BUSINESS

Shin-Otaru

Shin-Hakodate-Hokuto

Oshamanbe O

Shin-Aomori

Akita Q

Sapporo

Business

Development of New Shinkansen Lines (Hokuriku Shinkansen Line)

FIVE NEW SHINKANSEN LINES PROPOSED IN 1973 UNDER THE NATIONWIDE SHINKANSEN RAILWAY DEVELOPMENT LAW

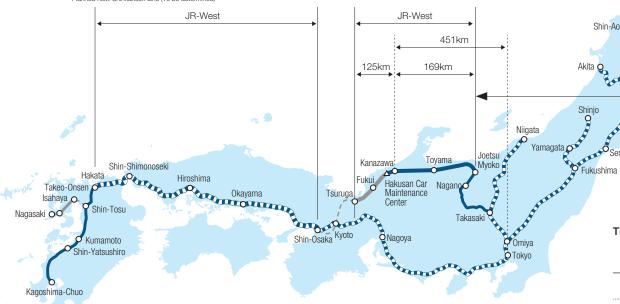
Line	Lines in Operation	Approved Zone for Construction Implementation Plan	Expense Burden	
Tohoku (Morioka-Aomori)	Morioka — Shin-Aomori (opened in December 2010, 178km)			
Hokuriku (Tokyo–Osaka)	Takasaki — Nagano (opened in October 1997, 117km) Nagano — Kanazawa (opened in March 2015, 228km)	Kanazawa — Tsuruga (125km)	Central government (existing Shinkansen transfer revenues, public utilities expenses) Local governments (one-half of the central government) JR (usage fees with the upper limit to be	
Hokkaido (Aomori–Sapporo)	Shin-Aomori — Shin-Hakodate-Hokuto (opened in March 2016, 149km)	Shin-Hakodate-Hokuto — Sapporo (211km)		
Kyushu (Fukuoka–Kagoshima)	Hakata — Kagoshima-Chuo (opened in March 2011, 289km)		determined by the range of expected benefits)	
Kyushu (Fukuoka–Nagasaki)		Takeo-Onsen — Nagasaki (66km)		



CORPORATE



-- Planned New Shinkansen Line (To be determined)



Hachinohe

Morioka

- 1) Nagano-Hakusan Car Maintenance Center Opened on March 14, 2015.
- 2 Hakusan Car Maintenance Center-Tsuruga Scheduled to be completed by end of FY2024.3.

TRAVEL TIME AND MARKET SHARE

Hokuriku Shinkansen

	JR			JR market share*4	
	Before opening*1	After opening*2	Airlines*3	Before opening (FY2014.3)	After opening (FY2021.3)
Tokyo — Ishikawa	About 3h 50m	2h 27m	About 3h 00m	31.2%	78.2%
Tokyo — Toyama	About 3h 10m	2h 07m	About 2h 50m	55.2%	92.3%

 $^{^{\}ast} 1.$ Using the Joetsu Shinkansen and Hakutaka limited express train

^{*2.} Time required for fastest "Kagayaki"

^{*3.} Includes airport access and egress time

^{*4.} Source: Statistical survey of Ministry of Land, Infrastructure, Transport and Tourism