

# NAIROBI BUS RAPID TRANSIT Labour Impact Assessment

Preliminary Research & Baseline Study Report March 2018

# Acknowledgements

The Global Labour Institute (GLI) would like to thank all those who provided support and cooperation in the research and preparation of this report, including John Mark Mwanika from the Amalgamated Transport and General Workers Union (ATGWU, Uganda); Erik Manga for the preparation of the baseline survey report; the leadership of the Public Transport Operators Union (PUTON) and the Matatu Workers Union (MWU); Anne Kamau and her colleagues in the Institute for Development Studies (IDS) at the University of Nairobi; Jackie Klopp at the Center for Sustainable Urban Development at Columbia University, New York; Matteo Rizzo at the Department of Development Studies, SOAS, London; Chris Bonner, Women in Informal Employment: Globalizing & Organizing (WIEGO), Johannesburg; and the staff at the International Transport Workers' Federation (ITF) Regional Office in Nairobi.

GLI is particularly grateful for the excellent work of the research team who undertook the baseline survey of matatu workers under very difficult conditions:

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# Glossary of terms

Akinyi	'Tea Girl'
Askari	Police or City council inspectors (uniformed)
Boda boda	Motorcycle taxis
BRT	Bus Rapid Transit
Caller	Tout attracting passengers to board departing matatu
Cartel	Criminal gang
Chama	Informal cooperative society to pool and invest savings
FGD	Focus Group Discussion
ITF	International Transport Workers' Federation
Kamagera	Casual drivers and conductors, often unlicensed
Kanju	City council police
Mananba	Stage-based assistants to drivers/conductors
Matatu	Informal passenger bus, including minibuses and 14-seater PSVs
Merry Go Round	Rotating Savings and Credit Association (ROSCA) – micro-savings group
Mungiki	Organised cartels
Mwananchi	Ordinary person/member of the public
MWU	Matatu Workers Union
NAMATA	Nairobi Metropolitan Transport Authority
NTSA	National Transport and Safety Authority
Pigasetti	People paid to occupy matatu seats to give impression of imminent departure
PSV	Public Service Vehicle
PWD	People with Disability
PUTON	Public Transport Operators Union
Radar men	Observers on the roads warning drivers of police presence, jams etc
Rhinos	Plain-clothes police
SACCO	Savings and Credit Cooperative Organisation
SPSS	Statistical Package for Social Sciences
Squad driver	Relief drivers

### CURRENCY

Most financial information is given in Kenya Shillings (Ksh). At the time of writing, the exchange rate is approximately USD 1.00 equivalent to Ksh 100.00.

# Introduction

This report was commissioned by the International Transport Workers' Federation (ITF) as a contribution to the ITF Our Public Transport (OPT) programme, with Swedish government financial support. The study was to be undertaken within the context of the overall objectives of OPT, 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." More specifically, the brief was to undertake research on:

- a) The likely impact and implications of BRT for workers in Nairobi.
- b) Good practice examples (e.g. Cape Town, Dar es Salaam) of engagement and inclusion of workers' organisations in the development of BRT policy and implementation by local, national and international decision-makers.
- c) The nature of the worker groups consulted (e.g. trade union, association, cooperative etc).
- d) Consultation or negotiation processes.
- e) Outcomes of the inclusion of workers' representatives in the design and operation of BRT.

### **BUS RAPID TRANSIT IN NAIROBI**

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. BRT involves building new roads, interchanges, terminals and modern stations along the routes.

All over the world, cities like Nairobi are encouraged by the World Bank and national governments to adopt BRT. They believe that BRT will ease congestion, increase efficiency, and reduce air pollution. Five BRT lines are currently being proposed in Nairobi:

- Kangemi Imara
- Bomas Ruiru
- Njiru Show Ground
- Mama Lucy T-Mall
- Balozi Imara

The authorities will want to see matatus removed from these routes. There may be opportunities for some matatus to continue operating on routes away from BRT, and on feeder routes taking passengers to and from BRT terminals and stations. There will be new opportunities to work for BRT, but it is likely that many more jobs in the matatu industry will be at risk.

As far as we are aware, there has yet been no assessment of the impact of BRT on employment in Nairobi, particularly for the large numbers of workers who currently depend on the informal matatu bus industry for their livelihoods. Nor has there been any consultation or engagement with matatu workers' representatives in the BRT planning process.

This report intends to stimulate discussion towards a labour impact assessment of BRT in Nairobi, and to encourage the active engagement of matatu workers' representatives in shaping a modern, accessible, efficient and environmentally sustainable transport system for Nairobi. It is based on preliminary research, including an initial baseline survey of the matatu workforce.

# NAIROBI MATATU WORKFORCE — Baseline Survey

In October 2017 researchers from the University of Nairobi and Kenyatta University undertook participatory research among workers in the Nairobi matatu industry to collect baseline data on the matatu workforce. The research, commissioned by the ITF, consisted of interviews with 300 workers and a sequence of six focus groups discussions. It was undertaken by three research teams, each led by university researchers, accompanied by men and women representatives of two transport trade unions, the Public Transport Operators Union (PUTON) and the Matatu Workers Union (MWU).

The research programme was preceded by participatory research training delivered by Dave Spooner and Jess Whelligan from the Global Labour Institute (GLI) and John Mark Mwanika from the Amalgamated Transport & General Workers Union (ATGWU) in Uganda, the ITF's 'mentor union' for East Africa informal transport workers. The training included discussion on conceptual and methodological issues, preparation and interrogation of the research instruments, mapping of various different categories of informal workers in the matatu industry within Nairobi's Central Business District (CBD), and identification of various matatu routes and corresponding sampling points. The training also pre-tested the survey questionnaire, focus group guide and the sampling points, and made subsequent adjustments.

The research was designed to capture baseline data on the matatu workforce in the context of the development of BRT in Nairobi. Interviews and focus groups were intended 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 matatu workers' awareness of BRT.

# NAIROBI MATATU WORKFORCE — Survey Methodology

### SURVEY DESIGN

Data was collected in October 2017 by a research team using survey questionnaires and focus group discussions at selected matatu working environments along routes designated for the development of BRT in Nairobi. A total of 300 workers were interviewed. The survey relied on qualitative and quantitative data collected from respondents in their respective working stations. This included a survey questionnaire and Focus Group Discussions (FGDs) conducted in different locations along the nine designated BRT routes within Nairobi City.

### TARGET POPULATION AND SAMPLE SIZE

The baseline survey targeted three main categories of informal workers in the public transport sector in Nairobi City, each with its own dynamics – crew, service providers and stage workers. Since the number of informal workers in this industry is not known, due to lack of authoritative data, the team did not rely on the census population to determine the sample size. Consequently, the team settled on a sample size of 300 informal workers along different routes designated for BRT in Nairobi city, as shown in the table below.

Sample	points	and	targets
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Target population	Location	Team
100 matatu crew (drivers and conductors)	Githurai, Kiambu, Kayole, Kenol	Karl Machado Paschalin Basil Synaida Khaenda
100 service providers	Park Road, Kariako Road,	Joseph Ndiritu
(mechanics, vendors and	Kirinyaga Road, Kipande	Erik Manga
spare part dealers)	Road and Ruai Road	Vivian Oketch
100 stage workers	Commercial, Bus Station,	Gladys Moraa
(callers, stage managers	Railways, Mfang'ano and	Ombativincent Menge
etc)	Posta	Winfred Maina

#### SOURCES OF INFORMATION AND MEANS OF COLLECTION

The baseline survey relied on different sources and tools to gather information required to address specific issues under investigation.

### **Respondents template**

A total of 300 survey templates were administered to respondents across the city. The tool had both structured and open-ended questions covering the following key issues: age and gender, location, occupations, employment relationship, length and contract, earnings and payments, problems at work, membership to unions/associations, knowledge and perceptions about BRT and traffic congestion and related problems in Nairobi city. (See annex 1.)

### Focus Group Discussions (FGDs)

There was a total of six FGDs conducted in six different places of the city, as shown in the table below.

Summary	of the	Focus	Group	Discu	ssions
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FGD	Category of participants	Number of participants	Place	Date
1	Service providers	9	Kibanda- Kariokor	5/10/2017
2	Service providers	10	Kipande Road	20/10/2017
3	Crew (drivers and conductors)	10	Globe Roundabout	5/10/2017
4	Crew (drivers and conductors)	10	Komarock Route	17/10/2017
5	Stage workers	10	Mathai Supermarket	5/10/2017
6	Stage workers	10	Commercial –Stage 105 (City Shuttle)	19/10/2017

Each FGD involved between 9 and 12 participants and lasted for approximately 1 hour. They were conducted in secluded venues to avoid unnecessary interruptions, using open ended guidelines. They focused on three key issues: major challenges facing informal workers in the industry: measures to address problems of congestion, pollution and traffic accidents; and knowledge and perception of BRT.

### **PREPARATION AND REVIEW OF BASELINE SURVEY TOOLS**

This exercise was iterative and participatory in order to ensure quality output. The research team spent two preparatory days discussing conceptual and methodological issues. Specific issues involved preparation and interrogation of the research instruments to ascertain their relevance and conceptual grounding, mapping of various different categories of informal workers in the matatu industry within the city, identification of various matatu routes and corresponding sampling points. The second stage involved pre-testing the survey instrument in respective sampling points and adjustment of the research instruments.

### DATA COLLECTION

Three researchers from two Kenyan universities (two female and one male) and six members of unions in the matatu industry (three females and three males) were involved in the data collection. Union members were paired (male and female) and each assigned a particular category of the target population. Each researcher was also attached to a group. The union members, by virtue of their experience and knowledge of the industry, were directly involved in actual data collection with the guidance of the three researchers who were paired with the teams.

Besides taking part in the preparation of the instruments and subsequent pre-testing, the union members were also taken through other aspects of data collection, such as logistics and ethical issues. One of the researchers from the university directly supervised the process on a daily basis to ensure quality. All 300 templates were duly administered and submitted within a period of 10 days. FGDs were conducted in two phases: at the beginning and towards the end of the survey. University researchers facilitated the discussions.

### AGE

The matatu workforce is **young**. 70% of the respondents were under the age of 40, similar to other sectors of the Kenyan informal economy (Kamau et al, 2018) and pointing to the way the sector is providing employment for a large pool of unemployed young people, especially men.

Age o	of Res	pond	ents
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Age	Frequency	%	Cumulative
<18	1	0.3%	0.3%
18-24	31	10.3%	10.7%
25-39	180	60.0%	70.7%
40-59	62	20.7%	91.3%
>60	1	0.3%	91.7%
No response	25	8.3%	100%
Total	300	100%	

### GENDER

**22% of respondents were women.** It is clear that young men continue to dominate the sector. Previous studies have estimated the proportion of women in the matatu industry to be 0.4% in 1997 or 6.7% in 2011 (Khayesi, 2015). Anecdotal evidence suggests that the number of women is growing, but this needs further exploration through representative sampling. It is important to use a definition of matatu employment which includes occupations often overlooked in previous research studies, e.g. matatu stage vendors, who are more likely to be women and likely to be among the most precarious and low-paid.

### **Gender of Respondents**

	Frequency	%
Man	228	76.0%
Woman	66	22.0%
No response	6	2.0%
Total	300	100.0%

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### **DURATION OF EMPLOYMENT**

Most matatu workers are in long-term informal employment. More than 50% of the workers interviewed have been in their respective occupations for five years or more.

### WORKFORCE QUALIFICATIONS

The workforce is largely educated, with more than 60% having completed secondary level, and 18% achieving college graduation. Furthermore, many have additional qualifications, including driving (22%) and mechanical engineering (7%). In total, 46% of correspondents claimed additional training or qualifications – this covered a wide range of skills, including IT, accountancy, electrical engineering, business management, catering, and teaching.

#### Level of education

		%	Cumulative
Primary level	56	18.7%	18.7%
Secondary level	188	62.7%	81.3%
College level	54	18.0%	99.3%
No response	2	0.7%	100%
Total	300	100%	

### **OCCUPATIONS**

The workforce includes **many varied occupations**, all dependent on the matatu industry for livelihoods.

For the purpose of analysis, occupations are considered within three groups of workers, each with distinct workplaces:

- **On-board crews**, including drivers, conductors, kamagera;
- Stage workers, including callers, porters/loaders, pigasetti, stage clerks, vendors and hawkers, SACCO supervisors and administrators, informal supervisors, traffic marshals;
- Matatu service workers, including mechanics, cleaners and vehicle washers, sound engineers, night security guards, spare parts dealers, panel beaters, electricians, painters, tyre-fitters/repairers, radar men.

Each of the three research teams undertook questionnaire surveys and focus group discussions in different locations, to capture data from each group of occupations.

Respondents were also asked about additional occupations they may pursue. Of the 300 interviewed, only 18 worked in other capacities, of whom only three were outside the matatu industry (boda boda riders).

Occupations	Frequency	%
Caller	67	22.3%
Driver	55	18.3%
Conductor	46	15.3%
Hawker	24	8.0%
Mechanic	23	7.7%
Vendor	21	7.0%
No response	15	5.0%
Loader/porter	12	4.0%
Stage supervisor	10	3.3%
Panel beater	8	2.7%
Tyre fitter/repairer	6	2.0%
Cleaner	4	1.3%
SACCO management	3	1.0%
Unofficial supervisor	2	0.7%
Traffic marshall	2	0.7%
Kamagera	1	0.3%
SACCO supervisor	1	0.3%
Total	300	100%

#### **Occupations of Respondents**

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### **EMPLOYMENT RELATIONSHIPS**

The matatu industry involves a complex set of employment relationships. Matatu workers' livelihoods depend on informal income from a wide range of sources, including drivers, conductors, customers, informal employers, and SACCOs.

The industry employs a wide range of other workers, including conductors, kamagera, callers, vehicle washers, squad drivers, food and drink vendors, painters and artists, mechanics, county officials, stage clerks, SACCOs, set guys, stage owners.

To build a comprehensive picture of these employment relationships will require further research and analysis, and a revision of interview questions and explanation.

There was confusion between the interviewers and some respondents on the meaning of "Who pays you?", with many respondents simply answering that they are self-employed, rather than describing the source of their income (e.g. passengers, customers, other workers).

Further analysis of the data is also required to tabulate responses to specific occupations.

Nevertheless, survey findings show that the majority of workers depend on each other either directly or indirectly for their livelihoods.

The total in the 'Who do you pay?' table is greater than the 300 people surveyed because some cited more than one source.

#### Who do you pay?

		%
None/Not applicable	132	34.9%
Conductor	50	13.2%
Call guys	47	12.4%
Assistants	32	8.5%
Kamagera	27	7.1%
SACCO	19	5.0%
Stage owner	16	4.2%
Suppliers	14	3.7%
County officials	9	2.4%
Squad drivers	7	1.9%
Car wash	7	1.9%
Vehicle wash	6	1.6%
Water vendor	3	0.8%
Mechanic	3	0.8%
Set guys	2	0.5%
Stage clerk	2	0.5%
Food vendor	1	0.3%
Spray painters	1	0.3%
Total Responses	378	

### Who pays you?

		%
Customers	82	27.3%
Conductor	52	17.3%
Driver	51	17.0%
"Self" (unidentified)	50	16.7%
SACCO	28	9.3%
Employer	19	6.3%
Company	17	5.7%
Nairobi County Government	1	0.3%
Total	300	100.0%

### SECURITY OF EMPLOYMENT

Matatu workers are in **highly precarious employment**. Very few have formal contracts. Most are wholly self-employed, or on hourly or daily informal 'contracts'. Nearly half the workers have been working in their current occupations for less than four years.

### Years in current occupation

Years		%
< 1 - 4	148	49.7%
5 - 9	73	24.5%
10 - 14	30	10.1%
15 - 19	24	8.1%
20 - 24	12	4.0%
25 - 29	4	1.3%
30 - 34	5	1.7%
35 - 39	1	0.3%
> 40	1	0.3%
	298	

### Length of contract

		%
Not relevant/Indefinite	152	50.7%
Days	84	28.0%
Hours	35	11.7%
No response	26	8.7%
Annually	3	1.0%
Total	300	100.0%

### **WORKING HOURS**

Most matatu workers work **very long hours**. Most of those surveyed work 12 hours per day or more. More than 65% work six days per week, and 27% work seven days per week.

### Working days per week

Number of days		%
3	1	0.4%
4	2	0.9%
5	10	4.4%
6	152	66.4%
7	64	27.9%
Total	229	100.0%





### INCOME

Most matatu workers have **low incomes**. It is difficult to give precise figures on net income. There are considerable fluctuations in gross income from day to day, or hour to hour, and a wide variety of necessary outgoings which are often unpredictable. Before vehicle crews can start to earn money, most have to meet **high daily financial targets** set by vehicle owners – in effect a vehicle rental fee. This leads to long working hours, high accident rates and poor health (see page 16).

In addition, workers have to pay for fuel, taxes, licenses, vehicle maintenance, loan repayments, insurance etc. They are also subject to **arbitrary fines and extortion** from askari.

To estimate net income, we need to take all outgoings (extractions) into consideration. These include a wide range of payments, including owners' targets and fuel.

### "

This small matatu here – from the body work, they are doing the paint and design: 70,000 Ksh. Others cost 100,000 Ksh. for roof / sides / dash board etc. doing rims – another 100,000. For a small matatu, [the total cost can be] 300,000 or 400,000 Ksh. Those big matatus cost as much as 1.5 million– lighting, music. Sometimes it is like a show off. If you buy that car, small mathematics say it costs almost 1.3 million Ksh. Every day you get 4,000 Ksh. from customers. You can imagine how long it will take to pay off your loan". Interview with matatu artist. (Glader, 2017)

	No. of responses	%
Fuel	87	20.3%
Owners target	86	20.1%
Bribes and fines	45	10.5%
Carwash	42	9.8%
SACCO	38	8.9%
Other workers	34	7.9%
Licences	26	6.1%
Suppliers	22	5.1%
Other payments	20	4.7%
Maintenance	14	3.3%
Insurance	7	1.6%
Loan repayment	4	0.9%
Taxes	3	0.7%
	428	

### Summary of extractions

**This requires further and longer-term research.** A full understanding of income and outgoings for all occupations in the matatu industry was not possible from this preliminary survey. Furthermore, it was evident that some respondents were not comfortable discussing their net income, or the nature of their outgoings. This will require further, sensitive investigation. Further analysis of the data is also required to tabulate income to specific occupations and gender.

### **OCCUPATIONAL HEALTH & SAFETY**

**The matatu industry is bad for workers' health.** A third of respondents reported back pain, and a further third reported respiratory problems, most likely linked to long hours of exposure to air pollution (Ngo et al, 2015). Others reported aching joints, swollen and painful legs, eye conditions, dust-related issues, sore throats, headaches and ulcers.

#### Main health issues experienced

		%
Chest problem	21	35.0%
Back problem	18	30.0%
Sore throat/voice	6	10.0%
Pneumonia	3	5.0%
Joint pains	2	3.3%
Swollen legs	2	3.3%
Dust related issues	2	3.3%
Headache	2	3.3%
Leg pains	2	3.3%
Eye problems	1	1.7%
Ulcers/stress	1	1.7%
	60	100.0%

Accidents are frequent. 22% of respondents reported that they had been directly involved in crashes, ranging from knocks from vehicle mirrors, to careless driving, failed brakes, speeding, dangerous overtaking, and drunk driving. It is important to note that the matatu drivers are not always at fault, although long hours without rest are associated with more potential crashes linked to fatigue.

### Involvement in accidents

Involvement		%
Yes	66	22.0%
No	233	77.7%
no response	1	0.3%
Total	300	100.0%

### **Reported causes of accidents**

		%
Minor injuries from the mirrors	23	35.94
Sharp objects	10	15.63
Over speeding	9	14.06
Careless driving	8	12.5
Brakes failed	6	9.38
Overtaking	5	7.81
Drunk driving	1	1.56
Fell from moving vehicle	1	1.56
Somebody jumped on the highway	1	1.56

### **KEY ISSUES AT WORK**

Respondents reported **other major problems**, including sexual harassment, lack of social protection, lack of sanitation, abusive customers, and poor security.

Most importantly, however, a large proportion of those surveyed complained of **harassment and extortion** from askari (30%) and local government officials (20%).

The total exceeds the 300 number of respondents because some reported more than one problem.

### Nature of the problems

	Total	%
Police harassment	144	22.9%
Local Government (Kanju)	126	20.1%
Poor working environment	55	8.8%
Reduced income/poor pay	49	7.8%
Long working hours	38	6.1%
No job security	37	5.9%
Unfaithful/rude customers	33	5.3%
Insecurity	26	4.1%
Pressure to meet target	18	2.9%
Low client base	13	2.1%
Sun, dust	12	1.9%
Sexual harassment	10	1.6%
Lack of sanitation	9	1.4%
Power blackout	7	1.1%
Many cartels	7	1.1%
Mistreatment by SACCO officials	6	1.0%
Lack of parking space	5	0.8%
Work space is too small	5	0.8%
No business when it rains	5	0.8%
Poor drainage	4	0.6%
No pay while off duty	4	0.6%
Lack of water	4	0.6%
Fake goods	3	0.5%
No maternity leave	3	0.5%
Low client turn up	2	0.3%
No guard force training	2	0.3%
Balancing work and family	1	0.2%
	628	100.0%

Focus group discussions provided a picture of key **challenges specific to crews, service** workers and stage workers.

#### Summary of key challenges mentioned by FGD participants

Crews	Service providers	Stage workers
Extractions and harassment by law enforcement officers (traffic police and city traffic marshals) Long working hours Poor remuneration Dysfunctional and unresponsive SACCOs	Limited working spaces Poor payment Traffic congestion Harassment and extractions by law enforcement agencies, especially city county officials	Harassment by law enforcement officers (traffic police and city traffic marshals) Poor payment Lack of formal contracts Lack of social security
Traffic congestion	Diminishing job opportunities	General poor working conditions
General poor working conditions		

### "

The SACCOs don't fight for the welfare of the workers. They are only interested in their own welfare and that of the vehicle owners. They have also neglected their role as SACCOs to ensure compliance of traffic rules and regulations and hence ensure sanity within the public transport."

### "

Averagely, police collect Ksh. 1,000 for every trip/squad. This is because there are several police strategic points where they have to part with at least Ksh. 100/200. Apart from traffic police arrests, the drivers and conductors are harassed by 'Commandos'. These are Administration Police officers who accuse them of idling to steal from the public.

The drivers and conductors usually converge at strategic places as they wait for their turn 'squad'. This is due to lack of employment and few matatus hence they cannot be all accommodated at one go. The 'Commando' harassment is a common practice within the Komarock and Kayole estates, collecting illegal fees/bribes from the crew."

### **CONGESTION AND POLLUTION**

**Congestion and pollution is acknowledged to be a major problem.** All interviewees and focus group participants agreed that traffic congestion was a major problem in Nairobi, along with the consequential air pollution from exhaust fumes, a finding backed up by science (Kinney et al. 2011, Ngo et al. 2015).

When asked what they thought should be done to address the problem, they made several suggestions:

- Reduce the number of private cars by improving public transport
- Ensure better self-regulation by SACCOs
- The National Transport and Safety Authority (NTSA) to ensure modernisation and improved quality of vehicles to reduce pollution and road accidents
- Improve fuel quality to enhance air safety/reduction of traffic congestion
- Improve hygiene and sanitation services (e.g. waste disposal)
- Control the unplanned expansion of roads
- Reclaim grabbed land/expanding Nairobi city
- Introduce long buses
- Decongest the city through mixed land use approaches
- Develop other cities/satellite and regional towns

### "

Traffic congestion within Nairobi City cannot end because the government keep on expanding road entering the city but do not expand roads within the city. Engineers need to monitor new roads to ensure that there is good traffic flow if they really want to address traffic congestion."

### "

Owners of the private cars are the main cause of traffic congestion in town. Families should be restricted by law to own only one private car."

### "

Another way of addressing the problem of traffic congestion is to expand Nairobi city besides developing the satellite town to accommodate more people. There is no need for everybody to come to town. Expand and create similar opportunities in the new cities."

"

The new stage managers/marshals unveiled by the current governor are not a solution to traffic congestion. These are the same matatu drivers and conductors who used to ply the same routes and cannot control traffic within the same areas. If the governor could change his tactics and redeploy them to different routes or other cities. Otherwise they will turn into another form of cartel within the CBD."

SACCOs can ease traffic congestion within and outside the CBD. They should be able to organize their vehicles in an orderly manner. For instance, if the Githurai SACCO took control of their vehicles which pick up passengers in the middle of the road along the Ronald Ngala street, then the CBD will be free of traffic."

### WORKERS' ORGANISATION

Only 20% of the workers interviewed are members of organisations, and those who are belong to organisations which provide financial assistance, rather than groups which support livelihoods or advocate workers' rights.

Only nine (3%) of respondents have trade union membership. They are all members of the Public Transport Operators Union (PUTON), one of the three unions representing matatu workers in Nairobi.

Membership of union, association and cooperative		
		%
Yes	59	19.7%
No	231	77.0%
no response	10	3.3%
Total	300	100%

### Membership

		%
Cooperative	3	1.0%
SACCO	16	5.3%
Self Help Group	8	2.7%
Association	5	1.7%
PUTON	9	3.0%
Microfinance	1	0.3%
Table banking credit co-ops	6	2.0%
'Merry go round' savings co-ops	10	3.3%
People with disability goups	1	0.3%
	59	

### AWARENESS OF BRT

Awareness and understanding of Bus Rapid Transit (BRT) is very low among matatu workers. More than 80% of those interviewed or who participated in focus group discussions said that they had never heard of BRT, or the plans to introduce BRT in Nairobi.

Of those workers who had heard of BRT, 59% thought that BRT was a good idea. They were then also asked what they thought might be the **effect of BRT on their livelihoods**.

42.1% believed that it would lead to a loss of jobs or decrease in income. Others predicted that it would lead to further discrimination against the opportunities for women to secure jobs in the BRT system; or that local small investors would be locked out from BRT opportunities.

#### **Awareness about BRT**

		%
No	242	80.7%
Yes	48	16.0%
no response	10	3.3%
Total	300	100%

### Is BRT a good idea?

		%
Yes	26	59.1%
No	15	34.1%
Partially	3	6.8%
Total responses	44	

### Effects of BRT on your livelihood?

		%
Loss of jobs	16	28.1%
Decrease in income	8	14.0%
Few employment opportunities	6	10.5%
Better business	6	10.5%
Discipline on roads	5	8.8%
Time saving	5	8.8%
It will create employment opportunities	5	8.8%
Gender bias/Favouring one gender	2	3.5%
It will not have any effect on my business	2	3.5%
Increase in crime	1	1.8%
It will lock out investors	1	1.8%
Total responses	57	

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On the other hand, interviewees and focus group participants gave examples of what they predicted to be the benefits of BRT: better discipline on the roads, faster journey times, and more business and employment opportunities.

Similarly, a majority of the participants in the six FGDs indicated that they did not know what BRT stands for. Very few FGD participants indicated that they either knew or had heard about it, and those who did clearly had no detailed understanding.

The potential negative effects mentioned include loss of jobs and increased crime as captured by these participants during discussions:

# "

I heard about it during one of the past news bulletin. Are they the long buses meant to address traffic congestion in the city?"

### "

"I have not heard about BRT, what is it?"

### "

Sisitunatambua matatu" (We recognize the matatus only).

### "

*Mtuwakawaidahawezinunuahiyobasi"* (*BRT is out of reach for the common citizen*).

### "

*This is an attempt to remove the matatu crew from the transport sector".* 

### "

Those kinds of buses will take away jobs from ordinary person in the matatu industry because they cannot be repaired by the ordinary mechanic in Kariakor. They cannot even fit in this garage. They will also require special spare parts which ordinary suppliers cannot afford. It is for the rich."

### IMPACT ON MATATU EMPLOYMENT

It is evident that the introduction of BRT in Nairobi will have a major impact on large numbers of workers dependent on the matatu industry for their livelihoods.

#### Estimating the size of the total matatu workforce in Nairobi

While there are no reliably precise figures, there are various estimates of the number of matatu vehicles operating in Nairobi, and the number of people employed in the industry.

There are problems encountered when attempting to define the matatu workforce. Nearly all studies which attempt to define the size of the matatu industry are limited to a consideration of the number of operators, and even this is not easily defined. Operators may include SACCOs, vehicle owners, and/or drivers.

Based on 2004 figures, one estimate suggests 40,000 vehicles provide 80,000 direct and 80,000 indirect jobs in the national matatu industry (Khayesi, 2015).

According to the Head of Road Transport Services, Ministry of Transport and Infrastructure, "informal public transport operators" employ 70,000 people in Nairobi and 300,00 nationally. It is, however, not known how this figure was calculated (Eshiwani, 2016).

The 2017 Economic Survey undertaken by the Kenya National Bureau of Statistics estimates that there are 417,200 people engaged in the national informal transport and communications sector, and that the number has risen steadily year by year. It notes that the sector "includes mainly support services to transport activity". (KNBS 2017)

It may be possible to provide a more accurate estimate of total numbers in Nairobi by a more detailed analysis of the many occupations and roles to be found in the matatu workforce and by attempting to estimate the numbers employed per occupation. These could be calculated from the number of vehicles, the number of matatu routes or the number of stages, and the numbers of workers in each, depending on occupation.

There are approximately **132 matatu routes** in Nairobi (Klopp, 2017), operating along **169 stages** (Digitalmatatus.com, 2015).

According to an interview with Richard Kanoru, Executive Officer of the Matatu Owners Association (MOA), there are 137 SACCOs operating matatus in Nairobi, with an average of 80 vehicles in each – a total of approximately 11,000 vehicles (Kisingu, 2017). This seems to be consistent with the results of a 2012 survey commissioned by the Transport Licencing Board, which estimated the total fleet size to be approximately 10,000 vehicles (Envag Associates, 2012). It is unlikely, but not clear, that these include unregistered vehicles.

#### Estimating the size of the workforce affected by proposed BRT routes

To undertake a full and detailed assessment requires further research, but the preliminary survey provides evidence of the large number of occupations and complex employment relationships of those reliant on the matatu industry potentially affected by BRT.

More detailed analysis and more precise numbers of jobs at risk require further research to provide a more accurate estimation of:

- the number of full-time equivalent jobs required to operate and maintain each vehicle, inclusive of all occupations (crew, stages, services);
- B. the number of matatu SACCOs, routes and stages to be removed or seriously affected by the introduction of BRT;
- C. the number of vehicles per affected SACCO, route and stage; and
- D. the number of direct and indirect jobs to be created in BRT operations which may be available to current matatu workers, and an assessment of access to the retraining opportunities provided, to off-set job losses.

This enables us to accurately estimate the number of jobs at risk, i.e.  $(A \times B \times C) - D$ .

### Estimating the economic impact

Unless there are mitigating employment-creating measures in place, the inevitable loss of a considerable number of matatu industry jobs will be substantial, and may have a serious impact on the wider Nairobi economy. An assessment of economic impact requires further research of net average income per occupation, multiplied by the number of jobs at risk, disaggregated by occupation.

Obviously, this will be offset by the incomes per occupation in BRT operations, multiplied by the number of jobs created (direct and indirect), along with the wider economic impact of greater urban transport efficiency and environmental benefit.

# BRT - Engagement and inclusion

### "

Implementation is a big challenge and requires considerable upfront discussions and consensus building... A successful system requires ownership by existing operators, drivers and users and incorporation of their specific concerns in the design... bringing the operators on board; and understanding needs of users through surveys and focus group discussions. Investments in BRT 'hardware' will come about only after an understanding and acceptance of the broader reform programme and an appreciation of the complexity of issues involved."

(World Bank, 2007)

### "

Building sustainable cities—and a sustainable future—will need open dialogue among all branches of national, regional and local government. And it will need the engagement of all stakeholders—including the private sector and civil society, and especially the poor and marginalized."

(Ban Ki-moon, quoted in ITDP 2018)

### "

There is no participation by all stakeholders in the BRT plan".

### "

*If you include SACCOs you will have included the common mwananchi."* (FGD participants)<sup>1</sup>

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

In Nairobi, there was government recognition that drivers, crews and other staff in the matatu industry are "key transition stakeholders", alongside passengers, communities, owners, investors and equipment suppliers. "Bus drivers and crew (need to) understand that modern bus systems are coming to Nairobi", and are to be "involved in the changes being developed." (Ridding, 2017)

Representatives of matatu vehicle owners – the Matatu Owners Association (MOA) and Matatu Welfare Association (MWA) – are already included in the consultation process, but it may be wrongly assumed that they represent the matatu industry as a whole. At the time of writing, there had been no consultation with workers or their representatives. Although there may be some convergence between owners and the workforce in protecting the matatu industry, there are many clear and major differences in interests<sup>2</sup>.

It is also obvious that the matatu industry will continue to play a crucial role in Nairobi'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 critical question of how this crucial part of the public transport system will be improved and integrated properly with BRT needs to be addressed.

Yet at the time of writing, matatu workers had been given no opportunities to have a voice in the planning of BRT in Nairobi.

Elsewhere, authorities have recognised that the inclusion of representatives of workers in affected informal transport services is essential in the successful planning and delivery of BRT.

 <sup>&</sup>lt;sup>7</sup> FGD, 5-10-17, Maathai Supermarket, Dandora Stage, Nairobi.
<sup>2</sup> There are some small-scale owner-drivers, but they are generally not represented by the MOA or MWA.

In 2016, the **African Association of Public Transport** (UATP) jointly with the **United Nations Environment Programme (UNEP)** and the Ministry of Transport and Infrastructure in Kenya organized a two-day training workshop on Promoting Soot-Free and Sustainable Public Transport in Africa. The workshop, attended by over 60 participants from 10 African cities, concluded with recommendations including *"Support integration of informal public transport into formalized public transport through stakeholder engagement"*. (UATP, 2016)

In **Ghana**, the Greater Accra Passenger Transport Executive (GAPTE) recognises the important role of the informal transport operators in the planning of BRT – *"Key Issue! Those who control the informal sector are those who are most threatened by change! How do we deal with this"* (Gyamera 2016). The GAPTE needed to obtain the support of the 'tro-tro' (minibus taxi) unions and other organisations, notably the Ghana Private Road and Transport Union (GPRTU) and the Progressive Transport Owners Association (PROTOA). A forum was established in 2010 to enable regular consultation with both organisations and others in the informal transport economy, leading to a formal Memorandum of Understanding signed in 2013, and the creation of three operator companies by the affected organisations. (Gyamera 2016)

The implementation strategy for BRT in **Nigeria** included study tours with transport trade union executives to BRT operations in other countries, and a series of high level meetings with union members. This led to the formation of a cooperative of union members on the BRT corridor, and the establishment of a steering committee, with representatives of the Lagos Metropolitan Area Transport Authority (LAMATA) and the lending institutions, to provide professional advice on the management of the cooperative and BRT operations. The union subsequently leased 100 buses for operation through a bank guarantee. According to LAMATA, trade union involvement and participation was a critical success factor (Orekoya 2010).

In **South Africa**, the minibus Kombi taxi industry had many characteristics in common with Nairobi's matatus. By 2002, it was a large employer that had grown very rapidly since the 1980s, albeit within the informal economy. It was the most commonly used form of public transport and played a critical role in the lives of the majority of commuters, particularly in poor black communities. Kombi taxis accounted for 65 per cent of all public transport commuter trips.

The total number of people directly employed in the sector was estimated to be around 185,000 (drivers, queue marshals, car washers and on-board fare collectors), and a further 150,000 or more additional jobs are indirectly associated with the sector, mainly in motor manufacturing, provision of supplies (including fuel and spare parts) and maintenance.

It was essential that democratically accountable representative organisations had a voice in the development of new mass transit systems.

## "

The ability of informal economic actors to exercise the right to freedom of association (establish or join organizations of their own choosing without fear of reprisal or intimidation) is critical to shaping regulatory frameworks and institutional environments that ultimately help informal workers and economic units move into the formal economy. Lack of voice at work is marginalizing informal economic actors in the labour market and in society at large." (Barrett, 2003) "The City is committed to the transformation of ALL public transport to prosperous transport businesses...We have developed our model over the years, but we are doing this through negotiating with affected operators so that they can:

- Become shareholders in the bus or vehicle operating companies
- Continue to operate their mini bus taxis without unfair competition on certain routes (and to certain performance standards)
- Convert their mini bus taxis to use dual fuel (diesel and biogas) thus reducing air pollution and carbon emissions
- Get opportunities in the management and maintenance of Public Transport Facilities
- Get opportunities in other public transport value chain activities WIFI in vehicles, out-door advertising
- Secure decent jobs for drivers and other workers in the public transport sector (marshals, maintenance, cooking mamas)
- Be trained and capacitated for new roles e.g. as Board members of Bus or Vehicle operating companies."

"The City has a policy which sets out how the engagement and negotiations with operators should happen, including:

- Need for different phases:
  - Engagement: For relationship building, information sharing and determining who will sit at the table and how
  - Negotiation: Negotiation of binding agreements
  - Handover: Removal of vehicles, election of board etc.
- Need for independent technical support and chairperson/facilitator as well as capacitation of affected operators
- Need for parties to be held accountable and get proper mandates." (Ngcobo, 2016)

In addition, in South African cities that have had the most experience with BRT a subtle policy shift is occurring towards improving the minibus sector and providing incentives for these improvements, rather than rely on punitive regulations alone. (Schalekamp and Klopp, 2018)

The Institute for Transportation and Development Policy (ITDP) notes that "as in many places around the world, informal networks of taxi or minibus drivers are the primary providers of public transport in Johannesburg, and transition to a formally run BRT system would mean massive change, and was sure to be controversial".

### "

(Johannesburg) was proactive, engaging with taxi leaders at the outset of planning by taking them to South America to visit TransMileno, and meet with operators who were previously also operating informally. They held formal negotiations with representatives of the taxi industry, which resulted in the taxi drivers becoming directly tied to Rea Vaya as shareholders of the operating company, which the city contracted to run the BRT. This gave the city a formal way to relate to these stakeholders, and it gave the stakeholders a platform with which to advocate for themselves, in partnership with, rather than in opposition to, the city." (ITDP, 2018)

# **Conclusion and Further Research**

This is a preliminary report, based on a limited survey of matatu industry workers. Internationally it is evident that there have been few, if any, rigorous and comprehensive attempts to measure the impact of the introduction of BRT on the informal transport workforce affected.

It is also evident that the informal transport industry will continue to provide vital urban transport services in Nairobi and elsewhere long after the introduction of BRT – either as feeder services to BRT lines, or stand-alone services where BRT is not present. Integration of BRT with all other forms of passenger transport, whether formal or informal, is a vital element of BRT planning (ITDP et al, 2016), requiring consultation with stakeholders, including matatu workers, from the outset.

The great majority of workers in the matatu industry are not aware of BRT or its planned introduction in Nairobi. There is an immediate need for the authorities to consult with matatu workers' representatives to provide wide-scale awareness-raising and public education on BRT for the workforce, passengers and affected communities.

There is also an urgent need to address the major issues facing the workers in the matatu industry, and include their representatives in consultation on broader questions of transport system efficiency, accessibility and environmental impact. Of highest concern to these workers are questions of the role of police and county officials, pay and security of employment, sexual harassment and discrimination of women workers, and decent working conditions and facilities. BRT provides an opportunity to make significant improvements, not just for those directly affected by the new services, but for all those in Nairobi's passenger transport system.

### FURTHER RESEARCH IS REQUIRED, AS SET OUT BELOW

#### More comprehensive survey data and detailed analysis of:

- the number of workers in the matatu industry with livelihoods at risk with the introduction of BRT;
- the numbers, role and status of women workers in the matatu industry, trends and prospects;
- earnings, financial 'extractions' and workers' net incomes, and the economic impact of BRT;
- employment relationships within the matatu industry; and
- the target system in the matatu industry, and its impact on livelihoods, working hours, compliance with traffic regulations and accident rates.

#### Policy research, including international comparative case studies:

- structures and procedures for the inclusion of the informal workforce as a stakeholder, and the role of workers' representatives in mass transit planning processes and operations;
- alternatives to the target system, including formalised employment relationships, use of cashless fare payments and digital innovation;
- programmes of compensation or alternative employment opportunities for workers faced with loss of livelihoods as a consequence of the introduction of BRT;
- measures to improve workers' livelihoods, working conditions and respect for rights in the matatu industry;
- removal of barriers to the inclusion of women in training and higher paid, more secure employment in the matatu industry; alongside improved personal security for women workers, and an end to violence and sexual harassment;
- likely scale and characteristics (numbers, occupations, skills) of future BRT workforce, recruitment and training policies to maximise equal and fair employment opportunities for informal transport workers; and
- inclusion of the matatu industry in an integrated efficient and environmentally sustainable mass transit system.

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