



EcoMobility

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Curitiba, Brazil A model of transit oriented planning

Summary: Curitiba's urban development strategy is a model for cities around the world. Accessible public transportation is prioritized when choosing housing and commercial building locations. The public transportation system is exceptional in terms of its affordability for customers, the use of enclosed prepay stations, and the integration of transfer terminals.

Curitiba paves way for sustainable communities

Since the 1970s, Curitiba has integrated public transportation planning into the overall city plan. In 1972, Curitiba created one of the world's first pedestrian malls in order to reduce vehicle traffic in a busy area. Today, public transportation is the priority in Curitiba's long-term structural plan for urban development. High traffic areas such as shopping centers and high rise apartment buildings are conveniently located next to public transportation stations. This level of accessibility has reduced automobile dependence. Curitiba's long term plan promotes dense land use by developing the city along existing bus routes.

Successful urban planning

Curitiba is regarded as an excellent example of Transit Oriented Development (TOD), which implies that residential, business and recreational areas should be built in high density areas and close to public transport stations. In addition, rather than promoting segregated zoning of land uses, TOD proposes land use mix to reduce the travel distances. By coupling the development of a pedestrian friendly community with an efficient low-emissions Bus Rapid Transit (BRT) system and lower car parking availability, Curitiba has successfully reduced the overall travel of its residents.



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Bus-only lanes allow for less traffic interruptions

Breakthrough Bus Rapid Transit system

The BRT in Curitiba has set an example for successful public transportation worldwide. The system currently contains 390 bus routes with 2,000 vehicles that are used for approximately 2.1 million passenger trips daily, nearly 50 times the amount of travelers 20 years ago. After its construction in 1974, the BRT gained an annual ridership of 2.3% of the population for over 20 years. Based on a survey of travelers, it is estimated that the BRT system has led to a reduction of approximately 27 million car trips every year, which translates to nearly 27 million liters of fuel saved yearly. The bus system has transformed into a mass transit system with features such as exclusive priority lanes, free transfers between routes, pre-board fare collection, information displays and traffic signal priority.

The modal share of Curitiba is approximately 23% private vehicles, 5% motor bikes, 5% bicycles, 21% pedestrians, and 45% BRT. The BRT has a very high capacity, a necessary element given the size and expansion of the city. In one BRT lane, 10,000-20,000 passengers can be carried at one time, with a capacity of 40,000 passengers on busy roads. The BRT is used by 85% of Curitiba's population.

Expansion and growth of public transportation

Planning for Curitiba's next major project has already begun. New roads will be constructed near new residences and businesses, each with access to a new BRT route, the "Green Line." For over 40 years, Curitiba has been able to successfully integrate transportation and land-use planning. Such experience has also been a model for other large cities, particularly from emerging economies, which have decided to invest on BRT as the backbone of their public transport system. Curitiba has cooperated with private companies to develop buses which are adjusted to the needs of various types of transit routes.

"With the Green Line and the area along the train, we could add three million residents to Curitiba, all with great access to parks, bikeways, and public transport. At the same we can guarantee a high quality of life and preserve open space in the city and the countryside"

Luiz Hayakawa of the city's Urban Planning Institute



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Curitiba's bus system is efficient and accessible to all. The turnstiles to enter the bus create a prepay station to eliminate bus standing time. The buses are also handicap accessible with a lift to the turnstiles and a ramp from the turnstile to the bus.



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Curitiba's pedestrian streets provide a safer pedestrian environment, thus encouraging walking. In the downtown mall, walking is a preferable option.



Curitiba, Brazil

The City of Curitiba is the capital of the Paraná state of Brazil. Curitiba is the largest city and biggest economy in southern Brazil and the 8th largest city in all of Brazil. The city has a population of 1.9 million people within an area of 430 km². Curitiba's economy is based on industry, commerce, and services. Tourism is also an important industry in Curitiba. Two million tourists visit the city yearly. Curitiba was a founding member of ICLEI in 1992.

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