Shinkansen networks and JR East





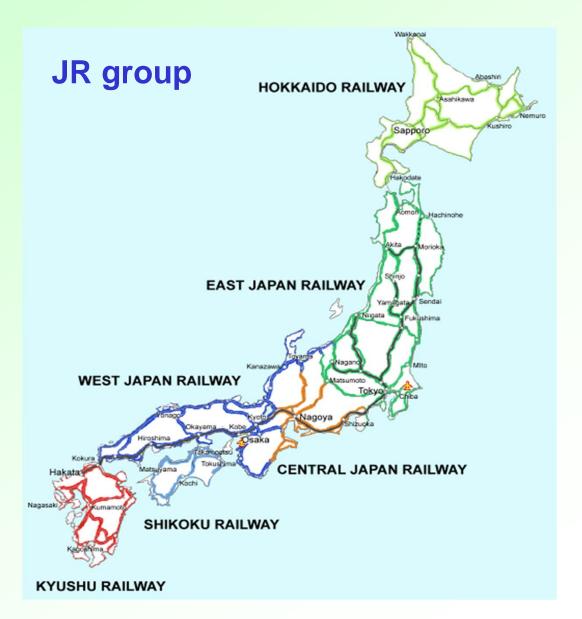
Shinkansen networks in Japan



Railways in Japan

	Railways in Japan	JR Group
No. of Operators	207 (*1)	7 (*2)
Operating (km)	27,314	20,000
No. of Employees (*3)	210,557	129,374
Passenger-km	385.5 billion	242.3 billion
Ton-km	22.5 billion	22.3 billion

(As of 2009.03.31)



^{*1:} JR Group + other railways, light rail, monorail, etc.

^{*2: 6} Passenger railways + 1 Freight railway

^{*3:} People engaged in railway business



Kagoshima-Chuo

Current Shinkansen Network Daily average No. of passengers: 930,000 (as of 2012.03.31) Total Length: 2,620 km Tokaido and Sanyo Shinkansen: 568,000 Tohoku and Joetsu Shinkansen: 304,000 Kyushu Shinkansen: 32,000 Hokuriku Shinkansen: 26,000 Sapporo **Akita Line** (Upgraded Conventional line) JR East Shin-Hakodate 2016-JR Central Yamagata Line Shin-Aomori (Upgraded Conventional line) JR West Hachinohe 2010 2002 JR Kyushu Q 1997 Joetsu Shinkansen(270km) Morioka **Under Construction** Hokuriku Shinkansen (117km) Tohoku Shinkansen (593km) Niigata Planned line 1982 Kanazawa Sanyo Shinkansen (554km) 1982 Nagano 1982 Hakata 1997 Shin-Osaka Omiya Takasaki Omiya 1977 Okayama Nagoya 1985 Nagasak Shin-Yatsushiro okaido Shinkansen (515km) 2004 Ueno 1991 shu Shinkansen (127km) Tokyo



Characteristics of Shinkansen

High-speed operation

Max. speed of 300 km/h (320km/h from FY 2013)

High-density mass transport

15 trains per hour Max. of 1,600 passengers

Safety

No. of passenger fatalities:
0 since the start of operations

Reliability

Train delay time: Less than 30 sec. for average of all trains per year

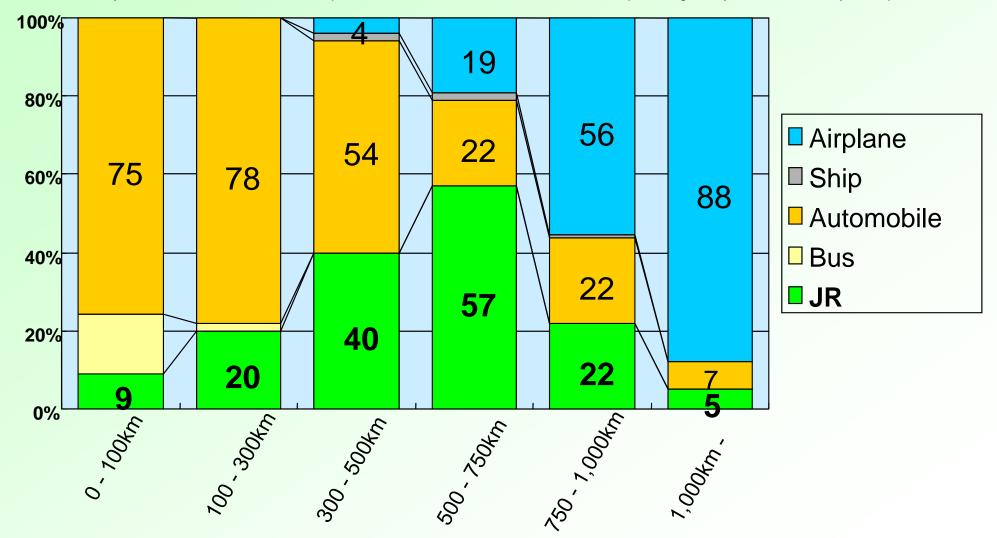
Eco-friendliness

Less Co₂ emissions



The Shinkansen Share versus other transport modes

Source: The Ministry of Land, Infrastructure, Transport, and Tourism, Research of the No. of passengers by distance and by transport mode





Future Development Plans for the Shinkansen In operation: 2,620km **Sapporo** Hokkaido Shinkansen Under construction: 434km completion planned **Shin-Hakodate** at the end of fiscal 2015 Construction planned: 533km Shin-Aomori Hokuriku Shinkansen completion planned at the end of fiscal 2014 Kyushu Shinkansen (Nishi-Kyushu route) completion planned Kanazawa in fiscal 2017 Nagano Hakata Shin-Osaka Nagasak

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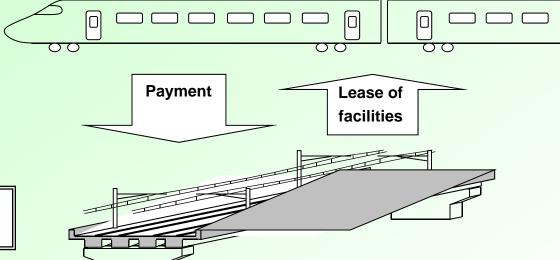
(as of 2012.03.31)



Separation of Shinkansen Line Construction and Operation

O Separation of construction and operation

JR (Operation of Shinkansen)



JRTT* (Construction and ownership)

*JRTT: The Japan Railway Construction, Transport and Technology Agency

O Subsidy

(Budget for 2012 fiscal year: 2.67 billion euro)

Revenue from the sale of Shinkansen lines* * to JR companies in 1991 1.07 billion euro	Public works expenditure in national budget 706 million euro	Local government 890 million euro
National government		Local government
17.8 billion euro		890 million euro
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^{**} Tokaido Shinkansen, Sanyo Shinkansen, Joetsu Shinkansen, Tohoku Shinkansen (Tokyo-Morioka)



Shinkansen networks in JR East





Three types of Shinkansen

High speed



Large capacity





Through service



★ With coupling/uncoupling functions



About JR East



Company Profile of JR East



- **■** Established in 1987
- 60000 employees
- 7512km network
- 1689 stations
- **■** 70 lines

S: Shinkansen

C: Conventional lines
*(): stations also served by C

(as of 2012.03.31)

Length of	7,512.6	S: 1,134.7 (15%)
operating km (km)		C: 6,377.9 (85%)
No. of stations	1,689	S: 37 (28*)
		C: 1,680
No. of trains	12,757	S: 327 (2%)
per day		C: 12,430 (98%)
Passenger-km (Billion-km)	125.1	S: 18.4 (15%)
		C: 106.7 (85%)



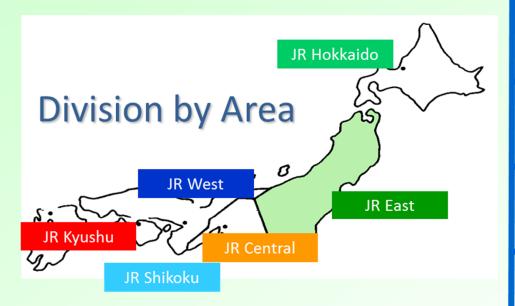
Schemes of JNR Reforms

Japanese National Railways (JNR)



Transferred in April 1987

JNR Settlement Corporation



6 Passenger Railway Companies

Hokkaido, East, Central,

West, Shikoku, Kyushu

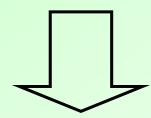
- Japan Freight Railway Company
- Railway Telecommunication Company
- Railway Information System Company
- Shinkansen Holding Corporation
 - Railway Technical Research Institute



Patterns of Breakup and Privatization

Factors for judgment

- 1 Community-based multilateral management of major private railways as models
- 2 Full consideration to regional situations of passengers' mobility and train operations
- 3 By clarifying proper management size and responsibilities, fermentation of competitive consciousness



Separation methods to accommodate individual characteristics of passenger and freight transports are applied.

Passenger railways

Territorial division

Management to accommodate regional situation and coordination of infrastructure and train operation

Freight railway

Separation of train operation and infrastructure management

Due consideration to characteristics of freight transport, separation from passenger railways



JR East Revenue Structure

※ €1=\100

2011.4 - 2012.3

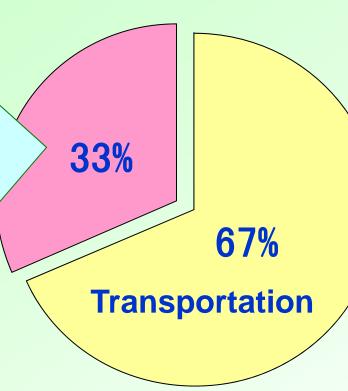
Shinkansen

Non Rail Business



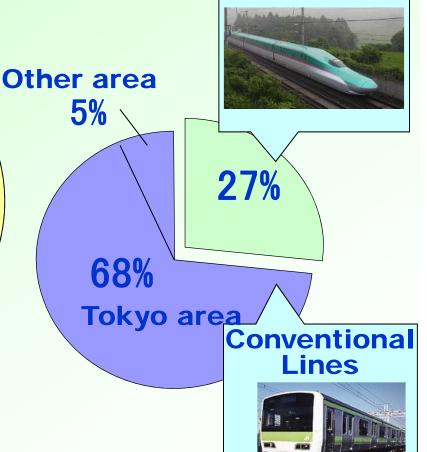






JR EAST
Group Total
€25 billion

JR EAST Group
Operating income € 3.6 billion



Rail Revenues €16 billion

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