# Japan Railway Construction, Transport and Technology Agency (Incorporated Administrative Agency) (Construction Account)

https://www.jrtt.go.jp/

## 1. Summary of operations implemented using FILP funds

Under the private railway project, Japan Railway Construction, Transport and Technology Agency undertakes the construction and major improvement of private railway systems in major urban regions to increase commuter transportation capacity, reduce congestion rates, increase the convenience of transportation, and maintain and improve urban functions. Under the Shinkansen new bullet train line project, JRTT constructs and leases Shinkansen lines to form nationwide high-speed railway networks to contribute to developing the national economy, expanding the national life sphere and promoting regional development.

Note: Major non-FILP projects include an urban railway convenience promotion project.

## 2. Amount of lending under FY2021 FILP

(Unit: billion yen)

FY2021 FILP	Estimated outstanding amount of FILP lending at the end of FY2020
308.3	1,060.0

## 3. Estimated policy cost analysis of the project

(1) Policy cost

(Unit: billion yen)

Category	FY2020	FY2021	Fluctuation
Government expenditure (subsidies, etc.)	844.5	764.3	-80.1
2. Government revenue (payments to the government, etc.)*1	-	-	-
3. Opportunity cost of capital investments, etc.	-	-	-
Total (1+2+3=policy cost(A))	844.5	764.3	-80.1
Analysis period (years)	25 years	24 years	-1 year

(2) Breakdown of policy cost by the time of the provision of funds (Unit: billion yen)

Catalana	EX2020	EV2021	TI .
Category	FY2020	FY2021	Fluctuation
(A) Policy cost (previously cited)	844.5	764.3	-80.1
<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	844.5	764.3	-80.1
Government expenditure (subsidies, etc.)	844.5	764.3	-80.1
Government revenue (payments to the government, etc.)*1	-	-	-
Opportunity cost of surplus, etc.	-	-	-
Opportunity cost of capital investments, etc.	-	-	-

(3) Year-to-Year comparison analysis

(Computing any fluctuation from previous year)

(Unit: billion yen)

		FY2020	FY2021	Simple fluctuation
t	Simple comparison (before adjustment)	844.5	764.3	-80.1
Policy cost	Past year comparison (after	Adjusting initial years     (Analysis results after adjusting initial year to that for FY2021 analysis)	Adjusting assumed interest rates     (Analysis results of re-estimation using assumed interest rate for FY2020)	Real fluctuation (2-1)
1	adjustment)	764.1	764.3	+0.2

[Real fluctuation factor analysis]

OFactors behind policy cost increase

- Increase in cost due to a decrease in the discount factor accompanying shortening of the analysis period (+0.2 billion yen)

OFactors behind policy cost decrease

- None

(4) Sensitivity analysis (cases where assumptions change)

(Unit: billion yen)

(A) Policy cost (previously cited)	Case before the negative interest rate policy* <sup>2</sup>	Fluctuation	Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*1	3. Opportunity cost of capital investments, etc.
764.3	761.8	-2.5	-2.5	-	-

(A) Policy cost	Case of a 1%				
(previously cited)	decrease in operating revenues	Fluctuation	Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*1	3. Opportunity cost of capital investments, etc.
764.3	764.3	-	-	-	-

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

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<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 23 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 24 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 completed around autumn 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	2	3	4~15
C	Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo)	93.0	95.0	1,288.6
Construction	Hokuriku Shinkansen (Kanazawa - Tsuruga)	275.0	330.0	300.8
	Kyushu Shinkansen (Takeo Onsen - Nagasaki)	75.0	61.0	40.3
	Total	443.0	486.0	1,629.7

## 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 subsequent to said 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%: 3,648.7 billion yen

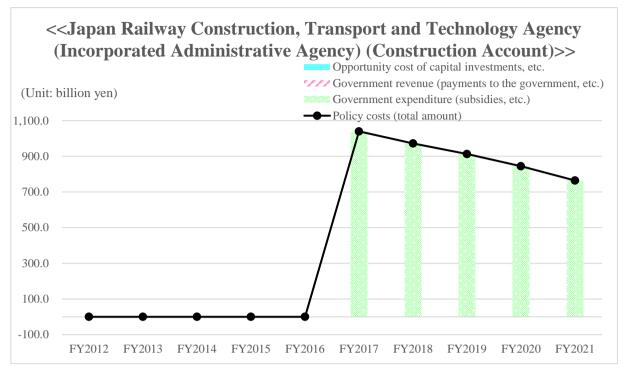
(Unit: billion yen)

Portions for development	Total benefits
Hokkaido Shinkansen (Shin-Hakodate-Hokuto - Sapporo)	1,513.9
Hokuriku Shinkansen (Kanazawa - Tsuruga)	1,484.2
Kyushu Shinkansen (Takeo Onsen - Nagasaki)	650.5
Total	3,648.7

•In the case where the social discount factor is set to that of the policy cost analysis: 3,578.1 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: billion yen)

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Policy costs (total amount)	-	-	-	-	-	1,040.1	972.7	913.2	844.5	764.3
Government expenditure (subsidies, etc.)	-	-	-	-	-	1,040.1	972.7	913.2	844.5	764.3
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 FY2021, policy costs involving subsidies declined on progress in Shinkansen line construction.

## [FILP agency's self-assessment of policy cost analysis results (FY2021)]

- •As the shinkansen bullet train railway construction made smooth progress, the policy cost in the FY2021 analysis decreased by 80.1 billion yen from the previous year to 764.3 billion yen. The decrease reflected a fall in subsidies in FY2020 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 2.5 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.

# (Reference) Financial Statements

Item	End of FY2019	End of FY2020	End of FY2021	Item	End of FY2019	End of FY2020	End of FY2021
	(Result)	(Estimated)	(Planned)		(Result)	(Estimated)	(Planned)
(Assets) Current assets	1,875,743	1,477,898	1 507 261	(Liabilities and equity) Current liabilities	329,943	323,429	412,28
Cash and bank deposits	511,819	407,176		Deposited subsidies	329,943 4,777	323,429	412,20
_		407,170	400,923	=		-	
Securities	210,900	-	-	Short-term borrowings	94	587	56,62
Installment sales receivables	1,081,890	1,017,884	957,413	Japan Railway Construction,	74,000	70,500	100,00
Disbursements for uncompleted construction	26,146	50,627	80,741	Transport and Technology Agency			
				bonds to be redeemed within			
Accrued income	192	390	454	one year			
Accounts receivable	40,630	1,821	1,728	Discount on bonds to be written off	_	0	
Other current assets	4,165	_ _	, -	within one year			
Fixed assets	6,415,233	6,860,410	7,210,947	·	134,134	115,416	97,8
Tangible fixed assets	6,217,510	6,665,804	7,019,102	Long-term debts payable to	134,134	113,410	71,0
•			i i	be repaid within a year	22.020	20.275	15.20
Buildings	165,440	156,501	148,487	Long-term loans from other	23,820	20,375	15,39
				accounts to be repaid within a			
Structures	3,542,062	3,406,233	3,262,060	year			
Machinery and equipment	160,121	149,791	132,364	Lease obligations planned for	81	86	
Tools furniture and fixtures	147	189	·	payment within 1 year			
Land	768,079	783,426		Accrued payments	52,889	50,114	45,92
	•	•	102,033	* *		·	
Leasing assets	143	72	-	Accrued expenses	1,963	1,935	2,00
Construction in progress	1,581,518	2,169,592	2,693,165	Advances received	9,852	9,782	9,7
				Advance received for			
Intangible fixed assets	147,054	141,518	135,412	entrusted business	27,191	51,612	81,72
Perpetual lease	57,549	57,549	*	Reserves	,	,-	- ,
Software	43	67	206	Reserve for bonuses	803	970	9'
Facilities usage rights	89,436	83,875	77,631	Asset retirement obligations	34	970	9
i acimiles usage fights	07,430	05,075	77,031	scheduled to be fulfilled within one	34	-	
Other intangible fixed assets	26	26	26	year			
Investment and other assets	50,668	53,089	56,433	Other current liabilities	305	2,053	2,0:
Shares in affiliates	_	3,390	6.790	Fixed liabilities	7,121,274	7,141,568	7,413,04
Long-term accounts due	43,226	41,717	40,208	Asset collateral liabilities	4,526,102	4,644,417	4,741,41
Expected value of receivable loan fees	617	591	564	Asset collateral subsidies	3,044,783	2,922,637	2,788,49
Return for provisions for retirement	6,318	6,735	6,973		42,429	40,822	36,42
allowances in Article 11-2 of the	0,510	0,733	0,773	Collateral subsidies for	804,177	999,335	1,183,00
Ministry of Finance Ordinance on the Japan Railway Construction, Transport				construction in progress	004,177	777,333	1,103,00
and Technology Agency				Collateral expenses for			
				construction in progress	1,743	162	54
Funds transferred into the account				Shinkansen asset collateral	1,743	102	<i>3</i> -
for regional public transportation, etc.	_	_	1,000		632,970	681,461	732,94
			-,000	Japan Railway Construction Transport	907,600	938,700	920,70
Security deposit and guarantee	507	656	898	and Technology Agency bonds	707,000	230,700	,,,,
				Discount on bond	0	-	
				Long-term loans payable	1,198,045	1,110,414	1,335,97
				Long-term loans of other accounts	46,413	26,039	10,64
				Lease obligations	86	_	ŕ
				Long-term advances received	170,523	160,741	151,02
				Reserves	,	,	,
				Reserve for retirement pensions	15,346	15,772	16,3
				Collateral account for continuing debt	255,410	245,486	236,9
				Other fixed liabilities	1,749	213,700	230,9
				Reserves based on law	1,/7/		
				Reserves for adjustments on leased assets	161,429	177,917	194,7:
				(Total liabilities)	7,612,645	7,642,914	8,020,0
				Capital	7,012,043	7,072,714	0,020,0
				-	51 500	54,898	58,29
				Financing by the Government	51,508 613,385	•	
				Capital surplus	613,385	626,844	626,10
				Capital surplus Other administrative costs	629,421	643,751	643,75
					- 16,036	- 16,907	- 17,63
				accumulated	4 4 4 4 4		
				Amount equivalent to accumulated depreciation cost (-)	- 15,291	- 15,951	- 16,6
				-			
				Amount equivalent to accumulated impairment loss (-)	- 4	- 4	-
				•			
				Amount equivalent to accumulated net gains or losses on sale or disposal (-)	- 741	- 952	- 98
				gams or rosses on sale of disposal (-)			
				Retained earnings	13,438	13,652	13,72
				Reserve carried forward during former	12,361	12,361	12,3
				medium-term target period			
				Reserve fund	381	1,077	1,2
				Unappropriated retained earnings or	696	214	-,-,
				undisposed losses for the period	3,70	21.	
				(Of this, gross profit or loss)	696	214	5
				(Or tills, gross profit or loss)  (Total equity)	678,331	695,394	698,12
Total assets	0.000.07	0 220 200	0.710.300				
I MISH SCOATO	8,290,976	8,338,309	8,718,208	Total liabilities and equity	8,290,976	8,338,309	8,718,20

<sup>2.</sup> Components may not add up to the total because of rounding.

Τ	End of FY2019	End of FY2020	End of FY2021	Trons	End of FY2019	End of FY2020	End of FY2021
Item	(Result)	(Estimated)	(Planned)	Item	(Result)	(Estimated)	(Planned)
(Losses)				(Profits)			
Ordinary expenses	361,216	352,153	349,590	Ordinary income	361,674	352,367	349,664
Construction administrative expenses	351,439	341,804	341,187	Railway facility transfer revenue	78,353	71,106	66,224
General and administrative expenses	1,401	1,305	1,328	Railway facility lease revenue	115,538	115,508	118,601
Finance expenses	8,107	8,462	6,997	Revenues from overseas operations	146	172	77
Miscellaneous losses	269	582	78	Revenue from cargo adjustment project	13,131	11,581	14,425
Temporary losses	1	-	-	Revenue from entrusted business	652	1,763	1,356
Loss on retirement of fixed assets	1	-	-	Revenue from financial assistance for	50	39	25
Loss on sale of fixed assets	0	-	-	railway improvement projects			
Net profit or loss (-)	696	214	74	Reversal of asset collateral subsidies	138,231	136,753	135,758
Gross profit or loss (-)	696	214	74	Reversal of asset collateral expenses	4,379	4,371	4,395
				Reversal of collateral subsidies for	231	-	-
				construction in progress			
				Reversal of collateral account for			
				continuing debt	10,366	9,924	8,518
				Financial income	21	13	4
				Miscellaneous income	575	1,137	281
				Temporary profits	240	-	-
				Gain on sales of fixed assets	240	-	-
Total	361,914	352,367	349,664	Total	361,914	352,367	349,664

Notes 1. The income statement includes costs for projects other than those subject to the policy cost analysis.

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