Deloitte.

Brazil infrastructure market study 2022

January 2023

MAKING AN IMPACT THAT MATTERS since 1845

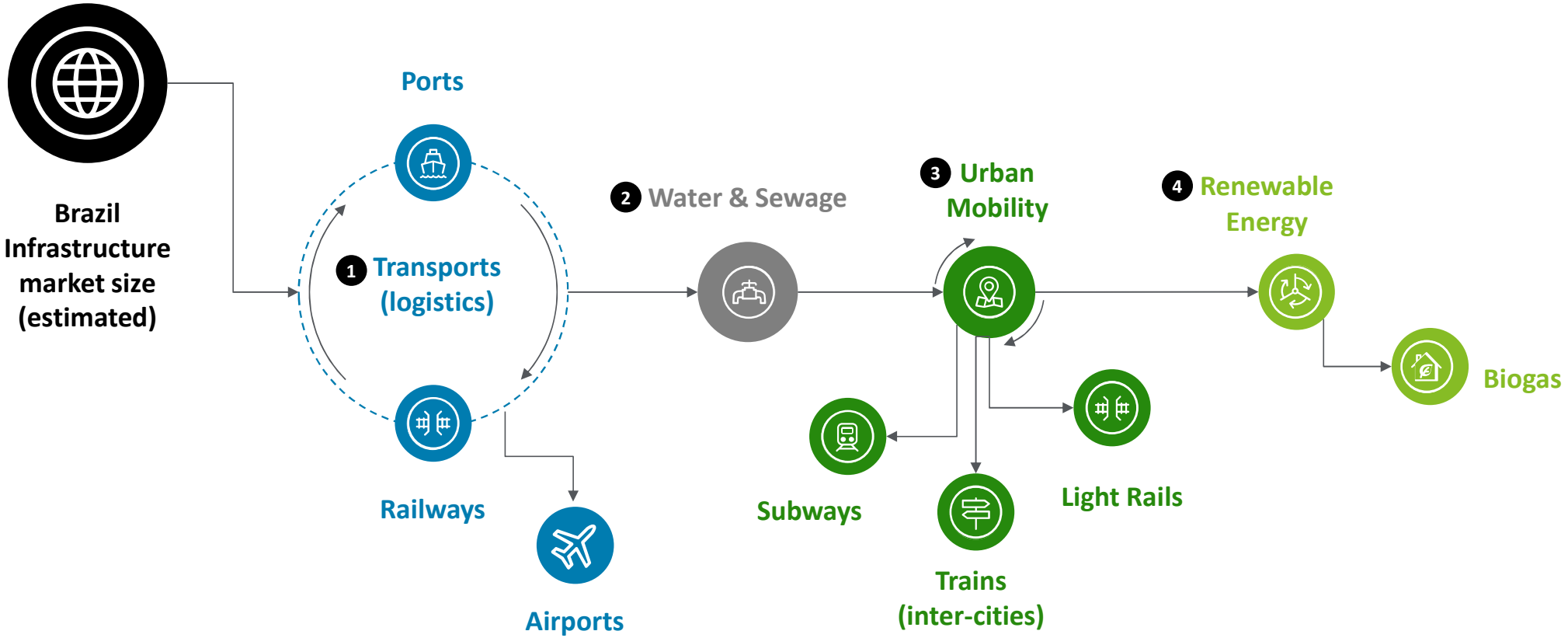
都市交通セクター　市場調査　エグゼクティブサマリ

ハイライト情報

バリューチェーンと規制	2012年に人口20,000以上の全ての都市がUrban Mobilityに関す計画を策定すべきであることが、National Urban Mobility Policy （PNMU）にて規定された。これに伴って、Belo Horizonte／São Paulo／Rio de Janeiro等の各都市が相次いで都市計画や関連する法令を設定している。
セクター概観	“Urban Mobility（都市交通）”は、公共交通機関とそのルール、物流、道路や信号等のインフラストラクチャ等をセットにした概念である。今回のレポートでは、その中で鉄道（Light Rail／Inter-city train／Subway）に関して、地域を人口が全国一位、二位のSão Paulo, Rio de Janeiroおよび上位のBelo Horizonteに焦点を当てている。 該当地域の鉄道は一定の発達をしている一方で、米国／英国／中国／日本に比べるとカバーする距離と乗客者数で劣っている。コロナ禍で2020～2021の乗客数は減少したものの、São Paulo, Rio de Janeiroでは2021年以降に鉄道への追加投資を実施している。
主要なプレイヤー	鉄道事業者してはCPTM（State owned）、METRÔ-SP（Public）、ViaQuatro（Private）、Linha Universidade（Private）等の複数社が存在している。1962年設立のMETRÔ-SPが最も歴史のある事業者であるが、一方でLinha Universidadeは2020年に設立されている。その他インフラストラクチャや鉄道のメンテナンス等の企業も複数社存在している。
投資プロジェクト状況	São Pauloを中心に今後も鉄道に対する投資が検討及び予定されている。 形態としてはコンセッション方式が過半を占めているが、PPP方式の投資も存在している。

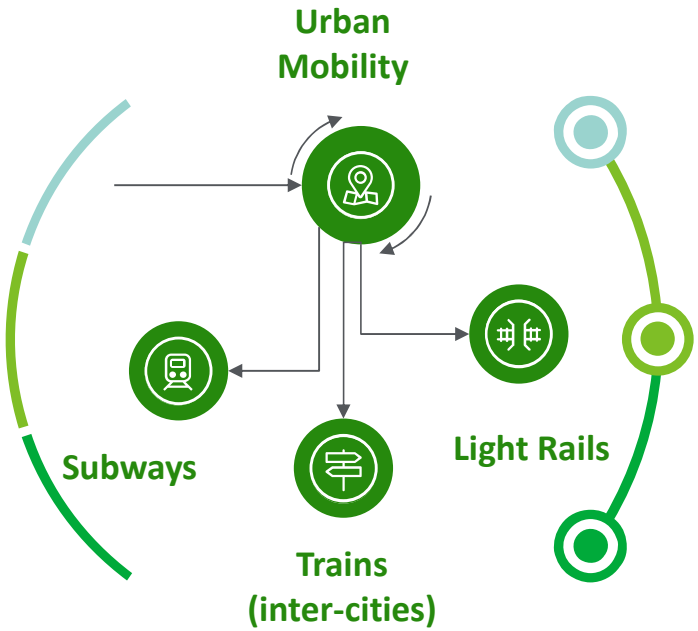
Brazil infrastructure market study

General Overview



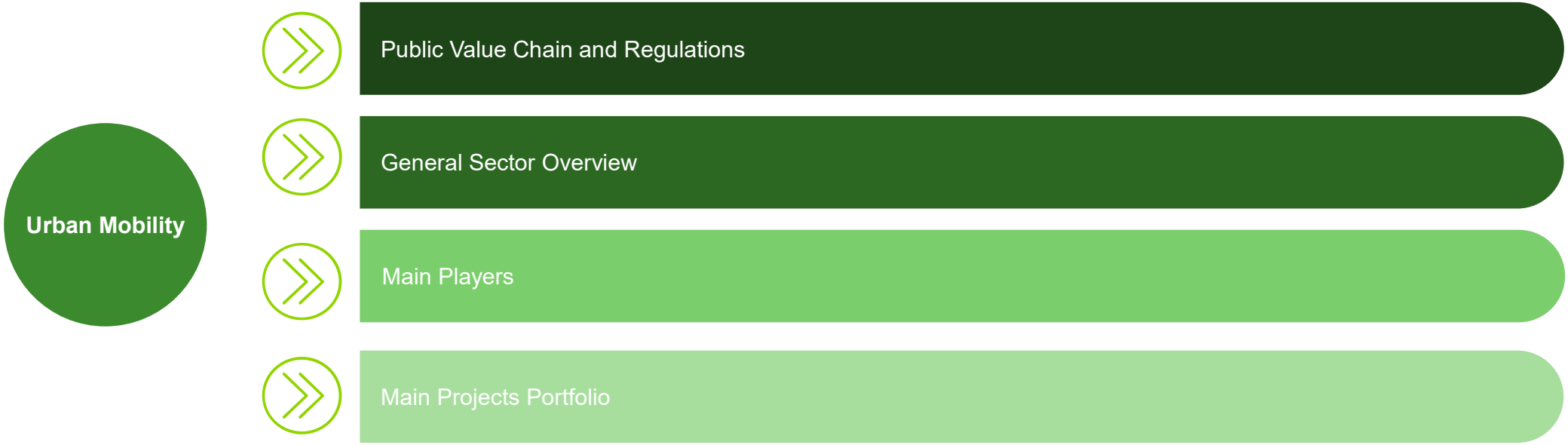
Brazil infrastructure market study

Transport - Urban Mobility



Brazil infrastructure market study

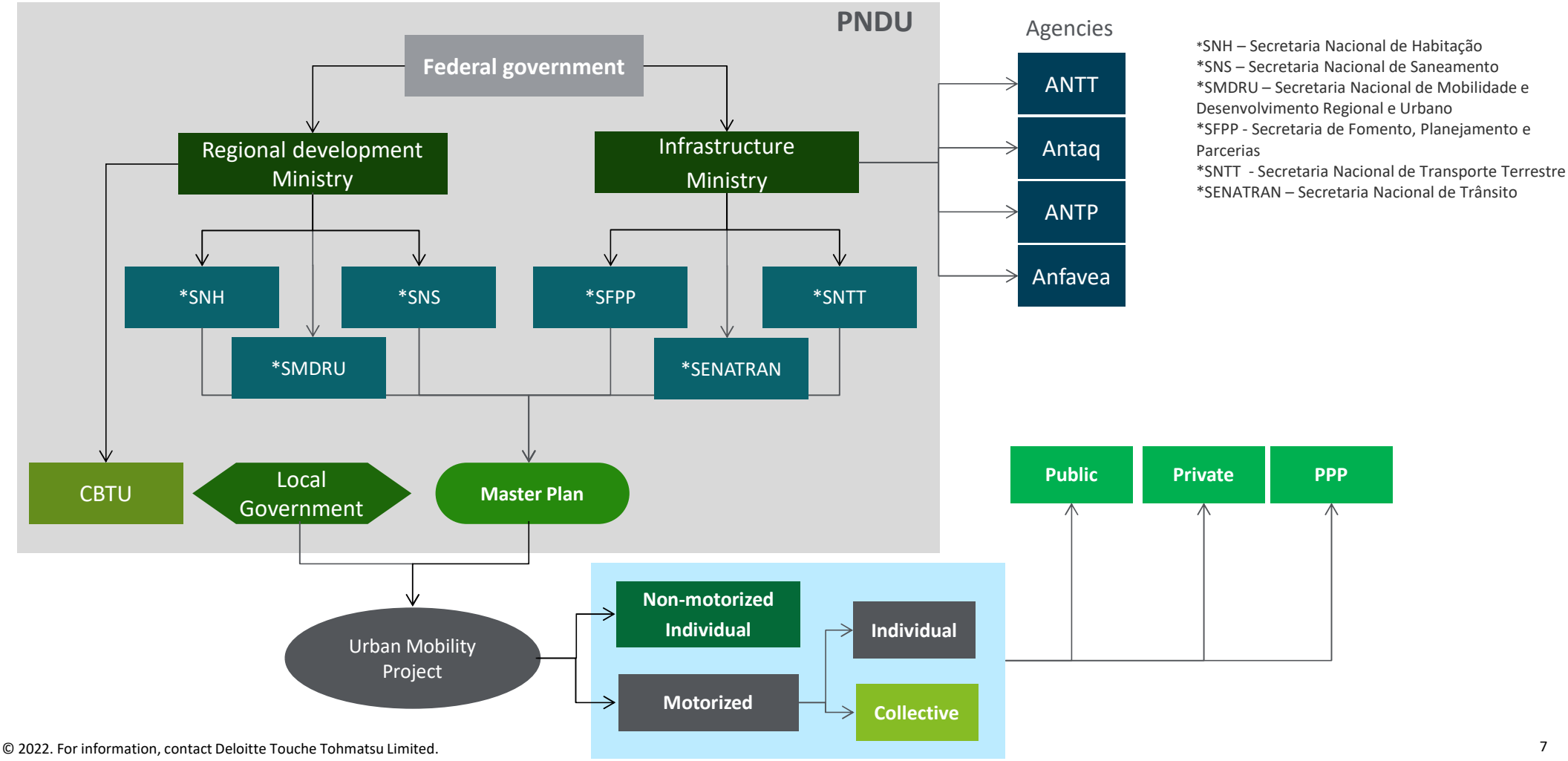
Urban Mobility – Light Trains – Subways – Inter-cities Trains - Agenda



Public Value Chain and Regulations

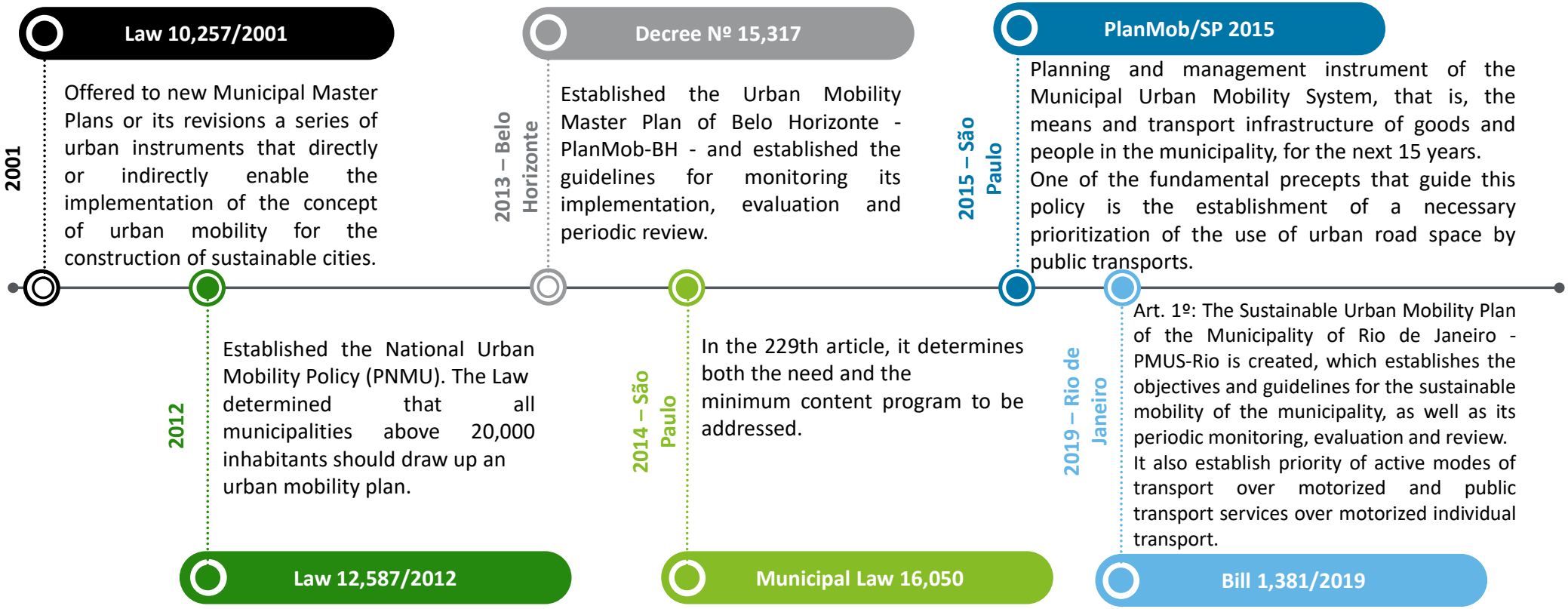
Public Value Chain and Regulations

Sector Organization.



Public Value Chain and Regulations

Regulatory Environment – Main Sector Laws.



Source: Camera News Agency/ Planato.

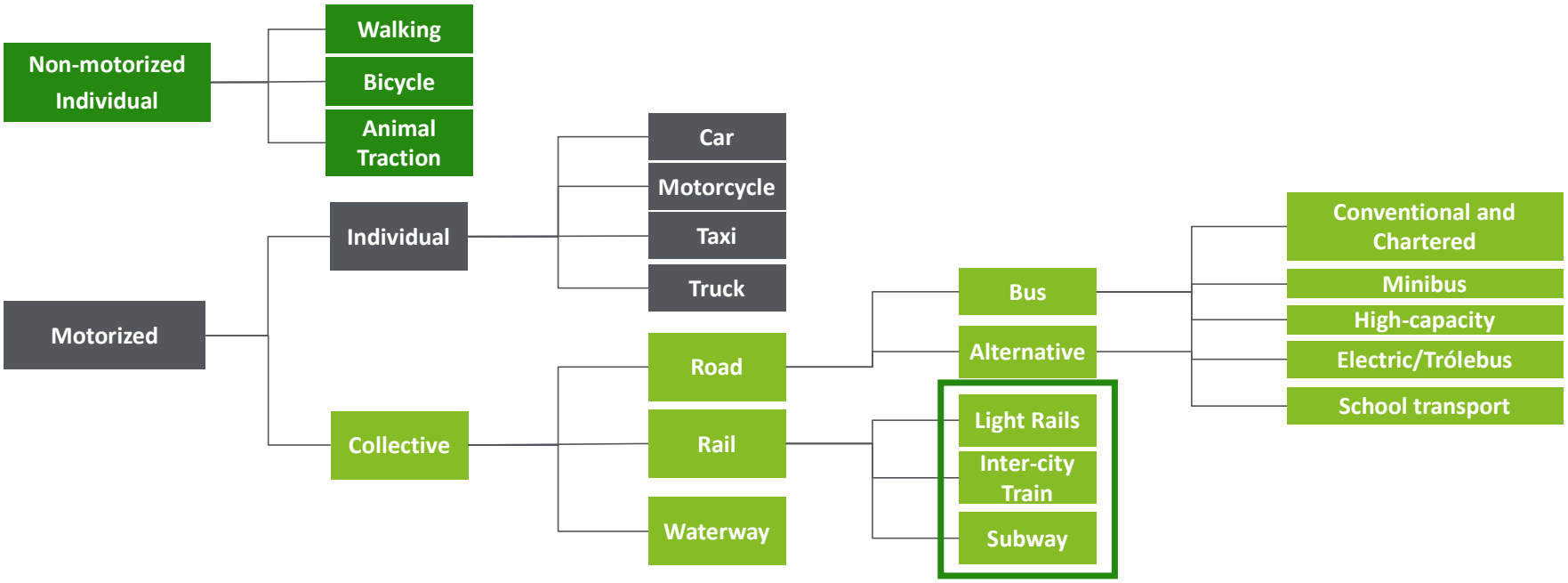
General Sector Overview

General Sector Overview

Urban mobility covers several transportation modals – Subway, Light Rail Transit and Inter-cities Trains of São Paulo, Rio de Janeiro and Belo Horizonte cities, will be the focus of this report.

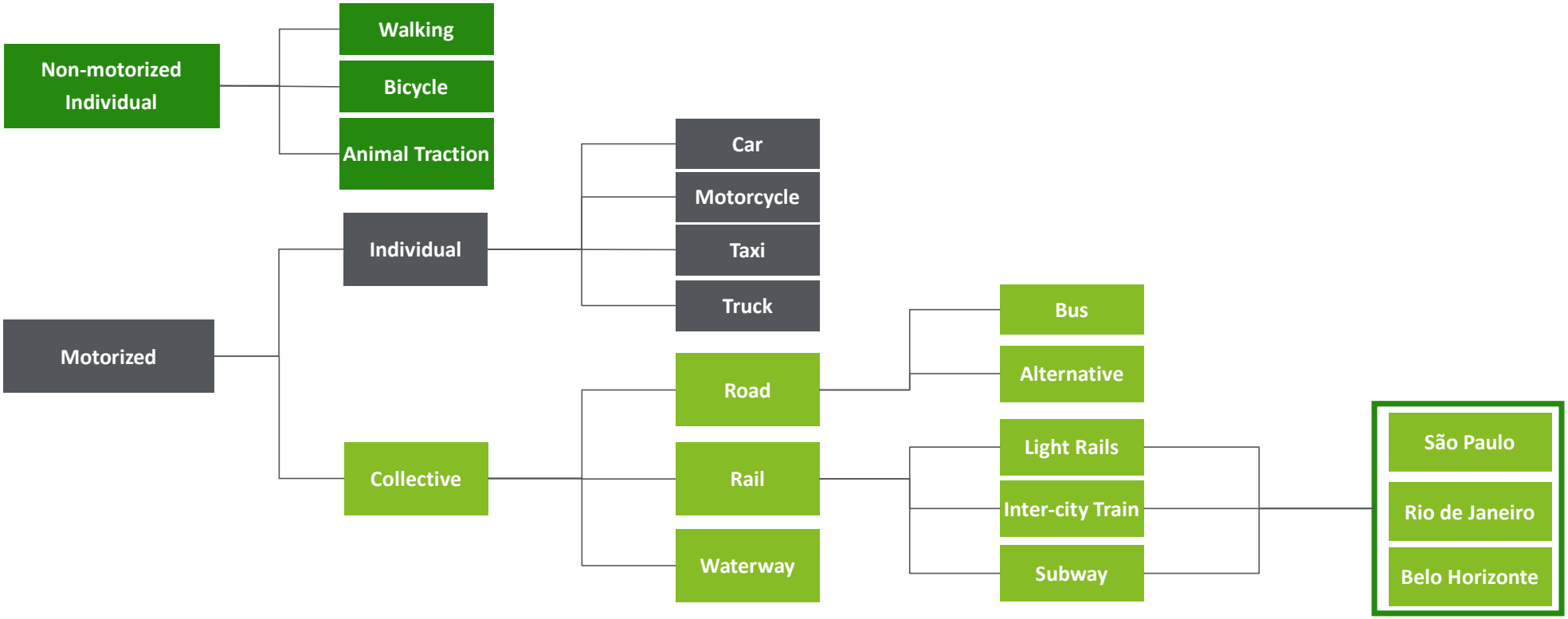
The **"urban mobility"** is a relatively new concept, its an advance to the traditional way of dealing, in isolation, with the traffic, planning and regulation of public transport, the logistics of the distribution of goods, the construction of road infrastructure, sidewalks, viaducts, traffic lights and so on.

The Urban Mobility and Infrastructure System is **a set of transport infrastructure sub-systems and their services**, organized according to management commands and regulatory devices, with the goal to deliver access and opportunity for the population.



General Sector Overview

Urban mobility covers several transportation modals – Subway, Light Rail Transit and Inter-cities Trains of São Paulo, Rio de Janeiro and Belo Horizonte cities, will be the focus of this report.



General Sector Overview

Modal – Light Rail Transit and Subways.

A) Light Rail Transit

Light rail transit (LRT) is a form of passenger urban rail transit characterized by a combination of tram and rapid transit features. While its rolling stock is more similar to a traditional tram, it operates at a higher capacity and speed, and often on an exclusive right-of-way. It is a model of efficiency and accessibility. In operation for some years in European cities, with excellent results, the Light Rail Vehicles has a sustainable approach nature as it uses clean, electrically powered vehicles, producing near zero emissions.

B) Subways

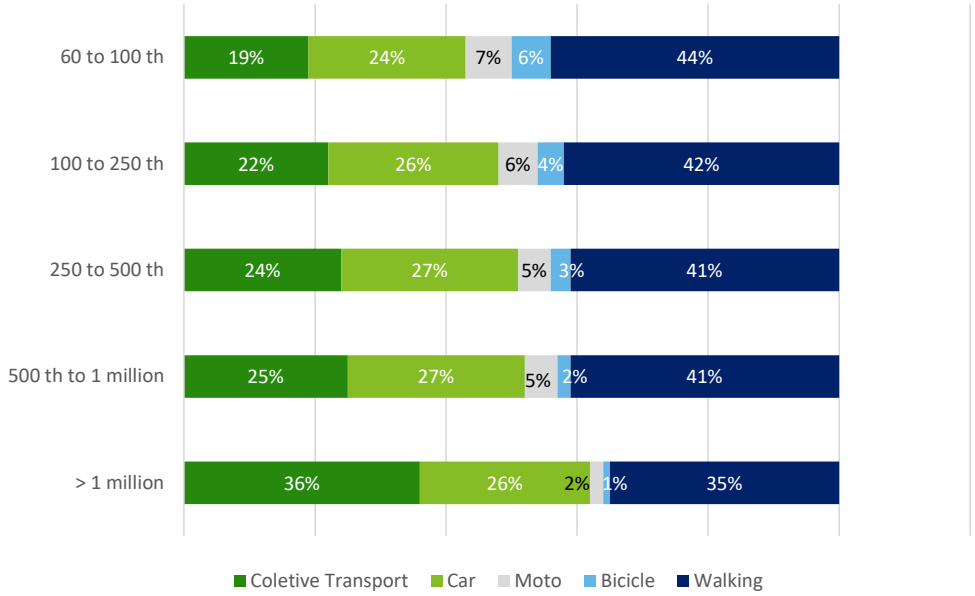
The subway is considered worldwide as an efficient solution for the mass transportation of large metropolises, mainly because it has the following characteristics:

- Promotes expressive intramodality through integrations of bus, car and taxi systems;
- It is used by new urban, air and underground spaces, not overloading the road structure;
- Causes low vibration, emissions and noise on the surface, reducing environmental pollution;
- Allows you to transport large amounts of users with high speed.

A subway line can use a car train with a capacity of 2,000 passengers and reduced waiting intervals (up to 100 seconds), at high speeds, regularly and high transport capacity (60,000 passengers/hour/direction).

Source: ANTP 2018

Modal division by means of transport and cities population class



Notes: The last update data considered is from 2018. 2020 and 2021 was influenced by COVID-19, therefore, aren't great references for the next years.

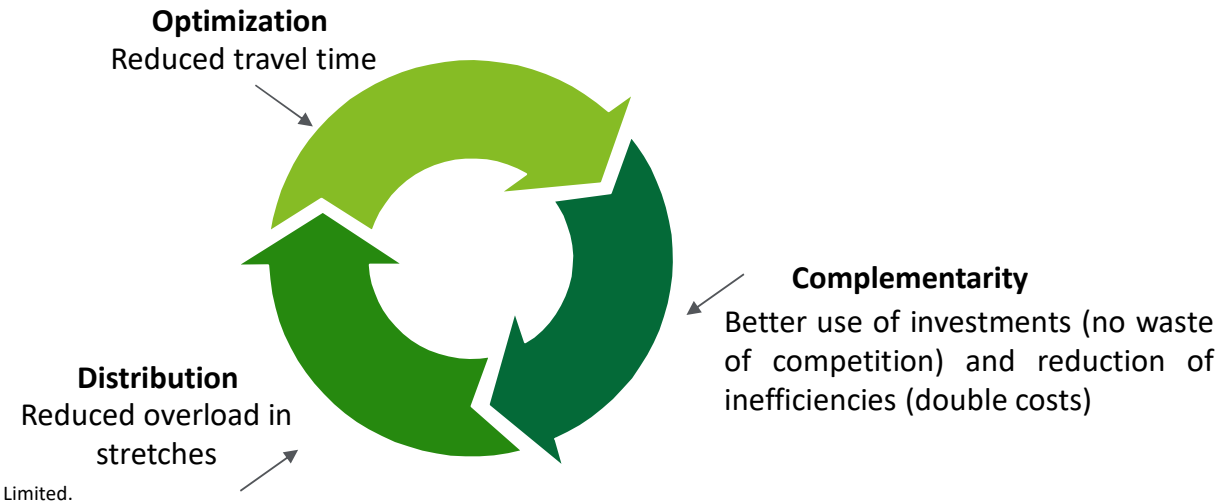
General Sector Overview

The importance of urban mobility and modal integration.

Advantages of urban mobility

1. Prevents traffic and long-time travels;
2. High capacity for people transportation;
3. Higher punctuality, accuracy and regularity in the schedules;
4. It's a more sustainable alternative for car replacement (congestion, energy consumption, accidents, city's economic efficiency, rational land occupation, dehumanization, public investments, parking).

Benefits of modal integration (buses, subways, trains)



General Sector Overview

Brazilian Mobility Profile classification by number of cities inhabitants.

To define a mobility profile in Brazilian cities, the classification adopted by the National Association of Public Transport -ANTP was used, which is divided into 5 categories:

1. Municipalities with a population of 60,000 to 100,000 inhabitants;
2. Municipalities with a population of 100 to 250,000 inhabitants;
3. Municipalities with a population of 250 to 500,000 inhabitants;
4. Municipalities with a population of 500,000 to 1 million inhabitants;
5. Municipalities with a population of more than 1 million inhabitants.

Evolution of the distribution of cities by population groups

Inhabitants (in thousands)	2000	2005	2010	2015	2021*
60-100	213	223	215	229	237
100-250	140	156	184	194	210
250-500	53	63	61	69	67
500-1000	18	21	23	24	32
1000<	13	14	15	17	17

Source: IBGE

(*)Estimate

General Sector Overview

Brazilian Mobility Profile – Cities features.

Characteristics of cities with 500,000 to 1 million inhabitants:

- Small importance of the countryside;
- Medium territorial dimension of urban area;
- Cities with moderate population growth, close to the National average;
- Predominance of automobiles and motorcycles;
- Significant participation in motorized travel;
- Complex public transport network, with integrated systems;
- Increased public participation in management;
- Medium motorization.

Characteristics of cities with over 1 million inhabitants:

- Minor importance of the countryside;
- Large territorial dimension of the urban area;
- Cities with population growth above the national average;
- Accelerated change in the distribution of economic activities;
- Area of historic strong tourism center, but lost importance compared to other regional centers;
- Demand for a greater variety of public transportation;
- Traffic problems, congestion, lack of parking spaces;
- Balance between car use and public transportation;
- Very expressive participation in motorized travel;
- Great importance of vehicle circulation for air quality and sound pollution;
- Highly complex public transport networks, presence of rail subway;
- Increased public participation in management and metropolitan issues.

General Sector Overview

Brazilian Mobility Profile - Particular themes.

Mobility Transport Master Plan is an instrument of urban development policy, integrated to the Master Plan of the Municipality, the Metropolitan region or the integrated Development region, containing guidelines, instruments, actions and projects aimed at providing broad and democratic access in the city.

Probable incidence of particular themes by city classes

PARTICULAR THEMES	60 to 100 thousand	100 to 250 thousand	250 to 500 thousand	500 thousand to 1 million	Over 1 million
Accessibility, public and school transport in rural areas	■	■	■	■	■
Organization of circulation in central areas and local poles	■	■	■	■	■
Classification and hierarchy of the road system	■	■	■	■	■
Installation and qualification of sidewalks and areas of walking movement	■	■	■	■	■
Creating suitable conditions for the circulation of bicycles	■	■	■	■	■
Systematic for permanent evaluation of the quality of the public transport and transit	■	■	■	■	■
Integrated public transport systems			■	■	■
Road treatment for public transport			■	■	■
Tariff model for urban public transport			■	■	■
Regulation of the movement of cargo transport			■	■	■
Medium public transport structural systems capacity				■	■
Institutional model in metropolitan regions and areas conurbated				■	■
High-capacity public transport structural systems					■
Urban traffic demand control					■

Source: Mobilize

General Sector Overview

Brazilian Mobility Profile – This study will focus on São Paulo, Rio de Janeiro and Belo Horizonte.

Recently, the Statute of Cities established mandatory measure, for cities with over 500,000 inhabitants, to develop an integrated Urban Transport Plan, compatible with or inserted in its Master Plan.

In this research sample, we found 49 cities with Integrated Transportation Plans and already created to the Master Plan, and some in creation process. Among these cities, São Paulo, Rio de Janeiro and Belo Horizonte were the ones that stood out the most, due to their existing projects and cities sizes.

Mapped Cities with more than 500,000 inhabitants				
São Paulo - SP	**12,396,372**		Santo André - SP	723,889
Rio de Janeiro - RJ	**6,775,561**		Ribeirão Preto - SP	720,116
Brasília - DF	3,094,325		Jaboatão dos Guararapes - PE	711,330
Salvador - BA	2,900,319		Uberlândia - MG	706,597
Fortaleza - CE	2,703,391		Osasco - SP	701,428
Belo Horizonte - MG	**2,530,701**		Sorocaba - SP	695,328
Manaus - AM	2,255,903		Contagem - MG	673,849
Curitiba - PR	1,963,726		Aracaju - SE	672,614
Recife - PE	1,661,017		Feira de Santana - BA	624,107
Goiânia - GO	1,555,626		Cuiabá - MT	623,614
Belém - PA	1,506,420		Joinville - SC	604,708
Porto Alegre - RS	1,492,530		Aparecida de Goiânia - GO	601,844
Guarulhos - SP	1,404,694		Londrina - PR	580,870
Campinas - SP	1,223,237		Juiz de Fora - MG	577,532
São Luís - MA	1,115,932		Porto Velho - RO	548,952
São Gonçalo - RJ	1,098,357		Ananindeua - PA	540,410
Maceió - AL	1,031,597		Serra - ES	536,765
Duque de Caxias - RJ	929,449		Caxias do Sul - RS	523,716
Campo Grande - MS	916,001		Macapá - AP	522,357
Natal - RN	896,708		Niterói - RJ	516,981
Teresina - PI	871,126		Florianópolis - SC	516,524
São Bernardo do Campo - SP	849,874		Belford Roxo - RJ	515,239
João Pessoa - PB	825,796		Campos dos Goytacazes - RJ	514,643
Nova Iguaçu - RJ	825,388		Vila Velha - ES	508,655
São José dos Campos - SP	737,310			
Source: IBGE				

General Sector Overview

São Paulo

Subway

São Paulo's subway has 104 km of extension distributed in 6 lines and 91 stations. The main lines are operated by Metrô and carried 1.9 million passengers daily in 2021.

Lines	
Subway Lines	
Metrô Operation	1 2 3 15
ViaQuatro Operation	4
ViaMobilidade Operation	5
Train Lines	7 8 9 10 11 12 13
Buss Lines	

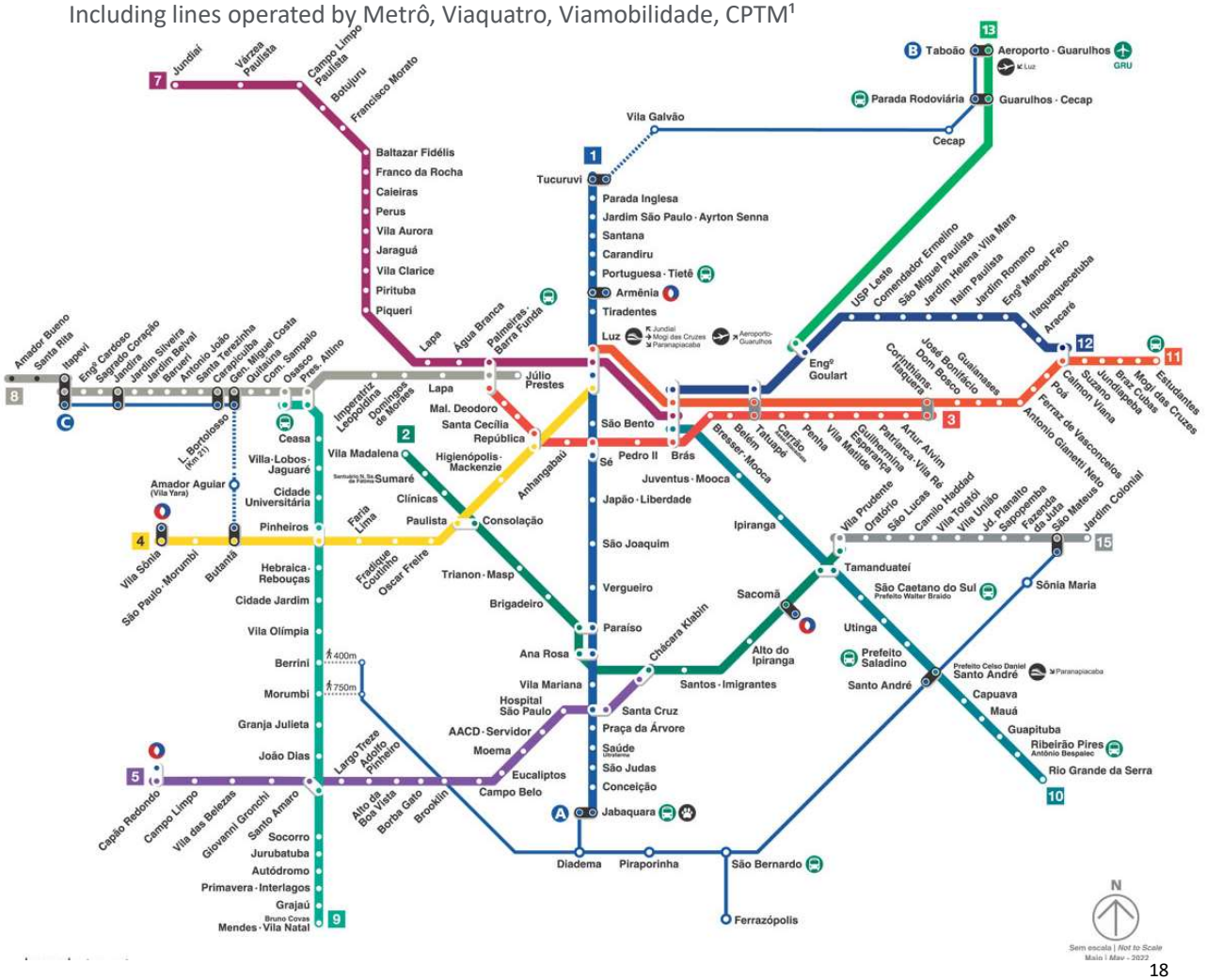
Source: MetrôCPTM

[1]Those companies also operate rails and busses, as represented on the map.

Source: Metro SP

São Paulo Metropolitan Transport Network

Including lines operated by Metrô, Viaquatro, Viamobilidade, CPTM[1]



General Sector Overview

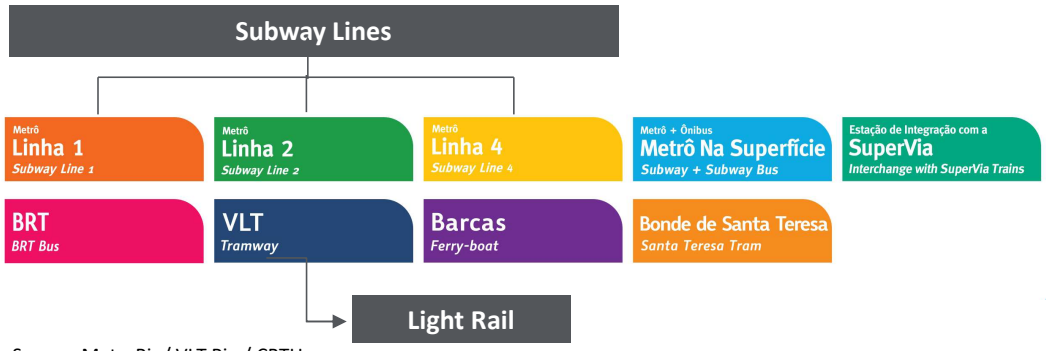
Rio de Janeiro

Subway

Operated by **Consortium Opportrans (Rio Metro),** currently, the MetrôRio has 41 stations, 3 lines in activity and 14 integration points.

Light Rail Transit

Light Rail from Rio de Janeiro is also called **VLT Carioca**. It began to circulate in June 2016 and allows the interconnection of the Port Region to the financial center of the city and Santos Dumont, in a faster, safer and more sustainable way.



Source: MetroRio/ VLT Rio / CBTU

Rio de Janeiro Transport Network

Including SubwayLines, SuperVia trains, Light Rail,BRTBus, Ferry, and Tram

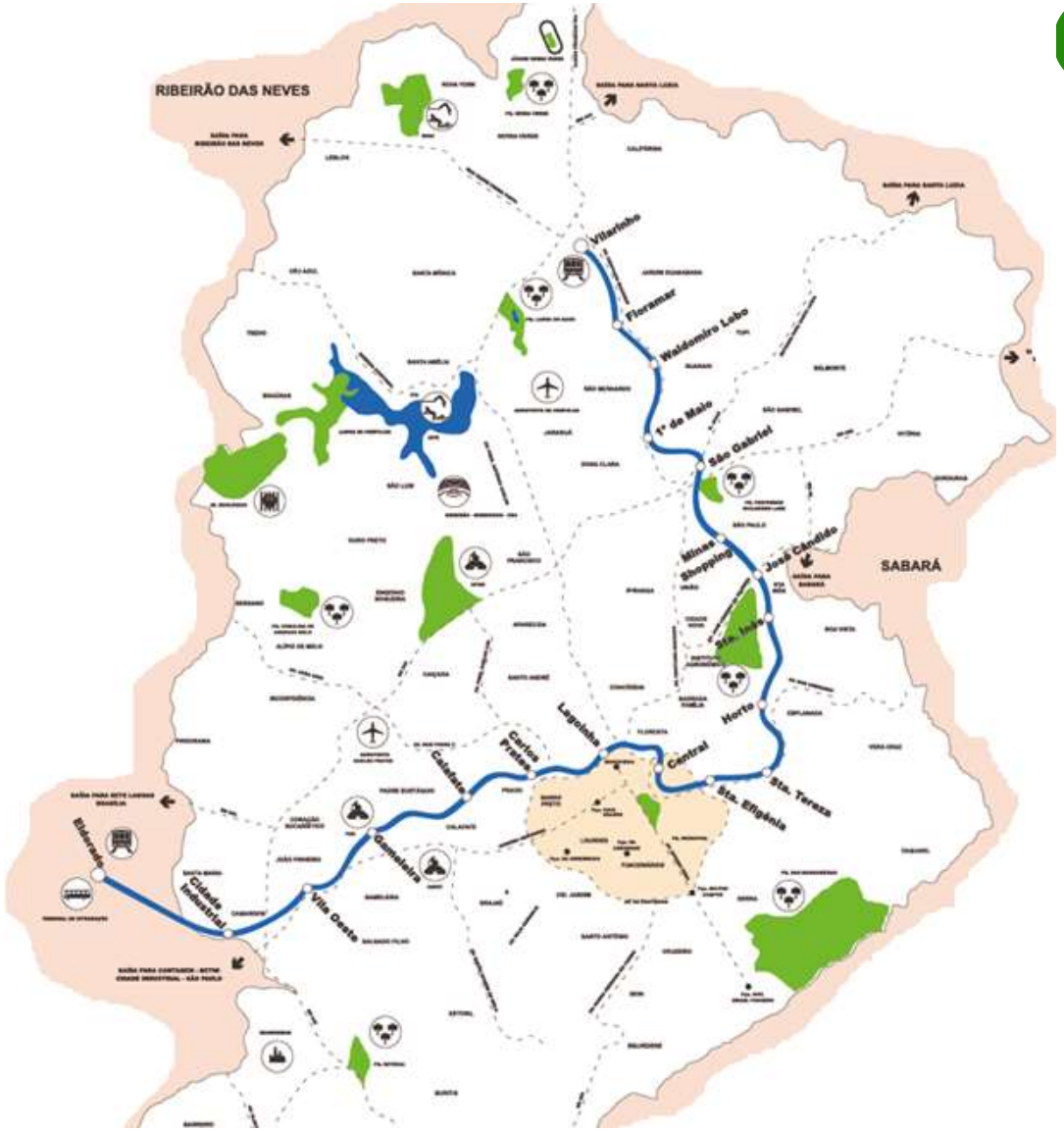
General Sector Overview

Belo Horizonte.

Subway

Operated by **CBTU – BH (The Brazilian Urban Train Company)** the Eldorado - Vilarinho line from Belo Horizonte, has an extension of 28.1km. There are 19 stations and 6 integrated road terminals, which carries around 100,000 users/day in the cities of Belo Horizonte and Contagem. Before the pandemic, it used to transport 150,000 users/day.

On December 22, 2022, an auction was held and the Comporte Participações S.A consortium was awarded line 1 (Eldorado – Vilarinho) and line 2 (Nova Suiça – Barreiro).



Line 1 – Eldorado/Vilarinho (in operation)

Central area

Source: CBTU

General Sector Overview

Comparing São Paulo, Rio de Janeiro and Belo Horizonte to the 10 cities in the world with longer subway length, they have less than half in km.

Cities in China, United States, United Kingdom and Japan are the ones with longer subway lengths, comparing to those cities, listed in the table below, São Paulo has less than half in lengths.

Even though it has more inhabitants than most of the cities, it has fewer daily passengers. It indicates that there's a need for improvement in this transportation method.

Cities	Km long	Daily passengers (millions)	Number of inhabitants (millions)
Shanghai, China	570	18.5	28.5
Beijing, China	465	3.5	21.3
New York, United States	465	5	8.3
London, United Kingdom	408	2.95	8.8
Tokyo, Japan	328.8	7	37
Moscow, Russia	325	9.2	12.3
Madrid, Spain	283.3	1.7	3
Guangzhou, China	260	5.6	13.9
Paris, France	214	4.5	2.1

Source: Diario do Estado de Goias

Source: Estadão/metrocptm/viatrolebus/IE/Inbec/IBGE/CBTU/MetroRio

Cities	Km Long	Daily passengers (millions)	Number of inhabitants (millions)
São Paulo, Brazil	104	1.9	12.3
Rio de Janeiro, Brazil	54	0.8	6.7
Belo Horizonte, Brazil	28.1	0.1	2.5

[1]São Paulo daily passengers considering the lines operated by Metrô in 2021

Rio de Janeiro data source: MetroRio 2021 and Deloitte Analysis

Belo Horizonte data source: CBTU

General Sector Overview

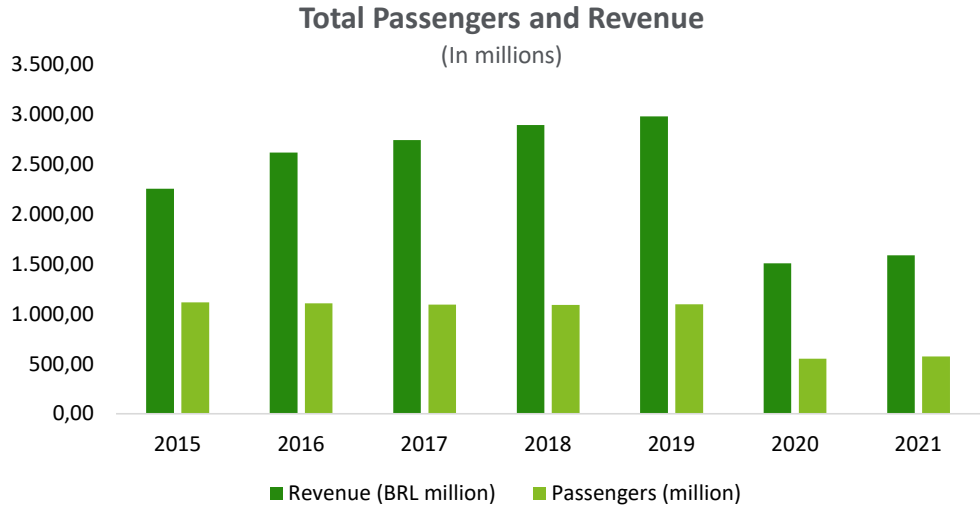
Market Size - São Paulo's Subway lines operated by Metrô – Until 2019, before COVID-19, revenue and number of passengers have been growing in São Paulo subway, however, there's still the need for more investments, to achieve a higher population % and more areas.

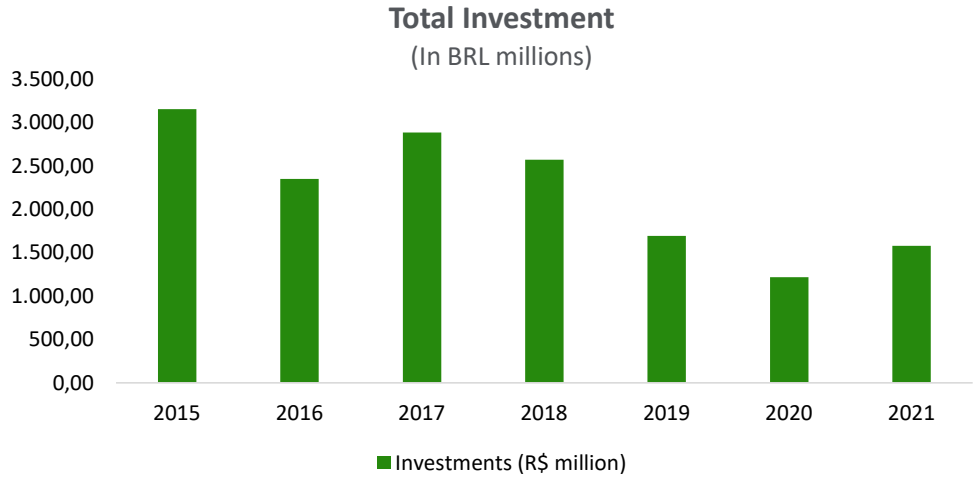
São Paulo's subway has been transporting around 1 billion passengers per year from 2015 to 2019, in 2020 and 2021 the number of passengers decreased, due to COVID-19 impacts.

The COVID-19 impacted significantly the revenue in 2020 and 2021. However, the graphic beside shows a great growth range in the years before.

The subway also has a good environmental impact, as it avoids carbon emission. SP Subway estimates that, 521 thousand CO2 tons ware avoided by its operation in 2021.

There has been a continuous reduction in investments amounts, since 2017. Yet, the São Paulo Subway has an ambitious target of investments expansion and modernization in 2022. According to data released by the company, the expectation is that almost R$3.5 billion will be invested in projects, a value that's almost the double amount of the forecast made for 2021.





Source: Metrô SP/Concessionaria do VLT Carioca

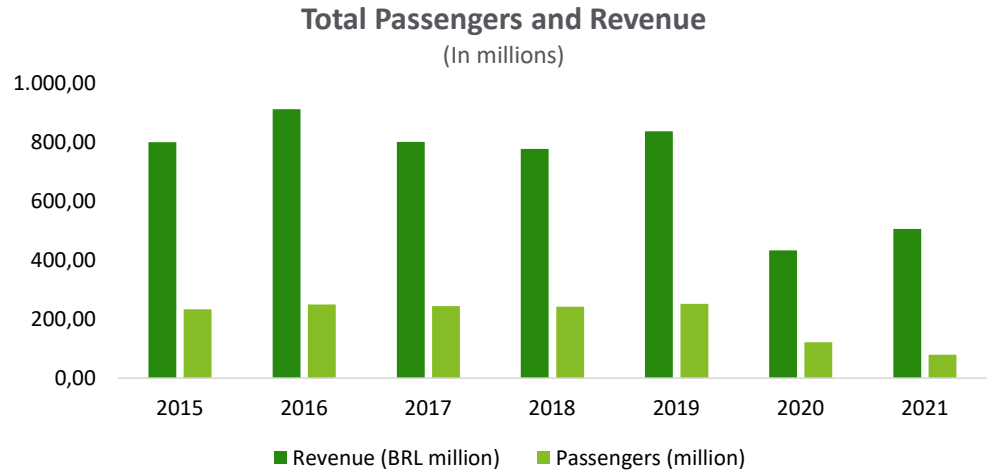
General Sector Overview

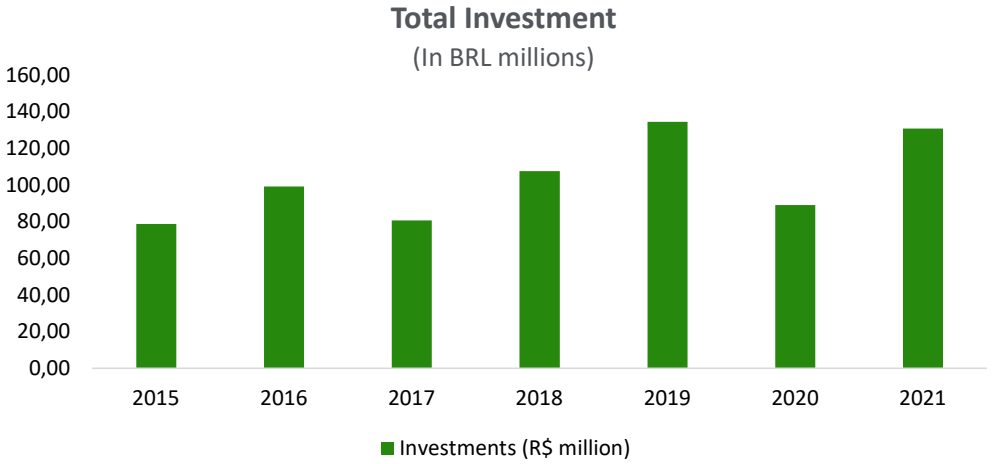
Market Size - Rio de Janeiro's Subway - Until 2019, before COVID-19, revenue and number of passengers had been growing in Rio de Janeiro's subway, however, there's still the need for more investments, to achieve a higher population % and more areas.

Rio de Janeiro subway is operated by MetrôRio, it controls, manage and operates lines 1, 2 and 4 of Rio de Janeiro subway, those lines have together 41 stations through South, North and Central zones.

Same as in the São Paulo subway, Rio's subway revenue has been growing over the years until COVID-19 impacted the numbers, in 2020 and 2021.

In 2021, MetrôRio has invested R$126.5 millions, an increase of 46.5% compared to 2020, giving continuity to projects to revitalize and modernize services.





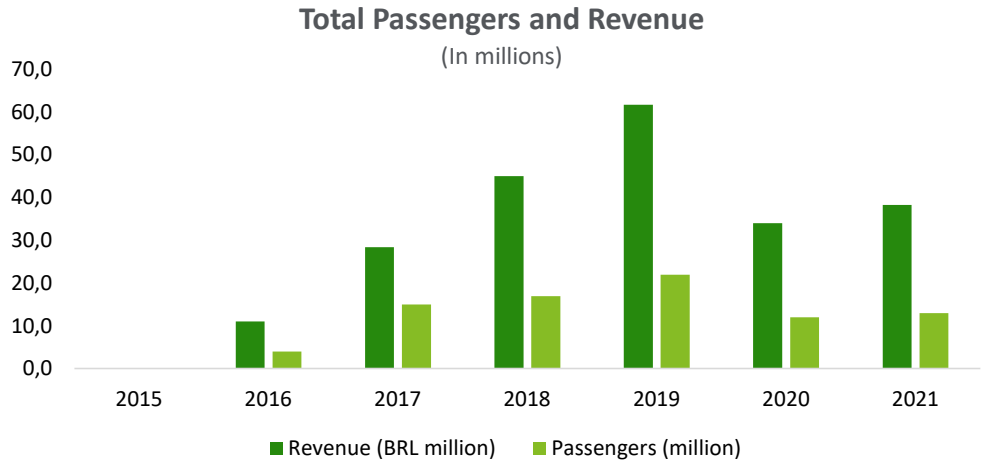
Source: Metrô RJ/Concessionaria do VLT Carioca

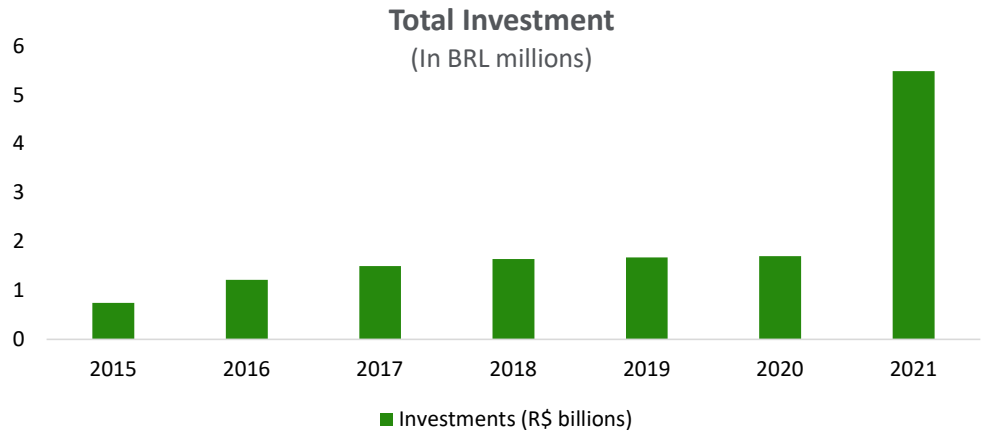
General Sector Overview

Market Size – Until 2019, before COVID-19, revenue and number of passengers had been growing in Rio de Janeiro's Light Rail, however, there's still the need for more investments, to achieve a higher population % and more areas.

The Rio de Janeiro Light Rails Transit began operations in 2016 and as SP's Light Rail, had promising revenue and passenger's numbers until 2019. From 2018 to 2019, the revenue grew 37.1% and the number of passengers grew 29.4%. In 2020 and 2021, the numbers suffered from the COVID-19 impact and returned to levels close to 2017.

The main investments linked to the implementation are divided into civil works, undercarriage, signaling and control systems. Disbursements for investment totaled R$ 5.5 million in 2021.





Source: VLT RIO/ Concessionaria do VLT Carioca

Main Players

Transport Operators

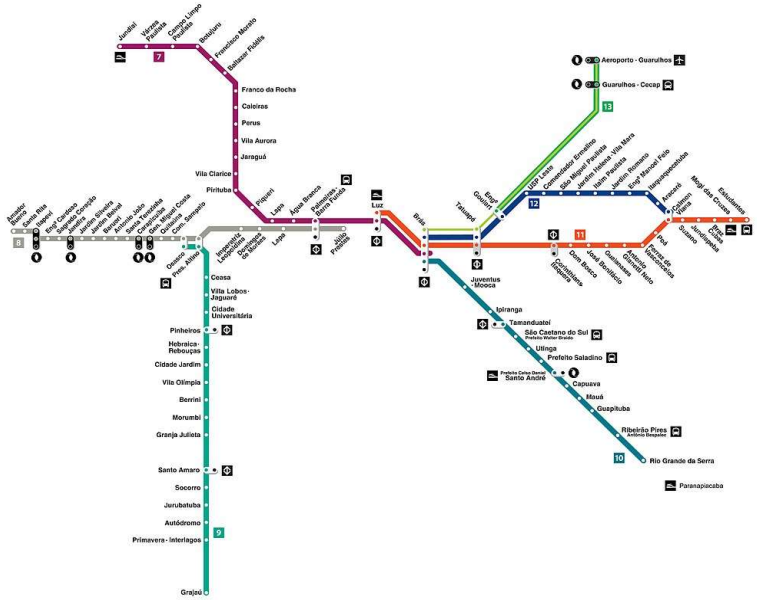
Main Players

CPTM - SP

Abstract

Companhia Paulista de Trens Metropolitanos (CPTM), founded by the Government of the State of São Paulo to take over the train systems of the Metropolitan Region of São Paulo (RMSP) replacing CBTU (Companhia Brasileira de Transportes Urbanos) and FEPASA (Ferrovia Paulista S.A.). It operates 05 lines (7, 10, 11, 12 and 13), totaling 57 operational stations.

Map of Metropolitan Trains



Source: https://www.cptm.sp.gov.br/

Important Numbers

Gross Revenue	R$2,768,000,000 – Date 12/31/2021
Type of company	State owned company
Founded in	1992
Passengers/day	1,9 million

Shareholding Structure

Main Players

METRÔ-SP

Abstract

The *Companhia do Metropolitano de São Paulo – Metrô* is controlled by the Government of the State of São Paulo under the management of the Secretariat of State for Metropolitan Transports (STM). It is responsible for the operation and expansion of the subway network and for the planning of the metropolitan passenger transport in São Paulo's Metropolitan Region.

The *São Paulo Metrô* is responsible for operating the lines

- *1-Azul (Jabaquara - Tucuruvi);*
- *2-Verde (Vila Prudente – Vila Madalena);*
- *3-Vermelha (Corinthians-Itaquera – Palmeiras-Barra Funda); e*
- *15-Prata (Vila Prudente – Jardim Colonial).*

Together, they add up to 71.5 km in length and 63 stations.

Important Numbers

Gross Revenue	R$1,591,203,000 – Date 12/31/2021
Type of company	Public
Founded in	1968
Passengers/day	4 million

Shareholding Structure

Source: https://www.metro.sp.gov.br/

Main Players

ViaQuatro - SP

Abstract

ViaQuatro is the concessionaire responsible for the operation and maintenance of Line *4-Amarela* in the São Paulo's subway, the first public-private partnership contract in the country.

The contract with the Government of the State of São Paulo, signed on November 29, 2006, allows the concessionaire to operate and maintain subway Line *4-Amarela* for 30 years. ViaQuatro has already invested US$ 450 million in systems, equipment and trains. Over the 30 years of operation, it will invest more than US$ 2 billion in the line.

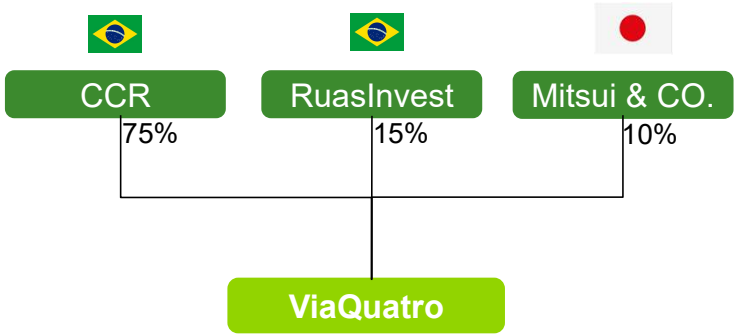
The concessionaire has a fleet of 29 trains. Each train is made up of six cars and has the capacity to carry 1,500 passengers.

Line 4

Important Numbers

Gross Revenue	R$1,758,297,000 – Date 12/31/2021
Type of company	Private
Founded in	2005
Passengers/day	626,000

Shareholding Structure



Source: https://www.viaquatro.com.br/

Main Players

ViaMobilidade - SP

Abstract

ViaMobilidade is one of the companies of CCR Mobilidade, the division responsible for all urban mobility projects of the CCR Group in the country.

It is the concessionaire responsible for the operation and maintenance of the subway's Lines *5-Lilás* and *17-Ouro* monorail in São Paulo.

It is also the concessionaire responsible for the operation and maintenance of Lines *8-Diamante* and *9-Esmeralda* of metropolitan trains in São Paulo.

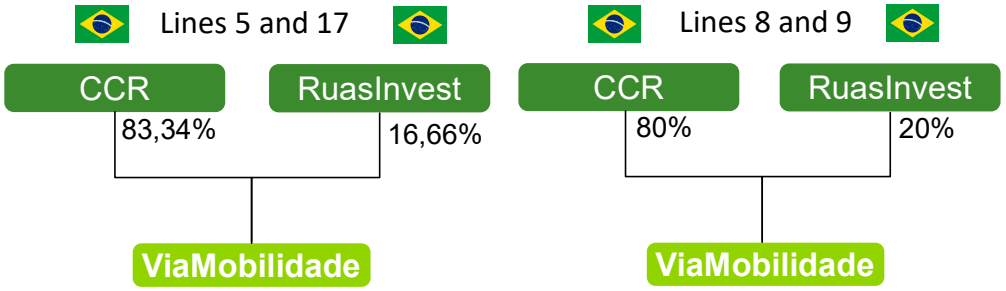
Concession

CCR	Lines	Concession Term	
Concessionaire		**Signature**	**End**
ViaMobilidade	5 and 17	05/04/2018	20 years
	8 and 9	30/06/2021	30 years

Important Numbers

Gross Revenue	**R$407,240,000 – Date 12/31/2021**
Type of company	**Private**
Founded in	**2018 – Lines 5 and 17** **2021 – Lines 8 and 9**
Passengers/day (business day)	**1,2 million**

Shareholding Structure



Source: https://www.viamobilidade.com.br/

Main Players

Linha Universidade - SP

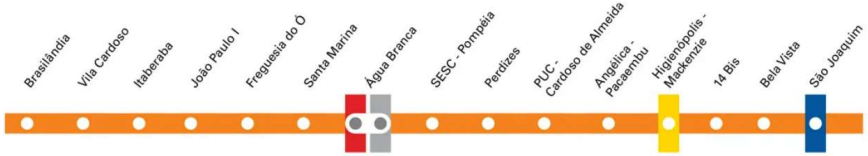
Abstract

State Government of São Paulo signed a PPP agreement with Concessionaria Linha Universidade to build and operate the Line 6 (Laranja) for 25 years.

With a length of 15 km and 15 stations, Line *6-Laranja* of the São Paulo's subway will connect Brasilândia, in the north zone, to São Joaquim, in the central region of the city, reducing to just 23 minutes a journey that is currently made by bus in about an hour and a half.

The constructions are being carried out by the construction arm of the ACCIONA group, generating more than 9,000 jobs.

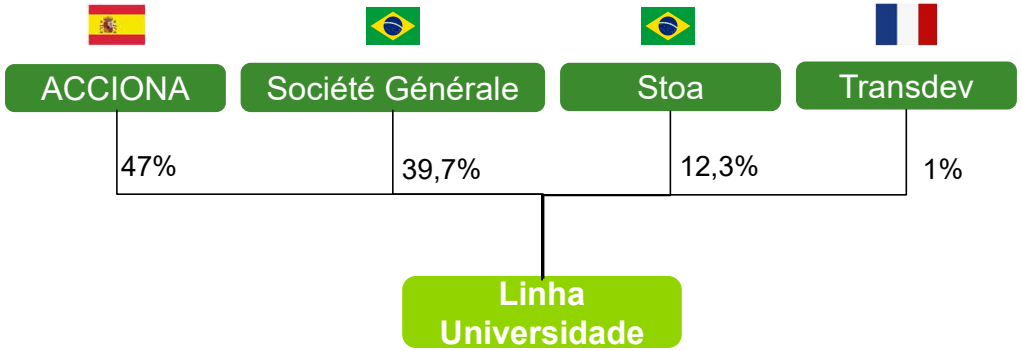
Line 6



Important Numbers

Net Revenue	R$1,590,706,000 – Date 12/31/2021
Type of company	Private
Founded in	2020
Passengers/day	630,000 (Projected)

Shareholding Structure



Source: https://www.linhauni.com.br/

Main Players

MetrôRio - RJ

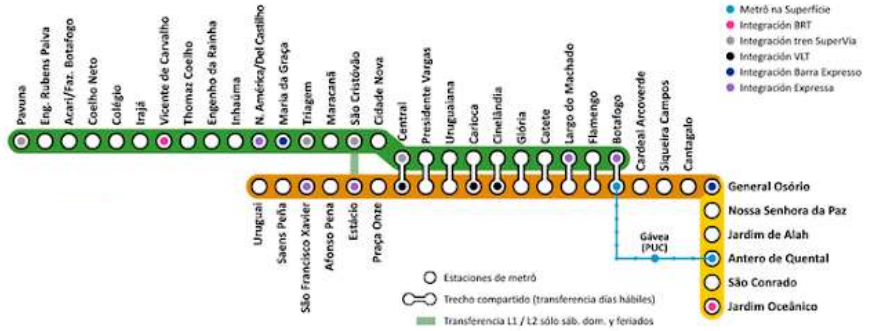
Abstract

In 1998, the company MetrôRio took over the management and operation of the Rio's subway lines from the Rio de Janeiro's State Government. in December 2009, the company MetrôRio joined the Invepar Group. Intense investments were made to improve the subway system, acquiring 19 Chinese trains (all in operation since March 2013), modernizing the Control Center and opening new stations.

In November 2021, the Company left the Invepar Group and became controlled by the holding company HMOBI Participações S.A.

Currently, MetrôRio has 41 stations, three active lines and 14 integration points. It has more than 2,500 employees and headquarters located [illegible] Rio de Janeiro.

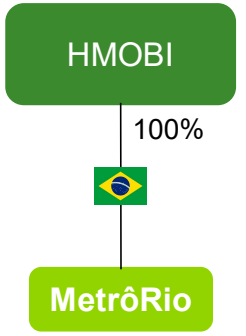
Subway Lines



Important Numbers

Gross Revenue	R$505,700,000 – Date 12/31/2021
Type of company	Private
Founded in	1998
Passengers/day	900,000

Shareholding Structure



Source: https://www.metrorio.com.br/

Main Players

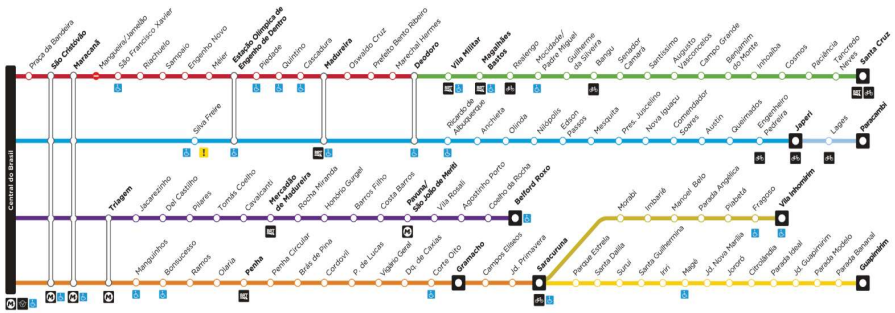
SuperVia - RJ

Abstract

SuperVia operates urban train services in the Metropolitan Region (Rio de Janeiro, Duque de Caxias, Nova Iguaçu, Nilópolis, Mesquita, Queimados, São João de Meriti, Belford Roxo, Japeri, Magé, Paracambi and Guapimirim), through a network 270-kilometer railway divided into five branches, three extensions and 104 stations.

In May 2019, GUMI - Guarana Urban Mobility Incorporated took control of SuperVia to continue the improvement process started in 2011, with regard to the services offered, train fleet, infrastructure, technology, passenger relationship, among others.

Train Lines

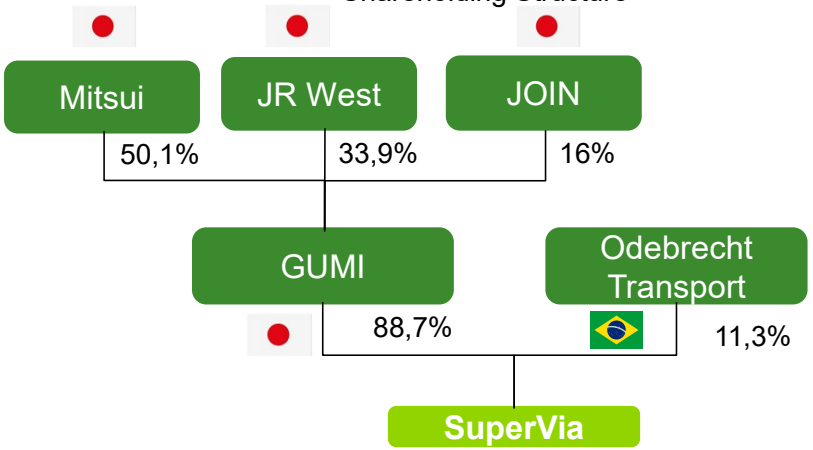


Source: https://www.supervia.com.br/

Important Numbers

Gross Revenue	R$750,900,000 – Date 12/31/2021
Type of company	Private Company with Public Debt Profile
Founded in	1998
Passengers/day	872,000

Shareholding Structure



Main Players

VLT Carioca - RJ

Abstract

The VLT Carioca Concessionaire is responsible for the implementation, operation and maintenance of the Light Rail Vehicle in the Center and Port Region of Rio.

The VLT Carioca has 29 stops and stations in operation and 32 trains in its fleet. Drivers and controllers, responsible for guiding the trains, accumulate more than 2,000 hours of training (theoretical, simulator and road clearance) before starting to transport passengers.

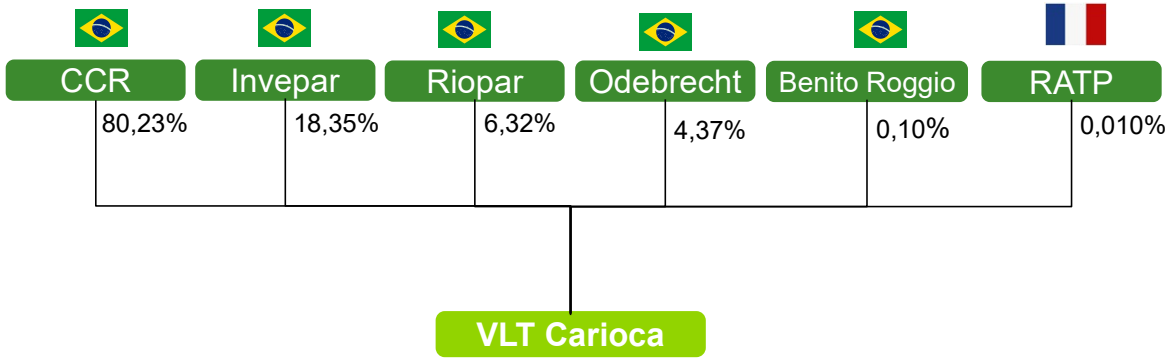
VLT Line

Source: https://www.vltrio.com.br/#/

Important Numbers

Gross Revenue	251,897,000 – Date 12/31/2021
Type of company	Private Ownership
Founded in	2013
Passengers/day	60,000

Shareholding Structure



Data: 31/12/2021

Main Players

CBTU – BH

Abstract

The Companhia Brasileira de Trens Urbanos (CBTU) is a state-owned company, responsible for operating passenger transportation systems in the metropolitan regions of the cities of Recife (PE), Maceió (AL), João Pessoa (PB) and Natal (RN). CBTU is linked to the Ministry of Regional Development (MDR). For each metropolitan region, CBTU is managed by a Superintendence of Urban Trains (STU). Therefore, the Belo Horizonte (BH) metropolitan region is operated by the STU-BH (Superintendence of Urban Trains), although, CBTU-BH is the name currently used to identify the company which operates the local system.

STU-BH operates line 1 (Eldorado – Vilarinho), with a length of 28.1km. and serves the population of Belo Horizonte and the Metropolitan Region. Line 1 has 19 stations and 6 integrated road terminals. The fleet of 35 trains is made up of four cars each, making a total of 140 passenger cars.

On 12/22/2022, an auction was held and the Comporte Participações S.A consortium was awarded line 1 (Eldorado – Vilarinho) and 2 (Nova Suiça – Barreiro).

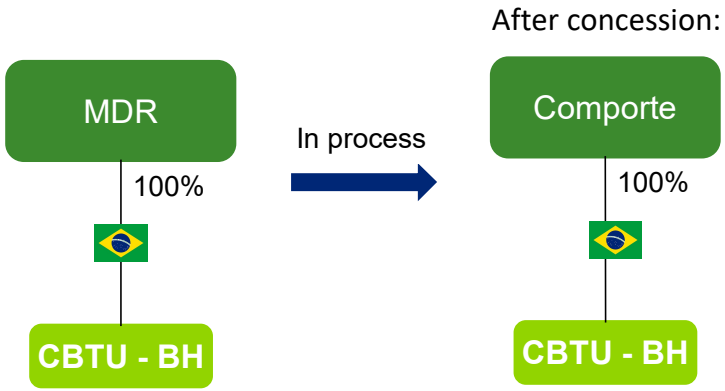
Line 1

Source: https://www.cbtu.gov.br/index.php/pt/belo-horizonte/

Important Numbers

Gross Revenue (aggregate)	R$158,056,014 – Date 12/31/2021
Type of company	State-owned company
Founded in	1985
Passengers/day	100,000

Shareholding Structure



Other main players

Other main players

Sector	Company and country
Construction and Project Management	HTB Construção Andrade Gutierrez Odebrecht Queiroz Galvão Camargo Corrêa CCR Egis Concremat - CCC ACCIONA
Industrial mounting	Telemont Tabocas Participações RIP Serviços Industriais Techint Enesa Engenharia Montcalm Montagens Industriais Vision Engenharia

Sector	Company and country
Maintenance, equipment and components in permanent railroad manufacture	Arcelormittal Brastan Br Railparts Empretec Geismar do Brazil Gerb do Brazil Harsco Rail Hewitt Equipamentos LB Foster Rail Linsinger Loram Matisa Pandrol South America Progress Rail Service Plasser do Brasil

Source: “O Empreiteiro” – Ranking da Engenharia Brasileira and Railways Magazine 2019

Main Projects Portfolio

Main Projects Portfolio

Latest projects conceded

Status	Project	Model	Auction	Value	Concession Term
Belo Horizonte					
Conceded	Linha 1 e 2 - CBTU Minas	Concession	12/22/2022	25,7 million	30 years
São Paulo					
In operation	Linha 8 e 9	Concession	04/20/2021	980 million	30 years
Conceded	Linha 15 - Prata	Concession	03/11/2019	160 million + 1% of Rough revenue	20 years
Constructing	Linha 5 e 17	Concession	01/19/2018	553 million + 1% per month	20 years
Constructing	Linha 6	PPP	07/06/2020	15,1 billions	25 years

Main Projects Portfolio

Projected Investments

Status	Project	Model	Expectation Period
São Paulo			
Planning	Linha 7 Rubi - Trem Intercidades	PPP	30 years
In Study	Linha 20 - Rosa	Concession	In study
In Study	Linha 19 - Celeste	Concession	In study
Preliminary Project Bidding	Linha 16 - Violeta	Concession	In study
In Study	Ligação Planalto - Santos (Linha Verde)	Concession	In study
Preliminary Project Bidding	Linha 22 - Marrom	Concession	In study

Deloitte.