

Best Practice: Largest Bicycle Path Network

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CITY: BOGOTÁ

POLICY AREA: ENVIRONMENT; TRANSPORTATION

BEST PRACTICE

The city of Bogotá's **CicloRuta** (Cycle Routes) is one of the most extensive bicycle path networks in the world. The network of paths has grown significantly since construction began in 1996. Today the route spans approximately 227 miles (366 kilometers) and as a result, mobility has increased. Residents can now bike to the city center in addition to major bus rapid transit (BRT) routes, parks and community centers.

ISSUE

The city of Bogotá sought a way to address the issue of noise and environmental pollution caused by increased traffic and congestion. It recognized that the quality of life for its residents would deteriorate as increasing traffic continued to cause longer travel times and a more polluted and noisier city.

GOALS AND OBJECTIVES

The main goals of the *CicloRuta* program are to:

- Improve air quality and reduce environmental pollution
- Reduce daily traffic congestion in the city including the resulting noise pollution
- Strengthen the integration of the transportation systems around the city with the *CicloRuta* as a critical component
- Promote a healthy lifestyle among residents

IMPLEMENTATION

Beginning in 1996, the city of Bogotá promoted the use of bicycles through the construction of new cycle routes, integrating these new routes with the city's massive transportation system as well as other popular destinations. The *CicloRuta* network was scheduled to be completed by 2009; however construction finished ahead of schedule in 2007.

The *CicloRuta* was developed to integrate the following three components:

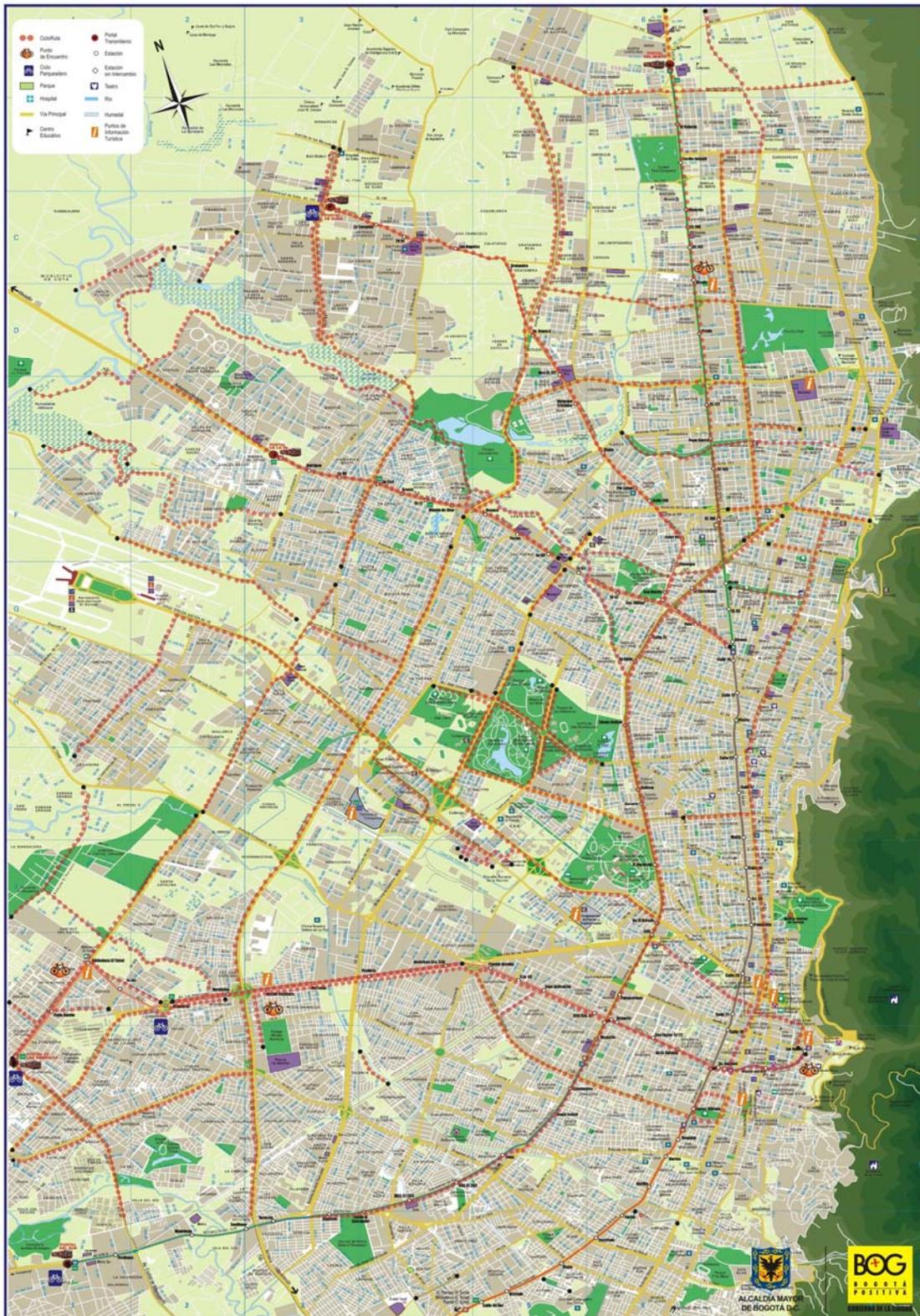
1. **Main Network:** connects the city center with the most populated residential areas. It also connects with the secondary network. The BRT system, TransMilenio, includes *CicloRuta* routes along several lines.
2. **Secondary Network:** connects housing areas, parks and facilities, and attractions with the main network. These paths are mostly designed to serve as feeders to the TransMilenio. Six stations of the TransMilenio have guarded bike parking facilities. The facilities have a total capacity of parking over 1500 bikes and are free to TransMilenio users.



Guarded bicycle parking on the *CicloRuta*

3. Complementary Network: links recreational and external routes to the system. These paths are located along the river banks which are included in the system of Linear Parks of the city; some paths also link surrounding wetlands as well.

Bogota's *CicloRutas* (designated by the dotted red lines)



COST

Construction cost per kilometer was \$147,000 USD. In 2010, the city of Bogotá spent \$2 million USD for maintenance of 152 miles of the *CicloRuta*.

RESULTS AND EVALUATION

The *CicloRuta* program has helped residents become more mobile and promoted an active lifestyle that significantly reduces the risks of diseases. Additionally, it has helped residents save money on gas and other transportation fees.

To evaluate the impact of the *CicloRuta*, the Office of Transport and Infrastructure has collected the following data:

- Average number of daily users: 83.436
- Average Number of bicycles per home: 1.66
- Average amount of money saved per four-person family per month: \$165 USD
- Percentage of households with a bicycle: 54%
- Average bicycle speed on routes: 17 kilometers per hour
- Peak time: 6:00am to 8:00 am and 5:00pm to 7:00pm

The city of Bogotá is currently conducting a study to determine new routes that would enhance the *CicloRuta* network as well as a study of how to implement a bicycle rental system. Both studies will be completed in June 2011.

Proven results since 2000:

- Mobility for residents within the lowest income levels in Bogotá has increased.
- Air quality has improved with the use of the *CicloRuta*. The city has achieved reductions of approximately 36,600 tons of CO₂.
- With designated bicycle lanes, bicycle accidents have decreased. In Bogotá there has been a decrease of deaths related to cycling. In 2005, there were 65 deaths and in 2010 there were 43 deaths. The number of injuries in 2005 was 1,418 and in 2010 injuries decreased to 878.
- In some instances, residents can travel faster by bicycle – the average speed of traveling by bicycle is 17 km/h, while the average speed of some forms of public transportation is 13 km/h.

CicloRuta has also recovered public space along riverbanks wetlands. The city's 13 wetlands were illegally occupied for years and contaminated with refuse; however, after construction of the *CicloRuta*, the wetlands were effectively taken back by city planners and are now being better preserved.

TIMELINE

1996	Construction on the first of the <i>CicloRuta</i> lanes
2000	180 kilometers were completed
2001	<i>CicloRuta</i> expansion plan launched
2011	Continued expansion of the <i>CicloRuta</i>

LEGISLATION

The following pieces of legislation were applied in the development and construction of *CicloRuta*:

- Cycle Routes Master Plan (1999) – A strategy was proposed to promote daily cycling
- Decree 619 of 2000 – Adopted the Land Use Plan for Santa Fe de Bogota, District Capital

- Territorial Plan of Management – Decree 190 Of 2004 – Compiled the provisions of Decree District 619 of 2000 and 469 of 2003
- Master Plan of Mobility – Decree 319 of 2006 – Adopted the Master Plan Mobility Bogotá Capital District, which includes the management of parking lots and other provisions
- Agreement No. 346 of 23 December 2008 – Implemented the use of bicycles as a transport service integrated with the Mobility System Capital District

LESSONS LEARNED

In developing the *CicloRuta* program, the city of Bogotá discovered the need to:

- Improve system intersections and crossings to avoid accidents among bikes, vehicles and pedestrians
- Install a significant amount of signage and electronic features including traffic lights, signs indicating connections and new street furniture
- Focus on the improvement and/or construction of access ramps to ensure the safety of users
- Develop a marketing strategy that highlights the comfort and security, friendly urban landscape and increased mobility associated with the *CicloRuta*
- Develop several ways to encourage respect and courtesy among cyclists along the routes

TRANSFERABILITY

For the *CicloRuta* or a similar program to succeed in other cities, it must include the following benefits:

- Improve the quality of life
- Reduce pollution (200g CO2 less per km travel)
- Reduce time travel
- Reduce traffic congestion
- Encourage a healthy lifestyle

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Facts and figures in this report were provided by the highlighted city agency to New York City Global Partners.