



Brazil Annual Report 2023



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Executive Summary

In 2023, Brazil's economic results exceeded the forecasts of both experts and the government. The projected inflation rate was 5.42%, yet Brazil closed the year at 4.62%. The basic interest rate (SELIC) was projected to be 12.25% but wound up being 11.75%. Finally, the Gross Domestic Product (GDP) growth was expected to be less than 1%, but estimates show that the Brazilian GDP grew 3% in 2023. This was due to labor markets and social programs resuming, which led to rallies in the services sector, as well as growth in Agriculture. For 2024, analysts project a slowdown in the economy with continuing low interest rates and a downward trend in inflation.

Regarding security, Brazil's Ministry of Justice and Public Security reported that 2023 experienced the lowest record of Intentional Lethal Violent Crimes (CVLI) since 2010, a reduction of 4.09% compared to 2022. However, when we talk about absolute numbers, Brazil leads the global ranking in homicides according to data from the Global Study on Homicides 2023, released by the UN. When considering the number of homicides per 100,000 inhabitants, the country placed 11th with a rate of 22.4. In comparison, the global average is 5.8 homicides per 100,000 inhabitants.

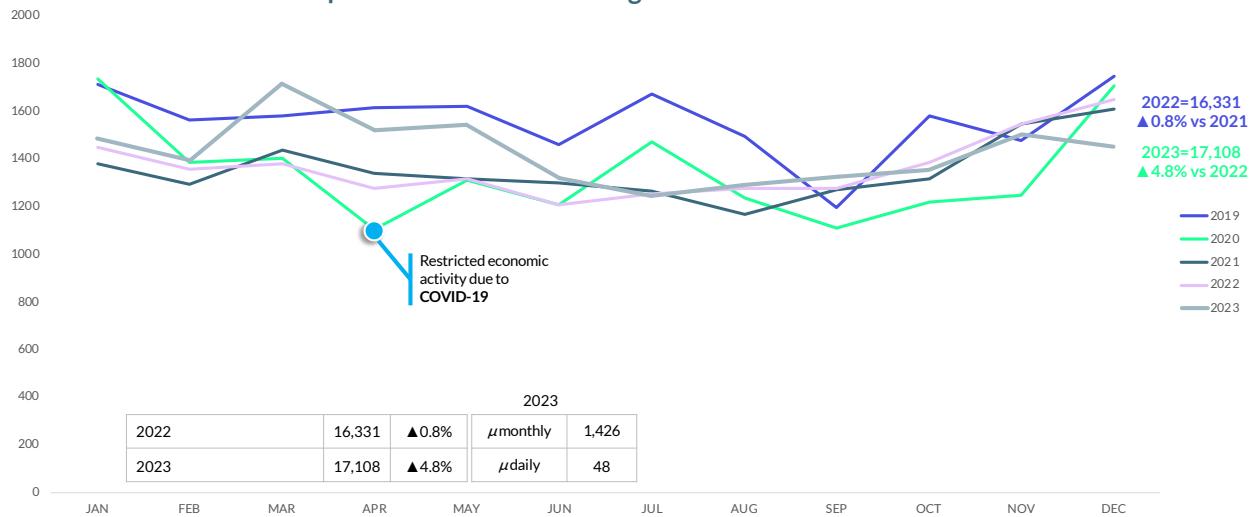
Organized crime remains a problem throughout the country. Criminal factions and militias are active in drug trafficking, customs crimes (embezzlement and smuggling), counterfeiting, and cargo theft. The federal government launched a program called Brazil United Against Crime with an investment of 3.6 billion dollars to strengthen the fight against corruption, militias/factions, and border control.

In this report, we provide a contextualized analysis of the behavior of cargo theft in the country and seek to collaborate with supply chains to keep their operations safe and efficient. Cargo theft is about much more than the simple value of stolen cargo; it can cause, among other negative consequences, an increase in insurance rates, supply disruptions, additional freight expenses, high investments in safety, operational restrictions for the use of routes, and limitations regarding the volume to be loaded on a vehicle.

Overhaul's analyses were developed based on our proprietary data sample, where we sought information about the events through public sources using technological resources and specialized analysts. We consider cargo theft to include all captured events that involve the subtraction, attempt and/or recovery of raw materials, components, products in processing, and/or finished products. Our goal is to study the behavior of these phenomena in order to enable companies to plan against and mitigate events that may impact the efficiency of their operations.



Graph 1: Annual Trend of Cargo Theft in Brazil 2019-2023



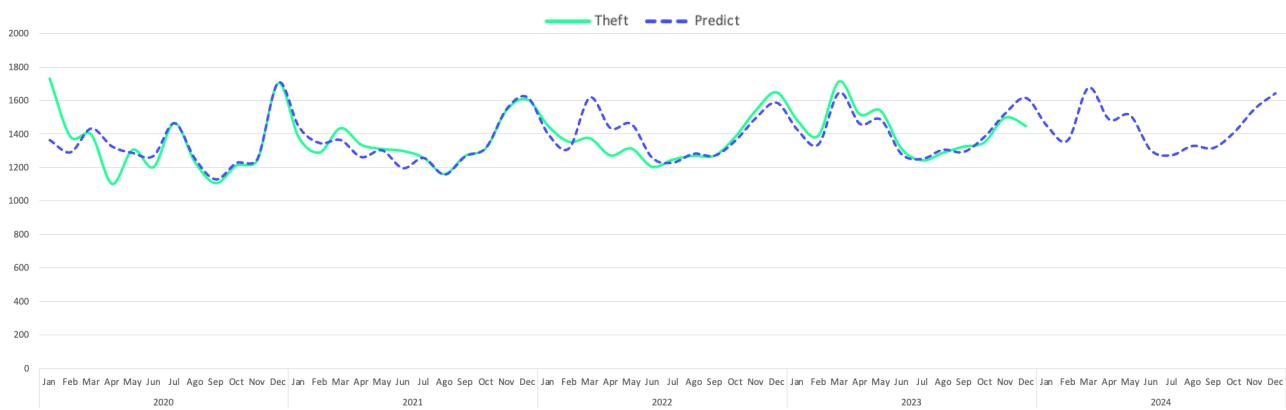
Above, we have presented temporal analyses and analyses of the spatial distribution of cargo theft in Brazil, considering the most impacted States of the Federation. Analyses of the behavior of cargo thefts in 2023 will be presented, considering times, days of the week, types of places where approaches occur, and types of events. Next, in our special report section, we provide a study dedicated to each region of Brazil to offer a more granular view of cargo theft in the country.

Our analysis revealed that 76% of cargo theft events in 2023 occurred in the Southeast region, with São Paulo and Rio de Janeiro as the most critical states. In terms of trends, the month of March 2023 showed a number 20.2% higher than the average of the months in the year.

According to our analyses and projections based on the data collected that make up our sample, we project that Brazil had 17,108 cargo theft events in 2023, an increase of 4.8% from the same period of the previous year.

Forecasts point to an expected growth of 1.1% in 2024, ending the year with 17,298 cargo thefts in Brazil. These analyses considered data from 2020 onwards, as the COVID-19 pandemic statistically resulted in a trend break that made the series before 2019 no longer autoregressive, considering the data we have in our database.

Graphic 2: Annual Trend Cargo Theft in Brazil 2020 - 2024

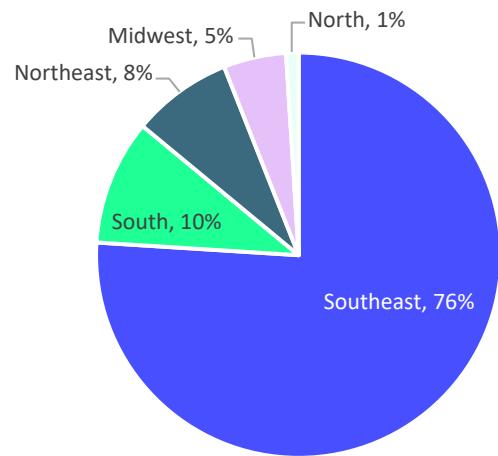


Spatial and Temporal Analysis of Cargo Theft in Brazil

By segmenting the country into quadrants, as shown in the map to the right, it was found that most cargo thefts (88%) were concentrated in quadrant 4 (C4). This quadrant encompasses the states of São Paulo, Rio de Janeiro, Minas Gerais, Paraná, Santa Catarina, Rio Grande do Sul, and Goiás.



Graph 3: Cargo Thefts by Region 2022



Source: Own development with data from Overhaul Intelligence Center

Regional Analysis

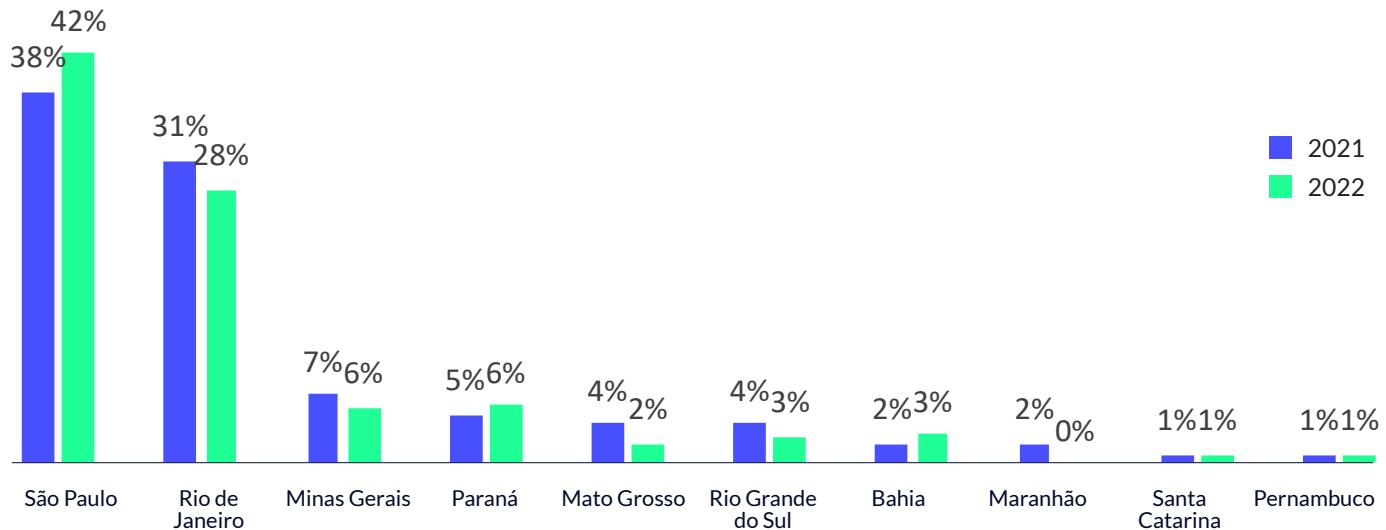
In 2023, the Southeast region maintained its position as the area with the highest number of recorded incidents. Specifically, the states of Rio de Janeiro and São Paulo stood out as the primary contributors to the country's cargo theft figures.

This can be attributed to their significant economic representation and extensive cargo movement, as both states play a crucial role in Brazil's commerce and trade. Consequently, the prominence of these states greatly influences the overall situation within the region. In 2023, the South and Northeast switched their positions compared to 2022, when the Northeast was the second region with the most occurrences and the South the third.

Analysis of the 10 states with the Highest Volume of Cargo Thefts

Regarding cargo thefts, São Paulo and Rio de Janeiro remain the leading states in Brazil, accounting for 70% of the country's total theft incidents. Although there has been a slight decrease of 4 percentage points compared to 2022, these two states still have the highest number of cargo thefts. Interestingly, the geographic distribution of thefts shows a certain stability, with the top states on the list consistently experiencing high levels of thefts. Among the top 10 states, São Paulo, Paraná, and Bahia have witnessed an increase in their theft numbers. São Paulo saw a rise of 4 percentage points, while Paraná and Bahia both experienced a 1% increase in theft incidents.

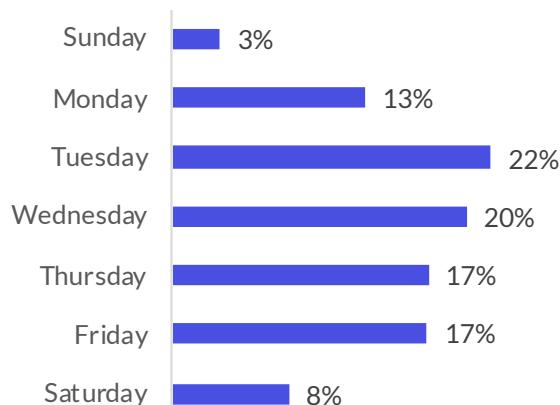
Graph 4: Brazil Cargo Theft by State



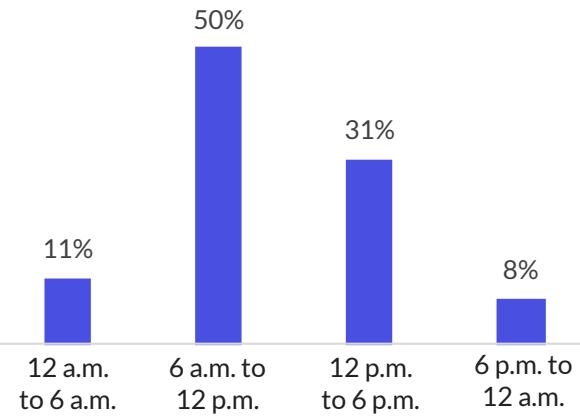
Theft by Day and Time

In Brazil during 2023, cargo theft continued to be more prevalent on weekdays. Among these days, Tuesday emerged as the day carrying the highest risk, accounting for 22% of incidents. This represents a shift in attack patterns, as Wednesday and Thursday were the days with the most events in 2022, both with 20%. One possible explanation for this overall pattern is the higher concentration of cargo movements on workdays. This higher volume of activity creates more opportunities for criminals to exploit vulnerabilities in the security of logistics operations. As a result, criminal activities tend to increase during these times.

Graph 5: Cargo Theft in Brazil by Day of the Week



Graph 6: Cargo Theft in Brazil by Time



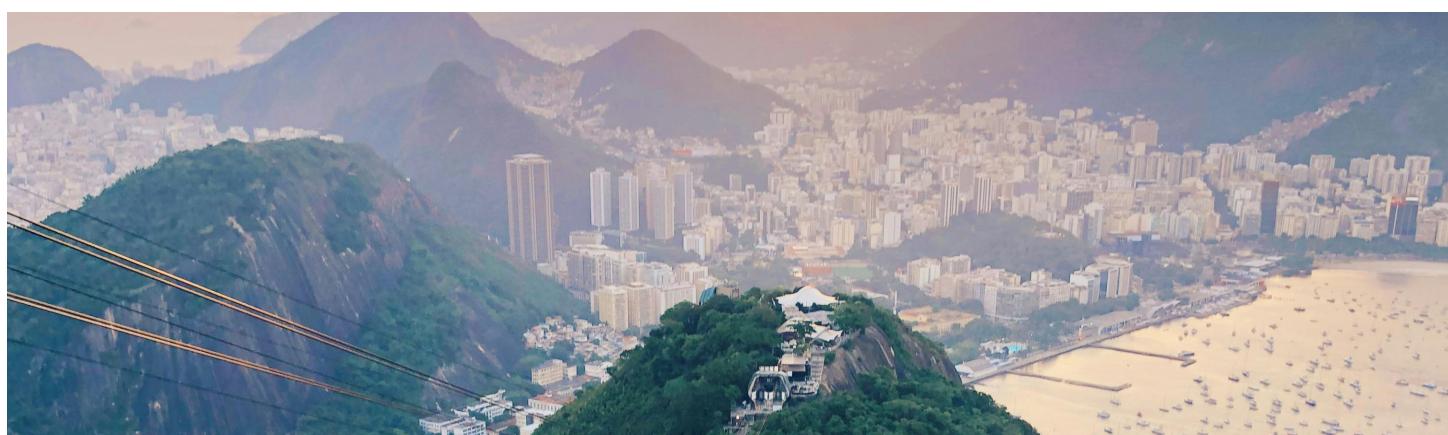
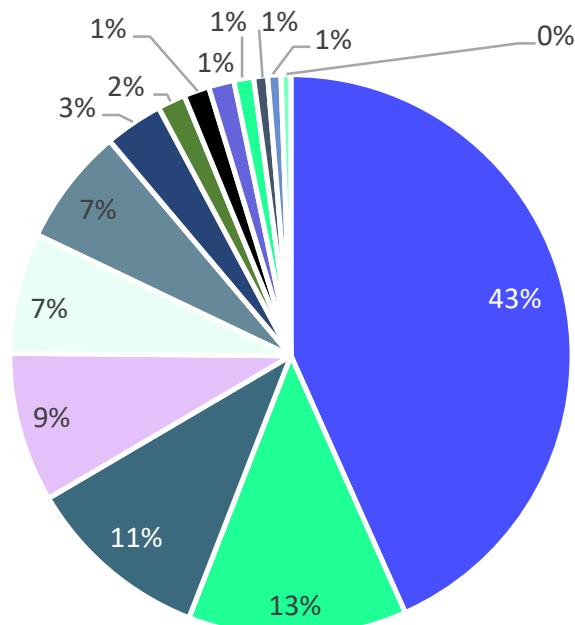
As for the times of day, a similar pattern was maintained in 2023, with the highest incidence of events in the morning between 6 a.m. and 12 p.m. at 50%, representing a drop of 5 percentage points compared to 2022. What is most striking are the robberies that occur from 12 p.m. to 6 p.m., which saw a huge increase in 2023, going from 6% to 31%. Among the factors that can contribute to this increase are drivers' rest stops after a day's travel, where criminals wait until the drivers have stopped and are out of the cab before they can hold them up and steal the cargo. This modus operandi is increasingly being used to deceive the tracking companies; after the drivers have stopped, the criminals force them to continue conducting required security procedures so that they don't arouse suspicion.

Theft by Product Type

According to the Overhaul Intelligence Center database, the top 5 most stolen product types remain the same as last year. **Miscellaneous** accounted for 43% of thefts and showed a drop of 10 percentage points when compared to 2022. The second most stolen type of product was **Food & Drinks**, which dropped 6% compared to the previous year. **Tobacco** was the third most stolen product with 11%, experiencing a 4% increase in thefts. The **Electronics** category also went up by 4 percentage points in 2023. The **Auto & Parts** category went up 3% compared to last year. This category includes thefts where not only cargo but also the vehicle that is carrying said cargo was targeted.

■ Miscellaneous	■ Food & Drinks
■ Tobacco	■ Electronics
■ Auto & Parts	■ Agro
■ Alcohol	■ Home & Garden
■ Fuel	■ Metals
■ Pharmaceuticals	■ Building & Industrial
■ Clothes & Shoes	■ Personal Care

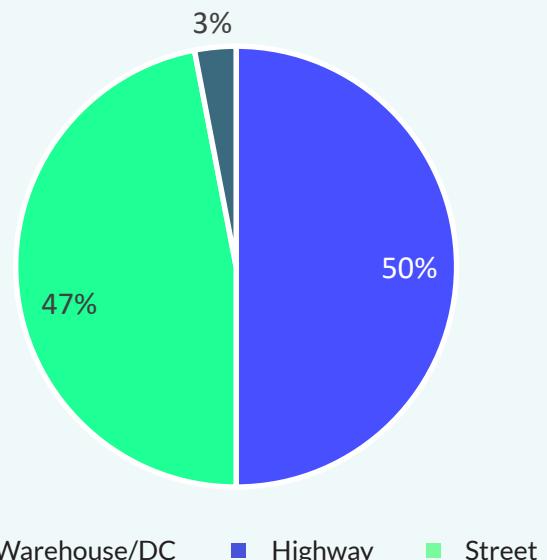
Graph 7: Cargo Theft in Brazil by Type of Product



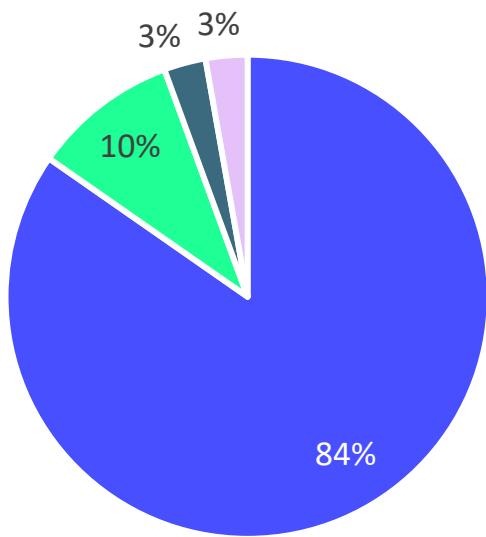
Theft by Type of Location

Thefts that took place on **Streets** or **Highways** were evenly distributed this year. This parity in **Street** robberies, i.e., more urban areas, in relation to **Highway** robberies, shows the spread of the different types of robberies involving gangs in 2023. Not only did they seek out higher-value loads in a more organized way in their **Highway** crimes, but there was also a significant expansion in thefts of opportunity, which involved lower-value loads and smaller volumes. Although there is a small percentage of thefts in **Warehouses/DC** compared to other locations, it is worth remembering that this type of theft usually targets larger volumes of cargo and more significant amounts, which makes this type of event more critical.

Graph 8: Cargo Theft in Brazil by Location



Graph 9: Cargo Theft in Brazil by Type of Event



Theft by Type of Event

Hijacking remains the most recurrent type of criminal action in Brazil at 84%. **Fraud**, which also include thefts with indications of facilitation by direct or indirect employees in logistics and transport operations, has been on the rise and saw a significant increase of 9 percentage points compared to 2022. These figures are of increasing concern to shippers and cargo carriers. **Pilferage** also rose by one percentage point compared to last year, remaining the third most frequent type of event in Brazil in 2023.

- Hijacking
- Fraud
- Pilferage
- Facility Theft

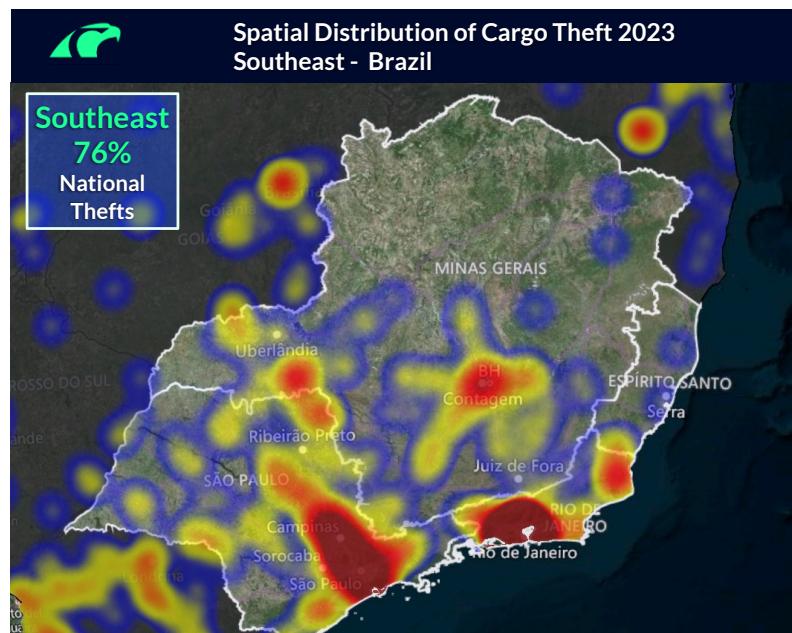
Special Report 2023

The Overhaul Intelligence Center has chosen to provide an overview of the country's regions so that readers can understand a little more about them individually. Specifically, this information will help provide an understanding of each region's unique risks, motivations, and trends. Below are the analyses of Brazil's five regions for the year 2023:

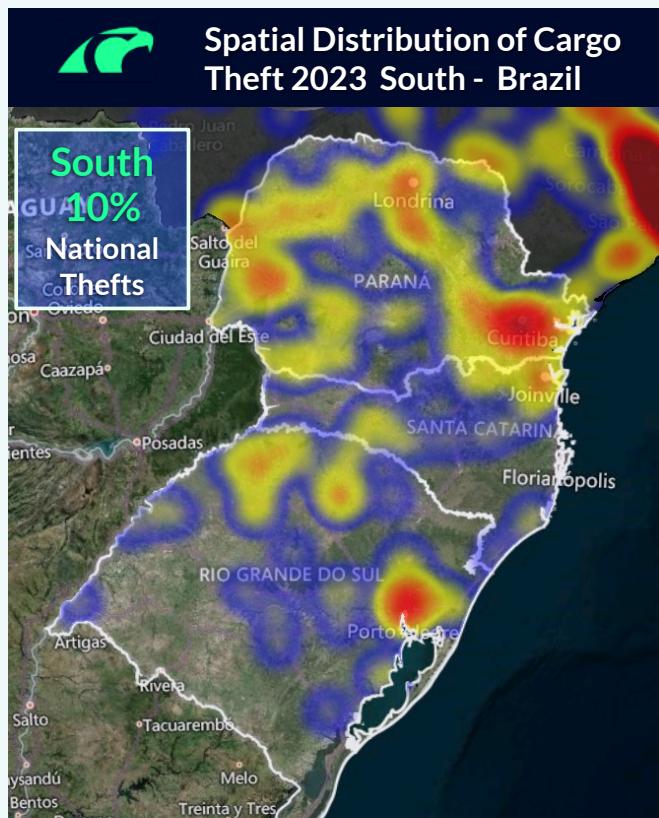
Cargo Theft in the Southeast Region

The Southeast is the country's most developed and populous region. It is responsible for over 55% of Brazil's GDP, despite being the second smallest region in Brazil. It comprises four states: Rio de Janeiro, São Paulo, Minas Gerais, and Espírito Santo. With a territorial extension of 924,511.3 km², it occupies 10.9% of Brazil's total area. The region is responsible for 76% of all cargo thefts in the country, with the states of São Paulo and Rio de Janeiro accounting for 70%. With the large circulation of goods and the area's development, the region has also become a target for cargo theft gangs looking for higher-value cargo that can be easily distributed in illegal markets.

Despite still being the region most at risk for cargo theft, other regions experienced spikes in 2023, which changed the percentage of thefts in the Southeast by 5% compared to 2022. The most stolen products in the region were **Miscellaneous** (mixed cargo), followed by **Food & Drinks** and **Tobacco**. The sub-regions with the highest occurrence continue to be the metropolitan areas, with a special highlight for the Baixada Santista region in the state of São Paulo. Specifically, the municipalities of Praia Grande, São Vicente, Guarujá, and Cubatão quadrupled their numbers of cargo thefts from 2022 to 2023.



Cargo Theft in the South Region



The South region is the smallest in the country and ranks second among Brazil's richest regions. It borders economically important countries in South America, including Uruguay, Argentina, and Paraguay. With an area of 576,774 km², corresponding to 6.76% of the Brazilian territory, the economy of Brazil's Southern region is divided into four main sectors: agriculture, extraction, industry, and energy. Agro-industry is one of the best-placed sectors within the Southern region's economy, producing foodstuffs such as corn, rice, soybeans, onions, and apples.

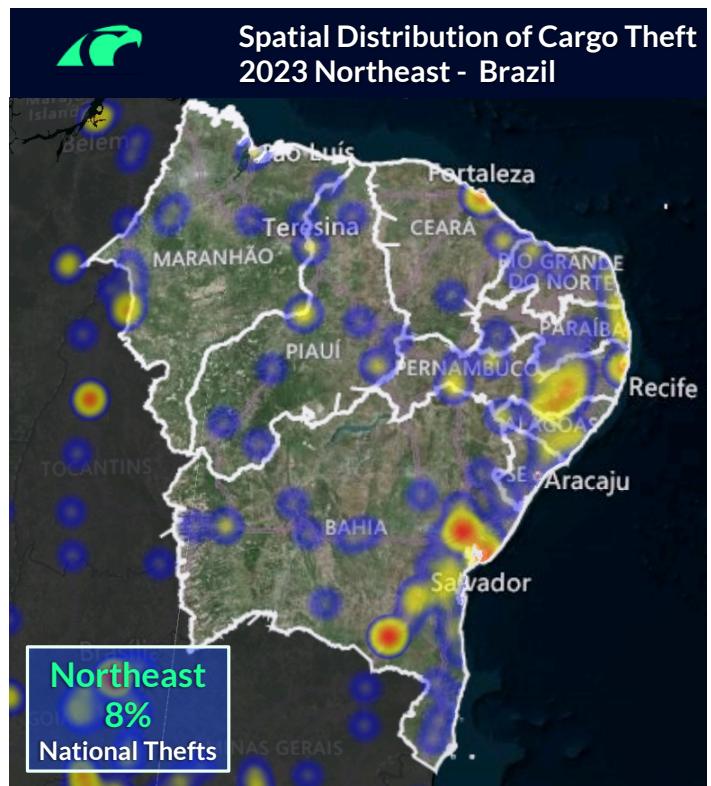
In 2023, the South had the second-highest number of cargo thefts. Compared to 2022, this region showed a considerable increase of 4 percentage points, with **Agro** cargo being the main target of criminals for cargo theft, accounting for 19% of the region's theft. In addition to cargo theft, the region registers large numbers of other types of cargo crime, such as smuggling and embezzlement of products that enter through its borders and are distributed to the rest of the country. The most smuggled product is cigarettes.



Cargo Theft in the Northeast Region

The Northeast region comprises nine states in Brazil and contains the largest number of federal units. It covers an area of 1,554,257 km² and is the third largest region in the country. The region's main economic activities are farming and tourism. Sugar cane is the region's main agricultural product, with plantations concentrated mainly in Alagoas, Pernambuco, and Paraíba (in that order), while cotton (Ceará, Paraíba, and Rio Grande do Norte), soy (Bahia, Maranhão), corn, tobacco (Bahia), cashews, grapes, mangoes, melons, and others are also important.

In 2023, the region was third in terms of the number of cargo thefts, with 8%. Although it went from second place in 2022 to third in 2023, its rate in relation to the other regions still increased by 1 percentage point, demonstrating the consistent action of cargo theft gangs in this region. Its most stolen products are **Electronics, Food & Drinks**, and **Miscellaneous**. Bahia has the highest number of incidents, accounting for 43% of all thefts in the region and 3% nationwide.



Cargo Theft in the Midwest Region



The Midwest region is the second largest in the country regarding its land area, yet it is the least populous. It is made up of the states of Goiás (GO), Mato Grosso (MT), Mato Grosso do Sul (MS), and the Federal District (DF), where the country's capital, Brasília, is located. It has an area of 1,606,399.509 km², representing 18.86 % of the national territory. It is the only region not touching the sea. The region's economy is primarily based on agriculture and livestock farming. Its main agricultural products are soybeans, beef, corn, sugar cane, and cotton.

Not surprisingly, the most stolen products in the region in 2023 are from the **Agro** category, accounting for 38% of thefts in the region. In addition to these types of products, we can highlight the theft of **Trucks and Trailers**, a type of crime in which criminals often focus not only on the cargo but also on the vehicle, which is often dismantled to feed the illegal spare parts market. This growing practice accounted for 14% of incidents in the region in 2023.



Cargo Theft in the North Region

The North region comprises seven Brazilian states. It is the largest in territorial extension, as well as the one that concentrates the largest green area in the country, the Amazon Rainforest. The North region covers an area of 3,853,676.948 km², corresponding to 45.27% of Brazil. The North's economy is based on mineral and vegetable extraction, agriculture, and aquaculture. The most important mineral and vegetable extraction is iron ore. Agriculture in the region is mainly for subsistence, with manioc, beans, and corn crops. The region continues to have the fewest incidents recorded by the Overhaul Intelligence Center, varying year to year between 1 and 2%. In 2023, the theft of **Electronics** accounted for 31% of all types of products stolen in the region. Tocantins and Pará are the states with the highest number of cargo thefts, together accounting for 59% of the region's thefts.



General Recommendations

Overhaul's Intelligence Center assesses cargo shipments in the country to be at a SEVERE risk for theft. According to our analyses presented here in this report, we highlight that the first six types of goods—Miscellaneous (mixed cargo), Food & Drinks, Cigarettes, Electronics, Auto & Parts, and Agro—remain the most stolen types of cargo in the country. However, it is important to consider that more of this cargo was shipped in 2023 than in 2022. Regardless, these numbers reinforce the need to act with preventive measures and intelligence to mitigate new events in the transportation and storage of such products.

Theft events continue to be concentrated in the Southeast region, but we see a considerable increase in the South region of the country, as well as in the State of Bahia (Northeast region), signaling changes in the modus operandi of the gangs. The city of Santos in the State of São Paulo has the most relevant port in the country and also deserves special attention. It quadrupled its number of events in 2023 compared to the previous year.

Transport plans must consider the application of safety features in an integrated way. Suppliers can offer customers the ability to balance preventive measures with improved efficiency levels. The locations highlighted above deserve unique support to meet a supply chain's particular needs.

It is important to embed visibility and risk monitoring devices within vehicles and cargo. Their risk mitigating effects can be further strengthened through predictive analyses that consider external environmental variables that need to be detected, analyzed, and ranked by a trained and mature intelligence team.

