The City of Curitiba:
Planning for Sustainability -
an Approach all Cities can Afford

Institute for Research and Urban Planning of Curitiba

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President

World Bank
April 2009
Curitiba
432 km²
1,828,092 inhabitants
Growth rate: 1.86%

São Paulo

SANTA CATARINA
### Evolution of Urban Growth

<table>
<thead>
<tr>
<th>ANO</th>
<th>POPULAÇÃO</th>
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<tbody>
<tr>
<td>1955</td>
<td>350.000</td>
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<td>1965</td>
<td>455.000</td>
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<td>1975</td>
<td>940.000</td>
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<tr>
<td>1985</td>
<td>1.560.000</td>
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<td>2008</td>
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<td>2014</td>
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PLANNING PROCESS
Planning Process

Curitiba’s Master Plans

Agache Plan 1943

Radial and perimetral growth

Master Plan 1966

Changing growth patterns from radial to linear growth

The 2004 Plan

Metropolitan vision
Planning Process

Sectorial Plans

I – Mobility and public transport;
II – Social housing;
III – Economic Development;
IV – Social Development;
V – Public Safety;
VI – Environmental Management and Sustainable Development.

Methodology

• Diagnosis and evaluation and discussion with the community
• Proposals to be discussed with the community
Planning Process

Master Plan 1966
Revised in 2004

Structural corridor
Linear growth
DOWNTOWN
N
W
E
S

LAND USE
SOCIAL DEVELOPMENT
ECONOMIC DEVELOPMENT
STREET NETWORK
ENVIRONMENT
PUBLIC TRANSPORT

Policy integration
Planning Process

Land Use

Street Network

Public Transport
MOBILITY AND PUBLIC TRANSPORT
Structural Corridors

- Dedicated lanes for buses
- One-way road
- Traffic flow
- One-way road
- 60 km/hour

Mobility and Public Transport System
Moblitity and Public Transport System

Evolution of the Integrated Network
Mobility and Public Transport System

INTEGRATED TRANSIT NETWORK - RIT

- Network Accessibility – 500 m
- Single Fare
- Exclusive bus lanes: 72 Km
- 13 municipalities
- 2270 buses
- 355 bus lines
- 20,850 trips/day
- 2,380,000 passengers/day
- 30 bus terminals
- 347 tube stations
Mobility and Public Transport System

BUS TYPES

<table>
<thead>
<tr>
<th>Tipo de linha</th>
<th>Capacidade</th>
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<tr>
<td>Circular Centro</td>
<td>30</td>
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<tr>
<td>Convencional</td>
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<td>Expresso Biarticulado</td>
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INTER-NEIGHBOURHOODS LINE

FEEDER LINE

CONVENTIONAL LINE

INTER-HOSPITALS LINE

DOWNTOWN CIRCULAR LINE

SPECIAL EDUCATION LINE
Mobility and Public Transport System

“TUBE STATION”
Improving passenger comfort, boarding time and accessibility
IDENTITY OF PUBLIC TRANSPORT
INTEGRATION TERMINALS

CIVIC CENTERS: “STREETS OF CITIZENSHIP”
Optimum integration between transit and public services
Mobility and Public Transport System

Social Inclusion: Social Fare
Reduced fare on Sundays
Mobility and Public Transport System

GREEN LINE

North Sector - 8 stations
South Sector - 5 stations

Line 3 – Atuba / Pinheirinho
Line 2 – Atuba / Central Station
Line 1 – Pinheirinho / Central Station

Former Federal Road
Mobility and Public Transport System

GREEN LINE

Total length: 18km
23 districts affected
(287,000 people)
Mobility and Public Transport System

Staggering tube stations and creating a new lane at specific points allowing the buses to take over
Moblility and Public Transport System

Pedestrian-oriented downtown
Moblitity and Public Transport System

BIKE-WAY NETWORK

120km
Heritage Preservation

TRANSFER OF BUILDING RIGHTS

Revitalization and conservation
In use since 1982
ENVIRONMENTAL PRESERVATION
Environmental Preservation

WOODS AND CONSERVATION AREAS

51.50 m² of green area / inhabitant
34 parks and woods
429 squares
346 public gardens

52 pedestrian areas
11 environmental nuclei
14 entertainment axes
6 environmental gardens
Environmental Preservation

34 PUBLIC PARKS
Environmental Preservation

Recycling and Environmental Education

Garbage that is not Garbage

Green exchange

Open University for the Environment
Developers purchase building rights and the money is used to build social housing. In use since 1991.
Socioeconomic Development

CURITIBA’S INDUSTRIAL DISTRICT - 1973

Activities distribution by type in Curitiba - 2006

- Non polluting industries
Socioeconomic Development

Distribution of Public Services and Facilities

- Supplies
- Culture
- School

- Education
- Children
- Health Care Center
- Lighthouse of Knowledge

- Sports and Leisure
- Social care
- Municipal guards

Regionais
Renda até 3 SM
Áreas de Ocupação Irregular
Community Participation

Community is engaged on the planning process

Public Hearings
Planning at Local Scale

"Novo Centro Project" – Downtown Revitalization

Improving the quality of the downtown area for local citizens and visitors

New sidewalks

Restoring heritage buildings

Revitalization of squares
Long-term Planning - Regional Scale

Democratic Urban Management

- Master plan
- Local plans
- Sectorial plans
- Information
- Capacity building
- Government
- Community

Sectorial plans and local plans cascade into the master plan. Information and capacity building are crucial components of democratic urban management. The government and community interact with the master plan to ensure democratic planning.
Planning for Metropolitan Region

Water and sewage systems
Waste
Health
Capacity building at the reginal level
Intermunicipal partnerships

Negative growth
< Curitiba
Curitiba
> Curitiba
City of Knowledge

Technopark
Urban Area with concentration of technology-oriented companies, from public and private sectors.

Their interaction should foment new enterprises in research and high technology fields.
Multimodal Plan

Railway, Highway, Airport, Port, Bikeways, Metropolitan Integration

Current situation
Multimodal Plan

Railway, Highway, Airport, Port, Bikeways, Metropolitan Integration

Proposal
High Capacity Transportation

**Subway**
Total length: 22km

Tunnel “Cut and Cover”
Located under the existing exclusive lanes (16.5km)

Tunnel “NATM”
Between Eufrásio Correia Station and Passeio Público Station (2.5 km)
High Capacity Transportation

Subway
Stations: 22
High Capacity Transportation
www.curitiba.pr.gov.br

www.ippuc.org.br

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IPPUC

Created on December 1st, 1965

Mission:
- Coordinate urban planning and monitoring process of the city
- Elaborate programs, plans, projects
- Seek excellency and share best practices in urban planning
- Follow municipal actions and the integration with the Metropolitan Region of Curitiba.
High Density Corridors and main transport lines