

# PARATRANSIT: A KEY ELEMENT IN A DUAL SYSTEM

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CODATU gathers the different stakeholders of transport and urban mobility: local authorities and government departments, universities and research institutes, private companies and individual consultants. The association was founded in 1980, following the World Conference on Urban Transport in Dakar. It aims to stimulate the exchange of knowledge and know-how to promote the implementation of sustainable urban mobility policies in developing countries. It organizes international conferences, offers trainings to the leaders of the South and regularly publishes books on this topic. Moreover, CODATU support cooperation between local governments in the field of transport and urban mobility.

For more information: [www.codatu.org](http://www.codatu.org)

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This document is the result of a cooperation within the programme “sustainable urban transport” of the Centre for Mediterranean Integration (CMI), a multi-actors platform for constructive dialogues and knowledge sharing to support transformational reforms and greater regional integration. CMI founding members are Egypt, France, Jordan, Lebanon, Morocco and Tunisia and two international

financial institutions active in the region, the European Investment Bank and the World Bank.

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# **The duality of urban public transport systems in cities of the global south**

In most cities of the global south, two types of public transport exist: institutional transport and paratransit. They operate according to very different models and co-exist in a complex relationship that varies from one context to another.

Institutional transport<sup>1</sup> includes public transport services often referred to as planned or scheduled transport services. This means public (or private) companies of a formal structure that provide services according to the regulations defined by the relevant urban transport authority. In response to the requirements of public authorities, these companies develop an offer that, in theory, meets the needs of users by providing a public service. Formal transport operators develop their networks in line with the service quality standards imposed by their governing authority and are often forced into setting low fares, putting even greater strain on the operational budget.

Paratransit, often referred to as ‘informal’ or even ‘illegal’ transport, operates on the fringe of the institutional transport system, sometimes even taking over as the main component in the system. In several documents that analyse transport in the Global South, it is most often described as a poorly organised and inefficient sector in terms of operations (route duplication, excessive length of routes, surplus supply of vehicles on certain routes, etc.), and it is considered partly responsible for road accidents, traffic congestion and air pollution. Critics of paratransit point to the unfair competition that heavily penalises institutional transport. Often deemed detrimental to the overall transport system by experts endorsing models similar to those coming from developed cities, the presence of paratransit is nonetheless justified.

Paratransit fulfils a type of demand that generally can only be met by the paratransit sector. In many cities, it is in fact the only type of transport available. Paratransit adapts in a pragmatic way to the local context in Global South cities where the institutional framework is inadequate or inefficient and where topography and geography become genuine obstacles to the development of large bus services. Besides, contrary to institutional transport, paratransit services have the ability to adapt to spending constraints of urban populations.

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1. Concept introduced by Godard (2001)

In order to study the potential opportunities for coordinating paratransit and formal transport, it is necessary to gain an understanding of the underlying business model of both types of service.

Institutional transport is established by the responsibility of public authorities that invest in a public service; authorities impose coverage conditions that, generally, are difficult to cover with fare-box revenues. The amount of subsidies (or other type of financial compensation) is not generally guaranteed for long periods because authorities tend to think that the public transport business should be profitable. But financial support becomes essential for reasons that are both internal (transport companies often have the same shortcomings as subsidised and poorly governed public corporations: revenue capture, low technical performance due to lack of incentive, etc.) and external (unfavourable urban development, difficult traffic conditions, etc.).

As for paratransit services, they are the result of private initiatives that develop spontaneously. Stakeholders' main objective is to maximise profitability: drivers will seek high occupancy rates and associated fare-box revenues to be able to pay rental costs to owners. Seeking profitability usually translates in a generalised poor service quality. Paratransit operators' aim is to maximise profit, sometimes to the detriment of quality of service. Owners and drivers balance quality and quantity, giving priority to their own personal profitability. This results in technical and organisational choices in the sector that may often be considered detrimental to the public transport system: fragmented ownership, reducing vehicle size, oversupply in certain parts of the city, and disruptive competition among operators.

The co-existence of these two highly different forms of transport can thus become conflicting. But recent literature suggests that the two components of urban public transport are in fact potentially complementary. Many case studies in a wide range of urban situations have focused on the specific role each type of service plays in the city and on the operational relations achieved between paratransit and institutional transport.

Identifying these complementarities requires a reframing of the general overview: instead of considering paratransit as a stop-gap solution to the lack of institutional transport, we should ask to what extent paratransit provides an adequate service, and at what point we can consider that it has reached its limits and that public authorities need to step in to ensure service.

If we look at the typical path-dependencies of Global South cities, we can see that institutional transport and the implementation of regulations must remedy the deficiencies of the paratransit sector, not the other way around. Nonetheless, any analysis of the situation must start with a study of existing paratransit services and identify the critical thresholds where they can arguably become unviable.

The present document will provide a review of the recent literature and seek to characterise the different models of paratransit, illustrated in specific examples of cities with highly contrasted realities. The ultimate aim is to identify key elements that warrant more in-depth analysis.

# **Paratransit services: definitions**

## **1.1 How to define paratransit**

In transport systems, two types of services exist: collective transport services (comprising institutional transport and paratransit modes) and “individual” public transport (including mainly motorcycle taxis and metered taxis). Paratransit is generally perceived as an antagonist to institutional transport. It is defined as opposed to formal public transport (which, in some cities, is nonexistent). Paratransit takes many forms and may be defined according to different parameters, depending on the institutional frameworks of each continent.

Many studies have analysed the role of the paratransit sector in the overall public transport system and its impact on the urban structures where it operates. They have highlighted the salient features of this fragmented, often disorganised and inadequately regulated sector.

Several publications give insights into the complexity of this type of transport and its broad range of possibilities in terms of vehicles, regulatory frameworks and service planning. Some recent studies have shed light on new factors shaping the relationship between paratransit and institutional transport (cf. Godard, 2013 & 2008; Salazar Ferro *et al.*, 2012; Venter, 2011; Orrico Filho *et al.*, 2007; Sohail *et al.*, 2006; etc.). Researchers observing the different urban contexts have come to define paratransit based on the following elements.

### **Lack of efficient regulatory frameworks**

The term ‘paratransit’, used in anglophone publications, emphasises the absence of adequate regulation. Paratransit includes informal and formal public transport services, but within a system that is not highly regulated. According to Cervero (2000), paratransit systems function in a “*laissez-faire*” context in which the authorities allow for a very flexible regulatory environment or even total deregulation. Behrens *et al.* (2012), who studied cities of sub-Saharan Africa, explain that paratransit services began as unregulated and informal services.

### **Vehicle capacity**

Shimazaki & Rahman (1996) offer a definition of paratransit that includes motorised and non-motorised modes, such as rickshaws, which play a key role in Asian cities. Chapain (2005), who studied the case of Mexico, proposes a definition of paratransit that is centred on the subject of vehicle capacity:

We define (...) paratransit as systems of public transport using a variety of motorised road vehicles with a capacity between that of an automobile (1 to 4 people) and that of a large bus (50 people or more). It commonly consists of minibuses (holding 10 to 15 people) and midibuses (i.e. an intermediate capacity of 20 to 40 people). In addition, paratransit offers regular service, though the routes may be subject to change.<sup>2</sup>

Figure no. 1 shows the heterogeneity of vehicles used for paratransit services.

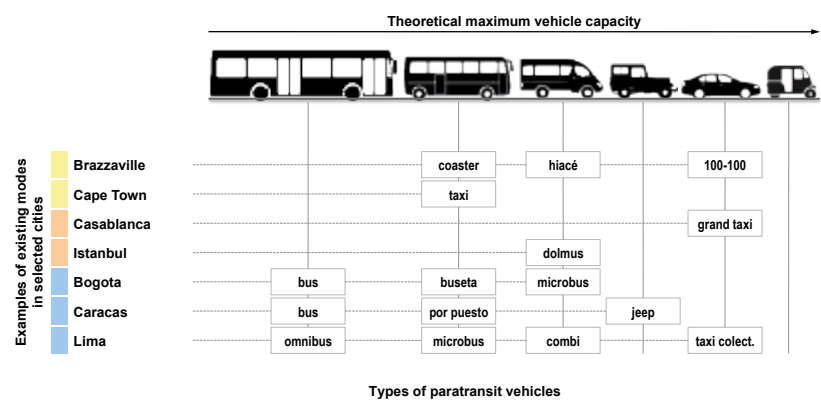


Figure 1 : Types of vehicles for paratransit and examples in some cities<sup>3</sup>

### Flexibility of services

Similarly, Wilkinson et al. (2012), based on analyses in Africa, conceive paratransit as a flexible mode of transport lacking schedules or frequencies and which features small and medium-sized vehicles, most often ageing minibuses.

### Internal organisation of the sector

Xavier Godard (2013, 2008 & 2001), who has focused his substantial research in Francophone Africa, coined the term transport artisanal in French; he considered the term “informal transport” to be inadequate when attempting to describe the sector. The internal structure of the services provided by private operators/drivers is the defining feature of transport artisanal:

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