



Bankable Project

in the
Cachoeirinha Neighbourhood

Pilot Project Concept

2018



Brazil
Belo Horizonte

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URBAN PATHWAYS

The Urban Pathways project helps delivering on the Paris Agreement and the NDCs in the context of the New Urban Agenda and the Sustainable Development Goals. It has established a facility in close cooperation with other organisations and networks active in this area to support national and local governments to develop action plans and concrete implementation measures to boost low-carbon urban development. This builds on UN-Habitat's role as "a focal point on sustainable urbanisation and human settlements including in the implementation and follow-up and review of the New Urban Agenda". The project develops national action plans and local implementation concepts in key emerging economies with a high mitigation potential. The local implementation concepts are being developed into bankable projects, focusing on the access to urban basic services to create a direct link between climate change mitigation and sustainable development goals.

PROJECT CONCEPT

The project follows a structured approach to boost Low Carbon Plans for urban mobility, energy and waste management services that deliver on the Paris Agreement and the New Urban Agenda. The project works on concrete steps towards a maximum impact with regards to the contribution of urban basic services (mobility, energy and waste management) in cities to global climate change mitigation efforts and sustainable and inclusive urban development. This project makes an active contribution to achieve global climate change targets to a 1.5°C stabilisation pathway by unlocking the global emission reduction potential of urban energy, transport and resource sectors. The project will contribute to a direct emission reduction in the pilot and outreach countries, which will trigger a longer term emission reduction with the aim to replicate this regionally and globally to make a substantial contribution to the overall emission reduction potential.



PROJECT AIMS

This project implements integrated urban services solutions as proposed in the New Urban Agenda providing access to jobs and public services in urban areas, contributing to equality and social coherence and deliver on the Paris Agreement and the Sustainable Development Goals. This is the first dedicated implementation action oriented project, led by UN-Habitat to deliver on inclusive, low-carbon urban services. Securing sustainability and multiplier effect, the project aims to leverage domestic and international funding for the implementation projects that will follow from this initiative.

Key fact and figures:

<u>City:</u>	<u>Belo Horizonte</u>
<u>Population:</u>	<u>Over 2.4 million, with 5.7 million in the official Metropolitan Area</u>
<u>GDP per capita:</u>	<u>USD 9,257.92 (2015)</u>
<u>CO2 emissions (total and per capita):</u>	<u>Belo Horizonte's total CO2 emissions (2013) were 4,417,834 tCO2-eq and per capita (2013) was 1.78 tCO2-eq</u>
<u>Mode shares:</u>	<u>Public transport: 28%; Private car: 33%; Walking: 35%; Motorcycle: 4%; Bicycle: 0.4%</u>

Short description of the measure being considered

Worldwide, road accidents are the cause of death of more than 500 children daily, 92% of which occur in low- and middle-income countries (ITDP, 2018). Additionally, in 2012, air pollution caused the death of 3 million people and 169,250 children under the age of five, of which 87% also occurred in low- and middle-income countries (WHO, 2016). Moreover, children and teenagers have important mobility needs as they commute every day to school and back. In Brazil, almost 25% of the population is in school age, i.e. between 4 and 17 years old (IBGE, 2010). Accordingly, the provision of safe routes to and school zones is crucial.

The Zone 30 project in the Cachoeirinha neighbourhood is the first of a series of planned interventions to be implemented in approximately 25 blocks (See Figure 1). The first intervention will be in an area of the neighbourhood where the conflict between pedestrians and motor vehicles is critical because of the width of the road, the lack of signage for vehicles, the very narrow sidewalks and the intense flow of children and adolescents due to the existence of two large schools in the area (See Figure 2).



Figure 1: Planned interventions in the Cachoeirinha Neighbourhood



Figure 2: Lack of pedestrian infrastructure in the selected area

Policy Environment

Description of the national policy framework

Brazil has a series of legal instruments in place to norm urban policy. For instance, the Federal Constitution of Brazil (1988) states that urban policy is the responsibility of the Municipality and must guarantee the social functions of the city and the development of citizens. It also establishes that the Municipal Master Plan is the basic instrument of urban territorial planning, and must define the use and occupation characteristics of each portion of the municipal territory, so that all properties fulfill their social function. In 2001, with the aim to regulate the Urban Policy chapter of the Constitution, the Statute of the City (Estatuto da Cidade) was approved. Its basic principles are participatory planning and the social function of property (Acioli, 2012). Moreover, in 2012, the Ministries of Transport and Cities developed and launched the Sectorial Plan of Transport and Urban Mobility for Mitigation and Adaptation of Climate Change (PSTM).

The strategy of the plan is to promote behavioral changes on travel patterns, by increasing share of public transport especially in major urban centers. The plan suggests four measures on how to achieve this.

Cities must invest in:

- Infrastructure for urban mobility through public transport projects
- Urban planning through decentralization of the essential activities of the city and promoting service, study or leisure activities along public transport corridors
- Managing tools to improve urban mobility through regulatory and economic instruments to promote public transport and discourage individual motorised transport
- Adoption of alternative vehicle technologies, focus on improving public transport.

Facts and Figures

What is the current status and how could the measure improve this?

Current status	Outcomes	Indicators
Speeding area, dangerous for children and teenagers	Increased road safety in the area	<ul style="list-style-type: none"> - Number of Deaths and injuries caused by road accidents in the area, mainly of children and adolescents - Safety peception of children and adolescents
Fragmented, inadequate public space	Increased public space occupancy	<ul style="list-style-type: none"> - Observation of public space occupancy in the area (before and after the intervention) - Safety and security perception in the neighbourhood
Air pollution	Better air quality	<ul style="list-style-type: none"> - Monitoring of PM10, PM2.5 and other pollutants in the neighborhood
GHG emissions from transport	Reduced GHG emissions in Belo Horizonte	<ul style="list-style-type: none"> - Emissions reflected in the GHG Inventory
Car-oriented mentality	Modal shift towards active mobility	<ul style="list-style-type: none"> - Modal share of active modes in the neighbourhood

Technical Considerations

Pilot Project

**Scope:
around 100,000 EUR**

Large scale Project

**above
5 million Euro**

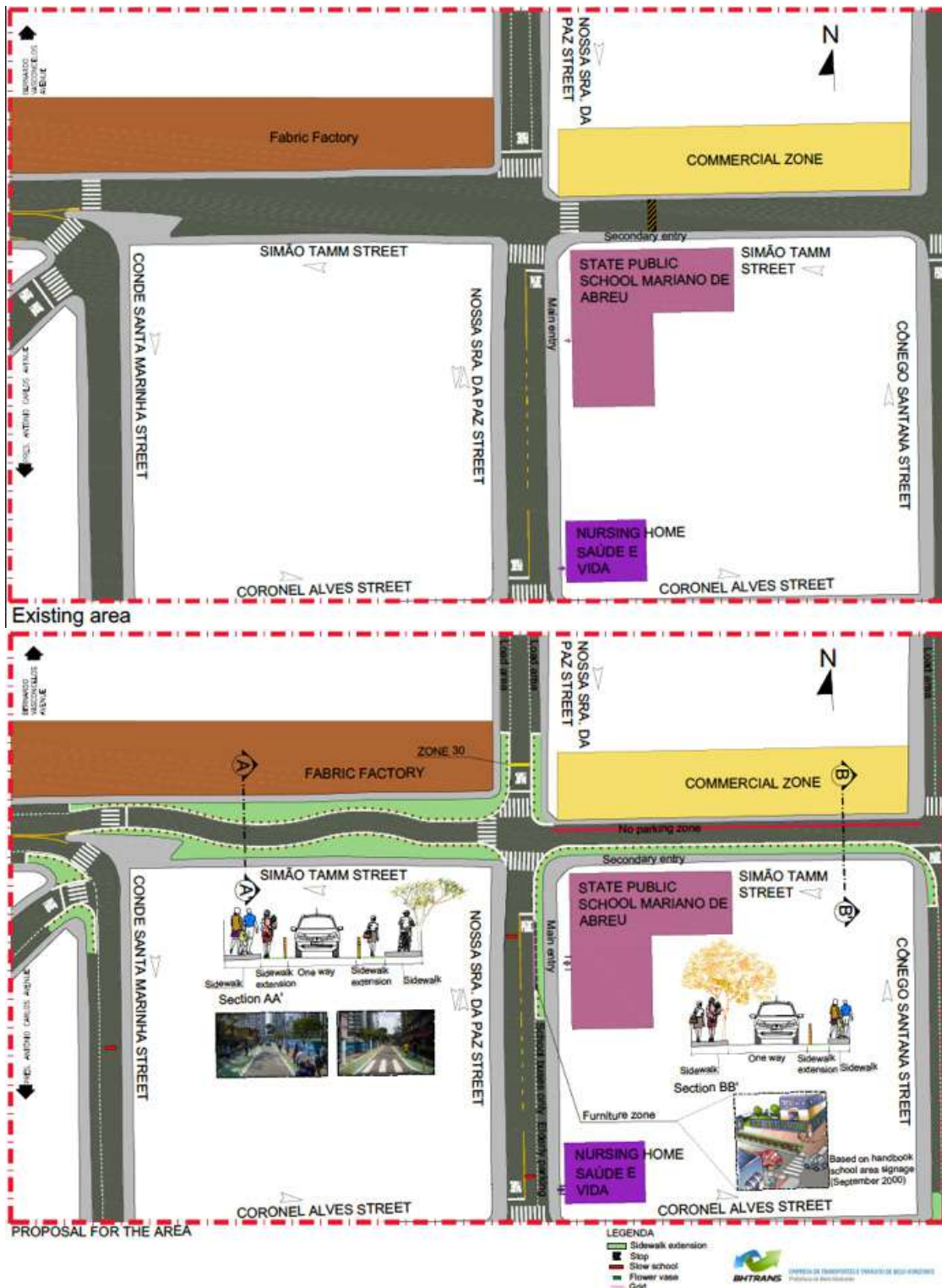
The project considers not only the inclusion of a 30 km/h speed limit, through signs and regulations, but also the evaluation of the pedestrian friendliness of sidewalks and streets, as well as the extension of sidewalks and public space by inserting urban furniture and painting the pavement. These combined measures will reduce the space for cars significantly and add a physical barrier that will prevent car drivers from speeding, promoting greater safety for all (See Figure 3). The specific measures that will be implemented include:

- The pedestrian areas will be visually improved by the installation of roadside markers and pavement painting;
- New pedestrian crossings will be implemented at intersections;
- Urban furniture that promotes public space use will be installed;
- A landscaping that provides shade, comfort and promotes walking.



Cachoeirinha Neighbourhood

Figure 3: Existing area vs. proposal of the first intervention



The intervention also considers the execution of several workshops and awareness raising campaigns in order to reinforce the participation processes that started in the Cachoeirinha Neighbourhood.

The first intervention comprises several streets and has the area of coverage delimited by the following routes: Rua Olávo Andrade, Rua Cônego Santana, Rua Simão Tamm and Rua Nossa Senhora da Conceição. This area includes the following facilities: Public School Mariano de Abreu, Public School Ilacir Pereira Lima, Don Bosco Educational Institute, Nursery Home Saúde e Vida and the Nossa Senhora da Paz Church.

In order to implement the project successfully, it will be carried out with the participation of all relevant stakeholders and the coordination of all the involved institutions. Citizen participation and interinstitutional coordination are key elements of this project.

Finances

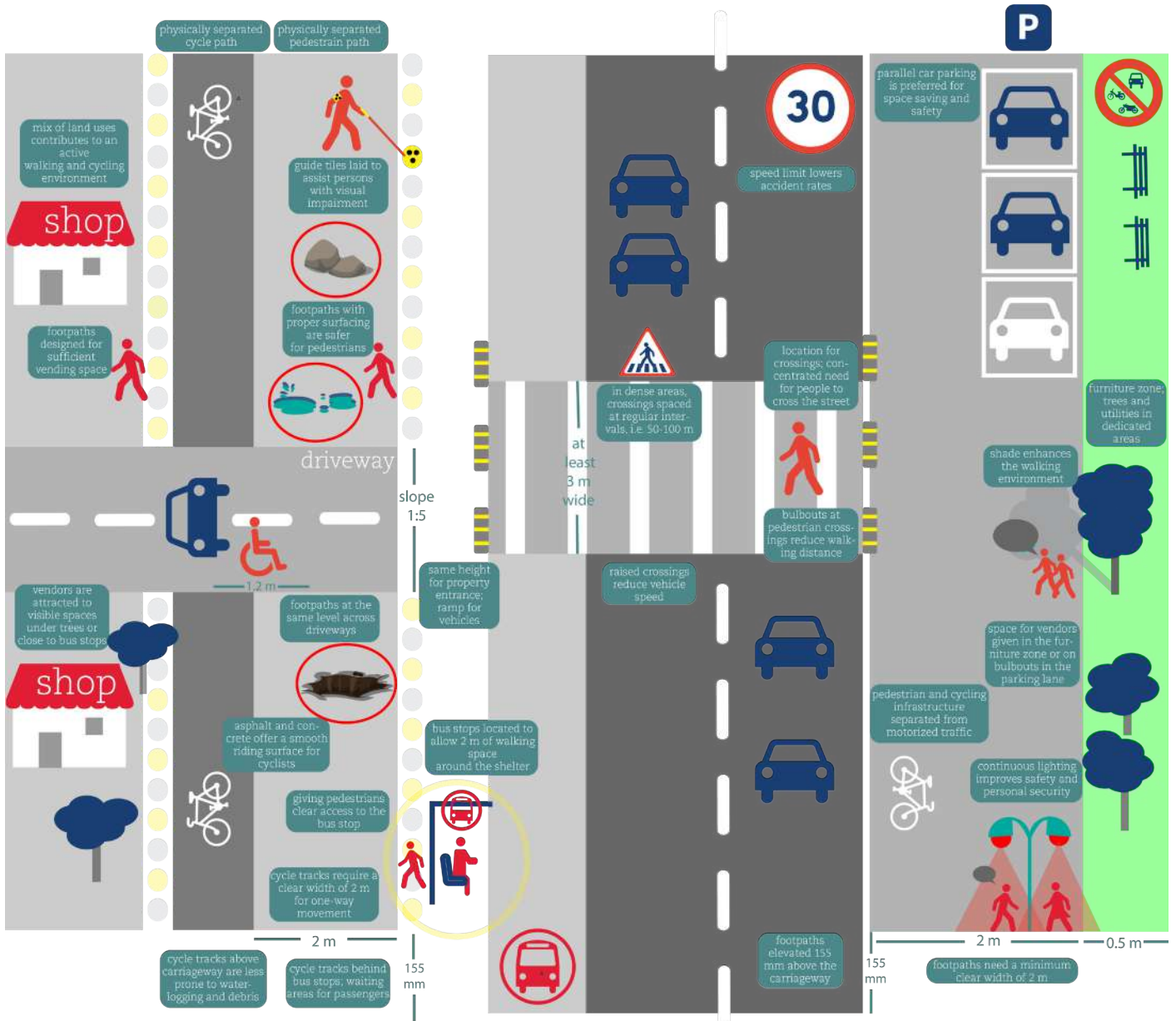
The overall cost of this intervention will be approximately USD 90,000 that will include the staff costs as well as the physical implementation, the necessary urban furniture, and the participatory workshops and awareness raisings campaigns required to generate the best possible outcome.

There are several organisations that support measures like this that promote public space occupancy and road safety. In November 2018 with the support of Urban Pathways, Belo Horizonte was able to submit a proposal to finance this pilot project to the UN-Habitat Public Space Call.

Once the pilot project is successfully implemented and its positive impact is evident, the possibility of mobilising resources for the scale-up and replication processes is relatively easier.



Promoting Cycling & Walking



Barriers

The main barriers for the implementation of Zones 30 in Belo Horizonte have been the lack of political will, the change of priorities of the new local authority and the lack of resources for the implementation of the pilot project.

Policy & governance requirements

There are several factors that ensure the permanence through time of these type of projects: political will, institutional coordination, community support and participation and maintenance of the implemented measures. In this context, it is worth noting that the Zones 30 project in the Cachoeirinha Neighbourhood is not an isolated measure. It is part of a long-term plan, in which the Cachoeirinha Project is just the first of a series of planned interventions.

Belo Horizonte has an innovative Sustainable Urban Mobility Plan, called PlanMob-BH, with comprehensive measures including not only Zones 30, but also TOD, BRT and Bike solutions. In September of 2013, Belo Horizonte formalized PlanMob-BH as a guide for improving mobility for the next 20 years. Belo Horizonte became the first city in Brazil to have a Sustainable Urban Mobility Plan with a long-term vision that links mobility to urban development goals. By 2030, the plan expects that the measures implemented contributes to reductions of 36% in GHG emissions, 25% in travel time and 19% in transport costs (Secretaria Municipal de Governo BH, 2013).

Moreover, beyond the immediate mobility related issues, Belo Horizonte also recognises these measures as an opportunity to revitalise the downtown area and enhance the quality of life by creating pedestrianised streets and giving the space back to people from cars.

The participation and acceptance of the local population is also important to guarantee the sustainability of the project. The participatory management of urban intervention projects is the way BHTrans have been using to ensure that the proposals are accepted and owned by the population. As some important examples we can mention: The PlanMob-BH was conceived and implemented with broad popular participation through various public hearings and workshops.

The maintenance of the project is critical to guarantee its efficiency and permanence through time. In this way, the BHTRANS stratigraphic signaling maintenance and implementation team will be responsible for the maintenance of the installed signage, the works and the necessary adjustments to guarantee the permanence and use of the intervention.

Steps towards implementation

In 2014, discussions about the need for Zones 30 in Belo Horizonte began, triggered by Belo Horizonte's cyclists' movements who demanded safer streets. This discussion led to the conclusion that the implementation of Zones 30 favours not only cyclists, but all city dwellers, especially the most vulnerable on the streets, such as children, the elderly and disabled people. Thus, this project has great acceptance and support from the local community and NGOs working in the field.

Moreover, as it will be the first Zone 30 project to be implemented, it will have an extremely important demonstrative effect in the city, with an immediate impact on people who use the neighbourhood's public spaces and with great potential to be replicated in other areas by having a positive impact on the public opinion of Belo Horizonte.

In August 2018, with the support of the German Cooperation Agency (GIZ), a workshop to discuss the implementation of Zones 30 in two areas of the city (Cachoeirinha neighborhood and a Hospital area) was held. At that time, the directors of schools, senior citizens, school students, business owners and representatives of the neighbourhood association were invited to participate, and the project was very well received (See Figure 4).

In September 2018, in celebration of the World Car Free Day, we organised a cultural activity in the selected area, where the local schools and the community occupied the streets for cultural presentations and artistic activities throughout the day. The event was a success and had broad community participation.





Figure 4: Participatory events conducted to define the necessary interventions in the Cachoeirinha Neighbourhood

The proposed timeframe for implementation given that the funding is secured will be as follows:

Time	Activity
February 2019	- Temporary intervention with the participation of the local community and the support of NGOs working in the field (ITDP and WRI)
March 2019	- Evaluation of the results of the temporary intervention by BHTrans technicians - Participatory workshop with the local community to discuss the necessary adjustments to the project based on the temporary intervention
April 2019	- Elaboration of the execution plan
May – July 2019	- Works
August 2019	- Inauguration of the Cachoeirinha Zone 30 pilot project
September – November 2019	- Monitoring and evaluation of the Cachoeirinha Zone 30 pilot project to assess the project success and the lessons learnt
December 2019	- Identification and prioritisation of next interventions - Participatory workshops with the local communities of the selected areas
January 2020	- Implementation of temporary interventions in the new selected areas of the Cachoeirinha Neighbourhood

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