

RIO DE JANEIRO: CITY OF RICH AND POOR

FAST FACTS	Rio de Janeiro	Similar To
Metropolitan (Labor Market) Population	10,900,000	Paris
Urbanized Area* Population	9,650,000	Paris, Shanghai
Urbanized Land Area: Square Miles	450	Vancouver, Portland, Perth
Urbanized Land Area: Square Kilometers	1,166	
Population per Square Mile	21,400	Singapore, Sao Paulo
Population per Square Kilometer	8,300	
Capital of the state of Rio de Janeiro		
Former national capital (before transfer to Brasilia)		
2 nd largest metropolitan area in Brazil		
Among 20 largest urbanized areas in the world		

Urbanized Area Atlas: Ruas Rio de Janeiro (Guia Quatro Rodas), purchase at bookstores.

*Continuously built up area

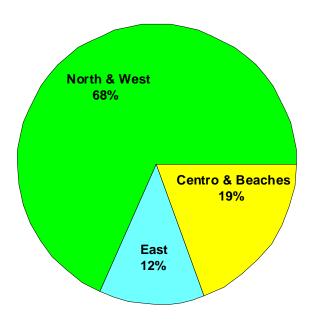
Few urban areas can compete with Rio de Janeiro for sheer physical beauty. High-rise European style development is interspersed with spectacular mountains, such as Sugar Loaf and Serra da Carioca, with the statue of Christ at its summit. Rio de Janeiro is, in many ways, defined by its mountains and beaches. Copacabana and Ipanema beaches are world renown, and for good reason. Behind the rows of hotels and apartment buildings of Ipenema is Lago Rodrigo Friegas, a most pleasing urban environment.

My entry to the city was on the Washington Luis motorway from Belo Horizonte. The first 200 miles or so are a mountainous poor quality, narrow, four-lane right of way on which the speed limit can be maintained only Brazilians move to the right when approached by a faster car almost as reliably as Germans. The last 50 miles into the urban area are on a high quality, private toll road, which includes a challenging downhill drive, with curves rated at 35 miles per hour or less (similar to the Adelaide approach from Murray Bridge, the Mexico City approach from Puebla or the uphill Sao Paul approach from Santos on the Anchiete).

Once reaching the vast northern flatland on which most of the urban area sits, the road becomes four --- two roadways in each direction, a trait shared with many other roadways in urban Brazil. Eventually traffic merges onto Avenida Brasil, which continues to Centro (downtown). This roadway includes four central lanes in each direction, two of which are for buses. There are also frontage roads with two to three lanes in each direction. All of this suggests either that a Texas engineer must have designed it, or perhaps that a Brazilian engineer provided the model for Texas freeways. Avenida Brasil has to rank among the world's most fascinating urban drives. But this fully grade separated roadway, with no traffic signals, is not the principal freeway entrance to Centro. There is also the adjacent, elevated Linha Vermelha, which by an extension ends in Copacabana at Avenida Atlantica, the principal route to Ipanema and the newer beach playground of Barra.

But there is much more to Rio de Janeiro than these and other European style neighborhoods. Indeed, within these neighborhoods themselves are some of the largest favelas (shantytowns or informal settlements) in Brazil. At Cocacabana's Leme Beach, for example, a favela extends up the mountain within three blocks of beachfront hotels. Rocinha, reputed to be the largest favela in Rio de Janeiro (some say the largest in Brazil), occupies prime view real estate between Ipanema and Barra, housing perhaps 200,000 residents in perhaps a square mile. A 2000 Census count of 56,000 seems hopelessly low. Here, even before economist Hernando DeSoto suggested it, the government began to promote private property ownership and while Rocinha will never be Beverly Hills, economic progress is being made. Favelas can be found on hills and mountains throughout the city. It is estimated that as many as 2,000,000 of the metropolitan area's nearly 11 million people live in favelas.

Little more than 10 percent of Rio de Janeiro residents live in the desirable areas to the south and west of Centro. Approximately one-third (6,500,000+) live on the tidal plains adjacent to Guanabara Bay, north of Centro and the flat lands north of the mountains that sit in the municipio's geographical core. In these areas, along with favelas, one finds the typical middle and lower middle income single family dwellings so typical of Brazil and which, at least from high-income world eyes considerably less pleasing than those lived in by people of similar economic status at home. Then, more than one million people live across the bay (Niteroi and Sao Goncalo), accessible by the long Ponte Rio Niteroi.



Population Distribution: Urbanized Area

Driving along the bays and waterways of Rio, one experiences another phenomenon all too familiar to Brazil --- the smell of sewage. No samples or scientific instruments are required for the judgment. Beyond that, of course, is the fact that basic utilities are not available in some favelas, especially sanitary systems.

In a city short of sewers, significant public funds have been spent to build a subsidized metro line that manages to attract less than one percent of travel, much of it within the European core. The suburban rail system attracts approximately five percent of travel, and requires a more than 70 percent subsidy. More than 50 percent of travel is by the thousands of unsubsidized private buses

¹ The Census also showed no substandard dwellings in Centro. Yet there are favelas in Centro.

that serve a dense network throughout the city² (the city owned bus utility failed and closed some years ago). This leaves approximately 40 percent of travel that is by car.

It is not easy to effectively serve the travel patterns of a 450 square mile urban area, regardless of population. It is even more difficult if that urbanization is frequently interrupted by mountains and water. No affordable rail system can do that, and the dispersion of destinations (Centro has less than 10 percent of employment) severely limits the ability of buses to conveniently serve destinations outside Centro, Copacabana and Ipenema and the areas between.

As a result, one of the world's largest (at least initially) informal, van transport systems has been developed in Rio de Janeiro. As experience from Cape Town to Los Angeles has shown, there are significant regulatory difficulties with informal transport. But people do not use informal transport because they seek to thwart regulators, rather they use it because it serves their needs better than any affordable alternatives. And while it is not easy to establish an effective, market oriented regulatory environment, failure to do so hastens the purchase of automobiles by people who find the formal public transport system insufficient because it doesn't go where they need to go fast enough and find the informal public transport system inadequate because regulations do not permit its full development.

Nonetheless, in Rio de Janeiro, the real story may be these vans, illegal and legal, that supply more market-oriented services throughout the city. The *Millennium Cities Database* estimated ridership to be greater than that of the metro in 1995, though this could be a significant underestimation. Any drive through the lower middle income and middle income areas that predominate the urban area will reveal surprisingly large numbers of such vans, all unsubsidized, and generally high load factors. In an urban area with less than five percent of employment in the central area, the vans may well provide opportunities for access between homes and non-Centro employment locations. It is also reputed that they are quicker than the buses.

And there is an even more market-oriented alternative to the automobile. In the favelas of Rocinha, motorcycle taxis operate to provide what may be the ultimate in low-cost, demand responsive service.

But, as University of Paris professor Remy Prud'homme and associates have shown, access to employment is a critical issue in the economic development of urban areas. Surely, there is much economic progress to be made in Rio de Janeiro, and making both formal and informal public transport more effective, especially for lower and middle income households will be very important.

Finally, Rio's reputation for insecurity appears to be somewhat overblown. The European style upper income areas, especially the beach areas, are quite safe, but as in any big city, appropriate precautions should be taken.

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² Subsidies are provided to lower income employees through the "Vale Transport" system, which purchases public transport tickets. Bus services receive no direct subsidies, though rail services around the country tend to receive both operating and capital subsidies, in addition to the user subsidies by employers for purchasing tickets.



Entry to Centro from South (Copacabana)



Copacabana Beach from Sugar Loaf



Avenida Brasil (Fully Grade Separated): Entrance to Centro from North
4 Roadways (2 Express, 2 Local): 12 to 14 Lanes
One Lane in Each Express Roadway is Busway
This is a Secondary Road: Linha Vermelha (Motorway) is Nearby to the East



Favela Rocinha between Ipanema and Barra: Affluent and Poor Together



Secondary Street in Rocinha



Formal and Informal Public Transport in Rocinha



Motorcycle Taxi Base in Rocinha



Private Property in Rocinha



Favela North of Centro



City of Rio de Janeiro: Northern Sector



Lower Middle Income Residences: Santissimo (Northern Sector)

Wendell Cox 24 September 2003

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