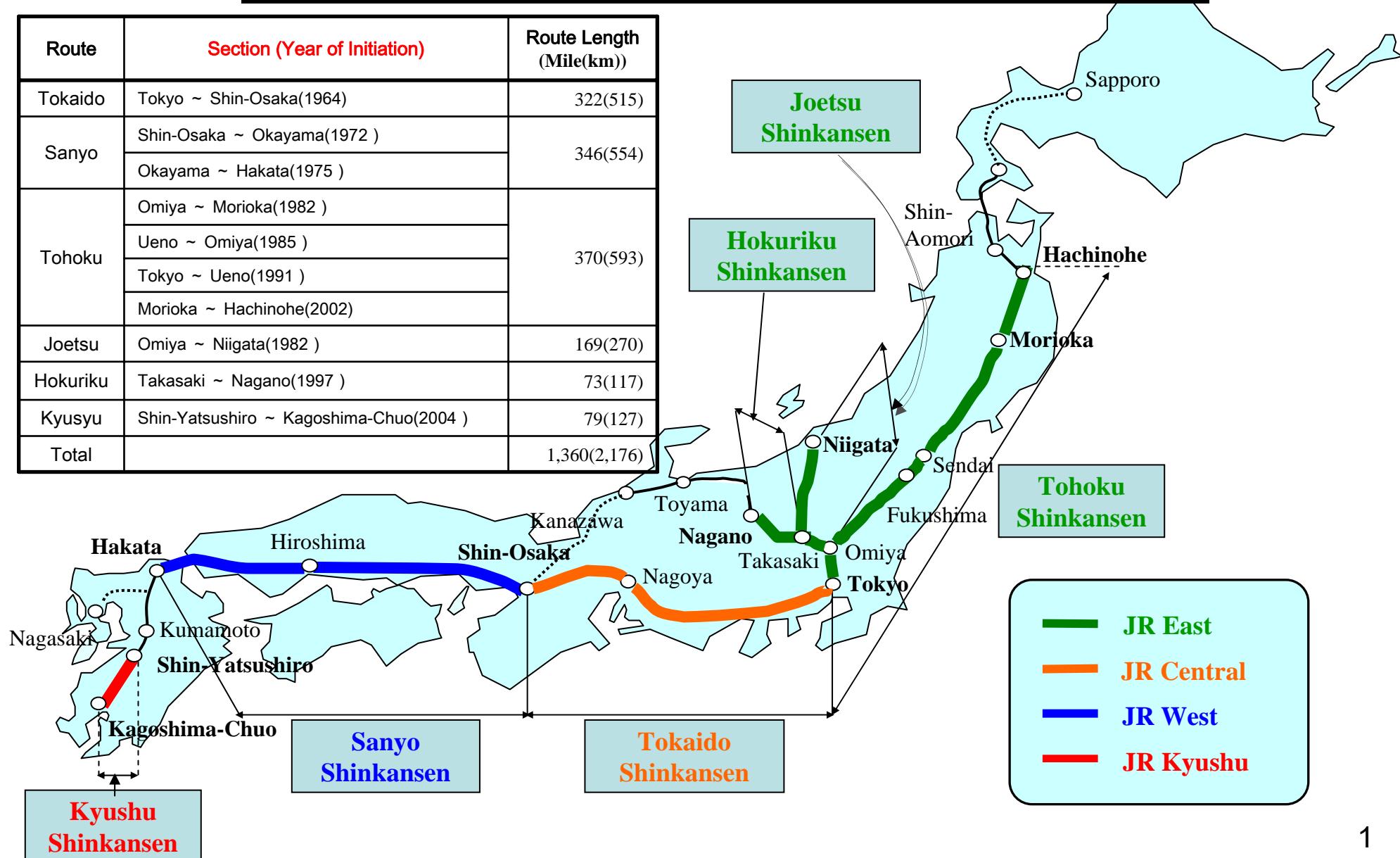


THE SHINKANSEN

- Japan's high-speed railway -

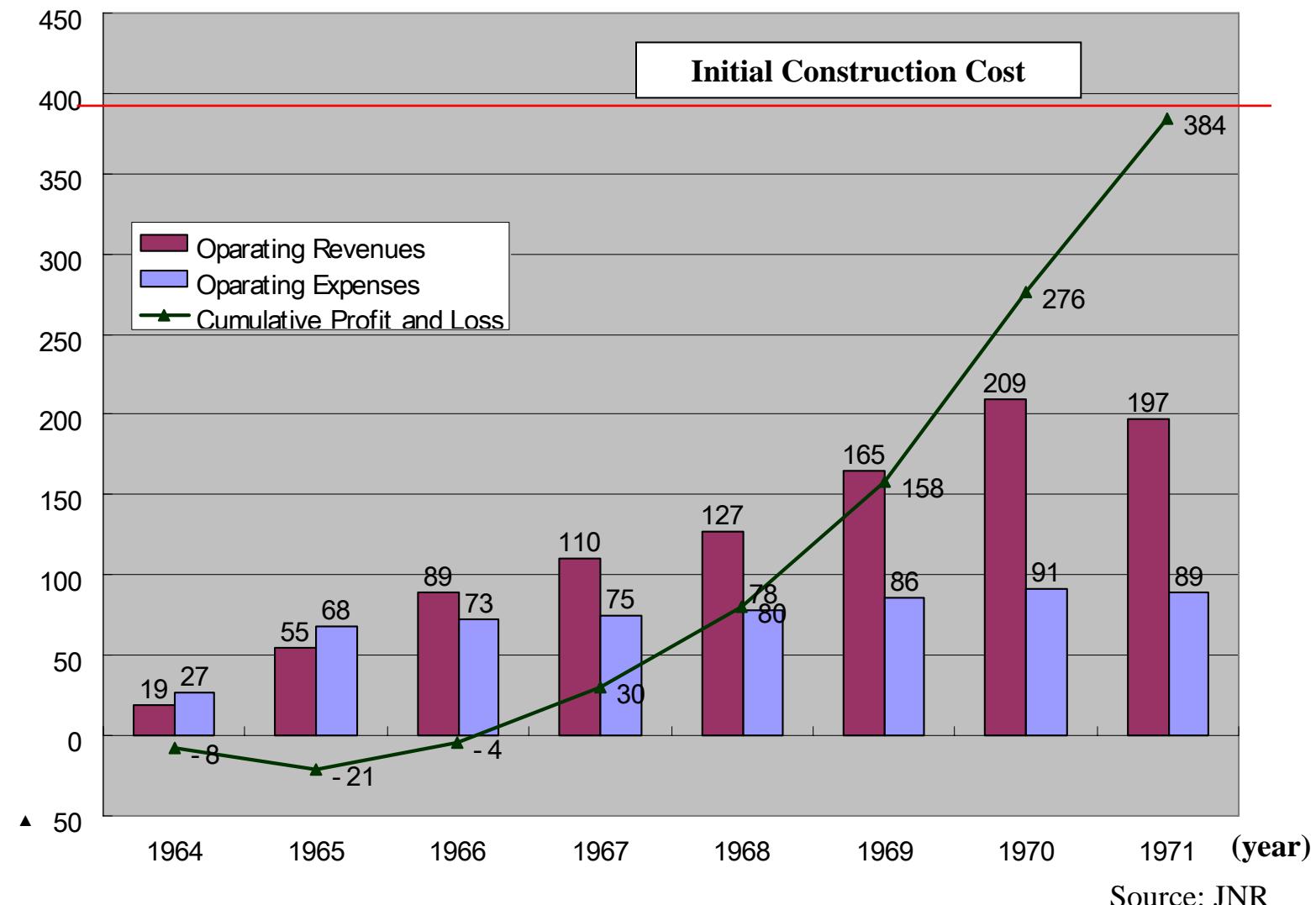
The Current Situation of the Shinkansen

Route	Section (Year of Initiation)	Route Length (Mile(km))
Tokaido	Tokyo ~ Shin-Osaka(1964)	322(515)
Sanyo	Shin-Osaka ~ Okayama(1972)	346(554)
	Okayama ~ Hakata(1975)	
Tohoku	Omiya ~ Morioka(1982)	370(593)
	Ueno ~ Omiya(1985)	
	Tokyo ~ Ueno(1991)	
	Morioka ~ Hachinohe(2002)	
Joetsu	Omiya ~ Niigata(1982)	169(270)
Hokuriku	Takasaki ~ Nagano(1997)	73(117)
Kyusyu	Shin-Yatsushiro ~ Kagoshima-Chuo(2004)	79(127)
Total		1,360(2,176)

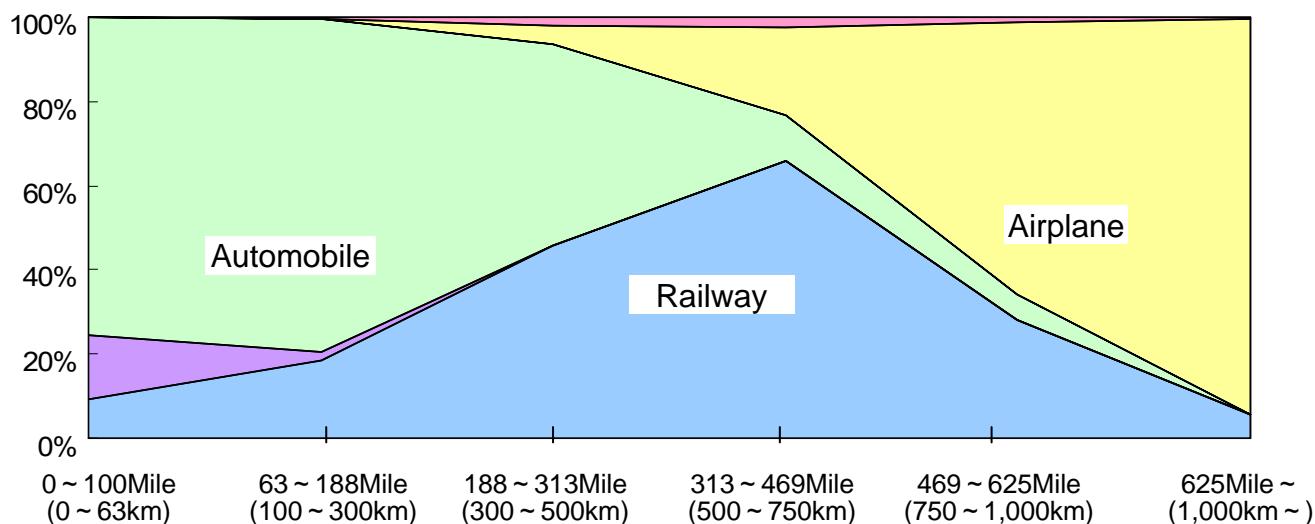


The Financial Balance of Tokaido Shinkansen

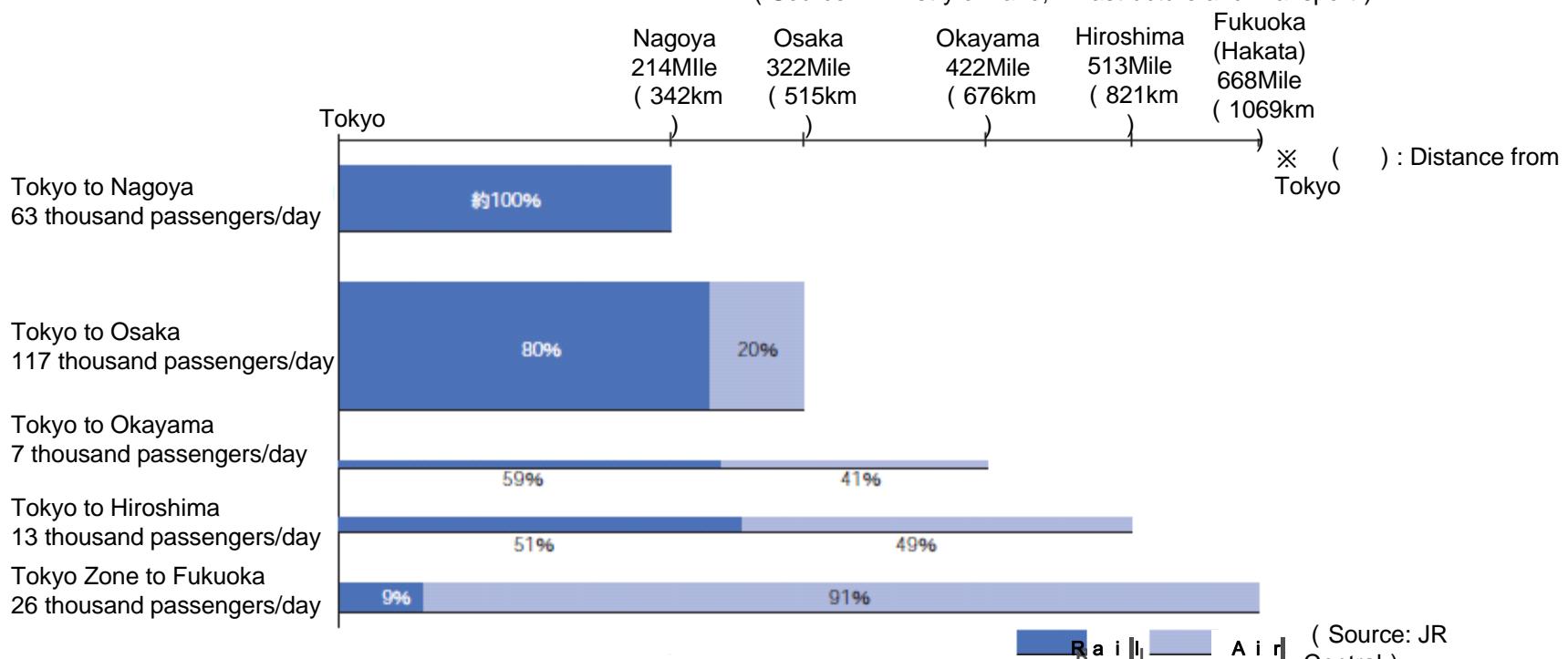
(billion yen)



Shares of Passenger Transportation Modes According to Distances



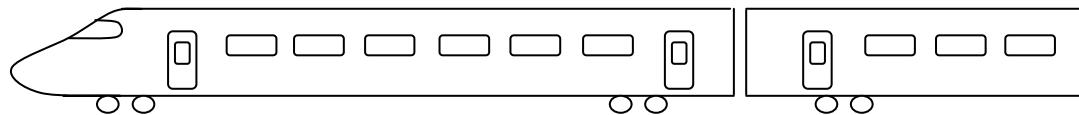
(Source : Ministry of Land, Infrastructure and Transport)



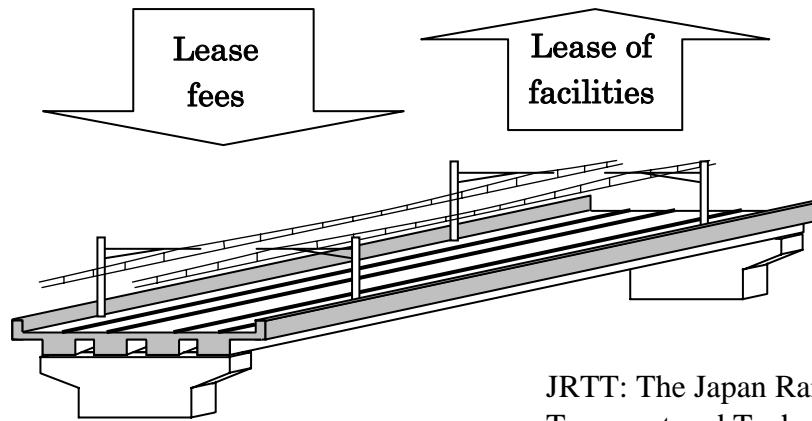
Development of New Shinkansen

○ Construction and Operation of New Shinkansen

JR (Private)
(Operating Shinkansen)



JRTT (Government Agency)
(Construction and Possession)



JRTT: The Japan Railway Construction,
Transport and Technology Agency

○ Finance

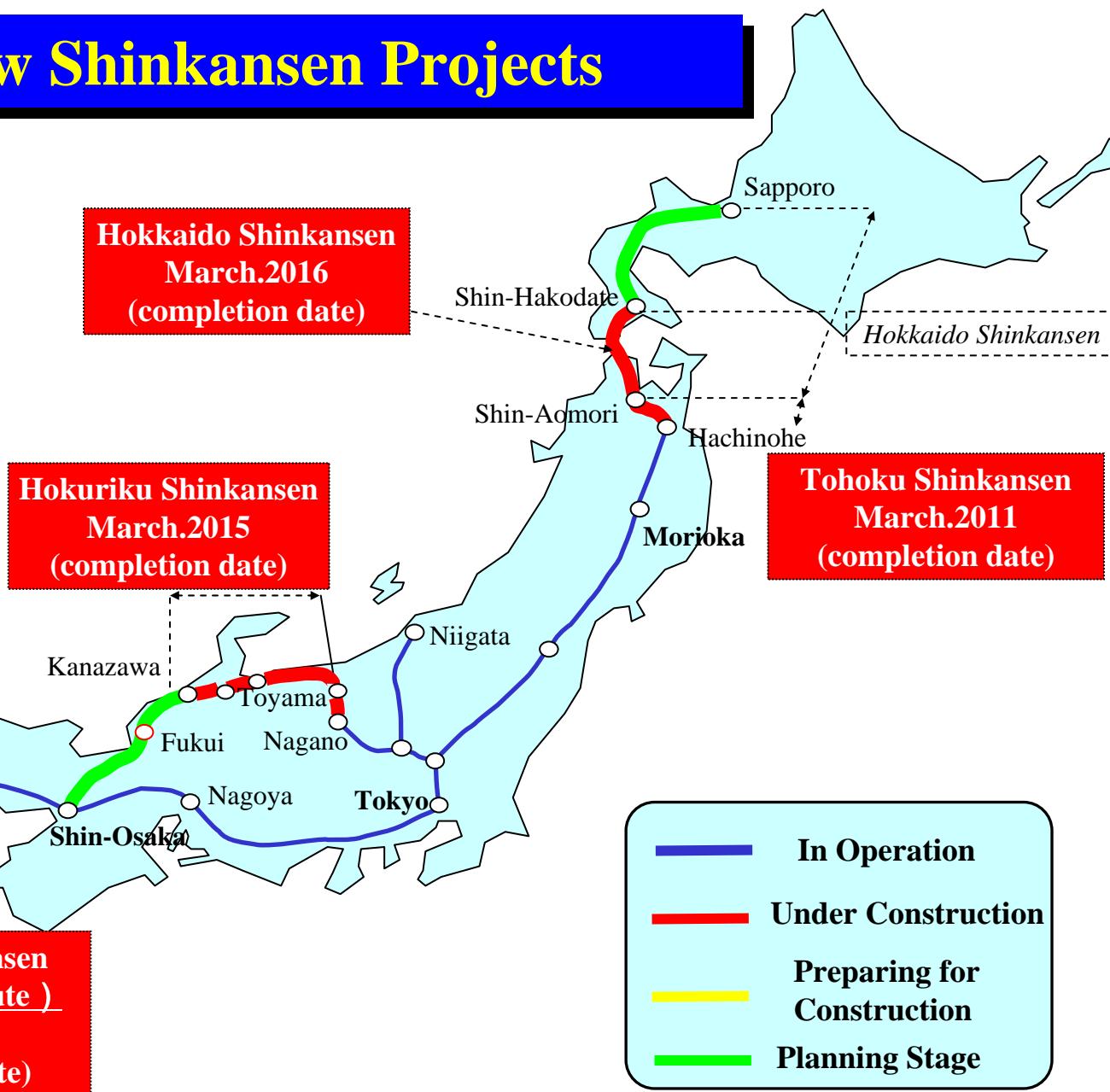
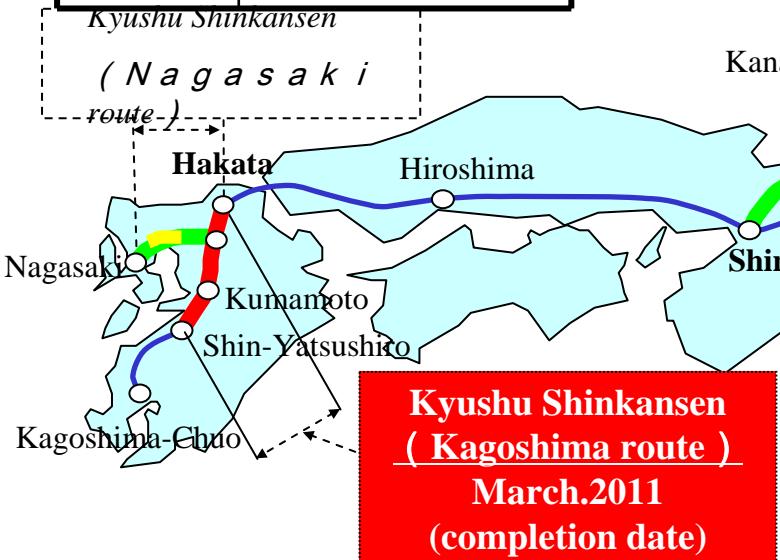
(Budget of 2007 fiscal year)

Payments for the procurement of existing Shinkansen lines ※ 105.2 billion yen	General Account 70.6 billion yen	Local Governments 87.9 billion yen
National Government 175.8 billion yen		Local Governments 87.9 billion yen

※ Tokaido Shinkansen , Sanyo Shinkansen , Joetsu Shinkansen , Tohoku Shinkansen(Tokyo-Morioka)

New Shinkansen Projects

Route	Under construction Route length (mile(km))
Hokkaido	9 3 (1 4 9)
Tohoku	5 1 (8 2)
Hokuriku	1 4 3 (2 2 8)
Kyushu	8 1 (1 3 0)
Total	3 6 8 (5 8 9)



Impact of Shinkansen Introduction

Time Reduction

Hokuriku Shinkansen

(Takasaki-Nagano)

Tokyo-Nagano



Tohoku Shinkansen

(Morioka-Hachinohe)

Tokyo-Hachinohe



Kyusyu Shinkansen

(Shin Yatsushiro-Kagoshima Chuo)

Hakata-Kagoshima Chuo

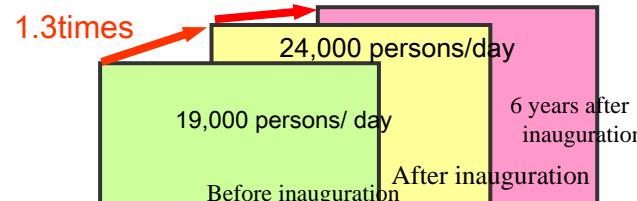


Passenger Increase

Hokuriku Shinkansen

(Takasaki-Nagano)

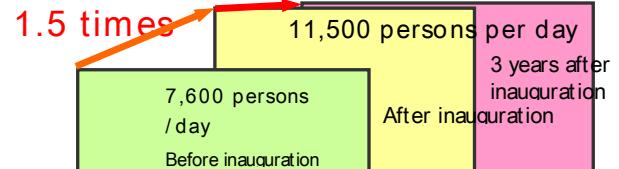
26,700 persons/day



Tohoku Shinkansen

(Morioka-Hachinohe)

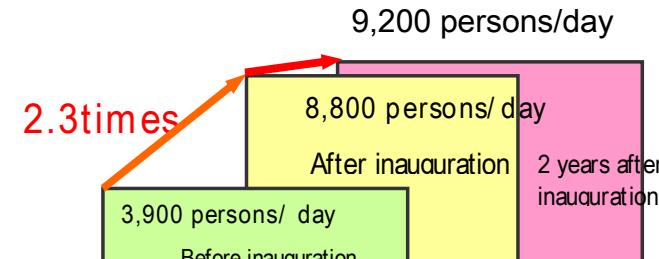
11,600 persons/day



Kyusyu Shinkansen

(Shin Yatsushiro-Kagoshima Chuo)

9,200 persons/day



Number of users of former express and Shinkansen lines one year before and after line inauguration

Benefits of the Shinkansen

High Speed

188 miles/h (300 km/h) Top Speed

2 hrs 30 min between Tokyo and Osaka (322 miles)

(Express bus takes more than 8 hrs)

High Density & High Level of Services

Up to 15 trains leave in an hour during the business day

Safety

Zero fatal accidents

Earthquake-proof

Reliability

Average delay time :
6 seconds (FY2003)

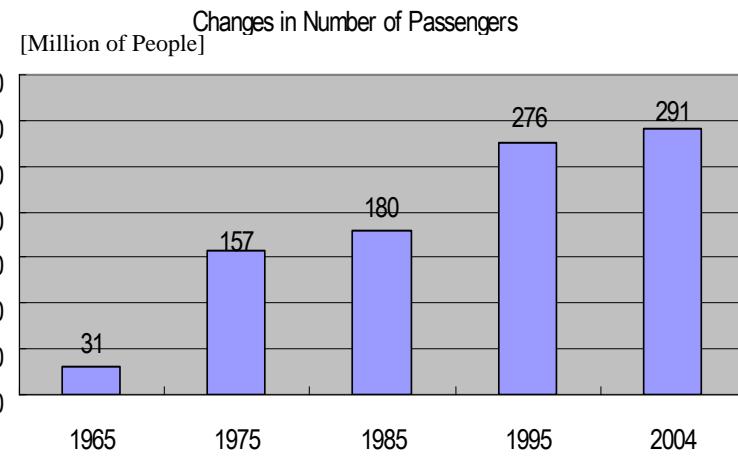
Environmentally Friendly

Low Energy Consumption

Low CO₂ emission

**High Density &
High Level of
Services**

- **High density – Mass transportation**
 - • • High Frequency: Interval can be as small as 3 minutes.
 - • • Passengers carried in FY2004: 291 million
- **Services Responding to Passenger Needs**
 - • • Local Express trains using Shinkansen grade gauge –
Passengers do not have to switch trains for local line.
 - • • Double Decker Cars



JR East Rolling Stocks

Safety

Fatal accidents to date: **ZERO**

No fatality for over 42 years since 1964

Proved to be Manageable through **Earthquakes**

Exclusive high-speed railway
without grade crossing

Traffic Control System

Automatic Train Control (ATC)
controls and stops trains to avoid collisions

Protective system
against Earthquakes

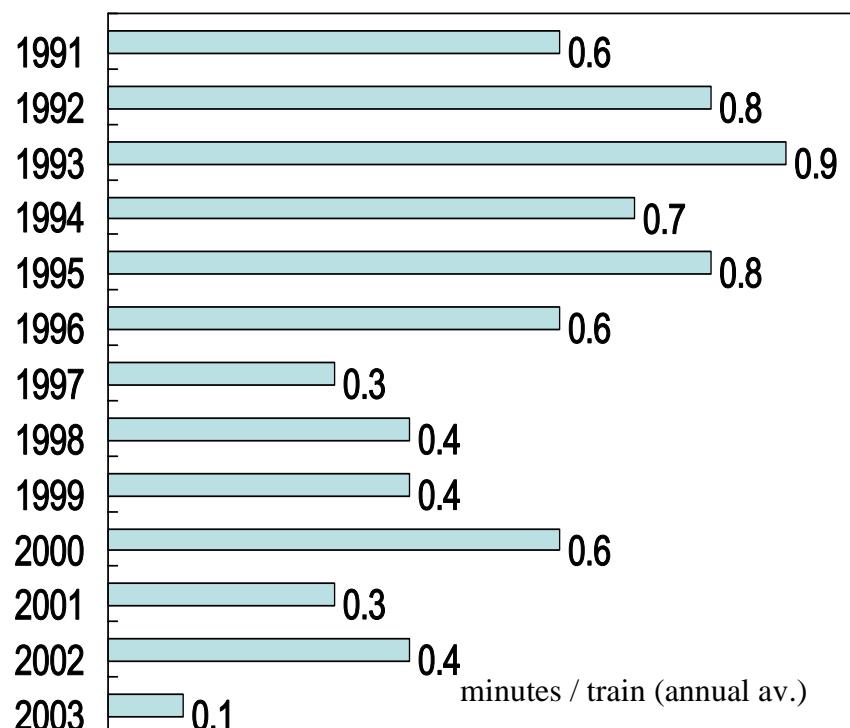
Trains stop automatically immediately after
a major earthquake

Reliability

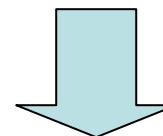
Delay time of Tokaido Shinkansen:

6 seconds per train (2003)

Punctuality of Tokaido Shinkansen trains



- Advanced Operation Management
- Skillful Operations
- Reliable Rolling Stocks and Control System



High reliability

**Environmentally
Friendly**

Low CO₂ emission

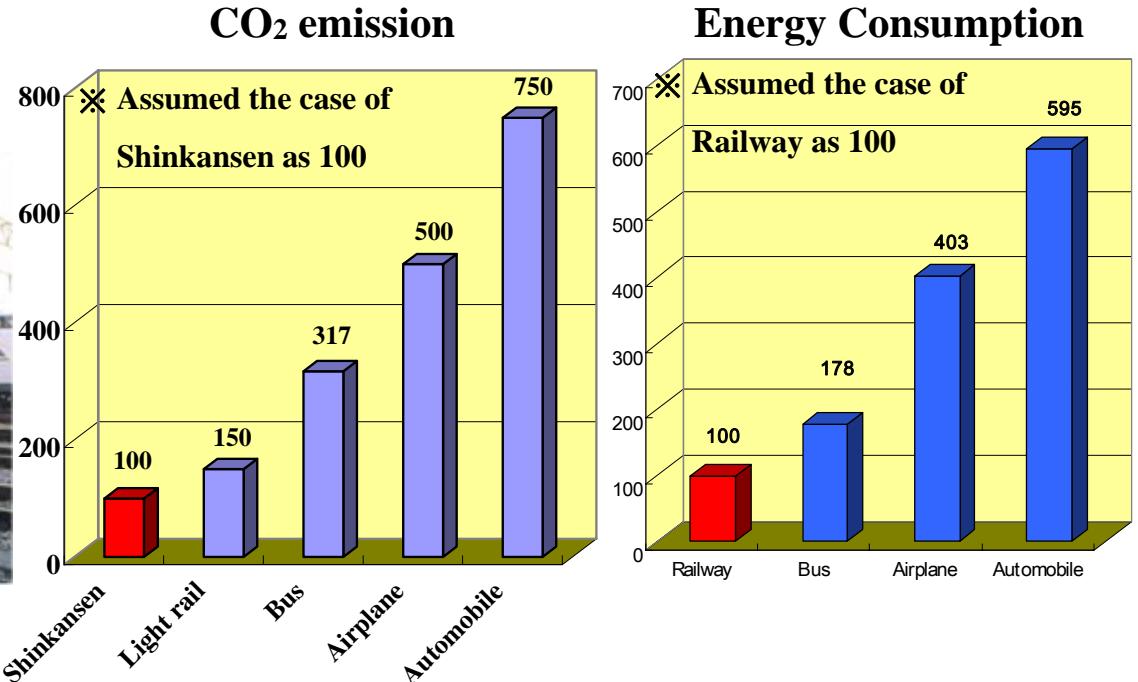
- · · CO₂ emission from the Shinkansen is;
1/5 that of Airplanes, 1/8 that of automobiles

Low Energy Consumption

- · · Energy Consumption of Railways is;
1/4 that of Airplanes, 1/6 that of automobiles



J R
Central



Safe and Reliable High Speed Train

