# Japan Railway Construction, Transport and Technology Agency (Incorporated Administrative Agency) (Construction Account) https://www.jrtt.go.jp/

1. Summary of operation	ns implemented	l using FIL	P funds								
Under the private railway of private railway syster transportation, and main lines to form nationwide promoting regional deve Note: Major non-FILP p	ms in major urba ntain and improv e high-speed rail elopment.	an regions to ve urban fur lway networ	o increase c actions. Unc ths to contri	ommuter der the Sl bute to d	r tran hinka levelo	ansen ne oping th	on capacity w bullet tra e national e	, reduce congestion	rates	s, increase the conveni nstructs and leases Shi	ence of inkansen
2. Amount of lending un	der FY2022 F	ILP									
										nit: billion yen)	
	)22 FILP		Estima	ated out	stanc	ding an		LP lending at the	e end	of FY2021	
	11.1						1,329	9.8			
3. Estimated policy cost	analysis of the	project				_					
(1) Policy cost			(Unit: b	oillion ye	n)			nparison analysis tuation from previous yea	ar)	(	Unit: billion yen)
Category	у	FY2021		Fluctuati				FY2021	/	FY2022	Simple fluctuation
1. Government expendit (subsidies, etc.)	ture	764.3	684.0	-80.	.4		Simple comparison (before adjustment		54.3	684.0	-80.4
2. Government revenue						cost		1) Adjusting initial y		<ol> <li>Adjusting assumed interest rates</li> </ol>	Real
(payments to the govern						Policy cost	Past year comparisor	(Analysis results after adj initial year to that for FY		(Analysis results of re-estimation using assumed interest rate for	fluctuation
3. Opportunity cost of c investments, etc.	apital	-	-		-	Po	(after	analysis)		FY2021)	(2-1)
Total (1+2+3=polic	cy cost(A))	764.3	684.0	-80.	.4	[D	adjustment	) 68 n factor analysis]	84.0	684.0	-
Analysis period (years)		24 years	23 years	-1 yea	ar		ctors behind	l policy cost increas	<u>se</u>		
(2) Breakdown of policy cos Category (A) Policy cost (previou 1) Opportunity cost of capit provided before the beginni 2) Policy cost expect accrued during the a	y isly cited) tal investments, etc. ng of the analysis period ted to be newly	FY2021 764.3	funds (1 FY2022 684.0 - 684.0	Unit: billion y Fluctuati -80.	on 4 -	<u>OFa</u> - Noi		l policy cost decrea:	<u>se</u>		
	expenditure	764.3	684.0	-80.	.4						
	venue (payments to	-	-		-						
Opportunity c etc.	cost of surplus,	-	-		-						
Opportunity c investments, e	-	-	-		-						
(4) Sensitivity analys			ons change						J)	Jnit: billion yen)	
(previously cited)	Case before the negative interest policy*2	t rate	Fluctuation			nment exp bsidies, et	c.) (pay	2. Government revenue ments to the government, etc.)*1		pportunity cost of al investments, etc.	
684.0	6	582.8		-1.2			-1.2	-		-	
	Case of a 1% dec in operating reve		Fluctuation	1. (		nment exp bsidies, et	enditure (pay	. Government revenue ments to the government, etc.)*1		pportunity cost of al investments, etc.	
0.+00	C			I				-			

(Note) Components in each column may not add up to the total because of rounding.

\*1 Government revenue (payments to the government, etc.) is booked as a negative amount. Example: -10 b. yen for 10 b. yen in payments to government, etc.

\*2 Assumed interest rates (discount factor and future interest rate) are based on the market yield on Japanese government bonds on January 28, 2016, before the introduction of the negative interest rate policy.

## 4. Outline of estimation and project prospect employed in the analysis

## [Outline of estimation]

Subject to the estimation are the private railway project for the construction, major improvement and transfer of private railways subjected to FILP and the Shinkansen project for the construction and leasing of Shinkansen lines. (As for the Shinkansen project, only three portions of three new lines under construction (Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo portion), Hokuriku Shinkansen (Kanazawa - Tsuruga portion), Kyushu Shinkansen (Takeo Onsen - Nagasaki portion)) are subjected to the estimation.)

#### 1) Private railway project

• The estimation is made based on the current system (cost collection method). Under the system, a part of the funds for the construction of railways that is considered as interest-bearing loans will be collected in full through of the payments for the transfer collected after the transfer from the railway operator by the principal-interest equal semiannual repayment system.

• The length of analysis period is 22 years (to FY2043), during the project will be completed.

#### 2) Shinkansen project

· Fiscal loans are planned to cover the construction of three portion of three new lines under construction and be repaid with rent income.

• The analysis period covers 23 years (to FY2044) in which the fiscal loans will be repaid.

The future business was simulated based on the preconditions given under the above-mentioned presuppositions. The results of the simulation were used to calculate the necessary policy cost to carry out the projects.

## [Project prospect]

1) Private railway project

• As the construction of private railway systems based on instructions in construction plans was completed in FY2018, the transfer of private lines is only projected for years from FY2019.

• Values for the transfer of private lines shall be collected an equal semiannual installment basis for 25 years after transfer, and will be totally redeemed by FY2043. No prepayment is expected from railway operators.

#### 2) Shinkansen project

• As noted in an agreement between the government and ruling parties on "Handling of New Shinkansen Railway Lines" on January 14, 2015, new Shinkansen lines will form nationwide high-speed railway networks to contribute to developing the national economy, expanding the national life sphere and promoting regional development and should be opened to produce their effects as early as possible for the national economy. The completion and opening of the three new lines under construction is expected to take a long period of time. However, exercising the effect of opening the new lines at an early time by making early, intensive investment within the limits of the planned operating expenses is very significant for the national economy. Therefore, the timing of the completion and opening is planned to be brought forward under the assumption that the local governments of regions located along the new lines will make the greatest possible efforts.

(Schedules for opening of three new lines' three portions under construction)

\*Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo portion): Scheduled to be completed at the end of FY2030

\*Hokuriku Shinkansen (Kanazawa - Tsuruga portion): The greatest possible efforts to be made toward completion at the end of FY2023

\*Kyushu Shinkansen (Takeo Onsen - Nagasaki portion): Scheduled to be opened in September 2022

•JRTT will steadily implement the development of new Shinkansen lines by utilizing long-term, fixed low-interest rate FILP funds when making advance use of future rent income as part of the financial source for construction of the lines.

				(Unit: billion yen)
		Estimated	Planned	Assumptions for calculation
	FY	2021	2022	2023-2033
C	Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo)	95.0	135.0	1,153.7
Construction cost	Hokuriku Shinkansen (Kanazawa - Tsuruga)	330.0	93.0	207.8
cost	Kyushu Shinkansen (Takeo Onsen - Nagasaki)	61.0	12.0	28.3
	Total	486.0	240.0	1,389.8

# 5. Reasons for granting of subsidies, mechanism and underlying laws

#### 1) Private railway project

The Agency receives subsidies from general accounts for loans and a part of the interest payable of railway construction bonds, to ease the burden of transfer prices on private railway operators.

(Underlying laws and regulations)

As for subsidies, each operator receives half of what exceeds beyond the interest rate specified in the annual budget for funds financed in each year. There are no underlying laws. (they are budgetary measures)

#### 2) Shinkansen project

Based on the Nationwide Shinkansen Railway Development Act, the Minister of Land, Infrastructure, Transport and Tourism designated JRTT as the builder of three new Shinkansen lines – Hokkaido Shinkansen (Aomori - Sapporo), Hokuriku Shinkansen (Tokyo - Osaka) and Kyushu Shinkansen (Fukuoka - Nagasaki) – for which a construction plan was decided on in 1973.

Based on an agreement between the government and ruling parties in December 2004 and that in December 2011 on "Handling of New Shinkansen Railway Lines," three new Shinkansen lines' three portions – Hokkaido Shinkansen's Shin-Hakodate-Hokuto - Sapporo portion, Hokuriku Shinkansen's Kanazawa - Tsuruga portion and Kyushu Shinkansen's Takeo Onsen - Nagasaki portion – totaling about 393 kilometers are now under construction. (Underlying laws and regulations)

Part of the subsidies are covered by rent income from the Japan Railway group. Of the remaining subsidies, two-thirds are provided by the central government and one-third by local governments under Article 13 of the Nationwide Shinkansen Railway Development Act and Article 8 of an ordinance for the enforcement of the Act.

Payments to the National Treasury are defined for in the Japan Railway Construction, Transport and Technology Agency (Incorporated Administrative Agency) Act.

[Japan Railway Construction, Transport and Technology Agency (Incorporated Administrative Agency) Act]

(Exceptions to profit and loss deposition, etc.)

Article 18:

The Agency may allocate funds approved by the Minister of Land, Infrastructure, Transport and Tourism equivalent to the amount of reserves (if such exist) provided for in Article 44, Paragraph 1, of the Law for development implemented as provided for in Article 44, Paragraph 1 or 2, relevant to the final project year of the medium-term target period) provided for in Article 29, Paragraph 2, Item 1, of the Act ("medium-term target period" in this and the following paragraph) in Grant Account to the financing of operations provided for in Article 13 (including transfers provided for in the foregoing article, Paragraph 3, and supplementary provisions, Article 3, Paragraph 11) based on the stipulations of the approved medium-term plan of Article 30, Paragraph 1, of the Act (the plan subsequent to revision in the event that revision has been authorized as provided for in the latter section of the Paragraph 1) for the medium-term target period.

2. The Agency's railway facility subsidies account may establish the reserve fund which is defined in the same paragraph in the medium-term target period subsequent to current medium-term target period if there is still remaining balance (if such exists) of funds approved by the Minister of Land, Infrastructure, Transport and Tourism derived by deducting funds approved.

3. The Agency shall pay the remaining balance (if such exists) to the National Treasury derived by deducting the amount approved as provided for in preceding two paragraphs from an amount equivalent to reserves as provided for in Paragraph 1.

4. In regard to the application of the provision of Article 44, Paragraph 1, of the Act in the account relating to operations described in Paragraph 1, Items 1 to 3, of the foregoing article, the text "in the event of allocation to uses of Paragraph 3 as provided for in the same paragraph" in said paragraph shall read "in the event of the payment to the National Treasury of an amount calculated as stipulated by government ordinance or allocation to uses of Paragraph 3 as provided for in the same paragraph."

5. The stipulations of Paragraphs 1 and 3 shall apply correspondingly to the accounts of the foregoing paragraph. In such event, "Article 44, Paragraph 1, of the Act" shall read "Article 44, Paragraph 1, of the Act upon revision as provided for in Paragraph 4."

6. In addition to the stipulations of the foregoing paragraphs, items required for payment procedures for payments and the disposal of other reserves shall be stipulated by government ordinance.

## [Act on General Rules for Incorporated Administrative Agencies]

#### Article 44

For each business year, when profits have accrued as a result of the calculation of profits and losses, an Incorporated Administrative Agency must offset any losses carried forward from the preceding business year, and if there is a remainder, it must record the amount of the remainder as reserve funds; provided, however, that this does not apply if it appropriates the amount of the remainder for the use referred to in paragraph (3) pursuant to the provisions of the paragraph.

2. For each business year, an Incorporated Administrative Agency must, when losses have occurred as a result of the calculation of profits and losses, record the losses by reducing the amount of the reserve funds under the provisions of the preceding paragraph, and if there is still a shortfall, it must dispose of the amount of the shortfall as a loss carried forward.

3. When there is a remainder provided for in paragraph (1), an Agency Managed under the Medium-term Objectives and a National Research and Development Agency may appropriate all or a part of the amount of the remainder for the use of a surplus referred to in Article 30, paragraph (2), item (vii) for a Medium-term Plan (meaning a Medium-term Plan referred to in Article 30, paragraph (1) as authorized under same paragraph (or a revised plan if the agency obtains authorization for revision under the provisions of the second sentence of same paragraph); the same applies hereinafter) or the use of a surplus referred to in Article 35-5, paragraph (2), item (vii) for a Medium to Long-term Plan (meaning a Medium to Long-term Plan referred to in Article 35-5, paragraph (1) as authorized under the paragraph (or a revised plan if the agency obtains authorization for revision under the provisions of the second sentence of the paragraph); the same applies hereinafter), by obtaining the approval of the competent minister.

4. The disposal of reserve funds under the provisions of paragraph (1) is specified by the relevant Individual Act.

# 6. Special remarks

The Corporation for Advanced Transport and Technology was integrated with the Japan Railway Construction Public Corporation on October 1, 2003, and subsequently reestablished as the Japan Railway Construction, Transport and Technology Agency (Incorporated Administrative Agency) based on the Reorganization and Rationalization Plan for Special Public Corporations.

#### 1) Private railway project

Policy costs of the Agency are required to promote the railway improvement in response to urgent issues, such as the demand for increased transportation capacity of work and social commuters and eased congestion in metropolitan areas, improved traffic flow, and maintenance and enhancement of urban functions. Since all the costs to raise funds for the projects shall be collected from railway operators on a long-term installment basis, the reduction of such costs through the investment of FILP would reduce construction costs, and consequently ease the burden on railway operators, and eventually on the general public, as ultimate users.

#### 2) Shinkansen project

The Economic Measures for Realizing Investment for the Future (Cabinet Decision on August 2, 2016) called for taking advantage of the current low interest situation for providing super-long-term funds for infrastructure development to accelerate investment for the future. Under additional FILP measures based on the second supplementary budget for FY2016, the JRTT construction account was set to utilize low-interest FILP loans for the construction of new Shinkansen lines to reduce interest cost and accelerate the construction.

(Reference) Outcome and social and economic benefits of operations

#### O Shinkansen project

Based on assumptions for the policy cost analysis, JRTT estimates users' benefits from Shinkansen development (improvement of convenience for users through shorter traveling time and fewer transfers), supplier benefits (a gap between railway operators' profits based on the absence and presence of Shinkansen development) and environment improvement benefits (environment improvement through users' switch from aircraft or automobiles to railways).

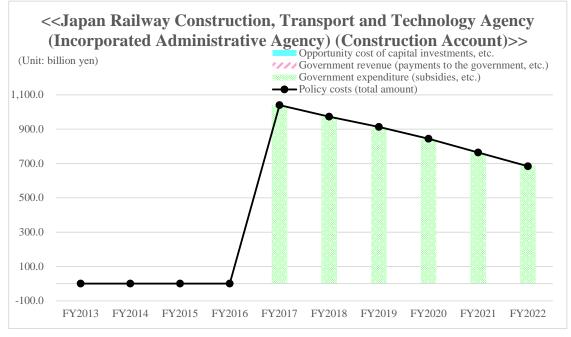
• Case for an analysis period of 50 years after Shinkansen opening with the social discount factor assumed at 4%: 3,794.6 billion years (I pit: billion year)

	(Unit: billion yen)
Portions for development	Total benefits
Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo)	1,574.5
Hokuriku Shinkansen (Kanazawa - Tsuruga)	1,543.6
Kyushu Shinkansen (Takeo Onsen - Nagasaki)	676.5
Total	3,794.6

• In the case where the social discount factor is set to that of the policy cost analysis: 3,567.1 billion yen

# Overview of policy cost analysis results

# [Changes in policy costs]



Note: Policy costs for each fiscal year differ in assumptions including interest rates applied to estimates.

									(Unit: bil	lion yen)
	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Policy costs (total amount)	-	-	-	-	1,040.1	972.7	913.2	844.5	764.3	684.0
Government expenditure (subsidies, etc.)	-	-	-	-	1,040.1	972.7	913.2	844.5	764.3	684.0
Government revenue (payments to the government, etc.)	-	-	-	-	-	-	-	-	-	-
Opportunity cost of capital investments, etc.	-	-	-	-	-	-	-	-	-	-

# [Explanation of policy cost trends]

•Policy costs of JRTT (Construction Account) had been generated through interest subsidies from the government to mitigate costs for the transfer of private railway lines. Under the estimates at interest rates set between FY2008 and FY2016, no interest subsidies were estimated for the future, with no policy cost generated.

•Regarding additional FILP measures under the second supplementary budget for FY2016, the government built on the Economic Measures for Realizing Investment for the Future (Cabinet Decision on August 2, 2016) to utilize low-interest FILP loans for the construction of new Shinkansen lines and subject the Shinkansen project to the policy cost analysis in FY2017. In FY2022, policy costs involving subsidies declined on progress in Shinkansen line construction.

# [FILP agency's self-assessment of policy cost analysis results (FY2022)]

As the shinkansen bullet train railway construction made smooth progress, the policy cost in the FY2022 analysis decreased by 80.4 billion yen from the previous year to 684.0 billion yen. The decrease reflected a fall in subsidies in FY2021 accompanying a change in the analysis period, exerting little impact on financial soundness.
In the sensitivity analysis (case before the negative interest rate policy), the policy cost decreased by 1.2 billion yen from the basic case due to a change in the discount factor, exerting little impact on financial soundness.
The results of the sensitivity analysis (case of a 1% decrease in operating revenues) showed no change in the policy cost compared with the basic case. This is because the amount of subsidies for the new Shinkansen line projects is fixed. Therefore, the impact on financial soundness is minimal.

Balance Sheet (Construction A	/						nit: million ye
Item	End of FY2020 (Result)	End of FY2021 (Estimated)	End of FY2022 (Planned)	Item	End of FY2020 (Result)	End of FY2021 (Estimated)	End of FY202 (Planned)
(Assets)				(Liabilities and net assets)			
urrent assets	1,559,638	1,506,269	, ,	Current liabilities	322,358	336,955	330,7
Cash and bank deposits Securities	235,971 214,900	286,038 214,900	220,339 214,900	Deposited subsidies Short-term borrowings	2,196 587	- 1,590	6
Installment sales receivables	1,017,662	952,382	896,824	Current portion of Japan Railway	70,500	1,590	68,9
Disbursements for uncompleted construction	28,162	51,088	88,457	Construction, Transport and	70,500	100,000	00,7
Accrued income	154	204	325	Technology Agency bonds			
Accounts receivable	56,875	1,656	1,656	Current portion of discount on	0	-	
Other current assets	5,913	-	-	bonds			
xed assets	6,751,055	7,196,443	7,300,334	Current portion of long-term	115,416	96,517	103,6
angible fixed assets	6,561,745	7,010,419	7,099,215	debts payable			
Buildings	158,438	149,555	169,425	Current portion of long-term	20,375	15,392	7,1
Structures	3,400,289	3,264,061	3,873,954	borrowings from other accounts			
Machinery and equipment	143,405	133,177	144,859	Current portion of lease	86	-	
Vehicles and transportation equipment	0	0	0	obligations			
Tools furniture and fixtures	140	150	155	Accrued payments	71,117	58,424	48,0
Land	782,164	782,908	847,666	Accrued expenses	1,855	1,832	1,8
Leasing assets	72	-	-	Advances received	9,784	9,714	9,6
Construction in progress	2,077,237	2,680,568	2,063,155	Advance received for entrusted business	29,300	52,227	89,5
ntangible fixed assets	140,092	134,585	147,062	Provisions	27,500	52,227	0),0
Perpetual lease	57,588	57,588	61,112	Provision for bonuses	800	930	ç
Software	160	304	418	Current portion of asset	14	-	
Facilities usage rights	82,318	76,667	85,505	retirement obligations			
Other intangible fixed assets	26	26	26	Other current liabilities	329	329	3
nvestment and other assets	49,218	51,439	54,058	Fixed liabilities	7,119,071	7,476,012	7,420,1
Shares in affiliates	-	3,400	6,490	Contra-accounts for assets	4,620,259	4,751,527	4,777,9
Long-term accounts due	41,717	40,208	38,699	Contra-accounts for assets funded by subsidies	2,909,893	2,786,132	3,215,5
Expected value of receivable loan fees	591 6,402	564 6,450	535 6,595	Contra-accounts for assets funded by expenses	44,773	43,022	38,6 737,5
Contra-accounts for provision for retirement benefits in Article 11-2	0,402	0,430	0,393	Contra-construction in progress funded by subsidies	980,566	1,187,325	151,5
of the Ministry of Finance Ordinance				Contra-construction in progress			
on the Japan Railway Construction, Transport and Technology Agency				funded by contribution	2,406	1,162	1,1
				Contra-accounts for Shinkansen assets	682,621	733,886	785,0
Funds transferred into the account for regional public transportation, etc.	-	103	923	Japan Railway Construction Transport and Technology Agency bonds	938,700	920,700	931,8
Security deposit and guarantee	508	713	816	Long-term borrowings	1,110,133	1,387,267	1,317,9
Security deposit and guarantee	508	/15	010	Long-term borrowings from other accounts	26,039	1,587,207	3,4
				Long-term advances received	160,741	151,027	141,3
				Provisions	15015	15 100	
				Provision for retirement benefits	15,245	15,408	15,9 229,1
				Contra-accounts for continuing liability Other fixed liabilities	245,485 2,469	236,968 2,469	229,1
				Provisions based on law	2,409	2,409	2,-
				Provision for adjustments on leased assets	177,964	194,804	212,0
				(Total liabilities)	7,619,393	8,007,771	7,962,9
				Capital			
				Government investment	51,508	54,908	57,9
				Capital surplus	626,233	626,384	688,0 706 0
				Capital surplus Other administrative costs	643,140 - 16,907	644,034 - 17,650	706,3 - 18,3
				Other administrative costs accumulated	- 10,207	- 17,050	- 10,2
				Amount equivalent to accumulated	- 16,162	- 16,672	- 17,3
				depreciation cost (-)			
				Amount equivalent to accumulated impairment loss (-)	- 4	- 0	
				Amount equivalent to accumulated net	- 741	- 978	- 1,0
				gains or losses on sale or disposal (-) Retained earnings	13,559	13,649	13,9
				Reserve fund carried over from the	12,361	12,361	13,5
				previous Mid-term Objective period	,- 31		
				Reserve fund	1,077	1,197	1,2
				Unappropriated retained earnings	121	90	2
				or undisposed losses for the period	101	00	
				(Of this, gross profit or loss)	121	90	2
				(Total net assets)	691,299	694,941	759,9
Total assets	8,310,692	8,702,711	8,722,835	Total liabilities and net assets	8,310,692	8,702,711	8,722,8
Notes 1. The balance sheet include					.,		-,-22,0

Υ.	End of FY2020	End of FY2021	End of FY2022	¥.	End of FY2020	End of FY2021	End of FY2022
Item	(Result)	(Estimated)	(Planned)	Item	(Result)	(Estimated)	(Planned)
(Losses)				(Profits)			
Ordinary expenses	364,851	359,869	344,394	Ordinary income	366,761	359,960	344,655
Construction administrative expenses	356,085	351,345	336,769	Railway facility transfer revenue	70,301	71,023	60,656
General and administrative expenses	1,353	1,328	1,361	Railway facility lease revenue	115,220	118,601	121,188
Finance expenses	7,190	6,994	6,211	Revenues from overseas operations	49	79	78
Miscellaneous losses	222	202	54	Revenue from cargo adjustment project	13,065	14,684	14,684
Temporary losses	1,790	0	-	Revenue from entrusted business	14,734	7,041	800
Loss on retirement of fixed assets	1,787	0	-	Revenue from financial assistance for	39	25	21
Loss on sale of fixed assets	3	-	-	railway improvement projects			
Net profit or loss (-)	121	90	261	Reversal of contra-accounts for assets funded by subsidies	137,657	134,889	134,311
Gross profit or loss (-)	121	90	261	Reversal of contra-accounts for assets funded by expenses	4,698	4,618	4,738
				Reversal of contra-construction in progress funded by subsidies	89	-	
				Reversal of contra-accounts for continuing liability	9,925	8,518	7,850
				Financial income	20	11	2
				Miscellaneous income	965	471	320
				Temporary profits	0	-	
				Gain on sales of fixed assets	0	-	
Total	366,761	359,960	344,655	Total	366,761	359,960	344,655

2. Components may not add up to the total because of rounding.