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Curitiba: Still the Ecological Capital?

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Curitiba, Parana: Brazil.

For more than 30 years, from the early 1970's through 2001, Curitiba was known as the "ecological capital" of Brazil. It was frequently heralded as an urban environmental utopia by city planners, transportation experts, and visiting research teams from around the world. This is not, however, another environmentalist's story about the miracle of the world's greenest city. Enough has been written about that, and enough already promoted about it by the city itself. [\[1\]](#)

This story is about the recent metamorphosis which Curitiba is undergoing, as it maintains its reputation as a progressive city filled with the actualization of innovative ideas. This city of three million people managed the rush to urban areas in the 1970's through innovative projects and creating a clear vision of how development should occur, managing to avoid the classic case of uncontrolled development and the problems of urban sprawl. Curitiba's story of today is being shaped daily as it struggles in the quest to define itself in a new time when its charismatic leader has fallen from grace. From the story we are learning how a model city maintains its place at the cutting edge of public transportation, urban planning, and social programs. In so doing, the city is coping with urban growth and development by planning for people rather than for cars, and by planning with social welfare and cultural enrichment as themes that will maintain the integrity and beauty of the city for its future generations. The Curitiba of 2003 is a city struggling to redefine itself and to maintain a unique character, under a new vision of what it means to be a sustainable urban environment.

In large part, credit for the city's development can be attributed to Jaime Lerner, the once architect and professor who made a successful conversion to a charismatic political career and became a visionary leader, guiding the development and vision of Curitiba as a green city for more than two decades. Jaime Lerner's long political career came to a halt in the past two years, following his unsuccessful run for president in 2001, and a rash of suspicions about political corruption and patronage. This article does not endeavor to portray what has been said by others about Curitiba's programs and ecological innovations – these can be subjectively viewed by the average tourist to Curitiba and selectively applied or evaluated to serve as models when applicable. Rather, I will convey my perceptions, based on a recent extensive stay in the city, two years after Lerner's run for president, and also two years after my first visit to research urban ecological model programs in Curitiba.

The past two years have brought substantial changes to Curitiba. The city no longer self-identifies as Brazil's Ecological Capital; rather, it calls itself the "Social Capital" of Brazil. The manifestations of this new ideal are occurring through improvements to the transportation system, and through boosting the cultural resources of the city. While President Lula De Silva is undergoing an enormous campaign for a "Brazil without hunger," Curitiba continues its program of the "Green Exchange" which allows community members to exchange recyclable waste for locally grown vegetables or for transit tokens. The project brings "Green exchange" trucks into neighborhoods, often without paved roads, and participants politely line up with wheelbarrows and bags full of recyclables in order to trade the government for food. In this way, people are able to solve multiple problems at the same time, both at the individual level of addressing waste and food, and as community members through organizing and meeting on the designated day of garbage pickup. Another initiative that continues to provide cultural life to the city is the artisan fair which occurs every Sunday morning in the city's historic district. This initiative of Jaime Lerner's is holding its own as a bustling center for artisans, locals, and tourists to interact. Neighborhoods also use local fairs to share in casual community interactions and support of small local businesses, ranging from crafts to music to locally grown organic vegetables.

One of the most substantive developments in Curitiba's formative years was the development of a bus-rapid-transit system. The implementation of bus-only lanes, a speedy boarding system, and a hub-spoke system that connected the downtown to the outskirts of the city made Curitiba's unique BRT (bus rapid transit) widely recognized as the best such transit system on earth. Despite test-runs of similar models in Manhattan and in Los Angeles in the 1990's, the Curitiba transportation model never caught on in these already-established urban grids. Mostly the failure of these attempts at implementing the Curitiba transportation model may be attributed to financial constraints, as well as the enormous discrepancy in already-established roads and transit systems available in the other cities, factors which were still nascent at the creation of Curitiba's system.

The bicycle paths in Curitiba are extensive, consisting of over 150 km of paths, and are separated from the often perilous car traffic. Frequently, the paths have signage that encourages walkers, joggers, and bicyclists to eat healthfully, to exercise regularly, and to minimize excesses. In this respect, the Curitiba city government is making significant strides towards increasing awareness and support for better public health.

Curitiba was also a pioneer in other aspects of urban environmentalism. Their recycling system, "Garbage that is not Garbage" offers an incentive for the public to exchange five kilos of recyclables for one kilo of locally grown, organic vegetables. A city law established in the early 1970s mandated that every tree cut down must have ten trees planted in replacement. This insures that Curitiba's every vista includes a canopy of green. The city converted several brown fields of old quarries into what are now popular outdoor theaters, an opera house, and park spaces. The pedestrian-only downtown is an asset that brings both economic prosperity as well as social and cultural value to the city. For the over six blocks of pedestrian-only streets in the downtown, the city thrives with shoppers, café-goers, and street performers every day of the week.

These days, Curitiba is striving to maintain and upgrade the system to be more user-friendly, while simultaneously maintaining a highly efficient fleet of buses. Public input, a concept that most U.S.

transportation planners can barely implement effectively, was impressively prominent in Curitiba's efforts to enhance their public transit. To garner input, the city piloted various models of bus shelters and bus system maps and information in Park Barigui, one of Curitiba's most frequented leisure destinations. After a phase of garnering public input as to which type of bus shelter was most desired by the public, the city is currently implementing the system, with sturdy shelters on the smaller bus routes, akin to those in Chicago or New York. The maps in each bus shelter model will undoubtedly be a welcomed asset for tourists and Curitiba locals alike, as the current system lacks the barest indication of bus routes at any of the bus stops aside from the terminals. Though genuine public involvement can be credited to the transportation planners in Curitiba, open public information has not been a strong point, as maps of the bus system in the city are not even accessible at the transportation planners' offices, nor at the tourist information sites. Perhaps this will not be such a significant issue for visitors in the future who will now not only experience Curitiba's rapid on-off boarding in the famous "tube" stations, but will also maintain their sense of place in the city through the convenience of maps. The Curitiba system continues to be highly efficient in terms of bus frequency and inexpensive access to all parts of the city, although the buses in Curitiba recently did raise their prices to 1.70 Real per ride, 20 cents more than before (depending on exchange rates this equals roughly \$1.50 USD, as of June 2003).

Despite wide use of the bus system, traffic congestion is widely recognized as one of the most significant problems in the city, where car ownership is the highest per capita in all of Brazil. To help bus riders better deal with congestion, some of the bus shelter models also include real-time information digital screens which would display the estimated arrival times of the next bus. Furthermore, the new bus shelter proposals will also be integrated with bicycle shelter facilities, newspaper and magazine kiosks, and a new design for informational signs at tourist destinations.

The city government is also engaged in a public informational campaign for respecting the rights of pedestrians and cyclists. Banners hung from lampposts remind drivers to respect pedestrians and cyclists and to take personal responsibility for improving the transportation conditions in the city. Crossing streets is often dangerous and unpleasant for pedestrians in Curitiba, since walkers do not have the right of way when crossing streets and are frequently without any sort of signal for when it is safe to cross. While a lack of regard for pedestrians remains a characteristic difficulty for walkers in all parts of Brazil, Curitiba's campaign for pedestrian rights is a significant step in the right direction.

Despite the recent changes in how this city identifies itself, and the current general disrepute of Jaime Lerner's political career, his legacy is continuing in Curitiba. Lerner's penultimate contribution to the city was the construction of the large New Museum, designed by architect Oscar Niemeyer. The museum contains a large collection of art from the state of Paraná, and also a significant space dedicated to the history of city planning and urban initiatives in Curitiba. The museum captures Lerner's legacy as a supporter of smart urban design as well as the arts. Moreover, it insures that the cultural strengths of the city will be preserved and supported for many decades to come.

Curitiba's visionary city planning insures that the city has a wealth of park space and a bounty of transportation assets. The projects initiated several years ago in Curitiba are proving to survive the test of time, even with different leadership. The city's prioritization of guidance under a common vision, actively shaped around public input continues to thrive in Curitiba. This ensures that it is a place giving

emphasis to improving the quality of life for its citizens, as it transforms from its ecological foundation to that of an urban nucleus of social assets, emphasizing convenient transportation, health and quality of life for all of Curitiba's citizens.

[1] For more information on Curitiba, visit:

I.C.L.E. I. case study: [I.C.L.E.I.](#)

New Zealand study on Curitiba as a model city: [Showing the Way: Curitiba: Citizen City](#)

IPPUC website: [www.ippuc.org.br](http://www.ippuc.org.br)

Curitiba website: [www.curitiba.pr.gov.br](http://www.curitiba.pr.gov.br)

Networking with Brazilian environmentalists: [Fundacao Gaia](#) (in Portuguese)

Eve Bratman's first trip to Curitiba: [Oberlin Online article](#)

Further Reading Suggestions:

Bill McKibben, *Hope, Human and Wild: True stories of living lightly on the earth* (Little, Brown and Co, 1995).

Paul Hawken, A. Lovins, and L.H. Lovins. *Natural Capitalism* (Rocky Mountain Institute, 2003)

### **Author Biography:**

*Eve Bratman* recently returned from a three-month trip to southern Brazil, where she was based in Curitiba. Among adventures in Curitiba she also translated a text from Portuguese into English, worked on an aspiring eco-village, and participated in the World Social Forum. Her first trip to Curitiba was in 2001 with a small group from the Oberlin Design Initiative, and was highlighted by an interview with Jaime Lerner. She is currently working as a research assistant in support of a book-writing effort on U.S. foreign policy on human rights, and is also a canoeing instructor for the Junior Earth Team, on the Chicago River. She has worked extensively in the Chicago environmental community, most recently as a community organizer around transportation issues at the Center for Neighborhood Technology. Eve graduated from Oberlin College in 2001 with highest honors, and she is an alumna of the International Honors Program in Global Ecology. She will be entering a doctoral program at American University's School of International Service in the fall of 2003. She hopes to focus her research on issues of environmental cooperation and conflict in Brazil, and to move there someday.

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John Mlade is a green building professional researching and teaching biomimicry at Colorado State University and is a research assistant at the Institute for the Built Environment ([www.ibe.colostate.edu](http://www.ibe.colostate.edu)). He is also a member of the Biomimicry Guild. Visit [www.biomimicry.net](http://www.biomimicry.net) for more information.

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