SAO PAULO: CITY OF HOPES

FAST FACTS	Sao Paulo	Similar To
Metropolitan (Labor Market) Population	17,900,000	Seoul, Mumbai, Mexico City, Los Angeles, Osaka-Kobe-Kyoto
Urbanized Area* Population	16,600,000	Mexico City, Mumbai
Urbanized Land Area: Square Miles	765	Sydney, San Diego, Phoenix
Urbanized Land Area: Square Kilometers	1,981	
Population per Square Mile	21,700	Singapore, Rio de Janeiro
Population per Square Kilometer	8,400	

Capital of the state of Sao Paulo

Largest metropolitan area in Brazil

Largest metropolitan area in the southern hemisphere

6th largest urbanized area in the world (following Tokyo, New York, Mumbai, Mexico City & Jakarta)

Urbanized Area Atlases: O Mapograf Guia or Ruas Sao Paulo (Guia Quatro Rodas), purchase at bookstores.

*Continuously built up area

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Among the world's great metropolitan areas, perhaps none is more reviled by the urban planning community than Sao Paulo. Sao Paulo is both Brazil's and the southern hemisphere's largest, among a group of metropolitan areas of similar size (with Mexico City, Mumbai and Seoul), somewhat smaller than New York and approximately one-half the size of Tokyo.

At nearly 18 million people, the metropolitan area is similar in size to Mexico City, Mumbai (Bombay) and Seoul, a bit smaller than New York and somewhat more than one-half the size of Tokyo.

Ask an urban planner about Sao Paulo and you will be told of how in a world with cities that have not been planned, Sao Paulo is the worst. Words like "haphazard," "sprawl" and worse will invariably be called upon.

And, of course, Sao Paulo sprawls. What urban area of 18 million does not? "Sprawl" implies sinister connotations for urban planners, the equivalent of "Lucifer" to medieval clerics. The word "sprawl" has long since lost any useful meaning. It has been applied to describe both Hong Kong (Kowloon-Norther Hong Kong, at 120,000 per square mile is the world's most dense urban area) and Atlanta (at 1,700 per square mile, one of the least dense). It only adds to the insanity that Portland's 3,500 per square mile urban form --- less than 1/30th that of Hong Kong and 1/6th that of Sao Paulo, is hailed by the urban planning clergy. And what urban area of 18 million is planned? New York's somewhat planned island of Manhattan is but an island of 20 square miles

in an urban area of more than 3,000. For that matter, not even the smallest, most comprehensively planned cities are planned in toto, as a visit to the Goias suburbs of Brasilia testifies.

Sprawl, simply put, is the product of population growth. Short of an architecture fashioned after the Tower of Babel, two people will take up more space than one. What might be called the urban planning Maoists --- those who would limit population growth like in China --- hold the most intellectually honest views among the religious leadership. Poverty also helps. As Greg Easterbrook of *The New Republic* put it, sprawl is caused by population growth and affluence.

But as we have shown elsewhere, the anti-sprawl movement has demonstrated no imperative than compels its policies (www.demographia.com/db-smg.htm). And, since sprawl, in and of itself, is not a problem, the world only be made worse by Maoists policies. Nor is there any useful place for those who propose a "third way" that would allow growth so long as they control it.

But in the international context, Sao Paulo's 18 million people live in a compact city. At an estimated 21,000 people per square mile, it is more than double the density of Paris, and nearly three times that of Los Angeles. Among the six urbanized areas in the world with more than 15,000,000 population, Sao Paulo covers less than area and is more dense than only Mumbai and Mexico City. Moreover, Sao Paulo is surrounded by vast open spaces, with the built up area comprising less than one percent of Sao Paulo state (itself, the largest state or province in the western hemisphere, with a population greater than that of California). So, sprawl is not a particular problem in Sao Paulo, except among those offended by more people and more money.

By any standards, the large urban core of Sao Paulo has the look of planning. There is what must be one of the worlds most extensive grid street systems. At the surface, Sao Paulo's urban core surely looks no less well planned than Portland, Perth, Phoenix or Stockholm. Wide boulevards that would be the envy of most American urban areas radiate from Centro (the central business district), providing for huge volumes of traffic, which are of course the natural result of such high densities.

Perhaps the planners are offended that there are so many buses and not enough (at least in their minds) metros or suburban rail lines. Perhaps the civic buildings are improperly grouped or do not resemble the fashionable cacophony of the Bilbao Guggenheim, or worse, the Disney Center or the nearby new Los Angeles cathedral. Maybe the jobs aren't located close enough to the residences (though there are an average of 1,600,000 jobs within the average work trip commute radius). Perhaps it is that there are too many cars. But there are cars wherever there are people with enough money to buy them. And there will inevitably be more where public transport policies spend too much on too little, making cars a necessity for any fortunate enough to be able to afford them. More on this later.

In a country with a strong north-south commercial orientation, virtually all freight railroads serve the interior from ports, providing virtually no service between the major metropolitan areas. This means most internal commerce is on trucks. This causes a particular problem for Sao Paulo, because there is no practical alternative to the city and its roadways for interstate trucks operating between major cities. A ring road has been one-quarter completed, but is currently stalled by environmental issues. The combustion engine exhaust one breathes in Sao Paulo leads one to wonder what environmental hazard might be more important than the air quality improvement moving trucks to a completed ring road would achieve.

But, of course, the urban core is not all there is to Sao Paulo. Fifty years ago, Sao Paulo wasn't even the largest urban area in Brazil, much less the largest in the southern hemisphere. Since 1960, the regiao metropolitana has added 13 million people --- more than live in the central cities of New York, Los Angeles and Philadelphia combined --- more people than live in Greater London, the ville de Paris, and the cities of Milan and Rome combined.

The reason for Sao Paulo's urban form has been hinted at --- people. A lot of people. And, as from Lagos to Detroit, not all of the new residents come with fistfuls of cash. People flock to cities because of the potential for betterment. In a middle-income nation, like Brazil, most of the new urban arrivees will be less well off than in higher income nations.

Thus, surrounding Sao Paulo and interspersed in the city itself are large tracts of low-income areas and favelas (shantytowns) --- so-called informal settlements that become permanent rather quickly. At first, favelas are densely packed dwellings made of wood or cardboard, and later they are replaced by concrete block construction, still very densely packed. There has been a modest "Chicago School" attempt to force favela residents into high rise projects reminiscent of the Robert Taylor homes along the Dan Ryan Expressway, but that appears to be no more successful than its model.

To affluent American eyes, the poverty is shocking. But Sao Paulo's poor moved here because things were worse where they came from. Like the Irish or Italian immigrants to New York, some probably return home. Virtually all could return, but the overwhelming majority wouldn't think of it. For the rural poor from the North East and elsewhere in the nation, Sao Paulo (like other large urban areas) shines as a beacon of opportunity, however dimly by high-income world perceptions.

Meanwhile, local authorities, like their comrades elsewhere, are busily overinvesting in subsidized new metro and suburban rail lines that principally serve the central area. The new routes rarely, if ever, serve the surrounding poor, and when they do take them only to the central business district (broadly defined as Centro and Paulista). But like elsewhere in the world, the central business district is a declining share of the employment and shopping market. In recent years, however, a great deal of new commercial construction has occurred in the growing edge cities, such as Berrini and Jardines. There are plans, of course, to build a CBD oriented metro line through Berrini, but that center is so large that much of it will be beyond walking distance from the station, no matter where it is placed.

And, by the time the new line is built, no doubt the market will have moved another decade or two ahead of the planners, with new commercial construction elsewhere, unserved by metro. Like elsewhere, the resource diversion resulting from preoccupation with overcapitalization limits potential mobility and is itself a principal reason why people buy cars as soon as they can afford them. The overwhelming majority of public transport riders in Sao Paulo ride the unsubsidized buses and trolleybuses, many of which operate on busways that carry some of the highest volumes in the world --- volumes most metros don't achieve. And there are the informal van transport operators, who provide more market oriented services throughout the metropolitan region than can be served even by such a flexible mode as buses.

Santos, the nation's largest port, and itself a metropolitan area of 1,500,000 is approximately 50 miles south. It is a world away in some regards. Sao Paulo sits on the Brazilian highland, which is separated from the coast by mountains, with a steep coastwise incline. While some analysts

consider Santos a part of the Sao Paulo metropolitan area (or at least by the inflated population figures they use, they would have to), a national park and at least 30 miles of empty green space separate the two urban areas. Santos itself has grown very quickly, but has a charming colonial core, with little in the way of high-rise apartments that are seen in other major Brazilian urban areas.

The two metropolitan areas are linked by two spectacular roads, the Rodovia Anchieta and the Rodovia dos Imigrantes. The Anchieta is the much older of the two, with construction having started in the 1920s. This road, the principal truck route between the largest port and the largest metropolitan area, winds up and down the mountain with sharp and challenging curves. The heavy truck traffic makes it one of the most challenging motorway drives in the world. The road is now four lanes from Santos to the southern part of the Sao Paulo urbanized area, where it becomes much wider, and it typical Sao Paulo fashion, splits into four roadways (two local, two express). The Imigrantes is much newer. It opened in 1998 and the southern section was converted into a motorway (dual carriageways) within the last year. By North American or Western European standards, this impressive roadway was built very inexpensively, for approximately \$300 million. The Imigrantes begins in the city, with a very wide road that narrows to six lanes (three in each direction) from the south end of Sao Paulo to the end of the roadway, a few kilometers north of Santos, where it merges with the Anchieta. The road is a bit more than 40 miles long (70 kilometers). Both roads wind through very green, lush forest. Both have extensive tunnels and viaducts.

But it is the Immigrantes that is, in the contemporary context, the engineering marvel. The road has more than four miles of tunnels, some longer than the longest highway tunnel in North America (Eisenhower in the Colorado Rockies). There are more than three miles of bridges. At one point the two roadways cross over (picture). This unusual design duplicates that of the Grapevine between Los Angeles and Bakersfield, where the northbound roadway is to the left of the southbound, with perhaps 1,000 feet in between, for a few miles north of Castaic. The same treatment is used on the western approach to Chamonix on the way to the Mount Blanc Tunnel.

Like Los Angeles and unlike Chamonix, the two roadways on the Imigrantes are also separated by a comparatively large distance, with, again, the northbound roadway being to the left of the southbound roadway. Both of these roadways, and others, are concessioned to Ecovias dos Imigrantes. The tolls are expensive by North American standards, but not by European, and, o course, the road is paid for directly by users based entirely on the extent of their use of the particular roadways (as opposed to the user fee system in the United States where all of the fees go into a large fund that is divided, often politically, without regard to where the funds were collected or the extent of use).

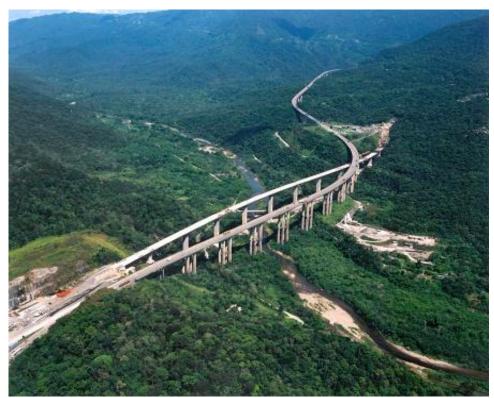
But, back up the Anchieta to Sao Paulo.

The charge of insufficient planning in Sao Paulo is not wholly unjustified. It would seem that the first responsibility of urban planners is to provide the most basic infrastructure. A drive along the high capacity "Marginals" along to the Rios (rivers) Tete and Pinhieros provides unpleasant evidence of their principal roles as sewers. Then, of course, there are the less than sanitary conditions in the favelas. It could be argued that the metro tunnels should have waited until the sewage tunnels were completed (especially since the buses and informal transport that provide most of the public transport service require no public subsidy).

But progress is being made in Sao Paulo. There are television satellite dishes on the roofs of some favela homes. American (Wal-Mart), French (Carrefour) and Brazilian (Extra) big box hypermarkets compete to make local residents more affluent through their lower prices. LeRoy Merlin facilities less expensive home improvements, just like in Europe. The bottom line is this. For whatever planning deficiencies there may have been in one of the world's greatest urban areas, things are much better in Sao Paulo than where its immigrants came from. In that regard, Sao Paulo fulfils a fundamental role for a city --- a place of hopes.



Rodovia Presidente Dutra: Entrance to Sao Paulo from the East (Rio de Janeiro) Between Guarulhos (International) Airport and Centro 4 Roadways (2 Express, 2 Local), 12 Lanes



Rodovia dos Immigrants: New Automobile Only Expressway to Santos Photo shows crossover of roadways (northbound roadway to left of southbound) Photograph from road concessionaire: Ecovias dos Imigantes (www.ecorodavias.com.br)



Rodovia Anchieta: Entrance to Sao Paulo from the South (Santos)



Avenida Paulista



Avenida 9 de Julio West of Centro (Busway in Center)



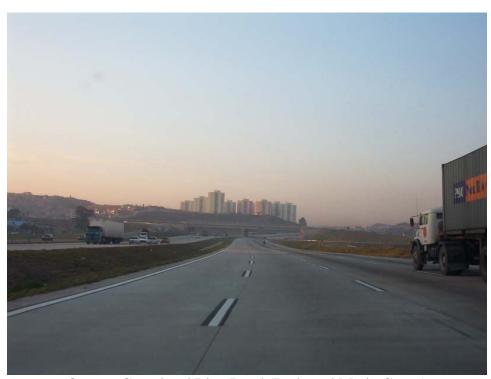
Berrini



Berrini



Jardines



Quarter-Completed Ring Road (Rodoanel Mario Covas)



Favela: Adjacent to Marginal Pinheiros (Zona Ouest)



Exurban Favela: Adjacent to Ring Road (Rodoanel Mario Covas)



Exurban Franco da Rocha



Chicago-Style Favela Replacement High-Rises Adjacent to Ring Road



Luxury Condominium Building & Adjacent Favela (Zona Ouest)

Wendell Cox 24 September 2003

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