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

1. Summary of operations implement	ed using F	ILP funds							
Under the private railway project, Japa improvement of private railway syster convenience of transportation, and ma leases Shinkansen lines to form nation life sphere and promoting regional dev Note: Major non-FILP projects includ	ns in major intain and i wide high-s velopment.	urban regic improve urb speed railw	ons to increation function ay networks	ase 1s. s to	comm Under contri	uter transport the Shinkan bute to deve	rtation capacity, reduc sen new bullet train lin	e congestion rates, inc ne project, JRTT const	ructs and
2. Amount of lending under FY2020	FILP						(7.7		
FY2020 FILP		Estima	nted outsta	ndi	ng am	ount of FII	Ur UP lending at the end	nit: billion yen)	
11.7		Lotinit		ITGI	ing un	1,089.	ě.		
3. Estimated policy cost analysis of the	ne project								
(1) Policy cost	[]	(Unit · )	oillion yen)			ar-to-Year comp			Unit: billion yen)
Category	FY2019	-	Fluctuation		(Comp	uting any fluctu	ation from previous year) FY2019	FY2020	Simple fluctuation
1. Government expenditure	913.2	844.5	-68.8			Simple comparison	913.2	844.5	-68.8
(subsidies, etc.)	715.2	0-+5	-00.0		st	(before adjustment)		2) Adjusting assumed interest	-00.0
2. Government revenue	-	-	-		Policy cost	Past year	<ol> <li>Adjusting initial years</li> <li>(Analysis results after adjusting</li> </ol>	rates	Real
(payments to the government, etc.)* <sup>1</sup> 3. Opportunity cost of capital					olicy	comparison	initial year to that for FY2020 analysis)	(Analysis results of re-estimation using assumed interest rate for	fluctuation (2-1)
investments, etc.	-	-	-		P	(after adjustment)		FY2019)	147
Total (1+2+3=policy cost(A))	913.2	844.5	-68.8		[Real		839.3 factor analysis]	844.0	+4.7
Analysis period (years)	26 years	25 years	-1 years		- Inci	ease in cost		sidies for routes for co	onstruction
(2) Breakdown of policy cost by the time of th	e provision o	f funds (1	Unit: billion yen)		unde	Shinkanser	n project (+4.7 billion	yen)	
Category	FY2019	FY2020	Fluctuation		⊖Fa	ctors behind	policy cost decrease		
(A) Policy cost (previously cited)	913.2	844.5	-68.8		- Nor	ie			
<ol> <li>Opportunity cost of capital investments, etc. provided before the beginning of the analysis period</li> </ol>	-	-	-						
2) Policy cost expected to be newly accrued during the analysis period	913.2	844.5	-68.8						
Government expenditure (subsidies, etc.)	913.2	844.5	-68.8						
Government revenue (payments to the government, etc.)* <sup>1</sup>	-	-	-						
Opportunity cost of surplus, etc.	-	-	-						
Opportunity cost of capital investments, etc.	-	-	-						
(4) Sensitivity analysis (cases whe	re assump	tions chan	ge)				J)	Jnit: billion yen)	
(A) Policy cost (previously cited) Case before t negative interes policy* <sup>2</sup>		Fluctuation			nent exp sidies, et	(navm		Dpportunity cost of tal investments, etc.	
	340.1		-4.3			-4.3		-	

(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.

\*<sup>2</sup> 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 24 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 25 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.

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

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

\*Hokuriku Shinkansen (Kanazawa - Tsuruga portion): Scheduled to open at the end of FY2022.

\*Kyushu Shinkansen (Takeo Onsen - Nagasaki portion): Scheduled to open in FY2022

• In using future rent income in advance for front-loading the completion, JRTT will utilize long-term, fixed-low-interest FILP funds to reduce interest cost and accelerate the development of new Shinkansen lines.

				(Unit: billion yen)
		Estimated	Planned	Assumptions for calculation
	FY	2019	2020	2021-2033
Construction	Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo)	49.0	93.0	1,383.6
construction	Hokuriku Shinkansen (Kanazawa - Tsuruga)	264.0	275.0	349.1
cost	Kyushu Shinkansen (Takeo Onsen - Nagasaki)	76.0	75.0	105.2
	Total	389.0	443.0	1,837.9

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 (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 revisions of the second sentence of the paragraph (1) as authorized under the paragraph (or a revised plan if the agency obtains authorization for revision 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

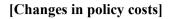
Based on assumptions for the policy cost analysis, JRTT estimates users' benefits from Shinkansen development (improvement of convenience for users through shorter traveling time and fewer transfers), supplier benefits (a gap between railway operators' profits based on the absence and presence of Shinkansen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

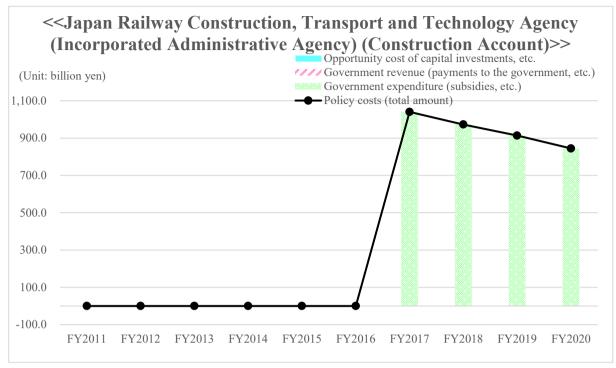
• Case for an analysis period of 50 years after Shinkansen opening with the social discount factor assumed at 4%: 3,572.9 billion year

	(Unit: billion yen)
Portions for development	Total benefits
Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo)	1,455.7
Hokuriku Shinkansen (Kanazawa - Tsuruga)	1,491.7
Kyushu Shinkansen (Takeo Onsen - Nagasaki)	625.5
Total	3,572.9

• In the case where the social discount factor is set to that of the policy cost analysis: 3,669.8 billion yen

# Overview of policy cost analysis results





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

									(Unit: bil	lion yen)
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Policy costs (total amount)	-	-	-	-	-	-	1,040.1	972.7	913.2	844.5
Government expenditure (subsidies, etc.)	-	-	-	-	-	-	1,040.1	972.7	913.2	844.5
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 FY2020, policy costs involving subsidies declined on progress in Shinkansen line construction.

# [FILP agency's self-assessment of policy cost analysis results (FY2020)]

- As the shinkansen bullet train railway construction made smooth progress, the policy cost in the FY2020 analysis decreased by 68.8 billion yen from the previous year to 843.5 billion yen. The decrease reflected a fall in subsidies in FY2019 accompanying a change in the analysis period, exerting little impact on financial soundness.

- In the sensitivity analysis, the policy cost decreased by 4.3 billion yen from the basic case due to a change in the discount factor, exerting little impact on financial soundness.

# (Reference) Financial Statements

Item	End of FY2018		End of FY2020	Item	End of FY2018	End of FY2019	End of FY2020
(Assets)	(Result)	(Estimated)	(Planned)	(Liabilities and equity)	(Result)	(Estimated)	(Planned)
(Assets) Current assets	2,151,313	1,765,528	1 465 401	Current liabilities	361,864	315,929	319,61
Cash and bank deposits	724,783		1,405,401	Short-term borrowings	501,804	94	519,01
Securities	221,900	-	-	Japan Railway Construction,	108,000		70,50
Installment sales receivables	1,153,498		-	Transport and Technology Agency	108,000	/4,000	70,50
Disbursements for uncompleted construction	16,673		54,026	bonds to be redeemed within one			
Accrued income	250	-	482	year Discount on bonds to be written off			
Accounts receivable	31,151		2,275	within one year	-	-	
Other current assets	3,059		2,275	Long-term debts payable to	137,272	134,134	117,08
			- 6,864,697	be repaid within a year	137,272	154,154	117,08
Fixed assets	6,143,139			· ·	26.640	22 820	20.27
Tangible fixed assets	5,956,267			to be repaid within a year	26,640	23,820	20,37
Buildings	171,795	-	157,840	Lease obligations planned for		70	0
Structures	3,616,372			navment within 1 year	73	78	8
Machinery and equipment	176,640	-	151,526				
Tools furniture and fixtures	145		220	Accrued payments	59,501	43,043	41,95
Land	759,721	-		-	2,179	-	2,13
Leasing assets	208	139	69	Advances received	9,934	9,865	9,79
Construction in progress	1,231,387	1,694,746	2,174,531	Advance received for entrusted business	17,264	26,343	54,52
Intangible fixed assets	134,813	150,692	143,348		,		
Perpetual lease	56,550	-			664	978	97
Software	50	-	102	Other current liabilities	338		1,59
Facilities usage rights	78,186	93,030	85,670	Fixed liabilities	7,115,313		7,132,85
Other intangible fixed assets	26	26	26	Asset collateral liabilities	4,435,779		4,633,19
Investment and other assets	52,059	54,243	56,666	Asset collateral subsidies	3,120,759		2,915,93
Shares in affiliates	-	3,200			40,997		35,74
Long-term accounts due	44,736	-		1	690,519	,	1,001,01
Expected value of receivable loan fees	641	617	591	construction in progress		-	
Return for provisions for retirement				Collateral expenses for	1 100		
allowances in Article 11-2 of the Ministry of Finance Ordinance on the	6,181	6,566	6,931	construction in progress	1,490		60.0 A.0
Japan Railway Construction, Transport				Shinkansen asset collateral liabilities	582,015		680,49
and Technology Agency				Japan Railway Construction Transport and Technology Agency bonds	867,600	907,600	938,70
	502	(22	826	Discount on hand	0	0	
Security deposit and guarantee	502	633	836		0	- -	1 1 1 1 4 1
				Long-term loans payable	1,278,939		1,111,41 26,03
				Long-term loans of other accounts Lease obligations	70,233 162	46,413 84	20,03
				Long-term advances received	180,793		161,13
				Reserves	180,795	170,928	101,15
				Reserve for retirement pensions	14,770	16,132	16,88
				*	265,777	-	245,49
				Collateral account for continuing debt Other fixed liabilities	1,261	255,450	245,49
				Reserves based on law	1,201	-	
				Reserves for adjustments on leased assets	145,225	161,331	177,81
				(Total liabilities)	7,622,402	-	7,630,29
				Capital	7,022,402	7,029,510	7,050,29
				Financing by the Government	51,508	54,708	58,09
				Capital surplus	607,800		628,75
				Capital surplus	622,954		645,65
				Other administrative costs accumulated	- 15,153		- 16,90
				Amount equivalent to accumulated	- 14,391	- 15,126	- 15,97
				depreciation cost (-)	17,571	13,120	10,97
				Amount equivalent to accumulated impairment loss (-)	- 31	- 0	-
				Amount equivalent to accumulated net	- 732	- 904	- 92
			I	gains or losses on sale or disposal (-)		, I	

				Retained earnings Reserve carried forward during former medium-term target period	12,742 12,361	13,031 12,361	12,949 12,361
				Reserve fund	-	381	669
				Unappropriated retained earnings or undisposed losses for the period	381	289	- 81
				(Of this, gross profit or loss)	381	289	- 81
				(Total equity)	672,050	697,173	699,804
Total assets	8,294,452	8,326,683	8,330,099	Total liabilities and equity	8,294,452	8,326,683	8,330,099
Notes1. The balance sheet include	es costs for projec	ts other than the	ose subject to th	e policy cost analysis.			
2. Components may not ad	d up to the total be	ecause of roundi	ng.				
		· ·				1 0 5 1 2 0 0	

gains or losses on sale or disposal (-)

3. Results at the end of FY2018 are adjusted for comparison with estimated results at the end of FY2019 and planned results at the end of FY2020.

T.	FY2018	FY2019	FY2020	T.	FY2018	FY2019	FY2020
Item	(Result)	(Estimated)	(Planned)	Item	(Result)	(Estimated)	(Planned)
(Losses)				(Profits)			
Ordinary expenses	377,515	371,219	349,100	Ordinary income	377,904	371,507	349,019
Construction administrative expenses	366,153	360,362	339,145	Railway facility transfer revenue	82,546	78,826	69,000
General and administrative expenses	1,442	1,268	1,305	Railway facility lease revenue	114,996	115,967	115,522
Finance expenses	9,497	9,449	8,539	Revenues from overseas operations	42	107	177
Miscellaneous losses	423	140	112	Revenue from cargo adjustment project	13,252	14,739	9,973
Temporary losses	9	-	-	Revenue from entrusted business	13,416	9,527	1,069
Loss on retirement of fixed assets	0	-	-	Revenue from subsidies for railway	38	-	-
Loss on sale of fixed assets	9	-	-	improvement projects			
Net profit or loss (-)	381	289	- 81	Revenue from financial assistance for	69	52	37
Gross profit or loss (-)	381	289	- 81	railway improvement projects			
				Reversal of asset collateral subsidies	137,994	137,424	138,686
				Reversal of asset collateral expenses	4,048	4,032	4,110
				Reversal of collateral subsidies for construction in progress	360	-	-
				Reversal of collateral account for			
				continuing debt	10,336	10,341	9,941
				Financial income	22	11	1
				Miscellaneous income	787	482	501
				Temporary profits	0	-	-
				Gain on sales of fixed assets	0	-	-
Total	377,904	371,507	349,019	Total	377,904	371,507	349,019