INTRODUCTION

Governments’ responses to the COVID-19 health crisis have had strong impacts on mobility, both on a local and global level. Public transport patronage has plummeted by 90% in some parts of the world, according to UITP’s COVID-19 Task Force, and the industry has been dramatically hit. The informal transport sector, which plays a major role in many cities worldwide, has been equally impacted.

This Knowledge Brief consolidates a detailed report and a series of three webinars that took place in the second half of 2020, giving a specific focus on the informal transport industry1. It highlights some of the characteristics, strengths and weaknesses, and reinforces the case for transforming informal transport.

Relevant case studies present practical experiences that have contributed to improving resilience and sustainability of informal transport for users, service providers and authorities. This paper identifies key insights and concluding questions that can help with understanding the necessary transformation process.

1. The extensive Report and recorded webinar sessions are available to UITP members on MyLibrary here.
THE EMERGENCE OF INFORMAL TRANSPORT

Informal transport emerges in a context where:

- There is no service for some population because governments, civil servants and the upper classes do not notice this lack of supply, even if it is critical to the economy.
- There is a lack of investment in public services and utilities.
- The public realm and infrastructures are very much car oriented.
- There is fast urban sprawl and city development.
- There is a supply of vehicles that can be shared to transport people.
- Public transport is considered as a private business: Public transport is not centred on urban dwellers needs or on any public policy.
- There is potential provided by IT tools.

STRENGTHS AND WEAKNESSES OF THIS INDUSTRY

A VITAL ROLE FOR MILLIONS

Informal transport is a ‘global phenomenon’ which plays a major role in the mobility of millions of city inhabitants, particularly in the Global South.

This form of transport is a major supplier in cities and regions and is vital to urban life, at any time of the day. It provides livelihoods for many millions of commuters who depend on affordable transport. For example, in Kayseri, Turkey, it represents 60% of the transport supply and in many African cities up to 90%. The sector fills the lack of official or regulated transport services in developing urban areas, where mobility needs are rising, a higher middle class is developing, and new technologies enables new services.

Informal transport provides a large variety of services. In Istanbul, Turkey, informal transport covers taxis, minibuses, school buses, employee buses, company buses, and much more.

Informal transport services use a variety of vehicles from vans to two or three wheelers, these vehicles are part of the city identity and are a way of expressing local culture.

HARD WORK IN A DYNAMIC ECONOMIC SECTOR

The industry is characterised by a scattered production structure and various working situations. Services are provided by individual entrepreneurs in Freetown, Sierra Leone, as well as by small and medium-size companies or cooperatives in India. Drivers work for different vehicle owners or, conversely, drive and own their vehicle. New business models are also developing with new technologies, including a cottage industry of providers, such as Uber middlemen in Cairo, Egypt.

This business generates revenues relying on users and work opportunities. The ecosystem of workers encompasses drivers and supporting industry such as mechanics, washers, and many other informal businesses that are associated with transport.

However, providing the service is hard work because of harsh competition to attract customers. Moreover, economic efficiency and sustainability of the industry could be improved. A multiplicity of individual businesses and small-scale enterprises hardly benefit from economies of scale as far as operating costs (maintenance, petrol...) are concerned. Small size businesses do not generate enough turnover that could be dedicated to investment. Additional difficulties in access to finance, among other reasons, due to a lack of solvency from the point of view of banks and financial institutions, contribute to keeping old fleets in operation or insufficient number of buses.

EXPECTATIONS ARE NOT FULFILLED

As informal transport is a decentralised industry, this sector is agile and adaptive. However, with the focus on generating enough daily income through low prices to attract users, passengers do not always benefit from a high quality, standardised and reliable service.

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2. UITP is aware that different terms are used to qualify and describe this sector. To be in line with governance, “informal transport” will be used in this paper.
Uncertain waiting times in Dakar, Senegal, partly because of the very nature of these ‘go-once-full’ services, contribute to unreliable travel experiences. Passengers’ safety and comfort standards of vehicles are low. Over-supply can be observed on main roads in Turkish cities, for example, at the expense of areas and populations that are excluded. Even if travel fares are well known, cash-based payment schemes do not make revenue flow clear, neither payment easy nor safe for users in times of pandemic.

In addition, the transport can also be characterised as a territorial system: Routes are managed locally, with operating staff who develop a sense of appropriation of the area that they serve. As a result, any intrusion by potential competitors could lead to antisocial or violent behaviours, as observed in Cape-Town, South Africa, further worsening operating conditions and service quality.

From the point of view of authorities, informal transport plays a major role in cities, but is also associated with significant externalities to urban life. These include congestion on main corridors, both air and noise pollution due to old vehicles, and accidents.

Informal transport develops in low transport governance environments. In such a context, transport functions or competencies are often not clearly defined or are scattered between various authorities. Mandates and responsibilities between different levels of governments are overlapping or conflicting. Specific infrastructures or facilities that would ease transportation (dedicated bus lanes, bus stop, interchange…) are not available. Such a context does not favour cooperation, coordination, coherent service provision, and a transition towards an environmentally friendly fleet.

Finally, authorities tend to have a lack of awareness of the sector. The understanding of the sector is limited because of a lack of data that could help better manage it and the multiplicity of stakeholders involved does not help authorities to reach out to them. Regulators tend to focus on a traffic management or fare control, but rarely consider its specific nature: A public service or utility.

**COVID-19: A HARD HIT TO AN INDISPENSABLE SECTOR**

Even if informal transport has played a key role in helping essential workers move around and ensure commodities are still delivered, the COVID-19 pandemic has dramatically impacted the sector.

The level of patronage has dropped on average by 90% during lockdown worldwide. Service levels have also decreased by 30–40% with a minimum still being operated. The crisis has amplified the impact on service quality. Waiting times have increased and transport capacity has been below demand.

Informal transport workers have suffered from a revenue crisis. Some cities estimate revenue losses varying from 50–70% in African cities\(^3\). Fare increase has rarely been used as a response to the revenue crisis by some informal transport service providers.

To respond to the health crisis, national or local authorities have outlined safety and sanitation guidelines. For passengers, these include compulsory face masks, hand cleaning, reducing talking and other personal protective equipment, capacity restriction, and mandatory seating in buses. Ticket sales have been limited or banned. Selling and non-related transport activities have been reduced at interchange and bus stations. Health and sanitation measures taken by informal transport service providers also include periodically disinfecting buses and other infrastructures. To ensure rules are respected, the police have applied strict controls.

Either the lack of political will or the scattered landscape of informal transport stakeholders have made it difficult to set up a specific financial mechanism that supports the informal sector.

THE CASE FOR TRANSFORMING THE SECTOR

The description of certain aspects of the informal transport sector helps to conduct an analysis of the strengths and weaknesses.

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<th>STRENGTHS</th>
<th>WEAKNESSES</th>
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<td>Plays a major role in the mobility of millions of urban dwellers.</td>
<td>A business model highly dependent upon income and low social protection of service providers.</td>
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<td>Provides a large variety of flexible transport services with different types of vehicles.</td>
<td>No benefit from economies of scale.</td>
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<td>Proves to be dynamic, agile, and adaptive.</td>
<td>Limited access to funding that hampers fleet greening.</td>
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<td>Subsidy light.</td>
<td>A low operational efficiency, a lack of coordination, integration of services, low quality standards, both impacting users and the community.</td>
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<td>Open to innovation.</td>
<td>A sense of territorial ownership.</td>
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<td>Provides employment opportunities.</td>
<td>A lack of existing or recognition of organisations of stakeholders (e.g workers unions).</td>
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<td>During the pandemic, allowing essential workers to move around and commodities to be delivered.</td>
<td>Little knowledge, available data, and general expertise of the industry.</td>
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<td></td>
<td>Lack of awareness towards governance in the sector.</td>
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<td>Significant environmental externalities.</td>
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This approach highlights the interest of transforming the informal sector to make it more resilient and sustainable, leveraging on its strengths. The next section present valuable experiences of sector transformation.
PRIVATE SECTOR TECHNOLOGICAL INNOVATIONS

Private initiatives which are based on technologies have contributed to improving operations, service quality, and societal benefits of informal transport.

TICKETING AND SEAT BOOKING SYSTEMS IN AFRICA

Shuttlers has proposed a multifunctional electronic platform for Lagos, Nigeria, with useful functionalities such as prebooking seats, scheduling, contact tracing, and an e-payment system for reducing contact and virus transmission risks. This solution collects data on travel patterns and helps secure the income of informal transport service providers.

ACGroup develops and implements urban and intercity smart card-based solutions for both urban transport in Kigali, Rwanda, and intercity transport across the rest of the country. The solution provides Tap & Go smartcards and on-board validators. This provides real-time information on bus services as well as scheduling trips, prebooking seats on long distance services and payments. Their services are fully integrated with mobile money and facilitate electronic revenue collection. This solution is used by the three major bus operators in Kigali.

TICKETING AND BUS TRACKING APPS IN INDIA

In 30 Indian cities, Chalo (“let’s go!” in Hindi) a mobile app, tracks buses and proposes real-time information to avoid long waiting times at bus stops. This solution also encompasses digital ticketing solutions: A smart card and on-board validator. Chalo offers bus owners and drivers a live dashboard and reports on their daily activities.

JOURNEY PLANNERS AND ROUTERS IN ASIA, AFRICA, AND LATIN AMERICA.

Winner of the UITP Special Recognition Award in 2019, Whereismytransport collects and provides public transport route data from both formal and informal transport service providers.

TRUFI sets up a multimodal journey planner for moving from point A to B. This customisable solution can be rolled out in cities where formal or informal transport solutions are in place. The application provides information on walking distances and details all the available transport connections.

These solutions address the needs of travellers, those involved in bus operations, and authorities. The following table identifies some of the benefits provided by these technologies.
<table>
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<tr>
<th>USERS</th>
<th>STAKEHOLDERS INVOLVED IN BUS OPERATIONS</th>
<th>AUTHORITIES</th>
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<tbody>
<tr>
<td>Facilitate seat booking, payments, travel planning, and opens the sector to Mobility as a Service (MaaS).</td>
<td>✔</td>
<td>-</td>
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<tr>
<td>Provides organisations and authorities with information and data they need to map services. This helps to improve the service and evaluate the feasibility of urban development and transport infrastructures.</td>
<td>-</td>
<td>✔</td>
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<tr>
<td>Increases ridership by simplifying and increasing safety of travel experience.</td>
<td>✔</td>
<td>-</td>
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<tr>
<td>Optimise transport operating with tools which help reduce risks, and better control operating costs.</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Matches demand and supply by reducing the number of empty seats, making transport services more reliable, and increasing patronage.</td>
<td>✔</td>
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<tr>
<td>Helps the industry facilitate payment, secure revenues, and funding: Optimising fare collection, making revenue flows more transparent and moving to straightforward and customer-friendly cashless payment options. However, this should not be the only source of funding and the case for subsidies should be raised.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Sustains employment: Supports staff, improves job quality, and powers the technology industry.</td>
<td>-</td>
<td>✔</td>
</tr>
<tr>
<td>Contributes to the United Nations Sustainable Development Goals environment and digital development by improving the livelihood of communities, making transport more accessible, and reduces congestion and pollution.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Increases resiliency of the sector by providing solutions adapted to crises which raises trust between users and those involved in bus operations.</td>
<td>✔</td>
<td>✔</td>
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</table>
The implementation of these technological solutions has not been straightforward.

To facilitate user’s appropriation, the following actions have been implemented:

1. Collect data to understand users’ needs and expectations.
2. Provide access to clear and updated information on integrated transport services, to adapt to a variety of individual situations, travel needs, and urban contexts.
3. Ensure the inclusiveness and comprehensiveness of tools. This requires a step-by-step technology development approach and necessitates to help users change their habits and behaviours. Avoiding a dehumanised environment is paramount.

The development of technological tools among informal transport service providers has involved the specific actions:

1. Raise awareness about the benefits of technology. Technological solutions require extra expenses or can be perceived as extra control on the operating staff. This requires engaging with the multiple stakeholders involved in the transport industry (bus drivers and owners, starting by liaising in the street…) and ensuring operating staff benefits.
2. Secure revenue to workers and vehicle owners at the end of the day and warrant business profitability for transport operating staff.

Awareness raising among transport authorities has been achieved with the following actions:

1. Bring evidence that technological tools are commonplace and popular among users, thanks to a step-by-step approach where technology is continuously upgraded, with the support of modern networks and facilitating legal frameworks.
2. Demonstrate the ‘general interest’ dimension that can be derived by technology, for example by ensuring the reliability of supply, improving customer experiences, and strengthening the viability of the business models for service providers, drivers, and owners.
3. Highlight the benefits for the future: Providing data to authorities will help improve their understanding of mobility patterns and consequently better plan transport supply and integrate adequate transport solutions.
4. Define the values and the goals that should be met by a new technology before defining the technological solutions.

PUBLIC SECTOR STRATEGIES

The examples of Mexico City, Mexico, Freetown, Sierra Leone, and cities across Turkey showcase interesting ways governments and authorities have stepped in to transform the informal transport sector. These actions aim to better structure the transport landscape and organise the supply side.

Structuring the transport landscape

Structuring the transport landscape implies to define clear responsibilities, and improve cooperation between the planner–regulator(s) and transport service providers.

INSTITUTIONAL REFORMS IN MEXICO

With the objective of defining clear responsibilities and improving cooperation between the planner–regulator(s) and transport service providers, Mexico City has implemented a centralised transport supply planning scheme, a maintenance service of rolling stock, and an independent entity (MetroBus) in charge of coordinating, regulating BRT lines, and managing fare collection. Additionally, a dedicated body to collect payments from users and redistribute them to operators has been set up. Better management of maintenance has led to economies of scale. Thanks to a legal framework change, a decentralised authority was created in 2000.
RESTRUCTURING THE TRANSPORT SYSTEM AND EXTENDING COLLECTIVE TRANSPORT SERVICES IN SIERRA LEONE

In Freetown, the authorities have defined two pilot corridor key routes that are the backbone of the urban transport network. For these Bus Rapid Transit (BRT) routes, contracts and tenders with private operators have been defined. New modern buses with a specific graphic identity have been introduced. Following the principle of a Quality Bus Partnership (QBP), the authority has invested in upgrading roads and transport facilities and infrastructures for buses such as interchange, accessible bus stops and dedicated lanes.

Organising the supply side

Authorities have been involved in organising the supply side of the transport market, by encouraging individual transport service providers, vehicle owners or workers to cooperate and to grow their organisations. The shift from a structure of individual businesses to a global company concession requires a change of mindset. Contracts linking an authority and a transport provider set standards, define obligations and liabilities of each stakeholder. In outlining and implementing their strategies, authorities have considered the economic weight of the informal transport sector that provides many job opportunities.

TRANSPORT SERVICE UNBUNDLING IN TURKEY

Following a municipal authority’s decision to re-organise the network, it has been decided to open new lines and better spread services across several cities. Additional staff have been hired, more vehicles have been bought or rented, and additional operating rights or licenses have been granted. By doing so, authorities focus on restructuring the supply and on defining new operating rules, that apply to new entrants as well as to existing players. As a result, individual workers or owners are now separated by a corridor, cash and/or vehicles.

To optimise the public transport supply in cities, a favoured approach is the coexistence of regulated and structured BRTs and more flexible informal transport systems.
Key conditions for implementing successful reforms

By transforming the transport landscape and the supply side, authorities have created a “transport agora” where a transformational dynamic has been ignited. Three main conditions are required to back this drastic change.

1. Strong political leadership and will for the necessary transformation of the informal sector. In Mexico and Free-Town, clear policy goals towards a resilient and sustainable city were set, along with the creation of a dedicated and well-defined authority.

2. Involve and work with all stakeholders – supply side providers, transport related authorities, governments, users, technology providers, transport industry suppliers – from the beginning of the transformation process to outline and implement a holistic transformation strategy. In Freetown, a steering committee involving more than seven types of stakeholders - all transport and mobility-related authorities, operators, representatives of informal transport service providers and of users - has been put in place.

3. Time and specific skills to manage, advocate and implement change. In Mexico City, a first step in the transformation process of informal transport has taken 15 years (2005-2020). Long discussions with service providers have been necessary. Specific trainings for all stakeholders of the industry have been proposed to informal transport sector workers by focusing the attention on service quality and not just on securing a daily revenue, as well as to government officials to increase skills in contracting.

CONCLUSION

The COVID-19 crisis requires us to consider the short-term consequences on the informal transport sector and solutions to keep it moving. Despite existing vulnerabilities, the key role of informal transport services in many cities worldwide shows that specific support should be targeted towards this sector.

This could include:

- Informal transport supply providers in COVID-19 support plans.
- Support informal transport service providers (drivers, associated personnel, vehicle owners...) with health protocols and guidance to protect staff and passengers.
- Control of sanitary measures by due authorities.
- Restoration of users’ confidence in public transport, by clarifying messages from authorities on solutions to mitigate potential health risks.

In the long-term, informal transport will continue to be part of the mobility landscape. To ensure the sector comes out stronger and more resilient, it is key to reflect on a transformation. This could mean the coexistence of regulated and informal transport in one efficient mobility system.
To transform this industry, we consider that there is no top-down one solution for all. On the contrary, we acknowledge the complexity of the sector and of the task. This politically backed transformation requires a holistic and deep understanding of mobility and of the sector. We have identified 10 key questions derived from case studies and discussions with experts and practitioners which will frame how to advance with transforming the sector:

1. How is the informal sector currently and locally organised and how is it working?
2. What should be the overarching mobility and transport policy objectives?
3. What should the transport sector look like in the future?
4. How could a cooperation and discussion platform with all relevant transport stakeholders be envisioned? What ‘language’ should be used?
5. What is the transformation path? How to build human capacity of informal transport providers and authorities on topics such as change management, innovative transport solution and green vehicles?
6. What regulatory landscape and governance structure should be set up? How should roles be clarified between regulators and operators? What links or relationships between regulator and providers could be developed? How should the informal transport service suppliers be organised, structured, grouped? How do we enforce it?
7. How can innovation and technological tools be supported to better meet the needs of service providers, users and commuters? How should data be provided to authorities and regulators in order to better understand the system? How do we ensure that all stakeholders benefit from new technologies?
8. How can funding be secured to cover operational costs and provide revenues to informal transport service providers? How can funding and financing be mobilised for investment in infrastructures and environmentally friendly public transport vehicles?
9. How to consider the economic role, the job provider function of the sector and promoting employment?
10. How to engage urban dwellers with a new transport system that would be better integrated, cheap, reliable, and safe?