

CPTM Lines 8 and 9 - Concession

Transaction Report

November.2020



DISCLAIMER

This presentation is part of the advisory work performed to the State of São Paulo. The material and information herein contained is for general information purposes only, being non-binding and merely referential. Final project elements shall be duly confirmed within the published draft Request-for-Proposal (RFP) and Concession Agreement.

The ownership of any investment decision (s) shall exclusively vest with the potential bidders after its own due diligence and risk factor analysis.

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Executive Summary



Executive Summary

Project Highlights



Prioritizing public transport investments

CPTM lines 8 and 9 transports more than 1 million passengers a day.

Highly reliable public partner

São Paulo has the highest GDP (R\$2,224 trillion) of all Brazilian states, which is equal to 31,9% of National GDP. According to IBGE, its population is 45,9 million.

International and transparent Bidding Process

It is an opportunity for the investor to participate in a project of international relevance. It provides high social return, legal security and the advantages of a long-term contract with clear rules, in addition to an organized, safe and transparent bidding process. It enables the participation on equal terms for local and international investors with financial capacity and expertise to implement, maintain and operate this transportation infrastructure.

Possibility of players from different profiles to participate

The Auction RFQ will not favor any type of player. Participation requirements have been set taking into account financial and implementation requirements, so that investors can have different profiles (financial, operational, construction etc.).

Robust Guarantee Mechanism

Project was structured considering its attractiveness and financing capacity. It provides robust liquidity mechanism for Grantor's obligations considering the best practices applied in previous experiences.

+ EXPERIENCE

Over the past decade, IFC's **transaction advisory** team has worked on the creation and implementation of more than 200 multi-area projects in 83 countries. These Projects are expected to generate about US\$ 20 billion in private sector infrastructure Investments, in developing countries. In Brazil, IFC has provided **transaction advisory** services in toll road concessions, airports, public lighting and social sectors.

+ ATTRACTIVENESS

Project of international relevance with high social return, wide market consultation, legal security, adequate risk allocation, attractive return and advantages of a long-term contract. In line with local and international best practices.

+ COMPETITIVENESS

Organized, competitive and transparent international bidding process with clear rules for the selection of the most qualified winner. It allows the participation of players with different profiles.

Highlighted numbers



Term

30 years



Net Capex*

BRL 3,05 billion

Without Upfront fee



Opex*

BRL 15,8 billion



Revenues*

BRL 28,4 billion



Project IRR

8,3% p.a.



Auction criteria

Highest upfront fees

Minimum upfront fee:

R\$ 303 million



Length

78,6 km



Stations

38 existing e 4 new one

*30 years (Concession Term)

Executive Summary

Ongoing concession agreements: Program of Public Private Participation of the São Paulo State is one of the most important in Brazil



Hospitals



Toll Roads



Urban Mobility



Exhibition Center



Water and Sanitation



Park Areas



Social Housing



Aerodrome

+ Over USD 30 billion have already been invested in private participation projects, since 1998.

➤ Political and regulatory stability: one of the first states to adopt PPP legislation in the country

🏆 Largest road network granted, with the best toll roads in the country (CNT Research)

🕒 Long tradition of concessions and PPPs in urban mobility (Subway Lines 4, 5, 6, 15 and 17; CPTM Trains Maintenance)

Executive Summary

Lines 8 and 9 Concession | General features

- ▶ **Length: 78,6 Km** from Amador Bueno to Júlio Prestes stations and from Osasco to Varginha stations.
 - **Number of Stations: 42** (38 existing and 4 new ones)



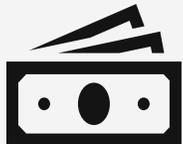
Grantor: São Paulo State Government, through the Metropolitan Transport Secretariat (STM)



Urban trains in a **consolidated commercial operation**
Reliable historical Demand
(With contractual protection mechanism)



Contractual term: **30 years**



Concessionaire Revenues generated through contractual technical tariff per passenger transported



International Bidding



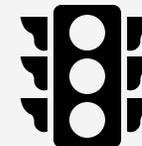
Auction criteria:
Highest upfront concession fees



Reform of existing stations and construction of **1 new one**



New Fleet acquisition (34 trains)



Investments in **Signaling**

Executive Summary

Lines 8 and 9 Concession | General features



Investment (8 years)

- **Net Capex:** BRL **3,05** billion
*not considering Upfront fee



Outputs

- **Project IRR (FCFF):** **8,30** %



Costs and Expenses (30 years)

- **Opex:** BRL **15,8** billion



Initial Minimum Upfront Fees

- **Grant:** BRL **303** million



Gross Revenues (30 years)

- **Amount:** BRL **28,4** billion



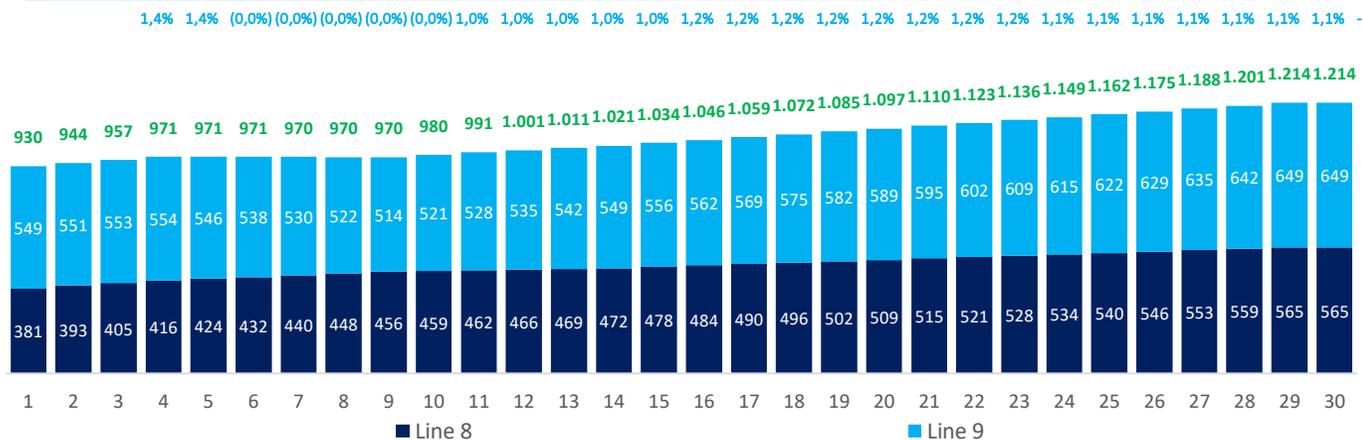
Demand (average per working day)

- **AWD:** **930** thousand passengers (First Fiscal Year of the Concession)

Executive Summary

Estimated Demand and Revenues (Real terms)

Demand (average per working day in thousands of passengers transported *)



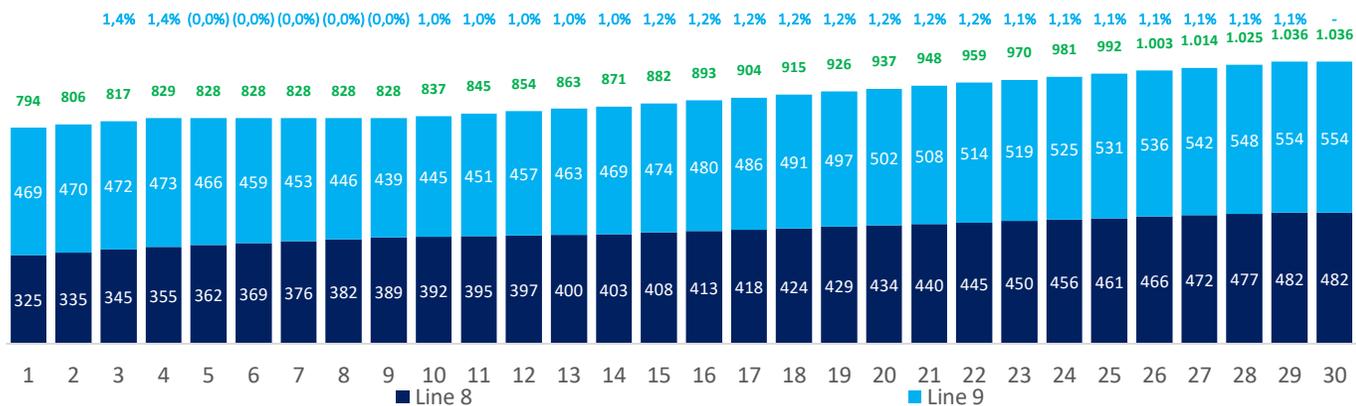
Demand Growth x GDP

Growth Rate – Demand Impact

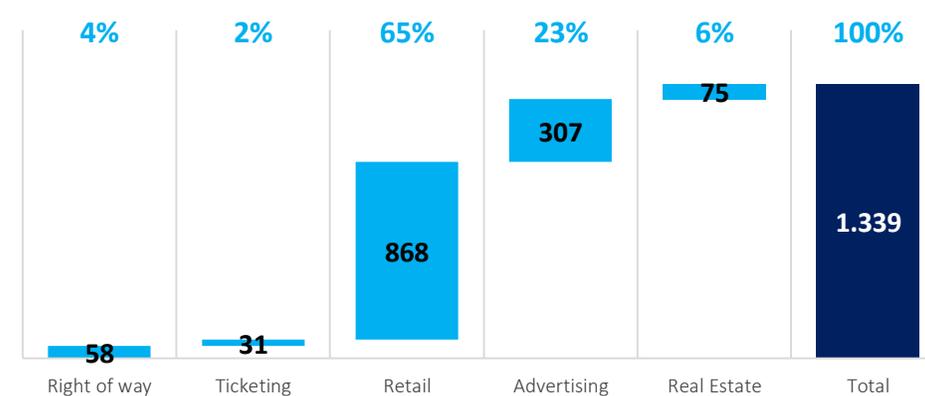
Year	GDP	Demand
2020	-5,0%	-2,22%
2021	3,47%	2,05%
2022 (year 1)	2,5%	3,16%

Tariff Revenue (annual amount in BRL million)

* excluding passengers that transfer from one line to the other (Line 8 to 9 and vice versa)



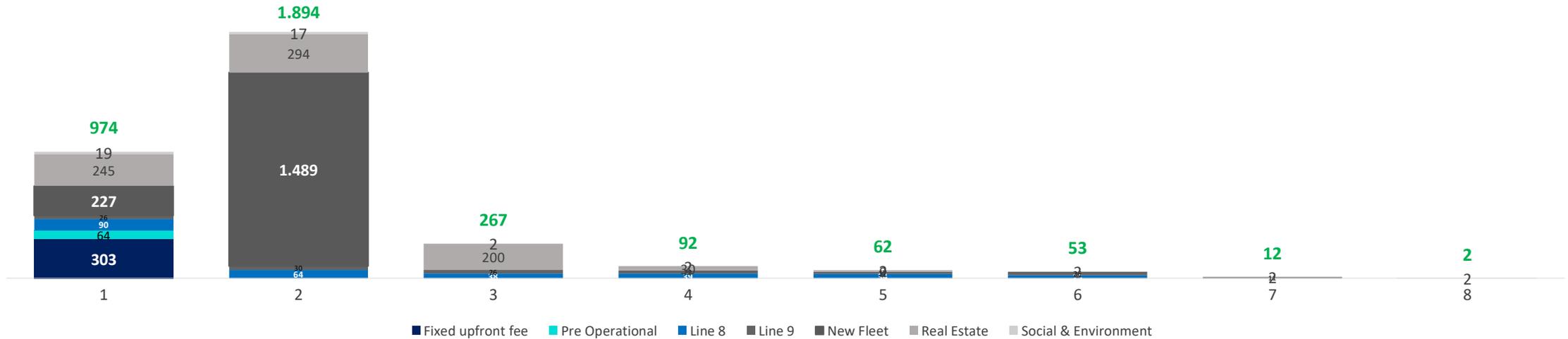
Ancillary Revenues Breakdown (30 years in BRL million)



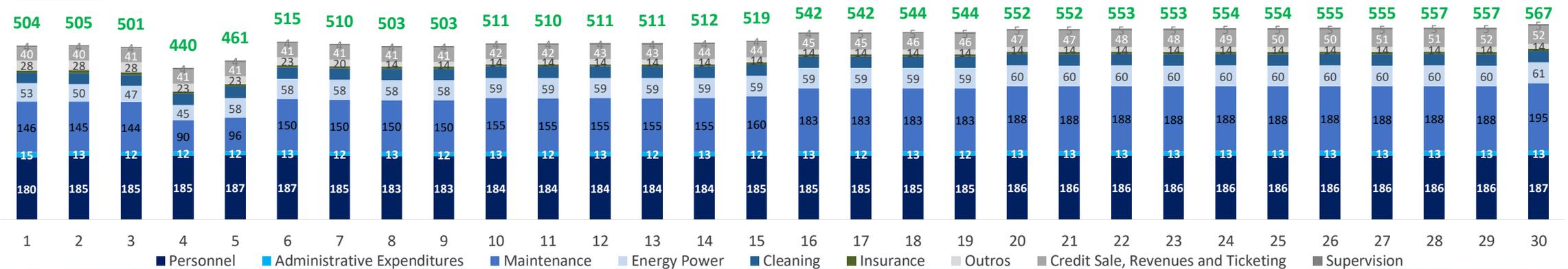
Executive Summary

Capex & Opex

Total Net Capex + Upfront Fee Breakdown | annual (BRL million)

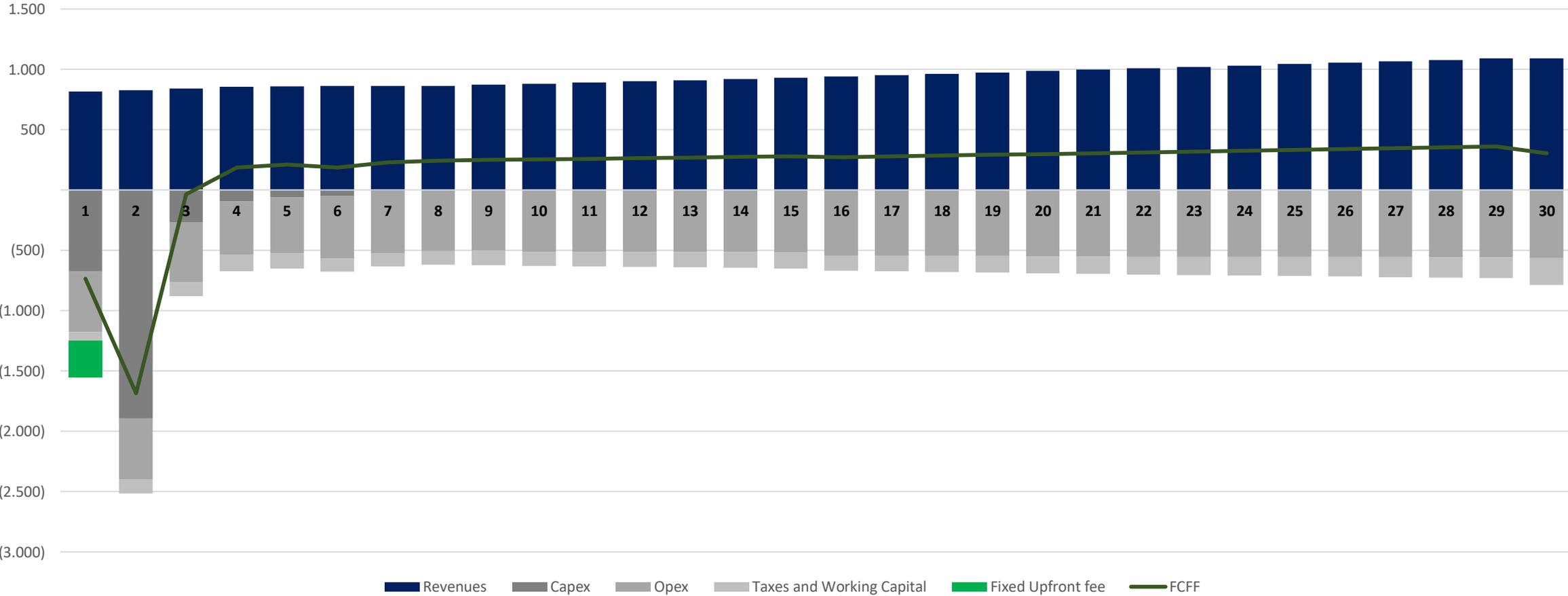


Total Opex Breakdown | annual (BRL million)



Executive Summary

Project Unlevered Cash Flow Forecast (BRL million – Real terms)



Executive Summary

Bid Process

Bid Modality

- ✓ International Competition

Selection Criteria

- ✓ Highest Upfront Concession Fees (R\$ 303 million = minimum)

Concession period

- ✓ 7 months of transition period (pre-operational phase)
- ✓ 30 years from the date of signing of the transition term (after pre-operational phase)

Grantor's Supervision Costs

- ✓ 0,5% of total Revenues

Deadline to submit proposals

- ✓ 90 days (so as to perform technical visit, Q&A phase, and to develop adequate project studies)

Players

- ✓ Brazilian and foreign investors without restrictions, except in cases forbidden by law.

Consortium Rules

- ✓ There is no limit on the number of members by consortium

Terms

- ✓ Each member of the consortium must individually meet the legal, tax and labor requirements.
- ✓ Technical qualification: previous management/administration of infrastructure assets amounting to BRL 650MM, with annual operating gross revenues of BRL 300MM;
- ✓ Economic-financial qualification: Minimum net shareholders equity



Background



Background

Current infrastructure sector and country scenarios require a differentiated approach



A scenario of fiscal restriction in the country which has resulted in a reduction in long-term public credit for the infrastructure sector and, consequently, requires greater private financing in its different forms.



Projects under preparation by national and subnational governments - such as privatizations, concessions and PPPs - **are in competition with other projects available in the so-called "secondary market"**, especially by funding.



The country **is going through a transition** in the infrastructure market, from traditional players in the construction sector to operators and financial investors;



Need to extend the range of players participating in infrastructure auctions, especially international ones, due to the shortage of national groups in conditions to participate and to compete;



New management model for BNDES equity participation: less participation in the financing of infrastructure projects (low interest scenario) leads to the need **to enable new forms of financing**, local and international and in line with international best practice (project finance).

Background

São Paulo is the leading economic power in the country. Why to invest here?



Rating S&P 2018
BB- (Global scale)

SÃO PAULO Numbers

- ▶ **Economic Development:** São Paulo accounts for approximately **28.7%** of the national GDP, larger than **Argentina, Indonesia, the Netherlands and Turkey** by itself. The per capita GDP of Brazil is USD 8,802 while in São Paulo ("SP") is **USD 20,625**.
- ▶ **Industry:** 36% of the national industry is concentrated in SP. For the machinery, equipment and automotive sectors, SP is responsible for about 50% of production. 96% of the Brazilian aeronautical sector production is in SP.
- ▶ **Annual Government Budget:** BRL 196 (~**USD 60 billions**) of state budget, ~3 times larger than the second state budget in Brazil (Minas Gerais).
- ▶ **Strategic Location:** SP borders Minas Gerais, Mato Grosso do Sul, Paraná and Rio de Janeiro. Counting with 645 municipalities, its regional dynamics is constituted in a network of cities that contemplates a cluster of metropolises and urban centres.
- ▶ **Infrastructure:** The state owns the most modern roads and the main airports in the country, as well as the Port of Santos, the largest container terminal in Latin America which accounts for 25% of the national trade flow. The transportation network is complemented by railways, waterways and pipelines.
- ▶ **Standard of Living:** **90%** of the state's municipalities have a high Human Development Index (HDI). Nevertheless, it is extremely unequal and has very poor municipalities as in all of Brazil.



Technical Experts and Objectives of the Project



Technical Experts and Objectives of the Project



The Government of the State of São Paulo through the Sub-Secretariat of Partnerships and Metropolitan Transport Secretariat (STM), - with the support from the IFC and the World Bank Transport Department - is structuring the concession for new investments and private operation of Lines 8 and 9 of the Companhia Paulista de Trens Metropolitanos (CPTM) - a company controlled by the State of São Paulo.

Goals

1. Promote competition for the contest with the attraction of new local and international players;
2. Introduce technical and contractual innovations and improvements that ensure the delivery of the best services for users and appropriate incentives for the Concessionaire, without high fiscal burden to the state treasury.
3. Enable investments for the expansion, modernization and operation of lines 8 and 9.

By means of:

- Development of high-quality studies, project and bidding documents, in line with national and international best practices.
- Incorporation of technical innovation aspects to the operation of the lines.
- Contractual design that determines adequate risk sharing, well-dimensioned. incentive structure and with strong orientation towards higher quality in service provision.
- Increased financial viability with strong dialogue with financial institutions and with other promotion mechanisms/instruments.
- Intensive project promotion (market sounding, local and international road shows, dissemination of material to target investors, etc.).

What has been done?

Lead Transaction Advisor



Technical Support



Ancillary Revenues



Social and environmental recommendations based on international best practices



Validation of Engineering Studies and Operational Design



Demand Forecast



International Legal Consultancy



Local Legal Consultancy



Line 8 (diamond) and 9 (emerald)



LINE 8 (DIAMOND) and 9 (EMERALD)

Lines Historical Background

Line 8 - Diamond

1875: Line was inaugurated, with the first stretch of the old Sorocabana Railroad trunk line which connected the current Júlio Prestes Station (next to Luz Station, in São Paulo) to Sorocaba.

1934 : officially established suburban transport services.

1944 - 1945: The line was electrified.

1950 – 1960: the line has undergone its first reform

1971: the railroad started being managed by the new state-owned Ferrovias Paulista S/A (Fepasa), which at the end of that decade and beginning of the 1980s renamed the line as “Linha Oeste”(West Line)

1996: the services were transferred to the Companhia Paulista de Trens Metropolitanos (CPTM) management, which unified the metropolitan train services of São Paulo Metropolitan Region.

Line 9 - Emerald

1957: Inaugurated (and already electrified) by the Sorocabana Railway as a way to shorten the distance between the center of the Capital and the downside of the mountain range made by the Mairinque-Santos line of that railway.

1971: Integrated to Fepasa and then named “Linha Sul” (South Line).

1981: services from Osasco to Pinheiros reaching Jurubatuba station as of 1987.

1992: inauguration of an operational extension from Jurubatuba to Varginha that circulated until 2001

1996: the line started being managed by Companhia Paulista de Trens Metropolitanos (CPTM) and was renamed as C-Celeste line.

2007: the line was renamed "Linha Esmeralda“ (Emerald Line) by decree of Governor José Serra, when it was delivered together with the Autódromo Station and is now jointly managed by the Metro and CPTM.

2016: Unsolicited Proposal Authorization – Expression of Interest Procedure

LINE 8 (DIAMOND) and 9 (EMERALD)

Concession implementation - Historical background

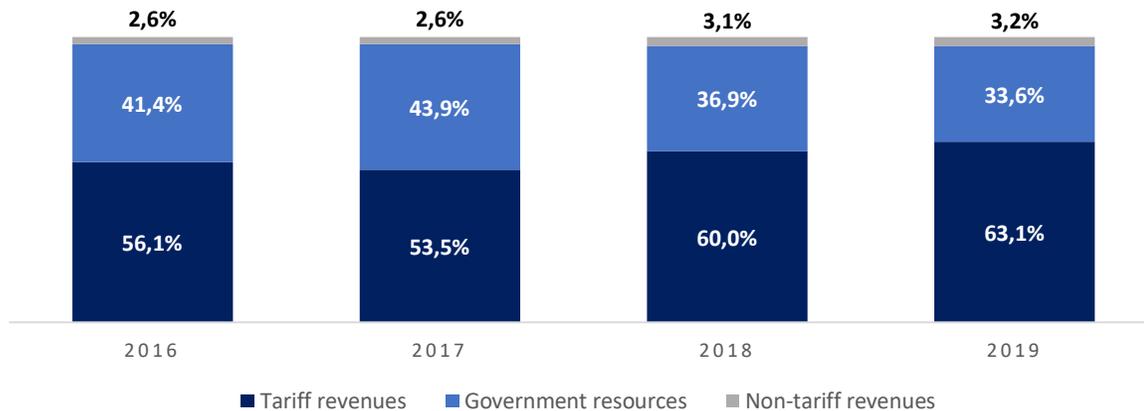
OCT 2015	Project is kickstarted - Unsolicited Proposal (Triunfo Participações)
APR 2017	Unsolicited Proposal RFP is published in the Official Gazette to call for other studies
SEP 2017	Studies are delivered by authorized unsolicited proponents (CAF, CCR, GM89)
DEC 2017	State Oversight Committee (Committee requires more in-depth business models and studies)
DEC 2018	New State Government is elected
FEB 2019	New State Working Group is created to review/consolidate concession model
SEP 2019	IFC's FASA is signed
FEB/MAR 2020	Public Audience and Consultation
DEC 2020	RFP Publication

LINE 8 (DIAMOND) and 9 (EMERALD)

CPTM – Companhia Paulista de Trens Metropolitanos – Nowadays

- ▶ Public company created in 1992 to operate the metropolitan rail transportation services
- ▶ Operational Gross Revenues (2019): R\$ 2.76 billion, counting with Government budget resources in the order of 34% of total revenues
- ▶ Active in 23 municipalities
- ▶ 7 operational lines integrated with São Paulo Metropolitan Region transport network
- ▶ Transports almost 3 million daily passengers; 867,7 millions of passengers throughout 2019.
- ▶ Rail network of 271 km
- ▶ 94 Stations

SOURCE OF REVENUES

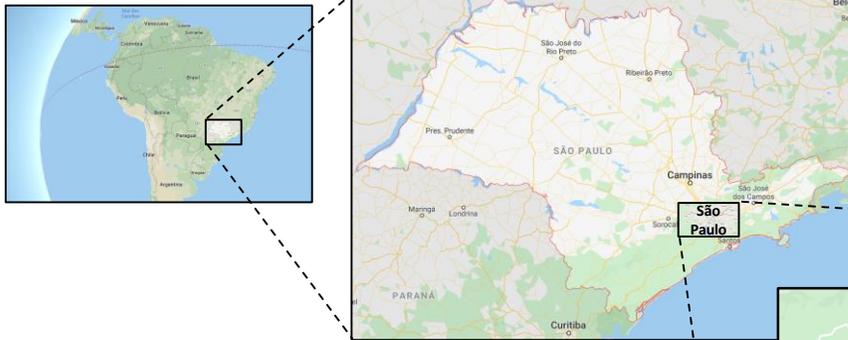


Rail network Map



LINE 8 (DIAMOND) and 9 (EMERALD)

The project is located in a densely populated area with a high volume of trips

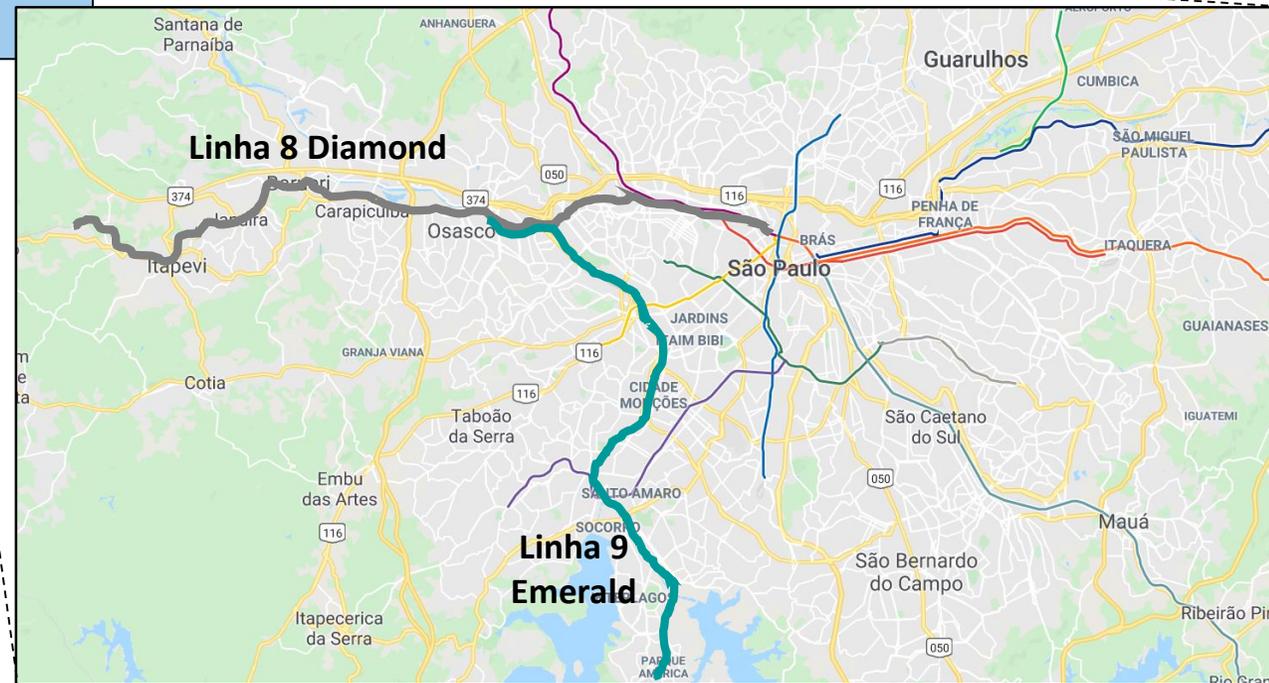


The **Line 8 Diamond** (from Júlio Prestes to Amador Bueno) and **Line 9 Emerald** (from Osasco to Varginha) of Companhia Paulista de Trens Metropolitanos (CPTM) will be granted to the private initiative.

São Paulo Metropolitan Region

- ▶ Population **20.8 million**
- ▶ Employment **9.4 million**
- ▶ Total daily Trips **42 million**
- ▶ Daily Trips in Public Transport **13 million**
- ▶ Passengers transported in 2019 in Metropolitan Trains **867,7 million**

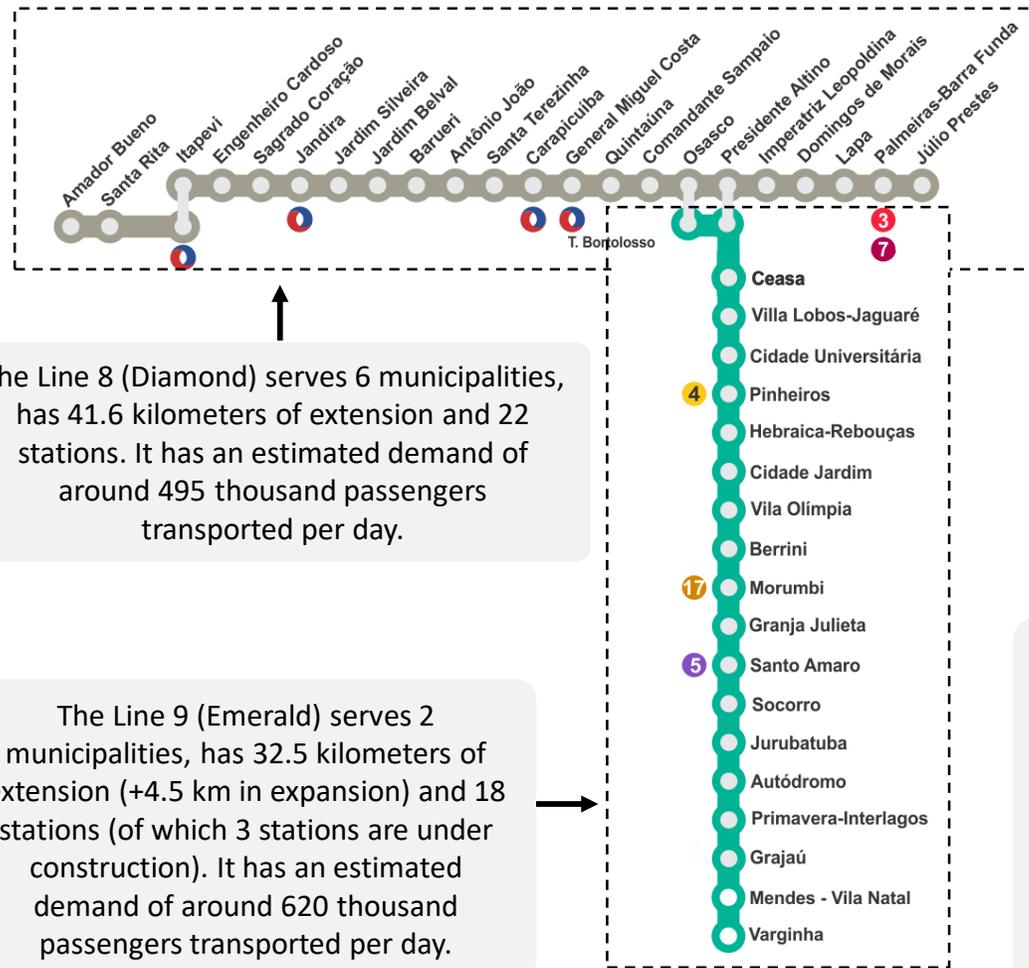
Source: OD 2017 research and 2018 Management Report undertaken by Companhia Paulista de Trens Metropolitanos.



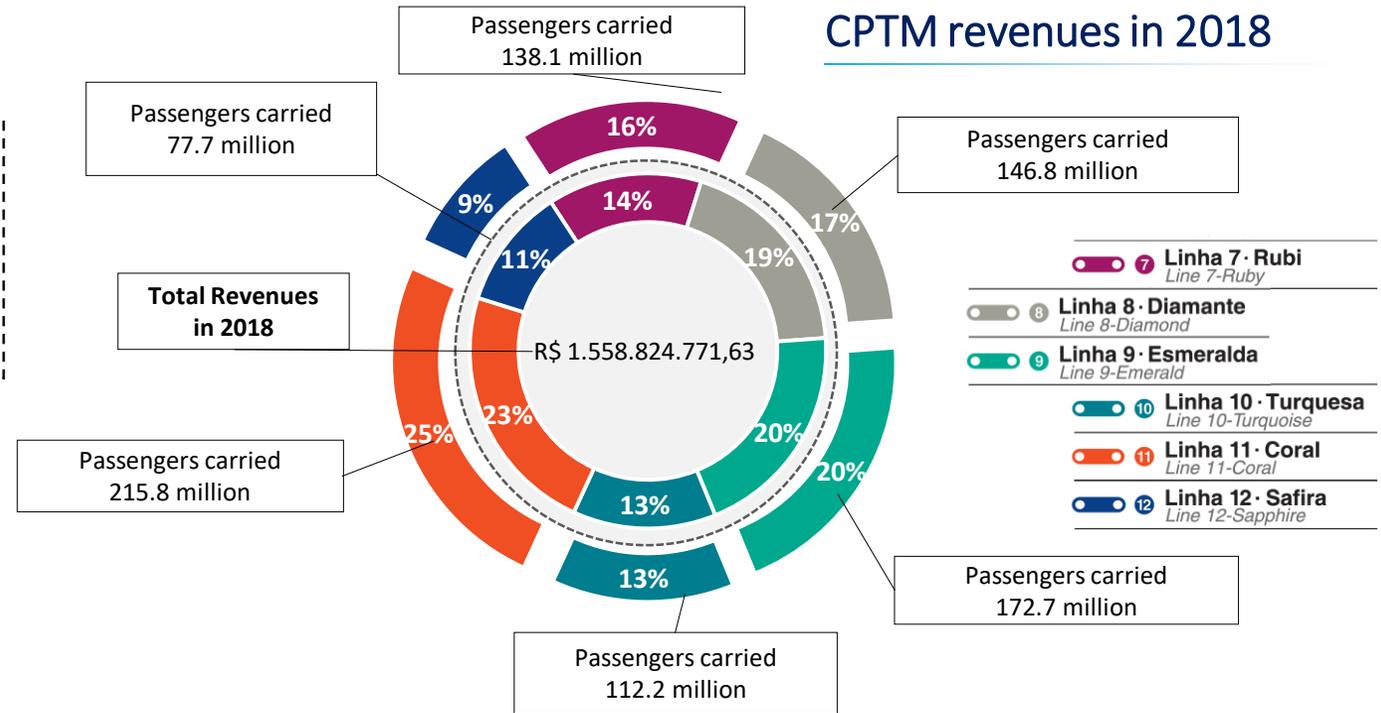
**Rail transportation lines*

LINE 8 (DIAMOND) and 9 (EMERALD)

The Project



CPTM revenues in 2018



The activities that will be transferred to private responsibility:

- ▶ Upgrade and revamp of Lines 8 and 9 stations including civil works to address accessibility and other issues
- ▶ Renewal of the permanent way structure
- ▶ Renovation of Presidente Altino's yard area and investment into a new yard for CPTM's fleet maintenance activities
- ▶ Modernization of signalling and telecommunications systems
- ▶ Improvement of the energy supply system
- ▶ Acquisition of new railway / rolling stock

Socio-Environmental

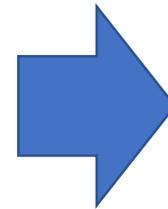


Environmental, Social, Labor and OHS

Majority of the works and investments are associated with rehabilitation, refurbishing, and expansion of two existing and presently operating intraurban railways, without significant alteration to current environmental, social, security, labor, and occupational health and safety (ESHS) impacts and risks. Key ESHS risks and impacts relate to railway operation which, for the most part, are expected to be significantly improved as the new concessionaire implements good international industry practices (GIIP).

Key E&S Risks:

- **PS2:** Lines 8 and 9 ~ 3,000 CPTM staff will be subjected to imminent corporate Work Force Planning; potential linkages to Concession Process.
- **PS3 & PS4:** Twenty-two environmental, social, and safety liabilities identified in the operational RoW (e.g. eroded or unstable embankments; clogged drainage systems; flood zones, illegal domestic waste/ garbage dump sites, irregular level pedestrian crossings, etc.)
- **PS5:** Patrimonial RoW heavily encroached by informal dwellings/*favelas*; 40-m-wide operational RoW is cleared and walled at high density areas; gaps with PS5 were identified in the CPTM-led resettlement process associated with 4.5-km Line extension and new stations.



Proposed Mitigation:

- **PS2:** CPTM considers that IFC's assessment of their corporate WFP is beyond scope of the FASA. IFC still recommended CPTM applies PS2-principles to avoid significant retrenchment and, if unavoidable develop a retrenchment management plan in consultation with those affected.
- **PS3 & 4:** Risk-based time-bound ESH Liabilities Remediation Plan is a requirement for the concessionaire.
- **PS5:** Only operational RoW is part of the concession; concessionaire responsible of performing PS5-audit and develop and implement a PS5-compliant Supplemental Resettlement Action Plan the Line 9 extension; and Develop a PS5 Compliant Resettlement Framework in case occupied land is required in the future for safety or operational reasons.



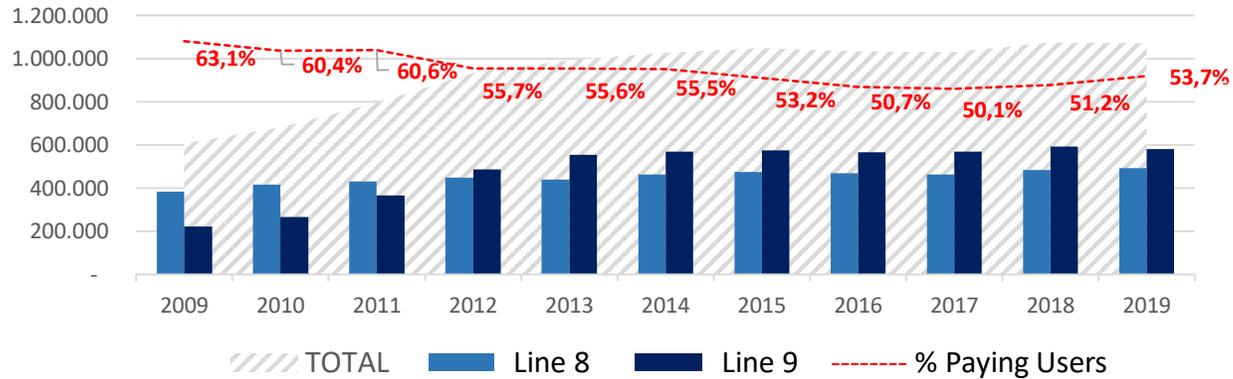
Demand



DEMAND

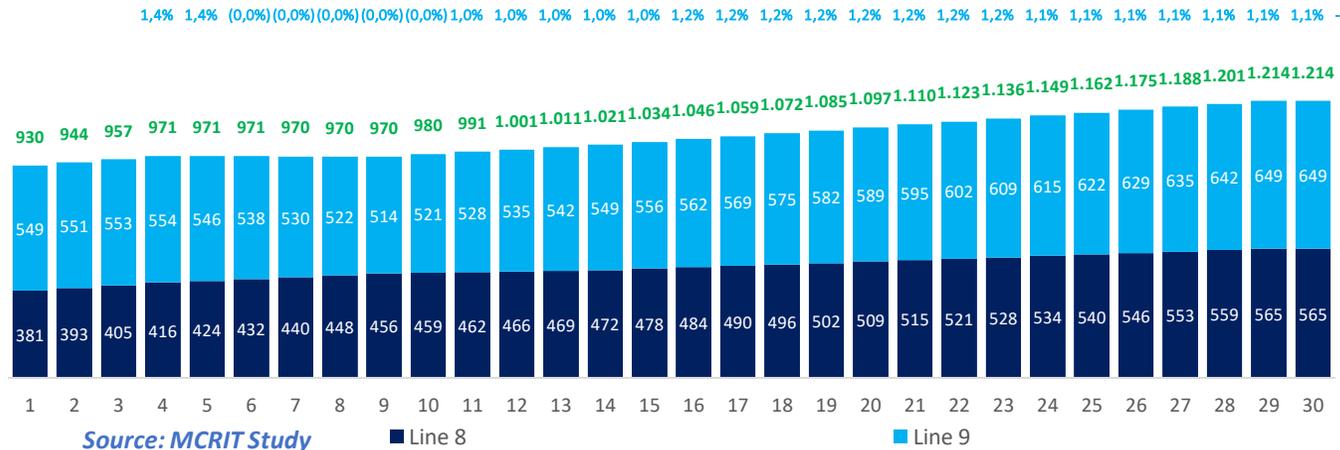
History, Forecast and Highlights

Demand History



Source: CPTM/STM

Demand Forecast (in million passengers per working day - MDU) as of 2022



Source: MCRIT Study

Highlights:

- Stable demand since 2012-2013
- **Resilience to the crisis showing low variation from 2015 to 2019.**
- **Operation is already consolidated.**
- Line 9 assumes a certain stability in the demand forecast as it operates near to its capacity. On the other hand, Line 8 has an expected increase in demand of 28% between the first and fifteenth year.
- Line 9 corresponds to 54% of the Concession estimated demand, while line 8 reaches 46%.



Average Demand (working day) in 2019

1.089.765

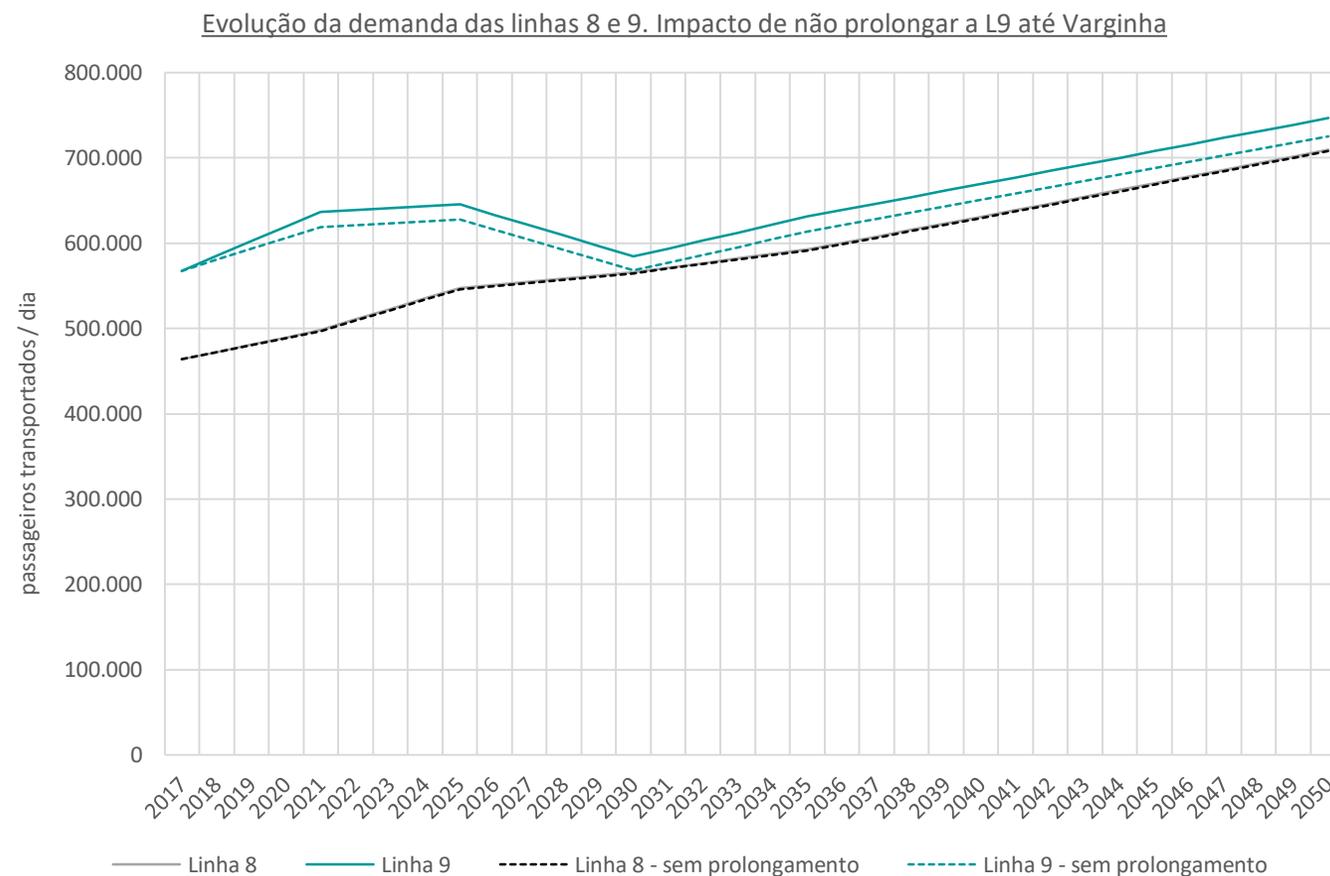
LOW DEMAND RISK

DEMAND

Scenario whereby Grantor's responsibility regarding extension works of Line 9 (to Varginha station) is not timely delivered

The extension of **Line 9** till Varginha Station includes the implementation of two new stations: Mendes-Vila Natal and Varginha.

- **These are works under Grantor's responsibility** with delivery date scheduled until August 2021 (Mendes Station - Vila Natal) and June 2023 (Varginha).
- According to the study developed by Steer, additional demand for Line 9 with the entry of the new stations is estimated: approximately 16,000 entries/day.
- **Risk of demand due to non-completion of these works is considered low, for the works which the Grantor is responsible:**
 - 2.8% decrease in forecast demand compared to the baseline scenario;
 - Decrease of 21,000 pax/day for L9 in 2050;
 - Decrease of 1.700 pax/day for L8 in 2050.



Investments



INVESTMENTS

Main Investments: Responsibilities earmarked for public and private partners

Concessionaire ~USD 582 million (FX as of 30/October – 5,77 BRL/USD)

- Acquisition of 34 new trains.
- Revamping of Lines 8 and 9 infrastructure (permanent way, energy and signaling systems).
- Investment in 36 stations including the construction of 1 new station (Ambuitá) and the revamping and modernization of the others.
- Expropriation efforts
- Works in the permanent way and aerial network for João Dias Station (Line 9), which will be received by the State through donation.
- Elimination of crossings and construction of new bridgeways and footbridges.
- Upgrade of Presidente Altino's yard and building/implementation of new facilities to segregate other lines maintenance activities for CPTM's future operations.
- Acquisition of equipment and vehicles.

Grantor ~USD 100 million (FX as of 30/October)

- Completion of Line 9 extension (4,5 km), with two new stations (Federal PAC resources):
 - Mendes-Vila Natal - expected due: 2021; and
 - Varginha - expected due: 2023
- Adaptation/Reform of the following stations:
 - Morumbi (integration with Line 17-Gold) - expected due: 2021
 - Santo Amaro (integration with Line 5 – Lilás) - expected due: 2022
 - Carapicuíba - expected due: 2026

INVESTMENTS

Main forecasted Net Investments

Values in BRL million

Pre Operational	(64)
Amount due to B3, Grantor's and IFCs reimbursement, Transitional expenditures	
Stations	(296)
Readjustment of 36 stations and construction of 1 new	
Signalling	(108)
Conclusion of system deployment and Signalling	
Permanent Track	(18)
Striker Exchange and drainage Works	
Energy Supply	(226)
Qualification for 3 minute breaks	
Telecommunications	(151)
Revitalization and user information services	
Socioenvironmental	(47)
Expropriation, environmental and social liabilities, environmental programs	
Crossings/Footbridges/Ancillary Vehicles	(183)
Elimination of transpositions, reform and reconstruction of footbridges	
Presidente Altino's Relocation	(220)
Relocation of maintenance activities to CPTM	
Functional Readjustment President Altino	(24)
Compliance with accessibility and functional suitability standards	
Rolling Stock	(1.716)
Purchase of 34 new trains	



Net CAPEX (Real Terms)

R\$ 3,05 billion

(approx. USD 582 MM)

99% in the first 6 years

The concessionaire's investment forecast was prepared by GPO-Sistran and consists in the acquisition of 34 new trains, expansion works, upgrades, reconstruction and reforms, interventions in the yards (Presidente Altino, Brás, Engenheiro São Paulo and PET), bridgeways and crossings. In addition, investments in telecommunications, signaling and energy systems, permanent track, vehicles and auxiliary equipment, and others also expected related to the socio-environmental scope.

* Note: REIDI of 9,25% applied in the first 10 years



Operational Expenditures



OPERATIONAL EXPENDITURES

Opex

The operation of Lines 8 and 9 systems will consist of:

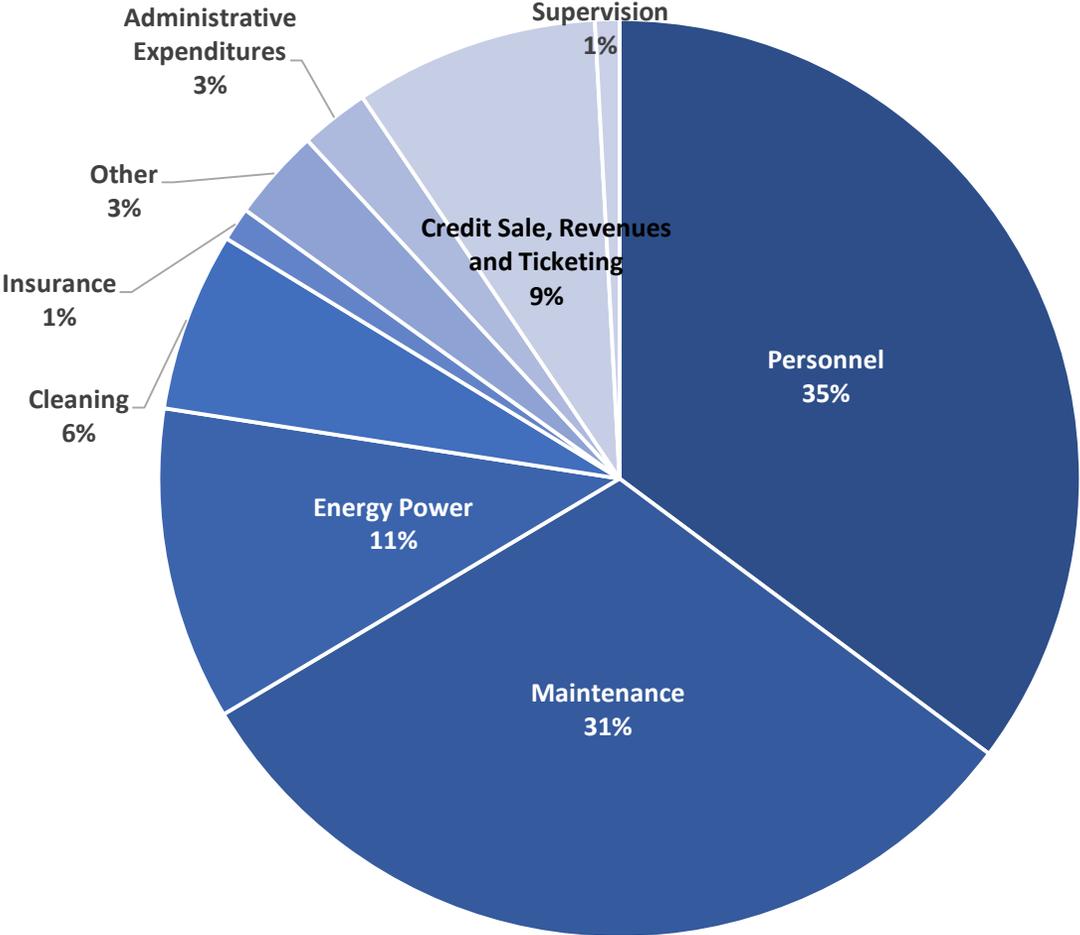
- Operational personnel (including train operators, surveillance, Operational Control Centre - CCO, etc.), maintenance and administration;
- O&M Services;
- Operations support systems (CMMS, SCADA and other tools);
- Among others.



OPEX (Real Terms)

R\$ 15,8 billion

(approx. USD 2,74 billion)



Financials

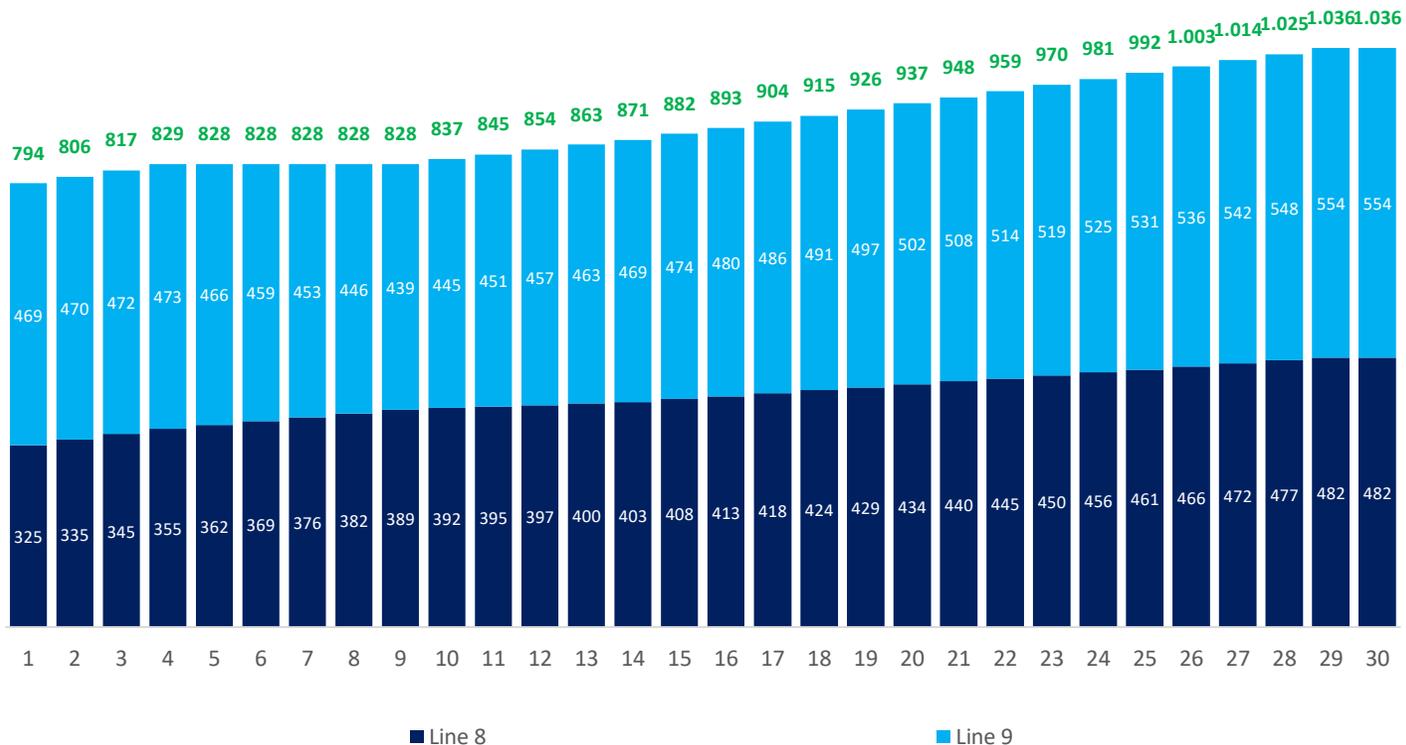


FINANCIALS

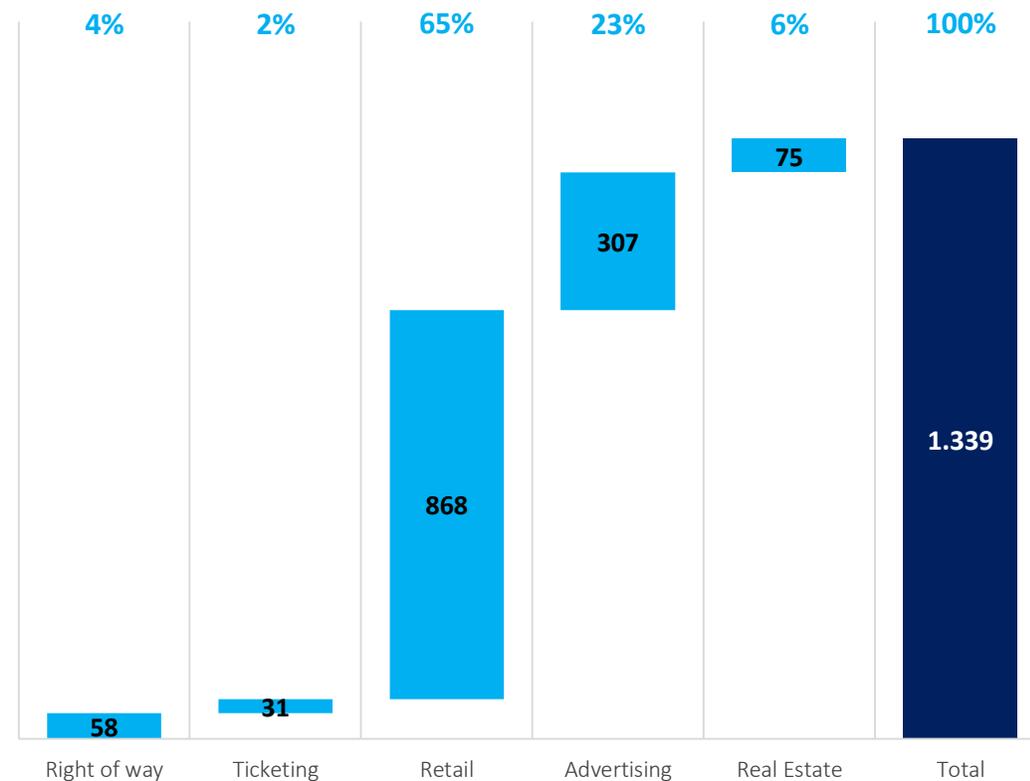
Revenues

Tariff Revenues (annual values in BRL million)

1,4% 1,4% (0,0%) (0,0%) (0,0%) (0,0%) (0,0%) 1,0% 1,0% 1,0% 1,0% 1,0% 1,2% 1,2% 1,2% 1,2% 1,2% 1,2% 1,2% 1,1% 1,1% 1,1% 1,1% 1,1% 1,1% 1,1% -



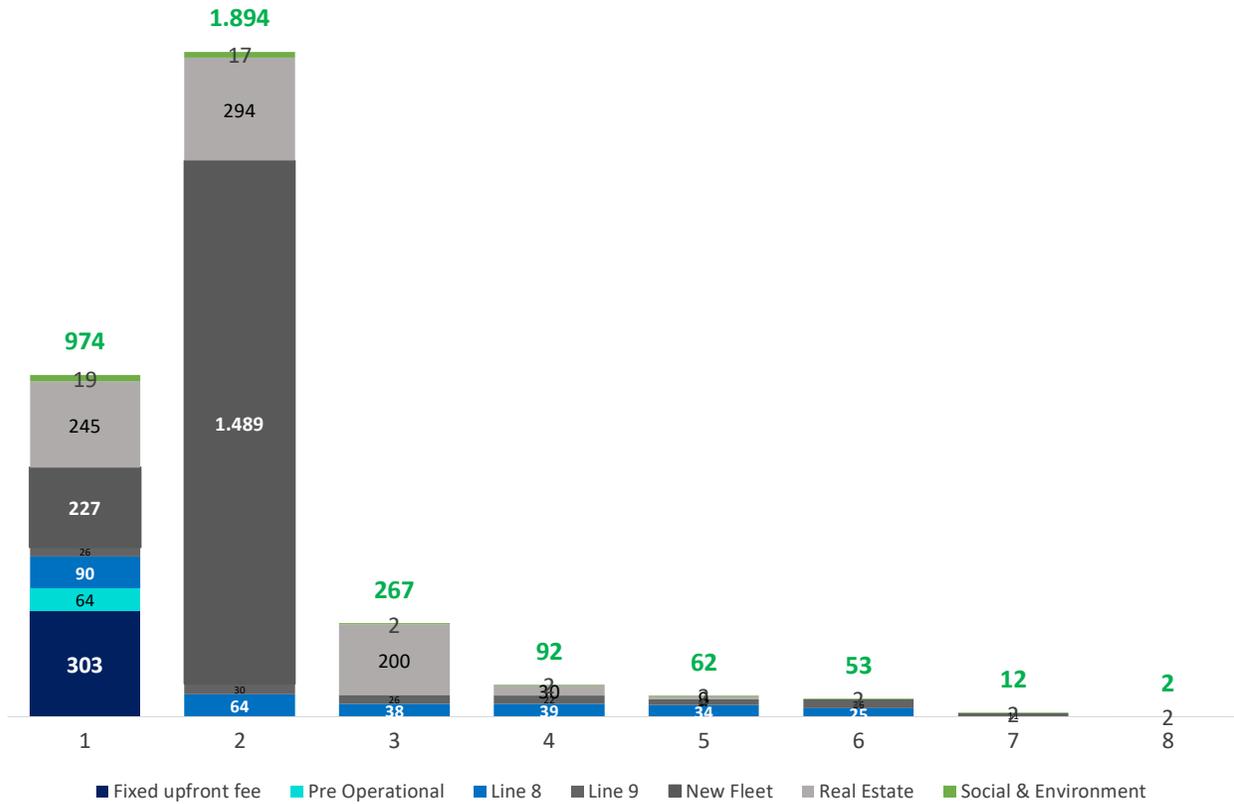
Ancillary Revenues (breakdown for 30 years - in BRL million)



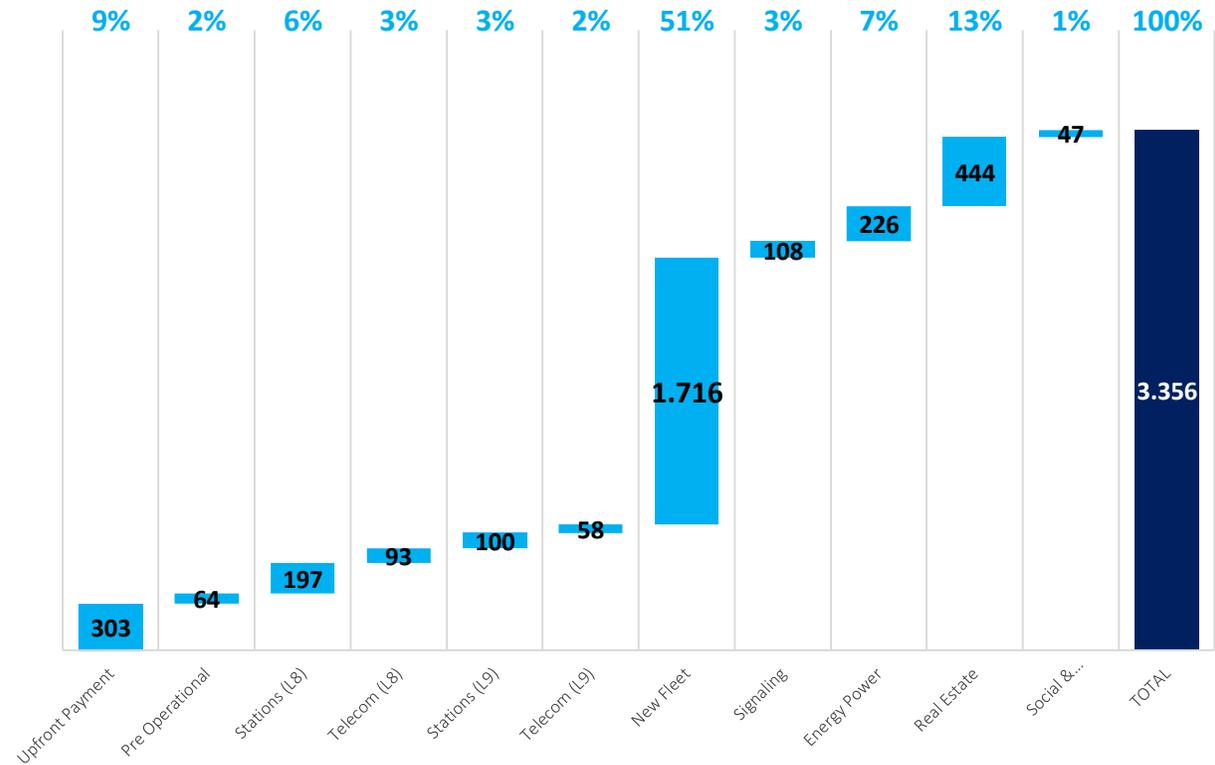
FINANCIALS

Capex

Net Capex + Upfront Concession Fees (BRL million)



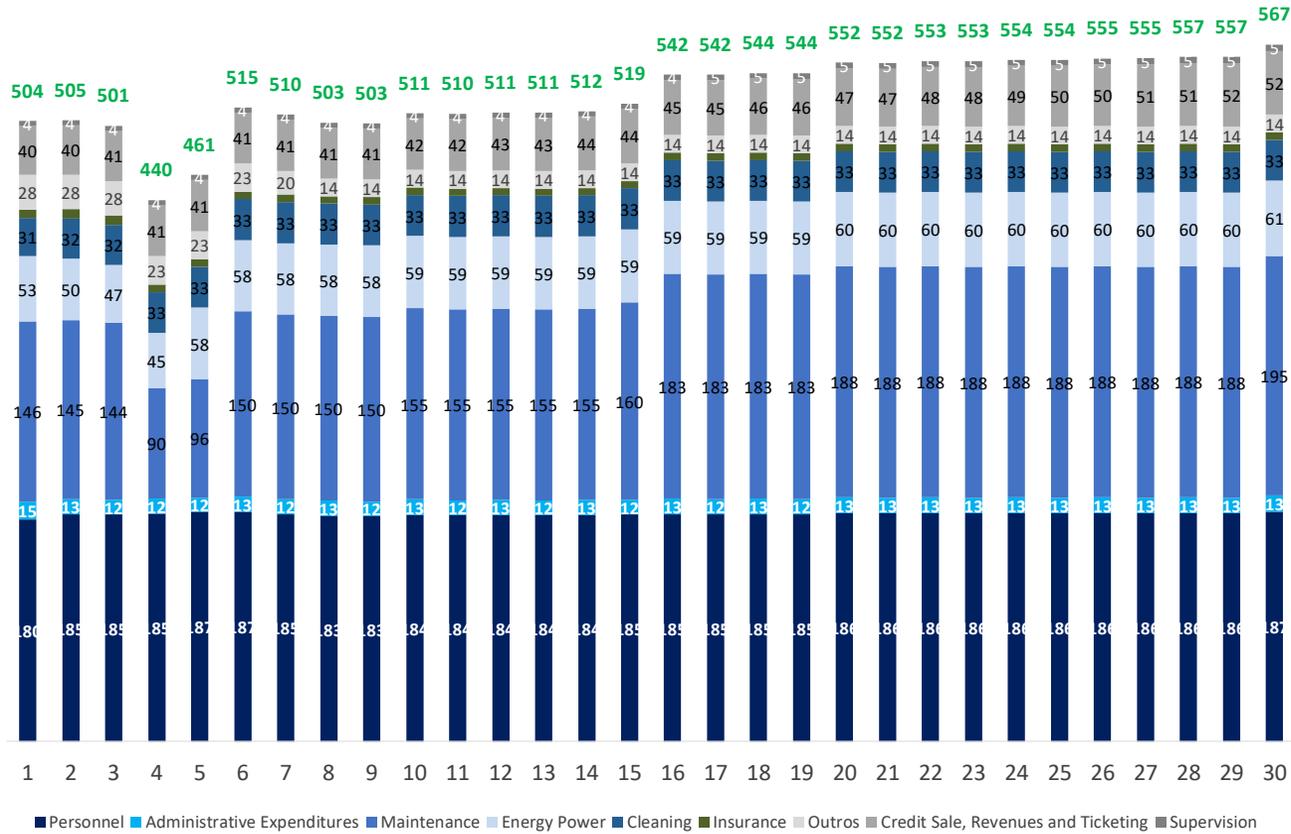
Net Capex + Upfront Concession Fees - Breakdown (BRL million)



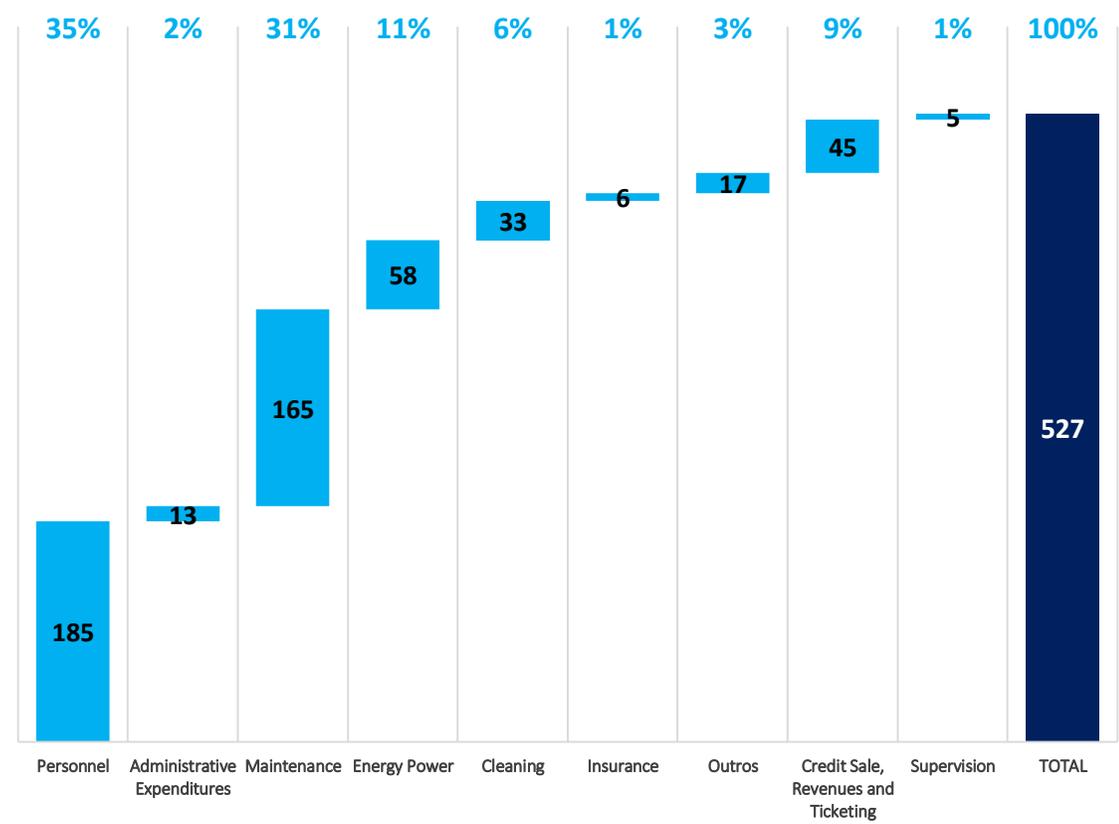
FINANCIALS

Opex

Opex (BRL million)



Opex Breakdown (BRL million)



FINANCIALS

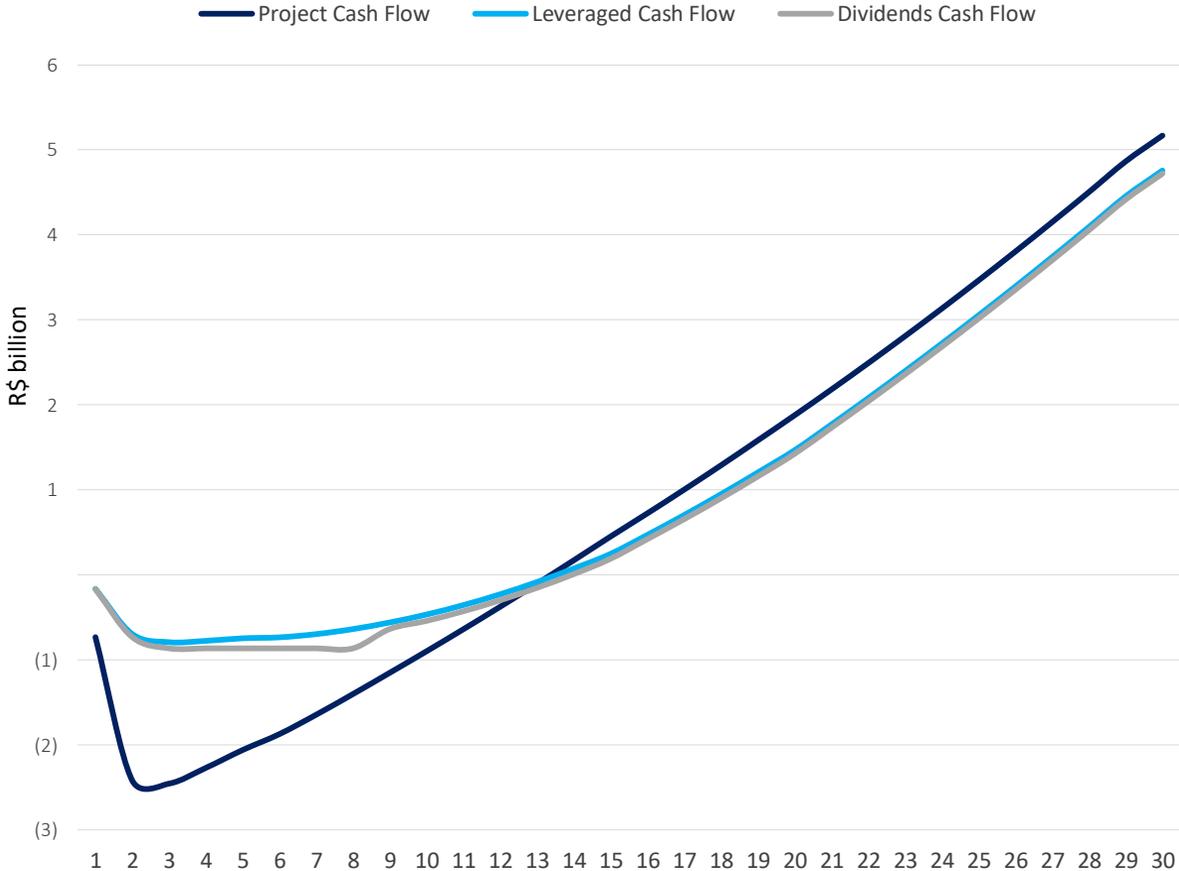
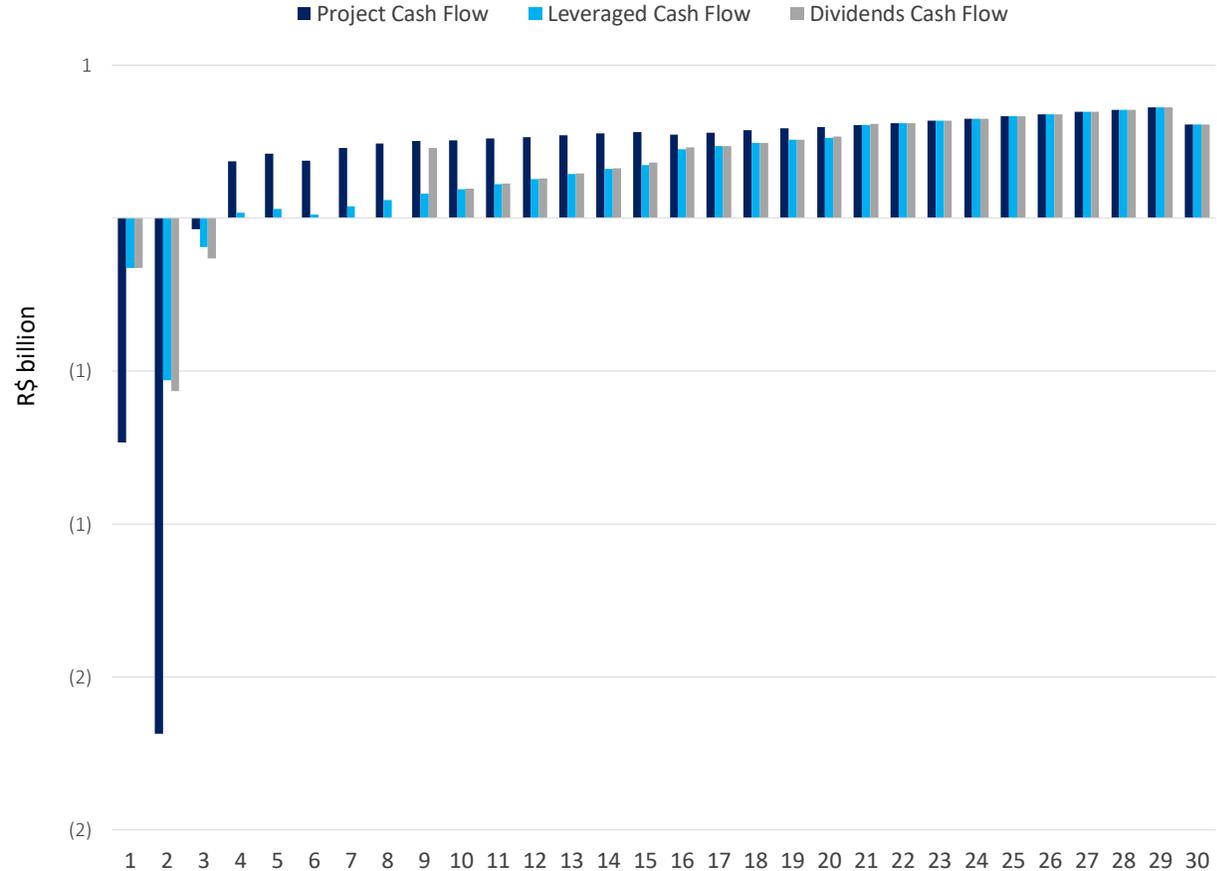
Project Cash Flow Forecast (R\$ million)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Revenues	816	829	842	856	859	862	863	863	873	883	892	901	910	919	931	942	953	964	976	987	999	1.010	1.022	1.033	1.045	1.056	1.068	1.079	1.091	1.091
Tariff Revenues	794	806	817	829	828	828	828	828	837	845	854	863	871	882	893	904	915	926	937	948	959	970	981	992	1.003	1.014	1.025	1.036	1.036	
Ancillary Revenues	22	23	25	27	31	34	35	34	44	46	47	47	48	48	49	50	50	51	51	51	52	52	52	53	53	54	54	55	55	
Deductions	(19)	(20)	(20)	(21)	(22)	(22)	(22)	(22)	(24)	(24)	(24)	(25)	(25)	(25)	(25)	(26)	(26)	(26)	(27)	(27)	(27)	(28)	(28)	(28)	(28)	(29)	(29)	(29)	(30)	(30)
Net Revenue	796	809	822	835	838	840	841	840	849	859	868	876	885	894	905	916	927	938	949	960	971	983	994	1.005	1.016	1.027	1.039	1.050	1.061	1.061
Operational Costs and Expenses	(504)	(505)	(501)	(440)	(461)	(516)	(510)	(503)	(503)	(511)	(510)	(512)	(511)	(513)	(519)	(542)	(542)	(544)	(544)	(552)	(552)	(553)	(553)	(554)	(554)	(556)	(556)	(557)	(557)	(567)
EBITDA	292	304	321	395	377	324	331	337	346	348	357	365	374	382	386	374	385	394	405	408	420	429	441	451	462	472	483	493	504	495
Working Capital	47	1	0	(3)	2	5	1	1	1	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	(49)
IR/CSLL	(99)	(98)	(92)	(115)	(108)	(90)	(91)	(93)	(96)	(97)	(100)	(102)	(105)	(107)	(109)	(104)	(108)	(111)	(114)	(115)	(118)	(121)	(125)	(128)	(132)	(135)	(138)	(141)	(145)	(142)
Operational Cash Flow	239	207	230	278	272	240	241	245	251	253	259	264	271	276	280	273	279	286	293	296	303	310	318	324	332	339	347	354	361	304
Upfront Payment	(303)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investments	(671)	(1.894)	(267)	(92)	(62)	(53)	(12)	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment Cash Flow	(974)	(1.894)	(267)	(92)	(62)	(53)	(12)	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FCFF	(735)	(1.686)	(37)	185	210	187	228	243	251	253	259	264	271	276	280	273	279	286	293	296	303	310	318	324	332	339	347	354	361	304

Negative Flow until the third year

FINANCIALS

Project Cash Flow Forecast (BRL billion)



FINANCIALS

Summary of key Economic-financial assumptions

Tax Assumptions

Tax	Tariff Revenues	Ancillary Revenues
CPRB	2%	2%
PIS	-	1,65%
COFINS	-	7,60%
ISS	-	5%

Income Tax

CSLL	9,00%
Income tax until R\$ 240 thousand	15,00%
Income tax over R\$ 240 Thousand	25,00%
Use of accumulated loss	30,00%

Project Assumptions

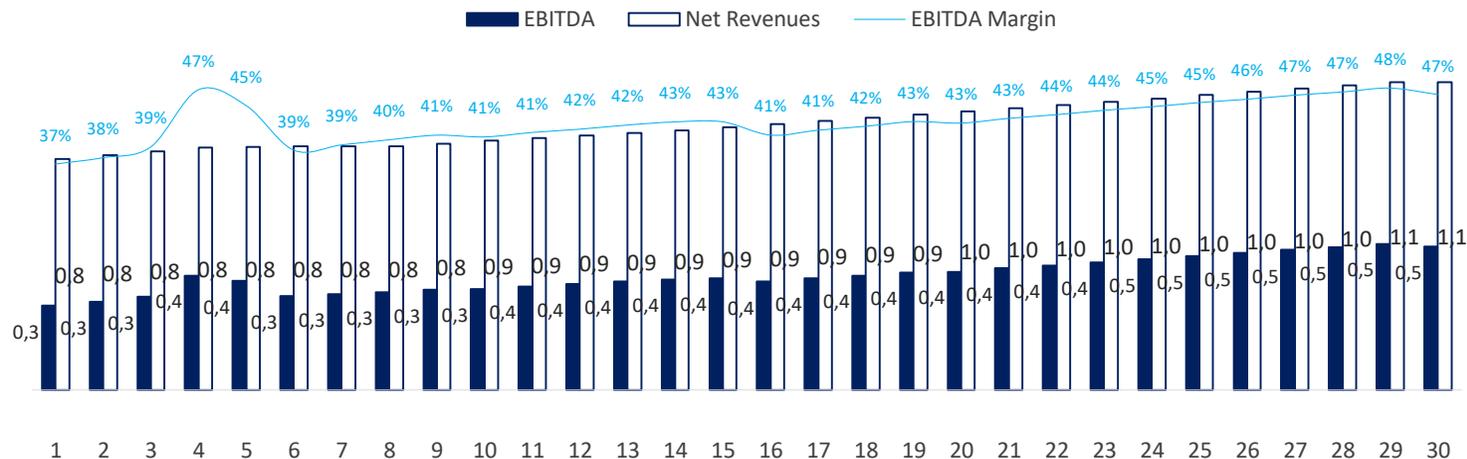
Parameters	Values
Phase	
Pre-operational	Period: 7 months
Operational	Period: 30 years
Technical tariff	R\$ 2,84 per passenger transported (excluding integrations between lines 8/9, as per draft contract))
Ancillary revenues	Average of 5.0 % of annual Tariff Revenues, approximately (basis: Steer study)
Grantor's Scope	Investment in the implementation and expansion of stations, as well as the implementation of signaling systems (paid by the Concessionaire).
Private Partner's Scope	Operation of the transport service (with maintenance), acquisition of new rolling stock, revamping works, improvement of stations and yards, telecommunications systems, signaling and energy system. Also, it considers other investments in right of way, air network, level crossings, and payment of upfront concession fees
WAAC	8,3% a.y. in real terms
Contract term	30 years
Reference Date	September, 2020

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Results and Sensitivity

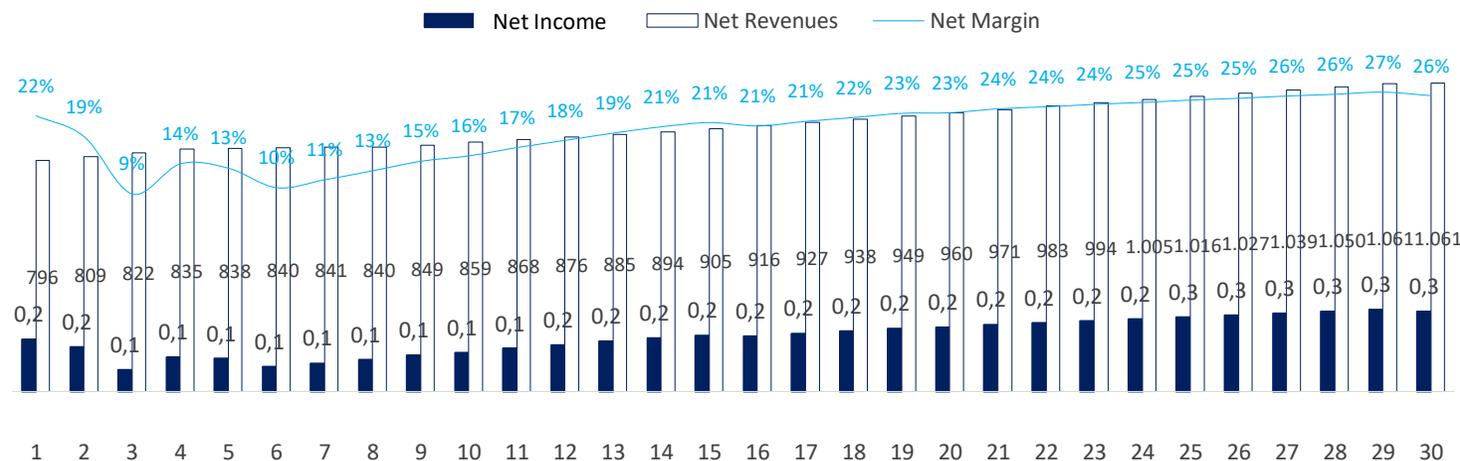
Opex vs Capex (Project IRR)

Δ Opex	Δ Capex				
	80%	90%	100%	110%	120%
80%	14,6%	12,8%	11,4%	10,2%	9,2%
90%	12,6%	11,1%	9,9%	8,8%	7,9%
100%	10,7%	9,4%	8,3%	7,4%	6,6%
110%	8,8%	7,7%	6,8%	5,9%	5,2%
120%	7,0%	6,0%	5,2%	4,5%	3,8%



Demand vs Opex (Project) IRR

Δ Demanda	Δ Capex				
	80%	90%	100%	110%	120%
80%	4,8%	4,0%	3,3%	2,7%	2,1%
90%	7,8%	6,7%	5,8%	5,1%	4,4%
100%	10,7%	9,4%	8,3%	7,4%	6,6%
110%	13,7%	12,1%	10,7%	9,6%	8,7%
120%	16,9%	14,9%	13,2%	11,9%	10,8%



Post-Covid and Public Consultation Scenarios

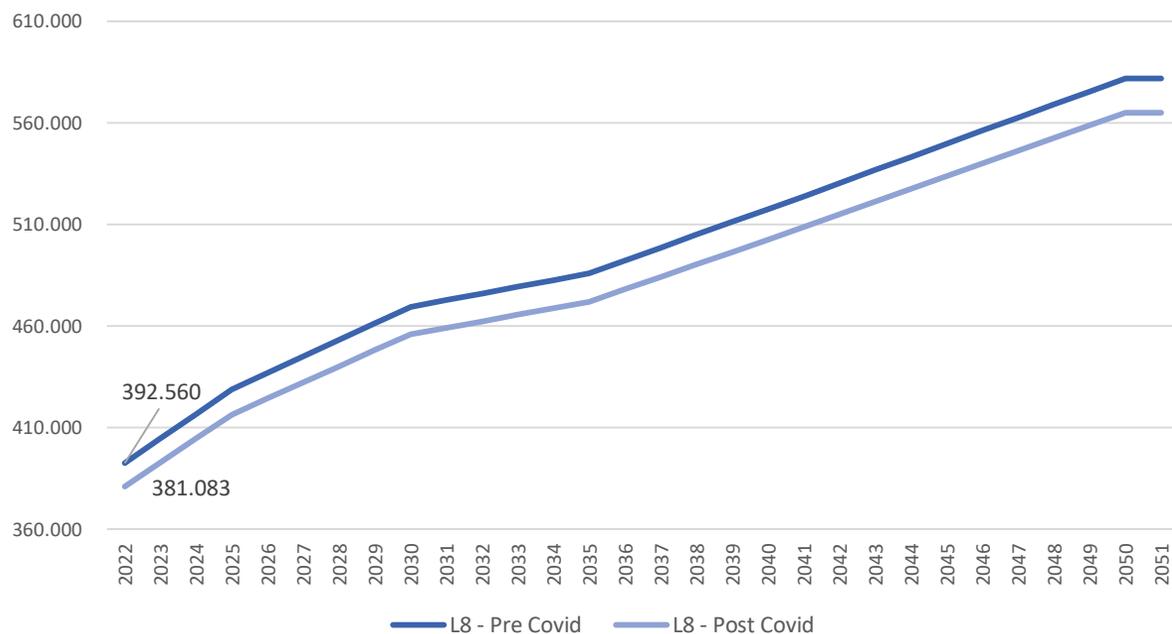


POST-COVID IMPACTS

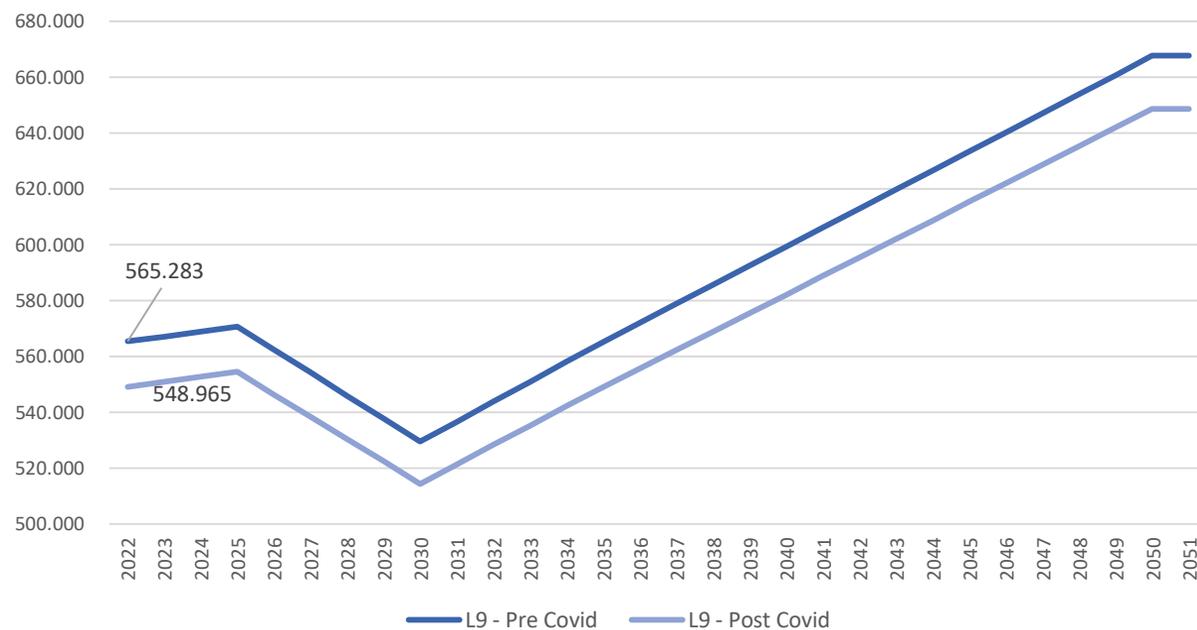
New Demand scenario post-COVID

- Because of the Covid-19 epidemic crisis and its related effects (short-term social distancing measures, temporary change in working behaviors with home-office adoption, the sharp decrease of economic activity etc), it is forecasted a **new demand scenario** resulting from GDP shocks that the new situation shall generate. No long-term behavioral/modal changes are forecasted due to lack of robust statistical evidence regarding that.
 - It assumes the same parameters (and price-elasticity) of the MCRIT'S original Demand Study (former base-case demand scenario used in Public Consultation, which resulted in the technical tariff of R\$2,30), i.e. keeping the same demand curve parameters, however, taking **GDP effects/shocks** into account.
- Brazilian's GDP growth forecasts were considered – assumption of one hit of Covid contamination:
 - Decrease of 5,0% in Forecasted GDP for 2020; 3,47% of GDP growth in 2021; and 2,55% in 2022. (Source: Brazil's Central Bank Focus Report on October/20)

Line 8 – Demand Scenarios: Pre and Post Covid



Line 9 – Demand Scenarios: Pre and Post Covid

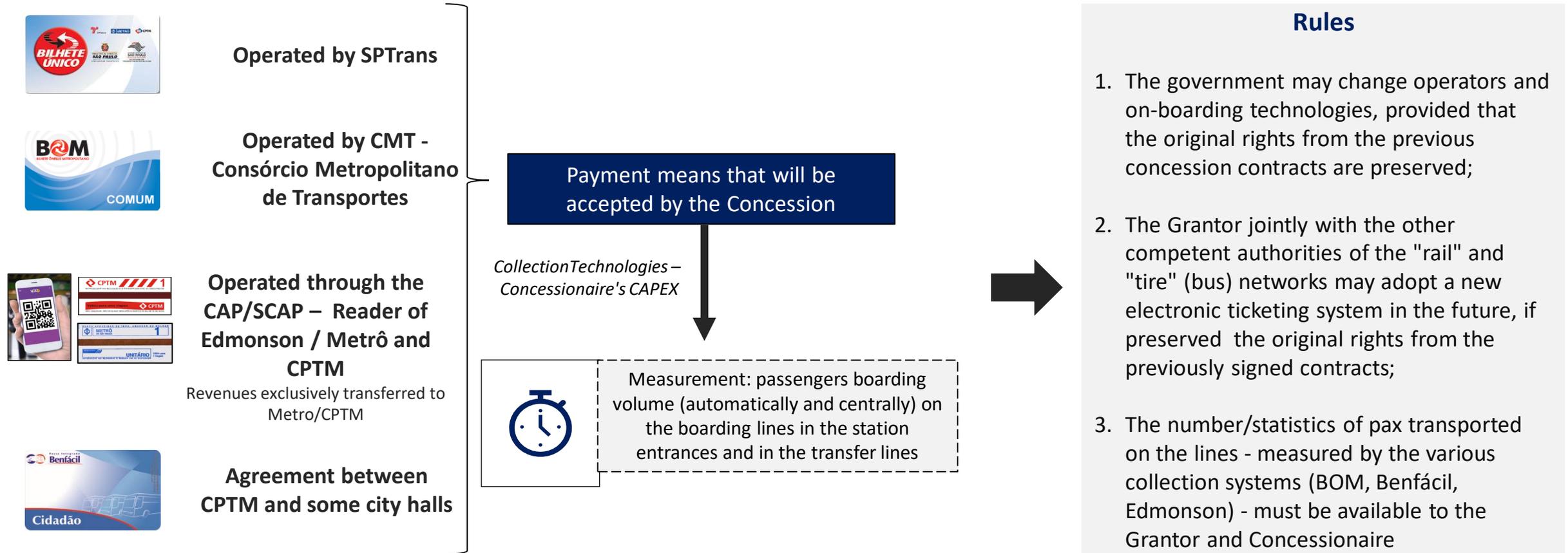


Tariff System



TARIFF SYSTEM

Payment means that will be accepted by the Lines 8 and 9' Concession



The remuneration of the Concessionaire for the Lines 8 - Diamond and 9 - Emerald refers to the TECHINCAL TARIFF per passenger transported and comes only from the *Bilhete Único* fare system

TARIFF SYSTEM

Features and Collection Systems

The operation of Lines 8 - Diamond and 9 - Emerald Concession will not change the collection and ticketing system currently employed in the metro and bus transportation systems of the São Paulo City and the Metropolitan Region of São Paulo, which is currently given by the following systems:

- “Bilhete Único” (Single Ticket) Collection System of São Paulo
 - Operated by SPTrans, manager of the São Paulo Municipal Transport System
 - ▶ Governed by the **OPERATIONAL INTEGRATION AND TARIFF COOPERATION AGREEMENT**, through the use of electronic ticketing systems with contactless smart cards
- Metropolitan Bus Ticket Collection System – BOM
 - Operated under the CMT responsibility – Consórcio Metropolitano de Transporte (Metropolitan Transport Consortium), of Intermunicipal Bus Transportation System of the Metropolitan Region of São Paulo Concessionaires - RMSP Paulo
 - ▶ governed by the **PASSENGER CARD AGREEMENT**
- Revenue and Passengers Control System – SCAP (magnetic tickets EDMONSON)
 - Operated and processed by Metrô
- System for controlling unitary trip documents (magnetic tickets EDMONSON) - for Revenue and Passengers Control – CAP
 - Operated and processed by Metrô
- Smart Card System Benfácil with contactless integrated circuit (contactless Smart Card)
 - Operated by the entity BB Transporte e Turismo Ltda.
 - ▶ According to the **Integration Agreement** signed between CPTM and the Municipalities of Itapevi, Barueri and Jandira, specifically in the stations (Itapevi, Barueri, Jardim Silveira and Jandira) of Line 8 - Diamond.

TARIFF SYSTEM

Governance of the payment means – Oversight/Supervisory Committees

The Governance for supervision and monitoring for each system of collection and ticketing is performed as follows:

Collection System of “Bilhete Único” (Single Ticket) - SPTrans INTEGRATION MANAGEMENT COMMITTEE



Secretaria Municipal de Mobilidade e Transportes da Cidade de São Paulo – SMT (Municipal Department of Mobility and Transport of São Paulo), Secretaria de Estado dos Transportes Metropolitanos – STM (State Department for Metropolitan Transport), São Paulo Transporte – SPTrans, Companhia do Metropolitano de São Paulo – Metrô, Companhia Paulista de Trens Metropolitanos – CPTM and each one of the Concessionaires of Line 4 – Yellow, Line 6 – Orange, Line 18 – Bronze and Line 5 – Lilac and 17 –Gold and i other concessionaires of the METRO-RAILWAY SYSTEM will participate;

Ticketing System of BOM MONITORING COMMITTEE



The composition and attributions are regulated by the AGREEMENT FOR THE USE OF THE PASSING CARD and in which Metro, CPTM, CMT and EMTU/SP participate.

Electronic Ticket System Benfácil CPTM



Currently it is accepted at Itapevi, Barueri, Jardim Silveira and Jandira stations from Line 8 – Diamond, which are located in Itapevi, Barueri and Jandira for tariff integration with the municipal bus transportation of these City Halls

Magnetic ticket systems EDMONSON CPTM (CAP) e Metrô (SCAP)



TARIFF SYSTEM

Governance of the Collection System



EDMONSON System (CAP e SCAP)

- Revenues exclusively transferred to Metrô/CPTM.

Bilhete Único – BU (Single Ticket) System



SPTrans – Semi-public Corporation – supervises municipal Public Transportation – which validates and approves BU smartless cards

Benfácil System

- verification performed by CPTM and the company that operates the Benfácil system
- periods of up to ten days, with settlement of payments.

Bilhete do Ônibus Metropolitano – BOM System

- prearranged percentages
- distributed on a daily basis

Account Monitoring Committee

Participants: SPTrans, Metrô, CPTM, private transport companies of the State of São Paulo

- Analyse monthly statements
- Analyse quarterly analytical reports
- Present suggestions for the internal statute improvement



Agreement n. 2005/023
Operational tariff integration
Establishes rules for proportional division of the revenue collected and the costing

Electronic credit sales
Net commission deposit
Channels of sale/charge

Multi-account - Caixa Econômica Federal trustee

Apportioned ticketing costs:

- Recharge;
- Card handling (initialization, recharge, etc.);
- User and accredited service stations,
- Personnel expenses,
- Feature development,
- Data Center;
- Fraud Prevention; etc.

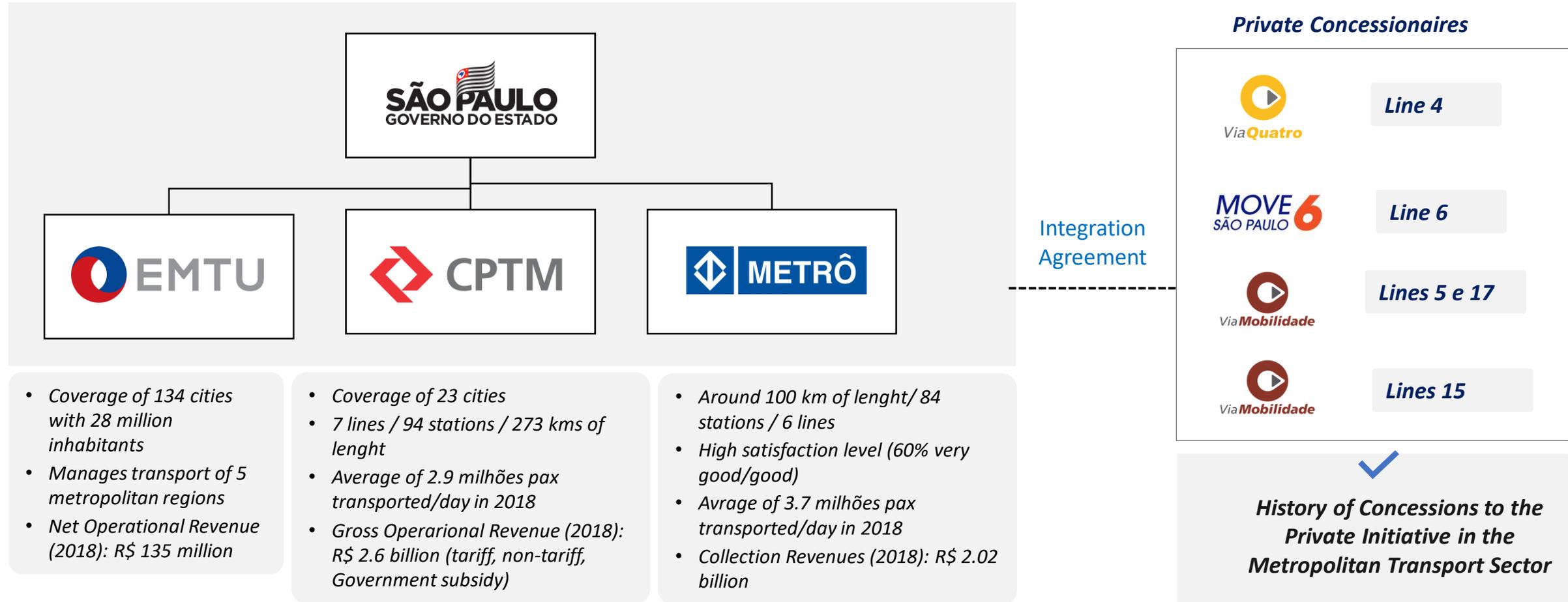
Cost assessment rule: by the usage revenue or according to the quantity of transported passengers

- Daily calculation of the sharing (based on weekly use of each modal tire/rail, in the previous month), but payment can be made up to D+0 on specified account
- %s based on the use of electronic credits by each entity of the agreement
- Definition by the Agreement Management Committee

Order of Receipt		
1		Line 4
2		Line 6
3		Lines 5 e 17
4		Line 15
5		Lines 8 e 9
6		Metro SP
7		CPTM

TARIFF SYSTEM

Transport operators' network under the São Paulo State management

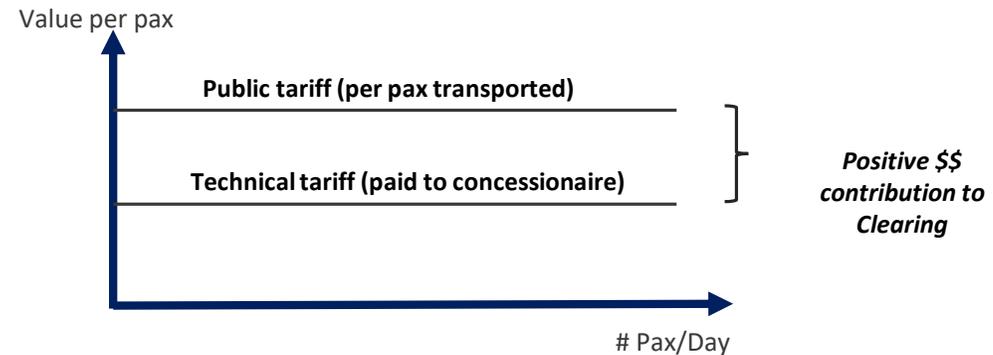


TARIFF SYSTEM

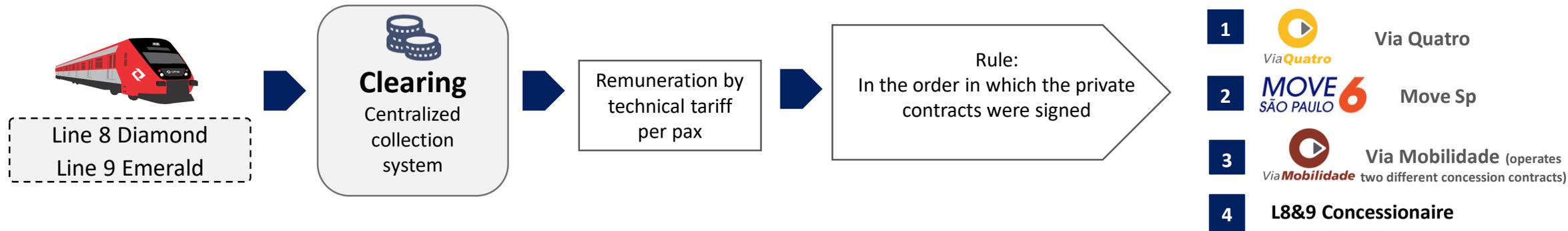
The entry of a new private concessionaire (Lines 8/9) will not entail liquidity risks to the Clearing House System

Outlining the concept: Public tariff vs. Technical tariff

- Public tariff will differ from the technical tariff paid to the Concessionaire, per pax transported
- The surplus of the technical tariff contributes to feed the clearing system



The concession of Lines 8 and 9 of CPTM will generate priority of payment to this upcoming private



Automatic Economic-financial Rebalancing mechanisms

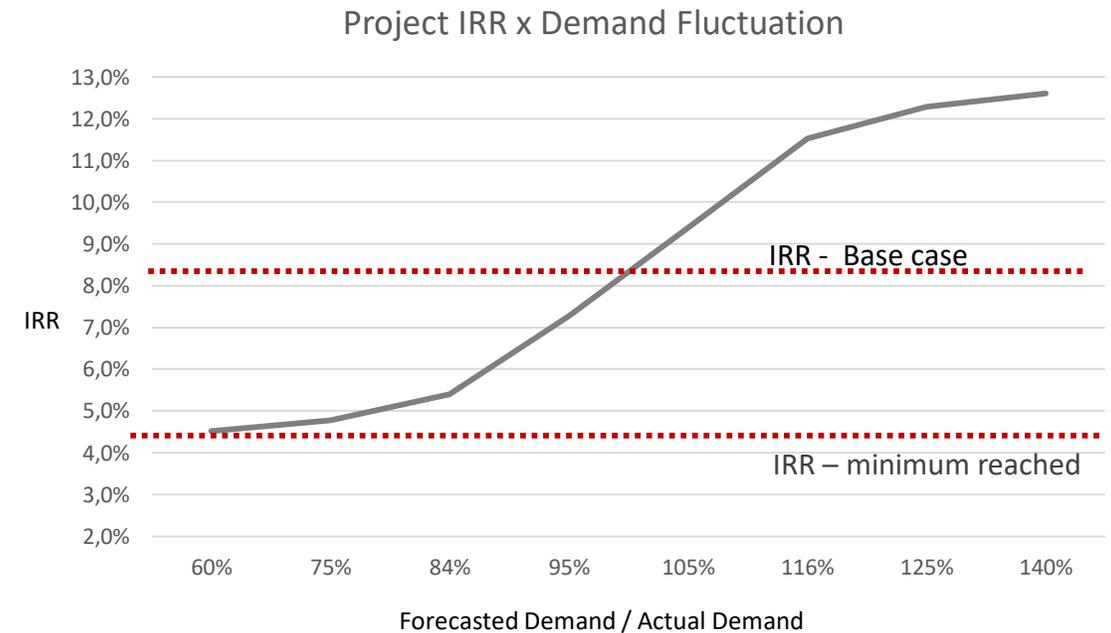


AUTOMATIC REBALANCING MECHANISMS

Demand Sharing Mechanism (Bands)

The risk of non-fulfillment of the FORECASTED DEMAND will be shared between the GRANTOR and the CONCESSIONAIRE pursuant to Section 35.3 of the CONTRACT.

Actual Demand/ Forecasted Demand	Compensation*
Range between 125% e 140%	90 %
Range between 115% e 125%	60%
Range between 85% e 115%	0
Range between 75% e 85%	60%
Range between 60% e 75%	90%



In case that the ACTUAL DEMAND accounted in the calendar quarter is below 60% or above 140% of the FORECASTED DEMAND for the period, it will trigger an economic-financial rebalance by the marginal cash flow methodology, as per the CONTRACT.

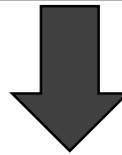
***Compensation** from or to the Grantor related to this percentage difference between the actual demand and the forecasted one, which will be partly offset (by 90% or 60%, as shown in the table) according to the calculation formula (see Appendix VIII).

AUTOMATIC REBALANCING MECHANISMS

IPTU – Real State Tax



In case there is an effective disbursement or forcefully deposit due to court decision of amounts for payment of (currently non-existent) IPTU (real state tax), over a stretch or all of the concession area, it will give rise to **economic-financial rebalancing**.



Payment will be made through an adjustment to the Technical Tariff until the compensation for the collection of the IPTU due amount has been fully met.

- The compensation in the amount Miptu, according to the collection of IPTU or deposit of the amount questioned in court, will be calculated in 20 (twenty) daily and equal tranches by applying the following formula:

$$\text{IPTUacum } t = \sum \text{IPTU } i \text{ (até } i-1)$$

$$\text{Ciptuacu } t = \text{IPTUacum } t / (1 - \text{custos sobre receitas})$$

$$\text{Miptuac } t = \text{Ciptu } t / ((t-i)/20)$$

Miptuac = Daily payment amount for Concessionaire, referring to mitigation of IPTU incidence
IPTUacum = Sum of the monthly IPTU amounts due, before actual collection
IPTU i = Nominal monthly amount of tax posted in the concession month i (but not yet paid)
Ciptuacu t = Gross Compensation for the accumulated incidence of IPTU in the month of concession t
i = IPTU incidence month
t = month of effective IPTU collection, from a judicial order or administrative act that has required its collection.
Costs over revenues = percentage value, corresponding to the sum of the Social Security Contribution rate over Gross Revenues (CPRB) and other costs (supervision percentage, cost of insurance and Sale of Credits and Collection and Ticketing over tariff revenue)

- Clause 35.4.2.** *The concessionaire must demonstrate that it has taken all steps within its power to have the IPTU declared non-incidence or to suspend the demandability for IPTU payment on the CONCESSION AREAS, because it is an area involved in the provision of public service.*
- Clause 35.4.4.** *In case of reconsideration, suspension or annulment of an act or decision that determined the payment of IPTU by a higher court, the economic-financial rebalancing of the CONCESSIONAIRE will be recomposed to the GRANTOR in an identical amount as the CONCESSIONAIRE has recovered. It has to observe the monetary restatement of the amounts involved and the correction of these by the real gross interest rate on the sale of National Treasury Notes - Series B (NTN-B), ex-ante the deduction of Income Tax, with maturity compatible to the date of the referred payment, published by the National Treasury Secretariat, considering the average of available quotations in the 12 months preceding the date of payment.*

AUTOMATIC REBALANCING MECHANISMS

Delay of the infrastructure being implemented by the Grantor and transferred to Concessionaire's responsibility



Upon delays, the Grantor will have the option to transfer to the Concessionaire the execution of works that are part of the infrastructure being implemented under its responsibility (for example, some stations under public works, especially in Line 9), by means of economic-financial rebalancing that brings the net present value of the projected Marginal Cash Flow (due to this work) to zero.

It considers, at the same base date:

- i. Resulting marginal expenditures
- ii. Resulting marginal cash flow from the economic-financial rebalancing



If there is a delay in the execution of the infrastructure under Government's responsibility that exceeds the period of 6 (six) months compared to the originally planned, the Concessionaire may:



1. Abide with the continuity of the works execution by CPTM and therefore assumes the risk of potential economic-financial impacts due to this delay , or



2. To request that the responsibility for the works be transferred to itself (Concessionaire), being up to the Grantor to decide within 30 (thirty) days, if:

a) indeed transfers the works to the concessionaire; or

b) remains with the works under CPTM's execution, assuming from this date on the risk for any economic and financial impacts that may result from the delay of the infrastructure implementation.

Main aspects of the Tender Notice and Concession Agreement



MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Auction Criteria

- Highest fixed Upfront Concession Fees to be paid at contract signing date

Bidding Order

- Reversed Phase (first price, then qualification documents)

Conditions for participation

- Consortiums are allowed without restriction on the number of participants
- Constituted by Brazilian or foreign companies (alone or in consortium)

Qualification conditions

- Legal conditions: Articles of incorporation, proof of directors' election, governmental authorization decree , consortium establishment commitment;
- Technical qualification: certificates of operation in urban or metropolitan public transport with metro, monorail, LRV or rail technology, for at least 12 consecutive months and with more than 300.000 passengers' entries per working day;
- Economic-financial qualification: Balance Sheet with Minimum Shareholder's Equity

Conditions for contract signature

- SPV constitution
- Payment for the use of PMI studies
- Payment for studies delivered by IFC
- Payment to B3 for auction services
- Upfront Fees Payment

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Term

- 210 days (7 months) of pre-operational phase + 30 years of operational phase

Pre-Operational Phase (7 months)

Unpaid transition: CPTM, operates together (new incumbent+ CPTM) and operates alone (new incumbent only)

Operational Phase (30 years)

Full operation with tariff revenue

Remuneration

- Technical tariff per passenger transported by the Concessionaire, excluding integrations between Lines 8 and 9 (including those free of charge per the State tariff policy)
- Subject to the measurement/deductions of basket of key performance indicators (IQS/IQM)
- Adjustment of the technical tariff in case of economic-financial rebalancing triggers

Contractual specificities

- Automatic economic-financial rebalancing rules: IPTU tax creation, transfer of Grantor's previous works in certain interventions
- Demand Risk sharing
- Expropriation related to projects under the Concessionaire's responsibility

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Permission for qualified operator's subcontracting

- Liability does not have to be jointly owned with the rail operator
- Operator may be replaced within minimum term defined in Contract

Ancillary Revenues

- 20% sharing when exceeding the defined value (5% of tariff revenues)

“Independent auditor” and “Independent verifier” hiring

- Independent auditor will act as technical and technological agent in the concession to support the Grantor’s monitoring and inspection. It is in charge of promoting the certifications of investments, as well as infrastructure works under implementation.
- Independent verifier will act as evaluator of the achievement of Contract Performance Indicators, promoting the measurement of performance in the defined periodicity.
- Remuneration of these entities will be paid by the Concessionaire independently (not being related to any agreement/clearance on the reports by the Concessionaire). Selection of these entities will be based on 3 names originally presented by the Concessionaire, with Grantor’s final definition.

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Detailed conditions precedent to signing

- **Prior to signing, the successful bidder must:**
 - Provide minimum equity amounts per the RFP requirements;
 - Delivery of the Performance Bond, minimum amounts

- **If the Successful bidder fails to comply with the contract signing date or refuses to sign it within the stipulated period: execution of the bid bond in addition to other legal consequences**
 - In this case, the Grantor may call the remaining Bidders (in the ranking order) - verifying the fulfillment of the qualification requirements - to sign the Contract in the same terms and under the same conditions of the winning bid; or it may also revoke the Bid.

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Tariff adjustment

Technical tariff adjustment:

- Parametric formulas:

- I. Until the sixth year from the signature date

$$\mathbf{Tr} = \mathbf{Tv} \times [(20\% \times \Delta \mathbf{INCC}) + (50\% \times \Delta \mathbf{IPCA}) + (30\% \times \Delta \mathbf{IGPM})]$$

- II. From the seventh year following the signature date

$$\mathbf{Tr} = \mathbf{Tv} \times \Delta \mathbf{IPCA}$$

- iii. If it has proof of financing, it may trigger

$$\mathbf{Tr} = \mathbf{Tv} \times [(80\% \times \Delta \mathbf{IPCA}) + (20\% \times \Delta \mathbf{IGP-M})]$$

In Which:

Tr = Readjusted compensation tariff;

Tv = Compensation tariff on reference date of [-];

INCC = Civil Building National Index for the previous month of the readjustment application;

INCCo = Civil Building National Index for the month preceding the reference date [-];

IPCA = Consumer Price Index for the previous month of the readjustment application;

IPCAo = Consumer Price Index for the month preceding the reference date [-];

IGPM: Market Prices General Index for the previous month of the readjustment application;

IGPMo: Market Prices General Index for the month preceding the reference date [-].

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Rolling Stock regulation

Guidelines for Rolling Stock Acquisition and Trains Refurbishment

- The concessionaire will have to acquire a total new fleet of 34 new trains and also refurbish 2 old trains;
- All the 8000 series trains currently in circulation should be replaced by the 7000, 7500 and 8500 series trains owned by CPTM during the transition period of up to 150 days from the contract signature.
- After series replacement, the fleet of lines 8 and 9 will be composed as follows:
 1. 40 trains of 7000 series – 2 of these are inoperative/unfunctional.
 2. 8 trains of 7500 series
 3. 7 trains of 8500 series
 4. 6 trains of 5400 series (of four cars)



After the maximum period of **34 months** from the signing of the concession agreement, the concessionaire must have returned the following fleet to the granting authority:
15 Series 8500 and 15 Series 7000 trains

TOTAL: 53 operational trains of eight cars, 6 operational trains of four cars e 2 inoperative trains that the Concessionaire must fully refurbish , including spare parts.

Returning chronogram of 34 trains "lent" to Concessionaire (originally owned by CPTM)

PERIOD FROM THE SIGNING OF THE CONCESSION CONTRACT (º mês)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
DELIVERIES OF THE 34 NEW TRAINS	1	1	2	3	3	3	3	3	3	3	3	3	3				
OPERATIONAL RELEASE						2	2	3	3	3	3	3	3	3	3	3	3

* THE FIRST 15 TRAINS TO BE RETURNED TO CPTM WILL BE THE 8500 SERIES, FOLLOWED BY THE 7000 SERIES TRAINS WITH THE LOWEST MILEAGE TRAVELLED

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Termination Cases

Type	Description
End of Contractual term	As general rule, the Concessionaire will not be entitled to any compensation. Investments were amortized during the Concession term.
Termination by Grantor for public interest reasons	Takeover of the Concession by duly justified public interest, which requires prior authorization by specific law and payment of compensation covering non-amortized investments, breakage costs and loss of profits amount in advance to the termination/takeover.
Termination due to Concessionaire's fault	Termination by the Grantor due to serious breach of the Concession Agreement by the Concessionaire. Concessionaire must be indemnified by non-amortized investments only after termination occurs. Losses caused to the Grantor, outstanding contractual fines, insurance amounts received by the Concessionaire per insurance policies related to the fault and other revenues collected by the Concessionaire after termination may be offset against the indemnification amount.
Amicable Termination	The Concessionaire may propose an amicable termination of the agreement in the events of (i) acts of God or force majeure; (ii) Concessionaire's fail to raise financing required to perform the Agreement within the first 24 months from signing date (and cannot perform the Agreement relying solely on its own funds); The event case of (i), the rules of termination by Grantor for public interest reasons shall apply. The event case of (ii), rules of termination due to Concessionaire's fault shall apply.

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Termination Cases – cont.

Type	Description
Termination due to Grantor`s default	Outside the hypothesis of amicable termination, in the event of Grantor`s default, the Concessionaire must resort to arbitration to be able to terminate the Agreement. If Concessionaire proves Government's default and is awarded termination, the indemnification rules of termination by Grantor for public interest reasons shall apply.
Anullment	The contract may be annulled in case it is found to be originated by any illegal act/transaction. In the event that the Concessionaire is proven to be involved in the illegal act/transaction, the Agreement will be terminated and the indemnification rules of termination due to Concessionaire`s default shall apply. In the event that the Concessionaire is not involved in the illegal act/transaction, the parties must negotiate in good faith to keep the Agreement in force.

MAIN ASPECTS OF TENDER NOTICE AND CONCESSION AGREEMENT

Termination Cases: Methods

- As already applied in Toll Roads, the compensation calculation methodology already pre-defined in the Lines 8&9 Concession contract will be applied in order to **expressly indicate the methodology for calculating the compensation amounts, to reduce the level of uncertainty and provide fit with best international practices.**
- In all cases the amount to be indemnified is linked to the investment amounts made to constitute the reversible assets and it is calculated according to the following methodology:
 - *The amortization method will be by straight line;*
 - *The following will not be accounted:*
 - *amounts of interest and other financial expenses;*
 - *amounts for pre-operational expenditures;*
 - *construction margin values;*
 - *potential acquisition goodwill;*
 - *amounts as supervisory burden;*
 - *The amount accounted will have as maximum limit the amount which is available in the Feasibility Study or amounts that have been approved by the Grantor;*
 - *The amounts of the Fixed upfront Concession Fees will also be considered in case it has been effectively disbursed;*
 - *The following will be deducted from the indemnity owed to the Concessionaire: Fines applied in the scope of the contract execution; outstanding balance to the Lead Financier related to reversible assets investments; and amounts of material damages caused to the Grantor.*

○ Loss of Profits Formula:

$$LC = A \times [(1 + NTNB')^n - 1]$$

In which:

LC = Loss of profits;

A = Investments in Unamortized Reverse Assets

NTNB' = Real Gross Interest Rate on Sale of National Treasury Notes – Series B, ex-ante deduction of Income Tax with maturity schedule compatible with the end of the Contract

N = remaining period between the date of indemnity payment and the advent of the contract term

Type	Description
Grantor's Fault	<ul style="list-style-type: none"> ▪ Amount which covers all fines, terminations and indemnities to third parties ▪ Loss of profits according to the contract formula ▪ Amounts paid prior to the decision of takeover of the concession
Sponsor's Fault	<ul style="list-style-type: none"> ▪ Amounts relating to fines, outstanding balance from the principal of the Senior Lender, amount regarding material damages caused to the Grantor ▪ It will be discounted: Material damages caused to the Grantor, unpaid fines, amounts received by the Concessionaire as insurance related to early termination due to Sponsor's fault and other revenues gained by the Concessionaire after the issuance of the decision
Amicable Termination (*)	<ul style="list-style-type: none"> ▪ Same formula from the "Grantor's Fault" to the i. contract case. ▪ Same formula from the "Sponsor's Fault" to the ii contract case.
Anullment	<ul style="list-style-type: none"> ▪ "Grantor's Fault" formula. It discounts the fines and any amounts due by the Concessionaire, in addition to amounts received as insurance coverage

(*) – There are 2 possible cases: i) unforeseeable circumstances such as materialisation of uninsurable force majeure; ii) in the 24th month after the contract signature: verification of the unfeasibility of contracting long-term financing;

Risk Matrix



RISK MATRIX

Risk Allocation

Main Risks	Description	Private	Public
Engineering Project Failures	failures, errors or omissions in basic or executive projects	X	
Terms of Works	delay in meeting the deadlines for the investment plan which is not attributable solely to the public authorities	X	
Cost estimates errors	errors in the estimates made by the Concessionaire	X	
Failure to provide services	failures to provide services, including those of subcontractors	X	
Authorizations, permits and permissions	licensing of works and operation under the Concessionaire's responsibility	X	
Judicial decisions that stop the works, due to a fact attributable to the Concessionaire	judicial decisions originated from commissive or omissive acts of the Concessionaire	X	
Interference handling	the burden, costs and deadlines arising from the need to manage interference	X	
Financial Standing	own resources or to obtain resources to meet obligations	X	

RISK MATRIX

Risk Allocation

Main Risks	Description	Private	Public
Proposal failures	errors, omissions or failures in forecasts made by the Concessionaire	x	
Change in macroeconomic scenario	changes in interest rates, exchange rates and capital costs	x	
Losses to third parties by the Concessionaire	losses to employees, suppliers, subcontractors etc., caused by the Concessionaire	x	
Environmental License	costs incurred with compensations/issues described in the Environmental Guidelines Book	x	
Geological issues in the Concession areas	costs associated with geological issues that impacts the Concession areas		x
Tax planning	costs associated with discrepancies between the tax assumptions adopted in the Concessionaire's business plan and the actual taxation levied	x	
Civil, Administrative, Criminal and Environmental Responsibility	costs related to potential damage to third parties or to the environment, as well as administrative and criminal penalties	x	

RISK MATRIX

Risk Allocation

Main risks	Description	Private	Public
Change in tariff policy	changes in the collection flow that prevent the due payment of the payable amounts to the Concessionaire by the collection account		X
Delays in the Concessionaires' obligations caused by the delay or omission of the Grantor	delays by the Concessionaire due to delay or omission of items under the contractual responsibility of the Grantor		X
Delay in the completion of the infrastructure under implementation that exceeds 6 months from the planned	delays on deadlines in case that no decision has been taken to transfer the works for which the Grantor is responsible		X
Environmental liabilities whose triggering event is prior to the assumption of the Concession	costs related to environmental liabilities or irregularities prior to the Concessionaire's full implementation of the Concession and unknown at the time of bidding		X
Tax changes, except income tax	termination or creation of taxes that have an impact on revenues and expenses, with the exception of income taxes		X
Unilateral modifications	new obligations imposed unilaterally by the Grantor		X

RISK MATRIX

Risk Allocation

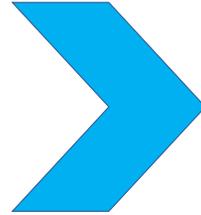
Main Risks	Description	Private	Public
Hidden defects in transferred liabilities after definitive acceptance	infrastructure defects under implementation that have not been reported and that could not have been observed at the time of the receipt term		x
Failure to obtain REIDI (tax benefit) due to factors unrelated to the performance of the Concessionaire	not obtaining REIDI in case the Concessionaire has made its best efforts to obtain it		x
IPTU (Real State tax) generator fact changes	IPTU collection notice on areas of the concession		x

BIDDING PROCESS

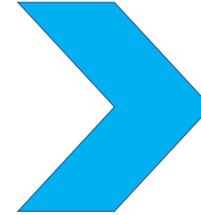


BIDDING PROCESS

PRICE PROPOSAL



GUARANTEE PROPOSAL



QUALIFICATION DOCUMENTS

Envelope B
Price Proposal

Envelope A
Bid Bond

Envelope C
Qualification Documents

- Fixed upfront Concession Fees to be paid by the Bidder at least BRL 303 MM
 - It will be declared as the best Price Proposal the one with the highest amount for the Fixed upfront Concession fees.
- It must also be attached: declaration of the bidder that it will afford all expenses related to the project (general financial commitment)
- BRL 33,560 million, with a validity period of 180 days, which may be extended by agreement between the parties
- It can be offered by the Consortium (a single legal entity or divided between consortium members)
- Documents of legal qualification, fiscal and labor regularity, economic-financial qualification and technical qualification

Schedule



SCHEDULE

Activities Planning

