



CAIXA SOLUTIONS FOR SPECIFIC SOCIAL SECURITY REGIMES

Actuarial Valuation

State of Rio de Janeiro/RJ

Valuation Base Date: Dec/31/2016

Brasília, April 2017

CAIXA

ACTUARIAL VALUATION

State of Rio de Janeiro/RJ

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Brasília, April 2017

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Actuarial Valuation of the Social Security System of the State of Rio de Janeiro

1 Presentation

The periodic Actuarial Valuation of a Benefit Plan with a Specific Social Security Regime, in addition to being a legal requirement, provided for in Law no. 9,717/98 and the Ministry of Social Security (MPS) Ordinance no. 204/08, is essential for reviewing of the social security plan's costing and benefits plans, in order to maintain or achieve a financial and actuarial balance. Thus, RIOPREVIDÊNCIA – Single Social Security Fund of the State of Rio de Janeiro – has contracted Caixa Econômica Federal to prepare this actuarial valuation.

As provided for in Article 5 and 7 of State Law No. 6,338, dated November 06, 2012, transcribed below, the group of beneficiaries is divided into two groups, namely:

That Law creates two Funds, the First being the Financial Fund, which is made up of current active and inactive public servants and pensioners who had joined the State prior to Sep/03/2013, the military servants and their dependents and the public servants who had taken office in the State after Sep/04/2013, but entered the public service before this date without interruption, in addition to their dependents. The second Fund, called the Social Security Fund, will be made up of civil servants who joined the municipal, state or federal public service as of Sep/04/2013 and were not bound to the public service previously or had a connection, but with interruption.

The actuarial valuation was carried out in four stages:

- Critical analysis of the database of actives public servants, retirees and pensioners;
- Selection of the financial and actuarial assumptions, financing systems and other mechanisms for measuring the plan obligations and the performance of the Actuarial Calculation;
- Analysis of results and studies on the feasibility of maintaining costing plans; and if they are unbalanced, one or more costing plans will be discussed and proposed in order to promote the long-term balance of the plan, without unbalancing the accounts in the short and medium terms; and
- Comparison of the results of the last three actuarial valuations carried out for

the RPPS social security plans.

2 Bases Used to Prepare the Actuarial Valuations

2.a. Legal Bases

- Federal Constitution (amendments introduced by Constitutional Amendments Nos. 20, 41, 47, 70 and 88 published on December 16, 1998, December 31, 2003, July 06, 2005 and March 29, 2012, respectively);
- Law 10,887, of June 21, 2004;
- Supplementary Law 152, of December 2015;
- MPS Ordinance No. 204, of July 10, 2008 and subsequent amendments;
- MPS Ordinance No. 402, of December 10, 2008 and subsequent amendments;
- MPS Ordinance No. 403, of December 10, 2008 and subsequent amendments;
- Law 5,260, of June 11, 2008;
- State Law No. 6,338, of November 06, 2012; and
- State Law 6,243, of May 21, 2012.

All of these standards and other social security regulations are available on the CD accompanying this report.

2.b. Technical Bases

The Actuarial Technical Base is composed of all the assumptions, hypotheses and mathematical techniques, among others, that determine the calculation of the Mathematical Reserve of Granted Benefits (RMBC), the Mathematical Reserve of Benefits to be Granted (RMBaC), Normal Cost (CN) and the Supplemental Cost (CS) of the Social Security Benefit Plan. In this study, we considered the technical bases that we understand as being adherent to the characteristics of the mass of participants:

Table 1: Assumptions used in the actuarial calculation

Assumption	Used
Real Interest Rate ¹	5.00% p.a.
Real Interest Rate – Financial Fund ²	0.00% p.a.
Inflation Rate	0.00% p.a.
Real Salary Growth Rate ³	1.00% p.a.
Real Benefit Growth Rate	0.00% p.a.
Turnover Rate ⁴	1.00% p.a.
Administrative Expense Rate ⁵	2.00% p.a.
New Members ⁶	Yes
Social Security Compensation	Yes

Table 2: Biometric tables used for the generating events

Generating Event	Table
General Mortality ⁷	AT-2000
Survival	IBGE-2014
Start Disability	ALVARO VINDAS
Mortality of Disabled People	IBGE-2014

Prepared by: CAIXA

2.c. Database

The database used in this valuation contains information on the active and retired public servants of each of the RPPS social security plans of the State of Rio de Janeiro, as well as the dependents of these Public Servants and also the registration information of the pensioners.

In accordance with the provisions of Article 40 of the Federal Constitution, already with the wording adjusted by EC No. 41/03, transcribed below, the public servants holding effective positions were considered in this actuarial valuation. As such, when we mention the term "active public servants" in this text, we are actually referring to the public servants that hold effective positions.

1 According to the Sole Paragraph of Article 9 of MPS Ordinance No. 403/08, the actual interest rate of the actuarial calculation may not exceed 6% per annum.

2 According to the Sole Paragraph of Article 9 of MPS Ordinance No. 403/08, the actual interest rate of the actuarial calculation may not exceed 6% per annum.

3 According to Article 8 of MPS Ordinance No. 403/08, the real salary growth calculated must show a minimum increase of 1% per annum.

4 According to Paragraph 1 of Article 7 of MPS Ordinance No. 403/08, the maximum permissible turnover rate is 1% per year.

5 Article 15 of MPS Ordinance no. 402, dated 12/11/2008, provides that the administration fee may not exceed two percentage points of the total value of the remuneration, pay and pensions of the beneficiaries linked to the specific social security regime, in relation to the previous financial year. As such, we highlight that the percentage used to calculate administrative expenses is 2%.

6 Assumption of the behavior of the hiring of new Public Servants. Only considered for projecting future revenue and expenditure, not taken into account for cost purposes and Mathematical Reserve.

7 According to Article 6 caput and its sub-item I, both of MPS Ordinance No. 403/08, any tables may be used in the actuarial calculation, provided they do not indicate obligations lower than those established by the current mortality table generated by the Brazilian Institute of Geography and Statistics – IBGE.

"Art. 40. Public servants holding effective positions of the Federal, State, Federal District and Municipalities, including their agencies and foundations, shall be provided with a contributory and joint social security regime, with a contribution from the respective public entity, active and inactive public servants and pensioners, observing criteria that preserve the financial and actuarial balance and the provisions of this article.

...

Paragraph 13. The general social security regime shall only apply to the public servant holding a commissioned position, declared under the law as being of free appointment and discharge, as well as another temporary position or public employment".

The following base dates were considered:

- Base date for data: **Sep/30/16**;
- Valuation date: **Dec/31/16**;
- Valuation Prepared on: **Apr/10/2017**

3. Purification of Database

The results presented in this study were affected by the lack or inconsistency of information submitted in the databases sent by the State, which determined the adoption of technical assumptions that aim at reducing their effects on the results of the actuarial valuation. The inconsistencies and the respective assumptions adopted are described in Annex 10.

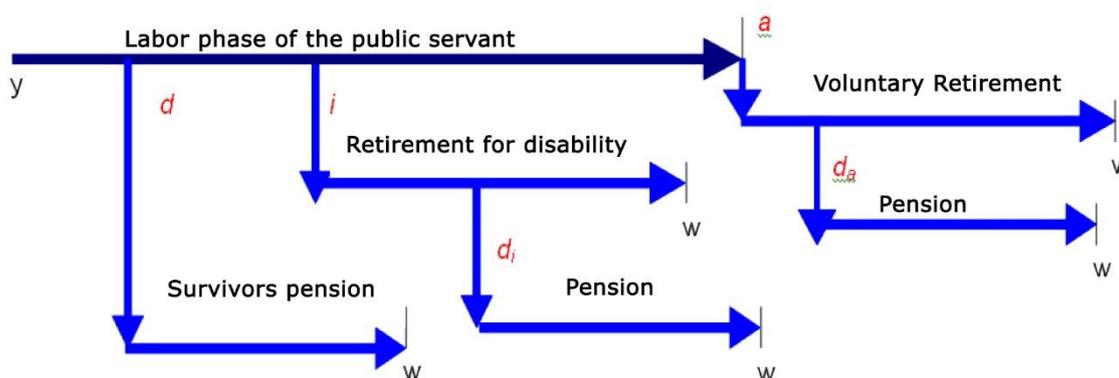
4 Description of Social Security Plan Benefits and Annual Bonus

To prepare the actuarial valuation, the following social security benefits were considered, provided for in the federal legislation, for the purposes of calculating the cost:

- Survivors Pension;
- Retirement – compulsory, by contribution time and by age;
- Retirement for Disability; and
- Allowance During Imprisonment;

As of the date of becoming a member of the RPPS, the public servant is subject to the possibility of no longer being an active public servant due to discharge, death or voluntary, compulsory or disability retirement. In case of death in retirement, there is also the possibility of reverting the benefit into survivor's pension. The following diagram illustrates this change over time.

Chart 1: Social Security Benefits



Source: Adapted from Fontoura, 2002.
Prepared by: CAIXA

- y : joining the RPPS;
- d : the death of the active public servant
- i : active public servant starting disability;
- d_i : the death of the retiree for disability;
- a : the age of eligibility of the active public servant to the benefit of Voluntary and Compulsory Retirement;
- d_a : death of the voluntary or compulsory retiree; and
- w : termination of the benefit.

The death of an active public servant generates an obligation for the Regime to pay the life annuity or temporary pension benefit to the dependents if the public servant is married and/or have dependents. On the other hand, the entry into a state of disability necessarily generates the payment of the disability retirement benefit to the disabled public servant during the rest of his life. If the disabled retiree dies, he/she will leave the right to receive the pension derived from it to his/her dependents (if any), according to the rules that govern the Plan. These benefits are known as risk benefits, since they are

granted in a random and involuntary manner.

If the public servant goes through the entire work phase, alive and not disabled, he/she will become eligible for the voluntary or compulsory retirement benefit. These benefits are known as programmed benefits, since their concessions are predictable and voluntary. The public servant will then receive their inactivity income until death. As with the disability benefit, there is the possibility of reverting the retirement benefit to pension for legal dependents.

The main characteristics of the analyzed population will be shown, through graphs and statistical tables, outlining the profile of active and retired public servants and pensioners, according to the mass segmentation implemented by State Law No. 6,338, dated November 06, 2012.

Retirement Plan

Comprised of public servants admitted as of Sep/04/13 and retirements and pensions generated by these public servants, according to State Law No. 6,338, dated November 06, 2012. The benefits of this Fund will be financed under the Capitalization Financial Regime.

5 Profile of the Population of the Social Security Plan

5.a. Population Distribution by Segment

The population analyzed, in quantitative terms, is distributed as follows:

Table 3: Population Studied by Segment – Social Security Plan

Actives	Retirees	Pensioners
18,973	7	17

Prepared by: CAIXA

Analyzing the composition of the population of public servants of the State of Rio de Janeiro, it is found that the total retirees and pensioners represents a portion of 0.13% of the group. This distribution points to a proportion of 790.54 active public servants for each retired public servant or dependent on benefit, as shown in the following table.

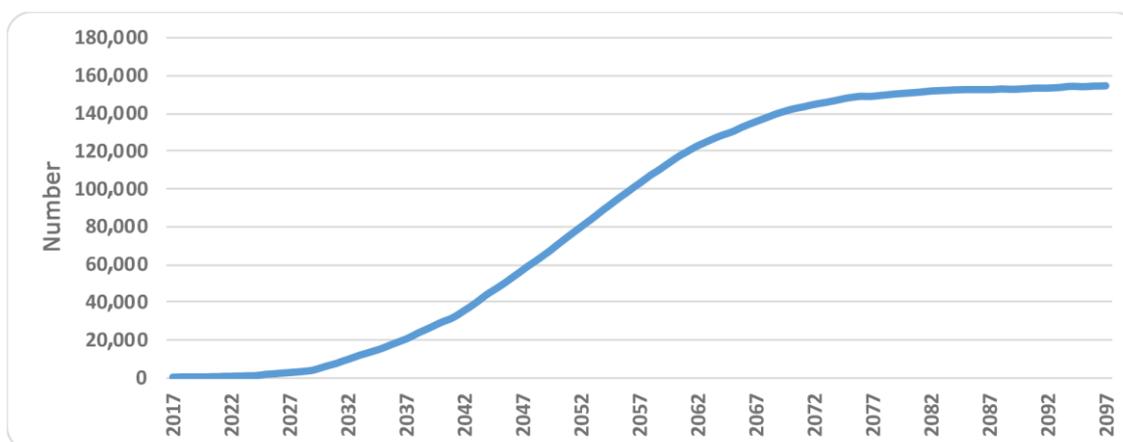
Table 4: Proportion between Active Public Servants, Retirees and Pensioners

Breakdown	Actives	Retirees and Pensioners	Proportion Actives / Retirees and Pensioners
Number	99.87%	0.13%	790.54

Prepared by: CAIXA

The following chart shows the changes in the population of retired public servants and pensioners of the State of Rio de Janeiro linked to the Social Security Plan expected for the coming decades. This forecast is made considering the possibilities of termination to which the group is subject, such as: retirement and disability benefits.

Chart 2: Change in the Number of Participants Tied to the Social Security Plan



As can be seen in the chart, the granting of benefits granted by the Social Security Plan will gradually change until maturity, when the number of active public servants, retirees and pensioners will tend to be stable. However, variations in this amount may

occur due to the occurrence of risk benefits (disability retirement or survivors pension).

5.b. Breakdown of Personnel Expenses by Segment

Table 5: Personnel Expenses per Segment

Breakdown	Monthly Payroll	Number	Average Remuneration
Active Public Servants	R\$ 64,109,908.39	18,973	R\$ 3,379.01
Retired Public Servants	R\$ 12,079.63	7	R\$ 1,725.66
Pensioners	R\$ 48,120.02	17	R\$ 2,830.59
Total	R\$ 64,170,108.04	18,997	R\$ 3,377.91

Note: The expense shown only represents the expenses with public servant remuneration and salaries.

Considering the information described in the previous table, it is found that the current expenses with the payment of social security benefits of the State of Rio de Janeiro represent 0.09% of total personnel expenses and 0.09% of the active public servant payroll, as shown in the table below:

To finance the Social Security Plan, the State of Rio de Janeiro and the beneficiaries make normal contributions as described below:

- monthly contributions from active public servants: 11.00% calculated on the contribution remuneration;
- monthly contributions of retired public servants and pensioners: they do not contribute to this Fund;
- monthly contributions of retirees and pensioners with disabling diseases: they do not contribute to this Fund; and
- Monthly contributions from the State: 22.00% on the contribution remuneration of the active public servants.

This costing plan generates the following monthly finance revenue:

Table 6: Revenue from Contribution by Social Security Plan Segment

Breakdown	Calculation Basis	Calculation Basis Value	Contribution Percentage	Revenue
Active Public Servants	Payroll	R\$ 64,109,908.39	11.00%	R\$ 7,052,089.92
Retired Public Servants	Value that exceeds INSS ceiling – retirees	R\$ 0.00	0.00%	R\$ 0.00
Pensioners	Value that exceeds INSS ceiling – Pensioners	R\$ 0.00	0.00%	R\$ 0.00
Municipal – CN	Payroll	R\$ 64,109,908.39	20.00%	R\$ 12,821,981.68
Municipal – CS	Payroll	R\$ 64,109,908.39	0.00%	R\$ 0.00
Total Revenue from Contributions				R\$ 19,874,071.60
Municipal – Administration Fee	Benefits and salaries payroll	R\$ 64,170,108.04	2.00%	R\$ 1,283,402.16
Total Revenue				R\$ 21,157,473.76

Prepared by: CAIXA

When matching revenue with expenditure, the following financial flow is shown:

Table 7: Financial Result

Breakdown	Total		
Total revenue from contributions	R\$ 19,874,071.60		
Total social security expenses	Retirees and Pensions	R\$ 60,199.65	R\$ 66,610.64
	Allowances (*)	R\$ 6,410.99	
Result (revenue - expenses)	R\$ 19,807,460.96		
Result on payroll	30.90%		
Result on collection	99.66%		

(*) Corresponds to the monthly average of expenses with Allowances, according to the amounts informed to CAIXA.

Source: Database provided by the State.

Prepared by: CAIXA

Thus, considering the collection of R\$ 19,874,071.60, there is a financial surplus of 30.90% of the payroll for the active public servants.

5.c. General statistics on active public servants, retirees and pensioners of the Social Security Plan

Table 8: Actives

Breakdown	Amounts
Population	18,973
Current average age	35
Average age of admission to public service	33
Projected average retirement age	60
Average salary	R\$ 3,379.01
Total monthly payroll	R\$ 64,109,908.39

Table 9: Retirees

Breakdown	Amounts
Population	7
Current average age	42
Average Benefit	R\$ 1,725.66
Total monthly benefit payroll	R\$ 12,079.63

Table 10: Pensioners

Breakdown	Amounts
Population	17
Current average age	33
Average Benefit	R\$ 2,830.59
Total monthly benefit payroll	R\$ 48,120.02

Table 11: Total

Breakdown	Amounts
Population	18,997
Total monthly benefits and salaries payroll	R\$ 64,170,108.04

6 Plan Net Assets

The Net Assets effectively constituted by RPPS (Plan Assets) is the amount used to cover the Mathematical Reserves (Plan Liabilities) and will determine if the Social Security Benefit Plan is balanced, in deficit or surplus. These net assets may consist of assets, rights and financial assets. These financial assets, as set forth in Art. 2 of CMN Resolution No. 3922/2010, may be segmented into Fixed Income, Variable Income and Real Estate (Real Estate Funds).

As reported to CAIXA, the RPPS net assets, as of December 31/Dec/16, amounts to R\$ 569,605,210.34 and is composed of Financial Assets.

7 Social Security Cost – Social Security Plan

7.a. Social Security Cost Financing Model

In order to calculate the Social Security Cost of the Social Security Plan, we use financial regimes defined based on the characteristics of each social security benefit.

The Financial Regime is understood as the financing model adopted by the actuary to establish the level and timing of the contributions needed to cover the benefits insured by the Plan. There are three actuarial financial regimes: Capitalization (CAP), Coverage Capital Redistribution (RCC) and Simple Redistribution (RS). They basically

differ from each other by the contribution period, by the benefit for which it is most appropriate and the level of constitution of financial reserves.

For retirement benefits (reversible to dependents), the Capitalization Financial Regime was used as a method to accumulate reserves at the Normal Age of Entry. The cost is calculated individually and its sum is divided by the value of the payroll. This procedure indicates a percentage of constant contribution over time that should be apportioned between the public servants and the Government. Note that, in this model, the contribution period extends from the date of admission to the public service until the date of retirement; and

For the other benefits, the pension of active public servants and retirement for disability, the financial regime of Coverage Capital Redistribution was used.

Table 12: Normal Cost Grouped by Financial Regime

Financial Regime	Normal Cost	Annual Cost	Rate on payroll of actives
Capitalization	Voluntary and Compulsory Retirement	R\$ 156,517,930.35	18.78%
	Reversion of Voluntary and Compulsory Retirement into Pension	R\$ 30,336,808.65	3.64%
Coverage Capital Redistribution	Disability reverting to the dependent	R\$ 11,501,317.57	1.38%
	Survivors pension of the Active Public Servant	R\$ 24,586,149.87	2.95%
	Allowance during imprisonment	R\$ 83,342.88	0.01%
Simple Redistribution	Sick pay	R\$ 0.00	0.00%
	Maternity pay	R\$ 0.00	0.00%
	Family Allowance	R\$ 0.00	0.00%
Total		R\$ 223,025,549.32	26.76%

7.b. Normal Cost

The Total Annual Normal Cost of the Plan corresponds to the sum of the amounts needed to fund the reserves to pay scheduled retirement benefits and the risk benefits (survivors pension of active public servants and disability retirement) and allowance during imprisonment) added to the Administration Fee. As the name implies, the values of the Annual Normal Cost correspond to the amount that will keep the Plan balanced for one year, from the date of the actuarial valuation. In the mandatory annual actuarial revaluation, the reserves shall be recalculated and the need to change the contribution

rate shall be checked.

Table 13: Total Normal Cost

NORMAL COST	Annual Cost (R\$)	Rate on payroll of actives
Retirements reverting to the dependent	R\$ 186,854,739.00	22.42%
Disability reverting to the dependent	R\$ 11,501,317.57	1.38%
Pension of actives	R\$ 24,586,149.87	2.95%
Allowances	R\$ 83,342.88	0.01%
NORMAL ANNUAL NET COST	R\$ 223,025,549.32	26.76%
Plan Administration	R\$ 16,684,228.09	2.00%
NORMAL ANNUAL TOTAL COST	R\$ 239,709,777.41	28.76%

7.c. Mathematical Reserves

The Mathematical Reserve is the actuarial liability account that expresses the actuarial projection, representing all the net obligations of the plan to its beneficiaries (actives, retirees and pensioners). That is, it represents the difference between future social security benefits and future contributions brought financially to the present date (present value) considering a certain interest rate.

The Mathematical Reserve is a Benefit Granted when it refers to retired public servants and pensioners and Benefits to be Granted when it refers to active public servants.

When calculating the difference between the Net Assets and the Mathematical Reserves, it can be valued if the Plan is in surplus, as a positive result, or a deficit, a negative result. The table below shows this result taking into account the obligations and the assets of the Social Security Plan.

Table 14: Reserves – Social Security Plan

Breakdown	Amounts
(-) Present Value of Future Benefits (retirees)	(R\$ 2,679,510.11)
(+) Present Value of Future Contributions (retirees)	R\$ 0.00
(-) Present Value of Future Benefits (pensioners)	(R\$ 10,965,741.25)
(+) Present Value of Future Contributions (pensioners)	R\$ 0.00
(+) Present Value of Future Contributions (Entity)	R\$ 0.00
(+) Social Security Compensation *	R\$ 98,245.81
Mathematical Reserve of Granted Benefits (RMB – Granted)	(R\$ 13,547,005.56)
(-) Present Value of Future Benefits	(R\$ 3,020,709,286.01)
(+) Present Value of Future Contributions – Active Public Servants	R\$ 866,220,358.19
(+) Present Value of Future Contributions – Retired Public Servants and Pensioners	R\$ 0.00
(+) Present Value of Future Contributions – Entity on Actives ***	R\$ 1,732,440,716.38
(+) Present Value of Future Contributions – Entity on Retirees and Pensioners	R\$ 0.00
(+) Social Security Compensation *	R\$ 21,749,106.86
Mathematical Reserve of Benefits to be Granted (RMB to be Granted)	(R\$ 400,299,104.58)
(-) Mathematical Reserve of Granted Benefits (RMBC)	(R\$ 13,547,005.56)
(-) Mathematical Reserve of Benefits to be Granted (RMBaC)	(R\$ 400,299,104.58)
Mathematical Reserves (RMBaC + RMBC)	(R\$ 413,846,110.14)
(+) Plan Assets **	R\$ 569,605,210.34
(+) Other receivables	R\$ 0.00
Actuarial Technical Surplus	R\$ 155,759,100.20

* For the purpose of estimating the Social Security Compensation, the percentage of the retired payroll that returns to the RPPS as Social Security Compensation was calculated and applied that percentage on the Present Value of Future Benefits of the current actives and retirees.

** The financial assets of the Plan were stated by RPPS in the "Supplementary Information" relating to 31/Dec/16.

*** Corresponds to the present value of the future contributions of the public entity that used payroll as a base.

To understand the Mathematical Reserves table, please find the following definitions:

- **Present Value** – corresponds to the sum of future payments that will be made under the Specific Social Security Regime, brought to the current date, discounting the accrued interest in each period and the probabilities of a decrease in the group of active public servants, whether by death, retirement, disability, discharge or dismissal;
- **RMB Granted** – corresponds to the sum of the reserves needed to pay the benefits of current retirees and pensioners discounted future contributions that will be transferred to the retirement plan, both from the employer and from the public servants;
- **RMB to Grant** – corresponds to the sum of the reserves needed to pay the

retirement and pension benefits for the current actives discounted the future contributions that will be transferred to the retirement plan, both from the employer and from the public servants;

- **Reserve to Amortize** – corresponds to the amount needed to amortize the deficit.

To estimate the present value of the Social Security Compensation flow, it was considered that the amounts receivable will be proportional to the current expense with payment of retirements and that the estimated total present value of revenues from this settlement of accounts is less than 10.00% of the present value of future benefits used to calculate Mathematical Reserves, based on the assumption that currently the revenue amount from this settlement of accounts with the General Social Security Regime is R\$ 8,643,855.53 per month.

The value of the Mathematical Reserve needed of these public servants is R\$ 413,846,110.14, and since the Financial Asset of this Fund is R\$ 569,605,210.34, there is a surplus of R\$ 155,759,100.20. In compliance with the rules of the Social Security Ministry, this surplus was allocated to the account “Surplus Actuarial Result Adjustment”, equivalent to the minimum between 25% of the Mathematical Reserves and the surplus amount.

8 Analysis of Variances in Social Security Plan Results

The main variances in the statistics and in the Costs and Mathematical Reserves of the Plan offered to RPPS participants linked to the Social Security Plan are analyzed, considering this actuarial valuation and those of the previous years, as follows.

8.a. Variance in Social Security Plan Statistics

Table 15: Variances in the Number of Participants

Breakdown	Actives	Retirees	Pensioners
2015 Actuarial Valuation	11,069	0	0
2016 Actuarial Valuation	17,040	2	8
2017 Actuarial Valuation	18,973	7	17

Table 16: Variances in Average Salaries and Benefits

Breakdown	Actives	Retirees	Pensioners
2015 Actuarial Valuation	R\$ 2,275.23	R\$ 0.00	R\$ 0.00
2016 Actuarial Valuation	R\$ 2,832.55	R\$ 3,071.65	R\$ 2,592.01
2017 Actuarial Valuation	R\$ 3,379.01	R\$ 1,725.66	R\$ 2,830.59

Table 17: Variances in Benefits and Salaries Payroll

Breakdown	Actives	Retirees	Pensioners
2015 Actuarial Valuation	R\$ 25,184,497.61	R\$ 0.00	R\$ 0.00
2016 Actuarial Valuation	R\$ 48,266,643.35	R\$ 6,143.29	R\$ 20,736.10
2017 Actuarial Valuation	R\$ 64,109,908.39	R\$ 12,079.63	R\$ 48,120.02

Table 18: Statistics of Active Public Servants Admitted to the State After the Last Actuarial Valuation

Breakdown	Female	Male	Total
Population	1,824	2,870	4,698
Monthly Payroll	R\$ 5,596,868.11	R\$ 8,551,222.87	R\$ 14,202,695.63
Average salary	R\$ 3,068.46	R\$ 2,979.52	R\$ 3,023.14
Current minimum age	20	19	19
Current average age	34	32	33
Current maximum age	70	69	70
Minimum age of admission	19	18	18
Average age of admission	33	31	32
Maximum age of admission	69	68	69
Projected average retirement age	57	59	58

From the data shown in the tables above, the following analysis can be made:

- an increase of 11.34% percentage points in the number of active participants, 1,933 public servants. Alongside this, there was an increase in the number of retired public servants, 05, and an increase in pensioners, 09, which, combined with the variation in average salary and benefits, resulted in a 32.88% increase in personnel expenses.

8.b. Variance in Social Security Costs and Social Security Plan Reserves

Table 19: Normal Cost Variance

NORMAL COST	2015 Actuarial Valuation	2015 Actuarial Valuation	2017 Actuarial Valuation
Retirements reverting to the dependent	23.36%	23.19%	22.42%
Disability reverting to the dependent	1.20%	1.47%	1.38%
Pension of actives	2.50%	3.01%	2.95%
Allowances	0.01%	0.01%	0.01%
NORMAL NET ANNUAL COST	27.07%	27.68%	26.76%
Plan Administration	1.15%	1.15%	2.00%
TOTAL ANNUAL NORMAL COST	28.22%	28.83%	28.76%

Table 20: Variances in Reserves Amounts and Plan Assets

Mathematical Reserves (RMBaC + RMBC)	2015 Actuarial Valuation	2016 Actuarial Valuation	2017 Actuarial Valuation
(-) Mathematical Reserve of Benefits Granted (RMBC)	R\$ 0.00	R\$ 5,482,178.44	R\$ 13,547,005.56
(-) Mathematical Reserve of Benefits to be Granted (RMBaC)	R\$ 73,733,654.10	R\$ 275,066,290.71	R\$ 400,299,104.58
Mathematical Reserves (RMBaC + RMBC)	R\$ 73,733,654.10	R\$ 280,548,469.15	R\$ 413,846,110.14
(+) Plan Net Assets	R\$ 105,072,910.34	R\$ 292,808,531.96	R\$ 569,605,210.34
Result: Actuarial Technical Surplus	R\$ 31,339,256.24	R\$ 12,260,062.81	R\$ 155,759,100.20

From the data shown in the tables above, the following analyzes can be made:

- Variance in the Normal Cost of less than 1.00%, showing stability of this cost;
- Increase in the Mathematical Reserves of Benefits to be Granted due to the increase in the payroll and since this plan is still in the reserve formation phase;
- Increase in Mathematical Reserves of Benefits Granted as a result of the increase in the benefits payroll for retirees and pensioners;
- Increase in the surplus, since the Plan Net Assets, which increased by 94.53%, increased by a much greater magnitude than the increase in the values of the Mathematical Reserves, by 44.50%.

9 Actuarial Opinion

In order to guarantee the financial coverage of Social Security Benefits, the State of Rio de Janeiro and its public servants pay monthly contributions to a Social Security Fund.

As provided for in Article 5 and 7 of State Law No. 6,338, dated November 06, 2012, transcribed below, the group of beneficiaries is divided into two groups, namely:

That Law creates two Funds, the First being the Financial Fund, which is made up of current active and inactive public servants and pensioners who had joined the State prior to 09/03/2013, the military servants and their dependents and the public servants who had taken office in the State after 09/04/2013, but entered the public service before this date without interruption, in addition to their dependents. The second Fund, called the Social Security Fund, will be made up of civil servants who joined the municipal, state or federal public service as of 09/04/2013 and were not bound to the public service previously or had a connection, but with interruption.

In addition to the separation of the mass of public servants, there is also supplementary retirement, which is why contribution salaries and benefits are limited to the benefit ceiling of the RGPS.

In view of the absence or inconsistency of information submitted in the registration databases sent by the State, technical assumptions were adopted that aim at reducing their effects on the results of the actuarial valuation. Such inconsistencies are related to the high rate of public servants with the previous length of service equal to zero.

The number of married public servants reported in the registration database was considered to be out of standard and much lower than what we found in the registration databases of other public entities. As such, since this information directly interferes with the Social Security Cost, we adopt the proportion of married people found in our database history as an assumption.

Following the provisions of Law 9,717/98 and MPS Ordinance No. 204/08, 402/08 and 403/08, an actuarial valuation was carried out to review the costing plan and benefits of the Social Security Plan.

The technical bases used were chosen by the responsible actuary, being those

that adhered to the characteristics of the mass of participants:

- **real interest rate**⁸ used in the projections contained in this valuation was 5% per year;
- **biometric tables**⁹ used were chosen according to the generating event:
 - Mortality Table of Abled Person (survival generating event) – IBGE-2014;
 - Mortality Table of Abled Person (death generating event) – AT-2000;
 - Start Disability Table - ALVARO VINDAS;
 - Mortality Table of Disabled People – IBGE-2014;
 - Probability of leaving a lifelong dependent in case of death, calculation of the proportion of married servants, by age, based on information found in the State database, using this proportion as a probability factor;
- **salary growth**¹⁰ considered was of 1% per year;
- **turnover rate**¹¹ considered was of 1% per year;
- **administrative cost**¹² considered in this study corresponds to 2.00% of the total remuneration of the active servants of the State;
- **Future Generation:** to each active public servant that leaves, another takes their place, with the same age of entrance and initial salary of the one that has left;
- **Projected average retirement age**
 - Female non-teacher: 60 years old;
 - Male non-teacher: 65 years old;
 - Female teacher: 56 years old;
 - Male teacher: 60 years old.
- **Key statistics for active public servants:**
 - Number – Women: 9,724;
 - Number – Men: 9,249;
 - Salary – Women (Annual): R\$ 404,109,777.34;
 - Salary – Men (Annual): R\$ 429,319,031.78;

8 According to Article 9 of MPS Ordinance No. 403/08, the real interest rate of the actuarial calculation may not exceed 6% per annum.

9 According to Article 6 of MPS No. 403/08, any tables may be used in the actuarial calculation, provided they do not state obligations lower than those reached in that Ordinance.

10 According to Article 8 of MPS Ordinance No. 403/08, the real remuneration growth calculated must show a minimum increase of 1% per annum.

11 According to Paragraph 1 of Article 7 of MPS Ordinance No. 403/08, the maximum permissible turnover rate is 1% per year.

12 Article 15 of MPS Ordinance no. 402/08 provides that the administration fee may not exceed two percentage points of the total value of the remuneration, pay and pensions of the beneficiaries linked to the specific social security regime, in relation to the previous financial year. In this study, we consider that the administrative expenses will be 2.00% on the total value of the remuneration, pay and pensions

- Payroll – FS (Annual): R\$ 833,428,809.12.

To use the salary growth rate of 1.00% per year, the estimate of the salary evolution of the active public servant was used for each year of service in the State through the database received. In order to do so, it was estimated the salary growth of the public servant in each year of work in the State according to a regression model that evaluates the wage variation as a function of the length of stay in the State, estimating a salary growth lower than 1.00%, which is why the minimum real growth of 1.00% of the salary was considered, as established by Ordinance No. 403/2008.

In the same way that salary growth was assessed, the growth of benefits was also assessed, considering the time of receiving the retirement benefit and the average benefit. This analysis showed that, according to the regression analysis study, the actual growth of the benefit is very close to zero, and then this parameter is considered.

Considering the information provided by the Plan Managers, the annual return obtained by the benefits plan was 22.55%, taking the INPC (Consumer Price Index) as an inflation adjustment index, thus exceeding the actuarial target of 11.91%. As such, it was decided to keep it at this level for 2017.

As reported to CAIXA, the RPPS net assets, as of December 31/Dec/16, amounts to R\$ 569,605,210.34 and is composed of Financial Assets.

According to RPPS representatives, contributions are defined as follows:

- monthly contributions from active public servants: 11.00% calculated on the contribution remuneration;
- monthly contributions of retired public servants and pensioners: they do not contribute to this Fund;
- monthly contributions of retirees and pensioners with disabling diseases: they do not contribute to this Fund; and
- Monthly contributions from the State: 22.00% on the contribution remuneration of the active public servants.

In addition to the contribution revenue, the Plan also has revenues from Social Security Compensation for the monthly amount of R\$ 8,643,855.53. It was considered that the revenue stream from this settlement of accounts with the General Social Security Plan will be proportional to the amount of expense with payment of retirement benefits. Using this methodology, the present value of the payment flow of social security

compensation was valued at R\$ 21,847,352.67, implying a reduction in the actuarial technical deficit.

The actuarial valuation found that to cost the Benefit Plan it is necessary that public servant contributions and the State Government contributions amount to 28.76% of the contribution remuneration payroll of the active public servants, where the public servants are at least 11%, according to Law No. 10,887, of June 21, 2004.

It has also been shown that the Mathematical Reserves of the Plan amount to R\$ 413,846,110.14, with the Mathematical Reserve of Benefits to Grant at R\$ 400,299,104.58, and the Mathematical Reserve of Benefits Granted at R\$ 13,547,005, 56.

Currently, there are 18,973 public servants linked to the Social Security Plan with a date of admission after 04 /Sep/13, 7 retirees and 17 pensioners. The value of the Mathematical Reserve needed from these public servants is R\$ 413,846,110.14, and since the Financial Asset of this Fund is R\$ 569,605,210.34, there is a surplus of R\$ 155,759,100.20. In compliance with the rules of the Social Security Ministry, this surplus was fully allocated to the account "Surplus Actuarial Result Adjustment", equivalent to 25% of the Mathematical Reserves.

Since the current Normal Cost is higher than the Normal Cost calculated in the Actuarial Valuation, we suggest that it be maintained as follows:

- monthly contributions from active public servants: 11.00% calculated on the contribution remuneration;
- monthly contributions of retired public servants and pensioners: they do not contribute to this Fund;
- monthly contributions of retirees and pensioners with disabling diseases: they do not contribute to this Fund; and
- Monthly contributions from the State: 22.00% on the contribution remuneration of the active public servants.

This is the opinion.

Adilson Moraes da Costa
Actuary MIBA 1.032 MTE/RJ

Annex 1. Profile of the Population of the Social Security Plan

The contingent population of the analyzed Social Security Plan has presented the following distribution:

Table 21: Number of Population Studied by Segment – Social Security Plan

Actives	Retirees	Pensioners
18,973	7	17

Annex 1.a. Active Public Servant Statistics

Statistical variables related to a group of public servants directly interfere with the analysis and the results found in an actuarial valuation. In this item, the main statistical variables related to the group of active public servants of the State of Rio de Janeiro linked to the Social Security Plan will be demonstrated, commented on and compared, separated as follows: statistics of teachers and "non-teachers".

Table 22: Statistical Variables of “Non-teacher” Active Public Servants – Social Security Plan

Breakdown	Female	Male	Total
Population	4,798	5,643	10,441
Monthly Payroll	R\$ 21,043,912.29	R\$ 25,103,867.67	R\$ 46,147,779.95
Average salary	R\$ 4,385.98	R\$ 4,448.67	R\$ 4,419.86
Current minimum age	20	19	19
Current average age	35	35	35
Current maximum age	68	70	70
Minimum age of admission	18	18	18
Average age of admission	33	33	33
Maximum age of admission	67	67	67
Projected average retirement age	60	65	63

The gender distribution of the "non-teacher" active public servants, as can be seen in the previous table, points to a larger number of male public servants, that is, 54.05% of the total group. Other characteristics of the female "non-teacher" public servants in relation to the male public servants, based on the calculated averages, are as follows: lower average remuneration of 1.41% and projected retirement age of less than 5 years.

In this study, it is important to consider the influence of the "gender" variable in calculating the social security cost, given that, evidently, women have a higher life

expectancy than men and continue enjoying retirement benefits for a longer period of time. In addition to this, the current social security legislation establishes different requirements for female public servants, requiring a shorter retirement contribution time, which is even lower for female teachers, about 10 years earlier than men who are "non-teachers", while other women will retire five years before men (see chart 3 of this report).

The following table summarizes the main characteristics of the teacher public servants so that a comparative analyzes can be established between this group and that of the "non-teachers".

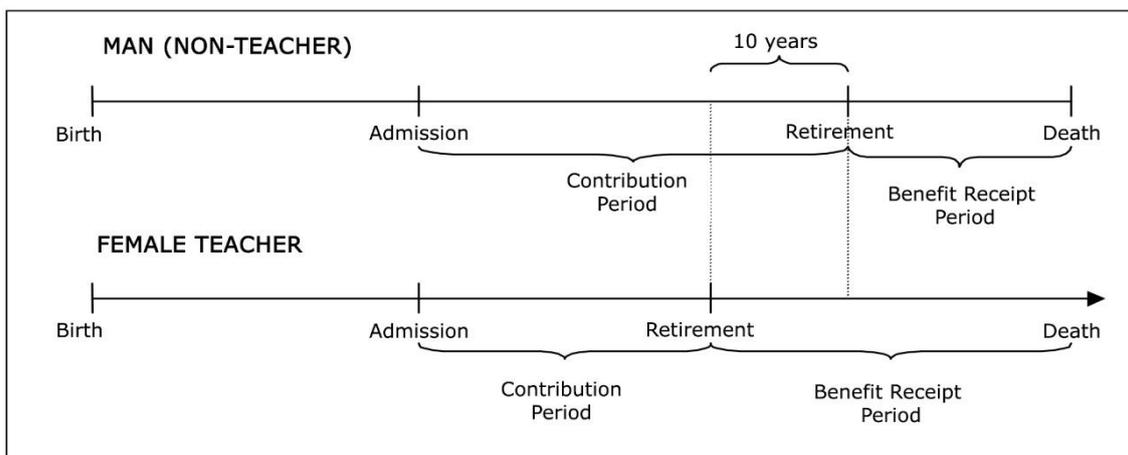
Table 23: Statistical Variables for Teacher Public Servants – Social Security Plan

Breakdown	Female	Male	Total
Population	4,926	3,606	8,532
Monthly Payroll	R\$ 10,041,455.20	R\$ 7,920,673.24	R\$ 17,962,128.44
Average salary	R\$ 2,038.46	R\$ 2,196.53	R\$ 2,105.27
Current minimum age	21	22	21
Current average age	36	36	36
Current maximum age	70	70	70
Minimum age of admission	18	20	18
Average age of admission	34	34	34
Maximum age of admission	69	68	69
Projected average retirement age	56	60	58

Currently, the population of public servants in teaching in the State of Rio de Janeiro corresponds to 44.97% of the total active public servants. This category has different characteristics from the others, such as its distribution by gender, where 57.74% of the group is composed of women.

The following Chart illustrates the difference in contribution time and retirement age existing between the female teachers and the "non-teacher" public servants.

Chart 3: Difference between the Female Teachers and Male Civil Servants



Financially, the difference shows up in approximately 20 years, since not only do female teachers contribute, on average, for a period of 10 years less than other male public servants, but also receive the benefit for a longer period, since they start receiving the benefit earlier and have a greater life expectancy than that of men for approximately 10 years.

The following table shows the statistical variables of the teachers and “non-teacher” public servants in the State of Rio de Janeiro, on a consolidated basis.

Table 24: Consolidation of Statistical Variables of Active Public Servants – Social Security Plan

Breakdown	Female	Male	Total
Population	9,724	9,249	18,973
Monthly Payroll	R\$ 31,085,367.49	R\$ 33,024,540.91	R\$ 64,109,908.39
Average salary	R\$ 3,196.77	R\$ 3,570.61	R\$ 3,379.01
Current minimum age	20	19	19
Current average age	35	35	35
Current maximum age	70	70	70
Minimum age of admission	18	18	18
Average age of admission	33	33	33
Maximum age of admission	69	68	69
Projected average retirement age	58	63	60

Given the data consolidation, it is found that the active female public servants represent 51.25% of the total contingent of active public servants. Regarding remunerations, it is found, given the calculated averages, that the male public servants perceive salaries 11.69% higher than the salaries of the female public servants.

The tables and graphs below show the statistics of the active public servants,

separated by specific variables relevant to the proposed study.

Table 25: Distribution of Active Public Servants by Age Group – Social Security Plan

Interval	Population	Frequency	Accumulated frequency
Up to 25	870	4.59%	4.59%
26 to 30	4,893	25.78%	30.37%
31 to 35	5,670	29.89%	60.26%
36 to 40	3,426	18.06%	78.32%
41 to 45	1,905	10.04%	88.36%
46 to 50	1,070	5.64%	94.00%
51 to 55	696	3.67%	97.67%
56 to 60	317	1.67%	99.34%
61 to 65	98	0.51%	99.85%
66 to 70	28	0.15%	100.00%
71 to 75	0	0.00%	100.00%
Above 75	0	0.00%	100.00%
Total	18,973	100.00%	100.00%

Chart 4: Distribution of Active Public Servants by Age Group – Social Security Plan

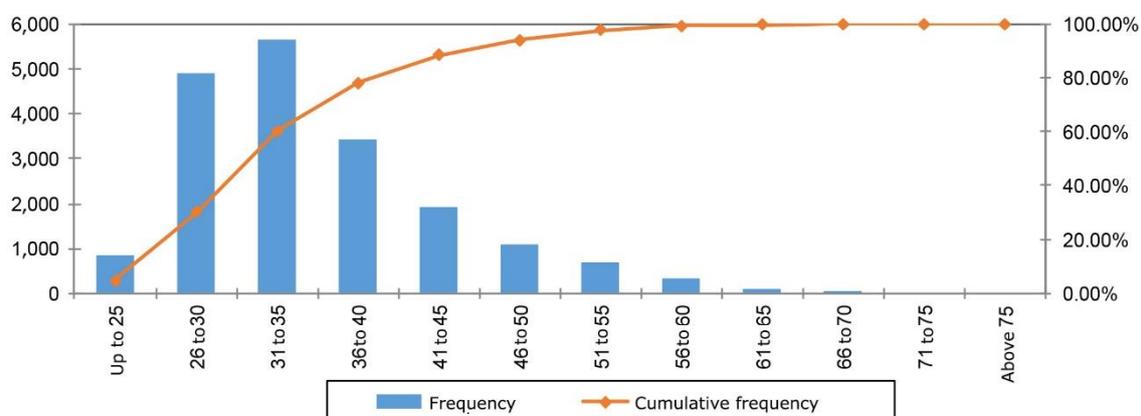
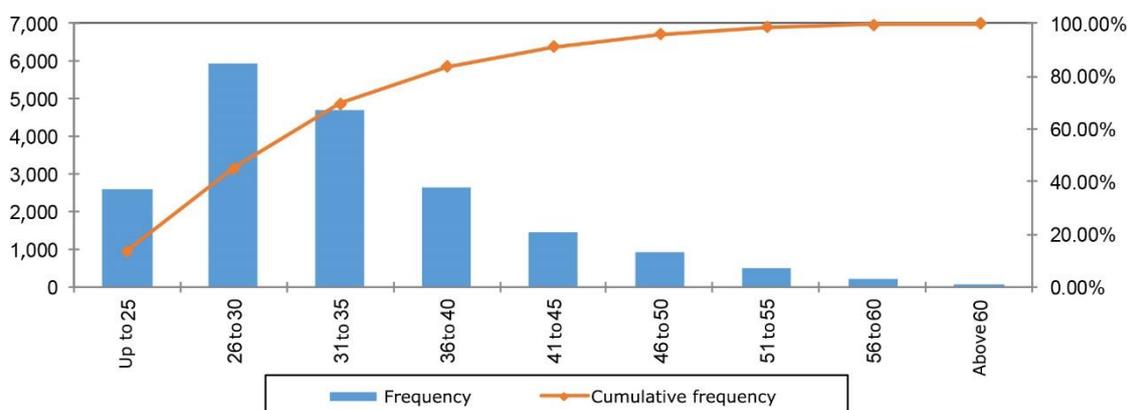


Table 26: Distribution of Active Public Servants by Age Admitted – Social Security Plan

Interval	Population	Frequency	Accumulated frequency
Up to 25	2,594	13.67%	13.67%
26 to 30	5,938	31.30%	44.97%
31 to 35	4,684	24.69%	69.66%
36 to 40	2,638	13.90%	83.56%
41 to 45	1,447	7.63%	91.19%
46 to 50	918	4.84%	96.03%
51 to 55	498	2.62%	98.65%
56 to 60	196	1.03%	99.68%

Above 60	60	0.32%	100.00%
Total	18,973	100.00%	100.00%

Chart 5: Distribution of Active Public Servants by Age Admitted – Social Security Plan



The lowest and the highest admission age recorded in the public service of the State of Rio de Janeiro were at 18 and 69 years of age, respectively, and 69.66% of the group were admitted by the age of 35.

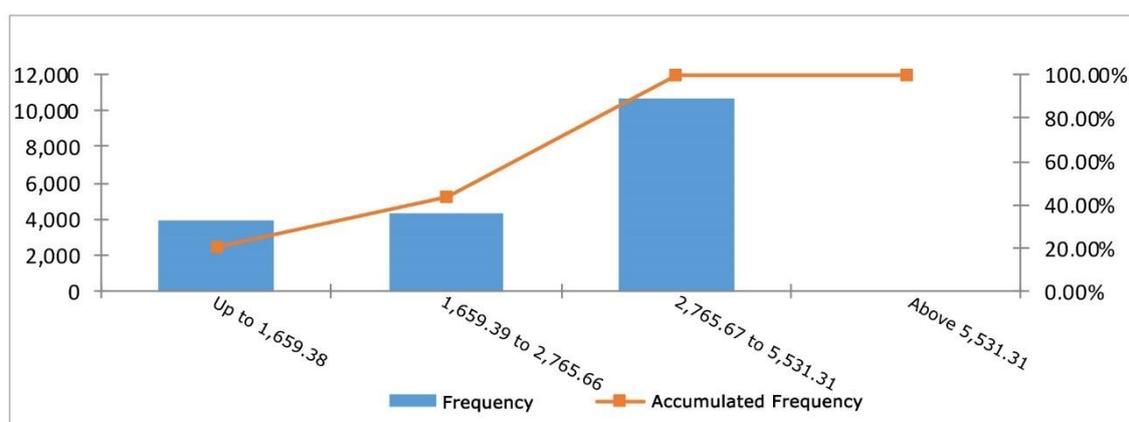
Note that the average age of public servant admission is a variable that produces a significant impact on the calculation of the Social Security Cost of a State, since, according to the methodology used to calculate the cost, under a capitalization regime, the public servant and the government must jointly finance the cost of social security benefits in the period between the public servant's age of admission and his retirement (constitution of reserves). Thus, the younger the public servant is admitted to the public service, the longer the contribution time for the social security regime, minimizing the impact on the cost of the plan.

The following table was prepared based on the currently used contribution bands, on the database under the Specific Social Security Regime – RPPS, in order to establish a comparative model with those of the active state public servants.

Table 27: Distribution of Active Public Servants by Wage Band – Social Security Plan

Interval – R\$	Population	Frequency	Accumulated Frequency
Up to 1,659.38	3,945	20.79%	20.79%
1,659.39 to 2,765.66	4,338	22.86%	43.66%
2,765.67 to 5,531.31	10,690	56.34%	100.00%
Above 5,531.31	0	0.00%	100.00%
Total	18,973	100.00%	100.00%

Chart 6: Distribution of Active Public Servants by Wage Band – Social Security Plan

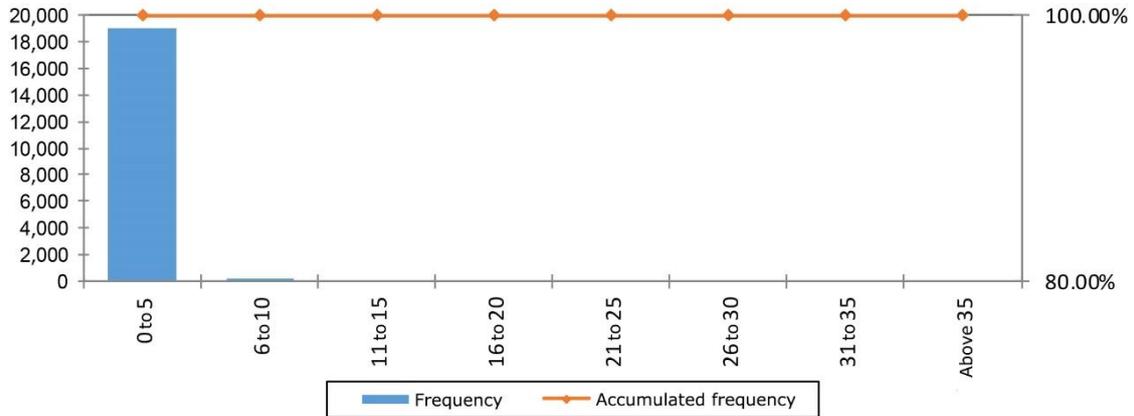


Note that 56.34% of the public servants are in the wage band of R\$ 2,765.67 up to R\$ 5,531.31.

Table 28: Distribution of Active Public Servants by Time of Contribution in the State – Social Security Plan

Interval	Population	Frequency	Accumulated frequency
0 to 5	18,970	99.98%	99.98%
6 to 10	3	0.02%	100.00%
11 to 15	0	0.00%	100.00%
16 to 20	0	0.00%	100.00%
21 to 25	0	0.00%	100.00%
26 to 30	0	0.00%	100.00%
31 to 35	0	0.00%	100.00%
Above 35	0	0.00%	100.00%
Total	18,973	100.00%	100.00%

Chart 7: Distribution of Active Public Servants by Time of Contribution in the State – Social Security Plan

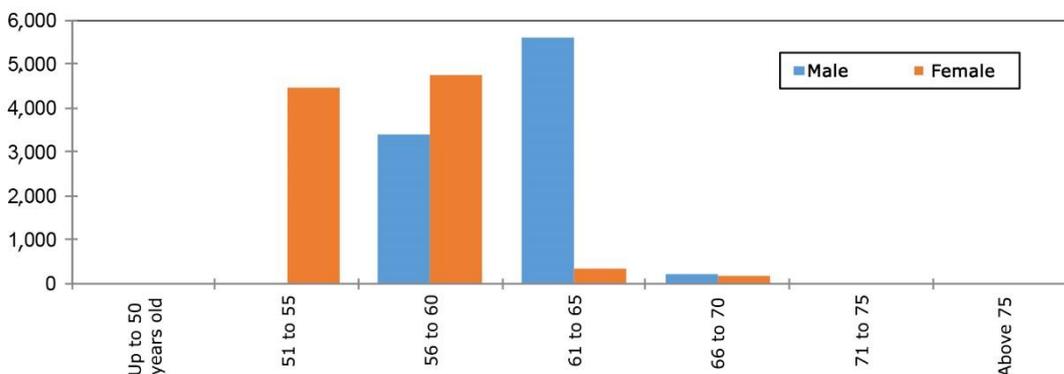


It can be found in the graph above that 99.98% of the active public servants have between 0 and 5 years of contribution time in the State Government.

Table 29: Distribution of Active Public Servants by Probable Pensionable Age – Social Security Plan

Interval	Female	Male	Total
Up to 50 years old	0	0	0
51 to 55	4,455	0	4,455
56 to 60	4,754	3,414	8,168
61 to 65	336	5,611	5,947
66 to 70	179	224	403
71 to 75	0	0	0
Above 75	0	0	0
Total	9,724	9,249	18,973

Chart 8: Distribution of Active Public Servants by Probable Pensionable Age – Social Security Plan



The chart above reinforces the above mentioned: female public servants will

retire earlier than males, reflecting the retirement rules established in current social security legislation. It is also found that 66.53% of the public servant population will meet the requirements for full retirement by the age of 60.

Table 30: Distribution of Active Public Servants by Marital Status – Social Security Plan

Category	Population	Frequency
Married	11,815	62.27%
Not married	7,158	37.73%
Total	18,973	100.00%

The probability of leaving a dependent for life in the event of death was calculated by observing the frequency of married public servants grouped by age, adjusting them by a curve that is closest to the trend indicated by the data.

Annex 1.b. Statistics of Retired Public Servants of the Social Security Plan

Find below the details of the main information in the registration database of retirees.

Table 31: Statistical Variables for Retired Public Servants

Breakdown	Female	Male	Total
Number of public servants	4	3	7
Payroll	R\$ 5,991.60	R\$ 6,088.03	R\$ 12,079.63
Average salary	R\$ 1,497.90	R\$ 2,029.34	R\$ 1,725.66
Minimum age	32	36	36
Average age	44	40	42
Maximum age	62	46	62

The previous table reveals that the distribution by gender of the retired public servants of the State of Rio de Janeiro linked to the Social Security Plan indicates a smaller number of male retirees, 42.86% of the total contingent.

Annex 1.c. Statistics of Pensioners of the Social Security Plan

Table 32: Statistics of Pensioners

Breakdown	Female	Male	Total
Population	17	0	17
Benefit payroll	R\$ 48,120.02	R\$ 0.00	R\$ 48,120.02
Average benefit	R\$ 2,830.59	R\$ 0.00	R\$ 2,830.59
Current minimum age	3	0	3
Current average age	33	0	33

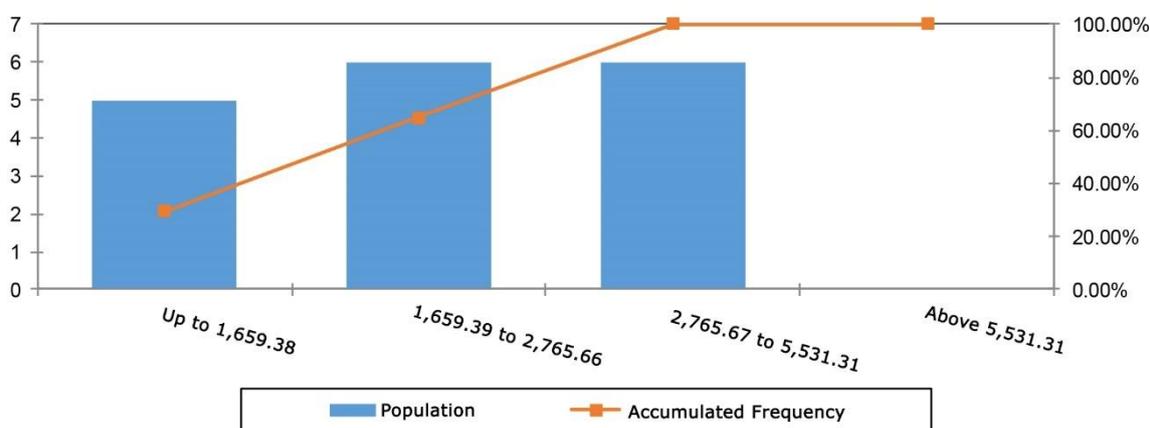
Current maximum age	62	0	62
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The group of pensioners of the State of Rio de Janeiro is represented by 100.00% of women.

Table 33: Distribution of Pensioners by Benefit Range

Interval – R\$	Population	Frequency	Accumulated Frequency
Up to 1,659.38	5	29.42%	29.42%
1,659.39 to 2,765.66	6	35.29%	64.71%
2,765.67 to 5,531.31	6	35.29%	100.00%
Above 5,531.31	0	0.00%	100.00%
Total	17	100.00%	100.00%

Chart 9: Distribution of Pensioners by Benefit Range



The concentration of the amounts perceived by the pensioners is in the second and third band, that is, 70.58% with benefits from R\$ 1,659.39 up to R\$ 5,531.39.

Annex 2. Parameters and Basis of Calculation for Cash Flows and Projections

Actuarial Valuation Base Date: 31/Dec/2016

No. of months in the calculation of the proportional value to the 1st year (considering a 13-month year): 13 months.

Table 34: Revenues

Reference	Monthly Calculation Base	Calculated Rate	13-month Amount
Contributions from active public servants	R\$ 64,109,908.39	11.00%	R\$ 91,677,169.00
Retiree Contribution	R\$ 0.00	0.00%	R\$ 0.00
Pensioner Contribution	R\$ 0.00	0.00%	R\$ 0.00
Entity Contribution – CN without Adm. Fee	R\$ 64,109,908.39	20.00%	R\$ 166,685,761.81
Entity Contribution – Adm. Fee	R\$ 64,170,108.04	2.00%	R\$ 16,684,228.09
Entity Contribution – Without CS	R\$ 64,109,908.39	0.00%	R\$ 0.00
Social Security Compensation	R\$ 433.44		R\$ 5,634.69
Debt for the RPPS			R\$ 0.00
Entity Contribution – CN + Adm. Fee	R\$ 64,109,908.39	22.00%	R\$ 183,369,989.90
Entity Contribution – CN + Adm. Fee + Actuarial CS			R\$ 183,369,989.90

Table 35: Expenditure

Reference	Monthly Calculation Base	Calculated Rate	13-month Amount
Retirements			R\$ 157,035.19
Survivor's Pensions			R\$ 625,560.26
Allowances	R\$ 64,109,908.39	0.01%	R\$ 83,342.88
Administrative Expenses	R\$ 64,170,108.04	2.00%	R\$ 16,684,228.09
Total Expenses			
Retirements + Survivor's Pensions + Allowances			R\$ 865,938.33
Retirements + Survivor's Pensions			R\$ 782,595.45

Table 36: Funds

Reference	Amount
Value on 12/31/16	R\$ 569,605,210.34
Value on 12/31/17	R\$ 598,085,470.86
Financial Gains	R\$ 28,480,260.52

Annex 3. Social Security Plan Participant Number, Remuneration and Benefit and Cash Flow Projections

Annex 3.a. Number of Participants

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2017	18,973	0	18,973	7	17	0	0	24	18,997
2018	18,741	7,951	26,692	7	17	18	16	59	26,751
2019	18,511	25,363	43,874	7	17	44	34	102	43,976
2020	18,282	44,789	63,071	7	17	83	90	197	63,268
2021	18,050	52,199	70,249	7	17	140	155	319	70,567
2022	17,816	59,135	76,951	7	17	209	230	462	77,413
2023	17,582	65,993	83,575	7	17	289	316	629	84,204
2024	17,348	72,612	89,960	7	17	373	416	812	90,772
2025	16,693	79,153	95,846	7	17	886	527	1,437	97,283
2026	16,217	84,852	101,068	7	17	1,238	653	1,914	102,982
2027	15,670	90,318	105,988	7	17	1,669	792	2,484	108,472
2028	15,290	95,403	110,693	7	17	1,982	946	2,951	113,645
2029	14,908	100,129	115,037	6	16	2,572	1,117	3,712	118,749
2030	14,492	104,523	119,015	6	16	4,155	1,316	5,493	124,508
2031	14,103	108,766	122,869	6	16	5,726	1,572	7,321	130,190
2032	13,699	112,672	126,371	6	16	7,613	1,850	9,486	135,857
2033	13,279	116,398	129,676	6	16	9,352	2,157	11,531	141,207
2034	12,813	120,066	132,879	6	16	10,928	2,476	13,426	146,305
2035	12,318	123,639	135,957	6	16	12,651	2,813	15,486	151,443
2036	11,817	127,072	138,889	6	16	14,739	3,179	17,939	156,828

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2037	11,258	130,305	141,563	6	15	16,703	3,579	20,304	161,867
2038	10,676	133,252	143,928	6	15	19,263	4,003	23,287	167,215
2039	10,022	136,054	146,077	6	15	21,664	4,482	26,167	172,243
2040	9,378	138,611	147,988	6	15	24,119	4,963	29,103	177,091
2041	8,715	141,055	149,770	5	15	26,099	5,462	31,581	181,351
2042	7,991	143,211	151,201	5	15	29,394	5,971	35,384	186,586
2043	7,235	145,166	152,401	5	14	32,967	6,575	39,562	191,963
2044	6,410	147,052	153,462	5	14	37,009	7,223	44,252	197,715
2045	5,628	148,807	154,434	5	14	40,169	7,906	48,094	202,528
2046	4,871	150,318	155,189	5	14	43,815	8,579	52,413	207,602
2047	4,141	151,626	155,767	5	14	47,648	9,307	56,973	212,739
2048	3,472	152,677	156,150	5	13	51,222	10,067	61,307	217,457
2049	2,843	153,589	156,431	4	13	54,710	10,851	65,579	222,010
2050	2,246	154,411	156,657	4	13	58,729	11,680	70,426	227,083
2051	1,742	155,085	156,826	4	13	62,618	12,558	75,192	232,019
2052	1,352	155,594	156,945	4	12	66,373	13,452	79,841	236,787
2053	1,004	156,021	157,025	4	12	70,088	14,362	84,466	241,492
2054	741	156,336	157,077	4	12	74,051	15,295	89,362	246,439
2055	498	156,614	157,112	4	12	77,668	16,268	93,951	251,063
2056	306	156,822	157,128	3	11	81,262	17,255	98,532	255,660
2057	184	156,951	157,136	3	11	84,717	18,262	102,993	260,129
2058	116	157,023	157,139	3	11	88,090	19,276	107,380	264,520
2059	63	157,077	157,140	3	11	91,102	20,299	111,414	268,554
2060	31	157,109	157,140	3	10	94,481	21,326	115,820	272,960
2061	11	157,129	157,140	3	10	97,221	22,362	119,596	276,736

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2062	3	157,137	157,140	2	10	99,505	23,368	122,885	280,025
2063	1	157,139	157,140	2	9	101,384	24,350	125,746	282,886
2064	0	157,140	157,140	2	9	102,992	25,305	128,309	285,449
2065	0	157,140	157,140	2	9	104,274	26,237	130,521	287,661
2066	0	157,140	157,140	2	9	106,237	27,139	133,386	290,526
2067	0	157,140	157,140	2	8	107,711	28,055	135,775	292,915
2068	0	157,140	157,140	1	8	109,231	28,928	138,168	295,308
2069	0	157,140	157,140	1	8	110,667	29,776	140,452	297,592
2070	0	157,140	157,140	1	7	111,683	30,587	142,278	299,418
2071	0	157,140	157,140	1	7	112,271	31,335	143,615	300,755
2072	0	157,140	157,140	1	7	112,948	32,026	144,981	302,121
2073	0	157,140	157,140	1	6	113,354	32,677	146,038	303,178
2074	0	157,140	157,140	1	6	113,967	33,280	147,254	304,394
2075	0	157,140	157,140	1	6	114,658	33,849	148,513	305,653
2076	0	157,140	157,140	0	6	114,837	34,372	149,216	306,356
2077	0	157,140	157,140	0	5	114,464	34,834	149,304	306,444
2078	0	157,140	157,140	0	5	114,670	35,234	149,910	307,050
2079	0	157,140	157,140	0	5	114,907	35,612	150,523	307,663
2080	0	157,140	157,140	0	5	114,977	35,944	150,926	308,066
2081	0	157,140	157,140	0	4	115,209	36,238	151,451	308,591
2082	0	157,140	157,140	0	4	115,607	36,504	152,115	309,255
2083	0	157,140	157,140	0	4	115,577	36,738	152,318	309,458
2084	0	157,140	157,140	0	4	115,734	36,920	152,657	309,797
2085	0	157,140	157,140	0	3	115,747	37,078	152,828	309,968
2086	0	157,140	157,140	0	3	115,611	37,216	152,831	309,971

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2087	0	157,140	157,140	0	3	115,536	37,328	152,867	310,007
2088	0	157,140	157,140	0	3	115,644	37,431	153,078	310,218
2089	0	157,140	157,140	0	3	115,457	37,530	152,990	310,130
2090	0	157,140	157,140	0	2	115,618	37,610	153,231	310,371
2091	0	157,140	157,140	0	2	115,902	37,703	153,608	310,748
2092	0	157,140	157,140	0	2	115,835	37,803	153,640	310,780
2093	0	157,140	157,140	0	2	116,083	37,884	153,969	311,109
2094	0	157,140	157,140	0	2	116,559	37,987	154,548	311,688
2095	0	157,140	157,140	0	1	116,319	38,099	154,419	311,559
2096	0	157,140	157,140	0	1	116,453	38,172	154,627	311,767
2097	0	157,140	157,140	0	1	116,522	38,264	154,788	311,928

Annex 3.b. Remuneration and Benefits

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2017	833,428,809.12	0.00	833,428,809.12	83,342.88	0.00	83,342.88	157,035.19	625,560.26	782,595.45	865,938.33	834,294,747.45
2018	828,951,194.94	413,103,530.40	1,242,054,725.34	868,408.56	0.00	868,408.56	156,560.81	624,410.61	780,971.42	1,649,379.98	1,243,704,106.32
2019	824,321,891.50	1,306,836,953.42	2,131,158,844.91	1,756,885.87	359,229.74	2,116,115.61	156,058.88	623,186.40	779,245.28	2,895,360.89	2,134,054,205.80
2020	819,560,309.14	2,367,172,772.33	3,186,733,081.47	2,707,667.84	3,294,991.91	6,002,659.75	155,526.85	621,880.42	777,407.27	6,780,067.01	3,193,513,148.48
2021	814,590,227.57	2,833,352,621.62	3,647,942,849.19	3,674,692.42	7,429,611.13	11,104,303.55	154,961.71	620,482.40	775,444.12	11,879,747.66	3,659,822,596.85
2022	809,332,936.46	3,283,426,470.20	4,092,759,466.66	4,724,086.01	12,561,924.20	17,286,010.21	154,360.49	618,980.63	773,341.12	18,059,351.33	4,110,818,817.99
2023	803,545,398.12	3,729,968,085.75	4,533,513,483.87	5,972,198.97	18,999,588.01	24,911,786.98	153,719.29	617,360.26	771,079.55	25,682,866.53	4,559,196,350.40
2024	797,639,563.00	4,165,916,657.50	4,963,556,220.50	7,214,369.50	26,127,629.54	33,341,999.04	153,033.66	615,606.87	768,640.52	34,110,639.56	4,997,666,860.06
2025	778,102,391.36	4,585,317,369.92	5,363,419,761.28	21,951,896.82	34,421,702.08	56,373,598.90	152,299.35	613,704.71	766,004.06	57,139,602.96	5,420,559,364.23
2026	762,211,232.49	4,981,614,648.06	5,743,825,880.55	33,097,921.78	44,090,768.63	77,188,690.41	151,513.05	611,636.28	763,149.33	77,951,839.74	5,821,777,720.29
2027	744,436,016.98	5,369,354,336.16	6,113,790,353.14	46,114,003.56	55,122,814.62	101,236,818.18	150,671.69	609,382.51	760,054.20	101,996,872.37	6,215,787,225.51
2028	732,101,683.97	5,753,607,657.23	6,485,709,341.21	53,667,097.74	68,121,369.78	121,788,457.52	149,771.88	606,923.46	756,695.34	122,545,152.86	6,608,254,494.07
2029	719,569,453.53	6,105,526,569.48	6,825,096,023.00	61,310,759.71	90,916,043.09	152,226,802.80	148,810.31	602,385.50	751,195.81	152,977,998.61	6,978,064,021.61
2030	704,938,727.17	6,442,019,549.32	7,146,958,276.49	70,816,811.05	145,350,390.31	216,167,201.36	147,784.05	598,739.63	746,523.68	216,913,725.04	7,363,872,001.54
2031	691,486,820.40	6,762,942,536.23	7,454,429,356.63	79,071,804.62	204,095,081.64	283,166,886.26	146,690.67	595,195.14	741,885.81	283,908,772.07	7,738,338,128.70
2032	677,139,035.08	7,058,329,885.42	7,735,468,920.50	88,076,220.22	277,906,870.46	365,983,030.68	145,527.61	591,363.79	736,881.40	366,719,972.08	8,102,188,962.58
2033	661,500,836.97	7,347,306,471.37	8,008,807,308.33	98,110,946.04	362,872,793.83	450,983,739.87	144,291.86	587,204.13	731,495.98	451,715,235.85	8,460,522,544.19
2034	643,687,777.07	7,635,431,160.50	8,279,118,937.57	110,231,080.46	426,880,153.76	537,111,234.22	142,980.26	582,734.47	725,714.73	537,836,948.95	8,816,955,886.52
2035	624,603,258.28	7,916,850,739.91	8,541,453,998.19	123,529,889.75	509,656,321.71	633,186,211.46	141,589.83	574,942.53	716,532.36	633,902,743.82	9,175,366,742.02
2036	605,252,603.78	8,188,311,590.50	8,793,564,194.28	137,005,023.36	603,865,117.38	740,870,140.74	140,121.79	569,428.24	709,550.03	741,579,680.76	9,535,143,885.05
2037	582,767,731.21	8,449,340,447.79	9,032,108,179.00	153,529,708.55	700,692,544.91	854,222,253.46	138,574.11	563,531.97	702,106.08	854,924,359.54	9,887,032,538.54

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2038	558,632,947.73	8,693,744,057.73	9,252,377,005.45	171,625,651.87	825,027,700.40	996,653,352.26	136,945.15	553,752.62	690,697.77	997,344,050.04	10,249,721,055.49
2039	530,539,963.83	8,925,650,860.36	9,456,190,824.18	193,625,437.81	949,530,282.25	1,143,155,720.06	135,233.38	546,702.29	681,935.67	1,143,837,655.73	10,600,028,479.92
2040	502,208,983.55	9,138,400,408.32	9,640,609,391.86	215,833,514.99	1,076,368,339.31	1,292,191,854.30	133,436.54	539,241.67	672,678.21	1,292,864,532.51	10,933,473,924.37
2041	472,365,700.63	9,352,136,610.64	9,824,502,311.27	239,545,709.97	1,184,930,250.78	1,424,475,960.75	131,551.19	531,376.00	662,927.19	1,425,138,887.94	11,249,641,199.22
2042	438,713,300.42	9,552,737,065.66	9,991,450,366.08	267,061,199.63	1,343,315,982.79	1,610,377,182.43	129,573.07	523,112.44	652,685.52	1,611,029,867.94	11,602,480,234.02
2043	404,081,689.65	9,731,736,148.09	10,135,817,837.73	295,557,433.30	1,531,229,025.43	1,826,786,458.73	127,496.44	514,459.90	641,956.34	1,827,428,415.07	11,963,246,252.80
2044	363,898,813.85	9,898,382,140.18	10,262,280,954.03	329,614,578.80	1,739,387,093.93	2,069,001,672.74	125,314.29	505,428.89	630,743.18	2,069,632,415.91	12,331,913,369.94
2045	324,896,497.06	10,057,639,944.91	10,382,536,441.97	362,582,990.41	1,915,148,992.13	2,277,731,982.54	123,018.93	496,031.92	619,050.85	2,278,351,033.39	12,660,887,475.36
2046	285,244,784.15	10,205,054,914.90	10,490,299,699.05	396,267,731.15	2,120,831,258.07	2,517,098,989.22	120,603.79	486,284.81	606,888.60	2,517,705,877.82	13,008,005,576.87
2047	246,069,212.96	10,332,167,230.00	10,578,236,442.96	429,556,683.95	2,348,989,579.82	2,778,546,263.77	118,063.85	476,207.43	594,271.28	2,779,140,535.05	13,357,376,978.00
2048	208,585,851.33	10,434,014,813.80	10,642,600,665.13	461,226,107.76	2,558,938,668.33	3,020,164,776.10	115,392.70	465,823.03	581,215.73	3,020,745,991.83	13,663,346,656.96
2049	173,101,168.34	10,525,157,013.06	10,698,258,181.40	490,939,920.46	2,785,090,609.15	3,276,030,529.60	112,582.18	455,159.86	567,742.03	3,276,598,271.64	13,974,856,453.03
2050	138,443,375.83	10,602,179,742.54	10,740,623,118.38	519,835,173.04	3,038,632,796.22	3,558,467,989.26	109,624.76	444,249.11	553,873.87	3,559,021,843.13	14,299,644,961.50
2051	108,208,774.46	10,660,442,947.40	10,768,651,721.86	544,264,578.73	3,319,203,027.60	3,863,467,606.33	106,517.54	433,124.57	539,642.12	3,864,007,248.45	14,632,658,970.31
2052	84,797,141.98	10,699,666,114.96	10,784,463,256.94	561,731,966.59	3,602,565,840.15	4,164,297,906.75	103,263.83	421,818.39	525,082.22	4,164,822,888.97	14,949,286,145.91
2053	63,485,723.42	10,730,126,226.72	10,793,611,950.14	576,881,418.52	3,893,966,241.09	4,470,847,659.61	99,863.32	410,360.16	510,223.48	4,471,357,883.09	15,264,969,833.23
2054	47,018,660.80	10,750,062,190.63	10,797,080,851.43	586,875,950.96	4,188,671,908.37	4,775,547,859.33	96,317.21	398,775.63	495,092.84	4,776,042,952.17	15,573,123,803.60
2055	31,496,524.28	10,767,310,276.08	10,798,806,800.35	595,562,954.82	4,499,350,172.51	5,094,913,127.32	92,627.06	387,086.40	479,713.47	5,095,392,840.79	15,894,199,641.14
2056	19,103,158.14	10,771,641,438.93	10,790,744,597.06	600,716,405.42	4,802,712,928.39	5,403,429,333.82	88,798.48	375,308.85	464,107.33	5,403,893,441.15	16,194,638,038.21
2057	11,331,123.39	10,771,327,439.13	10,782,658,562.52	600,743,003.58	5,112,241,012.72	5,712,984,016.30	84,840.93	363,453.75	448,294.68	5,713,432,310.98	16,496,090,873.50
2058	7,142,906.23	10,765,406,517.53	10,772,549,423.77	595,563,043.20	5,424,379,866.63	6,020,942,909.83	80,764.03	351,523.85	432,287.88	6,021,375,197.71	16,793,924,621.48
2059	3,888,990.28	10,754,917,085.84	10,758,806,076.12	590,733,568.57	5,730,683,668.64	6,321,417,237.21	76,580.76	339,517.38	416,098.14	6,321,833,335.36	17,080,639,411.47
2060	1,988,720.50	10,741,339,848.49	10,743,328,568.98	582,774,847.97	6,039,745,671.79	6,622,520,519.76	72,301.99	327,431.46	399,733.44	6,622,920,253.20	17,366,248,822.18

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2061	784,241.73	10,725,896,082.18	10,726,680,323.91	573,281,087.23	6,334,365,883.84	6,907,646,971.08	67,951.89	315,265.23	383,217.13	6,908,030,188.20	17,634,710,512.11
2062	166,812.56	10,710,670,955.57	10,710,837,768.13	562,307,561.99	6,588,359,002.71	7,150,666,564.70	63,560.80	303,021.47	366,582.27	7,151,033,146.97	17,861,870,915.10
2063	37,534.15	10,702,123,063.16	10,702,160,597.31	549,902,944.18	6,829,540,582.16	7,379,443,526.34	59,149.26	290,707.59	349,856.85	7,379,793,383.19	18,081,963,970.50
2064	0.00	10,694,543,583.81	10,694,543,583.81	536,419,620.07	7,044,444,557.14	7,580,864,177.21	54,742.59	278,336.75	333,079.34	7,581,197,256.55	18,275,740,840.36
2065	0.00	10,690,915,438.48	10,690,915,438.48	521,879,342.36	7,245,363,851.66	7,767,243,194.01	50,367.95	265,926.63	316,294.58	7,767,559,488.59	18,458,474,927.07
2066	0.00	10,689,067,199.33	10,689,067,199.33	506,295,084.88	7,461,447,602.25	7,967,742,687.13	46,066.05	253,502.77	299,568.82	7,968,042,245.95	18,657,109,445.28
2067	0.00	10,683,886,866.67	10,683,886,866.67	489,652,315.35	7,663,014,976.32	8,152,667,291.66	41,834.31	241,101.18	282,935.49	8,152,950,227.15	18,836,837,083.82
2068	0.00	10,680,060,842.90	10,680,060,842.90	471,950,014.25	7,852,079,231.17	8,324,029,245.43	37,729.23	228,768.84	266,498.07	8,324,295,743.50	19,004,366,586.39
2069	0.00	10,676,983,370.59	10,676,983,370.59	453,201,991.62	8,040,943,736.12	8,494,145,727.74	33,766.14	216,562.74	250,328.88	8,494,396,056.62	19,171,379,427.21
2070	0.00	10,672,312,244.77	10,672,312,244.77	433,440,000.60	8,198,657,413.16	8,632,097,413.76	29,968.94	204,547.60	234,516.53	8,632,331,930.29	19,304,644,175.07
2071	0.00	10,673,979,831.53	10,673,979,831.53	412,717,306.82	8,332,029,590.41	8,744,746,897.23	26,359.74	192,793.70	219,153.44	8,744,966,050.67	19,418,945,882.20
2072	0.00	10,678,368,562.69	10,678,368,562.69	391,108,548.82	8,454,196,091.14	8,845,304,639.95	22,958.58	181,372.20	204,330.78	8,845,508,970.73	19,523,867,533.42
2073	0.00	10,683,522,342.40	10,683,522,342.40	368,712,538.31	8,564,952,551.18	8,933,665,089.49	19,782.91	170,350.87	190,133.78	8,933,855,223.27	19,617,377,565.67
2074	0.00	10,689,767,786.13	10,689,767,786.13	345,653,332.73	8,676,928,080.09	9,022,581,412.83	16,846.98	159,789.12	176,636.10	9,022,758,048.92	19,712,525,835.05
2075	0.00	10,693,278,977.25	10,693,278,977.25	322,079,349.24	8,792,256,121.10	9,114,335,470.34	14,160.79	149,733.63	163,894.42	9,114,499,364.76	19,807,778,342.01
2076	0.00	10,693,760,206.44	10,693,760,206.44	298,162,882.13	8,873,027,875.39	9,171,190,757.52	11,728.52	140,215.31	151,943.83	9,171,342,701.35	19,865,102,907.79
2077	0.00	10,697,934,797.91	10,697,934,797.91	274,037,615.11	8,922,777,474.89	9,196,875,090.00	9,547.50	131,249.33	140,796.83	9,197,015,886.83	19,894,950,684.73
2078	0.00	10,705,006,968.21	10,705,006,968.21	250,093,421.20	8,979,285,312.13	9,229,378,733.33	7,611.09	122,836.69	130,447.78	9,229,509,181.11	19,934,516,149.32
2079	0.00	10,710,902,788.60	10,710,902,788.60	226,371,502.98	9,046,317,941.02	9,272,689,444.00	5,914.21	114,965.73	120,879.93	9,272,810,323.93	19,963,713,112.54
2080	0.00	10,713,665,969.75	10,713,665,969.75	203,158,513.44	9,067,789,820.59	9,290,948,334.04	4,453.23	107,610.29	112,063.52	9,291,060,397.56	20,004,726,367.31
2081	0.00	10,721,390,435.37	10,721,390,435.37	180,679,647.00	9,133,211,493.99	9,313,891,140.99	3,224.74	100,735.24	103,959.98	9,313,995,100.97	20,035,385,536.33
2082	0.00	10,725,848,952.31	10,725,848,952.31	159,147,704.73	9,191,707,964.73	9,350,855,669.46	2,225.78	94,298.73	96,524.52	9,350,952,193.97	20,076,801,146.28
2083	0.00	10,726,383,459.60	10,726,383,459.60	138,757,493.33	9,226,352,248.56	9,365,109,741.89	1,449.77	88,257.06	89,706.82	9,365,199,448.71	20,091,582,908.31

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2084	0.00	10,729,949,528.10	10,729,949,528.10	119,678,702.93	9,255,215,009.97	9,374,893,712.90	882.76	82,566.22	83,448.98	9,374,977,161.88	20,104,926,689.98
2085	0.00	10,734,933,895.82	10,734,933,895.82	102,048,235.40	9,287,340,740.15	9,389,388,975.55	500.81	77,184.44	77,685.25	9,389,466,660.80	20,124,400,556.62
2086	0.00	10,735,202,946.95	10,735,202,946.95	85,966,323.08	9,303,230,419.35	9,389,196,742.43	269.18	72,073.45	72,342.64	9,389,269,085.06	20,124,472,032.01
2087	0.00	10,739,579,556.77	10,739,579,556.77	71,495,941.20	9,318,791,121.28	9,390,287,062.48	142.56	67,200.56	67,343.13	9,390,354,405.61	20,129,933,962.38
2088	0.00	10,741,990,349.25	10,741,990,349.25	58,658,914.23	9,338,777,684.12	9,397,436,598.35	73.35	62,539.08	62,612.43	9,397,499,210.78	20,139,489,560.03
2089	0.00	10,742,849,446.67	10,742,849,446.67	47,439,598.33	9,343,440,428.66	9,390,880,027.00	32.28	58,068.28	58,100.56	9,390,938,127.56	20,133,787,574.22
2090	0.00	10,746,459,241.90	10,746,459,241.90	37,788,050.42	9,355,059,743.37	9,392,847,793.79	10.11	53,773.08	53,783.19	9,392,901,576.98	20,139,360,818.88
2091	0.00	10,749,013,392.33	10,749,013,392.33	29,623,505.49	9,385,451,198.47	9,415,074,703.96	1.64	49,643.61	49,645.26	9,415,124,349.21	20,164,137,741.54
2092	0.00	10,743,713,997.85	10,743,713,997.85	22,840,212.48	9,392,686,292.06	9,415,526,504.54	0.07	45,674.55	45,674.62	9,415,572,179.16	20,159,286,177.00
2093	0.00	10,744,862,503.38	10,744,862,503.38	17,315,431.62	9,414,577,038.83	9,431,892,470.45	0.00	41,864.16	41,864.16	9,431,934,334.62	20,176,796,838.00
2094	0.00	10,741,532,284.88	10,741,532,284.88	12,910,477.08	9,457,803,127.52	9,470,713,604.60	0.00	38,214.15	38,214.15	9,470,751,818.76	20,212,284,103.64
2095	0.00	10,731,900,711.77	10,731,900,711.77	9,479,829.95	9,460,669,517.80	9,470,149,347.74	0.00	34,728.25	34,728.25	9,470,184,076.00	20,202,084,787.77
2096	0.00	10,732,771,103.43	10,732,771,103.43	6,877,804.41	9,473,629,598.71	9,480,507,403.12	0.00	31,410.50	31,410.50	9,480,538,813.62	20,213,309,917.05
2097	0.00	10,731,597,377.46	10,731,597,377.46	4,959,165.91	9,491,107,819.61	9,496,066,985.53	0.00	28,264.36	28,264.36	9,496,095,249.88	20,227,692,627.34

Future Benefits of Current Active Public Servants: Retirement expenses, allowances (as long as they are included in the Plan's benefits schedule) and pensions derived from current active public servants.

Future Benefits of Future Active Public Servants: Retirement expenses, allowances (as long as they are included in the Plan's benefits schedule) and pensions derived from future active public servants.

Current Retiree Benefits: Expenses with retirement and pension payments arising from current retired public servants.

Current Pensioner Benefits: Expenses with current pensioner benefits.

Annex 3.c. Cash Flow

Year	Fund Revenues						Expenses				Revenue - Expense Difference	Cash Balance
	Entity Contribution	Participant Contribution	Social Security Compensation	Debt for the RPPS	Market Gains	Total Revenue	Pensioner and Retiree Benefits	Allowances	Administrative Expenses	Total Expenses		
2017	183,354,338.01	91,677,169.00	5,634.69	0.00	28,480,260.52	303,517,402.22	782,595.45	83,342.88	16,684,228.09	17,550,166.42	285,967,235.80	855,572,446.14
2018	273,252,039.57	136,626,019.79	15,972.75	0.00	42,778,622.31	452,672,654.42	2,218,437.86	124,205.47	24,885,463.26	27,228,106.59	425,444,547.83	1,281,016,993.97
2019	468,854,945.88	234,427,546.28	29,703.54	0.00	64,050,849.70	767,363,045.40	4,125,490.99	213,115.88	42,705,686.72	47,044,293.59	720,318,751.81	2,001,336,745.78
2020	701,081,277.92	350,540,782.98	62,739.19	0.00	100,066,787.29	1,151,751,587.38	8,713,776.56	318,673.31	63,908,937.16	72,941,387.03	1,078,810,200.35	3,080,145,946.13
2021	802,547,426.82	401,273,856.98	105,404.76	0.00	154,007,297.31	1,357,933,985.86	14,639,550.09	364,794.28	73,251,647.99	88,255,992.36	1,269,677,993.50	4,349,823,939.63
2022	900,407,082.67	450,203,684.34	156,343.93	0.00	217,491,196.98	1,568,258,307.92	21,714,434.66	409,275.95	82,289,478.03	104,413,188.64	1,463,845,119.28	5,813,669,058.91
2023	997,372,966.45	498,686,885.66	218,206.29	0.00	290,683,452.95	1,786,961,511.35	30,306,429.46	453,351.35	91,276,398.27	122,036,179.08	1,664,925,332.27	7,478,594,391.18
2024	1,091,982,368.51	545,991,838.87	286,421.73	0.00	373,929,719.56	2,012,190,348.67	39,780,736.26	496,355.62	100,066,740.34	140,343,892.22	1,871,846,456.45	9,350,440,847.63
2025	1,179,952,347.48	589,979,615.38	460,406.84	0.00	467,522,042.38	2,237,914,412.08	63,945,394.84	536,341.98	108,547,303.12	173,029,039.94	2,064,885,372.14	11,415,326,219.77
2026	1,263,641,693.72	631,827,980.79	618,319.56	0.00	570,766,310.99	2,466,854,305.06	85,877,717.19	574,382.59	116,594,071.95	203,046,171.73	2,263,808,133.33	13,679,134,353.10
2027	1,345,033,877.69	672,527,230.00	799,622.64	0.00	683,966,717.66	2,702,317,447.99	111,068,700.30	611,379.04	124,496,981.07	236,167,060.41	2,466,150,387.58	16,145,284,740.68
2028	1,426,856,055.07	713,439,948.71	955,830.39	0.00	807,264,237.03	2,948,516,071.20	132,754,220.70	648,570.93	132,369,271.24	265,772,062.87	2,682,744,008.33	18,828,028,749.01
2029	1,501,518,925.06	750,773,530.50	1,183,734.03	0.00	941,401,437.45	3,194,877,627.04	164,407,503.75	682,508.60	139,789,870.54	304,879,882.89	2,889,997,744.15	21,718,026,493.16
2030	1,572,330,820.83	786,182,495.63	1,653,402.85	0.00	1,085,901,324.66	3,446,068,043.97	229,639,284.84	714,695.83	147,531,951.23	377,885,931.90	3,068,182,112.07	24,786,208,605.23
2031	1,639,974,458.46	820,006,473.03	2,145,588.44	0.00	1,239,310,430.26	3,701,436,950.19	297,998,394.67	745,442.94	155,048,555.03	453,792,392.64	3,247,644,557.55	28,033,853,162.78
2032	1,701,803,177.91	850,923,005.29	2,752,249.40	0.00	1,401,692,658.14	3,957,171,090.74	382,256,860.75	773,546.90	162,354,517.03	545,384,924.68	3,411,786,166.06	31,445,639,328.84
2033	1,761,937,607.83	880,993,521.98	3,375,205.40	0.00	1,572,281,966.44	4,218,588,301.66	468,778,528.01	800,880.73	169,551,716.73	639,131,125.47	3,579,457,176.19	35,025,096,505.03
2034	1,821,406,166.27	910,731,729.15	4,006,810.75	0.00	1,751,254,825.25	4,487,399,531.42	556,501,493.60	827,911.89	176,712,408.62	734,041,814.11	3,753,357,171.31	38,778,454,222.34
2035	1,879,119,879.60	939,592,442.00	4,710,465.07	0.00	1,938,922,711.12	4,762,345,497.79	654,231,259.78	854,145.40	183,913,705.16	838,999,110.34	3,923,346,387.45	42,701,800,609.79
2036	1,934,584,122.74	967,329,097.66	5,498,133.58	0.00	2,135,090,030.49	5,042,501,394.47	763,629,664.54	879,356.42	191,143,877.18	955,652,898.14	4,086,848,486.33	46,788,649,096.12
2037	1,987,063,799.38	993,574,458.35	6,326,989.26	0.00	2,339,432,454.81	5,326,397,701.80	878,748,508.10	903,210.82	198,217,133.74	1,077,868,852.66	4,248,528,849.14	51,037,177,945.26
2038	2,036,522,941.20	1,017,809,795.01	7,365,417.42	0.00	2,551,858,897.26	5,612,557,050.89	1,022,974,641.03	925,237.70	205,507,032.93	1,229,406,911.66	4,383,150,139.23	55,420,328,084.49
2039	2,080,361,981.32	1,040,237,263.60	8,433,306.18	0.00	2,771,016,404.22	5,900,048,955.33	1,171,292,525.41	945,619.08	212,549,666.99	1,384,787,811.48	4,515,261,143.85	59,935,589,228.34

2040	2,120,934,066.21	1,060,532,147.89	9,519,325.60	0.00	2,996,779,461.42	6,187,765,001.11	1,322,128,554.92	964,060.94	219,254,758.94	1,542,347,374.80	4,645,417,626.31	64,581,006,854.65
2041	2,161,380,508.48	1,080,770,780.41	10,484,547.05	0.00	3,229,050,342.73	6,481,696,178.67	1,456,187,090.85	982,450.23	225,613,788.04	1,682,783,329.12	4,798,912,849.55	69,379,919,704.20
2042	2,198,119,080.54	1,099,147,534.08	11,835,537.15	0.00	3,468,995,985.21	6,778,098,136.98	1,643,824,604.64	999,145.04	232,705,499.41	1,877,529,249.09	4,900,588,887.89	74,280,488,592.09
2043	2,229,879,924.30	1,115,099,715.52	13,405,622.48	0.00	3,714,024,429.60	7,072,349,691.91	1,861,892,011.45	1,013,581.78	239,954,196.98	2,102,859,790.21	4,969,489,901.70	79,249,978,493.79
2044	2,257,701,809.89	1,128,967,414.81	15,160,825.92	0.00	3,962,488,924.69	7,364,328,975.31	2,105,670,267.10	1,026,228.10	247,359,024.42	2,354,055,519.62	5,010,273,455.69	84,260,251,949.48
2045	2,284,158,017.23	1,142,212,691.78	16,673,824.76	0.00	4,213,012,597.47	7,656,057,131.25	2,315,808,994.54	1,038,253.64	253,966,908.73	2,570,814,156.91	5,085,242,974.34	89,345,494,923.82
2046	2,307,865,933.79	1,154,084,775.28	18,406,274.55	0.00	4,467,274,746.19	7,947,631,729.81	2,556,427,020.75	1,049,029.97	260,934,534.40	2,818,410,586.12	5,129,221,144.69	94,474,716,068.51
2047	2,327,212,017.45	1,163,777,090.15	20,296,329.14	0.00	4,723,735,803.43	8,235,021,240.16	2,818,934,602.61	1,057,823.64	267,943,420.91	3,087,935,847.16	5,147,085,393.00	99,621,801,461.51
2048	2,341,372,146.33	1,170,878,448.07	22,042,169.63	0.00	4,981,090,073.08	8,515,382,837.10	3,061,412,449.07	1,064,260.07	274,080,262.28	3,336,556,971.42	5,178,825,865.68	104,800,627,327.19
2049	2,353,616,799.91	1,177,019,508.09	23,888,961.08	0.00	5,240,031,366.36	8,794,556,635.44	3,317,911,261.45	1,069,825.82	280,323,388.86	3,599,304,476.13	5,195,252,159.31	109,995,679,486.50
2050	2,362,937,066.04	1,181,698,838.56	25,925,406.67	0.00	5,499,793,974.33	9,070,355,305.60	3,600,750,926.77	1,074,062.31	286,827,480.90	3,888,652,469.98	5,181,702,836.62	115,177,582,322.12
2051	2,369,103,378.81	1,184,799,077.09	28,122,543.03	0.00	5,758,879,116.11	9,340,904,115.04	3,905,908,754.32	1,076,865.17	293,491,209.52	4,200,476,829.01	5,140,427,286.03	120,318,009,608.15
2052	2,372,581,916.53	1,186,551,980.10	30,287,951.73	0.00	6,015,900,480.41	9,605,322,328.77	4,206,659,962.89	1,078,446.33	299,822,464.40	4,507,560,873.62	5,097,761,455.15	125,415,177,063.30
2053	2,374,594,629.03	1,187,570,681.20	32,493,100.65	0.00	6,270,788,553.17	9,865,446,964.05	4,512,930,645.97	1,079,361.20	306,130,851.92	4,820,140,859.09	5,045,306,104.96	130,461,077,168.26
2054	2,375,357,787.31	1,187,963,070.41	34,683,494.97	0.00	6,523,053,868.41	10,121,068,211.10	4,817,152,079.73	1,079,708.09	312,284,668.62	5,130,516,446.44	4,990,541,764.66	135,451,618,932.92
2055	2,375,737,496.08	1,188,162,608.01	36,978,212.92	0.00	6,772,580,946.65	10,373,459,263.66	5,135,862,905.63	1,079,880.68	318,689,394.12	5,455,636,180.43	4,917,823,083.23	140,369,442,016.15
2056	2,373,963,811.35	1,187,283,304.65	39,193,504.15	0.00	7,018,472,100.81	10,618,912,720.95	5,443,542,243.28	1,079,074.46	324,685,736.81	5,769,307,054.55	4,849,605,666.40	145,219,047,682.55
2057	2,372,184,883.75	1,186,396,738.02	41,415,098.36	0.00	7,260,952,384.13	10,860,949,104.25	5,752,096,995.06	1,078,265.86	330,685,111.15	6,083,870,372.07	4,777,078,732.18	149,996,126,414.73
2058	2,369,960,873.23	1,185,284,280.55	43,624,304.11	0.00	7,499,806,320.74	11,098,675,778.62	6,058,931,125.74	1,077,254.94	336,629,610.99	6,396,637,991.67	4,702,037,786.95	154,698,164,201.68
2059	2,366,937,336.75	1,183,770,966.75	45,778,940.63	0.00	7,734,908,210.08	11,331,386,474.22	6,358,186,198.87	1,075,880.61	342,339,845.50	6,701,601,924.98	4,629,793,549.24	159,327,957,750.92
2060	2,363,532,285.18	1,182,065,474.83	47,937,479.52	0.00	7,966,397,887.55	11,559,933,127.08	6,657,983,266.86	1,074,332.86	348,026,236.72	7,007,083,836.44	4,552,849,290.64	163,880,807,041.56
2061	2,359,869,671.26	1,180,230,256.86	49,980,457.90	0.00	8,194,040,352.08	11,784,120,738.10	6,941,730,263.56	1,072,668.03	353,368,211.75	7,296,171,143.34	4,487,949,594.76	168,368,756,636.32
2062	2,356,384,308.99	1,178,482,780.28	51,719,801.32	0.00	8,418,437,831.82	12,005,024,722.41	7,183,305,738.20	1,071,083.78	357,882,870.13	7,542,259,692.11	4,462,765,030.30	172,831,521,666.62
2063	2,354,475,329.21	1,177,522,474.90	53,366,192.36	0.00	8,641,576,083.33	12,226,930,079.80	7,410,582,271.90	1,070,216.06	362,254,857.18	7,773,907,345.14	4,453,022,734.66	177,284,544,401.28
2064	2,352,799,588.44	1,176,678,174.08	54,795,283.86	0.00	8,864,227,220.06	12,448,500,266.45	7,610,456,092.26	1,069,454.36	366,099,933.52	7,977,625,540.14	4,470,874,726.31	181,755,419,127.59
2065	2,352,001,396.47	1,176,272,050.36	56,125,785.81	0.00	9,087,770,956.38	12,672,170,189.02	7,795,248,029.77	1,069,091.54	369,723,269.37	8,166,040,390.68	4,506,129,798.34	186,261,548,925.93
2066	2,351,594,783.85	1,176,061,139.38	57,557,716.42	0.00	9,313,077,446.30	12,898,291,085.94	7,994,127,280.12	1,068,906.72	373,663,889.59	8,368,860,076.43	4,529,431,009.51	190,790,979,936.44
2067	2,350,455,110.67	1,175,483,106.66	58,877,326.15	0.00	9,539,548,996.77	13,124,364,540.25	8,177,406,410.07	1,068,388.69	377,225,865.53	8,565,700,664.29	4,568,663,875.96	195,359,643,811.40
2068	2,349,613,385.44	1,175,053,449.18	60,099,159.78	0.00	9,767,982,190.57	13,352,748,184.97	8,347,105,525.20	1,068,006.08	380,543,327.36	8,728,716,858.64	4,624,031,326.33	199,983,675,137.73

2069	2,348,936,341.53	1,174,705,535.18	61,311,967.73	0.00	9,999,183,756.89	13,584,137,601.32	8,515,551,073.23	1,067,698.34	383,850,688.88	8,900,469,460.45	4,683,668,140.87	204,667,343,278.60
2070	2,347,908,693.85	1,174,181,734.29	62,293,204.44	0.00	10,233,367,163.93	13,817,750,796.51	8,651,833,949.83	1,067,231.22	386,482,923.89	9,039,384,104.94	4,778,366,691.57	209,445,709,970.17
2071	2,348,275,562.94	1,174,354,631.06	63,092,351.30	0.00	10,472,285,498.51	14,058,008,043.81	8,762,826,570.05	1,067,397.98	388,736,128.03	9,152,630,096.06	4,905,377,947.75	214,351,087,917.92
2072	2,349,238,883.79	1,174,825,230.60	63,804,605.79	0.00	10,717,554,395.90	14,305,423,116.08	8,861,750,804.30	1,067,835.86	390,802,187.34	9,253,620,827.50	5,051,802,288.58	219,402,890,206.50
2073	2,350,374,915.33	1,175,381,714.22	64,429,290.24	0.00	10,970,144,510.33	14,560,330,430.11	8,948,512,533.41	1,068,352.23	392,640,697.52	9,342,221,583.16	5,218,108,846.95	224,620,999,053.45
2074	2,351,748,912.95	1,176,056,776.23	65,058,307.68	0.00	11,231,049,952.67	14,823,913,949.53	9,035,876,067.02	1,068,976.78	394,512,877.06	9,431,457,920.86	5,392,456,028.67	230,013,455,082.12
2075	2,352,521,375.00	1,176,430,746.94	65,708,168.06	0.00	11,500,672,754.11	15,095,333,044.11	9,126,134,452.19	1,069,327.90	396,388,268.59	9,523,592,048.68	5,571,740,995.43	235,585,196,077.55
2076	2,352,627,245.42	1,176,471,193.22	66,107,241.73	0.00	11,779,259,803.88	15,374,466,484.24	9,181,561,351.38	1,069,376.02	397,506,431.16	9,580,137,158.56	5,794,328,325.68	241,379,524,403.23
2077	2,353,545,655.54	1,176,917,787.62	66,282,430.13	0.00	12,068,976,220.16	15,665,722,093.45	9,205,893,074.25	1,069,793.48	398,076,557.44	9,605,039,425.17	6,060,682,668.28	247,440,207,071.51
2078	2,355,101,533.01	1,177,683,110.55	66,507,320.86	0.00	12,372,010,363.58	15,971,302,318.00	9,237,127,897.50	1,070,500.70	398,842,697.31	9,637,041,095.51	6,334,261,222.49	253,774,468,294.00
2079	2,356,388,613.49	1,178,319,152.86	66,810,675.18	0.00	12,688,723,414.70	16,290,251,856.23	9,279,260,441.68	1,071,080.28	399,803,264.61	9,680,134,796.57	6,610,117,059.66	260,384,585,353.66
2080	2,357,006,513.34	1,178,610,848.43	66,934,344.94	0.00	13,019,229,267.68	16,621,780,974.39	9,296,436,797.24	1,071,366.60	400,202,055.34	9,697,710,219.18	6,924,070,755.21	267,308,656,108.87
2081	2,358,705,895.78	1,179,448,652.95	67,092,442.91	0.00	13,365,432,805.44	16,970,679,797.08	9,318,394,849.21	1,072,139.04	400,795,705.69	9,720,262,693.94	7,250,417,103.14	274,559,073,212.01
2082	2,359,686,769.51	1,179,927,688.51	67,352,214.82	0.00	13,727,953,660.60	17,334,920,333.44	9,354,474,280.81	1,072,584.90	401,606,464.66	9,757,153,330.37	7,577,767,003.07	282,136,840,215.08
2083	2,359,804,361.11	1,179,975,675.59	67,449,183.50	0.00	14,106,842,010.75	17,714,071,230.95	9,367,942,152.13	1,072,638.35	401,886,512.23	9,770,901,302.71	7,943,169,928.24	290,080,010,143.32
2084	2,360,588,896.18	1,180,357,819.76	67,514,655.70	0.00	14,504,000,507.17	18,112,461,878.81	9,377,035,514.08	1,072,994.95	402,139,700.84	9,780,248,209.87	8,332,213,668.94	298,412,223,812.26
2085	2,361,685,457.08	1,180,896,737.49	67,614,708.33	0.00	14,920,611,190.61	18,530,808,093.52	9,390,931,711.81	1,073,493.39	402,517,312.15	9,794,522,517.35	8,736,285,576.17	307,148,509,388.43
2086	2,361,744,648.33	1,180,917,786.51	67,609,634.44	0.00	15,357,425,469.42	18,967,697,538.70	9,390,227,005.93	1,073,520.29	402,508,599.06	9,793,809,125.28	9,173,888,413.42	316,322,397,801.85
2087	2,362,707,502.49	1,181,391,517.64	67,614,364.31	0.00	15,816,119,890.09	19,427,833,274.53	9,390,883,931.56	1,073,957.96	402,609,269.77	9,794,567,159.29	9,633,266,115.24	325,955,663,917.09
2088	2,363,237,876.83	1,181,649,872.69	67,663,241.07	0.00	16,297,783,195.85	19,910,334,186.45	9,397,672,370.26	1,074,199.03	402,793,254.39	9,801,539,823.68	10,108,794,362.77	336,064,458,279.86
2089	2,363,426,878.27	1,181,738,397.77	67,613,897.93	0.00	16,803,222,913.99	20,416,002,087.96	9,390,819,157.42	1,074,284.94	402,673,372.08	9,794,566,814.44	10,621,435,273.52	346,685,893,553.38
2090	2,364,221,033.22	1,182,130,330.14	67,626,334.16	0.00	17,334,294,677.67	20,948,272,375.19	9,392,546,411.39	1,074,645.92	402,780,113.07	9,796,401,170.38	11,151,871,204.81	357,837,764,758.19
2091	2,364,782,946.31	1,182,406,930.00	67,784,987.35	0.00	17,891,888,237.91	21,506,863,101.57	9,414,581,577.01	1,074,901.34	403,271,899.39	9,818,928,377.74	11,687,934,723.83	369,525,699,482.02
2092	2,363,617,079.53	1,181,820,372.83	67,787,162.63	0.00	18,476,284,974.10	22,089,509,599.09	9,414,883,698.43	1,074,371.40	403,171,953.93	9,819,130,023.76	12,270,379,555.33	381,796,079,047.35
2093	2,363,869,750.74	1,181,943,751.69	67,904,163.01	0.00	19,089,803,952.37	22,703,521,617.81	9,431,133,751.57	1,074,486.25	403,519,925.10	9,835,728,162.92	12,867,793,454.89	394,663,872,502.24
2094	2,363,137,102.67	1,181,575,064.79	68,183,046.59	0.00	19,733,193,625.11	23,346,088,839.16	9,469,867,582.26	1,074,153.23	404,227,997.34	9,875,169,732.83	13,470,919,106.33	408,134,791,608.57
2095	2,361,018,156.59	1,180,513,745.48	68,178,522.55	0.00	20,406,739,580.43	24,016,450,005.05	9,469,239,243.18	1,073,190.07	404,022,799.10	9,874,335,232.35	14,142,114,772.70	422,276,906,381.27
2096	2,361,209,642.76	1,180,608,080.73	68,252,759.26	0.00	21,113,845,319.06	24,723,915,801.81	9,479,549,897.59	1,073,277.11	404,246,420.02	9,884,869,594.72	14,839,046,207.09	437,115,952,588.36
2097	2,360,951,423.04	1,180,477,925.42	68,364,546.27	0.00	21,855,797,629.42	25,465,591,524.15	9,495,075,870.65	1,073,159.74	404,533,464.96	9,900,682,495.35	15,564,909,028.80	452,680,861,617.16

Annex 4. Summary Report on Budget Execution – LRF (Fiscal Responsibility Law) Art. 4, Paragraph 2, Sub-item IV and LRF Art. 53, Paragraph 1, Sub-item II – Social Security Plan

SUMMARY REPORT ON BUDGET EXECUTION

LRF Art. 53, Paragraph 1, Sub-item II (R\$ 1.00)

FISCAL YEAR	SOCIAL SECURITY REVENUE	SOCIAL SECURITY EXPENSES	SOCIAL SECURITY RESULT	FINANCIAL BALANCE FOR THE YEAR
	Value (a)	Value (b)	Value (c) = (a-b)	Value (d) = (d Previous Year) + (c)
2015	181,557,661.63	1,752,245.71	179,805,415.92	283,621,732.90
2016	190,687,308.86	23,375,329.01	167,311,979.85	450,933,712.75
2017	303,517,402.21	17,550,166.42	285,967,235.79	736,900,948.54
2018	452,672,654.42	27,228,106.59	425,444,547.83	1,162,345,496.37
2019	767,363,045.40	47,044,293.59	720,318,751.81	1,882,664,248.18
2020	1,151,751,587.38	72,941,387.03	1,078,810,200.35	2,961,474,448.53
2021	1,357,933,985.86	88,255,992.36	1,269,677,993.50	4,231,152,442.03
2022	1,568,258,307.92	104,413,188.64	1,463,845,119.28	5,694,997,561.31
2023	1,786,961,511.35	122,036,179.08	1,664,925,332.27	7,359,922,893.58
2024	2,012,190,348.67	140,343,892.22	1,871,846,456.45	9,231,769,350.03
2025	2,237,914,412.08	173,029,039.94	2,064,885,372.14	11,296,654,722.17
2026	2,466,854,305.07	203,046,171.73	2,263,808,133.34	13,560,462,855.51
2027	2,702,317,447.99	236,167,060.41	2,466,150,387.58	16,026,613,243.09
2028	2,948,516,071.20	265,772,062.87	2,682,744,008.33	18,709,357,251.42
2029	3,194,877,627.04	304,879,882.89	2,889,997,744.15	21,599,354,995.57
2030	3,446,068,043.97	377,885,931.90	3,068,182,112.07	24,667,537,107.64
2031	3,701,436,950.19	453,792,392.64	3,247,644,557.55	27,915,181,665.19
2032	3,957,171,090.74	545,384,924.68	3,411,786,166.06	31,326,967,831.25
2033	4,218,588,301.66	639,131,125.47	3,579,457,176.19	34,906,425,007.44
2034	4,487,399,531.42	734,041,814.11	3,753,357,717.31	38,659,782,724.75
2035	4,762,345,497.79	838,999,110.34	3,923,346,387.45	42,583,129,112.20
2036	5,042,501,384.47	955,652,898.14	4,086,848,486.33	46,669,977,598.53
2037	5,326,397,701.80	1,077,868,852.66	4,248,528,849.14	50,918,506,447.67
2038	5,612,557,050.89	1,229,406,911.66	4,383,150,139.23	55,301,656,586.90
2039	5,900,048,955.33	1,384,787,811.48	4,515,261,143.85	59,816,917,730.75
2040	6,187,765,001.11	1,542,347,374.80	4,645,417,626.31	64,462,335,357.06
2041	6,481,696,178.67	1,682,783,329.12	4,798,912,849.55	69,261,248,206.61
2042	6,778,098,136.99	1,877,529,249.09	4,900,568,887.90	74,161,817,094.51
2043	7,072,349,691.91	2,102,859,790.21	4,969,489,901.70	79,131,306,996.21
2044	7,364,328,975.31	2,354,055,519.62	5,010,273,455.69	84,141,580,451.90
2045	7,656,057,131.25	2,570,814,156.91	5,085,242,974.34	89,226,823,426.24
2046	7,947,631,729.81	2,818,410,585.12	5,129,221,144.69	94,356,044,570.93
2047	8,235,021,240.16	3,087,935,847.16	5,147,085,393.00	99,503,129,963.93
2048	8,515,382,837.11	3,336,556,971.42	5,178,825,865.69	104,681,955,829.62
2049	8,794,556,635.44	3,599,304,476.13	5,195,252,159.31	109,877,207,988.93
2050	9,070,355,305.60	3,888,652,469.98	5,181,702,835.62	115,058,910,824.55

2051	9,340,904,115.04	4,200,476,829.01	5,140,427,286.03	120,199,338,110.58
2052	9,605,322,328.77	4,507,560,873.62	5,097,761,455.15	125,297,099,565.73
2053	9,865,446,964.05	4,820,140,859.09	5,045,306,104.96	130,342,405,670.69
2054	10,121,058,211.10	5,130,516,446.44	4,990,541,764.66	135,332,947,435.35
2055	10,373,459,263.66	5,455,636,180.43	4,917,823,083.23	140,250,770,518.58
2056	10,618,912,720.96	5,769,307,054.55	4,849,605,666.41	145,100,376,184.99
2057	10,860,949,104.26	6,083,870,372.07	4,777,078,732.19	149,877,454,917.18
2058	11,098,675,778.62	6,396,637,991.67	4,702,037,786.95	154,579,492,704.13
2059	11,331,395,474.22	6,701,601,924.98	4,629,793,549.24	159,209,286,253.37
2060	11,559,933,127.08	7,007,083,836.44	4,552,849,290.64	163,762,135,544.01
2061	11,784,120,738.10	7,296,171,143.34	4,487,949,594.76	168,250,085,138.77
2062	12,005,024,722.40	7,542,259,692.11	4,462,765,030.29	172,712,850,169.06
2063	12,226,930,079.80	7,773,907,345.14	4,453,022,734.66	177,165,872,903.72
2064	12,448,500,266.45	7,977,625,540.14	4,470,874,726.31	181,636,747,630.03
2065	12,672,170,189.03	8,166,040,390.68	4,506,129,798.35	186,142,877,428.38
2066	12,898,291,085.94	8,368,860,076.43	4,529,431,009.51	190,672,308,437.89
2067	13,124,364,540.25	8,555,700,664.29	4,568,663,875.96	195,240,972,313.85
2068	13,352,748,184.97	8,728,716,858.64	4,624,031,326.33	199,865,003,640.18
2069	13,584,137,601.32	8,900,469,460.45	4,683,668,140.87	204,548,671,781.05
2070	13,817,750,796.51	9,039,384,104.94	4,778,366,691.57	209,327,038,472.62
2071	14,058,008,043.82	9,152,630,096.06	4,905,377,947.76	214,232,416,420.38
2072	14,305,423,116.08	9,253,620,827.50	5,051,802,288.58	219,284,218,708.96
2073	14,560,330,430.11	9,342,221,583.16	5,218,108,846.95	224,502,327,555.91
2074	14,823,913,949.54	9,431,457,920.86	5,392,456,028.68	229,894,783,584.59
2075	15,095,333,044.10	9,523,592,048.68	5,571,740,995.42	235,466,524,580.01
2076	15,374,465,484.24	9,580,137,158.56	5,794,328,325.68	241,260,852,905.69
2077	15,665,722,093.46	9,605,039,425.17	6,060,682,668.29	247,321,535,573.98
2078	15,971,302,318.00	9,637,041,095.51	6,334,261,222.49	253,655,796,796.47
2079	16,290,251,856.23	9,680,134,796.57	6,610,117,059.66	260,265,913,856.13
2080	16,621,780,974.39	9,697,710,219.18	6,924,070,755.21	267,189,984,611.34
2081	16,970,679,797.08	9,720,262,693.94	7,250,417,103.14	274,440,401,714.48
2082	17,334,920,333.45	9,757,153,330.37	7,577,767,003.08	282,018,168,717.56
2083	17,714,071,230.95	9,770,901,302.71	7,943,169,928.24	289,961,338,645.80
2084	18,112,461,878.81	9,780,248,209.87	8,332,213,668.94	298,293,552,314.74
2085	18,530,808,093.51	9,794,522,517.35	8,736,285,576.16	307,029,837,890.90
2086	18,967,697,538.71	9,793,809,125.28	9,173,888,413.43	316,203,726,304.33
2087	19,427,833,274.53	9,794,567,159.29	9,633,266,115.24	325,836,992,419.57
2088	19,910,334,186.44	9,801,539,823.68	10,108,794,362.76	335,945,786,782.33
2089	20,416,002,087.97	9,794,566,814.44	10,621,435,273.53	346,567,222,055.86
2090	20,948,272,375.19	9,796,401,170.38	11,151,871,204.81	357,719,093,260.67
2091	21,506,863,101.57	9,818,928,377.74	11,687,934,723.83	369,407,027,984.50
2092	22,089,509,589.08	9,819,130,023.76	12,270,379,565.32	381,677,407,549.82

Definitions:

Number of Months in the 1st Year Calculation: 13.

Social Security Revenues: Normal Cost calculated (included Adm. Fee), applied on remuneration of active public servants and on payments that exceed RGPS ceiling

(+)

(+) COMPREV (+) Supplementary Cost Revenue (+) Market Gains.

Social Security Expenses: Retirements (+) Pensions (+) Allowances (+) Plan Administration Fee.

Social Security Result: Social Security Revenues (-) Social Security Expenses.

Balance: TOTAL DAIR Balance as of 12/31/2016

Financial Fund:

Composed of public servants admitted until 03/Sep/2013, as well as by all Military personnel, regardless of the date of admission, and benefits generated by these public servants, according to State Law 6,338, dated November 06, 2012. The benefits of this Fund will be financed under the Simple Redistribution Financial Regime.

10 Profile of the Population of the Financial Fund

10.a. Population Distribution by Segment

The population of the Financial Fund analyzed, in quantitative terms, is distributed as follows:

Table 37: Number of Population Studied by Segment – Financial Fund

Actives	Retirees	Pensioners
199,814	164,296	69,781

In accordance with the provisions of Article 40 of the Federal Constitution, already with the wording adjusted by EC No. 41/03, transcribed below, the public servants holding effective positions were considered in this actuarial valuation. As such, when we mention the term "active public servants" in this text, we are actually referring to the public servants that hold effective positions.

"Art. 40. Public servants holding effective positions of the Federal, State, Federal District and Municipalities, including their agencies and foundations, shall be provided with a contributory and joint social security regime, with a contribution from the respective public entity, active and inactive public servants and pensioners, observing criteria that preserve the financial and actuarial balance and the provisions of this article.

...

§ 13. The general social security regime shall only apply to the public servant holding a commissioned position, declared under the law as being of free appointment and discharge, as well as another temporary position or public employment".

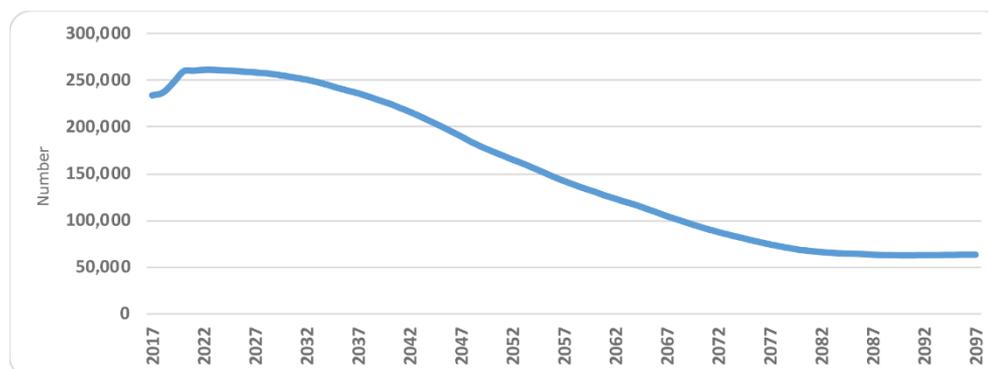
Analyzing the composition of the population of public servants of the State of Rio de Janeiro linked to the Financial Fund, it is found that the total retirees and pensioners represents a portion of 53.95% of the group. This distribution points to a proportion of 0.85 active public servants for each retired public servant or dependent on benefit, as shown in the following table.

Table 38: Proportion between Active Public Servants, Retirees and Pensioners – Financial Fund

Breakdown	Actives	Retirees and Pensioners	Proportion Actives / Retirees and Pensioners
Number	46.05%	53.95%	0.85

The following chart shows the changes in the population of retired public servants and pensioners of the State of Rio de Janeiro linked to the Financial Fund expected for the coming decades. This forecast is made considering the possibilities of termination to which the group is subject, such as: benefits, retirement and disability.

Chart 10: Change in the Number of Participants Tied to the Financial Fund



It is important to consider that, as time goes by, the number of participants receiving benefits increases, changing this proportion significantly. However, since this Fund is closed to new admissions, its growth is limited, tending towards termination after reaching a certain volume of expenses.

10.b. Breakdown of Personnel Expenses per Segment

Table 39: Personnel Expenses per Segment of the Financial Fund

Breakdown	Monthly Payroll	Number	Average Remuneration
Active Public Servants	R\$ 1,164,206,613.17	199,814	R\$ 5,826.45
Retired Public Servants	R\$ 893,301,760.34	164,296	R\$ 5,437.15
Pensioners	R\$ 302,886,352.62	69,781	R\$ 4,340.53
Total	R\$ 2,360,394,726.13	433,891	R\$ 5,440.06

Note: The expense shown only represents the expenses with public servant remuneration and payments.

To fund the Financial Fund, the State of Rio de Janeiro and the beneficiaries make contributions as described below:

- monthly contributions from active public servants: 11.00% calculated on the contribution remuneration;
- monthly contributions of retired public servants and pensioners: 11.00% on the portion of retirements that exceeds the RGPS benefit ceiling;
- monthly contributions of retirees and pensioners with disabling diseases: 11.00% on the portion of retirements that exceeds the RGPS benefit ceiling;
- Monthly contributions from the State: 22.00% on the contribution remuneration of the active public servants.

This costing plan generates the following monthly finance revenue:

Table 40: Contribution Revenue of the Financial Fund

Breakdown	Calculation Basis	Calculation Basis Value	Contribution Percentage	Revenue
Active Public Servants	Payroll	R\$ 1,164,206,613.17	11.00%	R\$ 128,062,727.45
Retired Public Servants	Value that exceeds INSS ceiling – retirees	R\$ 312,076,254.21	11.00%	R\$ 34,328,387.96
Pensioners	Value that exceeds INSS ceiling – Pensioners	R\$ 98,814,047.96	11.00%	R\$ 10,869,545.28
Municipal – CN	Payroll	R\$ 1,164,206,613.17	20.00%	R\$ 232,841,322.63
Municipal – CS	Payroll	R\$ 1,164,206,613.17	0.00%	R\$ 0.00
Total Revenue from Contributions				R\$ 406,101,983.32
Municipal – Administration Fee	Benefits and salaries payroll	R\$ 2,360,394,726.13	2.00%	R\$ 47,207,894.52
Total Revenue				R\$ 453,309,877.84

When matching revenue with expenditure, the following financial flow is shown:

Table 41: Financial Result of the Financial Fund

Breakdown	Total		
Total revenue from contributions	R\$ 406,101,983.32		
Total social security expenses	Retirements and Pensions	R\$ 1,196,188,112.96	R\$ 1,196,304,533.62
	Allowances (*)	R\$ 116,420.66	
Result (revenue – expenses)	(R\$ 790,202,550.30)		
Result on salary payroll	-67.87%		
Result on collection	-194.58%		

(*) Corresponds to the monthly average of expenses with Allowances, according to the amounts informed to CAIXA.
Source: Database provided by the State.
Prepared by: CAIXA

Thus, considering a collection of R\$ 406,101,983.32, there is a financial deficit of 67.87% of the salary payroll of the active public servants.

10.c. Statistical Summary – Financial Fund

Table 42: Civil Actives

Breakdown	Amounts
Population	138,167
Current average age	48
Average age of admission to public service	31
Projected average retirement age	58
Average salary	R\$ 5,716.25
Total monthly payroll	R\$ 789,797,055.60

Table 43: Military Actives

Breakdown	Amounts
Population	61,647
Current average age	39
Average age of admission to public service	25
Projected average retirement age	52
Average salary	R\$ 6,073.44
Total monthly payroll	R\$ 374,409,557.56

Table 44: Civil and Military Actives

Breakdown	Amounts
Population	199,814
Current average age	45
Average age of admission to public service	29
Projected average retirement age	56
Average salary	R\$ 5,826.45
Total monthly payroll	R\$ 1,164,206,613.17

Table 45: Civil and Military Retirees

Breakdown	Amounts
Population	164,296
Current average age	68
Average benefit	R\$ 5,437.15
Total monthly benefit payroll	R\$ 893,301,760.34

Table 46: Civil and Military Pensioners

Breakdown	Amounts
Population	69,781
Current average age	64
Average benefit	R\$ 4,340.53
Total monthly benefit payroll	R\$ 302,886,352.62

Table 47: Total Civil and Military

Breakdown	Amounts
Population	433,891
Total monthly benefits and salaries payroll	R\$ 2,360,394,726.13

11 Financial Fund Net Assets

The Net Assets effectively constituted by RPPS (Plan Assets) is the amount used to cover the Mathematical Reserves (Plan Liabilities) and will determine if the Social Security Benefit Plan is balanced, in deficit or surplus. These net assets may consist of assets, rights and financial assets. These financial assets, as set forth in Art. 2 of CMN Resolution No. 3922/2010, may be segmented into Fixed Income, Variable Income and Real Estate (Real Estate Funds).

Table 48: Net assets constituted under RPPS

Asset composition	Value on 12/31/2016
ROYALTIES & PE (SPECIAL INTERESTS)	111,792,848,973.60
CASH + CASH EQUIVALENTS	65,400,140.62
OVERDUE DEBT	928,878,582.65
REAL ESTATE	371,266,564.44
ICMS (STATE GOODS AND SERVICES TAX) INSTALLMENTS	3,234,197,190.67
FUNDES (ECONOMIC AND SOCIAL DEVELOPMENT FUND)	762,539,460.90
BERJ (BANK OF THE STATE OF RIO DE JANEIRO) + TCE (STATE ACCOUNTING COURT)	407,041,094.03
OTHER	2,170,588,585.78
TOTAL	119,732,760,592.69

12 Social Security Cost – Financial Fund

12.a. Social Security Cost Financing Model

In order to calculate the Social Security Cost of the Financial Fund, the Simple Redistribution financial regime was used, in which there is no need to form financial reserves to cover benefits that exceed the period of one year.

However, for the purpose of determining the Normal Cost, the result was replicated in percentage terms already shown in the Social Security Plan.

12.b. Normal Cost

Table 49: Total Normal Cost – Financial Fund

NORMAL COST	Annual Cost (R\$)	Rate on payroll of actives
Retirements reverting to the dependent	R\$ 3,393,196,594.74	22.42%
Disability reverting to the dependent	R\$ 208,858,666.40	1.38%
Pension of actives	R\$ 446,473,236.15	2.95%
Allowances	R\$ 1,513,468.60	0.01%
NORMAL ANNUAL NET COST	R\$ 4,050,041,965.88	26.76%
Plan Administration	R\$ 613,702,628.79	2.00%
NORMAL ANNUAL TOTAL COST	R\$ 4,663,744,594.67	28.76%

13 Mathematical Reserves

The Financial Social Security Fund is financed by the Simple Redistribution Financial Regime, where revenue and expense must balance within the fiscal year, and there is no need to establish a financial reserve for payments after this period.

However, for the purpose of completing the Actuarial Valuation Results Statement, we calculate the reserve values of this Fund, using a percentage interest rate of 0.00% per annum.

Table 50: Mathematical Reserve – Financial Fund

Breakdown	Values R\$
(-) Present Value of Future Benefits (retirees)	(R\$ 240,525,956,372.40)
(+) Present Value of Future Contributions (retirees)	R\$ 9,214,571,109.09
(-) Present Value of Future Benefits (pensioners)	(R\$ 79,523,432,239.31)
(+) Present Value of Future Contributions (pensioners)	R\$ 2,610,033,925.77
(+) Present Value of Future Contributions (Entity)	R\$ 0.00
(+) Social Security Compensation *	R\$ 2,304,355,598.00
Mathematical Reserve of Benefits Granted (RMB – Granted)	(R\$ 305,920,427,978.85)
(-) Present Value of Future Benefits	(R\$ 445,478,133,723.27)
(+) Present Value of Future Contributions – Active Public Servants	R\$ 16,232,582,323.45
(+) Present Value of Future Contributions – Retired Public Servants and Pensioners	R\$ 16,660,442,209.33
(+) Present Value of Future Contributions – Entity on Actives ***	R\$ 32,465,164,646.97
(+) Present Value of Future Contributions – Entity on Retirees and Pensioners	R\$ 0.00
(+) Social Security Compensation *	R\$ 3,207,442,562.81
Mathematical Reserve of Benefits to be Granted (RMB to be Granted)	R\$ 376,912,501,980.71
(-) Mathematical Reserve of Granted Benefits (RMBC)	(R\$ 305,920,427,978.85)
(-) Mathematical Reserve of Benefits to be Granted (RMBaC)	R\$ 376,912,501,980.71
Mathematical Reserves (RMBaC + RMBC)	(R\$ 682,832,929,959.55)
(+) Plan Assets **	R\$ 119,732,760,592.69
(+) Other receivables	R\$ 0.00
Actuarial Technical Deficit	(R\$ 563,100,169,366.86)

* For the purpose of estimating the Social Security Compensation, the percentage of the retired payroll that returns to the RPPS as Social Security Compensation was calculated and applied that percentage on the Present Value of Future Benefits of the current actives and retirees.

** The financial assets of the Plan were stated by RPPS in the "Supplementary Information" relating to 31/Dec/16.

*** Corresponds to the present value of the future contributions of the public entity that used payroll as a base.

To understand the Mathematical Reserves table, please find the following definitions:

- **Present Value** – corresponds to the sum of future payments that will be made under the Specific Social Security Regime, brought to the current date, discounting the accrued interest in each period and the probabilities of a decrease in the group of active public servants, whether by death, retirement, disability, discharge or dismissal;
- **RMB Granted** – corresponds to the sum of the reserves needed to pay the benefits of current retirees and pensioners discounted future contributions that will be transferred to the retirement plan, both from the employer and from the public servants;
- **RMB to Grant** – corresponds to the sum of the reserves needed to pay the retirement and pension benefits for the current actives discounted the future contributions that will be transferred to the retirement plan, both from the employer and from the public servants;
- **Reserve to Amortize** – corresponds to the amount needed to amortize the deficit.

To estimate the present value of the Social Security Compensation flow, it was considered that the amounts receivable will be proportional to the current expense with payment of retirements and that the estimated total present value of revenues from this settlement of accounts is less than 10.00% of the present value of future benefits used to calculate Mathematical Reserves, based on the assumption that currently the revenue amount from this settlement of accounts with the General Social Security Regime is R\$ 8,643,855.53 per month.

13.a. Financial Flow

Table 51: Financial Flow

Year	Fund Revenues						Expenses				Revenue - Expense Difference	Cash Balance
	Entity Contribution	Participant Contribution	Social Security Compensation	ICMS + Royalties + FUNDES	Market Gains	Total Revenue	Pensioner and Retiree Benefits	Allowances	Administrative Expenses	Total Expenses		
2017	3,329,630,913.66	2,252,388,588.93	111,963,207.37	1,286,343,566.21	0	6,980,326,276.17	15,550,445,468.44	1,513,468.60	613,702,628.79	16,165,661,565.83	-9,185,335,289.66	0.00
2018	3,222,052,152.02	2,218,599,346.45	115,774,272.78	1,442,194,774.99	0.00	6,998,620,546.24	16,079,760,108.05	1,464,569.16	614,509,034.16	16,695,733,711.37	-9,697,113,165.13	0.00
2019	2,992,536,815.54	2,135,771,845.17	121,858,628.43	3,151,031,942.33	0.00	8,401,199,231.47	16,924,809,503.61	1,360,244.01	610,544,991.49	17,536,714,739.11	-9,135,515,507.64	0.00
2020	2,711,861,158.31	2,035,861,410.17	129,562,147.20	5,244,981,372.77	0.00	10,122,266,088.45	17,994,742,666.88	1,232,664.16	606,427,685.91	18,602,403,016.95	-8,480,136,928.50	0.00
2021	2,603,003,255.50	1,993,167,711.96	131,798,322.61	5,382,732,952.18	0.00	10,110,702,242.25	18,305,322,584.27	1,183,183.30	602,743,111.28	18,909,248,878.85	-8,798,546,636.60	0.00
2022	2,495,378,082.25	1,951,714,179.48	134,153,364.50	7,741,775,063.47	0.00	12,323,020,689.70	18,632,411,736.30	1,134,262.76	599,500,787.66	19,233,046,786.72	-6,910,026,097.02	0.00
2023	2,394,974,532.54	1,909,046,407.47	135,588,983.45	7,686,596,269.07	0.00	12,126,206,192.53	18,831,803,257.04	1,088,624.79	594,361,022.64	19,427,252,904.47	-7,301,046,711.94	0.00
2024	2,297,357,549.41	1,866,614,525.82	136,804,058.92	7,152,897,687.53	0.00	11,453,673,821.68	19,000,563,738.86	1,044,253.43	588,861,961.09	19,590,469,953.38	-8,136,796,131.70	0.00
2025	2,207,014,307.15	1,826,304,446.44	137,730,435.19	6,485,496,435.60	0.00	10,656,545,624.38	19,129,227,109.61	1,003,188.32	583,222,206.48	19,713,452,504.41	-9,056,906,880.03	0.00
2026	2,118,647,635.92	1,787,904,852.23	138,832,538.41	5,708,118,628.53	0.00	9,753,503,655.09	19,282,297,000.76	963,021.65	578,250,270.55	19,861,510,292.96	-10,108,006,637.87	0.00
2027	2,032,145,815.77	1,749,871,467.92	139,826,748.13	5,097,428,685.68	0.00	9,019,272,717.50	19,420,381,684.22	923,702.64	573,148,162.39	19,994,453,549.25	-10,975,180,831.75	0.00
2028	1,943,094,277.55	1,711,082,115.27	140,919,833.48	5,046,310,838.62	0.00	8,841,407,064.92	19,572,199,094.29	883,224.67	568,088,916.21	20,141,171,235.17	-11,299,764,170.25	0.00
2029	1,863,319,188.81	1,674,864,390.59	141,619,124.79	4,708,472,620.78	0.00	8,388,275,324.97	19,669,322,886.87	846,963.27	562,779,111.27	20,232,948,961.41	-11,844,673,636.44	0.00
2030	1,790,286,284.39	1,639,700,236.85	141,876,807.90	4,272,196,410.91	0.00	7,844,059,740.05	19,705,112,208.29	813,766.49	556,855,542.75	20,262,781,517.53	-12,418,721,777.48	0.00
2031	1,719,098,408.86	1,605,230,839.30	142,091,091.23	3,932,780,951.65	0.00	7,399,201,291.04	19,734,873,782.30	781,408.37	550,979,149.18	20,286,634,339.85	-12,887,433,048.81	0.00
2032	1,655,246,246.78	1,572,827,388.95	142,000,127.58	3,545,646,318.43	0.00	6,915,720,081.74	19,722,239,941.40	752,384.66	544,921,730.35	20,267,914,066.41	-13,352,193,974.67	0.00
2033	1,594,478,395.05	1,540,367,633.23	141,604,574.15	3,160,986,116.23	0.00	6,437,436,718.66	19,667,301,965.03	724,762.91	538,298,620.67	20,206,325,348.61	-13,768,888,629.95	0.00
2034	1,537,481,433.23	1,507,703,807.30	140,810,859.52	2,867,905,459.08	0.00	6,053,901,559.13	19,557,063,822.32	698,855.20	530,912,315.83	20,088,674,993.35	-14,034,773,434.22	0.00
2035	1,484,248,115.48	1,471,076,168.40	138,903,247.74	2,829,819,143.51	0.00	5,924,046,675.13	19,292,117,741.18	674,658.23	520,774,001.69	19,813,566,401.10	-13,889,519,725.97	0.00
2036	1,432,235,542.97	1,438,789,236.79	137,706,458.50	2,356,910,312.82	0.00	5,365,641,551.08	19,125,897,014.27	651,016.16	512,721,171.46	19,639,269,201.89	-14,273,627,650.81	0.00
2037	1,381,994,661.37	1,407,569,175.23	136,544,163.86	2,562,004,141.53	0.00	5,488,112,141.99	18,964,467,202.79	628,179.39	504,925,222.36	19,470,020,604.54	-13,981,908,462.55	0.00

Year	Fund Revenues						Expenses				Revenue - Expense Difference	Cash Balance
	Entity Contribution	Participant Contribution	Social Security Compensation	ICMS + Royalties + FUNDES	Market Gains	Total Revenue	Pensioner and Retiree Benefits	Allowances	Administrative Expenses	Total Expenses		
2008	1,337,517,530.63	1,377,665,547.82	135,083,571.32	1,884,528,091.47	0.00	4,734,794,741.24	18,761,607,128.14	607,962.51	496,824,645.35	19,259,039,736.00	-14,524,244,994.76	0.00
2009	1,296,391,460.29	1,348,256,514.65	133,397,949.13	1,768,394,232.26	0.00	4,546,440,156.33	18,527,492,935.23	589,268.85	488,403,627.82	19,016,485,831.90	-14,470,045,675.57	0.00
2040	1,260,533,274.44	1,320,777,428.89	131,578,179.36	1,599,110,318.64	0.00	4,311,999,201.33	18,274,747,133.08	572,969.67	480,088,876.70	18,755,408,979.45	-14,443,409,778.12	0.00
2041	1,225,078,960.32	1,292,694,979.05	129,603,053.54	1,571,942,887.25	0.00	4,219,309,870.16	18,000,424,102.16	556,854.07	471,379,236.71	18,472,360,251.94	-14,253,050,381.78	0.00
2042	1,195,808,061.97	1,266,097,591.74	127,325,587.44	1,382,768,165.72	0.00	3,971,999,406.87	17,684,109,366.65	543,549.12	462,392,011.15	18,147,044,926.92	-14,175,045,520.05	0.00
2043	1,169,908,778.68	1,240,463,724.77	124,908,583.54	1,380,985,328.51	0.00	3,916,266,415.50	17,348,414,380.70	531,776.72	453,323,631.13	17,802,269,788.55	-13,886,003,373.05	0.00
2044	1,149,057,119.45	1,215,879,446.48	122,210,663.51	1,395,277,229.74	0.00	3,882,424,459.18	16,973,703,264.96	522,298.69	443,933,803.43	17,418,159,367.08	-13,535,734,907.90	0.00
2045	1,128,168,457.90	1,191,817,001.16	119,615,705.20	1,297,417,929.37	0.00	3,737,019,093.63	16,613,292,388.31	512,803.84	434,826,616.67	17,048,631,808.82	-13,311,612,715.19	0.00
2046	1,111,947,710.14	1,167,932,255.82	116,609,867.92	1,211,519,593.06	0.00	3,608,009,426.94	16,195,814,988.63	505,430.78	425,002,455.24	16,621,322,874.65	-13,013,313,447.71	0.00
2047	1,100,238,484.57	1,146,027,344.88	113,551,452.27	1,108,594,358.94	0.00	3,468,411,640.66	15,771,035,037.84	500,108.40	415,442,381.17	16,186,977,527.41	-12,718,565,886.75	0.00
2048	1,083,338,149.50	1,125,442,281.58	110,286,364.43	1,051,823,812.65	0.00	3,380,890,608.16	15,317,550,615.93	496,971.89	405,745,389.55	15,723,792,977.37	-12,342,902,369.21	0.00
2049	1,089,741,001.42	1,108,199,364.42	107,343,414.70	995,013,755.34	0.00	3,300,297,535.88	14,908,807,597.53	495,336.82	397,243,515.72	15,306,546,450.07	-12,006,248,914.19	0.00
2050	1,083,752,512.75	1,091,680,736.60	104,766,317.03	928,271,810.70	0.00	3,208,471,377.08	14,550,877,364.90	492,614.78	389,540,503.00	14,940,910,482.68	-11,732,439,105.60	0.00
2051	1,075,763,925.11	1,074,211,391.00	102,198,619.60	887,485,054.02	0.00	3,139,658,989.73	14,194,252,722.66	488,983.60	381,681,774.92	14,576,423,481.18	-11,436,764,491.45	0.00
2052	1,068,689,358.82	1,056,856,642.53	99,565,674.61	852,003,887.37	0.00	3,077,115,563.33	13,828,565,918.37	485,767.89	373,724,896.44	14,202,776,582.70	-11,125,661,019.37	0.00
2053	1,063,029,042.90	1,041,512,454.19	97,181,101.69	745,504,561.76	0.00	2,947,227,160.54	13,497,375,235.21	483,195.02	366,586,508.60	13,864,444,938.83	-10,917,217,778.29	0.00
2054	1,055,370,826.25	1,022,593,503.18	94,305,702.71	713,981,588.27	0.00	2,886,251,620.41	13,098,014,265.66	479,714.01	357,903,067.70	13,456,397,067.37	-10,570,145,446.96	0.00
2055	1,052,910,946.32	1,005,338,269.54	91,252,051.72	687,591,807.39	0.00	2,837,039,074.97	12,673,896,072.02	478,596.88	349,197,098.38	13,023,571,766.28	-10,186,478,691.31	0.00
2056	1,052,523,115.54	988,957,219.77	88,167,561.66	640,723,072.43	0.00	2,770,370,969.40	12,245,494,675.33	478,419.60	340,583,813.10	12,586,566,908.03	-9,816,195,938.63	0.00
2057	1,052,740,077.89	973,792,025.50	85,257,132.99	0.00	0.00	2,111,789,236.38	11,841,268,470.80	478,518.22	332,529,012.86	12,174,276,001.88	-10,062,486,765.50	0.00
2058	1,051,706,897.90	958,794,621.23	82,497,785.56	0.00	0.00	2,082,999,304.69	11,458,025,772.10	478,048.59	324,770,233.43	11,783,274,054.12	-9,690,274,749.43	0.00
2059	1,049,701,571.64	943,808,338.79	79,833,179.60	0.00	0.00	2,073,343,090.03	11,087,941,611.27	477,137.08	317,186,247.83	11,405,604,936.18	-9,332,261,906.15	0.00
2060	1,047,029,988.27	929,377,180.09	77,337,831.85	0.00	0.00	2,053,745,000.21	10,741,365,534.73	475,922.72	310,011,855.08	11,051,853,312.53	-8,998,108,312.32	0.00
2061	1,043,317,678.72	913,806,243.67	74,724,453.44	0.00	0.00	2,031,848,375.83	10,378,396,310.51	474,235.31	302,414,987.91	10,681,285,533.73	-8,649,437,157.90	0.00
2062	1,041,302,969.24	899,926,008.63	72,271,500.96	0.00	0.00	2,013,500,478.83	10,037,708,467.20	473,319.53	295,418,075.64	10,333,599,862.37	-8,320,099,383.54	0.00
2063	1,038,122,931.73	885,980,534.32	69,917,144.79	0.00	0.00	1,994,020,610.84	9,710,714,553.86	471,874.06	288,588,103.05	9,999,775,530.97	-8,005,754,920.13	0.00

Year	Fund Revenues						Expenses				Revenue - Expense Difference	Cash Balance
	Entity Contribution	Participant Contribution	Social Security Compensation	ICMS + Royalties + FUNDES	Market Gains	Total Revenue	Pensioner and Retiree Benefits	Allowances	Administrative Expenses	Total Expenses		
2064	1,034,778,296.69	872,043,292.94	67,580,039.60	0.00	0.00	1,974,401,629.23	9,366,116,611.60	470,353.77	281,793,066.48	9,668,380,051.85	-7,693,978,422.62	0.00
2065	1,031,980,903.59	857,124,653.19	65,003,788.03	0.00	0.00	1,954,109,344.81	9,028,303,893.32	469,082.23	274,382,523.65	9,303,155,499.20	-7,349,046,154.39	0.00
2066	1,032,275,648.67	843,340,961.13	62,349,196.48	0.00	0.00	1,937,965,806.28	8,669,610,621.86	469,216.20	267,035,453.23	8,927,115,291.29	-6,989,149,485.01	0.00
2067	1,034,331,830.48	830,601,048.29	59,725,676.49	0.00	0.00	1,924,658,555.26	8,295,232,845.29	470,150.83	259,934,823.31	8,555,637,819.43	-6,630,979,264.17	0.00
2068	1,036,744,501.15	818,935,613.97	57,272,935.65	0.00	0.00	1,912,953,050.77	7,954,574,395.82	471,247.50	253,340,988.02	8,208,386,631.34	-6,295,433,580.57	0.00
2069	1,038,544,382.46	807,263,170.81	54,877,243.37	0.00	0.00	1,900,684,796.64	7,621,839,357.15	472,065.63	246,849,912.82	7,869,161,335.60	-5,963,476,538.96	0.00
2070	1,040,773,250.79	796,352,038.04	52,585,748.11	0.00	0.00	1,889,711,036.94	7,303,576,127.04	473,078.75	240,687,272.61	7,544,736,478.40	-5,655,025,441.46	0.00
2071	1,042,966,435.07	786,035,892.45	50,411,028.66	0.00	0.00	1,879,413,356.18	7,001,531,758.37	474,075.65	234,845,765.63	7,236,651,599.65	-5,357,438,243.47	0.00
2072	1,045,108,085.97	776,602,432.92	48,409,416.65	0.00	0.00	1,870,119,935.54	6,723,530,090.23	475,049.13	229,480,427.80	6,953,485,557.16	-5,083,355,631.62	0.00
2073	1,046,826,744.09	768,100,436.14	46,625,597.74	0.00	0.00	1,861,552,777.97	6,475,777,463.71	475,830.34	224,681,616.92	6,700,934,910.97	-4,839,382,133.00	0.00
2074	1,047,702,775.59	759,341,538.91	44,873,119.45	0.00	0.00	1,851,917,493.95	6,232,377,701.03	476,228.53	219,893,260.89	6,452,747,190.45	-4,600,829,696.50	0.00
2075	1,049,264,516.35	751,247,746.03	43,182,023.60	0.00	0.00	1,843,694,285.98	5,997,503,278.43	476,938.42	215,337,748.87	6,213,317,965.72	-4,369,623,679.74	0.00
2076	1,051,469,324.01	743,811,156.23	41,554,901.70	0.00	0.00	1,836,835,381.94	5,771,514,124.97	477,940.60	211,018,402.86	5,983,010,468.43	-4,146,175,086.49	0.00
2077	1,053,728,288.39	737,043,333.59	40,050,054.85	0.00	0.00	1,830,821,676.83	5,562,507,617.55	478,967.40	207,043,633.11	5,770,030,218.06	-3,939,208,541.23	0.00
2078	1,056,216,207.26	731,214,706.19	38,702,359.62	0.00	0.00	1,826,133,273.07	5,375,327,724.81	480,098.28	203,526,209.70	5,579,334,032.79	-3,753,200,759.72	0.00
2079	1,058,412,406.69	726,023,449.42	37,503,910.46	0.00	0.00	1,821,939,766.57	5,208,876,453.17	481,096.55	200,396,838.76	5,409,754,388.48	-3,587,814,621.91	0.00
2080	1,060,217,590.09	721,254,198.00	36,423,129.68	0.00	0.00	1,817,894,917.77	5,058,768,011.62	481,917.09	197,568,777.51	5,256,808,706.22	-3,438,913,788.45	0.00
2081	1,061,962,033.04	718,512,045.89	35,734,403.74	0.00	0.00	1,816,208,482.67	4,963,111,630.75	482,710.02	195,804,235.62	5,159,398,576.39	-3,343,190,093.72	0.00
2082	1,061,026,897.80	714,921,947.04	35,139,399.32	0.00	0.00	1,811,088,244.16	4,880,472,127.67	482,284.95	194,066,433.26	5,075,020,845.88	-3,263,932,601.72	0.00
2083	1,060,133,250.95	712,894,878.83	34,838,280.59	0.00	0.00	1,807,866,410.37	4,838,650,082.15	481,878.75	193,148,751.73	5,032,280,712.63	-3,224,414,302.26	0.00
2084	1,057,271,392.70	709,779,462.02	34,517,298.17	0.00	0.00	1,801,588,152.89	4,794,069,190.93	480,577.91	191,966,964.97	4,986,546,733.81	-3,184,978,580.92	0.00
2085	1,055,482,205.86	709,428,483.91	34,620,885.13	0.00	0.00	1,799,531,574.90	4,808,456,268.36	479,764.64	192,122,053.17	5,001,058,086.17	-3,201,526,511.27	0.00
2086	1,050,259,839.89	705,204,012.99	34,313,469.97	0.00	0.00	1,789,777,322.85	4,765,759,717.48	477,390.84	190,793,361.61	4,957,030,469.93	-3,167,253,147.08	0.00
2087	1,049,790,093.98	703,585,304.79	34,049,777.46	0.00	0.00	1,787,425,176.23	4,729,135,758.40	477,177.32	190,018,178.26	4,919,631,113.98	-3,132,205,937.75	0.00
2088	1,049,329,117.30	702,025,186.70	33,796,413.91	0.00	0.00	1,785,150,717.91	4,693,946,377.07	476,967.78	189,272,483.66	4,883,656,828.51	-3,098,545,110.60	0.00
2089	1,049,489,646.56	701,523,124.26	33,685,450.36	0.00	0.00	1,784,688,221.18	4,678,534,771.69	477,040.75	188,978,845.12	4,867,990,657.56	-3,083,292,436.38	0.00

Year	Fund Revenues						Expenses				Revenue - Expense Difference	Cash Balance
	Entity Contribution	Participant Contribution	Social Security Compensation	ICMS + Royalties + FUNDES	Market Gains	Total Revenue	Pensioner and Retiree Benefits	Allowances	Administrative Expenses	Total Expenses		
2090	1,048,591,419.70	700,640,776.66	33,602,896.74	0.00	0.00	1,782,835,093.10	4,667,068,991.50	476,632.46	188,667,872.53	4,856,213,496.49	-3,073,378,403.39	0.00
2091	1,047,854,828.99	700,475,757.33	33,641,631.38	0.00	0.00	1,781,972,217.70	4,672,448,803.23	476,297.65	188,708,505.97	4,861,633,606.85	-3,079,661,389.15	0.00
2092	1,046,151,453.51	699,994,315.28	33,712,182.42	0.00	0.00	1,779,857,951.21	4,682,247,558.69	475,523.39	188,749,628.77	4,871,472,710.85	-3,091,614,759.64	0.00
2093	1,044,493,312.55	699,146,314.23	33,708,575.17	0.00	0.00	1,777,348,201.95	4,681,746,550.71	474,769.69	188,588,868.52	4,870,810,188.92	-3,093,461,986.97	0.00
2094	1,043,688,525.98	699,007,257.59	33,758,754.48	0.00	0.00	1,776,454,538.05	4,688,715,899.45	474,403.88	188,655,093.08	4,877,845,396.41	-3,101,390,858.36	0.00
2095	1,042,399,308.31	698,807,256.64	33,843,475.38	0.00	0.00	1,775,050,040.33	4,700,482,691.41	473,817.87	188,773,227.31	4,889,729,736.59	-3,114,679,696.26	0.00
2096	1,040,894,933.70	698,374,308.37	33,904,307.00	0.00	0.00	1,773,173,549.07	4,708,931,527.48	473,134.06	188,805,442.70	4,898,210,104.24	-3,125,036,555.17	0.00
2097	1,039,657,368.34	697,294,245.29	33,816,409.12	0.00	0.00	1,770,768,022.75	4,696,723,488.60	472,571.53	188,448,775.98	4,885,644,836.11	-3,114,876,813.36	0.00

14 Variance Analysis of Results

The main variances in the statistics and in the Costs and Mathematical Reserves of the Plan are analyzed below, considering this actuarial valuation and those of previous years.

14.a. Variance in Financial Fund Statistics

Table 52: Variances in the Number of Participants – Financial Fund

Breakdown	Actives	Retirees	Pensioners
2015 Actuarial Valuation	219,749	158,759	69,274
2016 Actuarial Valuation	205,715	161,956	69,539
2017 Actuarial Valuation	199,814	164,296	69,781

Table 53: Variances in Average Salaries and Benefits – Financial Fund

Breakdown	Actives	Retirees	Pensioners
2015 Actuarial Valuation	R\$ 4,040.00	R\$ 4,147.11	R\$ 3,794.15
2016 Actuarial Valuation	R\$ 4,706.66	R\$ 4,766.40	R\$ 4,082.10
2017 Actuarial Valuation	R\$ 5,826.45	R\$ 5,437.15	R\$ 4,340.53

Table 54: Variances in Benefits and Salaries Payroll – Financial Fund

Breakdown	Actives	Retirees	Pensioners
2015 Actuarial Valuation	R\$ 887,786,909.51	R\$ 658,391,125.78	R\$ 262,836,060.95
2016 Actuarial Valuation	R\$ 968,230,959.15	R\$ 771,947,679.75	R\$ 283,865,099.25
2017 Actuarial Valuation	R\$ 1,164,206,613.17	R\$ 893,301,760.34	R\$ 302,886,352.62

From the data shown in the tables above, the following analysis can be made:

- a decrease of 2.87% percentage points in the number of active participants, 5,901 public servants. Alongside this, there was an increase in the number of retired public servants, 2,340, and an increase in pensioners, 242, which, combined with the variation in average salary and benefits, resulted in a 16.62% increase in personnel expenses.

15 Actuarial Opinion

In order to guarantee the financial coverage of Social Security Benefits, the State of Rio de Janeiro and its public servants pay monthly contributions to a Social Security Fund.

As provided for in Article 5 and 7 of State Law No. 6,338, dated November 06, 2012, transcribed below, the group of beneficiaries is divided into two groups, namely:

That Law creates two Funds, the First being the Financial Fund, which is made up of current active and inactive public servants and pensioners who had joined the State prior to 09/03/2013, the military servants and their dependents and the public servants who had taken office in the State after 09/04/2013, but entered the public service before this date without interruption, in addition to their dependents. The second Fund, called the Social Security Fund, will be made up of civil servants who joined the municipal, state or federal public service as of 09/04/2013 and were not bound to the public service previously or had a connection, but with interruption.

In view of the absence or inconsistency of information submitted in the registration databases sent by the State, technical assumptions were adopted that aim at reducing their effects on the results of the actuarial valuation. Such inconsistencies are related to the high rate of public servants with the previous length of service equal to zero.

The number of married public servants reported in the registration database was considered to be out of standard and much lower than what we found in the registration databases of other public entities. As such, since this information directly interferes with the Social Security Cost, we adopt the proportion of married people found in our database history as an assumption.

According to information from RPPS representatives, normal contributions made to the Financial Fund are defined as follows:

- monthly contributions from active public servants: 11.00% calculated on the contribution remuneration;

- monthly contributions of retired public servants and pensioners: 11.00% on the portion of retirements that exceeds the RGPS benefit ceiling;
- monthly contributions of retirees and pensioners with disabling diseases: 11.00% on the portion of retirements that exceeds the RGPS benefit ceiling;
- monthly contributions from the State: 22.00% on the contribution remuneration of the active public servants.

The technical bases used were chosen by the responsible actuary, being those that adhered to the characteristics of the mass of participants:

- **real interest rate**¹³ used in the projections contained in this valuation was 0.00% per year;
- **biometric tables**¹⁴ used were chosen according to the generating event:
 - Mortality Table of Abled Person (survival generating event) – IBGE-2014;
 - Mortality Table of Abled Person (death generating event) – AT-2000; Start Disability Table – ALVARO VINDAS; and
 - Mortality Table of Disabled People – IBGE-2014.
- probability of leaving a lifelong dependent in case of death, calculation of the proportion of married servants, by age, based on information found in the State database, using this proportion as a probability factor;
- **salary growth**¹⁵ considered was 1% per year;
- **turnover rate**¹⁶ considered was 1% per year;

¹³ According to Article 9 of MPS Ordinance No. 403/08, the real interest rate of the actuarial calculation may not exceed 6% per annum.

¹⁴ According to Article 6 of MPS Ordinance No. 403/08, any tables may be used in the actuarial calculation, provided they do not state obligations lower than those reached in that Ordinance.

¹⁵ According to Article 8 of MPS Ordinance No. 403/08, the real remuneration growth calculated must show a minimum increase of 1% per year.

¹⁶ According to Paragraph 1 of Article 7 of MPS Ordinance No. 403/08, the maximum permissible turnover rate is 1% per year.

- **administrative cost**¹⁷ considered in this study corresponds to 2.00% of the total remuneration of the Active Public Servants, Retirees and Pensioners of the State;
- **Future Generation:** to each active public servant that leaves, another takes their place, with the same age of entrance and initial salary of the one that has left;
- **Projected average retirement age**
 - Female non-teacher: 57 years old
 - Male non-teacher: 57 years old
 - Female teacher: 54 years old
 - Male teacher: 58 years old
- **Key statistics for active public servants:**
 - Number – Women: 89,384
 - Number – Men: 110,430
 - Salary – Women (Annual): R\$ 5,965,494,217.65
 - Salary – Men (Annual): R\$ 9,169,191,753.51
 - Salary Payroll – FS (Annual): R\$ 15,134,685,971.16

To use the salary growth rate of 1.00% per year, the estimate of the salary evolution of the active public servant was used for each year of service in the State through the database received. In order to do so, it was estimated the salary growth of the public servant in each year of work in the State according to a regression model that evaluates the wage variation as a function of the length of stay in the State, estimating a salary growth lower than 1.00%, which is why the minimum real growth of 1.00% of the salary was considered, as established by Ordinance No. 403/2008.

In the same way that salary growth was assessed, the growth of benefits was also assessed, considering the time of receiving the retirement benefit and the average benefit. This analysis showed that, according to the

¹⁷ Article 15 of MPS Ordinance no. 402/08 provides that the administration fee may not exceed two percentage points of the total value of the remuneration, pay and pensions of the beneficiaries linked to the specific social security regime, in relation to the previous financial year. In this study, we consider that the administrative expenses will be 2.00% on the total remuneration, pay and pensions.

regression analysis study, the actual growth of the benefit is very close to zero, and then this parameter is considered.

Considering the information provided by the Plan Managers, the annual return obtained by the benefits plan was 22.55%, taking the INPC (Consumer Price Index) as an inflation adjustment index, thus exceeding the actuarial target of 11.91%. As such, it was decided to keep it at this level for 2017.

As reported to CAIXA, the RPPS net assets, as of December 31/Dec/16, amount to R\$ 119,732,760,592.69 and is composed of:

Composition of Assets – Financial Plan	Value on 12/31/2016
ROYALTIES & PE (SPECIAL INTERESTS)	111,792,848,973.60
CASH + CASH EQUIVALENTS	65,400,140.62
OVERDUE DEBT	928,878,582.65
REAL ESTATE	371,266,564.44
ICMS (STATE GOODS AND SERVICES TAX) INSTALLMENTS	3,234,197,190.67
FUNDES (ECONOMIC AND SOCIAL DEVELOPMENT FUND)	762,539,460.90
BERJ (BANK OF THE STATE OF RIO DE JANEIRO) + TCE (STATE ACCOUNTING COURT)	407,041,094.03
OTHER	2,170,588,585.78
TOTAL	119,732,760,592.69

The actuarial valuation found that to cost the Benefit Plan it is necessary that public servant contributions and the State Government contributions amount to 28.76% of the contribution remuneration payroll of the active public servants, where the public servants are at least 11%, according to Law No. 10,887, of June 21, 2004.

Currently, 199,814 active public servants with admission date up to 04/Sep/13, 164,296 retirees and 69,781 pensioners are linked to the Financial Fund, and the benefits are financed under the Simple Redistribution financial regime.

Since the current Normal Cost is higher than the Normal Cost calculated in the Actuarial Valuation, we suggest that it be maintained as follows, and there is also a complementation to cover the current

deficit:

- monthly contributions from active public servants: 11.00% calculated on the contribution remuneration;
- monthly contributions of retired public servants and pensioners: 11.00% on the portion of retirements that exceeds the RGPS benefit ceiling;
- monthly contributions of retirees and pensioners with disabling diseases: 11.00% on the portion of retirements that exceeds the RGPS benefit ceiling;
- Monthly contributions from the State: 22.00% on the contribution remuneration of the public servants.

This is the opinion.

Adilson Moraes da Costa
Actuary MIBA 1.032 MTE/RJ

Annex 5. Profile of the Population of the Beneficiaries of the Financial Fund

Annex 5.a. Statistics of the Active Public Servants

As previously mentioned, the statistical variables related to a group of public servants directly interfere with the analysis and the results found in an actuarial valuation. In this item, the main statistical variables related to the group of active public servants of the State of Rio de Janeiro linked to the Financial Fund will be demonstrated, commented on and compared, separated as follows: statistics of teachers and "non-teachers".

Table 55: Statistical Variables of "Non-teacher" Active Public Servants – Financial Fund

Breakdown	Female	Male	Total
Population	44,617	90,879	135,496
Monthly Salary Payroll	R\$ 310,869,030.72	R\$ 647,712,082.22	R\$ 958,581,112.94
Average salary	R\$ 6,967.50	R\$ 7,127.19	R\$ 7,074.61
Current minimum age	20	19	19
Current average age	48	43	45
Current maximum age	74	74	74
Minimum age of admission	18	18	18
Average age of admission	30	27	28
Maximum age of admission	69	68	69
Projected average retirement age	57	57	57

The gender distribution of the "non-teacher" active public servants, as can be seen in the previous table, points to a larger number of male public servants, that is, 67.07% of the total group. Other characteristics of the female "non-teacher" public servants in relation to the male public servants, based on the calculated averages, are as follows: lower average remuneration of 2.24% and current average age higher than 5 years.

In this study, it is important to consider the influence of the "gender" variable in calculating the social security cost, given that, evidently, women have a higher life expectancy than men and continue enjoying retirement benefits for a longer period of time. In addition to this, current social security

legislation establishes distinct requirements for female public servants, requiring that they have a shorter contribution time for retirement, which is even lower when it comes to female teacher public servants.

The following table summarizes the main characteristics of the teacher public servants so that a comparative analyzes can be established between this group and that of the "non-teachers".

Table 56: Statistical Variables of "Teacher" Active Public Servants – Financial Fund

Breakdown	Female	Male	Total
Population	44,767	19,551	64,318
Monthly Salary Payroll	R\$ 148,015,139.87	R\$ 57,610,360.35	R\$ 205,625,500.22
Average salary	R\$ 3,306.34	R\$ 2,946.67	R\$ 3,197.01
Current minimum age	25	25	25
Current average age	47	47	47
Current maximum age	71	73	73
Minimum age of admission	18	18	18
Average age of admission	31	34	32
Maximum age of admission	65	65	65
Projected average retirement age	54	58	55

Currently, the population of public servants in teaching in the State of Rio de Janeiro linked to the Financial Fund corresponds to 32.19% of the total active public servants of this group. This category has different characteristics from the others, such as its distribution by gender, where 69.60% of the group is composed of women.

The following table shows the statistical variables of the teachers and "non-teacher" public servants in the State of Rio de Janeiro linked to the Financial Fund, on a consolidated basis.

**Table 57: Consolidation of Statistical Variables of Active Public Servants
– Financial Fund**

Breakdown	Female	Male	Total
Population	89,384	110,430	199,814
Monthly Salary Payroll	R\$ 458,884,170.59	R\$ 705,322,442.58	R\$ 1,164,206,613.17
Average salary	R\$ 5,133.85	R\$ 6,387.05	R\$ 5,826.45
Current minimum age	20	19	19
Current average age	48	44	45
Current maximum age	74	74	74
Minimum age of admission	18	18	18
Average age of admission	31	28	29
Maximum age of admission	69	68	69
Projected average retirement age	56	57	56

Given the data consolidation, it is found that the active female public servants represent 44.73% of the total contingent of active public servants. Regarding remunerations, it is found, given the calculated averages, that the male public servants perceive salaries 24.41% higher than the salaries of the female public servants.

The tables and graphs below show the statistics of the active public servants, separated by specific variables relevant to the proposed study.

Table 58: Distribution of Active Public Servants by Age Group – Financial Fund

Interval	Population	Frequency	Accumulated frequency
Up to 25	1,397	0.70%	0.70%
26 to 30	10,827	5.42%	6.12%
31 to 35	26,993	13.51%	19.63%
36 to 40	30,203	15.11%	34.74%
41 to 45	33,841	16.94%	51.68%
46 to 50	31,372	15.70%	67.38%
51 to 55	29,015	14.52%	81.90%
56 to 60	20,354	10.19%	92.09%
61 to 65	10,918	5.46%	97.55%
66 to 70	4,745	2.38%	99.93%
71 to 75	149	0.07%	100.00%
Above 75	0	0.00%	100.00%
Total	199,814	100.00%	100.00%

Chart 11: Distribution of Active Public Servants by Age Group – Financial Fund

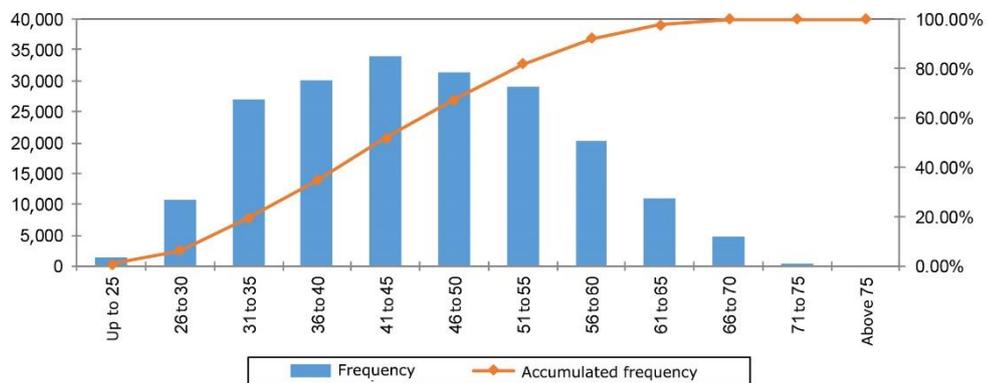
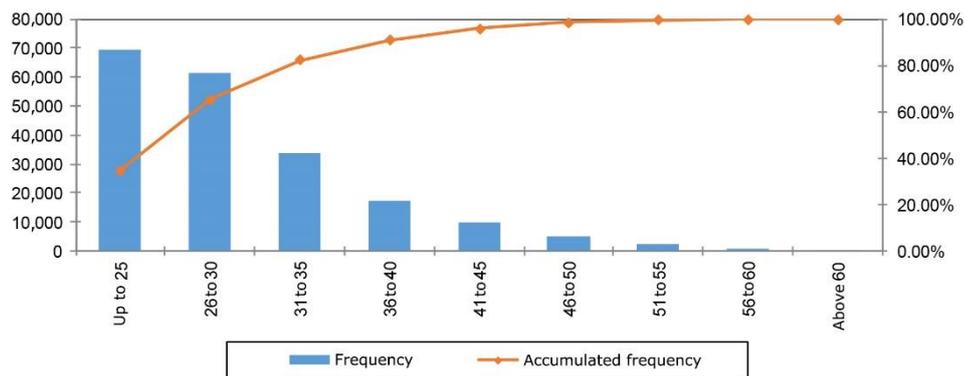


Table 59: Distribution of Active Public Servants by Age Admitted – Financial Fund

Interval	Population	Frequency	Accumulated Frequency
Up to 25	69,277	34.67%	34.67%
26 to 30	61,209	30.63%	65.30%
31 to 35	33,533	16.79%	82.09%
36 to 40	17,542	8.78%	90.87%
41 to 45	9,811	4.91%	95.78%
46 to 50	5,273	2.63%	98.41%
51 to 55	2,312	1.16%	99.57%
56 to 60	713	0.36%	99.93%
Above 60	144	0.07%	100.00%
Total	199,814	100.00%	100.00%

Chart 12: Distribution of Active Public Servants by Age Admitted – Financial Fund



The lowest and the highest admission age recorded in the Financial Fund were 18 and 69 years old respectively, and 82.09% of the group were admitted by the age of 35.

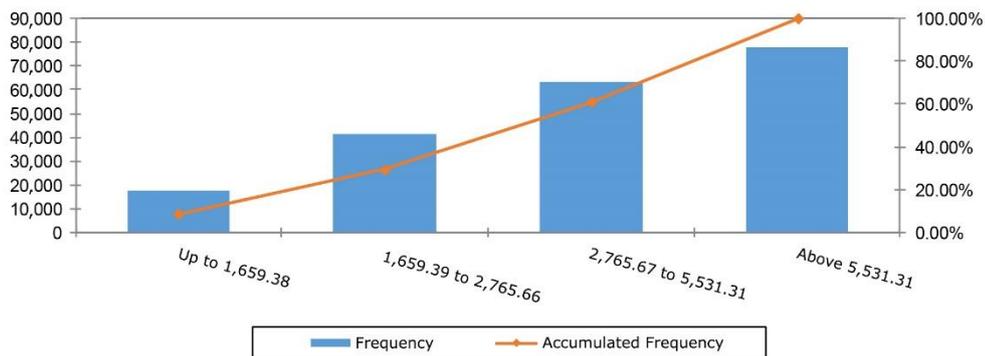
Note that the average age of public servant admission is a variable that produces a significant impact on the calculation of the Social Security Cost of a State, since, according to the methodology used to calculate the cost, under a capitalization regime, the public servants and the Government must jointly finance the cost of social security benefits between the age of admission of the public servants and their retirement. Thus, the younger the public servant is admitted to the public service, the longer the contribution time for the social security regime, minimizing the impact on the cost of the plan.

The following table was prepared based on the contribution ranges currently practiced by the Specific Social Security Regime – RPPS, in order to establish a comparative model with the remuneration of the State's public servants linked to the Financial Fund.

Table 60: Distribution of Active Public Servants by Wage Band – Financial Fund

Interval – R\$	Population	Frequency	Accumulated Frequency
Up to 1,659.38	17,429	8.72%	8.72%
1,659.39 to 2,765.66	41,611	20.82%	29.55%
2,765.67 to 5,531.31	62,947	31.50%	61.05%
Above 5,531.31	77,827	38.95%	100.00%
Total	199,814	100.00%	100.00%

Chart 13: Distribution of Active Public Servants by Wage Band – Financial Fund

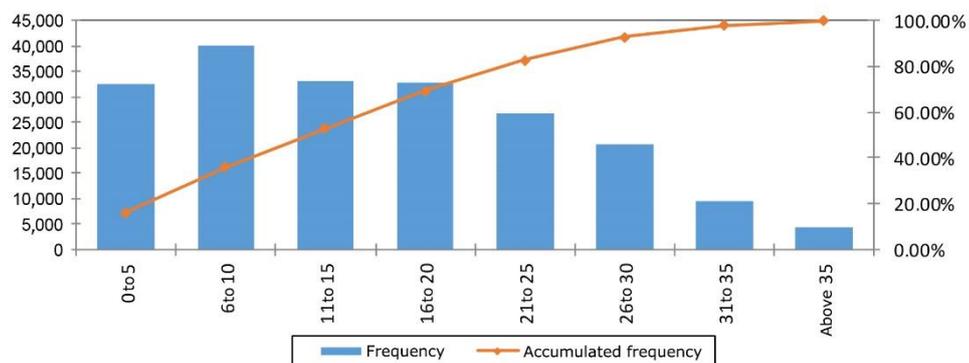


Note that 38.95% of the public servants are in the salary range above R\$ 5,531.31 and that only a small portion, 8.72%, receives salaries of R\$ 1,659.38.

Table 61: Distribution of Active Public Servants by Length of Service in the State

Interval	Population	Frequency	Accumulated Frequency
0 to 5	32,378	16.20%	16.20%
6 to 10	39,967	20.01%	36.21%
11 to 15	33,178	16.60%	52.81%
16 to 20	32,911	16.47%	69.28%
21 to 25	26,917	13.47%	82.75%
26 to 30	20,646	10.34%	93.09%
31 to 35	9,508	4.75%	97.84%
Above 35	4,309	2.16%	100.00%
Total	199,814	100.00%	100.00%

Chart 14: Distribution of Active Public Servants by Length of Service in the State

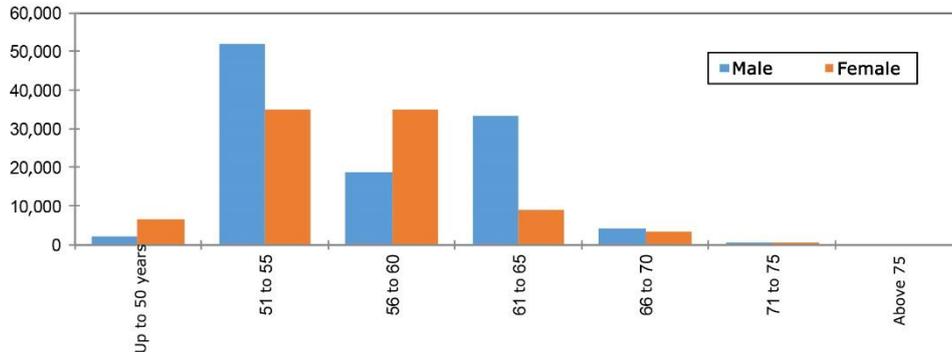


It can be found in the graph above that 20.01% of the active public servants have between 6 and 10 years of contribution time in the State Government.

Table 62: Distribution of Active Public Servants by Probable Pensionable Age – Financial Fund

Interval	Female	Male	Total
Up to 50 years old	6,462	2,105	8,567
51 to 55	34,970	51,936	86,906
56 to 60	35,136	18,683	53,819
61 to 65	9,196	33,316	42,512
66 to 70	3,563	4,298	7,861
71 to 75	57	92	149
Above 75	0	0	0
Total	89,384	110,430	199,814

Chart 15: Distribution of Active Public Servants by Probable Pensionable Age – Financial Fund



The chart above reinforces the above mentioned: female public servants will retire earlier than males, reflecting the retirement rules established in current social security legislation. It is also found that 74.72% of the public servant population will meet the requirements for full retirement by the age of 60.

Table 63: Distribution of Active Public Servants by Marital Status – Financial Fund

Category	Population	Frequency
Married	142,137	71.13%
Not married	57,677	28.87%
Total	199,814	100.00%

The probability of leaving a dependent for life in the event of death was calculated by observing the frequency of married public servants grouped by age range, adjusting them by a curve that is closest to the trend indicated by the data.

Annex 5.b. Statistics of Retired Public Servants

Find below the details of the main information in the registration database of retirees.

Table 64: Statistical Variables for Retired Public Servants

Breakdown	Female	Male	Total
Number of public servants	101,797	62,499	164,296

Salary Payroll	R\$ 386,185,978.86	R\$ 507,115,781.48	R\$ 893,301,760.34
Average salary	R\$ 3,793.69	R\$ 8,113.98	R\$ 5,437.15
Minimum age	30	27	27
Average age	69	67	68
Maximum age	117	105	117

The previous table reveals that the distribution by gender of the retired public servants of the State of Rio de Janeiro indicates a smaller number of male retirees, 38.04% of the total contingent.

These retired public servants can be classified by type of retirement, as follows:

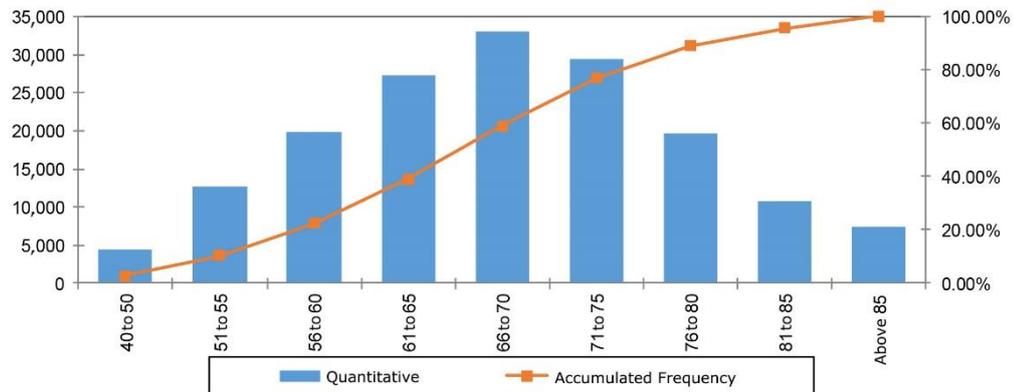
Table 65: Retired Public Servants Grouped by Retirement Type

Retirement	Statistics	Number	Total Benefit	Average Benefit	Average Age
Disability	Male	5445	R\$ 34,901,294.92	R\$ 6,409.79	61
	Female	8564	R\$ 21,271,161.54	R\$ 2,483.79	61
Contribution time	Male	53529	R\$ 447,510,930.66	R\$ 8,360.16	68
	Female	84508	R\$ 334,706,597.32	R\$ 3,960.65	69
Age	Male	2338	R\$ 16,262,371.91	R\$ 6,955.68	74
	Female	7372	R\$ 25,875,556.89	R\$ 3,509.98	73
Compulsory	Male	1187	R\$ 8,441,183.99	R\$ 7,111.36	80
	Female	1353	R\$ 4,332,663.11	R\$ 3,202.26	79
Total		164,296	R\$ 893,301,760.34	R\$ 5,437.15	68

Table 66: Distribution of Retired Public Servants by Age Group

Interval	Number	Frequency	Accumulated frequency
40 to 50	4,469	2.72%	2.72%
51 to 55	12,633	7.69%	10.41%
56 to 60	19,866	12.09%	22.50%
61 to 65	27,333	16.64%	39.14%
66 to 70	32,887	20.02%	59.16%
71 to 75	29,309	17.84%	77.00%
76 to 80	19,770	12.03%	89.03%
81 to 85	10,734	6.53%	95.56%
Above 85	7,295	4.44%	100.00%
Total	164,296	100.00%	

Chart 16: Distribution of Retired Public Servants by Age Group

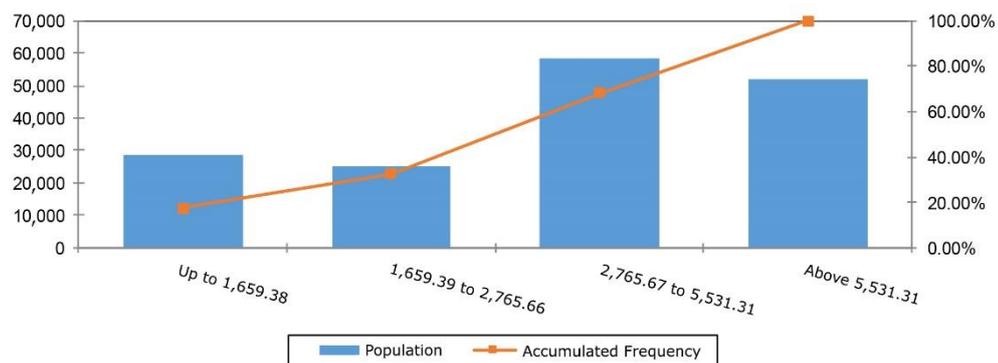


For retired public servants of the State, voluntary, compulsory and disability retirements are considered.

Table 67: Distribution of Retired Public Servants by Benefit Range

Interval – R\$	Population	Frequency	Accumulated Frequency
Up to 1,659.38	28,744	17.50%	17.50%
1,659.39 to 2,765.66	24,960	15.19%	32.69%
2,765.67 to 5,531.31	58,432	35.57%	68.25%
Above 5,531.31	52,160	31.75%	100.00%
Total	164,296	100.00%	100.00%

Chart 17: Distribution of Retired Public Servants by Value of Benefit Ranges



As seen in the previous graph, 35.57% of retired public servants have perceive benefits from R\$ 2,765.67 to R\$ 5,531.31.

Annex 5.c. Statistics of Pensioners

Table 68: Statistics of Pensioners

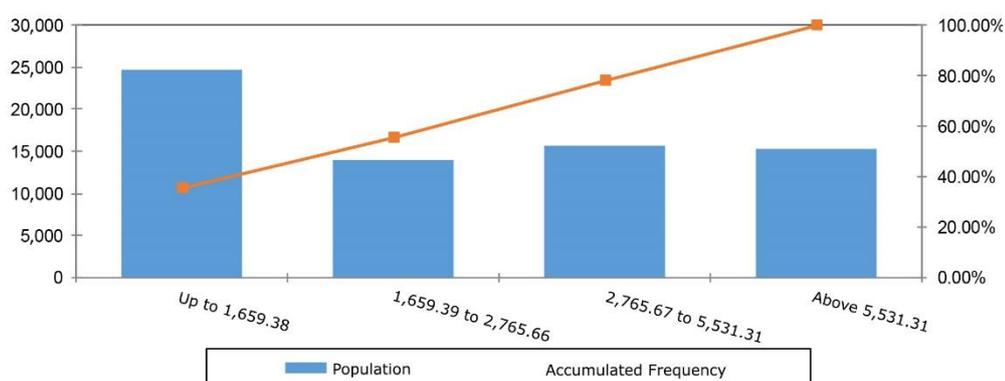
Breakdown	Female	Male	Total
Population	63,776	6,005	69,781
Benefit Payroll	R\$ 284,339,009.88	R\$ 18,547,342.74	R\$ 302,886,352.62
Average benefit	R\$ 4,458.40	R\$ 3,088.65	R\$ 4,340.53
Current minimum age	1	4	1
Current average age	63	70	64
Current maximum age	110	105	110

The group of pensioners of the State of Rio de Janeiro is represented by 91.39% of women, a group that received an average benefit 44.35% higher than that received by the men.

Table 69: Distribution of Pensioners by Benefit Range

Interval – R\$	Population	Frequency	Accumulated Frequency
Up to 1,659.38	24,667	35.35%	35.35%
1,659.39 to 2,765.66	14,000	20.06%	55.41%
2,765.67 to 5,531.31	15,746	22.57%	77.98%
Above 5,531.31	15,368	22.02%	100.00%
Total	69,781	100.00%	100.00%

Chart 18: Distribution of Pensioners by Benefit Range



The concentration of the amounts received by the pensioners is in the first band, that is, 35.35% with benefits up to R\$ 1,659.38.

Annex 6. Parameters and Basis of Calculation for Cash Flows and Projections – Financial Fund

Actuarial Valuation Base Date: 31/Dec/2016

No. of months in the calculation of the proportional value to the 1st year (considering a 13-month year): 13 months.

Table 70: Revenues

Reference	Monthly Calculation Base	Calculated Rate	13-month Amount
Contributions from active public servants	R\$ 1,164,206,613.17	11.00%	R\$ 1,664,815,456.83
Retiree Contribution	R\$ 312,076,254.21	11.00%	R\$ 446,269,043.52
Pensioner Contribution	R\$ 98,814,047.96	11.00%	R\$ 141,304,088.58
Entity Contribution – CN without Adm. Fee	R\$ 1,164,206,613.17	20.00%	R\$ 3,026,937,194.24
Entity Contribution – Adm. Fee	R\$ 2,360,394,726.12	2.00%	R\$ 613,702,628.79
Entity Contribution – Without CS	R\$ 1,164,206,613.17	0.00%	R\$ 0.00
Social Security Compensation	R\$ 8,612,554.41		R\$ 111,963,207.37
Debt for the RPPS			R\$ 334,332,869.28
Entity Contribution – CN + Adm. Fee	R\$ 1,164,206,613.17	22.00%	R\$ 3,640,639,823.03
Entity Contribution – CN + Adm. Fee + Actuarial CS			R\$ 3,640,639,823.03

Table 71: Expenditure

Reference	Monthly Calculation Base	Calculated Rate	13-month Amount
Retirements			R\$ 11,612,922,884.38
Survivor's Pensions			R\$ 3,937,522,584.06
Allowances	R\$ 1,164,206,613.17	0.01%	R\$ 1,513,468.60
Administrative Expenses	R\$ 2,360,394,726.12	2.00%	R\$ 613,702,628.79

Total Expenses			
Retirements + Survivor's Pensions + Allowances			R\$ 15,551,958,937.04
Retirements + Survivor's Pensions			R\$ 15,550,445,468.44

Table 72: Funds

Reference	Amount
Value on 12/31/16	R\$ 3,943,174,967.52
Difference between operating revenue and expenses throughout the year	(R\$ 9,185,335,289.67)
Financial Gains	R\$ 0.00

Annex 7. Participant Number, Remuneration and Benefits and Cash Flow Projections

Annex 7.a. Number of Participants

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2017	199,814	0	199,814	164,296	69,781	0	0	234,077	433,891
2018	188,391	3,704	192,095	160,163	67,622	8,363	795	236,943	429,038
2019	169,507	5,406	174,913	155,882	65,474	24,235	1,632	247,224	422,137
2020	148,502	7,214	155,716	151,457	63,328	42,359	2,516	259,660	415,376
2021	139,098	9,441	148,538	146,893	61,191	49,052	3,446	260,582	409,120
2022	129,679	12,157	141,836	142,196	59,064	55,783	4,426	261,470	403,305
2023	121,233	13,980	135,212	137,377	56,950	61,560	5,458	261,345	396,557
2024	112,942	15,885	128,827	132,445	54,853	67,185	6,543	261,025	389,852
2025	104,974	17,967	122,941	127,410	52,781	72,485	7,682	260,357	383,298
2026	97,057	20,662	117,719	122,285	50,735	77,723	8,875	259,618	377,337
2027	89,341	23,458	112,799	117,086	48,718	82,742	10,123	258,669	371,468
2028	81,582	26,512	108,094	111,825	46,733	87,780	11,425	257,763	365,857
2029	74,162	29,588	103,750	106,521	44,786	92,451	12,779	256,537	360,287
2030	67,385	32,387	99,772	101,191	42,879	96,442	14,183	254,695	354,467
2031	60,576	35,342	95,918	95,853	41,011	100,418	15,635	252,918	348,836
2032	54,089	38,327	92,416	90,528	39,188	104,021	17,131	250,867	343,284
2033	48,100	41,010	89,111	85,234	37,409	107,070	18,665	248,377	337,488
2034	42,759	43,149	85,908	79,994	35,674	109,473	20,231	245,371	331,279
2035	37,731	45,099	82,830	74,827	33,986	111,442	21,826	242,081	324,911
2036	32,491	47,407	79,898	69,754	32,346	113,580	23,439	239,119	319,017
2037	27,294	49,930	77,224	64,795	30,754	115,572	25,062	236,184	313,408

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2038	22,769	52,090	74,859	59,970	29,207	116,879	26,686	232,742	307,601
2039	18,673	54,037	72,710	55,295	27,709	117,663	28,301	228,967	301,678
2040	14,850	55,949	70,799	50,788	26,257	118,200	29,895	225,140	295,939
2041	11,546	57,471	69,017	46,462	24,853	118,162	31,459	220,936	289,953
2042	8,822	58,764	67,586	42,330	23,495	117,476	32,978	216,279	283,865
2043	6,346	60,039	66,386	38,404	22,184	116,455	34,438	211,480	277,866
2044	4,637	60,687	65,325	34,690	20,919	114,756	35,827	206,192	271,516
2045	3,164	61,189	64,353	31,196	19,700	113,013	37,136	201,045	265,397
2046	2,154	61,444	63,598	27,924	18,528	110,592	38,359	195,404	259,002
2047	1,373	61,647	63,020	24,877	17,401	108,037	39,466	189,781	252,801
2048	990	61,647	62,637	22,055	16,320	105,091	40,458	183,924	246,562
2049	709	61,647	62,356	19,454	15,285	102,587	41,323	178,649	241,005
2050	483	61,647	62,130	17,072	14,294	100,533	42,071	173,969	236,099
2051	314	61,647	61,961	14,901	13,347	98,458	42,694	169,400	231,360
2052	195	61,647	61,842	12,935	12,444	96,281	43,170	164,831	226,672
2053	115	61,647	61,762	11,164	11,585	94,459	43,490	160,698	222,460
2054	63	61,647	61,710	9,580	10,768	91,962	43,671	155,981	217,691
2055	28	61,647	61,675	8,172	9,992	89,245	43,675	151,085	212,760
2056	12	61,647	61,659	6,929	9,258	86,620	43,521	146,329	207,988
2057	4	61,647	61,651	5,839	8,564	84,199	43,222	141,824	203,476
2058	1	61,647	61,648	4,890	7,909	82,117	42,785	137,701	199,348
2059	0	61,647	61,647	4,070	7,292	80,093	42,220	133,675	195,322
2060	0	61,647	61,647	3,366	6,712	78,435	41,523	130,036	191,683
2061	0	61,647	61,647	2,766	6,168	76,478	40,715	126,128	187,775
2062	0	61,647	61,647	2,259	5,659	74,905	39,780	122,603	184,250
2063	0	61,647	61,647	1,834	5,184	73,392	38,756	119,166	180,813

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2064	0	61,647	61,647	1,480	4,742	72,011	37,642	115,875	177,522
2065	0	61,647	61,647	1,187	4,331	70,021	36,454	111,993	173,640
2066	0	61,647	61,647	947	3,951	67,935	35,178	108,011	169,658
2067	0	61,647	61,647	751	3,600	65,798	33,847	103,996	165,643
2068	0	61,647	61,647	593	3,276	63,986	32,475	100,329	161,976
2069	0	61,647	61,647	465	2,978	62,099	31,090	96,633	158,280
2070	0	61,647	61,647	364	2,705	60,410	29,688	93,167	154,814
2071	0	61,647	61,647	283	2,455	58,799	28,293	89,830	151,477
2072	0	61,647	61,647	219	2,226	57,422	26,907	86,775	148,422
2073	0	61,647	61,647	169	2,017	56,226	25,549	83,962	145,609
2074	0	61,647	61,647	130	1,827	55,128	24,226	81,310	142,957
2075	0	61,647	61,647	100	1,653	53,885	22,942	78,580	140,227
2076	0	61,647	61,647	76	1,495	52,724	21,700	75,996	137,643
2077	0	61,647	61,647	58	1,352	51,606	20,523	73,539	135,186
2078	0	61,647	61,647	43	1,222	50,703	19,412	71,381	133,028
2079	0	61,647	61,647	32	1,105	49,848	18,382	69,367	131,014
2080	0	61,647	61,647	24	999	49,086	17,432	67,540	129,187
2081	0	61,647	61,647	17	903	48,792	16,564	66,276	127,923
2082	0	61,647	61,647	12	816	48,536	15,795	65,158	126,805
2083	0	61,647	61,647	9	737	48,550	15,112	64,407	126,054
2084	0	61,647	61,647	6	666	48,519	14,524	63,714	125,361
2085	0	61,647	61,647	4	601	48,973	14,019	63,597	125,244
2086	0	61,647	61,647	3	541	48,829	13,618	62,991	124,638
2087	0	61,647	61,647	2	487	48,699	13,277	62,466	124,113
2088	0	61,647	61,647	1	437	48,579	13,015	62,032	123,679
2089	0	61,647	61,647	1	391	48,594	12,821	61,807	123,454

Year	Current Actives	Future Actives	Total Actives	Current Retirees	Current Pensioners	Future Retirees	Future Pensioners	Total Retirees and Pensioners	Total Participants
2090	0	61,647	61,647	1	349	48,647	12,691	61,688	123,335
2091	0	61,647	61,647	0	310	48,836	12,607	61,753	123,400
2092	0	61,647	61,647	0	274	49,071	12,561	61,906	123,553
2093	0	61,647	61,647	0	240	49,153	12,541	61,934	123,581
2094	0	61,647	61,647	0	210	49,334	12,529	62,072	123,719
2095	0	61,647	61,647	0	181	49,565	12,528	62,274	123,921
2096	0	61,647	61,647	0	156	49,757	12,531	62,443	124,090
2097	0	61,647	61,647	0	133	49,668	12,528	62,329	123,976

Annex 7.b. Remuneration and Benefits

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2017	15,134,685,971.16	0.00	15,134,685,971.16	1,513,468.60	0.00	1,513,468.60	11,612,922,884.38	3,937,522,584.06	15,550,445,468.44	15,551,958,937.04	30,686,644,908.21
2018	14,287,972,388.12	357,719,201.96	14,645,691,600.08	825,014,194.95	0.00	825,014,194.95	11,454,027,433.06	3,802,183,049.19	15,256,210,482.26	16,081,224,677.21	30,726,916,277.29
2019	13,103,270,915.99	499,169,154.67	13,602,440,070.66	1,984,760,021.16	0.00	1,984,760,021.16	11,272,869,651.86	3,668,540,074.61	14,941,409,726.46	16,926,169,747.62	30,528,609,818.28
2020	11,672,321,885.16	654,319,743.51	12,326,641,628.67	3,389,689,419.62	0.00	3,389,689,419.62	11,070,394,217.73	3,535,891,693.70	14,606,285,911.42	17,995,975,331.04	30,322,616,959.71
2021	10,982,552,416.44	849,280,563.12	11,831,832,979.56	4,053,922,900.18	0.00	4,053,922,900.18	10,847,858,481.99	3,404,724,385.41	14,252,582,867.40	18,306,505,767.57	30,138,338,747.13
2022	10,257,265,030.20	1,085,362,616.39	11,342,627,646.58	4,751,918,431.68	0.00	4,751,918,431.68	10,606,394,829.17	3,275,242,738.22	13,881,627,567.39	18,633,545,999.06	29,976,173,645.65
2023	9,642,995,762.82	1,243,252,112.37	10,886,247,875.19	5,337,012,253.27	0.00	5,337,012,253.27	10,348,831,635.59	3,147,047,992.98	13,495,879,628.56	18,832,891,881.83	29,719,139,757.03
2024	9,041,302,272.48	1,401,232,043.02	10,442,534,315.50	5,907,232,416.10	0.00	5,907,232,416.10	10,073,440,699.12	3,020,934,877.07	13,094,375,576.19	19,001,607,992.29	29,444,142,307.79
2025	8,465,129,715.62	1,566,753,498.71	10,031,883,214.34	6,449,342,124.25	0.00	6,449,342,124.25	9,783,737,335.45	2,897,150,838.23	12,680,888,173.68	19,130,230,297.93	29,162,113,512.27
2026	7,849,268,690.83	1,780,947,836.10	9,630,216,526.92	7,028,098,764.16	0.00	7,028,098,764.16	9,479,598,934.53	2,775,562,323.73	12,255,161,258.25	19,283,260,022.41	28,913,476,549.34
2027	7,235,623,762.78	2,001,402,672.53	9,237,026,435.32	7,601,195,459.42	0.00	7,601,195,459.42	9,163,726,013.42	2,666,383,914.02	11,820,109,927.43	19,421,305,386.86	28,658,331,822.17
2028	6,593,585,145.45	2,238,661,570.71	8,832,246,716.16	8,198,741,401.46	0.00	8,198,741,401.46	8,834,537,135.83	2,539,803,781.67	11,374,340,917.50	19,573,082,318.96	28,405,329,035.12
2029	5,996,502,903.36	2,473,129,773.06	8,469,632,676.42	8,746,968,047.04	0.00	8,746,968,047.04	8,497,129,234.75	2,426,072,568.34	10,923,201,803.10	19,670,169,850.14	28,139,802,526.56
2030	5,452,773,510.02	2,684,891,419.02	8,137,664,929.04	9,236,900,584.70	0.00	9,236,900,584.70	8,153,692,922.19	2,315,332,467.89	10,469,025,390.08	19,705,925,974.78	27,843,590,903.83
2031	4,906,295,429.46	2,907,788,247.17	7,814,083,676.63	9,723,973,639.44	0.00	9,723,973,639.44	7,804,135,209.91	2,207,546,341.32	10,011,681,551.24	19,735,655,190.67	27,549,738,867.31
2032	4,393,741,287.21	3,130,105,289.06	7,523,846,576.27	10,170,941,173.64	0.00	10,170,941,173.64	7,449,217,231.55	2,102,833,920.88	9,552,051,152.43	19,722,992,326.06	27,246,838,902.33
2033	3,918,483,265.19	3,329,145,803.21	7,247,629,068.40	10,573,735,470.08	0.00	10,573,735,470.08	7,092,961,500.18	2,001,329,757.68	9,094,291,257.86	19,668,026,727.94	26,915,655,796.34
2034	3,499,554,518.00	3,488,997,451.23	6,988,551,969.23	10,919,236,376.03	0.00	10,919,236,376.03	6,735,742,706.13	1,902,783,595.36	8,638,526,301.49	19,557,762,677.52	26,546,314,646.76
2035	3,120,626,037.67	3,625,966,305.43	6,746,592,343.11	11,212,029,465.67	0.00	11,212,029,465.67	6,273,303,930.99	1,807,459,002.74	8,080,762,933.73	19,292,792,399.41	26,039,374,742.51
2036	2,729,630,660.62	3,780,530,898.33	6,510,161,558.95	11,511,349,147.82	0.00	11,511,349,147.82	5,899,905,262.22	1,715,293,620.39	7,615,198,882.62	19,126,548,030.43	25,636,709,589.39
2037	2,336,210,651.62	3,945,583,263.68	6,281,793,915.31	11,800,195,333.08	0.00	11,800,195,333.08	5,538,583,387.45	1,626,306,661.65	7,164,900,049.10	18,965,095,382.18	25,246,889,297.49

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2038	1,987,411,354.32	4,092,213,784.93	6,079,625,139.25	12,039,846,092.30	0.00	12,039,846,092.30	5,182,085,059.57	1,540,283,938.78	6,722,368,998.35	18,762,215,090.65	24,841,840,229.89
2039	1,668,240,966.38	4,224,447,489.50	5,892,688,455.88	12,238,271,125.83	0.00	12,238,271,125.83	4,832,503,802.48	1,457,307,275.77	6,289,811,078.25	18,528,082,204.08	24,420,770,669.95
2040	1,375,947,114.67	4,363,749,587.33	5,729,696,701.99	12,407,065,081.26	0.00	12,407,065,081.26	4,490,956,020.75	1,377,299,000.74	5,868,255,021.49	18,275,320,102.75	24,005,016,804.75
2041	1,106,384,414.88	4,462,156,268.38	5,568,540,683.26	12,542,519,293.25	0.00	12,542,519,293.25	4,158,259,400.61	1,300,202,262.37	5,458,461,662.98	18,000,980,956.23	23,569,521,639.49
2042	877,327,112.19	4,558,164,078.56	5,435,491,190.75	12,623,220,772.16	0.00	12,623,220,772.16	3,835,443,081.35	1,225,989,062.25	5,061,432,143.61	17,684,652,915.77	23,120,144,106.52
2043	665,458,612.96	4,652,308,562.87	5,317,767,175.84	12,670,888,646.64	0.00	12,670,888,646.64	3,523,422,819.94	1,154,634,690.84	4,678,057,510.78	17,348,946,157.42	22,666,713,333.26
2044	507,072,366.66	4,715,914,539.91	5,222,986,906.57	12,665,099,444.30	0.00	12,665,099,444.30	3,223,010,761.11	1,086,115,368.24	4,309,126,119.35	16,974,225,563.65	22,197,212,470.22
2045	361,132,855.23	4,766,905,589.78	5,128,038,445.02	12,658,476,878.06	0.00	12,658,476,878.06	2,934,926,353.67	1,020,401,960.42	3,955,328,314.09	16,613,805,192.15	21,741,843,637.16
2046	256,239,971.55	4,798,067,801.81	5,054,307,773.36	12,579,052,789.24	0.00	12,579,052,789.24	2,659,806,197.54	957,461,432.62	3,617,267,630.17	16,196,320,419.41	21,250,628,192.76
2047	171,009,853.58	4,830,074,167.19	5,001,084,020.77	12,476,064,626.51	0.00	12,476,064,626.51	2,398,213,736.68	897,256,783.05	3,295,470,519.73	15,771,536,146.24	20,772,619,167.02
2048	117,852,698.17	4,851,866,163.18	4,969,718,861.36	12,327,655,978.83	0.00	12,327,655,978.83	2,150,643,031.09	839,748,577.90	2,990,391,608.98	15,318,047,587.82	20,287,766,449.17
2049	80,773,390.76	4,872,594,797.54	4,953,368,188.29	12,206,891,963.77	0.00	12,206,891,963.77	1,917,517,316.60	784,893,653.97	2,702,410,970.57	14,909,302,934.35	19,862,671,122.64
2050	52,168,752.43	4,873,979,032.79	4,926,147,785.22	12,119,540,529.00	0.00	12,119,540,529.00	1,699,189,125.17	732,640,325.51	2,431,829,450.67	14,551,369,979.68	19,477,517,764.89
2051	32,188,103.87	4,857,647,919.38	4,889,836,023.25	12,015,876,187.64	0.00	12,015,876,187.64	1,495,931,310.35	682,934,208.27	2,178,865,518.62	14,194,741,706.26	19,084,577,729.51
2052	18,162,376.68	4,839,516,527.03	4,857,678,903.71	11,885,403,355.17	0.00	11,885,403,355.17	1,307,925,416.01	635,722,915.08	1,943,648,331.09	13,829,051,686.26	18,686,730,589.98
2053	10,000,621.75	4,821,949,573.23	4,831,950,194.98	11,771,660,177.01	0.00	11,771,660,177.01	1,135,247,021.00	590,951,232.23	1,726,198,253.22	13,497,858,430.23	18,329,808,625.21
2054	5,123,891.91	4,792,016,227.39	4,797,140,119.30	11,572,081,175.62	0.00	11,572,081,175.62	977,852,095.98	548,560,708.07	1,526,412,804.05	13,098,493,979.67	17,895,634,098.97
2055	1,921,742.54	4,784,037,104.35	4,785,958,846.89	11,330,327,174.01	0.00	11,330,327,174.01	835,560,987.20	508,486,506.69	1,344,047,493.89	12,674,374,667.90	17,460,333,514.79
2056	841,029.35	4,783,354,950.36	4,784,195,979.71	11,067,266,417.66	0.00	11,067,266,417.66	708,049,580.08	470,657,097.19	1,178,706,677.27	12,245,973,094.93	17,030,169,074.64
2057	313,259.00	4,784,868,913.22	4,785,182,172.22	10,811,906,262.84	0.00	10,811,906,262.84	594,841,034.69	434,999,691.50	1,029,840,726.18	11,841,746,989.02	16,626,929,161.24
2058	14,009.52	4,780,471,890.02	4,780,485,899.54	10,561,749,955.62	0.00	10,561,749,955.62	495,309,378.42	401,444,456.65	896,753,835.07	11,458,503,820.69	16,238,989,720.23
2059	0.00	4,771,370,780.16	4,771,370,780.16	10,309,805,652.93	0.00	10,309,805,652.93	408,689,869.03	369,923,236.39	778,613,095.42	11,088,418,748.35	15,859,789,528.52
2060	0.00	4,759,227,219.42	4,759,227,219.42	10,067,374,966.82	0.00	10,067,374,966.82	334,098,913.78	340,367,576.85	674,466,490.64	10,741,841,457.45	15,501,068,676.87

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2061	0.00	4,742,353,065.08	4,742,353,065.08	9,795,602,467.10	0.00	9,795,602,467.10	270,559,276.04	312,708,802.68	583,268,078.72	10,378,870,545.82	15,121,223,630.89
2062	0.00	4,733,195,314.73	4,733,195,314.73	9,534,271,215.75	0.00	9,534,271,215.75	217,029,500.47	286,881,070.51	503,910,570.98	10,038,181,786.73	14,771,377,101.46
2063	0.00	4,718,740,598.79	4,718,740,598.79	9,275,929,666.75	0.00	9,275,929,666.75	172,438,407.70	262,818,363.46	435,256,761.17	9,711,186,427.92	14,429,927,026.71
2064	0.00	4,703,537,712.21	4,703,537,712.21	9,010,417,768.39	0.00	9,010,417,768.39	135,715,760.19	240,453,436.79	376,169,196.98	9,386,586,965.37	14,090,124,677.58
2065	0.00	4,680,822,289.06	4,680,822,289.06	8,703,235,001.22	0.00	8,703,235,001.22	105,821,073.09	219,716,901.25	325,537,974.33	9,028,772,975.55	13,719,595,264.61
2066	0.00	4,662,162,039.41	4,662,162,039.41	8,377,776,342.60	0.00	8,377,776,342.60	81,768,139.82	200,535,355.64	282,303,495.46	8,660,079,838.06	13,352,241,877.47
2067	0.00	4,701,508,320.34	4,701,508,320.34	8,050,230,488.95	0.00	8,050,230,488.95	62,641,843.61	182,830,663.55	245,472,507.17	8,295,702,996.12	12,997,211,316.46
2068	0.00	4,712,475,005.23	4,712,475,005.23	7,740,914,252.33	0.00	7,740,914,252.33	47,610,835.63	166,520,555.36	214,131,390.98	7,955,045,643.32	12,667,520,648.55
2069	0.00	4,720,656,283.90	4,720,656,283.90	7,434,856,846.13	0.00	7,434,856,846.13	35,934,068.93	151,520,507.72	187,454,576.65	7,622,311,422.78	12,342,967,706.67
2070	0.00	4,730,787,503.59	4,730,787,503.59	7,139,341,305.38	0.00	7,139,341,305.38	26,962,284.30	137,745,616.11	164,707,900.41	7,304,049,205.79	12,034,836,709.39
2071	0.00	4,740,756,523.06	4,740,756,523.06	6,856,755,207.08	0.00	6,856,755,207.08	20,138,281.38	125,112,345.57	145,250,626.94	7,002,005,834.02	11,742,762,357.08
2072	0.00	4,750,491,299.87	4,750,491,299.87	6,595,472,800.56	0.00	6,595,472,800.56	14,992,794.41	113,539,544.39	128,532,338.80	6,724,005,139.36	11,474,496,439.23
2073	0.00	4,758,303,382.21	4,758,303,382.21	6,362,164,415.66	0.00	6,362,164,415.66	11,138,897.37	102,949,981.02	114,088,878.38	6,476,253,294.05	11,234,556,676.26
2074	0.00	4,762,285,343.61	4,762,285,343.61	6,131,317,435.49	0.00	6,131,317,435.49	8,264,459.25	93,272,034.83	101,536,494.07	6,232,853,929.56	10,995,139,273.17
2075	0.00	4,769,384,165.24	4,769,384,165.24	5,907,416,789.56	0.00	5,907,416,789.56	6,123,600.90	84,439,826.39	90,563,427.29	5,997,980,216.85	10,767,364,382.09
2076	0.00	4,779,406,018.24	4,779,406,018.24	5,691,070,910.91	0.00	5,691,070,910.91	4,528,452.68	76,392,701.98	80,921,154.66	5,771,992,065.57	10,551,398,083.81
2077	0.00	4,789,674,038.15	4,789,674,038.15	5,490,575,250.64	0.00	5,490,575,250.64	3,338,251.45	69,073,082.86	72,411,334.31	5,562,986,584.95	10,352,660,623.10
2078	0.00	4,800,982,760.26	4,800,982,760.26	5,310,933,532.26	0.00	5,310,933,532.26	2,448,976.52	62,425,314.32	64,874,290.84	5,375,807,823.09	10,176,790,583.35
2079	0.00	4,810,955,484.97	4,810,955,484.97	5,151,178,643.39	0.00	5,151,178,643.39	1,784,418.96	56,394,487.37	58,178,906.33	5,209,357,549.72	10,020,323,034.69
2080	0.00	4,819,170,864.06	4,819,170,864.06	5,007,034,598.43	0.00	5,007,034,598.43	1,288,804.04	50,926,526.24	52,215,330.28	5,059,249,928.71	9,878,420,792.77
2081	0.00	4,827,100,150.18	4,827,100,150.18	4,916,704,174.45	0.00	4,916,704,174.45	921,070.49	45,969,095.83	46,890,166.32	4,963,594,340.77	9,790,694,480.95
2082	0.00	4,822,849,535.46	4,822,849,535.46	4,838,830,675.95	0.00	4,838,830,675.95	650,400.58	41,473,336.09	42,123,736.67	4,880,954,412.62	9,703,803,948.08
2083	0.00	4,818,787,504.31	4,818,787,504.31	4,801,285,283.60	0.00	4,801,285,283.60	453,282.91	37,393,394.38	37,846,677.29	4,839,131,960.90	9,657,919,465.21

Year	Full Remuneration of Current Active Servants	Full Remuneration of Future Active Servants	Total Remuneration of Active Servants	Future Benefits of Current Active Servants	Future Benefits of Future Active Servants	Total Future Benefits of Actives	Current Retiree Benefits	Current Pensioner Benefits	Total Benefits of Current Retirees and Pensioners	Total Benefits of Retirees and Pensioners (Current and Future)	Total
2084	0.00	4,805,779,057.74	4,805,779,057.74	4,760,552,125.80	0.00	4,760,552,125.80	311,555.57	33,686,087.47	33,997,643.04	4,794,549,768.84	9,600,328,826.58
2085	0.00	4,797,646,390.28	4,797,646,390.28	4,778,413,407.26	0.00	4,778,413,407.26	211,068.25	30,311,567.49	30,522,625.73	4,808,936,033.00	9,606,582,423.28
2086	0.00	4,773,908,363.15	4,773,908,363.15	4,738,862,477.63	0.00	4,738,862,477.63	140,826.57	27,233,804.12	27,374,630.69	4,766,237,108.32	9,540,145,471.47
2087	0.00	4,771,773,154.46	4,771,773,154.46	4,705,099,870.08	0.00	4,705,099,870.08	92,485.19	24,420,580.45	24,513,065.64	4,729,612,935.72	9,501,386,090.18
2088	0.00	4,769,677,805.91	4,769,677,805.91	4,672,520,276.36	0.00	4,672,520,276.36	59,728.92	21,843,339.57	21,903,068.49	4,694,423,344.85	9,464,101,150.76
2089	0.00	4,770,407,484.38	4,770,407,484.38	4,659,496,330.47	0.00	4,659,496,330.47	37,884.98	19,477,596.99	19,515,481.97	4,679,011,812.44	9,449,419,236.82
2090	0.00	4,766,324,634.99	4,766,324,634.99	4,650,218,728.09	0.00	4,650,218,728.09	23,562.43	17,303,333.45	17,326,895.87	4,667,545,623.96	9,433,870,258.96
2091	0.00	4,762,976,495.39	4,762,976,495.39	4,657,605,629.69	0.00	4,657,605,629.69	14,339.99	15,305,131.20	15,319,471.19	4,672,925,100.88	9,435,901,586.27
2092	0.00	4,755,233,879.58	4,755,233,879.58	4,669,242,997.50	0.00	4,669,242,997.50	8,518.34	13,471,566.24	13,480,084.58	4,682,723,082.08	9,437,956,961.66
2093	0.00	4,747,696,875.21	4,747,696,875.21	4,670,422,836.51	0.00	4,670,422,836.51	4,920.25	11,793,563.64	11,798,483.89	4,682,221,320.40	9,429,918,195.61
2094	0.00	4,744,038,754.47	4,744,038,754.47	4,678,923,904.23	0.00	4,678,923,904.23	2,751.99	10,263,647.11	10,266,399.10	4,689,190,303.33	9,433,229,057.79
2095	0.00	4,738,178,674.11	4,738,178,674.11	4,692,079,440.45	0.00	4,692,079,440.45	1,483.69	8,875,585.14	8,877,068.83	4,700,956,509.28	9,439,135,183.40
2096	0.00	4,731,340,607.72	4,731,340,607.72	4,701,779,829.71	0.00	4,701,779,829.71	767.22	7,624,064.61	7,624,831.83	4,709,404,661.54	9,440,745,269.26
2097	0.00	4,725,715,310.64	4,725,715,310.64	4,690,691,292.65	0.00	4,690,691,292.65	376.97	6,504,390.50	6,504,767.48	4,697,196,060.13	9,422,911,370.77

Future Benefits of Current Active Public Servants: Retirement expenses, allowances and pensions derived from current active public servants.

Future Benefits of Future Active Public Servants: Retirement expenses, allowances and pensions derived from future active public servants.

Current Retiree Benefits: Expenses with retirement and pension payments arising from current retired public servants.

Current Pensioner Benefits: Expenses with current pensioner benefits.

Annex 7.c. Cash Flow

Year	Fund Revenues						Expenses				Revenue - Expense Difference	Cash Balance
	Entity Contribution	Participant Contribution	Social Security Compensation	ICMS + Royalties + FUNDES	Market Gains	Total Revenue	Pensioner and Retiree Benefits	Allowances	Administrative Expenses	Total Expenses		
2017	3,329,630,913.66	2,252,388,588.93	111,963,207.37	1,286,343,566.21	0	6,980,326,276.17	15,550,445,468.44	1,513,468.60	613,702,628.79	16,165,661,565.83	-9,185,335,289.66	0.00
2018	3,222,052,152.02	2,218,599,346.45	115,774,272.78	1,442,194,774.99	0.00	6,998,620,546.24	16,079,760,108.05	1,464,569.16	614,509,034.16	16,695,733,711.37	-9,697,113,165.13	0.00
2019	2,992,536,815.54	2,135,771,845.17	121,858,628.43	3,151,031,942.33	0.00	8,401,199,231.47	16,924,809,503.61	1,360,244.01	610,544,991.49	17,536,714,739.11	-9,135,515,507.64	0.00
2020	2,711,861,158.31	2,035,861,410.17	129,562,147.20	5,244,981,372.77	0.00	10,122,266,088.45	17,994,742,666.88	1,232,664.16	606,427,686.91	18,602,403,016.95	-8,480,136,928.50	0.00
2021	2,603,003,255.50	1,993,167,711.96	131,798,322.61	5,382,732,952.18	0.00	10,110,702,242.25	18,305,322,584.27	1,183,183.30	602,743,111.28	18,909,248,878.85	-8,798,546,636.60	0.00
2022	2,495,378,082.25	1,951,714,179.48	134,153,364.50	7,741,775,063.47	0.00	12,323,020,689.70	18,632,411,736.30	1,134,262.76	599,500,787.66	19,233,046,786.72	-6,910,026,097.02	0.00
2023	2,394,974,532.54	1,909,046,407.47	135,588,983.45	7,686,596,269.07	0.00	12,126,206,192.53	18,831,803,257.04	1,088,624.79	594,361,022.64	19,427,252,904.47	-7,301,046,711.94	0.00
2024	2,297,357,549.41	1,866,614,525.82	136,804,058.92	7,152,897,687.53	0.00	11,453,673,821.68	19,000,553,738.86	1,044,253.43	588,861,961.09	19,590,469,953.38	-8,136,796,131.70	0.00
2025	2,207,014,307.15	1,826,304,446.44	137,730,435.19	6,485,496,435.60	0.00	10,666,545,624.38	19,129,227,109.61	1,003,188.32	583,222,206.48	19,713,452,504.41	-9,056,906,880.03	0.00
2026	2,118,647,635.92	1,787,904,852.23	138,832,538.41	5,708,118,628.53	0.00	9,753,503,655.09	19,282,297,000.76	963,021.65	578,250,270.55	19,861,510,292.96	-10,108,006,637.87	0.00
2027	2,032,145,815.77	1,749,871,467.92	139,826,748.13	5,097,428,685.68	0.00	9,019,272,717.50	19,420,381,684.22	923,702.64	573,148,162.39	19,994,453,549.25	-10,975,180,831.75	0.00
2028	1,943,094,277.55	1,711,082,115.27	140,919,833.48	5,046,310,838.62	0.00	8,841,407,064.92	19,572,199,094.29	883,224.67	568,088,916.21	20,141,171,235.17	-11,299,764,170.25	0.00
2029	1,863,319,188.81	1,674,864,390.59	141,619,124.79	4,708,472,620.78	0.00	8,388,275,324.97	19,669,322,866.87	846,963.27	562,779,111.27	20,232,948,961.41	-11,844,673,636.44	0.00
2030	1,790,286,284.39	1,639,700,236.85	141,876,807.90	4,272,196,410.91	0.00	7,844,069,740.05	19,705,112,208.29	813,766.49	556,855,542.75	20,262,781,517.53	-12,418,721,777.48	0.00
2031	1,719,098,408.86	1,605,230,839.30	142,091,091.23	3,932,780,951.65	0.00	7,399,201,291.04	19,734,873,782.30	781,408.37	550,979,149.18	20,286,634,339.85	-12,887,433,048.81	0.00
2032	1,655,246,246.78	1,572,827,388.95	142,000,127.58	3,545,646,318.43	0.00	6,915,720,081.74	19,722,239,941.40	752,384.66	544,921,730.35	20,267,914,056.41	-13,352,193,974.67	0.00
2033	1,594,478,395.05	1,540,367,633.23	141,604,574.15	3,160,986,116.23	0.00	6,437,436,718.66	19,667,301,965.03	724,762.91	538,298,620.67	20,206,325,348.61	-13,768,888,629.95	0.00
2034	1,537,481,433.23	1,507,703,807.30	140,810,859.52	2,867,905,459.08	0.00	6,053,901,559.13	19,557,063,822.32	698,855.20	530,912,315.83	20,089,674,983.35	-14,034,773,434.22	0.00
2035	1,484,248,115.48	1,471,076,168.40	138,903,247.74	2,829,819,143.51	0.00	5,924,046,675.13	19,292,117,741.18	674,658.23	520,774,001.69	19,813,566,401.10	-13,889,519,725.97	0.00
2036	1,432,235,542.97	1,438,789,236.79	137,706,458.50	2,366,910,312.82	0.00	5,365,641,551.08	19,125,897,014.27	651,016.16	512,721,171.46	19,639,269,201.89	-14,273,627,650.81	0.00
2037	1,381,994,661.37	1,407,569,175.23	136,544,163.86	2,562,004,141.53	0.00	5,488,112,141.99	18,964,467,202.79	628,179.39	504,925,222.36	19,470,020,604.54	-13,981,908,462.55	0.00
2038	1,337,517,530.63	1,377,665,547.82	135,083,571.32	1,884,528,091.47	0.00	4,734,794,741.24	18,761,607,128.14	607,962.51	496,824,645.35	19,259,039,736.00	-14,524,244,994.76	0.00
2039	1,296,391,460.29	1,348,256,514.65	133,397,949.13	1,768,394,232.26	0.00	4,546,440,156.33	18,527,492,935.23	589,268.85	488,403,627.82	19,016,485,831.90	-14,470,045,675.57	0.00
2040	1,260,533,274.44	1,320,777,428.89	131,578,179.36	1,599,110,318.64	0.00	4,311,999,201.33	18,274,747,133.08	572,969.67	480,088,876.70	18,755,408,979.45	-14,443,409,778.12	0.00

2041	1,225,078,950.32	1,292,684,979.05	129,603,053.54	1,571,942,887.25	0.00	4,219,309,870.16	18,000,424,102.16	556,854.07	471,379,295.71	18,472,360,251.94	-14,253,050,381.78	0.00
2042	1,195,808,061.97	1,266,097,591.74	127,325,587.44	1,382,768,165.72	0.00	3,971,999,406.87	17,684,109,366.65	543,548.12	462,382,011.15	18,147,044,926.92	-14,175,045,520.05	0.00
2043	1,169,908,778.68	1,240,463,724.77	124,908,583.54	1,380,985,328.51	0.00	3,916,266,415.50	17,348,414,380.70	531,776.72	453,323,631.13	17,802,269,788.55	-13,886,003,373.05	0.00
2044	1,149,057,119.45	1,215,879,446.48	122,210,663.51	1,395,277,229.74	0.00	3,882,424,459.18	16,973,703,264.96	522,298.69	443,933,803.43	17,418,159,367.08	-13,535,734,907.90	0.00
2045	1,128,168,457.90	1,191,817,001.16	119,615,705.20	1,297,417,929.37	0.00	3,737,019,093.63	16,613,292,388.31	512,803.84	434,826,616.67	17,048,631,808.82	-13,311,612,715.19	0.00
2046	1,111,947,710.14	1,167,932,255.82	116,609,867.92	1,211,519,593.06	0.00	3,608,009,426.94	16,195,814,988.63	505,430.78	425,002,455.24	16,621,322,874.65	-13,013,313,447.71	0.00
2047	1,100,238,484.57	1,146,027,344.88	113,551,452.27	1,108,594,368.94	0.00	3,468,411,640.66	15,771,036,037.84	500,108.40	415,442,381.17	16,186,977,527.41	-12,718,566,886.75	0.00
2048	1,093,338,149.50	1,125,442,281.58	110,286,364.43	1,051,823,812.65	0.00	3,380,890,608.16	15,317,550,615.93	496,971.89	405,745,389.55	15,723,792,977.37	-12,342,902,369.21	0.00
2049	1,089,741,001.42	1,108,199,364.42	107,343,414.70	995,013,755.34	0.00	3,300,297,535.88	14,908,807,597.53	495,336.82	397,243,515.72	15,306,546,450.07	-12,006,248,914.19	0.00
2050	1,083,752,512.75	1,091,680,736.60	104,766,317.03	928,271,810.70	0.00	3,208,471,377.08	14,550,877,364.90	492,614.78	389,540,503.00	14,940,910,482.68	-11,732,439,105.60	0.00
2051	1,075,763,925.11	1,074,211,391.00	102,198,619.60	887,485,054.02	0.00	3,139,658,989.73	14,194,252,722.66	488,983.60	381,681,774.92	14,576,423,481.18	-11,436,764,491.45	0.00
2052	1,068,689,358.82	1,056,856,642.53	99,565,674.61	852,003,887.37	0.00	3,077,115,563.33	13,828,555,918.37	485,767.89	373,724,896.44	14,202,776,582.70	-11,125,661,019.37	0.00
2053	1,063,029,042.90	1,041,512,454.19	97,181,101.69	745,504,561.76	0.00	2,947,227,160.54	13,497,375,235.21	483,195.02	366,586,508.60	13,864,444,938.83	-10,917,217,778.29	0.00
2054	1,055,370,826.25	1,022,583,503.18	94,305,702.71	713,981,588.27	0.00	2,886,251,620.41	13,098,014,266.66	479,714.01	357,903,087.70	13,456,397,067.37	-10,570,145,446.96	0.00
2055	1,052,910,946.32	1,005,338,269.54	91,252,051.72	687,591,807.39	0.00	2,837,033,074.97	12,673,896,072.02	478,595.88	349,197,098.38	13,023,571,766.28	-10,186,478,691.31	0.00
2056	1,052,523,115.54	988,957,219.77	88,167,561.66	640,723,072.43	0.00	2,770,370,969.40	12,245,494,675.33	478,419.60	340,593,813.10	12,586,566,908.03	-9,816,195,938.63	0.00
2057	1,052,740,077.89	973,792,025.50	85,257,132.99	0.00	0.00	2,111,789,236.38	11,841,268,470.80	478,518.22	332,529,012.86	12,174,276,001.88	-10,062,486,765.50	0.00
2058	1,051,706,897.90	958,794,621.23	82,497,785.56	0.00	0.00	2,092,999,304.69	11,458,025,772.10	478,048.59	324,770,233.43	11,783,274,054.12	-9,690,274,749.43	0.00
2059	1,049,701,571.64	943,808,338.79	79,833,179.60	0.00	0.00	2,073,343,090.03	11,087,941,611.27	477,137.08	317,186,247.83	11,405,604,936.18	-9,332,261,906.15	0.00
2060	1,047,029,988.27	929,377,180.09	77,337,831.85	0.00	0.00	2,053,745,000.21	10,741,365,534.73	475,922.72	310,011,855.08	11,051,853,312.53	-8,998,108,312.32	0.00
2061	1,043,317,678.72	913,806,243.67	74,724,453.44	0.00	0.00	2,031,848,375.83	10,378,396,310.51	474,235.31	302,414,987.91	10,681,285,533.73	-8,649,437,157.90	0.00
2062	1,041,302,969.24	899,926,008.63	72,271,500.96	0.00	0.00	2,013,500,478.83	10,037,708,467.20	473,319.53	295,418,075.64	10,333,599,862.37	-8,320,099,383.54	0.00
2063	1,038,122,931.73	885,980,534.32	69,917,144.79	0.00	0.00	1,994,020,610.84	9,710,714,553.86	471,874.06	288,589,103.05	9,999,775,530.97	-8,005,754,920.13	0.00
2064	1,034,778,296.69	872,043,292.94	67,580,039.60	0.00	0.00	1,974,401,629.23	9,386,116,611.60	470,353.77	281,793,086.48	9,668,380,051.85	-7,693,978,422.62	0.00
2065	1,031,980,903.59	857,124,653.19	65,003,788.03	0.00	0.00	1,954,109,344.81	9,028,303,893.32	469,082.23	274,382,523.65	9,303,155,499.20	-7,349,046,154.39	0.00
2066	1,032,275,648.67	843,340,961.13	62,349,196.48	0.00	0.00	1,937,965,806.28	8,659,610,621.86	469,216.20	267,035,453.23	8,927,115,291.29	-6,989,149,485.01	0.00
2067	1,034,331,830.48	830,601,048.29	59,725,676.49	0.00	0.00	1,924,668,555.26	8,295,232,845.29	470,150.83	259,934,823.31	8,556,637,819.43	-6,630,979,264.17	0.00
2068	1,036,744,501.15	818,935,613.97	57,272,936.65	0.00	0.00	1,912,953,050.77	7,954,574,395.82	471,247.50	253,340,988.02	8,208,386,631.34	-6,295,433,580.57	0.00
2069	1,038,544,382.46	807,263,170.81	54,877,243.37	0.00	0.00	1,900,684,796.64	7,621,839,357.15	472,065.63	246,849,912.82	7,869,161,335.60	-5,968,476,538.96	0.00

2070	1,040,773,250.79	796,362,038.04	52,586,748.11	0.00	0.00	1,889,711,036.94	7,303,576,127.04	473,078.75	240,687,272.61	7,544,736,478.40	-5,665,025,441.46	0.00
2071	1,042,966,435.07	786,036,892.45	50,411,028.66	0.00	0.00	1,879,413,366.18	7,001,531,758.37	474,075.65	234,845,765.63	7,236,851,599.65	-5,357,438,243.47	0.00
2072	1,045,108,085.97	776,602,432.92	48,409,416.65	0.00	0.00	1,870,119,935.54	6,723,530,090.23	475,049.13	229,480,427.80	6,953,485,567.16	-5,083,365,631.62	0.00
2073	1,046,826,744.09	768,100,436.14	46,625,597.74	0.00	0.00	1,861,552,777.97	6,475,777,463.71	475,830.34	224,681,616.92	6,700,934,910.97	-4,839,382,133.00	0.00
2074	1,047,702,775.59	759,341,598.91	44,873,119.45	0.00	0.00	1,851,917,493.95	6,232,377,701.03	476,228.53	219,893,260.89	6,452,747,190.45	-4,600,829,696.50	0.00
2075	1,049,264,516.35	751,247,746.03	43,182,023.60	0.00	0.00	1,843,694,285.98	5,997,503,278.43	476,938.42	215,337,748.87	6,213,317,966.72	-4,369,623,679.74	0.00
2076	1,051,469,324.01	743,811,156.23	41,554,901.70	0.00	0.00	1,836,835,381.94	5,771,514,124.97	477,940.60	211,018,402.86	5,993,010,468.43	-4,146,175,086.49	0.00
2077	1,053,728,288.39	737,043,333.59	40,050,054.85	0.00	0.00	1,830,821,676.83	5,562,507,617.55	478,967.40	207,043,633.11	5,770,030,218.06	-3,939,208,541.23	0.00
2078	1,056,216,207.26	731,214,706.19	38,702,369.62	0.00	0.00	1,826,133,273.07	5,375,327,724.81	480,098.28	203,526,209.70	5,579,334,032.79	-3,753,200,759.72	0.00
2079	1,058,412,406.69	726,023,448.42	37,503,910.46	0.00	0.00	1,821,939,766.57	5,208,876,463.17	481,096.55	200,396,838.76	5,409,754,388.48	-3,587,814,621.91	0.00
2080	1,060,217,580.09	721,254,198.00	36,423,129.68	0.00	0.00	1,817,894,917.77	5,058,768,011.62	481,917.09	197,588,777.51	5,256,808,706.22	-3,438,913,788.45	0.00
2081	1,061,962,033.04	718,512,045.89	35,734,403.74	0.00	0.00	1,816,208,482.67	4,963,111,630.75	482,710.02	195,804,235.62	5,159,388,576.39	-3,343,190,093.72	0.00
2082	1,061,026,897.80	714,921,947.04	35,139,399.32	0.00	0.00	1,811,088,244.16	4,880,472,127.67	482,284.95	194,066,433.26	5,075,020,845.88	-3,263,932,601.72	0.00
2083	1,060,133,250.95	712,894,878.83	34,838,280.59	0.00	0.00	1,807,866,410.37	4,838,650,082.15	481,878.75	193,148,751.73	5,032,280,712.63	-3,224,414,302.26	0.00
2084	1,057,271,392.70	709,779,462.02	34,517,298.17	0.00	0.00	1,801,568,152.89	4,794,069,190.93	480,577.91	191,996,964.97	4,986,546,733.81	-3,184,978,580.92	0.00
2085	1,055,482,205.86	709,428,483.91	34,620,885.13	0.00	0.00	1,799,531,574.90	4,808,456,268.36	479,764.64	192,122,053.17	5,001,068,086.17	-3,201,526,511.27	0.00
2086	1,050,259,839.89	705,204,012.99	34,313,469.97	0.00	0.00	1,789,777,322.85	4,765,759,717.48	477,390.84	190,793,361.61	4,957,030,469.93	-3,167,253,147.08	0.00
2087	1,049,790,093.98	703,585,304.79	34,049,777.46	0.00	0.00	1,787,425,176.23	4,729,135,758.40	477,177.32	190,018,178.26	4,919,631,113.98	-3,132,205,937.75	0.00
2088	1,049,329,117.30	702,025,186.70	33,796,413.91	0.00	0.00	1,785,150,717.91	4,693,946,377.07	476,967.78	189,272,483.66	4,883,685,828.51	-3,098,545,110.60	0.00
2089	1,049,489,646.56	701,523,124.26	33,685,450.36	0.00	0.00	1,784,698,221.18	4,678,534,771.69	477,040.75	188,978,845.12	4,867,980,657.56	-3,083,292,436.38	0.00
2090	1,048,591,419.70	700,640,776.66	33,602,866.74	0.00	0.00	1,782,835,093.10	4,667,068,991.50	476,632.46	188,667,872.53	4,856,213,496.49	-3,073,378,403.39	0.00
2091	1,047,854,828.99	700,475,757.33	33,641,631.38	0.00	0.00	1,781,972,217.70	4,672,448,803.23	476,297.65	188,708,505.97	4,861,633,606.85	-3,079,661,389.15	0.00
2092	1,046,151,453.51	699,994,315.28	33,712,182.42	0.00	0.00	1,779,857,951.21	4,682,247,558.69	475,523.39	188,749,628.77	4,871,472,710.85	-3,091,614,759.64	0.00
2093	1,044,493,312.55	699,146,314.23	33,708,575.17	0.00	0.00	1,777,348,201.95	4,681,746,550.71	474,769.69	188,588,868.52	4,870,810,188.92	-3,093,461,986.97	0.00
2094	1,043,688,525.98	699,007,257.59	33,758,754.48	0.00	0.00	1,776,454,538.05	4,688,715,899.45	474,403.88	188,655,093.08	4,877,845,396.41	-3,101,390,858.36	0.00
2095	1,042,399,308.31	698,807,256.64	33,843,475.38	0.00	0.00	1,775,050,040.33	4,700,482,691.41	473,817.87	188,773,227.31	4,889,729,736.59	-3,114,679,696.26	0.00
2096	1,040,894,933.70	698,374,308.37	33,904,307.00	0.00	0.00	1,773,173,549.07	4,708,981,527.48	473,134.06	188,805,442.70	4,898,210,104.24	-3,125,086,555.17	0.00
2097	1,039,657,368.34	697,294,245.29	33,816,408.12	0.00	0.00	1,770,768,022.75	4,696,723,488.60	472,571.53	188,448,775.98	4,885,644,836.11	-3,114,876,813.36	0.00

Annex 8. Summary Report on Budget Execution – LRF Art. 4, Paragraph 2, Sub-item IV and LRF Art. 53, Paragraph 1, Sub-item II – Financial Fund

SUMMARY REPORT ON BUDGET EXECUTION

LRF Art. 53, Paragraph 1, Sub-item II (R\$ 1.00)

FISCAL YEAR	SOCIAL SECURITY REVENUE	SOCIAL SECURITY EXPENSES	SOCIAL SECURITY RESULT	FINANCIAL BALANCE FOR THE YEAR
	Value (a)	Value (b)	Value (c) = (a-b)	Value (d) = (d Previous Year) + (c)
2015	12,871,994,163.79	13,926,794,438.29	-1,054,800,274.50	0.00
2016	4,514,845,833.21	16,022,757,107.59	-11,507,911,274.38	0.00
2017	6,980,326,276.17	16,165,661,565.83	-9,185,335,289.66	0.00
2018	6,998,620,546.23	16,695,733,711.37	-9,697,113,165.14	0.00
2019	8,401,199,231.46	17,536,714,739.11	-9,135,515,507.65	0.00
2020	10,122,266,088.45	18,602,403,016.95	-8,480,136,928.50	0.00
2021	10,110,702,242.25	18,909,248,878.85	-8,798,546,636.60	0.00
2022	12,323,020,689.70	19,233,046,786.72	-6,910,026,097.02	0.00
2023	12,126,206,192.53	19,427,252,904.47	-7,301,046,711.94	0.00
2024	11,453,673,821.68	19,590,469,953.38	-8,136,796,131.70	0.00
2025	10,656,545,624.38	19,713,452,504.41	-9,056,906,880.03	0.00
2026	9,753,503,655.09	19,861,510,292.96	-10,108,006,637.87	0.00
2027	9,019,272,717.50	19,994,453,549.25	-10,975,180,831.75	0.00
2028	8,841,407,064.92	20,141,171,235.17	-11,299,764,170.25	0.00
2029	8,388,275,324.97	20,232,948,961.41	-11,844,673,636.44	0.00
2030	7,844,059,740.05	20,262,781,517.53	-12,418,721,777.48	0.00
2031	7,399,201,291.04	20,286,634,339.85	-12,887,433,048.81	0.00
2032	6,915,720,081.74	20,267,914,056.41	-13,352,193,974.67	0.00
2033	6,437,436,718.66	20,206,325,348.61	-13,768,888,629.95	0.00
2034	6,053,901,559.14	20,088,674,993.35	-14,034,773,434.21	0.00
2035	5,924,046,675.12	19,813,566,401.10	-13,889,519,725.98	0.00
2036	5,365,641,551.08	19,639,269,201.89	-14,273,627,650.81	0.00
2037	5,488,112,141.99	19,470,020,604.54	-13,981,908,462.55	0.00
2038	4,734,794,741.24	19,259,039,736.00	-14,524,244,994.76	0.00
2039	4,546,440,156.34	19,016,485,831.90	-14,470,045,675.56	0.00
2040	4,311,999,201.33	18,755,408,979.45	-14,443,409,778.12	0.00
2041	4,219,309,870.16	18,472,360,251.94	-14,253,050,381.78	0.00
2042	3,971,999,406.87	18,147,044,926.92	-14,175,045,520.05	0.00
2043	3,916,266,415.50	17,802,269,788.55	-13,886,003,373.05	0.00
2044	3,882,424,459.18	17,418,159,367.08	-13,535,734,907.90	0.00
2045	3,737,019,093.63	17,048,631,808.82	-13,311,612,715.19	0.00
2046	3,608,009,426.94	16,621,322,874.65	-13,013,313,447.71	0.00

LRF Art. 53, Paragraph 1, Sub-item II (R\$ 1.00)

FISCAL YEAR	SOCIAL SECURITY REVENUE	SOCIAL SECURITY EXPENSES	SOCIAL SECURITY RESULT	FINANCIAL BALANCE FOR THE YEAR
	Value (a)	Value (b)	Value (c) = (a-b)	Value (d) = (d Previous Year) + (c)
2047	3,468,411,640.66	16,186,977,527.41	-12,718,565,886.75	0.00
2048	3,380,890,608.16	15,723,792,977.37	-12,342,902,369.21	0.00
2049	3,300,297,535.88	15,306,546,450.07	-12,006,248,914.19	0.00
2050	3,208,471,377.08	14,940,910,482.68	-11,732,439,105.60	0.00
2051	3,139,658,989.73	14,576,423,481.18	-11,436,764,491.45	0.00
2052	3,077,115,563.34	14,202,776,582.70	-11,125,661,019.36	0.00
2053	2,947,227,160.55	13,864,444,938.83	-10,917,217,778.28	0.00
2054	2,886,251,620.42	13,456,397,067.37	-10,570,145,446.95	0.00
2055	2,837,093,074.97	13,023,571,766.28	-10,186,478,691.31	0.00
2056	2,770,370,969.40	12,586,566,908.03	-9,816,195,938.63	0.00
2057	2,111,789,236.38	12,174,276,001.88	-10,062,486,765.50	0.00
2058	2,092,999,304.69	11,783,274,054.12	-9,690,274,749.43	0.00
2059	2,073,343,090.03	11,405,604,996.18	-9,332,261,906.15	0.00
2060	2,053,745,000.21	11,051,853,312.53	-8,998,108,312.32	0.00
2061	2,031,848,375.83	10,681,285,533.73	-8,649,437,157.90	0.00
2062	2,013,500,478.83	10,333,599,862.37	-8,320,099,383.54	0.00
2063	1,994,020,610.84	9,999,775,530.97	-8,005,754,920.13	0.00
2064	1,974,401,629.23	9,668,380,051.85	-7,693,978,422.62	0.00
2065	1,954,109,344.81	9,303,155,499.20	-7,349,046,154.39	0.00
2066	1,937,965,806.28	8,927,115,291.29	-6,989,149,485.01	0.00
2067	1,924,658,555.26	8,555,637,819.43	-6,630,979,264.17	0.00
2068	1,912,953,050.77	8,208,386,631.34	-6,295,433,580.57	0.00
2069	1,900,684,796.64	7,869,161,335.60	-5,968,476,538.96	0.00
2070	1,889,711,036.94	7,544,736,478.40	-5,655,025,441.46	0.00
2071	1,879,413,356.18	7,236,851,599.65	-5,357,438,243.47	0.00
2072	1,870,119,935.54	6,953,485,567.16	-5,083,365,631.62	0.00
2073	1,861,552,777.97	6,700,934,910.97	-4,839,382,133.00	0.00
2074	1,851,917,493.95	6,452,747,190.45	-4,600,829,696.50	0.00
2075	1,843,694,285.98	6,213,317,965.72	-4,369,623,679.74	0.00
2076	1,836,835,381.94	5,983,010,468.43	-4,146,175,086.49	0.00
2077	1,830,821,676.83	5,770,030,218.06	-3,939,208,541.23	0.00
2078	1,826,133,273.07	5,579,334,032.79	-3,753,200,759.72	0.00
2079	1,821,939,766.57	5,409,754,388.48	-3,587,814,621.91	0.00
2080	1,817,894,917.77	5,256,808,706.22	-3,438,913,788.45	0.00
2081	1,816,208,482.67	5,159,398,576.39	-3,343,190,093.72	0.00
2082	1,811,088,244.16	5,075,020,845.88	-3,263,932,601.72	0.00
2083	1,807,866,410.37	5,032,280,712.63	-3,224,414,302.26	0.00
2084	1,801,568,152.89	4,986,546,733.81	-3,184,978,580.92	0.00

LRF Art. 53, Paragraph 1, Sub-item II (R\$ 1.00)

FISCAL YEAR	SOCIAL SECURITY REVENUE	SOCIAL SECURITY EXPENSES	SOCIAL SECURITY RESULT	FINANCIAL BALANCE FOR THE YEAR
	Value (a)	Value (b)	Value (c) = (a-b)	Value (d) = (d Previous Year) + (c)
2085	1,799,531,574.90	5,001,058,086.17	-3,201,526,511.27	0.00
2086	1,789,777,322.85	4,957,030,469.93	-3,167,253,147.08	0.00
2087	1,787,425,176.23	4,919,631,113.98	-3,132,205,937.75	0.00
2088	1,785,150,717.91	4,883,695,828.51	-3,098,545,110.60	0.00
2089	1,784,698,221.18	4,867,990,657.56	-3,083,292,436.38	0.00
2090	1,782,835,093.10	4,856,213,496.49	-3,073,378,403.39	0.00
2091	1,781,972,217.70	4,861,633,606.85	-3,079,661,389.15	0.00
2092	1,779,857,951.21	4,871,472,710.85	-3,091,614,759.64	0.00

Definitions:

Number of Months in the 1st Year Calculation: 13.

Social Security Revenues: Normal Cost calculated (included Adm. Fee), applied on remuneration of active public servants and on payments that exceed RGPS ceiling (+)

(+) COMPREV (+) Supplementary Cost Revenue (+) Market Gains.

Social Security Expenses: Retirements (+) Pensions (+) Allowances (+) Plan Administration Fee.

Social Security Result: Social Security Revenues (-) Social Security Expenses.

Balance: TOTAL DAIR Balance as of 12/31/2016

Annex 9. Mathematical Reserve Statement (MPS Ordinance No. 916/03)

– All Participants

Account Code	Name	Amount (R\$)
(APF)	(1) ASSETS – FINANCIAL PLAN	119,732,760,592.69
1.1.2.1.1.71.00	(+) SOCIAL SECURITY CREDITS IN INSTALLMENTS	0.00
1.2.1.1.1.01.71	(+) SOCIAL SECURITY CREDITS IN INSTALLMENTS	0.00
TOTAL ASSETS – FINANCIAL PLAN		119,732,760,592.69
(APP)	(2) ASSETS – SOCIAL SECURITY PLAN	569,605,210.34
1.1.2.1.1.71.00	(+) SOCIAL SECURITY CREDITS IN INSTALLMENTS	0.00
1.2.1.1.1.01.71	(+) SOCIAL SECURITY CREDITS IN INSTALLMENTS	0.00
TOTAL ASSETS – SOCIAL SECURITY PLAN		569,605,210.34
TOTAL ASSETS – FINANCIAL AND SOCIAL SECURITY PLANS		120,302,365,803.03
LIABILITIES		
2.2.7.2.1.00.00 (4) + (5) + (7)+ (8) - (9)+ (10)+ (11)	TOTAL LIABILITIES = LONG-TERM MATHEMATICAL PROVISIONS – CONSOLIDATION	120,302,365,803.03
3.9.7.2.1.01.00 (4) + (5)	(3) DPV OF LONG-TERM MATHEMATICAL PROVISIONS OF THE SOCIAL SECURITY – CONSOLIDATION – FINANCIAL PLAN	119,732,760,592.69
2.2.7.2.1.01.00	(4) FINANCIAL PLAN – PROVISION FOR GRANTED BENEFITS	53,642,253,846.45
2.2.7.2.1.01.01	(+) RETIREMENTS/PENSIONS/OTHER BENEFITS GRANTED FOR THE RPPS FINANCIAL PLAN	320,049,388,611.71
2.2.7.2.1.01.02	(-) ENTITY CONTRIBUTIONS TO THE RPPS FINANCIAL PLAN	0.00
2.2.7.2.1.01.03	(-) RETIREE CONTRIBUTIONS TO THE RPPS FINANCIAL PLAN	9,214,571,109.09
2.2.7.2.1.01.04	(-) PENSIONER CONTRIBUTIONS TO THE RPPS FINANCIAL PLAN	2,610,033,925.77
2.2.7.2.1.01.05	(-) SOCIAL SECURITY COMPENSATION OF THE RPPS FINANCIAL PLAN	2,304,355,598.00
2.2.7.2.1.01.07	(-) FINANCIAL INSUFFICIENCY COVERAGE	252,278,174,132.40
2.2.7.2.1.02.00	(5) FINANCIAL PLAN – PROVISION FOR BENEFITS TO BE GRANTED	66,090,506,746.24
2.2.7.2.1.02.01	(+) RETIREMENTS/PENSIONS/OTHER BENEFITS TO BE GRANTED FOR THE RPPS FINANCIAL PLAN	445,478,133,723.27
2.2.7.2.1.02.02	(-) ENTITY CONTRIBUTIONS TO THE RPPS FINANCIAL PLAN	32,465,164,646.97
2.2.7.2.1.02.03	(-) ACTIVE PUBLIC SERVANT CONTRIBUTIONS TO THE RPPS FINANCIAL PLAN	32,893,024,532.79
2.2.7.2.1.02.04	(-) SOCIAL SECURITY COMPENSATION OF THE RPPS FINANCIAL PLAN	3,207,442,562.81
2.2.7.2.1.02.06	(-) FINANCIAL INSUFFICIENCY COVERAGE	310,821,995,234.46
3.9.7.2.1.02.00 (7) + (8) - (9)	(6) DPV OF LONG-TERM MATHEMATICAL PROVISIONS OF THE SOCIAL SECURITY – CONSOLIDATION – SOCIAL SECURITY PLAN	413,846,110.14
2.2.7.2.1.03.00	(7) SOCIAL SECURITY PLAN – PROVISION FOR GRANTED BENEFITS	13,547,005.56

2.2.7.2.1.03.01	(+) RETIREMENTS/PENSIONS/OTHER BENEFITS GRANTED FOR THE RPPS SOCIAL SECURITY PLAN	13,645,251.37
2.2.7.2.1.03.02	(-) ENTITY CONTRIBUTIONS TO THE RPPS SOCIAL SECURITY PLAN	0.00
2.2.7.2.1.03.03	(-) RETIREE CONTRIBUTIONS TO THE RPPS SOCIAL SECURITY PLAN	0.00
2.2.7.2.1.03.04	(-) PENSIONER CONTRIBUTIONS TO THE RPPS SOCIAL SECURITY PLAN	0.00
2.2.7.2.1.03.05	(-) SOCIAL SECURITY COMPENSATION OF THE RPPS SOCIAL SECURITY PLAN	98,245.81
2.2.7.2.1.03.07	(-) FINANCIAL CONTRIBUTIONS TO COVER THE ACTUARIAL DEFICIT – AMORTIZATION PLAN	0.00
2.2.7.2.1.04.00	(8) SOCIAL SECURITY PLAN – PROVISION FOR BENEFITS TO BE GRANTED	400,299,104.58
2.2.7.2.1.04.01	(+) RETIREMENTS/PENSIONS/OTHER BENEFITS TO BE GRANTED FOR THE RPPS SOCIAL SECURITY PLAN	3,020,709,286.01
2.2.7.2.1.04.02	(-) ENTITY CONTRIBUTIONS TO THE RPPS SOCIAL SECURITY PLAN	1,732,440,716.38
2.2.7.2.1.04.03	(-) ACTIVE PUBLIC SERVANT CONTRIBUTIONS TO THE RPPS SOCIAL SECURITY PLAN	866,220,358.19
2.2.7.2.1.04.04	(-) SOCIAL SECURITY COMPENSATION OF THE RPPS SOCIAL SECURITY PLAN	21,749,106.86
2.2.7.2.1.04.06	(-) CONTRIBUTIONS TO COVER THE ACTUARIAL DEFICIT – AMORTIZATION PLAN	0
2.2.7.2.1.05.00	(9) SOCIAL SECURITY PLAN – AMORTIZATION PLAN	0.00
2.2.7.2.1.05.98	(-) OTHER AMORTIZATION PLAN CREDITS	0
2.2.7.2.1.06.00	(10) ACTUARIAL PROVISIONS FOR FINANCIAL PLAN ADJUSTMENTS	0.00
2.2.7.2.1.06.01	(+) ACTUARIAL PROVISION FOR RISK FLUCTUATIONS	0.00
2.2.7.2.1.07.00	(11) ACTUARIAL PROVISIONS FOR SOCIAL SECURITY PLAN ADJUSTMENTS	155,759,100.20
2.2.7.2.1.07.01	(+) ADJUSTMENTS OF ACTUARIAL SURPLUS RESULT	103,461,527.54
2.2.7.2.1.07.02	(+) ACTUARIAL PROVISION FOR RISK FLUCTUATIONS	0.00
2.2.7.2.1.07.03	(+) ACTUARIAL PROVISION FOR BENEFITS TO BE SETTLED	0.00
2.2.7.2.1.07.04	(+) ACTUARIAL PROVISION FOR BENEFIT CONTINGENCIES	0.00
2.2.7.2.1.07.98	(+) OTHER ACTUARIAL PROVISIONS FOR PLAN ADJUSTMENTS	52,297,572.66
ACTUARIAL SITUATION		0.00
(1) - (4) - (5) - (10)	FINANCIAL PLAN – ACTUARIAL TECHNICAL BALANCE	0.00
(2) - (7) - (8) + (9) - (11)	SOCIAL SECURITY PLAN – ACTUARIAL TECHNICAL BALANCE	0.00
EXPLANATORY NOTES:	-*	

Annex 10. Database Inconsistencies

Active Public Servants – Executive – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Participation salary less than the minimum wage	314	The National Minimum Wage was adopted
Active Public Servants admitted to public service under 18 years old	350	Public servant taken as admitted at 18 years of age
Active public servants over 75 years old	23	Migrated to the Retiree base of the Financial Fund
Public Servants married without the respective date of birth of the spouse	22,647	The average age difference established for the date of birth of the spouses was assumed.
Dependent over 24 years old	17,554	Delete the dependent from the database
Salary of more than R\$ 27,074.54 Executive (except PGE/DPGE)	1,286	The Constitutional ceiling was adopted
Salary of more than R\$ 33,763.00 Executive (PGE/DPGE)	903	The Constitutional ceiling was adopted
Previous service length not stated	181,883	The previous service length was adjusted by assuming that the public servant entered the labor market at the age of 24
Spouse under the age of 16	3,605	The average age difference found in the database is assumed

Active Public Servants – Executive – Social Security Plan		
Limitations	No. of cases	Hypothesis adopted
Participation salary less than the minimum wage	3	The National Minimum Wage was adopted
Public Servants married without the respective date of birth of the spouse	741	The average age difference established for the date of birth of the spouses was assumed.
Numbers of married public servants less than the minimum standard		Statistical data was taken from other registration bases
Abled dependent over 24 years old	147	Delete the dependent from the database
Salary of more than R\$ 27,074.54 Executive (except PGE/DPGE)	3	The Constitutional ceiling was adopted
Salary of more than R\$ 33,763.00 Executive (PGE/DPGE)	7	The Constitutional ceiling was adopted
Unmarried Public Servants with spouse's date of birth		It has been assumed that these public servants have a spouse
Previous service length not stated	17,726	The previous service length was adjusted by assuming that the public servant entered the labor market at the age of 24
Spouse under the age of 16	21	The average age difference found in the database is assumed
Low rate of married public servants (Less than 40%)	7.36%	The national proportion of married people by age was adopted

Active Public Servants – TJRJ (Court of Appeals of the State of Rio de Janeiro) – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Date of taking the current position prior to the date of admission	4	It was assumed that the date of taking the current position is the same date as that of admission
Active Public Servants admitted to public service under 18 years old	68	Public servant taken as admitted at 18 years of age
Active public servants over 75 years old	41	Migrated to the Retiree base of the Financial Fund
Married Public Servants with inconsistent date of birth of the spouse	1	The average age difference established for the date of birth of the spouses was assumed.
Dependent over 24 years old	4,967	Delete the dependent from the database
Dependent with inconsistent date of birth	1	The average date of birth from the database adopted
Salary of more than R\$ 30,471.11	70	The Constitutional ceiling was adopted
Previous service length not stated	6,047	The previous service length was adjusted by assuming that the public servant entered the labor market at the age of 24
Spouse under the age of 16	1	The average age difference found in the database is assumed

Active Public Servants – TJRJ – Social Security Plan		
Limitations	No. of cases	Hypothesis adopted
Abled dependent over 24 years old	380	Delete the dependent from the database
Previous service length not stated	815	The previous service length was adjusted by assuming that the public servant entered the labor market at the age of 24
Spouse under the age of 16	2	The average age difference found in the database is assumed
Low rate of married public servants (Less than 40%)	39.81%	The national proportion of married people by age was adopted

Active Public Servants – ALERJ (Legislature of the State of Rio de Janeiro)		
Limitations	No. of cases	Hypothesis adopted
Active Public Servants admitted to public service under 18 years old	2	Public servant taken as admitted at 18 years of age
Salary of more than R\$ 25,322.25	59	The Constitutional ceiling was adopted
Previous service length not stated	184	The previous service length was adjusted by assuming that the public servant entered the labor market at the age of 24

Active Public Servants – MPRJ (Prosecution Office of the State of Rio de Janeiro) – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
High rate of public servants with the previous length of service equal to zero (Greater than 20%).	33.45%	It was assumed that they entered the labor market at age 24, or the age of admission to the municipality, considering the lowest of these parameters

Active Public Servants – MPRJ – Social Security Plan		
Limitations	No. of cases	Hypothesis adopted
High rate of public servants with the previous length of service equal to zero (Greater than 20%).	76.44%	It was assumed that they entered the labor market at age 24, or the age of admission to the municipality, considering the lowest of these parameters

Active Public Servants – TCE/RJ (Accounting Court of the State of Rio de Janeiro) – Social Security Plan		
Limitations	No. of cases	Hypothesis adopted
High rate of public servants with the previous length of service equal to zero (Greater than 20%).	25.00%	It was assumed that they entered the labor market at age 24, or the age of admission to the municipality, considering the lowest of these parameters

Active Public Servants – TCE/RJ – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
High rate of public servants with the previous length of service equal to zero (Greater than 20%).	27.85%	It was assumed that they entered the labor market at age 24, or the age of admission to the municipality, considering the lowest of these parameters
Participation salary equal to zero or not stated	4	The calculated average salary was adopted
Active Public Servants admitted to public service under 18 years old	2	Public servant taken as admitted at 18 years of age
Public Servants married without the respective date of birth of the spouse	107	The average age difference established for the date of birth of the spouses was assumed.
Dependent over 24 years old	108	Delete the dependent from the database
High rate of public servants with the previous length of service equal to zero (Greater than 20%).	33.45%	It was assumed that they entered the labor market at age 24, or the age of admission to the municipality, considering the lowest of these parameters
Salary of more than R\$ 30,471.11	15	Adopt the Constitutional ceiling
Unmarried Public Servants with spouse's date of birth	2	It has been assumed that these public servants have a spouse
Public Servants who did not take a civil-service examination and who were admitted before the Federal Constitution was promulgated	313	Considered effective
Public Servants who did not take a civil-service examination and who were admitted after the Federal Constitution was promulgated	10	Considered effective

Retired Public Servants – Executive – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Benefit less than the Minimum Wage	1	The Minimum Wage was adopted
Dependent over 24 years old	30,125	Delete the dependent from the database
Date of birth of the dependent is inconsistent	1	The average date of birth was adopted
Public servant retired under the allowed retirement age	1,195	Data assumed as correct
Public Servants with spouse without the respective date of birth	14,320	The calculated average age difference was assumed.
Benefit of more than R\$ 27,074.54 Executive (except for PGE/DPGE)	2,132	The Constitutional ceiling was adopted
Benefit of more than R\$ 33,763.00 Executive (PGE/DPGE)	352	The Constitutional ceiling was adopted
Date of admission equal to date the benefit was granted	1,338	The average date of admission on the database was adopted
Type of benefit not specified	6,676	Assume a voluntary retirement (Code 2)

Retired Public Servants – Executive – Social Security Plan		
Limitations	No. of cases	Hypothesis adopted
Public Servants with spouse without the respective date of birth	1	The calculated average age difference was assumed.

Retired Public Servants – ALERJ – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Benefit less than the Minimum Wage	5	The Minimum Wage was adopted
Benefit of more than R\$ 25,322.25	8	The Constitutional ceiling was adopted
Date of admission equal to date the benefit was granted	1	The average date of admission on the database was adopted
Type of benefit not specified	1	Assume a voluntary retirement (Code 2)

Retired Public Servants – MPRJ – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Public servant retired under the allowed retirement age	2	Data assumed as correct

Retired Public Servants – TCE – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Benefit equal to zero or not stated	1	The calculated average salary was adopted
Dependent over 24 years old	301	Delete the dependent from the database
Benefit of more than R\$ 30,471.11	11	The Constitutional ceiling was adopted
Public servant retired under the allowed retirement age	6	Data assumed as correct
Public Servants with spouse without the respective date of birth	236	The calculated average age difference was assumed.
Public Servants without spouses with respective date of birth	9	It has been assumed that these public servants have a spouse
Date of admission equal to date the benefit was granted	2	The average date of admission on the database was adopted

Retired Public Servants – TJRJ – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Benefit less than the Minimum Wage	2	The Minimum Wage was adopted
Dependent over 24 years old	4,045	Delete the dependent from the database
Benefit of more than R\$ 30,471.11	278	The Constitutional ceiling was adopted
Date of Admission not stated	505	The average date of admission was adopted
Public servant retired under the allowed retirement age	16	Data assumed as correct
Type of benefit not specified	1	Assume a voluntary retirement (Code 2)

Pensioners – Financial Plan		
Limitations	No. of cases	Hypothesis adopted
Benefit less than the Minimum Wage	2,396	The National Minimum Wage was adopted
Date of Birth not stated	8	The average date of birth was adopted
Inconsistent date of birth	12	The average date of birth was adopted
Date of Admission not stated	70	The difference between the grant date of the benefit and the contribution time was adopted
Inconsistent date of admission	3	The difference between the grant date of the benefit and the contribution time was adopted
Temporary pension granted to persons over 24 years of age	183	It was assumed as a lifelong pension
Gender not specified	3,057	Classified as Female

Pensioners – Social Security Plan		
Limitations	No. of cases	Hypothesis adopted
Gender not specified	6	Classified as Female