

# Japan Expressway Holding and Debt Repayment Agency (Incorporated Administrative Agency)

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## 1. Summary of operations implemented using FILP funds

- Holding of expressway assets and their lending to expressway companies (East Nippon Expressway Company Limited, Central Nippon Expressway Company Limited, West Nippon Expressway Company Limited, Metropolitan Expressway Company Limited, Hanshin Expressway Company Limited and Honshu-Shikoku Bridge Expressway Company Limited)
- Speedy and sure repayment of debts inherited from the four former Japan Highway Public Corporations as well as the ones related to such operations as construction and reconstruction of expressways
- Supporting smooth operations related to expressways by the expressway companies

## 2. Amount of lending under FY2019 FILP

(Unit: billion yen)

FY2019 FILP	Estimated outstanding amount of FILP lending at the end of FY2018
1,520.0	18,751.4

## 3. Estimated policy cost analysis of the project

### (1) Policy cost (Unit: billion yen)

Category	FY2018	FY2019	Fluctuation
1. Government expenditure (subsidies, etc.)	26.4	40.8	+14.4
2. Government revenue (payments to the government, etc.)*	-	-	-
3. Opportunity cost of capital investments, etc.	1,057.7	1,001.7	-56.0
<b>Total (1+2+3=policy cost(A))</b>	<b>1,084.1</b>	<b>1,042.5</b>	<b>-41.6</b>
Analysis period (years)	35 years	36 years	+1 years

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

Category	FY2018	FY2019	Fluctuation
(A) Policy cost (previously cited)	1,084.1	1,042.5	-41.6
1) Opportunity cost of capital investments, etc. provided before the beginning of the analysis period	1,051.7	996.3	-55.4
2) Policy cost expected to be newly accrued during the analysis period	32.5	46.2	+13.8
Government expenditure (subsidies, etc.)	26.4	40.8	+14.4
Government revenue (payments to the government, etc.)*	-	-	-
Opportunity cost of surplus, etc.	-	-	-
Opportunity cost of capital investments, etc.	6.1	5.5	-0.6

### (5) Sensitivity analysis (cases where assumptions change)

(Unit: billion yen)

(A) Policy cost (previously cited)	Case for raising lending and fundraising rates by 1%	Fluctuation	Fluctuation		
			1. Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*	3. Opportunity cost of capital investments, etc.
1,042.5	2,094.1	+1,051.7	-0.5	-	+1,052.2

(A) Policy cost (previously cited)	Case for cutting operating revenue by 10%	Fluctuation	Fluctuation		
			1. Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*	3. Opportunity cost of capital investments, etc.
1,042.5	1,467.6	+425.1	-	-	+425.1

### (3) Year-to-Year comparison analysis

(Computing any fluctuation from previous year)

(Unit: billion yen)

Policy cost		FY2018	FY2019	Simple fluctuation
		Simple comparison (before adjustment)	1,084.1	1,042.5
Past year comparison (after adjustment)	1) Adjusting initial years (Analysis results after adjusting initial year to that for FY2019 analysis)		2) Adjusting assumed interest rates (Analysis results of re-estimation using assumed interest rate for FY2018)	Real fluctuation (2-1)
		1,075.7	1,106.3	+30.6

[Real fluctuation factor analysis]

○Factors behind policy cost increase

- Increase in subsidies, etc. due to implementation of new operations, etc. (+22.9 billion yen)
- Increase in opportunity cost due to increase in accepted capital investments through implementation of new operations (+5.2 billion yen)
- Increase in opportunity cost due to analysis period extension (+2.5 billion yen)

○Factors behind policy cost decrease

- None

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

\* 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.

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

Estimates in the analysis and future operations are based on agreements signed with the expressway companies.

• Operation revenues: Covering rent revenues(\*) from expressway companies, etc.

\* Gap between toll revenues and planned management expenses calculated by expressway companies based on traffic demand forecasts

• Agency bonds: Covering government-guaranteed and FILP agency bond amounts out of the required fundraising amount calculated in line with a projected balance sheet for each year, etc.

• Borrowings: Covering borrowings from the private sector and the FILP program as calculated in line with a projected balance sheet for each year, etc.

• Debt repayment expense: Calculated based on agency-held debts (at the end of FY2018) and years for redemption of debts planned to be assumed from expressway companies in or after FY2019

(Unit: billion yen)

FY	Result				Estimated 2018	Decision 2019	Assumptions for calculation				total 2019-2058
	2014	2015	2016	2017			2020-2028	2029-2038	2039-2048	2049-2058	
Operational Revenue (lending fees)	1,969.1	2,065.3	2,228.8	2,133.2	2,216.7	2,264.9	18,832.7	20,934.1	18,478.0	3,942.1	64,451.9
Agency bonds	2,415.0	1,586.0	1,156.0	1,669.0	1,430.9	740.0	10,391.0	2,410.0	-	-	13,541.1
Borrowings	60.0	35.0	-	-	1,500.0	1,008.8	5.2	58.5	-	-	1,072.6
Debt repayment expense	4,487.7	3,692.5	3,215.8	3,732.3	3,734.3	3,363.0	30,392.4	20,908.1	10,971.2	7,203.0	72,837.8

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

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

Capital investment: Required for expressway construction or reconstruction for Metropolitan Expressway Company Limited and Hanshin Expressway Company Limited

(Underlying laws and regulations)

Article 6 of the Act on Japan Expressway Holding and Debt Repayment Agency: Capital

1. The Agency's capital shall be a total of investments provided from national and local governments under provisions of Article 15, Paragraph 11 of the Enforcement Act.

2. The Agency may, if necessary, increase its capital upon obtaining the approval from the Minister of Land, Infrastructure, Transport and Tourism.

3. The national government or local governments stipulated by cabinet order may invest in the Agency within the limit specified in the budget when the Agency increases its capital under the above provision.

Subsidies: Required for development of smart interchange systems, post-disaster restoration, etc.

(Underlying laws and regulations)

Article 25 of the Act on Japan Expressway Holding and Debt Repayment Agency: Subsidies

1. The government may subsidize the Agency for the expenses necessary for the operations under the provisions of Article 12, Paragraph 1, Item 5 and 6 within the limit specified in the budget.

2. The local governments specified in Article 12, Paragraph 1, Item 7 may subsidize the Agency for the expenses necessary for the operations under the provisions of the Item within the limit specified in the budget.

The national treasury payment

(Underlying laws and regulations)

Article 31 of the Act on Japan Expressway Holding and Debt Repayment Agency: Dissolution of Agency

1. The Agency shall be dissolved no later than September 30, 2065, as specified separately by an act.

2. The Agency shall complete the repayment of the inherited debt in the road account by the day of its dissolution as provided in the previous paragraph and have residual assets equivalent to at least the capital.

3. The Agency, if dissolved, shall distribute residual assets that involve the road account to investors involved with the road account according to their respective investment amounts.

4. If the Agency has any residual assets consisting of non-road accounts after repaying debt that involves those accounts, it shall distribute the residual assets to investors involved with those accounts according to their respective investment amounts.

#### 6. Special remarks

1) The road assets related to expressways will be opened to public at no charge after the completion of the debt redemption and restored to the national or local governments. However, the policy cost analysis does not consider their residual value.

2) The increase in assets and debts through constructions of expressways by the expressway companies will be inherited by the Agency, and the Agency will lend assets of expressways to the expressway companies, then receive the revenues from road lending fee from the expressway companies. The Agency will return the capital investment to the government by this road lending fee during the redemption period, so the opportunity cost as the capital investment during the period will be the policy cost.

3) The interest rate used in the analysis is set as a common precondition in the analysis and is not the same as the future interest rate used by the Agency and Companies in the preparation of recoupment plans.

#### (Reference) Outcome and social and economic benefits of operations

(Effects of expressway development)

The construction and/or improvement of expressways generates various social and economic effects, as well as direct effects for road users, including shorter traveling times.

Specific effects include:

○ Enhanced associations and exchanges among regions and local cities

○ Development or creation of industries

○ Increased employment opportunities

○ Increased asset value

○ Reduced price of products and services

○ Maintaining of alternative routes in the event of disaster

○ Improvement of urban environment due to smoother transportation

Among the beneficial effects of such expressway construction and/or improvement, direct effects of the new services in and after FY2018 can be estimated as follows.

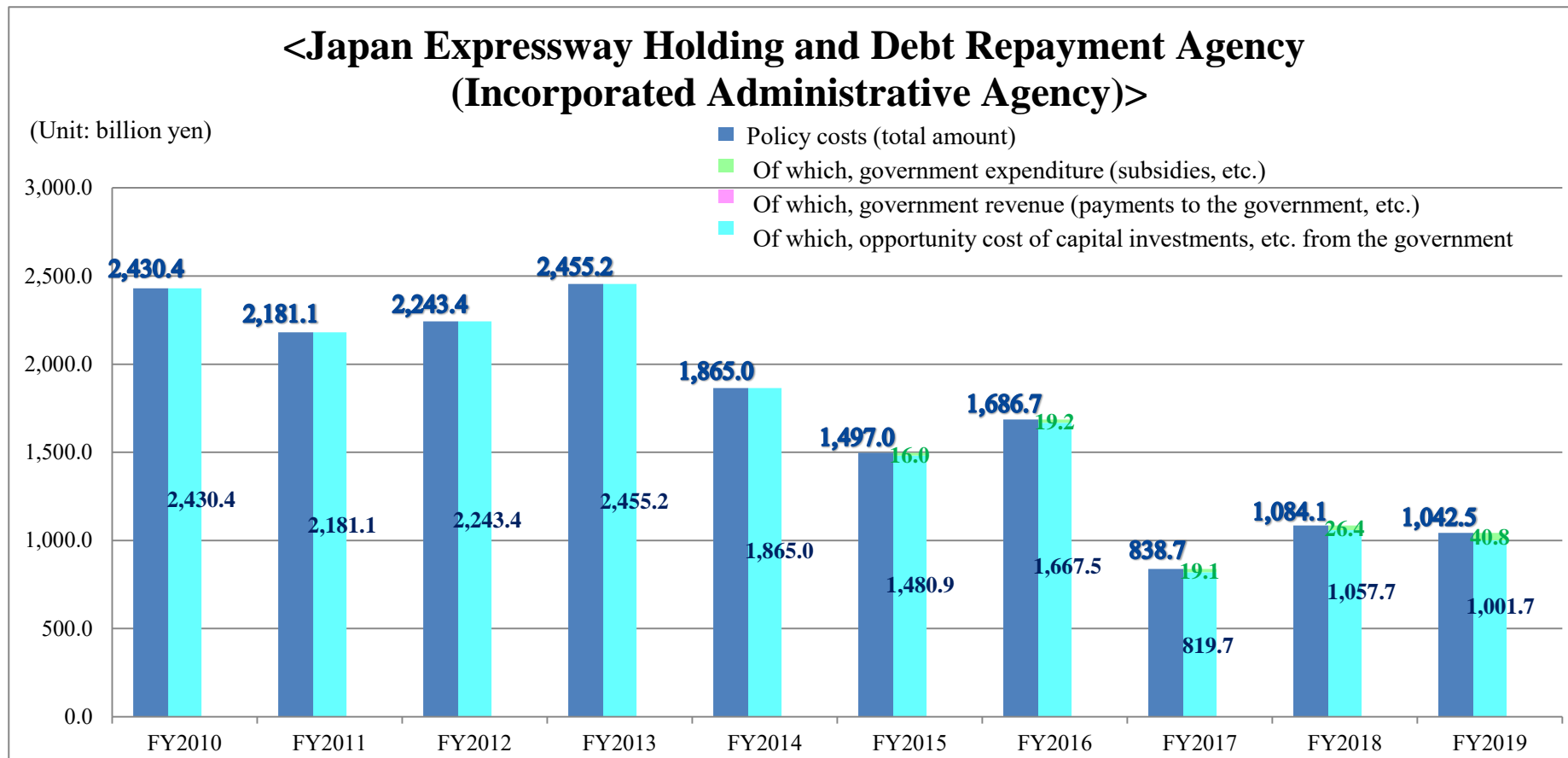
• in the case where the social discount rate is set to 4%; 9.8189 trillion yen

• in the case where the social discount rate is set to that of the policy cost analysis; 16.8305 trillion yen

Notes 1. The estimates on quantitative benefits were conducted by each company based on the method for benefit estimation and basic units in the "CostBenefit Analysis Manual (February 2018, Road Bureau and City Bureau, Ministry of Land, Infrastructure, Transport and Tourism)."

2. Direct effects cover benefits in and after FY2021.

# (Reference) Changes in Policy Costs by Component



Notes 1. Policy costs for each fiscal year differ in assumptions including interest rates applied to estimates.

2. Japan Expressway Holding and Debt Repayment Agency was established in October 2005.

## (Point)

- Policy cost of the Agency until FY2014 only consisted of opportunity cost of capital investments from the government, but after FY2015 analysis, the cost of subsidies was added due to the acceptance of subsidies from the government.
- In FY2019, the opportunity cost decreases on a fall in the assumed interest rate.

## (Reference) Financial Statements

## Balance Sheet (Road Account)

(Unit: million yen)

Item	End of FY2017 (Result)	End of FY2018 (Estimated)	End of FY2019 (Planned)	Item	End of FY2017 (Result)	End of FY2018 (Estimated)	End of FY2019 (Planned)
(Assets)				(Liabilities and equity)			
Current assets	518,574	2,021,038	2,419,080	Current liabilities	3,617,213	3,217,605	3,186,641
Cash and bank deposits	119,676	1,500,146	2,171,000	Deposited subsidies	2,378	4,757	2,104
Accounts due for road assets lending fee, etc	355,910	374,888	171,368	Deposited donations	27	58	10,206
Accounts receivable	32,087	36,013	23,266	Japan Expressway Holding and Debt Repayment Agency bonds to be repaid within one year	3,163,620	2,565,565	2,582,098
Short-term loans receivable	7,608	106,688	50,201	Discount on bond (-)	-686	-372	-557
Inventory goods	3,245	3,245	3,245	Long-term loans to be repaid within a year	271,197	507,408	518,856
Other current assets	47	58	-	Accrued payments	114,994	73,136	2,250
Fixed assets	40,161,423	40,793,246	41,830,226	Accrued expenses	65,590	66,988	71,619
Tangible fixed assets	39,795,443	40,503,894	41,544,611	Other current liabilities	94	65	65
Buildings	339,194	367,463	409,048	Fixed liabilities	24,242,696	26,308,561	27,313,197
Structures	29,267,475	29,842,377	30,369,393	Asset collateral liabilities	149,397	144,647	153,287
Machinery and equipment	777,539	832,597	1,069,741	Long-term deposit of subsidies	1,669	12,901	17,757
Vehicles and transportation equipment	4	3	3	Long-term contributions received	10,796	10,686	-
Tools furniture and fixtures	1,638	2,561	3,462	Japan Expressway Holding and Debt Repayment Agency bonds	22,243,051	22,896,254	22,994,488
Land	9,129,037	9,289,665	9,562,089	Discount on bond (-)	-75,008	-69,449	-64,423
Construction in progress	280,554	169,228	130,875	Long-term loans payable	1,440,960	2,841,328	3,738,902
Intangible fixed assets	269,975	267,114	273,519	Long-term accrued liabilities	470,909	468,659	466,409
Leasehold interests	268,382	265,625	272,160	Long-term accrued expenses	915	3,527	6,772
Other intangible fixed assets	1,593	1,490	1,359	Reserves			
Investment and other assets	96,005	22,238	12,096	Reserves for retirement pensions	7	8	5
Long-term loan receivable	95,988	22,220	12,078	Reserves based on law			
Security deposit and guarantee	16	16	16	Reserve for Highway Convenience Improvement Project	603,524	577,679	551,684
Other assets	2	2	2	(Total liabilities)	28,463,433	30,103,845	31,051,522
Total assets	40,679,997	42,814,284	44,249,306	Capital	5,604,988	5,596,583	5,616,431
				Financing by the Government	4,069,232	4,076,328	4,086,252
				Local government investment	1,535,756	1,520,255	1,530,179
				Capital surplus	847,802	847,802	847,802
				Capital surplus	229	229	229
				Reserves under Article 15 of the Act for Enforcement of Acts Related to Privatization of the Japan Highway Public Corporation, etc.	847,573	847,573	847,573
				Retained earnings	5,763,774	6,266,054	6,733,551
				Reserve fund	5,080,770	5,763,774	6,266,054
				Unappropriated income for the current year	683,004	502,280	467,497
				(Of this, gross profit)	(683,004)	(502,280)	(467,497)
				(Total equity)	12,216,564	12,710,439	13,197,784
				Total liabilities and equity	40,679,997	42,814,284	44,249,306

Note: Components may not add up to the total because of rounding

## Income Statement (Road Account)

(Unit: million yen)

Item	FY2017 (Result)	FY2018 (Estimated)	FY2019 (Planned)	Item	FY2017 (Result)	FY2018 (Estimated)	FY2019 (Planned)
(Ordinary expenses)				(Ordinary income)			
Ordinary expenses	1,394,210	1,432,237	1,475,963	Ordinary income	2,051,053	1,946,037	1,917,465
Operating expenses of road assets lending	1,004,241	1,023,560	1,093,000	Income from the road assets lending fees	2,021,599	1,921,979	1,904,093
Management effort aid expense	195	454	916	Other income	4,702	4,851	4,799
General and administrative expenses	1,416	1,470	1,271	Revenues from subsidies, etc	10,704	10,856	-
Finance expenses	336,044	311,501	296,885	Income from donations	6,690	27	511
Expenses related to acquisition of road assets	51,883	95,252	83,890	Reversal of asset collateral liabilities	7,312	8,154	8,035
Miscellaneous losses	431	-	-	Financial revenues	21	33	28
(Temporary losses)				Miscellaneous income	27	137	-
Temporary losses	57	39,102	-	(Temporary profits)			
Loss on retirement of fixed assets	0	-	-	Temporary profits	26,218	27,582	25,994
Loss on sale of fixed assets	57	7	-	Reversal of reserve for Highway Convenience Improvement Project	25,555	25,845	25,994
Loss on transfer of fixed assets	-	39,095	-	Gain on sales of fixed assets	152	942	-
Net profit	683,004	502,280	467,497	Other temporary profits	511	795	-
Gross profit	683,004	502,280	467,497				
Total	2,077,271	1,973,619	1,943,460	Total	2,077,271	1,973,619	1,943,460

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