for adjacent residential communities, thereby appealing to people looking for a place to live in Tokyo.

Regarding timetable revisions conducted in March 2012, on the Musashino Line, *Shimousa* rapid trains that operated before peak morning hours were shifted to the peak period to alleviate congestion on the morning commute. On the Yokohama Line, trains were added in the evening and night to improve convenience and reduce crowding. On the Nambu Line, also, segments for some trains operating at night were extended to alleviate congestion.

#### Yoshikawaminami Station Opened

Yoshikawaminami Station on the Musashino Line was opened in March 2012. The new station was established between Yoshikawa Station and Shinmisato Station at the request of the city of Yoshikawa in Saitama Prefecture. It is expected to help facilitate development in the adjacent area. The station is equipped

REVIEW OF OPERATIONS TRANSPORTATION

## **Kanto Area Network**







Series E233 railcars for the Saikyo and Yokohama lines



with turnaround facilities, which provide a number of benefits, including greater transportation stability during emergencies. Overall, the station improves the convenience of the Musashino Line.

#### OUTLOOK

### The Tohoku Through Line

The Tohoku Through Line project involves building new elevated railway tracks and upgrading existing railway tracks between Tokyo Station and Ueno Station. This will be done so that certain services of the Utsunomiya, Takasaki, and Joban lines that now terminate at Ueno Station can instead be linked near Kanda Station to the Tokaido Line bound for Tokyo, Shimbashi and Shinagawa.

Upon completion, the Tohoku Through Line will ease crowding on the Yamanote and Keihin-Tohoku lines during the morning rush hour. Through services on the line will also eliminate transfers and shorten travel times from the Utsunomiya, Takasaki and Joban lines to the Tokaido Line. In these ways, the through line will significantly help JR East improve its railway network.

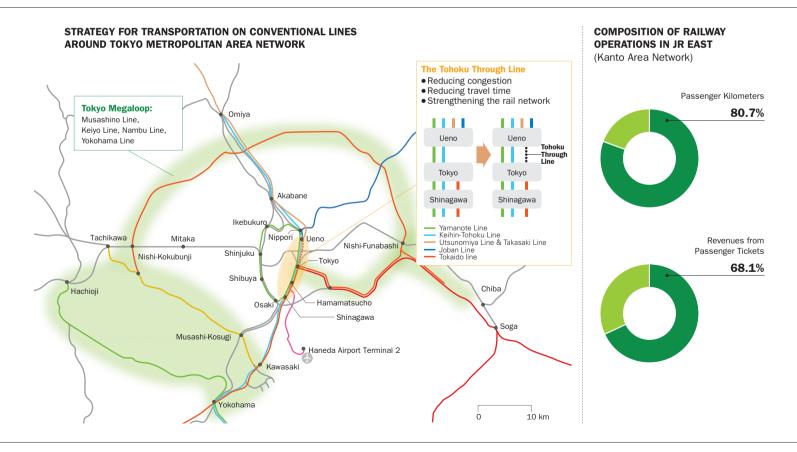
Construction is proceeding on the Tohoku Through Line, which is scheduled to open for fiscal 2015.

#### **Through Services With Sagami Railway**

Through services with Sagami Railway will begin in conjunction with establishment of the Sagami-JR Direct Line under the plan to enhance the convenience of urban railways.

### **Introduction of Series E233 Commuter Railcars**

Series E233 commuter railcars will be introduced on the Saikyo Line and Yokohama Line. The roll-out will begin in fiscal 2014 on the Saikyo Line and fiscal 2015 on the Yokohama Line. The cars feature around 10% greater capacity than conventional Series 205 cars, which will help alleviate crowding, and 100% LED lighting, which will reduce power consumption by some 60% compared to standard fluorescents.



Intercity networks comprise limited express services linking major cities. Based on regional conditions, JR East is further integrating those services with its Shinkansen services as well as increasing and speeding up limited express services. Further, JR East is shortening journey times by eliminating the need to change trains through the operation of the Yamagata Shinkansen and the Akita Shinkansen services, which can run on Shinkansen lines and conventional lines. Meanwhile, in regional networks, JR East is providing transportation services that closely reflect local needs while improving efficiency.

Intercity and regional networks comprise 3,841.7 operating kilometers. In fiscal 2012, they accounted for 5,672 million passenger kilometers and revenues from passenger tickets of ¥68.7 billion.

#### **TOPICS AND OUTLOOK**

#### **ATACS Goes Online**

ATACS is a new train control system that uses wireless technology. It has been put into operation on the Senseki Line between Aobadori Station and Higashi-Shiogama Station. Similar systems have been developed and installed in other countries, but as a total system with a multitude of functions, ATACS is the world's first to be put into practical application.

# Introduction of New Limited Express Railcars on the Joban Line

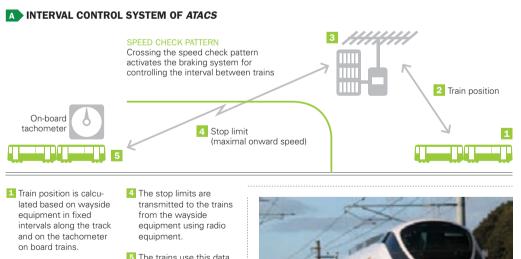
New Series E657 railcars have been put into service in *Super Hitachi* and *Fresh Hitachi* limited express trains on the Joban Line. The new cars provide a comfortable travel experience for business travelers and a wide range of other passengers.

As of the March 2012 timetable revisions, the new railcars will account for around 40% of *Super Hitachi* and *Fresh Hitachi* trains. In addition, with the addition of the new cars, the timetable will be revised and the time between Ueno Station and Iwaki Station will be shortened up to nine minutes on some *Super Hitachi* trains.



REVIEW OF OPERATIONS TRANSPORTATION

# **Intercity and Regional Networks**



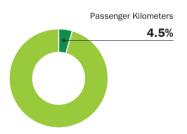
- 2 Train positions are transmitted to the wayside equipment using radio equipment.
- 3 The wayside equipment produces a stop limit based on the position data it has of all trains along the track.
- The trains use this data along with stored information on railcar specification, rail curve and rail grade to produce a speed check pattern that controls the braking system to keep the trains moving at speeds within the pattern.

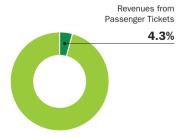


B New Series E657 limited express railcars for the Joban Line

# COMPOSITION OF RAILWAY OPERATIONS IN JR EAST

(Intercity and Regional Networks)





Roughly speaking, the passengers found on JR East's Shinkansen Lines are half traveling for business, and half for tourism. For this reason, creating an extra demand for tourism will lead to an increase in JR East's ridership. And a buildup of the areas that are attractive to tourists within JR East's railway service area is absolutely essential to creating this extra demand.

The Tourism Development of JR East is fully engaged with local communities in generating this demand, focused on cultivating attractions, refining them and conducting the related publicity campaigns.

### **TOPICS AND OUTLOOK**

#### **Destination Campaigns**

Tourism and local industry in eastern Japan was greatly impacted in the wake of the

Great East Japan Earthquake due in part to damaging misinformation and voluntarily reduced consumption. JR East responded by running tourism campaigns, including the Aomori Destination Campaign and Gunma Destination Campaign, for various destinations in support of the region. The intention was to help reinvigorate Japan through the power of tourism. Promotional copy, such as "Be Strong Japan! Be Strong Tohoku!" and "Linking Japan," emphasized bringing Japan together and cheering on Japan and the Tohoku region. From fiscal 2013 onward, we plan on launching a Destination Campaign for Iwate in April to June 2012, Sendai and Miyagi in April to June 2013, Akita in October to December 2013, Niigata in April to June 2014, and Yamagata in June to September 2014.

#### **WTTC Global Summit**

In April 2012 the 12th World Travel and Tourism Council (WTTC) Global Summit was held in Sendai and Tokyo. Over 1,200 people from 53 countries around the world, including Japan, participated in the event, which provided a valuable opportunity for people to directly experience Japan as it recovers from the earthquake. JR East also actively participated in the summit and promoted Japan's appeal to the rest of the world.

From JR East, Chairman Satoshi Seino took part as a member, Advisor Mutsutake Otsuka and Vice Chairman Masaki Ogata gave speeches, and President Tetsuro Tomita provided introductory remarks. As a member of the host country organizing committee, we operated special dedicated Shinkansen trains and otherwise drew on the Group's collective resources to help host the event.

REVIEW OF OPERATIONS TRANSPORTATION

# **Tourism Development**









B The 12th WTTC Global Summit and the Summit session

### **Inbound Strategy: Measures to Attract More Overseas Tourists**

JR East is carrying out a number of initiatives to increase tourists to Japan in conjunction with the Visit Japan campaign, which is being conducted for this purpose.

Specifically, JR East is exchanging and selling discount rail passes that include JR EAST PASS for unlimited travel on the JR East network, JAPAN RAIL PASS for unlimited travel on all JR lines, Suica & N'EX, which combines a discounted Narita Express ticket with a Suica card, and Suica & MONORAIL, which provides a discount on the Tokyo Monorail from Haneda Airport along with a Suica card. The Group has also set up travel offices expressly for visitors to Japan. JR East Travel Service Centers are conveniently located at Narita Airport Station, Narita Airport Terminal 2 Station, and Haneda Airport International Terminal Station. C