



GLOBAL LABOUR INSTITUTE MANCHESTER
CHEIKH ANTA DIOP UNIVERSITY DAKAR

DAKAR BUS RAPID TRANSIT

Labour Impact Assessment Research Report 2020

Mamadou Bouna Timéra, Momar Diongue and Papa Sakho,
Laboratory of Human Geography,
Cheikh Anta Diop University, Dakar, Senegal

Dave Spooner
Global Labour Institute, Manchester, UK

FOREWORD

This is the provisional report of research commissioned by the International Transport Workers' Federation (ITF) from the Laboratory of Human Geography (LABOGEHU) at Cheikh Anta Diop University, Dakar, Senegal and the Global Labour Institute (GLI) in Manchester, UK. It considers the potential impact of Bus Rapid Transit (BRT) on the livelihoods and working conditions of those dependent on Dakar's urban transport industry, particularly those employed in the informal economy.

The research is a contribution to the ITF's Our Public Transport (OPT) programme. The overall objectives of OPT are to 'promote quality public transport and inclusive cities in Africa, including decent jobs, a just transition for informal workers, strong union representation and improved access to affordable mobility'.

In September 2019, a research team of trade union representatives, led by the Laboratory of Human Geography, undertook questionnaire surveys among 181 workers (134 men and 47 women) in the Dakar transport industry. The surveys were designed to capture data on the workforce in the context of the development of BRT in Dakar. The interviews were designed to build a profile of workforce demographics; occupations; work experience and qualifications; employment terms and relationships; working hours and conditions; earnings; and major issues experienced at work. It also aimed to determine the level of workers' awareness of BRT.

The street surveys were accompanied by a sequence of focus group discussions (FGDs), designed to provide further insight into the key issues faced by transport workers, issues facing the Dakar passenger transport system, ideas for improvements and reform and attitudes towards the introduction of BRT.

The fieldwork was accompanied by initial desk research to identify policies and analysis of BRT, its introduction to Dakar and the question of community and workforce engagement in BRT consultation, planning and implementation.

This project is the second BRT Labour Impact Assessment undertaken on behalf of the ITF. The first, completed in January 2019, was carried out in Nairobi by GLI in partnership with the Institute for Development Studies (IDS) at the University of Nairobi. This report is available at www.BRTlabourimpact.org.

Acknowledgements

LABOGEHU and GLI would like to thank all those who provided support and cooperation in the research and preparation of this report, especially Gora Khouma, Secretary-General, Union des Routiers du Sénégal (URS); Malick Diop, project coordinator in Dakar; Adama Soumaré, Maguette Diop and Aida Ba (Women in Informal Employment: Globalizing and Organizing (WIEGO); and Mohammed Safiyanu, Bayla Sow, Alana Dave, Ali Howes and Claire Clarke (ITF).

We would also like to thank all the participants of the national workshop on BRT held in December 2019, where the preliminary findings of the research were presented – they were from URS, Fédération des Transports de l'UDTS and Syndicat Democratique des Travailleurs du Transport Routier .

We are particularly grateful for the excellent work of the research team from the unions who undertook the surveys of workers:

- Adama Diokhane
- Elizabeth Ndong
- Mamadou Fall
- Mohamadou Diallo
- Momar Diagne
- Soukey Ka

GLI and LABOGEHU would also like to thank Union to Union and the Swedish Union for Service and Communications Employees (SEKO) for their support in making this project possible.

Prof Mamadou Bouna Timéra, Dr Momar Diongue and Prof Papa Sakho,
Laboratory of Human Geography, Cheikh Anta Diop University, Dakar

Dave Spooner,
Global Labour Institute, Manchester
January 2020

Contents

Tables	4
Acronyms and abbreviations	5
Introduction	6
Bus Rapid Transit	6
BRT in Dakar	7
The passenger road transport industry in Dakar	10
Changing patterns of transport modes	12
The Dakar urban transport workforce	14
Survey methodology	14
Statistical data analysis	16
Characteristics of the informal transport workforce in Dakar	17
Workers' proposals	28
BRT – Implications for the workforce	31
Awareness of BRT	31
Potential impact of BRT on employment	34
Conclusions and recommendations	38
Bibliography	41
Appendices	42
Appendix A. Survey questionnaire	42
Appendix B. Focus group discussion guidelines	48

Tables

Table 1.	Funding and loan agreements	8
Table 2.	Individuals who used public transport in Dakar (aged 14 and over, Monday to Friday)	12
Table 3.	Public transport share, Monday to Friday	13
Table 4.	Typical journeys by mode of travel	13
Table 5.	Questionnaire survey schedule	14
Table 6.	Schedule for focus groups	15
Table 7.	Distribution of sample by site and gender	16
Table 8.	Sample by age and gender	17
Table 9.	Duration of employment	17
Table 10.	Duration in current occupation	18
Table 11.	Highest level of education received	18
Table 12.	Further training by type	18
Table 13.	Occupation and workplace by gender	19
Table 14.	Proportion of workers with an employment contract	20
Table 15.	Regularity of work	20
Table 16.	Number of hours worked daily	20
Table 17.	Number of workdays per week	21
Table 18.	Gross income and payment terms	21
Table 19.	Expenditure category	22
Table 20.	Frequency of expenditure	22
Table 21.	Source of income	22
Table 22.	Health problems or injuries at work	22
Table 23.	Distribution of health problems	23
Table 24.	Causes of workers' health problems	23
Table 25.	Details of causes of workers' health problems	24
Table 26.	Problems at work	24
Table 27.	Problems at work by category	26
Table 28.	Workers who are members of an organisation	26
Table 29.	Worker membership by type of organisation	27
Table 30.	Worker proposals by focus area	28
Table 31.	Frequency of proposals on the implementation of BRT according to workers' concerns	28
Table 32.	Distribution of proposals for improvements to informal transport industry	29
Table 33.	Frequency of proposals for the reduction of congestion and pollution	29
Table 34.	Frequency of proposals against harassment and promotion of safety and hygiene	30
Table 35.	Proportion of workers having heard about BRT	31
Table 36.	Source of knowledge about BRT	31
Table 37.	Reasons for attitude towards BRT	32
Table 38.	Positive/negative attitudes towards BRT	32
Table 39.	Perceived impact of BRT	33
Table 40.	AFTU/DDD job loss calculation	34
Table 41.	Estimated number of workers at Grand-Yoff garage	35
Table 42.	Approximate number of terminal jobs at risk	35
Table 43.	Stations and bus stops of operators on BRT corridor and feeder network	36

Acronyms and abbreviations

AFTU	Association de Financement des professionnels du Transport Urbain (Tata minibus operator)
ANSD	National Agency for Statistics and Demography of Senegal
CETUD	Conseil Exécutif des Transports Urbains de Dakar (Dakar Executive Council of Urban Transport)
CFA	Communauté Financière Africaine (African Financial Community)
DDD	Dakar Dem Dikk (Dakar bus operator/network)
EMTASUD	Household Survey on Mobility, Transport & Access to Urban Service in Greater Dakar
EMTSU	Survey on Mobility, Transport & Urban Services in Dakar
GIE	Groupeement d'Intérêt Economique (Economic Interest Grouping)
GLI	Global Labour Institute
ITF	International Transport Workers' Federation
ITDP	Institute for Transportation and Development Policy
LABOGEHU	Laboratory of Human Geography
SMIG	Salaire Minimum Interprofessionnel Garanti (minimum wage)
SOTRAC	Société de transport du Cap-Vert
TER	Regional Express Railway
WIEGO	Women in Informal Employment: Globalizing and Organizing
WB	World Bank

CURRENCY

CFA franc 1,000 is the approximate equivalent of USD1.70 or EUR1.52 (1 January 2020)

INTRODUCTION

This report assesses the potential impact of the introduction of Bus Rapid Transit (BRT) on the workforce of the informal transport industry in Dakar, Senegal and seeks to encourage the active engagement of transport workers' representatives in shaping a modern, accessible, efficient and environmentally sustainable transport system for the city.

This is the second labour impact assessment of BRT commissioned by the International Transport Workers' Federation (ITF). It follows a successful impact assessment undertaken in Nairobi, Kenya, which, like Dakar, has large numbers of workers who currently depend on the informal urban passenger transport industry for their livelihoods.

Bus Rapid Transit

BRT is a public transport system designed to improve capacity and reliability in congested cities. It is based on dedicated road lanes that cannot be used by vehicles other than large buses operated by BRT companies. It involves building new roads, interchanges, terminals and modern stations along the routes.

All over the world, cities like Dakar are encouraged by the World Bank and national government agencies to adopt BRT in order to ease congestion, increase efficiency and reduce air pollution.

There are some complex factors involved in determining what constitutes a recognisable BRT system, including service planning, infrastructure, station design, communications, and integration with pedestrians and other transport systems.

The Institute for Transportation and Development Policy (ITDP) developed the BRT Standard, a worldwide evaluation tool to determine BRT best practice.

The most basic criteria are:

- dedicated right-of-way
- busway alignment (minimising conflict with other traffic)
- off-board fare collection
- intersection treatments (reducing delays at intersections)
- platform-level boarding

The BRT Standard has a scorecard which attempts to evaluate planned and operational BRT systems based on 43 further criteria, giving a score out of 100 (see www.itdp.org/the-brt-standard/).



Dar Es Salaam BRT

In Latin America BRT has become widespread: depending on the definition of BRT, it currently operates in 55 cities. The TransMilenio BRT system in Bogotá, Colombia, in operation since 2000, became the model system which city authorities throughout the world have been encouraged to emulate by lending agencies and supportive research and advocacy institutions, such as the ITDP.

The Bogotá model is more than just a set of technical design standards. It includes a public-private partnership operating model, which is supposed to generate an international market for public bus services with no public funds for operating subsidies. Cities are encouraged to address the informality in urban transport by creating a market for purchasing bus services from private, in some cases international, companies. The government takes on the initial risk, guaranteeing payments to the private operators. The lack of public subsidy can lead to high fares, which risks excluding poor people while simultaneously restricting the more affordable informal services on which they depend (Spooner, 2019).

Over the last decade, BRT has been introduced in several African cities, with projects thought to be underway in at least 20 cities, either operating or in various stages of planning. This includes five in South Africa alone. While BRT systems are operating in Abuja and Lagos (Nigeria), Dar es Salaam (Tanzania), Tshwane, Cape Town, Durban, Johannesburg and Port Elizabeth (South Africa), not all are designed to a full BRT specification; and at least one (Accra, Ghana) has effectively been abandoned (Manga & Spooner, 2019).

There is the fundamental question of whether BRT can be successful without public subsidy, especially in cities with high levels of poverty. Many transport planners, academics and lending institution professionals believe not. There is an obvious relationship between state subsidy, the affordability of BRT fares for passengers and the need for governments to reduce debt. There is considerable debate among transport economists and planners on whether subsidies are necessary, and whether a lack of subsidy inevitably means that fares are only affordable to middle-class commuters. Some argue that BRT systems should be deliberately designed to attract the middle-classes away from their cars to reduce congestion, therefore excluding the poor (Spooner, 2019).

BRT in Dakar

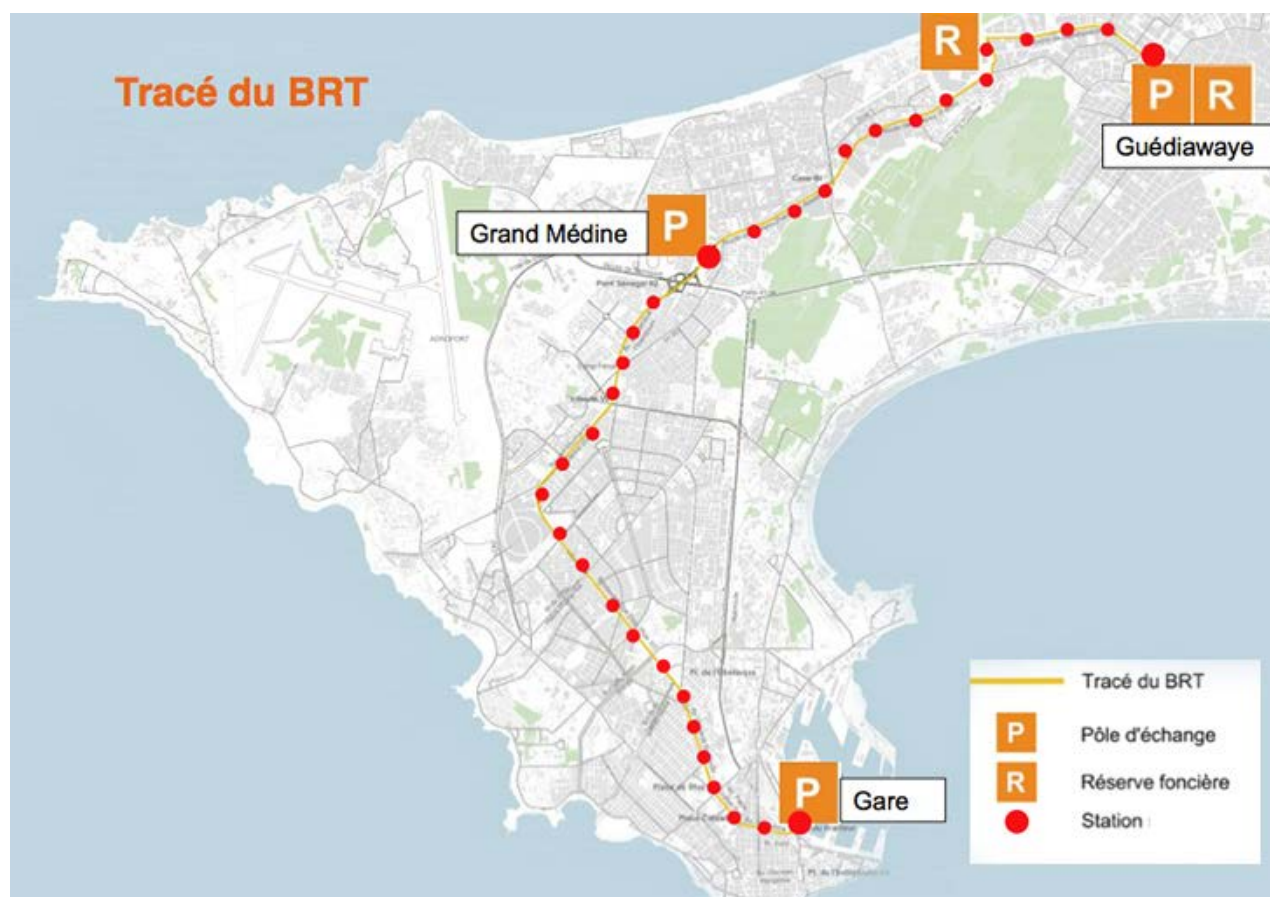
The history of BRT in Dakar dates back to 2002, when the former mayor of Bogotá visited the city. A workshop was organised by CONNEX, a French-owned transnational passenger transport company (now part of the Veolia group), and SYSTRA, an international engineering and consulting group specialising in public transport. This led to interest by the Dakar authorities in exploring the potential for the development of a BRT system over the period 2006-2008. The idea was to have a single, high-capacity line leading to Dakar city centre and a limited network of feeder routes connecting with the populations of Pikine and Guédiawaye (ITDP, 2004). Over time, route plans were to vary according to broader planning decisions for the organisation of the Dakar urban area.

In May 2017, the World Bank approved loans totalling EUR281 million for a pilot project 'to enhance urban mobility between Dakar and Guédiawaye through the development of a Bus Rapid Transit (BRT) corridor', to be completed and operational by 2023.

The pilot project adjusts the planned routes to take into account other flagship projects: Blaise Diagne International Airport, opened in December 2017 53 km from Dakar city centre; the 45 km Dakar-Diamniadio Highway which opened in 2013, linking Dakar to the new airport; new commercial and residential development around Diamniadio; and, above all, the Regional Express Railway (TER) to connect the city centre with Diamniadio and the airport.

In this context, according to the Conseil Executif des Transports Urbains de Dakar (CETUD), the transport authority for Dakar, 'the viability of investments in the BRT and TER projects depends greatly on the construction of efficient feeder lines so as to allow for the intermodality and price integration of the future urban public transport network of Dakar' (Diaw, 2019).

Consequently, the BRT routes planned as feeder lines were revised to allow for demand to be split between the two main lines of the BRT and TER.



Map 1. Planned BRT route | Source: CETUD, 2018

The proposed 18.3 km route will have 23 stops, including three interchanges at the Guédiawaye and Pétersen terminals and at Grand Yoff. Each of the three interchanges is to include a BRT terminus, a feeder lines terminus and a taxi rank. It is estimated that the 26 feeder lines will supply 60 percent of demand for the BRT, and will be operated by L'Association de Financement des Professionnels du Transport Urbain (AFTU) and Dakar Dem Dikk (DDD) (CETUD, 2017).

The construction contract for the interchanges has been awarded to Ageroute, a state-owned company in Senegal.

The terminals will offer facilitated connections with other modes of transport and will have parking spaces, safe and secure pedestrian access and practical connections with other bus lines.

A depot and operational control centre is to be built near the Guédiawaye terminal which will maintain the fleet and systems, and provide administrative services and facilities for drivers (SCE / SAFEGE, 2017).

FUNDING AND LOAN AGREEMENTS

The project is funded by a variety of sources, with the World Bank by far the largest lender. The financial plan includes a USD54 million contribution from the future bus operating company.

TABLE 1. FUNDING AND LOAN AGREEMENTS

Partner/sponsor	Contribution (million USD)	%
World Bank	300.00	62
European Investment Bank	85.47	18
Green Climate Fund	35.00	7
Future bus operator	54.00	11
Government of Senegal	10.80	2
Total	485.27	100

(Source CETUD, 2018)

PROPOSED REGULATORY ARRANGEMENTS

Dakar's transport authority, CETUD, is responsible for tendering and managing the BRT operation. Created in March 1997, CETUD is responsible for implementing and monitoring the government-defined urban transport reform policy for the Dakar region, including the determination of routes, contracts with operating companies, fare pricing policy, coordination between different modes of transport (including the assignment of income in the event of price integration) and the state and quality of fleets to combat noise and air pollution.

All the fixed elements of the project are to belong to the state (such as infrastructure, bus stations, systems, ticketing systems and stations). The operator buys buses for the BRT line and the equipment on board the bus. The operator must pay operating costs to the government of Senegal. The anticipated operational arrangement consists of establishing a 'Public Service Delegation' contract (UITP, 2019). The operating company is, in effect, taking the financial risk of predicting passenger numbers and revenue.

The fleet will be financed and operated by a private operator selected under public-private partnership procedures. Local operators will be able to become shareholders in the private BRT operator.

CONSULTATION WITH THE INFORMAL TRANSPORT INDUSTRY AND WORKFORCE

In common with similar World Bank-financed projects, Dakar was obliged to undertake a study of the social and environmental impact of BRT, with particular consideration of the involuntary resettlement of populations – those communities which are directly affected by the building of new roads and infrastructure – and the impact of temporary disruption during the construction phase.

The authorities organised a series of consultations and meetings with community representatives and residents during 2015-16. But there was little or no consideration of the impact on the livelihoods of the informal transport services which are threatened by the introduction of BRT, nor were trade unions or associations representing informal transport workers consulted in the process (CETUD, 2017).

This is despite the strong recommendation in the 2004 ITDP report *Pre-Feasibility Study for Bus Rapid Transit in Dakar, Senegal*, which drew attention to the fact that the authorities who designed the BRT have to take the informal transport industry into consideration.



Whatever is proposed, it is certain to have an enormous impact on the everyday lives of thousands of transportation workers and owners. These individuals are likely to be extremely threatened by the changes and involving them in the operational design is critical. The general public is also likely to not understand what is being done unless it is explained to them. Professional public relations firms can play an important role in this, in cooperation with NGOs.'

Hook & Gautier, 2004

The UITP report also highlights the decision-makers' lack of specific knowledge about the potential effects of the BRT projects on social or urban factors.



For example, they do not possess factual data specifying whether BRT systems make a significant contribution to improving employment prospects, combatting social exclusion or improving the quality of life.'

UITP, 2019

It also draws the attention of the authorities to a fare level (300 CFA francs, USD0.52) that could exclude a proportion of those potential users who are being targeted.



Source: ITF

THE PASSENGER ROAD TRANSPORT INDUSTRY IN DAKAR

Public transport in Dakar is a diverse mix of services in both the formal and informal economy but sometimes the boundaries between informal and formal are unclear.

We can roughly describe them as:

- formal bus services – where drivers, conductors and other essential staff are paid a regular wage by the vehicle owner in accordance with labour legislation; and
- informal operations – dominated by the ‘target system’ in which drivers have to pay the owner a daily fee (in effect, renting the vehicle), after which they can keep any remaining fares collected once they have covered their own expenses (such as fuel, conductors’ wages and police bribes). The owner and the employee reach a verbal agreement on pay that takes no account of labour legislation. The targets can be very substantial, typically around CFA15,000 (USD26) per day, leading to very long working hours, high accident rates and dangerous driving as drivers compete for passengers.

Informal urban transport is dominated by Car Rapide and Ndiaga Ndiaye minibuses.

Car Rapides are the oldest public transport mode in Dakar, first introduced in 1947. The buses are light commercial vehicles made by Renault that have been converted for passenger transport, with a seating capacity of about 25. Their history has been marked by several phases, from a ban to tolerance and implicit acceptance, and it was not until the 1970s that their role in the public transport market was fully recognised. The public authorities then tried to regulate them by specifying the fares, schedules and routes, and encouraging owners to replace their vehicles. But few operators complied with the regulations and the informal character of Car Rapides still prevails.

Ndiaga Ndiayes are Mercedes-Benz diesel trucks, converted to include seating for 35-45 passengers. A large cargo rack on the roof may be used to carry personal bags, spare parts and agricultural goods. Ndiaga Ndiaye vehicles first appeared in the 1980s. Like Car Rapides, they were light commercial vehicles which had been converted for passenger transport. Ndiaga Ndiayes provided intercity services when the Dakar urban public transport service went bankrupt.

In the 1990s, the Ndiaga Ndiaye initially provided transport services for employees, notably for dockers commuting to and from the port. They then extended their activities to include public transport services between Dakar and its suburbs. In the 1990s, in a context of fast urbanisation and marked demographic

Car Rapide



growth, the former state-owned bus company SOTRAC was unable to satisfy increasing demand for transport. The number of Car Rapides and Ndiaga Ndiayes increased constantly, reaching 2,500 to 3,000 vehicles, around two-thirds of the total passenger transport fleet. Most of the Car Rapides and Ndiaga Ndiayes belonged to small-scale operators, who usually owned only one vehicle or just a few.

Each Car Rapide or Ndiaga Ndiaye bus is operated by a driver and at least one apprentice, though many carry two or three. The apprentice is responsible for collecting passenger fares, loading cargo, and identifying stops. Apprentices generally stand on the rear bumper, holding on to the door or cargo rack while the bus is in motion, signalling stops to the driver by banging on the body panel.

Citing the ageing bus fleet, pollution and danger associated with both Car Rapides and Ndiaga Ndiaye vehicles, the Senegalese government is attempting to replace them with newer Tata buses and in 2016, Dakar's Executive Council on Urban Transport (CETUD) announced plans to phase both out by 2018.

The main formal economy public transport operators in Dakar are **Dakar Dem Dikk (DDD)** and **Tata-AFTU minibuses**.

At the beginning of the 1990s, the age and poor condition of passenger transport vehicles, led the authorities to initiate an ambitious programme to regulate and professionalise their activity and renew the vehicle fleet. However, due to strong opposition from the small-scale operators, the project was not

actually implemented until 2003, with funding from the World Bank. The renewal program was based on financial leasing over a five-year period, with the operator contributing 25 percent of the new vehicle's purchase price. This amount was financed by a scrapping premium for the old vehicle (CFA francs 1-2.5 million).

Dakar Dem Dikk ('round-trip' in Wolof, the local language) is the current state-owned bus company. It was created in 2000 after the Société de Transport du Cap-Vert (Cape Verde Transport Enterprise, SOTRAC) was declared bankrupt, following a long period of management difficulties, financial losses and decline in its position in the public transport market. Since 2015, DDD has run 17 lines in Dakar, catering for 50 million passengers per annum, using 408 buses.

Tata minibuses are organised in 14 economic interest groupings (GIEs) which grouped together to form L' Association de Financement des Professionnels du Transport Urbain (AFTU). AFTU brings together carriers, the government ministries of economy and finance and transport and CETUD and was created as a Senegalese government initiative with the support of the World Bank as a pilot programme for the renewal of the urban transport minibus fleet. Since 2005 Tata minibuses have replaced 1,607 Car Rapides and Ndiaga Ndiayes.

AFTU monitors the credit-lease contracts and is the intermediary between the GIEs on the one hand and CETUD and the supplier of vehicles on the other. The operators undertake to follow the routes designated by CETUD and comply with its departure frequency, pricing, ticketing and training requirements. The first

Ndiaga Ndiaye



new vehicles were Indian, manufactured by Tata, but this manufacturer was then replaced by the Chinese firm King Long. The vehicles are 40-seater buses, still known locally as Tatas. There are currently approximately 300 operators who own 1,300 vehicles in running order that serve almost 60 routes. However, failures to comply with pre-defined routes and departure frequencies are still common (Orrico Filho, Ribeiro, & Thiam, 2015). Vehicle overloading and the strenuousness of journeys are regularly mentioned by the press.

When new Tata buses (see below) were introduced in 2005, they were relatively well-managed, but after a few years they had degenerated into an informal industry, with drivers and conductors employed under the 'target system' (Faye, 2012).

Despite the growth in Tata services, many Car Rapide and Ndiaga Ndiaye operators have still not joined the vehicle renewal program and continue to work as before.

Based on summary from Olvera, Plat & Pochet, 2016



AFTU Tata minibus

Changing patterns of transport modes

Using data from 2000 and 2015 (Table 2), Olvera, Plat and Pochet showed that the Tata-AFTU buses, which did not exist in 2000, had by 2015 become the form of public transport most widely used – by nearly one in five residents each day from Monday to Friday. This growth was at the expense of the Car Rapide and Ndiaga Ndiaye minibuses which they replaced. These were in rapid decline, although still used by one resident out of seven.

In 2015 (Table 3), more than 80 percent of motorised journeys from Monday to Friday were made via public transport. Of these, the four methods used most were: AFTU minibuses (Tatas), (36 percent); Car Rapides (20 percent); illegal cabs (12 percent); and taxis (10.5 percent). Dakar Dem Dikk buses accounted for six percent, Ndiaga Ndiayes four percent, and other minibuses and Petit Trains de Banlieue (PTB) suburban trains each accounted for one percent of public transport journeys. (SITRASS/CUREM, 2015)

TABLE 2. INDIVIDUALS WHO USED PUBLIC TRANSPORT IN DAKAR (AGED 14 AND OVER, MONDAY TO FRIDAY)

Percentage of individuals who used a ...	2000	2015	2015-2000
Tata – AFTU bus	0	19.5	+19.5
Clando – unlicensed shared taxi ¹	6.6	9.1	+2.5
Dakar Dem Dikk bus ²	2.5	4.0	+1.5
Taxi	5.1	5.8	+0.7
Car Rapide minibus	17.9	11.1	-6.8
Ndiaga Ndiaye minibus	13.0	3.6	-9.4
Individuals who used a public transport mode at least once a day³	30.8	37.9	+7.1

Source: (Olvera, Plat, & Pochet, 2016)

¹ In 2000 this included green taxis

² SOTRAC buses in 2000

³ The value is less than the sum of the column because if an individual used more than one public transport mode, s/he has been counted only once

TABLE 3. PUBLIC TRANSPORT SHARE, MON – FRI

Transport Mode	% Journeys
Tata - AFTU	36%
Car Rapides	20%
Clandos (illegal cabs)	12%
Taxis	11%
Dakar Dem Dikk	6%
Ndiaga Ndiaye	4%
Other	1%
(Intermodal)	10%

Source (SITRASS/CUREM, 2015), EMTASUD 2015

The research does not currently include the following other forms of public transport in Dakar in the surveys or analysis of the potential impact of BRT on employment in the transport industry.

- **Clandos** are private cars used, regularly or occasionally, as unlicensed shared taxis. They initially served areas in the outskirts (Guediawaye, Pikine and Rufisque) but now cover pericentral districts and the city centre areas that are usually

well known to the drivers. Their routes are 'recurrent and well structured' (Lammoglia, 2013), so that they may be identified easily by customers in the absence of any distinctive sign. Their number has increased considerably and they have replaced the former authorised suburban shared taxis, known locally as 'green and white taxis'.

- **Metered taxis** are usually yellow and black, but some are entirely yellow or blue. The latter operate by telephone reservation while yellow and black taxis cruise the streets of Dakar in search of clients. The city's regular traffic jams have gradually led to the disappearance of taxi meters.
- There is also an urban train service, the **Petit Train de Banlieue**, which has been operating since 1987 with just one line between Dakar and Rufisque in the south of the conurbation. The train service runs only at peak hours (6-10.50 am, 4.30-8 pm) on working days, so the number of customers is very small compared to the road public transport modes.

Each working day there are an estimated 716,000 motorised journeys but, at two million journeys, **walking** still constitutes the most important method by which populations move about Dakar.

TABLE 4. TYPICAL JOURNEYS BY MODE OF TRAVEL

Mode of travel	Total number of urban journeys per working day					
	Women		Men		Overall	
	Number	%	Number	%	Number	%
Walking	1,037,562	39.4	878,210	33.4	1,915,772	72.8
Mechanised mode	301,586	11.5	414,433	15.7	716,019	27.2
Total journeys	1,339,148	50.9	1,292,643	49.1	2,631,791	100

Source: (SYSCOM, 2001)

Dakar Dem Dikk bus | Source: demdikk.com



THE DAKAR URBAN TRANSPORT WORKFORCE

Survey methodology

RESEARCH OBJECTIVES

In Africa many of the BRT projects are struggling or have not achieved their objectives, due to economic or political problems. In most cases, the authorities have failed to consult and negotiate with transport sector workers.

The major objective of this research is to provide the trade unions in Dakar responsible for urban road transport workers with information and analysis to assist them in negotiations for the operational launch of the BRT, to represent the interests of workers whose livelihoods may be at risk, and to encourage practical steps towards a fair transition from informal to formal passenger transport.

The goals of the research are to understand the characteristics of the informal transport workforce, paying particular attention to gender relationships, to assess the potential implications of BRT for livelihoods and working conditions, and to consider some of the workers' own proposed steps towards formalising their industry.

RESEARCH METHODS

1. CONSULTATION MEETING AND TRAINING WORKSHOP

An initial consultation meeting was held with the project steering committee, which has overall oversight of the project as a whole, and was attended by representatives of three Senegal transport trade unions – the Union des Routiers du Sénégal (URS), Fédération

des Transports de l'UDTS, and Syndicat Democratique des Travailleurs du Transport Routier (SDTR/3D).

This was followed by a training workshop, led by the Global Labour Institute (GLI) and LABOGEHU (Laboratory of Human Geography), for the six union members (three men and three women) appointed by the steering committee to conduct the survey: Adama Diokhane, Elizabeth Ndong, Soukey Ka, Mohamadou Diallo, Mamadou Fall and Momar Diagne. They learned the background and purpose of the survey, its technical requirements and the basis of participatory research methodology.

The workshop discussed and carried out a detailed review of the questionnaire template that had been developed through the BRT labour impact research study in Nairobi in 2018. Participants made appropriate changes to meet local conditions in Dakar and translated the template into Wolof, the local language. The trainees then undertook a test survey at Pétersen terminal and provided feedback, after which further changes were made to suit the Senegalese context.

The workshop concluded with a meeting to develop a schedule for the focus groups and to identify and select sites, all situated on the main BRT route: Pétersen, Grand-Yoff, Lat-Dior, Liberté 6 roundabout, Guédiawaye and Casebi.

2. STREET/WORKPLACE SURVEY SCHEDULE

The interviews were only conducted with the Tata minibus operator AFTU and informal transport workers. The plan was to interview 30 individuals at each site, including three women in every 10 interviews – 54 women in total.

The three survey days were supervised by Professor Sakho or Professor Timéra, with logistical support from Malick Diop. Each morning before data collection started they gave the day's instructions and recovered the completed questionnaires at the end of the day.

See Appendix A: Survey questionnaire.

TABLE 5. QUESTIONNAIRE SURVEY SCHEDULE¹

Date	Time	Survey site	Sample/women
Wednesday 11 September 2019	Morning	Lat Dior	30/9
	Afternoon	Pétersen	30/9
Thursday 12 September 2019	Morning	Liberté 6	30/9
	Afternoon	Grand Yoff	30/9
Friday 13 September 2019	Morning	Casebi (Parcelles assainies)	30/9
	Afternoon	Guédiawaye	30/9
TOTAL			180/54

¹ Unless indicated otherwise, the source all data is the questionnaire survey of workers in the transport industry, September 2019.



Researchers | Source: ITF

3. FOCUS GROUP DISCUSSIONS

The focus groups were led by Adama Soumaré and the team from Women in Informal Employment: Globalizing and Organizing (WIEGO), supported by Gora Khouma. For each target group of workers, the focus group leader addressed three issues:

- the current problems and challenges that transport workers face;
- ideas for reform of the informal transport industry; and
- attitudes towards BRT.

See *Appendix B: Focus group discussion guidelines*.

4. IN-DEPTH INTERVIEWS

While the questionnaire survey is designed to gain broad indications of the different livelihoods in Dakar's informal transport industry, the Nairobi experience demonstrated that illustrative profiles of the detailed transactions and relationships of individual drivers and owners were very valuable in determining the potential impact of BRT across all those likely to be affected.

A series of longer, one-to-one, in-depth interviews with vehicle drivers and owners was therefore planned to build a much more detailed understanding of the informal micro-economy around DDD buses, Car Rapides and Ndiaga Ndiayes. The emphasis was on understanding livelihoods, employment relationships and transaction patterns within informal operations.

TABLE 6. SCHEDULE FOR FOCUS GROUPS

Date	Time	Survey site	Sample & targets
Friday 11 October 2019	Afternoon	Grand Yoff	35 members of on-board crew: drivers and apprentices
Saturday 12 October 2019	Morning	Pétersen	13 service workers: washers, mechanics and electricians
	Afternoon	Lat Dior	22 station workers: catering, upholstery and laundry workers

The nine initial trial interviews conducted by GLI provided useful data and feedback to the interview template and methodology. These demonstrated the complexity of attempting to provide ‘typical’ figures. There are considerable fluctuations between, for example, days of the week, times of the year, seating capacity, maintenance conditions of vehicles, types of vehicles, business models and ownership patterns.

The methodology will be reviewed and amended for a second stage of research, which will include more interviews with drivers and owners in a range of vehicles of different ages, capacities, routes and maintenance conditions.

Statistical data analysis

DISTRIBUTION OF SAMPLE

The questionnaire survey was based on sampling from a range of sites likely to be affected by the introduction of BRT. It also attempted to ensure that interviews were conducted with a significant number of women workers as well as men. Of the 54 women anticipated, 47 were interviewed.

GENDER

According to the findings of the *2010 National Survey on the Informal Sector in Senegal* (ANSD, 2013), the informal transport workforce in Senegal is calculated to total 83,538, comprising 80,464 men compared to 3,074 women, a ratio of 96.2 percent to 3.8 percent. In the survey, women (at 26 percent) were over-represented in the sample to better capture the maximum amount of information about their work and working conditions.

Nevertheless, these figures are based on a definition of the informal transport workforce which may not include all those who depend on the informal transport industry for their livelihoods. Many transport-related occupations are often placed in other categories, such as retail, food production, financial services, cleaning or engineering but are included here. A wide definition of a transport worker has been used in this research to avoid it being limited to just on-board crews (drivers and conductors). Women in the transport industry are more likely to be found in the more precarious occupations which are rarely captured in studies.

TABLE 7. DISTRIBUTION OF SAMPLE BY SITE AND GENDER

Survey location	Total number of urban journeys per working day					
	Women		Men		Total	
	Number	%	Number	%	Number	%
Case Bi	10	21.3	21	15.7	31	17.1
Grand Yoff	6	12.8	17	12.7	23	12.7
Guédiawaye	4	8.5	22	16.4	26	14.4
Lat Dior	2	4.3	27	20.1	29	16.0
Liberté 6	8	17.0	17	12.7	25	13.8
Pétersen	8	17.0	18	13.4	26	14.4
Other location	9	19.1	12	9.0	21	11.6
TOTAL	47	100	134	100	181	100

Characteristics of the informal transport workforce in Dakar

AGE

The 172 workers interviewed for the survey were all at least 15 years old. Those aged under 35 accounted for more than 41 percent of the survey group, while those aged between 35 and 54 accounted for about 50 percent. People aged 55 or over accounted for less than seven percent, while those aged under 45 represented about 75 percent.

When it came to gender, most (57.5 percent) of the 40 women surveyed were in the under-35s group, while most (57.6 percent) of the 132 men surveyed were in the 35-54 age group.

DURATION OF EMPLOYMENT

Taking all categories together, the longevity of workers in the informal transport sector varies. But long-term employment predominates: 75 percent of those surveyed have five years or more of experience, while 16 percent have more than 20 years' experience.

A significant proportion of men (46.3 percent) say they have worked in the transport sector for at least 15 years, compared with only 20.6 percent of women. This is very different when it comes to those who have worked in the sector for fewer than 15 years – nearly 80 percent of women compared to 53.7 percent of men. More than a third (35.3 percent) of women say they have worked in the sector for fewer than four years, compared to 22.8 percent of men. This suggests an increase in the number of women coming into a sector dominated by men, as well as the possibility that women are not staying long.

TABLE 8. SAMPLE BY AGE AND GENDER

Age range	Women		Men		Overall	
	Number	%	Number	%	Number	%
15-24	7	17.5	12	9.1	19	11.0
25-34	16	40	37	28.0	53	30.8
35 to 44	10	25	48	36.4	58	33.7
45 to 54	3	7.5	28	21.2	31	18.0
55 to 64	4	10	6	4.5	10	5.8
65 or more	0	0	1	0.8	1	0.6
TOTAL	40	100	132	100	172	100

TABLE 9. DURATION OF EMPLOYMENT

Longevity	Women		Men		Overall	
	Number	%	Number	%	Number	%
0 - 4 years	12	35.3	28	22.8	40	25.5
5 - 9 years	9	26.5	14	11.4	23	14.6
10 - 14 years	6	17.6	24	19.5	30	19.1
15 - 19 years	4	11.8	18	14.6	22	14.0
20 - 24 years	1	2.9	16	13.0	17	10.8
25 years or more	2	5.9	23	18.7	25	15.9
TOTAL	34	100	123	100	157	100

There is evidence that there is little progression from one transport occupation to another. Nearly two-thirds (64.3 percent) of the survey group have worked for at least five years in their current occupation in the sector.

Longevity in current work confirms that more women are joining the sector. While only 29.3 percent of men surveyed say that they entered their current occupation less than five years ago, well over half (58.8 percent) of women say they did so.

QUALIFICATIONS

Some 40 percent of workers in the informal transport sector declare that they have had no education. A

quarter have achieved a middle or upper secondary education, so probably hold a school leaving certificate (BFEM).

Although the education level in the informal transport sector is low overall, women appear to be better educated, with 18 percent of women compared to 11 percent of men saying that they had completed secondary education.

Of the 181 workers interviewed, just 31 – one in six – said that they had received advanced training. Just over 60 percent of that number had received training in a transport occupation. Of the 40 women surveyed, most (26) did not declare any additional training and of those who did, just two had trained in the transport sector.

TABLE 10. DURATION IN CURRENT OCCUPATION

Longevity in occupation	Women		Men		Overall	
	Number	%	Number	%	Number	%
0 - 4 years	20	58.8	36	29.3	56	35.7
5 - 9 years	5	14.7	28	22.8	33	21.0
10 - 14 years	5	14.7	24	19.5	29	18.5
15 - 19 years	3	8.8	15	12.2	18	11.5
20 - 24 years	0	0.0	9	7.3	9	5.7
25 years or more	1	2.9	11	8.9	12	7.6
TOTAL	34	100	123	100	157	100

TABLE 11. HIGHEST LEVEL OF EDUCATION

Education level	Women		Men		Overall	
	Number	%	Number	%	Number	%
Uneducated	16	41.0	53	40.2	69	40.4
Primary level	11	28.2	48	36.4	59	34.5
Middle level	5	12.8	17	12.9	22	12.9
Secondary level	7	17.9	14	10.6	21	12.3
TOTAL	39	100	132	100	171	100

TABLE 12. FURTHER TRAINING BY TYPE

Type of training	Occupation/training body	Number	%
Occupational training	AFTU, mechanic, CETUD, electrician, carpentry/ joinery, metalwork, driving instruction, conductor, upholsterer, transport and logistics	19	61.3
Other	Arabic/Koranic school, hairdressing, catering, computing, secretarial and office work	8	25.8
Unspecified	SEDIMA [agribusiness], Army, ENDA [environment/ development organisation], intern placement	4	12.9
TOTAL		31	100

OCCUPATIONS

Informal transport encompasses a great diversity of occupations. The 20 occupations listed during the survey can be grouped into three occupational blocks.

Occupations at the core of travel (the first two rows in Table 13) employ about half of the workers surveyed (51.2 percent). In practice, about a third of workers (34.9 percent) are members of the crew on board the vehicle (drivers, conductors, apprentices) while travel facilitators at stations and stops (guides/'coaxers' and station/stop managers) account for 16.3 percent. While men work in all these transport activities, women work almost exclusively as on-board crew members.

The same gender dynamic also applies to occupations linked to vehicle maintenance (such as mechanic, electrician, sheet metal worker, upholsterer and cleaner), which employ more than one in five (22.1 percent) of workers but no women.

The near absence of women from these occupations is explained by the fact that, in the eyes of Senegal society, they are masculine roles requiring physical endurance and strength. Efforts since the 2010s to open these occupations up to women have had little success. The same applies to the abortive 'taxi sisters' experiment launched by the Senegal government in 2007 and SOTRAC (Société de transport du Cap-Vert) women bus drivers. The survey findings testify to this: 22 percent of the women employed in core travel roles are conductors on board AFTU buses.

Apart from direct transport activities, stations and stops are enlivened by a range of associated commercial activities that employ over a quarter (26.7 percent) of workers, which constitutes the second biggest category behind on-board crew members. Women have a greater presence in trading, both stationary (50 percent) and hawkers (12.5 percent).

TABLE 13. OCCUPATION AND WORKPLACE BY GENDER

Occupational group	Types	Women		Men		Total	
		Number	%	Number	%	Number	%
Crew on board vehicle	Driver	1	3.1	41	29.3	42	24.4
	Relief driver	0	0.0	2	1.4	2	1.2
	Conductor	7	21.9	9	6.4	16	9.3
	Total	8	25.0	52	37.1	60	34.9
Facilitators at bus terminals, stations and stops	Guide (coaxer)	0	0.0	15	10.7	15	8.7
	Station manager	0	0.0	5	3.6	5	2.9
	Union representative	1	3.1	1	0.7	2	1.2
	Dispatcher	0	0.0	5	3.6	5	2.9
	Traffic officer	0	0.0	1	0.7	1	0.6
	Total	1	3.1	27	19.3	28	16.3
Automotive maintenance occupations	Sheet metal worker	0	0.0	6	4.3	6	3.5
	Washer	0	0.0	4	2.9	4	2.3
	Mechanic/electrician	0	0.0	21	15.0	21	12.2
	Tyre repairer	0	0.0	6	4.3	6	3.5
	Upholsterer	0	0.0	1	0.7	1	0.6
	Total	0	0.0	38	27.1	38	22.1
Associated commercial work	Caterer	0	0.0	7	5.0	7	4.1
	Trader	16	50.0	7	5.0	23	13.4
	Hawker	4	12.5	3	2.1	7	4.1
	Other	3	9.4	6	4.3	9	5.2
	Total	23	71.9	23	16.4	46	26.7
TOTAL		32	100	140	100	172	100

JOB SECURITY

Informal transport is generally insecure. The overwhelming majority of the workers interviewed have an insecure job (94 percent), with just six percent saying that they are tied to their employer by a job contract. Women are more vulnerable than men – only 2.5 percent say that they benefit from a contract compared to 7.5 percent of men.

The work is also irregular for most of the workers surveyed. Less than a third (31.3 percent) declared that they had a regular job. Well over a third (37.5 percent) of women surveyed said their job is irregular and unpredictable, compared to 30 percent of men.

TABLE 14. PROPORTION OF WORKERS WITH AN EMPLOYMENT CONTRACT

Employment contract	Women		Men		Overall	
	Number	%	Number	%	Number	%
Yes	1	2.5	10	7.5	11	6.4
No	39	97.5	123	92.5	162	93.6
TOTAL	40	100	133	100	173	100

TABLE 15. REGULARITY OF WORK

Irregular/ unpredictable work	Women		Men		Overall	
	Number	%	Number	%	Number	%
Yes	15	37.5	37	29.4	52	31.3
No	25	62.5	89	70.6	114	68.7
TOTAL	40	100	126	100	166	100

WORKING HOURS

Nearly nine in ten workers interviewed (88 percent) do more than eight hours work, the legal daily duration in Senegal. More than a third work between nine and twelve hours while more than half (52 percent) spend more than 12 hours a day at work. Only 12 percent say that they work eight hours or fewer, mostly women (23 percent), compared to only eight percent of men. In contrast, a greater proportion of men work the longest hours – 57 percent say that they spend more than 12 hours at work, compared to 45 percent of women. This disparity is probably connected to the fact that for

women domestic tasks (such as shopping, preparation of meals and caring for children) extend the working day beyond the time spent at the workplace.

Two workers in five (40 percent) say that they work every day of the week. Of the 61 percent who claim they have rest days, 72 percent have just one day off per week and only 21 percent have two. Women appear to spend more days at work than men – 87 percent of women compared with 79 percent of men spend six or more days at work.

TABLE 16. NUMBER OF HOURS WORKED DAILY

Daily working hours	Women		Men		Overall	
	Number	%	Number	%	Number	%
Less than 8 hours	3	7.50	2	1.50	5	2.9
8 hours	6	15.00	9	6.77	15	8.7
9 - 12 hours	13	32.50	47	35.34	60	34.7
More than 12 hours	18	45.00	75	56.39	93	53.8
TOTAL	40	100	133	100	173	100

TABLE 17. NUMBER OF WORKDAYS PER WEEK

Number of workdays per week	Women		Men		Overall	
	Number	%	Number	%	Number	%
Less than 5 days	1	2.56	9	6.98	10	6.0
5 days	4	10.26	17	13.18	21	12.5
6 days	19	48.72	52	40.31	71	42.3
7 days	15	38.46	51	39.53	66	39.3
TOTAL	39	100	129	100	168	100

LIVELIHOODS

Gross income is calculated by correlating the frequency with which sums are received to the monthly amounts declared by the workers interviewed. The questions about income to the 181 workers from stations and informal transport stops revealed a great contrast in situations. Three dominant groups according to monthly income stand out.

- The first group, almost a quarter (23.1 percent), are the lowest paid. They receive no more than the monthly minimum guaranteed income of 55,000 CFA francs (USD95).
- The second group are the top earners, with a similar percentage earning more than one million CFA francs (USD1,730) per month.
- In the middle of the income scale, the third group is smaller, with two in ten (20 percent) workers earning between 250,000 and 550,000 CFA francs (between USD430 and USD950) a month.

According to 2013 figures from the ANSD, Senegal's national agency for statistics, average monthly pay in the informal sector is 42,150 CFA francs. It therefore

appears that the transport sector is a high-earning one, as more than three-quarters of workers are paid above the guaranteed monthly minimum income (SMIG).

More than half of workers (54 percent) receive their pay on a monthly basis, while over a third (35.6 percent) receive their income day-to-day. In general, under the informal system an employee (driver, administrator, water seller or other domestic employee) is appointed by his or her employer (vehicle, shop or business owner) based on a monthly salary, in return for which s/he has to earn and hand over to the employer an agreed sum each day.

The survey revealed 10 categories of expenditure that workers have to make out of their earned income. The top four mentioned by those who responded were fuel purchases (40 percent), taxes (22 percent), payment of suppliers (14.7 percent) and payments such as vehicle rental to the owner (9.3 percent).

Nearly two-thirds (65 percent) of workers interviewed say they pay expenses monthly, while just over one-third (35 percent) pay them on a daily basis.

In general, of workers who receive their income daily or weekly, by far the largest category comprises those who are left with little margin to survive on after all daily expenditure, mainly taxes, have been paid.

TABLE 18. GROSS INCOME AND PAYMENT TERMS

Income bracket	Daily		Weekly		Monthly		Total	
	Number	%	Number	%	Number	%	Number	%
Less than 56,000	22	46.8	7	53.8	1	1.4	30	22.7
56,000 – 84,000	3	6.4	0	0.0	4	5.6	7	5.3
85,000 – 112,000	4	8.5	2	15.4	4	5.6	10	7.6
113,000 – 224,000	4	8.5	0	0.0	9	12.5	13	9.8
225,000 – 550,000	6	12.8	4	30.8	18	25.0	28	21.2
551,000 – 1,000,000	2	4.3	0	0.0	10	13.9	12	9.1
More than 1,000,000	6	12.8	0	0.0	26	36.1	32	24.2
TOTAL	47	100	13	100	72	100	132	100
%	36		9.8		54.5		100	

TABLE 19. EXPENDITURE CATEGORY

Expenditure	Number	%
Vehicle fuel	61	40.7
Taxes	33	22.0
Suppliers	22	14.7
Payments to owner (vehicle rental)	14	9.3
Support staff	8	5.3
Fines/bribes	3	2.0
Loan repayments	3	2.0
Vehicle or machinery maintenance	2	1.3
Trade taxes/business licences	1	0.7
Other	3	2.0
Total	150	100

TABLE 20. FREQUENCY OF EXPENDITURE

Frequency of expenditure	Number	%
Daily	45	34.6
Weekly	1	0.8
Monthly	84	64.6
Total	130	100

HEALTH AND SAFETY

Workers in the informal transport sector are exposed to risks connected to their work, such as a lack of health and safety measures). More than a third (35.8%) said that they had suffered health issues or injuries in the context of their work.

A higher proportion of men (38.3 percent) interviewed reported health problems or injuries at work than women (27.5 percent).

TABLE 22. HEALTH PROBLEMS OR INJURIES AT WORK

Health problems or injuries	Women		Men		Total	
	Number	%	Number	%	Number	%
Yes	11	27.5	51	38.2	62	35.8
No	29	72.5	82	61.7	111	62.4
TOTAL	40	100	133	100	173	100

EMPLOYMENT RELATIONSHIPS

More than half (57 percent) of the workers interviewed say that they receive their income directly from customers while four in ten (40 percent) say they depend on an employer.

TABLE 21. SOURCE OF INCOME

Source of income	Number	%
Employer	72	40.4
Customer	102	57.3
Myself	4	2.2
Total	178	100



Bus station | Source: ITF

Some four in ten workers who responded mentioned fatigue, linked to long working hours, as a health problem. Work accidents and illnesses (such as headaches and asthma) were each reported by two in ten workers.

Women respondents reported two health problems: fatigue (four in ten) and illness (six in ten). The same percentage (41 percent) of men as women reported fatigue but men complained less of illness and more of work-related accidents.

TABLE 23. DISTRIBUTION OF HEALTH PROBLEMS

Health problem	Women		Men		Overall	
	Number	%	Number	%	Number	%
Fatigue	4	40	24	40.7	28	40.6
Accident at work	0	0	14	23.7	14	20.3
Illness (asthma, stomach-ache, haemorrhoids, headaches, stress)	6	60	9	15.3	15	21.7
Insomnia	0	0	9	15.3	9	13.0
Traffic accident	0	0	3	5.08	3	4.3
TOTAL	10	100	59	100	69	100

One worker summed up health problems during a focus group at the Grand Yoff bus station:



The government must help us with traffic jams because that has adverse effects on our health. There are asthmatics, people who have heart problems. So, it is important to take out mutual health insurance that will cover you when you fall ill."

Working conditions, specifically the lack of rest associated with their pattern of work, was the leading cause of health problems cited by almost half (48 percent) of workers. Three in ten (32

percent) reported a hazardous working environment, specifically a lack of shelter, the condition of work equipment (dilapidation of vehicles) and accidents.

The leading causes of health problems are evident. More than half (52 percent) of men raise tough working conditions while a similar proportion of women (50 percent) attribute their health problems to a lack of shelter against bad weather because they are predominantly working outside. Working conditions and their consequences, namely illness, tend to be cited more by women than by men. This denotes a certain capacity for resilience among women in informal transport.

TABLE 24. CAUSES OF WORKERS' HEALTH PROBLEMS

Category	Women		Men		Overall	
	Number	%	Number	%	Number	%
Work accident	0	0	6	12	6	10
Working conditions	3	30	26	52	29	48
Lack of shelter	5	50	1	2	6	10
Illness	2	20	0	0	2	3.3
Work equipment	0	0	7	14	7	12
Not specified	0	0	10	20	10	17
TOTAL	10	100	50	100	69	100

Overall, the health problems of workers in informal transport are closely connected to the working conditions imposed by the insecurity of their employment and the quality of work equipment. The women interviewed placed less emphasis than men on traffic and traffic jams, the state of the highway

and relations with traffic police. More women raised problems over workspace, issues with sanitation or even unsafe conditions and relations with City Hall. These differences are clearly linked to the nature of their work (on board for men and at stations/stops for women).

TABLE 25. DETAILS OF CAUSES OF WORKERS' HEALTH PROBLEMS

Category	Causes
Work accident	Falling machinery, motorbike travel, detached parts, battery explosion, burst tyre, struck by lorry
Working conditions	Physically demanding work, long hours, traffic, fatigue, lack of training, lack of work, lack of rest, lack of sleep, means of travel, work commitment, diet, sitting down too long, safety, difficult work and finding customers
Bad weather	Climate, heat, solar radiation, walking under sun, rainy season
Illness	Infection, headaches
Work equipment	Lack of tools, brake problem, engine problem, accelerator adjustment problem, vehicle, car, lack of resources

PRINCIPAL PROBLEMS AND CHALLENGES FACED AT WORK

The difficult social **conditions at work** were cited by one in five workers and constitutes the major challenge for the sector as regards employment insecurity.

These encompass the lack of a contract, low pay, difficult work, long working hours, lack of social security cover and lack of means to address sexual harassment. In addition, while conflict with customers affects 16 percent of workers, women are twice as likely as men to mention this issue (24.1 percent compared to 13.9 percent). More than one woman in six (15.5 percent) cites sexual harassment.

TABLE 26. PROBLEMS AT WORK

Problems at work	Women		Men		Overall	
	Number	%	Number	%	Number	%
Access to basic services	2	3.4	14	6.1	16	5,6
None	6	10.3	9	3.9	15	5,2
Other*	1	1.7	25	10.9	26	9
Traffic and traffic jams	1	1.7	15	6.5	16	5.6
Working conditions	5	8.6	22	9.6	27	9.4
Workspace	5	8.6	14	6.1	19	6.6
State of highway	0	0.0	10	4.3	10	3.5
Sexual harassment	9	15.5	0	0.0	9	3.1
Sanitation (lack of hygiene)	5	8.6	5	2.2	10	3.5
Insecurity	3	5.2	11	4.8	14	4.9
Means of subsistence and operation	1	1.7	15	6.5	16	5.6
Organisation of transport system	1	1.7	4	1.7	5	1.7
Tough work	1	1.7	2	0.9	3	1
Relations with City Hall	3	5.2	9	3.9	12	4.2
Relations with traffic police	1	1.7	19	8.3	20	6.9
Relations with customers	14	24.1	32	13.9	46	16
Toilets	0	0.0	6	2.6	6	2.1
No response	0	0.0	18	7.8	18	6.3
TOTAL	58	100	230	100	288	100

* Stallholder evictions, counterfeit spare parts, relations with neighbouring areas, congestion, lack of customers, lack of electricity

PROBLEMS RAISED WITHIN FOCUS GROUPS



There are many difficulties. There is the location, transport, ever-declining income and we have health problems."

MT, upholsterer



Here we are with our apprentices, and people doing a runner is a major problem in our line of work. There are also the unhealthy conditions."

TW, sheet metal worker



I have been working in the garage for ten years but must highlight all the many costs; we pay taxes and have problems with the water."

AD, caterer, Lat Dior bus station focus group

The second major problem is the stress induced by often frictional relations with customers (13.5 percent), traffic police (9.4 percent) and City Hall staff (4.2 percent).



The money that police officers receive should go into the public coffers as that would allow for an improvement in working conditions."



The difficulties are many and varied; for vendors, for example, City Hall conducted an operation to chase them away and they confiscated their food stall. Particularly as the mayor didn't intend to bring us here before, he had refused to relocate us on the simple grounds that if premises are occupied that encourages delinquency in the surrounding area."

TM, bus station manager, Grand Yoff bus station focus group

The third problem is the highly unfavourable working environment: limited amount of workspace and poor road conditions. These constraints are corroborated by the Pétersen focus group.



We have no space to clean the vehicles."

MN, washer



We have no space and we are too close together."

AG, mechanic



I've done 20 years here but our main problem is workspace."

ON, electrician



We have many problems; I've been here since 2005 and I've been doing this job since 1990 but the main problem is the workplace. There are ten of us garage managers but we don't have much space."

AD, mechanic, Pétersen bus station focus group

For others, the constraints affecting the work environment are traffic jams and sanitation.



There are a lot of traffic jams and the pay rate isn't good. The pollution also causes problems for the workers."

Driver



The pollution from cars causes us a lot of problems."

Tea vendor, Lat-Dior bus station focus group



Vendors | Source: ITF

TABLE 27. PROBLEMS AT WORK BY CATEGORY

Category	Occupation/training body
Access to basic services	Lack of water, electricity
Other	A lot of problems, blockage, counterfeit spare parts, cold, rain, state of Senegal
Traffic and traffic jams	Traffic jams and congestion, occupation of space, travel time
Working conditions	Competition between vendors, tough working conditions, no contract,, problem of age, no compensation, no fixed hours, no employment, long working hours, no retirement, no social security cover, lack of consideration, lack of training, lack of rest, lack of sleep
Workspace	Being chased off, location where our workshop is set up, breakdown area, sales area, insufficient space for vehicles, ban on working in the station, no set place, cramped working conditions
State of highway	
Insecurity	Poor condition of roads
Means of subsistence and operation	Insecurity, lack of safety, lack of safety in garage, lack of safety in toilets, theft
Organisation of transport system	Lack of funds, lack of resources, lack of payments, low pay, shortage of customers, inadequate income, customers lacking resources, drivers paying us badly
Tough work	Drivers do not keep to departure time, itinerary with Car Rapide buses, drivers not abiding by departure time, failure to keep to working hours
Relations with City Hall	A lot of energy expended and fatigue
Relations with traffic police	Being chased by and having problems with City Hall staff
	Traffic police, inspection officers, abusive inspections by traffic police, illicit fees levied by inspection police, harassment by traffic police, extortion of money, gendarmes
Relations with customers	Refusal to pay, argument with apprentices, money/cash problems, bad behaviour by customers, lack of understanding by customers, drunk customers, dealing with customers' luggage, lost luggage, insults, fights with customers
Toilets	Lack of toilets, lack of safety in toilets

ORGANISATION

Nearly seven out of ten (69%) workers who responded are not members of an association, mutual support group, union or cooperative.

Of those who say they are members of an organisation, the majority are women (40.5 percent), compared with only 28.1 percent of men.

TABLE 28. WORKERS WHO ARE MEMBERS OF AN ORGANISATION

Member	Women		Men		Total	
	Number	%	Number	%	Number	%
Yes	15	40.5	34	28.2	49	31.0
No	22	59.5	87	71.9	109	69.0
TOTAL	37	100	121	100	158	100

Membership recorded by type of organisation shows that a quarter of respondents are in each of unions (28.6 percent), Economic Interest Groupings (GIEs) (26.5 percent) and associations (26.5 percent). Unions include the Road Transport Association of Senegal (URS), affiliated to the CNTS, which encompasses owners and drivers from Car Rapides and Ndiaga Ndiaye; and the Independent Transport Workers' Union of Senegal (SATTs), affiliated to the Democratic Workers' Association of Senegal/Workers' Power

(UDTS/FO), which covers TATA/AFTU bus drivers, conductors and dispatchers.

A clear distinction emerges between men and women as regards the nature of the organisation to which they belong. While nearly two-thirds (64.7 percent) of men tend to belong to formal organisations (unions, GIEs), two-thirds of women (66.6 percent) tend to be in associations and informal organisations for solidarity and mutual aid.

TABLE 29. WORKER MEMBERSHIP BY TYPE OF ORGANISATION

Type of organisation	Women		Men		Total	
	Number	%	Number	%	Number	%
Association	5	33.3	8	23.5	13	26.5
EIG	3	20.0	10	29.4	13	26.5
Professional group	0	0.0	3	8.8	3	6.1
Union	2	13.3	12	35.3	14	28.6
Solidarity / mutual aid organisation	5	33.3	1	2.9	6	12.2
TOTAL	15	100	34	100	49	100

A number of workers recognise the benefits of joining organisations.



I'm 61 years old, I'm married and I have seven children. It's thanks to the garage that when my wife died, I did not feel alone. Dame Béye has created solidarity among the workers by establishing an EIG that takes responsibility for families and all social circumstances."

AD, driver



All the drivers from this garage make a daily contribution of 300 Francs by money order for social cover ... so as to allow drivers who are not owners to be able to make ends meet."

MT, bus station manager, Grand Yoff bus station focus group

Driver | Source: ITF



WORKERS' PROPOSALS

While just under a third of informal transport workers' proposals are devoted to the implementation of BRT, over half are concerned with formalisation and

improving the sector, although they are raised by more women than men. Only about one proposal in ten relates to health and safety issues.

TABLE 30. WORKER PROPOSALS BY FOCUS AREA

Focus of proposals	Women		Men		Total	
	Number	%	Number	%	Number	%
Implementation of BRT operations	18	31.6	50	31.8	68	31.8
Formalisation & improvement of the informal transport sector	34	59.6	85	54.1	119	55.6
Reduction of congestion and pollution	1	1.8	6	3.8	7	3.3
Reduction of harassment and promotion of health & safety	4	7.0	16	10.2	20	9.3
ALL PROPOSALS	57	100	157	100	214	100

IMPLEMENTATION OF BRT OPERATIONS

For informal transport workers, the implementation of BRT operations cannot take place at their expense. The need for the informal transport system to be integrated into the BRT system is the principal concern among men (30 percent) as they are in transport occupations. But the main concern for women (38.9 percent) is the need to secure work areas occupied by informal workers, if necessary, to relocate workers affected by BRT.

As far as the workers are concerned, the improvement of the sector relies on its involvement and integration into the BRT project, including for young people. The high proportion of women (27.8%) who question the implementation of BRT suggests their particular concern at the impact of BRT.

TABLE 31. FREQUENCY OF PROPOSALS ON THE IMPLEMENTATION OF BRT ACCORDING TO WORKERS' CONCERNS

Proposals	Women		Men		Total	
	Number	%	Number	%	Number	%
Support	2	11.1	8	16.0	10	14.7
Compensation	0	0.0	2	4.0	2	2.9
Involvement	4	22.2	7	14.0	11	16.2
Integration	0	0.0	15	30.0	15	22.1
Questioning	5	27.8	11	22.0	16	23.5
Relocation of workspace	7	38.9	7	14.0	14	20.6
TOTAL	18	100	50	100	68	100



I have been to different countries where they have BRT. But what is important is to provide customers with a feeder route service. That shouldn't stay in the hands of CETUD [the Dakar Executive Council of Urban Transport] and Dakar Dem Dikk [bus operator]."

Gora Khouma, secretary-general, Union des Routiers du Senegal – URS

FORMALISATION/IMPROVEMENT OF INFORMAL TRANSPORT SECTOR

The many proposals for the improvement of the informal transport industry can be grouped into five main areas.

1.

The improvement of social conditions is perceived by more than half of workers (54.6 percent) as the principal factor in the advancement of the informal sector. These measures include the need to improve the physical and social working environment in the sector (such as spatial organisation, social security and retirement cover, social funds and tax reductions).

2.

A fifth (20.6 percent) of women are particularly concerned about the availability of social security cover.

3.

The training of workers in the informal sector was cited frequently (16 percent of respondents). This requires workers to receive high-level training in the transport sector.

4.

Workers are also concerned about the improvement of working conditions, particularly higher pay; the regulation of working time; security of employment; and the upgrading of the vehicle fleet.

5.

There were also several references to the general need for reform, integration and formalisation of public transport in Dakar as a whole.



Why not run the buses like the Ndiaga Ndiaye and just change the [management of] transport; it could stick to the rules of the latter."

Cheikh Tidiane Ndoeye, Grand Yoff bus station

TABLE 32. DISTRIBUTION OF PROPOSALS FOR IMPROVEMENTS TO INFORMAL TRANSPORT INDUSTRY

Proposals	Women		Men		Total	
	Number	%	Number	%	Number	%
Improvement of working conditions	3	8.8	14	16.5	17	14.3
Increased pay	4	11.8	10	11.8	14	11.8
Social security cover	7	20.6	9	10.6	16	13.4
Employment and contract	4	11.8	14	16.5	18	15.1
Finance	6	17.6	2	2.4	8	6.7
Vocational training	2	5.9	17	20.0	19	16.0
Regulation	3	8.8	9	10.6	12	10.1
Abidance by working hours	5	14.7	10	11.8	15	12.6
TOTAL	34	100	85	100	119	100

REDUCTION OF CONGESTION AND POLLUTION

There were very few proposals relating to the reduction of traffic congestion and pollution – four on development and three on user conduct.



There are already a lot of cars so it would be better to improve the roads rather than to add even more vehicles."

Welder, Lat-Dior bus station

TABLE 33. FREQUENCY OF PROPOSALS FOR THE REDUCTION OF CONGESTION AND POLLUTION

Nature of proposals	Women		Men		Total	
	Number	%	Number	%	Number	%
Development	1	100.0	3	50.0	4	57.1
User conduct	0	0.0	3	50.0	3	42.9
TOTAL	1	100	6	100	7	100

REDUCTION OF HARASSMENT AND IMPROVEMENT OF SAFETY

Although few proposals were made, the improvement of safety conditions, including harassment, was raised by almost two-thirds of workers and by men in particular. For women, hygienic conditions (such as cleanliness, toilets) are equally important.

TABLE 34. FREQUENCY OF PROPOSALS AGAINST HARASSMENT AND PROMOTION OF SAFETY AND HYGIENE

Proposals	Women		Men		Total	
	Number	%	Number	%	Number	%
Improvement of safety conditions	2	50.0	11	68.8	13	65.0
Improvement of health conditions	2	50.0	5	31.3	7	35.0
TOTAL	4	100	16	100	20	100

Ticket collector | Source: ITF



BRT - IMPLICATIONS FOR THE WORKFORCE

Awareness of BRT

Most workers surveyed from the informal transport sector (76.5 percent) claim not to be aware of BRT. Less than a quarter (23.5 percent) said they had heard about the project, with fewer women (17.9 percent) than men (25.2 percent) making the claim.

At Grand Yoff bus station, it emerged from the focus group that most of them had never heard of BRT before that day; others knew it was a government project.



It was when I got back from the village where I'd celebrated Tabaski [Eid] that I heard we'd been evicted. I've not even been registered, and it was through the press that I learned that BRT work is starting on Monday."

Trader, Garage Petersen

TABLE 35. PROPORTION OF WORKERS HAVING HEARD ABOUT BRT

	Women		Men		Total	
	Number	%	Number	%	Number	%
Heard about BRT	7	17.9	33	50.0	40	23.5
Not heard about BRT	32	82.1	98	50.0	130	76.5
TOTAL	39	100	131	100	170	100

SOURCE OF KNOWLEDGE ABOUT BRT

Among workers who had some knowledge of the BRT, 56.5 percent said that they had heard about it by word of mouth or through a third party. The press was only cited by 22 percent of workers, while just one worker in ten (13 percent) had received information

through a meeting about BRT. In contrast, two-thirds (66.7 percent) of women said that they had been informed by word of mouth and a third (33.3 percent), compared with no men, through their workplace.

TABLE 36. SOURCE OF KNOWLEDGE ABOUT BRT

	Women		Men		Total	
	Number	%	Number	%	Number	%
Workplace	1	33.3	0	0.0	1	4.3
Media	0	0.0	5	25.0	5	21.7
Worker's organisation	0	0.0	1	5.0	1	4.3
Meeting about BRT	0	0.0	3	15.0	3	13.0
Third party / word of mouth	2	66.7	11	55	13	56.5
TOTAL	3	100	20	100	23	100

UNDERSTANDING OF BRT

Some workers (63 percent) believe that the project will allow transport to be reorganised, particularly by improving coverage, safety, organisation, time or comfort/convenience. Others (17 percent) stress a positive impact on employment, believing that the

project could reduce unemployment and job losses. In contrast, about 37 percent of workers express an unfavourable opinion of the BRT, arguing that it will have a negative impact on their work and on employment.

TABLE 37. REASONS FOR ATTITUDE TOWARDS BRT

	UNDERSTANDING	Number	%
POSITIVE	Improves transport (coverage, safety, better organisation, time savings, comfort/convenience)	14	82.4
	Positive impact on employment	3	17.6
	TOTAL	17	100
NEGATIVE	Negative impact on work (loss of work, disruption, problem getting by, loss of custom)	11	73
	Negative impact on employment (unemployment, job losses)	4	27
	TOTAL	15	100

ATTITUDES TOWARDS BRT

Among workers who are familiar with the BRT, more than a third are negative about it.

TABLE 38. POSITIVE/NEGATIVE ATTITUDES TOWARDS BRT

Attitudes	Number	%
Favourable	17	63.0
Unfavourable	10	37.0
Total	27	100

Certain workers are categorically against BRT, as noted during the focus groups:



BRT is not a good thing because it will take everything away from us."

Worker, Grand Yoff bus station



It's a project that will destroy informal work."

Caterer, Lat-Dior bus station



No. Because government projects never reach a successful conclusion. For example, the Regional Express Railway (TER) has never worked ever since it was launched and the building work was at the root of problems that residents are living through now."

Worker, Lat Dior bus station



No! The BRT is going to increase unemployment in this country. The route is unsuitable, there will be unfair competition, BRT will affect our incomes and it doesn't benefit many people, beyond a small group."

Worker, Pétersen bus station

PERCEIVED IMPACT ON LIVELIHOODS

More than 56 percent of workers surveyed said that they risked losing their job with the establishment of the BRT. The threat to income was also felt by 22 percent. Just as many workers mentioned a feeling

of anxiety that could stem from a risk of losing their job, their income or even both at the same time. The only two women to offer an opinion raised the loss of employment.

TABLE 39. PERCEIVED IMPACT OF BRT

	Women		Men		Total	
	Number	%	Number	%	Number	%
Loss of jobs	2	100.0	11	52.4	13	56.6
Loss of income	0	0	5	23.8	5	21.7
Fear	0	0	5	23.8	5	21.7
TOTAL	2	100	21	100	23	100



The Bus Rapid Transit (BRT) project does not envisage redeployment for those impacted even if they are liable to receive compensation."

Trader, Pétersen



This garage has existed since 1992. We have no other sources or income and we have families to feed."

Clandos garage manager, Grand Médine, since 2014



I had my mechanic's garage in the house and now I don't know what to do with my apprentices."

Mechanic, Grand Médine



Here's our house [he points at it]. I had built my garage alongside to earn my living."

Mechanic, Clandos garage, Grand Médine



What bothers me the most, it's that when we protest the BRT managers tell us that in Grand-Médine it is houses that are being destroyed, whereas for us it is just a market stall ... It's just going to increase insecurity. Some might get involved in crime if they have nowhere else to go. They cannot go on at us about infrastructure, when people haven't even got anything to eat."

Market representative for 10 years,
Liberté 6 bus station



When we demanded new sites for our stalls, they told us that it wasn't up to them to find them for us, because they hadn't set us up here."

Sheet metal worker, Guédiawaye bus station



I've been selling shoes here since 1998. When I went to the Prefecture, they told me that they were going to call me. If they ask me to leave, I don't even know where to go."

Shoe seller, Guédiawaye bus station

Potential impact of BRT on employment

At this stage of the research, we are unable to make a reliable quantitative assessment of the number of livelihoods likely to be at risk as the result of the introduction of BRT in Dakar.

Nevertheless, the number of potential job losses is likely to be substantial. The previous study on the impact of BRT on Nairobi's matatu industry (Manga & Spooner, 2019), which has many similarities to the informal transport services in Dakar, estimated that 35,000 jobs could be at risk if and when all 180 km of BRT lines are operational – approximately 200 jobs per kilometre. The planned Dakar system is much smaller – 18.3 km – so if the ratio is realistic, there could be (conservatively) a loss of some 3,500 livelihoods, if no action is taken in mitigation.

TABLE 40. AFTU/DDD JOB LOSS CALCULATION

Tata-AFTU/Dakar Dem Dikk job loss calculations		
2017 Estimate of AFTU workforce:	Number of AFTU lines operated	65
	Number of AFTU minibuses	1,607
	Number of AFTU workers	6,828
Therefore:	Average number of buses per line	25
	Average number of workers per line	105
	Average number of workers per bus	4
CETUD estimate of lines to be lost (Aw, 2018)	Tata-AFTU	15
	Dakar Dem Dikk	6
Estimate of numbers of jobs at risk	Tata-AFTU	1,576
	Dakar Dem Dikk	630
TOTAL		2,206

Car Rapides and **Ndiaga Ndiaye** vehicles both require at least four on-board workers (driver, relief driver and two apprentices). If the planned replacement of all 1,397 Car Rapides and Ndiaga Ndiaye vehicles were to

A more rigorous assessment will require us to calculate:

1.

The **number of on-board crew jobs at risk**, based on the number of crew members per vehicle multiplied by the number of vehicles to be displaced by the BRT line and feeder route services.

The limited data available at this stage of research gives an approximate indication of the number of jobs at risk from **Tata-AFTU** and **Dakar Dem Dikk** services. A 2017 study showed that 1,607 AFTU minibuses operating 65 lines employed 6,828 workers (Byll, 2017). CETUD has envisaged that 15 Tata-AFTU and six Dakar Dem Dikk lines will be lost with the introduction of BRT (Aw, 2018). From this, it is possible to make some limited assumptions on the total number of jobs at risk.

be replaced (CETUD, 2019) that could generate more than **5,000 jobs at risk**, although this could be offset by new replacement vehicles.



Driver | Source: ITF

2.

The number of **jobs at risk in the affected terminals and stops**, based on the number of workers per stop multiplied by the number of stops to be displaced on the BRT route.

TABLE 41. ESTIMATED NUMBER OF WORKERS AT GRAND-YOFF GARAGE

Estimated number of workers at Grand-Yoff terminal

Owner-drivers	200
Employed drivers	300
Garage managers	10
Clerks	180
Hawkers	57
Traders	84
Total	831

Source: Focus Group Discussion, September 2019

It is clear that some of the largest numbers of livelihoods at risk will be in the major terminals affected by BRT (see Table 50). Focus group participants suggested that there are more than 800 workers employed at the Grand-Yoff terminal.

If we assume that each affected terminal (informal or formal) has a similar ratio of workers to the number of passengers/vehicles, we can, for example, make a very rough calculation of potential job losses.

Based on preparatory data published by CETUD in 2014, complemented by observation in the field, we can estimate the number of stops and terminals that are to be affected by the introduction of BRT.

On the one hand, it seems that of the 78 gateways identified, those situated outside the main BRT route that are to be absorbed by the feeder network are going to be by far the most severely affected (79.5 percent). On the other hand, the gateways of the future BRT, DDD and AFTU feeder network operators will be affected much less.

TABLE 42. APPROXIMATE NUMBER OF TERMINAL JOBS AT RISK

Approximate calculation of terminal jobs at risk

	Grand-Yoff	Lat Dior	Pétersen	Case Bi	Liberté 6	Colobane	Total
Owner-drivers	200	300	400	200	200	400	1,700
Employed drivers	300	450	600	300	300	600	2,550
Garage managers	10	15	20	10	10	20	85
Clerks	180	270	360	180	180	360	1,530
Hawkers	57	86	114	57	57	114	485
Traders	84	126	168	84	84	168	714
Total	831	1,247	1,662	831	831	1,662	7,064

Ticket Collector | Source: ITF



TABLE 43. STATIONS AND BUS STOPS OF OPERATORS ON BRT CORRIDOR AND FEEDER NETWORK

Location/BRT		Clando	Car Rapide	Ndiaga Ndiaye	AFTU	DDD	Total	%
Feeder network	Polyclinique	0	1	1	0	0	2	
	Colobane	1	1	1	1	1	5	
	University	0	1	1	1	0	3	
	Fann Hospital	1	0	0	0	0	1	
	Liberté 5 Terminus	1	0	0	1	0	2	
	Sahm/Abass Ndao							
	Hospital	1	1	1	1	0	4	
	Ouakam/ Tally Diallo	1	1	1	0	0	3	
	Yoff/Airport	1	0	1	0	1	3	
	Garage Ngor	1	0	1	1	0	3	
	Lat Dior	0	1	1	1	1	4	
	Cambérène Junction	1	1	1	0	0	3	
	Patte d'oie Roundabout	1	1	1	0	0	3	
	Ecole Dior	1	1	1	1	1	5	
	Route des Niayes x Tally	1	1	1	0	0	3	
	bou bess							
	Buntu Pikine/church	1	1	1	0	0	3	
	Route des Niayes x tally							
	bou mag	1	1	1	0	0	3	
	Tally Bess Terminus	1	0	1	0	0	2	
	Texaco (icotaf x route des Niayes)	1	1	0	0	0	2	
	Serigne Assane (Guédiawaye)	1	1	1	1	0	4	
	Route de boune	1	1	1	1	0	4	
	Total	17	15	17	9	4	62	79.5%
Main line BRT	Rond point Casebi	1	1	1	0	0	3	
	Petersen	0	1	1	1	0	3	
	Garage Grand Yoff	1	1	1	0	0	3	
	Stade de l'amitié Stadium	1	0	1	0	0	2	
	Garage Guédiawaye	1	1	1	1	1	5	
	Total	4	4	5	2	1	16	20.5%
Overall		21	19	22	11	5	78	100.0%
%		26.9	24.4	28.2	14.1	6.4	100	

Source: (SCE / SAFEGE, 2017), complemented by observations on the ground

3.

The number of **service workers at risk**, based on the number of vehicles maintained/kept per occupation, multiplied by the number of vehicles to be displaced.

Large numbers of workers are needed to maintain, clean and repair vehicles, especially older vehicles. The Nairobi study estimated that there were more than 50 workers (mechanics, brake repairers, tyre menders, welders, panel beaters, painters, lighting technicians, upholsterers, spare-part dealers) needed to maintain the matatu minibuses on each matatu

minibus route, in addition to other workers, such as those in petrol stations and carwashes and night guards. (Manga & Spooner, 2019).

As the questionnaire survey revealed, there are a large number of services involved in the informal transport industry (see Table 50). Many are overlooked in statistics and transport research, particularly those with the most precarious of occupations and more likely to be women, such as clerks, ticket-sellers, hawkers, food vendors and traders.

Mechanics | Source: ITF



4.

The number of new jobs to be created within BRT.

More data is needed on the projected staff requirements of the Dakar BRT operating company. In addition, the number of livelihoods supported by BRT will be affected by the physical design and regulations surrounding the terminals and stations – for example, whether roles such as security and ticketing at the stations will employ staff or be fully automated, or whether street vendors and stall-holders are permitted to trade in or near stations.

However, we can take a reasonable guess at the number of jobs likely to be directly created by BRT in Dakar by drawing a comparison with data from the Rea Vaya BRT system in Johannesburg, South Africa. In its first phase, the 25.5 km BRT system generated 830 permanent jobs: 256 within the bus operating company, 280 in the stations (cashiers, ‘ambassadors’ and marshals), 240 in security and cleaning, and 40

in administration (McCaul & Ntuli, 2011). This does not take into account the creation of new jobs within the feeder services. CETUD is optimistic, suggesting that ‘the operation could benefit 1,500 people’ (Diaw, 2019).

These calculations are purely illustrative and tentative at present, and require further detailed data collection and analysis. But when more reliable figures of jobs at risk are calculated for each of on-board crews, terminal/bus stop workers and service workers, and new jobs to be created by BRT and its feeder routes, we may be able to calculate an approximate assessment of the total number of transport livelihoods at risk through the introduction of BRT in Dakar. **Even so, from the partial evidence provided above, it would be reasonable to assume that a net figure of 5,000 to 10,000 livelihoods could be at risk, if no mitigating measure are introduced.**

CONCLUSIONS AND RECOMMENDATIONS

THE INFORMAL TRANSPORT WORKFORCE

Those working in Dakar's informal passenger transport industry, including those working informally within and around the otherwise formal transport economy (such as Dakar Dem Dikk, AFTU), are relatively young, although many work in the industry and in the same occupation throughout their working life. The majority of workers have only primary education or none at all.

There is a great diversity of occupations within the industry, including on-board crews, workers at terminals and bus stops, and service workers employed within terminals or off-site workplaces.

The great majority are highly precarious and have no contract or **security of employment**.

Working hours are very long, with the majority of workers working more than 12 hours per day and six or seven days per week.

Reliable data on **earnings** is exceptionally difficult to obtain. While the questionnaire survey suggests that many workers earn apparently large amounts of money, it is difficult in a street interview to ascertain the difference between gross earnings and net earnings after expenses (such as target payments, fuel, bribes and maintenance). This requires further research, particularly through longer in-depth interviews with drivers, conductors and vehicle owners, where confidentiality can be assured. A similar exercise in Nairobi revealed that, despite the relatively large sums of money collected in fares, the take-home pay of on-board crews can be very little. In some cases, they will even make a loss after all the expenses are covered, especially for older, less efficient vehicles.

Working conditions and the working environment are bad for health, and injuries are common. Much of this is caused by very excessive working hours, caused by the target system of informal employment of crews by vehicle owners.

The **major issues** reported by workers are job insecurity, long hours, low pay, sexual harassment, police harassment, and lack of facilities (such as toilets, drinking water and shelter).

The majority of workers are not members of **workplace organisations**, such as unions,

cooperatives or informal associations and self-help groups. Of those that are organised, a third are trade union members.

The industry remains **male-dominated**, although there is some evidence that the number of women is growing. The women tend to be better educated but are predominantly found in the most precarious, vulnerable, unpredictable and badly-paid occupations – particularly traders and hawkers – and face widespread sexual harassment in their work.

IMPLICATIONS OF BRT

More than 75 percent of workers were unaware of BRT at the time of the survey (September 2019) but it is likely that this will decrease substantially as the relocation and construction phases begin. Of those who were aware, there was a fairly even split between those who were positive and those who were negative towards BRT, with considerable concern about the implications for their livelihoods.

At this stage of research, it is not possible to provide a reliable estimate of the numbers, but it is possible that **5,000 - 10,000 livelihoods may be at risk**, after taking potential new jobs within BRT into consideration, if no mitigating measure are introduced.

WORKERS' PROPOSALS

A successful introduction of BRT in Dakar will still leave a substantial informal passenger transport industry: BRT may not be affordable to all, it will not cover all the city's transport needs, and there will be the need for feeder routes (and travel to and from feeder routes to the more outlying communities).

The planning and implementation of BRT offers an opportunity towards the integration of all public transport in Dakar, and the possibility of formalising the informal transport economy.

Workers themselves have proposals that provide steps towards formalisation, and therefore improvements to working conditions and livelihoods that, in turn, will benefit passengers and the Dakar economy as a whole.

The questionnaire survey and the focus group discussions both included opportunities for workers to propose ideas that would improve their work, relieve congestion and increase efficiency in public transport, irrespective of BRT. These included:

- introduce and implement regulations to ensure formal contracts of employment, and a reduction of working hours (and thus cut accident rates and dangerous driving)
- improve access to social protection, especially social security and pensions
- upgrade the current vehicle fleet with new, more environmentally sustainable vehicles
- provide improved and expanded opportunities for vocational training, especially for women
- upgrade and improve working spaces, including the provision of basic facilities such as toilets, drinking water and shelter from sun and rain

Regarding the introduction of BRT itself, workers proposed:

- involve informal workers in the planning and implementation of the BRT project
- give priority to informal workers in BRT recruitment
- provide compensation for loss of earnings or livelihoods
- for workers who have to relocate their working space, relocate in new areas with good facilities

ENGAGEMENT AND INCLUSION

It is widely appreciated that BRT planning authorities need to consult and include all stakeholders in the process of planning and implementation.

Representatives of vehicle owners are already included in the consultation process, but it would be wrong to assume that they represent the informal passenger transport industry as a whole. Although there may be some convergence between owners and the workforce in protecting the informal industry, there are many clear and major differences in interests.

It is also obvious that the industry will continue to play a crucial role in Dakar's transport system after the introduction of BRT, providing feeder routes and transport services in those parts of the city not served by BRT. Thus, the question of how this critical part

of the public transport system will be improved and integrated properly with BRT needs to be addressed. It is important to restate the overall objectives behind the introduction of BRT in Dakar, or indeed other projects designed to improve urban passenger transport. These are to transform current transport services towards an efficient, affordable and environmentally sustainable urban transport system which promotes economic growth and decent employment. To be sustainable and achievable, BRT needs to be conceptualised, planned and delivered with the maximum engagement and inclusion of all stakeholders, including the workforce.

A good passenger transport system in Dakar is not just the result of good engineering but requires innovative and inclusive business models that address the underlying problems of the informal transport political economy.

The common practice of including operators in consultations and policy discussion is insufficient to describe or engage the current urban transport workforce – those whose livelihoods depend on the informal transport industry. 'Operator' is not a useful term. It is a catch-all, covering the thousands of people who depend directly on the industry for their livelihoods, but frequently with very different economic interests and involving a complex set of employment relationships.

When referring to operators, those in transport policy, planning and implementation should include both vehicle owners and democratically accountable representatives of (informal) employees or own-account workers dependent on the industry, and recognise that they have distinct and frequently divergent interests.

At the time of writing, there are very positive indications from the Dakar authorities (CETUD in particular) to engage the trade unions representing urban transport workers in discussions on the introduction of BRT and its impact on the informal transport workforce. This is to be applauded. It is hoped that the city authorities, the lending agencies and other key stakeholders may seize the opportunity to work with the trade unions towards the formalisation of the passenger transport industry as a whole.

FURTHER RESEARCH NEEDED

A second stage of research is required to:

- gather more data and analysis on **gross and net workers' earnings**, and
- construct a more substantial analysis of the informal transport micro-economy (including informality within otherwise formal transport operations). This should include a series of lengthy, in-depth interviews with on-board crews, service workers and vehicle owners.

Detailed research is also needed to provide more **reliable estimates of the numbers** of workers whose livelihoods may be at risk through the introduction of BRT.

Further research could also include consideration of the **taxi and clando industries** and perhaps rail services, which were not addressed in the first stage but play a major role in Dakar's public transport system.

More research is required to build a more detailed understanding of the plans for feeder routes, including ownership structures, business models, employment policies and opportunities for steps towards formalisation while mitigating against job losses.



Ticket collector on a night shift | Source: ITF

BIBLIOGRAPHY

ANSD. (2013). Enquête Nationale sur le Secteur Informel. Dakar: Agence Nationale de la Statistique et de la Demography.

Aw, T. (2018). Presentation of Dakar BRT Project. Abuja.

Byll, T. N. (2017). Le financement du renouvellement du parc de TPU dans l'agglomération dakaroise et la professionnalisation des acteurs: un mécanisme à consolider . Dakar: CETUD.

CETUD. (2017). Pilot Bus Rapid Transit (BRT) Project in Dakar; Executive Summary of safeguard documents. Dakar: CETUD.

CETUD. (2019). Programme de Modernisation des Transports. Retrieved April 2, 2020, from <http://www.cetud.sn/index.php/projets/programme-modernisation-transports>

Diaw, A. (2019, October 20). Interview with CETUD Managing Director. Le Soleil.

Faye, P. E. (2012). Modernization and/or Sustainable Transportation System in Dakar: Identification of Problems and Mode Requirements. 8th International Conference on Traffic and Transportation Studies. Changsha, China: Elsevier.

Hook, W., & Gautier, A. (2004). Pre-Feasibility Study for Bus Rapid Transit in Dakar, Senegal. ITDP. (2004). Pre-Feasibility Study for Bus Rapid Transit in Dakar. Dakar: Institute for Transportation & Development Policy.

Lammoglia, A. (2013). Analyse et modélisation multi-agents de transports flexibles. Comparaison de services français et sénégalais. Thèse de Docteur. Université Cheikh Anta Diop de Dakar.

Lombard, J., Sakho, P., & al, e. (2005). Les rues de Dakar, espaces de négociation et d'appropriation des transports collectifs. Autrepart.

Manga, E., & Spooner, D. (2019). Nairobi Bus Rapid Transit: Labour Impact Assessment Research Report. Manchester: Global Labour Institute.

McCaul, C., & Ntuli, S. (2011). Negotiating the deal to enable the first Rea Vaya bus operating company . Case Studies in Sustainable Urban Transport.

Olvera, L. D., Plat, D., & Pochet, P. (2016). Changes in daily mobility patterns in Dakar (Senegal). World Conference on Transport Research . Shanghai.

Orrico Filho, R. D., Ribeiro, R. G., & Thiam, M. K. (2015, June). A comparative study of the organization of alternative transport in the cities of Rio de Janeiro and Dakar. Case Studies on Transport Policy, 3(2). doi:<https://doi.org/10.1016/j.cstp.2014.07.002>

SCE / SAFEGE. (2017). Préparation d'une expérience pilote d'un système de bus rapides sur voie réservée à Dakar (BRT). Dakar: CETUD.

SITRASS/CUREM. (2015). Enquête ménages sur la mobilité, le transport et l'accès aux services urbains dans l'agglomération de Dakar. Dakar: CETUD.

Spooner, D. (2019). Bus Rapid Transit (BRT) and the Formalisation of Informal Public Transport. London: ITF.

SYSKOM. (2001). Enquête sur la mobilité, le transport et les services urbains à Dakar (EMTSU) – 2000. Rapport d'analyse. Dakar: CETUD.

UITP. (2019). Transforming Cities with Bus Rapid Transit (BRT) Systems. Brussels: UITP.

APPENDICES

Appendix A. Survey questionnaire

Informal Transport Industry Workforce Survey

Date of interview _____

Interview Questions

I am [name] from [union / university]. We are doing some research on working conditions for Dakar transport workers.

The results of this research will be used to help persuade the authorities to improve pay and conditions for the workers, and to include them in planning and implementation of better transport systems in the city.

We would like to ask you a few questions. Everything you say will be treated in strictest confidence.

Male	1	2. Age	<18	18-24	25-39	> 40
Female	2		1	2	3	4

3. Highest level of education attained	Primary level	1
	Secondary level	2
	College level	3
4. List any additional Training in case you have one?		

5. Workplace (Where do you work?)		
On board (drivers, conductors etc)	1	
Off-road service area (mechanics, tyre-menders etc)	2	
Stage/Bus stop	4	
Along the route (in case of traffic hawkers)	5	

Other (Name it) _____				6			
6. What do you do in the matatu sector at the moment?							
Driver	1	Conductor	5	Caller	9	Cleaner	13
Loader / Porter	2	Street Vendor	6	Traffic Hawker	10	Traffic Marshal	14
Relief Driver	3	Panel Beater	7	Mechanic	11	Tyre fitter / repairer	15
Stage supervisor	4	Unofficial Stage Supervisor	8	SACCO Supervisor	12	SACCO Mgt./Admin.	16
Other (name it)							17

7. How long have you worked in the matatu sector?		
8. How long have you been involved in what you are doing at the moment?		

9. Do you have a written agreement with someone who pays you to do your job?		
Yes		
No		

10. Working Hours	
10a. How many hours do you normally do this job each day?	
10b. How many days do you normally do this job each week?	
10c. Irregular / unpredictable work? (please tick)	

11. Whom do you receive money from in this particular job? (NB if self-employed, who are your customers?)	
12. Whom, do you in turn pay within your work set up?	

13. How much money do you receive in total, before paying other people of other expenses?	a) Per Day	1	CFA	
	b) Per Week	2		
	c) Per Month	3		
	d) Per Year	4		
	<i>Tick one as appropriate</i>			

14	Out of the total money you make out of your business/job, how much do you use for the following purposes	Enter the amount per day, per week, per month <u>or</u> per year, as appropriate			
		CFA per day	CFA per week	CFA per month	CFA Per year
a	Fuel for vehicles				
b	Maintenance of vehicles or machines you use				
c	Fines/Bribe for example to police				
d	Taxes				
e	Licenses for businesses				
f	Insurance for business				
g	Suppliers (those who provide you with goods/services you need for your business to run)				
h	Owners <i>target</i>				
i	Other workers helping you in the business				
j	Loan repayment for money taken to run the business				
k	Any other payment which is required of your business (Name it e.g. rent for space)				
	Total				

15. What is the average amount of remaining money for yourself, after making all these other payments?	Per Day	1	CFA
	Per Week	2	
	Per Month	3	
	Per Year	4	
	Tick one as appropriate		

16. Have you had health problems or injuries as a result of your work in this sector?	Yes
	No
17. If yes, mention the problem (s)	
18. If yes, what are the cause (s) in your view	

19. What are the problems you face at your work?	
---	--

20. Name any union, association or cooperative which you are a member of	
---	--

21. Have you heard about Bus Rapid Transit - BRT?	Yes
	No (if no go to question 26)

22. If yes, where did you hear from?	
---	--

23. If yes, do you think BRT is a good idea?	Yes
	No
	I do not know
24. If yes, why	

25. If yes, how do you think BRT will affect you?	
--	--

26. *Is there anything else you would like to say about your work, or about the Dakar public transport system in general? Or do you have any questions for us?*

--

If you have any questions, or other comments you would like to make later, here are our contact details [Give card]

If you would like to see the results of this research, or learn about the ITF and its members in Dakar, please give us your contact details [? WhatsApp #?]

Thank you.

Appendix B. Focus group discussion guidelines

Dakar BRT Labour Impact Assessment

Focus Group Discussions: September 2019

Objectives:

To organise three FGDs, targeting three groups of workers:

1. on-board crews
2. stage workers
3. service workers (mechanics, tyre menders, painters, vendors etc)

Each FGD

- to be held in a venue close to their respective workplaces
- to involve 12-16 participants
- to ensure inclusion of women workers – as far as possible proportional to the number of women in each of the three workforces
- to take approximately one hour – more if the discussion is productive and participants are happy to continue
- to be held in Wolof, if appropriate

If successful, each FGD will provide more insight into workers' perceptions of

- key issues they face at work
- key issues facing Dakar passenger transport as a whole
- ideas or proposals for improvements to Dakar's passenger transport, with particular reference to congestion, pollution and accidents/health/safety, although open to other issues (violence, corruption, quality of passenger service ...)
- awareness and understanding of BRT, and its impact

Preparation:

- Identify three venues appropriate to the three groups of workers.
- Identify / recruit participants for three FGDs preferably giving some notice.

Resources

- Facilitator
- FGD participants will be provided with drinks/snacks and (if necessary) modest expenses.
- Someone to take comprehensive notes, including good quotes from participants
- Someone to take some photos

Guide questions for facilitator

1. *What are the major problems you face in your job?*
2. *Do you think this is the same for other workers?*
3. *What do you think are the major passenger transport problems in Dakar?*

If **congestion, pollution and traffic accidents** are not mentioned, ask about these, but do not exclude other issues.

4. *How could these problems be addressed? Are there any practical solutions you would propose to the government or the city authorities?*
5. *The government is planning to introduce a Bus Rapid Transit (BRT) system in Nairobi in an attempt to tackle these problems. Have you heard about this?*

If **yes**: go to Question 6.

If **no or unsure**: show and explain the **cards provided** and go to Question 7.

6. *What do you think is meant by “BRT”?*
7. *Do you think that BRT is a good idea for Dakar?*
8. *Why? or Why not?*
9. *How in your own thoughts would the introduction of BRT affect your work?*
10. *How do you think the Ndiaga Ndiaye owners might react?*
11. *Do you have confidence in the government to introduce BRT?*
12. *Elaborate on why you have or don’t have confidence?*



Dakar Bus Rapid Transit

Labour Impact Assessment

Research Report | 2020

Laboratory of Human Geography, Cheikh Anta Diop University, Dakar, Senegal

Global Labour Institute, Manchester, UK

www.BRTLlabourImpact.org