

Latin American Bike Sharing Systems Platform driving knowledge to action

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This report was developed by the Latin American Bike Sharing Systems Platform.

### **EXECUTIVE SUMMARY**

Bike sharing systems (BSS) have proved to be a strong ally of sustainable development in many ways, such as promoting health and well-being, improving mobility, supporting gender equality, saving resources and decreasing carbon footprint. Recently, the BSSs have also proved to be a lifeline in times of crisis.

This project was developed by the Latin American Bike Sharing Systems Platform, latinoSBP.org, after analysing data from 92 systems along the region. As a result of this analysis, we have developed an overview of bike sharing systems operating during the month of December 2019 and also an online map called "The Latin America Bike-sharing Map", which provides information from the BSS's.

Available, accessible, accurate and transparent data generates information transparency. Sharing data lowers the inequality of information, leading to a readjust of resources within society, by creating opportunities, improving governments, empowering citizens and much more. Still, there are several knowledge gaps about the bicycle sharing systems in Latin America.

With the intention of increasing the knowledge about these BSSs, this report reveals a full picture of the systems which were active during the month of December 2019 and aims to disseminate the acquired information and data in order to stimulate new ideas and new developments.

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## **BIKE SHARING ACROSS LATIN AMERICA**

By the end of 2019 we had 92 Public Bike Sharing Systems operating in 11 countries of Latin America. Brazil stands out with 42 systems, followed by Colombia and Mexico with 18 and 15 systems, respectively.



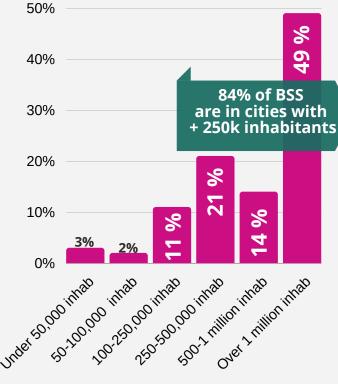


Figure 1: Systems per Country Available at: bit.ly/latinosbpmap

Figure 2: Systems per Cities' Population

Predominantly, the systems were implemented in cities with more than 1 million inhabitants. Cities between 250 thousand 500 thousand habitants also holds a significant number of BSS in operation.

# **BIKE SHARING ACROSS LATIN AMERICA**

The majority of the systems are dock based (72,83%) and they are whether located in megacities like São Paulo and Mexico City or small cities like Quimbaya, in Colombia, with less than 30 thousand habitants.

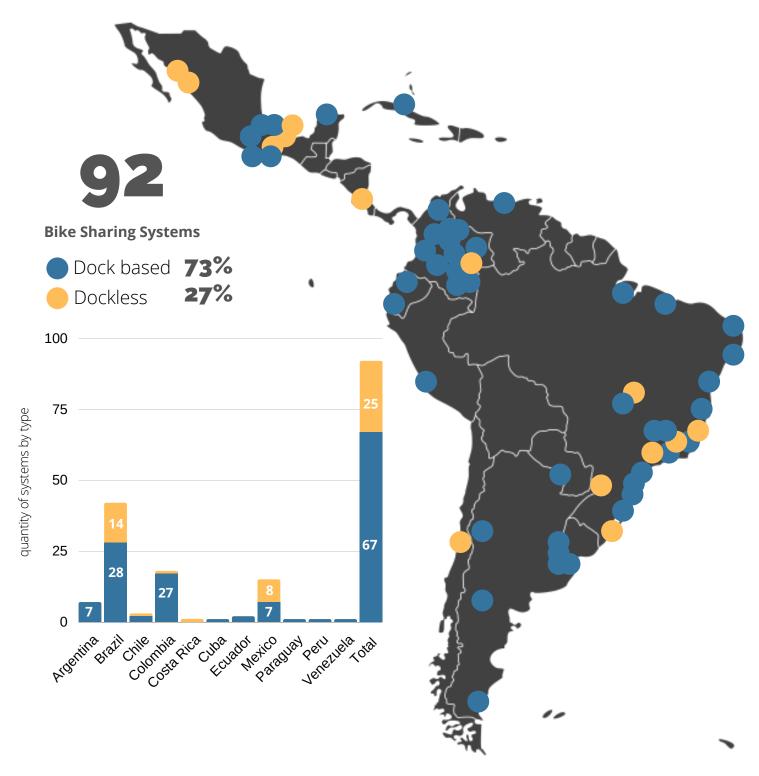
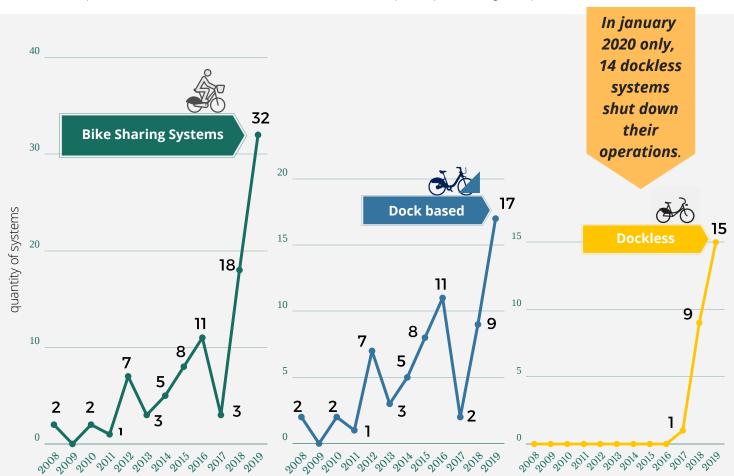


Figure 3: Bike Sharing Systems type per country and its locations Availabe at: bit.ly/latinosbpmap

#### IMPLEMENTATION HISTORY

The first bike share system in Latin America was implemented in 2008, in Rio de Janeiro. This system was called SAMBA and had a fleet of 190 bicycles among 19 stations. In the subsequent years, the number of bike sharing systems increased and a boom occurred from 2017 to 2019, when 25 dockless systems and 28 new dock based systems began to operate.

During more than a decade after the implementation of the first BSS, new systems emerged and some systems were restructured or shut down. By the month of December of 2019, 92 systems were fully operating in Latin America.



Note 1: Transporte Ativo. (2008) Pedalemos no ritmo da Samba. Avaialable at: http://transporteativo.org.br/ta/?p=542

Figure 4: Implementation's timeline of Bike Sharing Systems operating in December 2019

Along the years, some systems have changed their infrastructure by expanding their fleet and stations, changing technology and improving their performance in order to fulfil the general's expectations and needs. It is relevant to mention that 19 of the analysed systems went through a restructuring process during this period.

### SYSTEMS' SIZE

The systems' dimensions are determined by the number of implemented bikes and dock stations. In Latin America, we have almost 47 thousand bikes (more than 36 thousand are dock based bikes) and more than 3 thousand dock stations. These systems operate using 31 different technologies, developed from small organizations up to global companies.

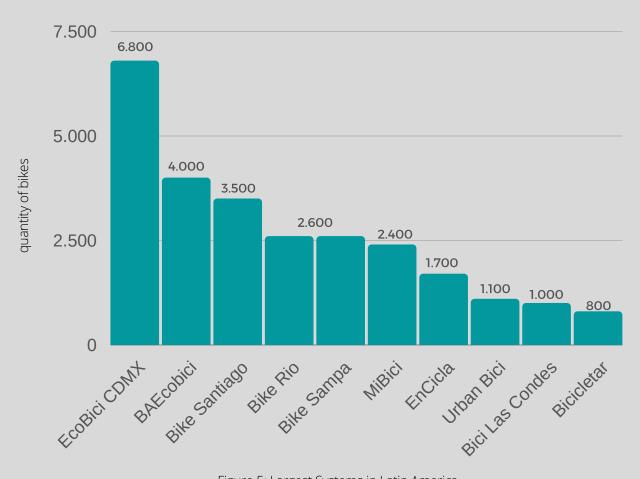


Figure 5: Largest Systems in Latin America

Note **2**: Instituto de Políticas de Transporte e Desenvolvimento (ITDP). Guia de Sistemas de bicicletas compartilhadas, 2014. Available iat: https://itdpbrasil.org.br/guia-de-planejamento-de-sistemas-de-bicicletas-compartilhadas/

# SYSTEMS' OPERATION

Most of the systems' operation occurs 7 days a week, during different hours, usually between 5 a.m. and 12 a.m. There are 18 systems operating 24 hours a day and some BSSs have different working hours in the weekends. There are 48 different operators offering their services and the predominance of private companies operating the systems in Latina America is remarkable.

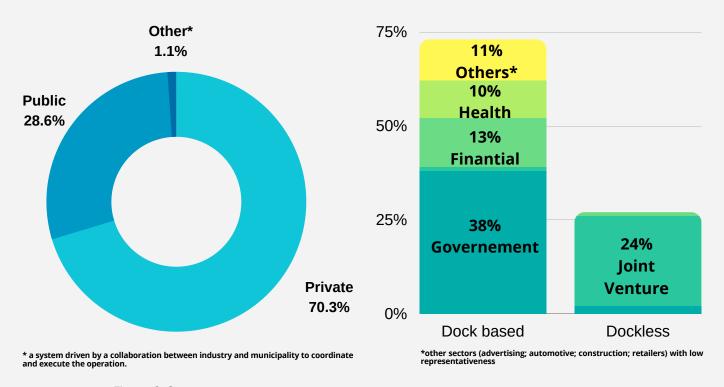


Figure 6: Operators type

Figure 7: Systems type vs Sponsor's sectors

There are 29 systems free of charge and many systems offers daily, monthly or annual payments plans, accepting different payment methods, such as credit or debit card. At least 70 of the systems apply a penalty or require an additional fee for noncompliance with the usage regulation.

Many of the systems are sponsored by public departments, revealing the government's efforts to improve the implementation of the BSSs. It is also notable that a significant amount of systems is sponsored by finance and health companies.

#### TRANSIT INTEGRATION

BSSs can be complementary to mass transit systems, helping to address the "last-mile" problem.<sup>3</sup> To accomplish that, bike sharing systems must be implemented near transit stations, enabling fast and easy access to bikes. Integrated, high quality and accessible transit systems are essential for attracting travellers to shift from private to public means of transportation.

A huge challenge for citizens, governments and operators is how to strengthen the trip chain integration between BSSs and other transit systems, considering the insufficiency of coordination, institutional governance and transportation subsidies, which affects directly the low-income groups.

However, the absence of standardization, together with the lack of significant data, makes the analysis of the transit system's integration in Latin America inaccurate.

Nonetheless, it was possible to identify some bike-sharing systems using specific cards for public transit integration, reducing obstacles and providing a seamless mobility experience. These cards might increase the use of BSS near transit stations and expand transit reach, since further users can access the transit systems. This policy can help Latin American cities to promote sustainable mobility in commute travels.<sup>5</sup>

Note **3**: Institute for Transportation and Development Policy (ITDP). The Bike sharing Planning Guide, 2018 Edition. Available at: https://www.itdp.org/publication/the-bike-share-planning-guide/.

Note **4**: Rivas, M.E.; Serebrisky, T.; Suárez-Alemán, A. (2018) How Affordable is Transportation in Latin America and the Caribbean? Inter-American Development Bank. Doi: http://dx.doi.org/10.18235/0001530

Note **5**: Vassalo, J.M.; Bueno, P.C. (2019) Transporte challenges in Latin American: cities lessons learnt from policy experiences. Inter - American Development Bank. Doi: http://dx.doi.org/10.18235/0001558

#### APPENDIX - METHODOLOGICAL NOTE

This report considered only bike sharing systems which were operating in Latin America during the month of December 2019. This study was developed in three stages: (1) Variable's identification; (2) Data gathering; and (3) Data analysis and Knowledge sharing.



Figura 8: Study stages

The data were obtained through an exhaustive research, which includes consulting the main references, accessing the systems, operators and cities websites; tracking BSSs news; crossing and validating all the acquired information.

Relevant aspects were selected to characterize the systems, including elements related to the planning, operation, management and financing of the BSSs. In order to accomplish that, institutional publications<sup>7</sup> and academic papers were on the subject were also used.

Note **6**: MEDDIN, R.; De MAIO, P. (2020) The Bike-Sharing World Map. O'BRIEN, O. (2013) The Bike Share Map.

Note **7**: Inter-American Development Bank - IADB; Institute for Transportation Development and Policy - ITDP; National Association of City Transportation Officials - NACTO, World Resources Institute - WRI

### WHAT'S NEXT?

Latin America is a complex and singular territory. It becomes clear when we observe the unstoppable urban development of its cities and how it influences the mobility systems. With that being said, this first report represents a tremendous effort at collecting, systematizing and converting data of the dynamic bike-sharing ecosystem into open knowledge as a means to assist in improving the services provided by the government, industry, organizations and civil society.

Open data have proved to be a great resource to empowers citizens, stimulate proactiveness, improve the delivering of public services and to generate value to many different areas. Yet, we are still facing a multitude of challenges when it comes to this matter. Despite to the fact that several governments around the world have made huge datasets available, we still sense a lack of responsible government behavior and transparency in Latin America.

Collecting bike sharing systems data and monitoring them leads us to understand and to recognize its unique elements and its possible successes and challenges. It also stimulates the development of innovations and new technologies, by generating greater public acknowledge and engagement with infrastructure and the provided services. This report hopes to contribute to build a trustworthy ecosystem where people are able to make better decisions using data and managing its impacts.

## **About Us**

The Latin America Bike Sharing Systems Platform was created in 2018, firstly incubated by Transporte Ativo and financed by Itaú. As from its beginning, its purpose is to generate open knowledge about the BSSs, hoping that the understanding of this content leads to the development of new and successful bike sharing systems.

We strongly believe that researches are extremely important to contribute achieving sustainable cities and communities.

LatinoSBP is focused on sharing and spreading knowledge of the Latin America bike sharing systems, which are offering accessible means of transportation, promoting physical activity and well-being, reducing carbon emissions and stimulating development. Thus, we advocate for a responsible and better governmental behavior and transparency in Latin America.



