

# Mobility for all?

## Planning Active Modes and Para-transit for Vulnerable Groups

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Introduction



Recent study in Abuja



The Role of Technology



The Way Out



Current Situation



Q&A, Feedback and Farewell

# Introduction

## Our Organisation

Ochenuel mobility is a sustainable urban transport and road safety organization based in Abuja Nigeria. We are involved in Research, advocacy and capacity building .

We consult on policy development, feasibilities, general project management, and have handled a number of projects in different African countries



# Objectives of the training

- Provide basic knowledge of Active Mobility and paratransit, and their implications for vulnerable groups in Africa
- Discuss the broader context of diversity on active mobility and paratransit with particular emphasies on women
- Discuss the proccess of planning and development of active mobility in a motorising Africa
- Get participants familiar with key approaches to transforming current paratransit practices towards sustanqbility
- Showcase the roles of research and advocacy in spotlighting the issues to generate political commitment
- Outline other recommendations

## Some General Overview – Para-transit

- Africa's massive population growth shows that its inhabitants will double from 1.2 billion in 2016 to 2.5 billion in 2050 and could increase to more than 4b by 20100, that is, its share of world population growing from 15% to over 40% according to UNICEF – highest world projection
- the share of Africans living in urban areas based on the 2018 World Urbanization Prospect is 43 percent, but will grow to 50 percent by 2030 and to over 60 percent by 2050 – highest urbanization rate.
- Yet there is limited resources to meet the infrastructure need of this population. The mismatch between urbanization and infrastructure development has led to increased urban slums





## Some General Overview – Para-transit



- Today 85% of urban dwellers cannot afford a car in the face of poverty, yet urban transport development has centered on the car
- There is limited level of *proper* public transport development, NMT is only gaining an awakening
- But the nearly 50% urban population must move to be able to live
- The state of public transport is abysmal as only 31.7% have access to public transport within walking distance of between half a kilometer to a kilometer against the global average of 51.6% (UN Habitat 2020)
- Little wonder that there is proliferation of para-transit or informal transport as some chose to call it

## Some General Overview – Para-transit

We must note that transportation is not optional, it is intrinsic to livelihood, hence people must move, either by what means is provided or what means they invent themselves, a recent research puts it this way, transport is so essential to urban life that people will develop it with or without government help (DigitalMatatus, 2014). This was the birth of para-transit





## Some General Overview – Active Mobility

- Walking, cycling and public transport occupies a strategic place and are the future of transport but have not enjoyed the appropriate intervention for its effective development in many cities of Africa
- Africa have the best potentials for quick development of Active mobility
- The west are struggling so badly to reverse the harm done by the car over the years and they are not finding it funny, we must not tow that part, some have gone far, but the best thing you can do when you realize that you are on the wrong road is to turn back



# Can Technology help



**CARS****ELECTRIC CARS****AUTONOMOUS CARS****UBER/LYFT CARS**

- Some think technology is the solution, but cars will remain cars irrespective of the technology employed and today extent, the associated complexities will remain with us

# Three Revolutions in Urban Transportation

## Business-as-Usual Scenario

### 20th Century Technology

Through 2050, we continue to use vehicles with internal combustion engines at an increased rate, and use transit and shared vehicles at the current rate, as population and income grow over time.



## 2 Revolutions (2R) Scenario

### Electrification + Automation

We embrace more technology. Electric vehicles become common by 2030, and automated electric vehicles become dominant by 2040. However, we continue our current embrace of single-occupancy vehicles, with even more car travel than in the BAU.



## 3 Revolutions (3R) Scenario

### Electrification + Automation + Sharing

We take the embrace of technology in the 2R scenario and then maximize the use of shared vehicle trips. By 2030, there is widespread ride sharing, increased transit performance—with on-demand availability—and strengthened infrastructure for walking and cycling, allowing maximum energy efficiency.



**Number of Vehicles on the Road by 2050** 🚗 = 250 million vehicles

2.1 billion

2.1 billion

0.5 billion

**CO<sub>2</sub> Emissions by 2050** ☁️ = 500 megatonnes of CO<sub>2</sub>



# Understanding Some Terms

## Informal Transport

- Informal transports describes unregulated and unconventional transport modes, with flexible fares, schedules and routes (Cervero & Golub, 2007), they are low cost, low quality but most accessible means of commute for low and middle income residents and or neighborhoods that spills into main city centers

## Active Mobility

- Active mobility, soft mobility, active travel, active transport or active transportation is the transport of people or goods, through non-motorized means, based around human physical activity. In recent times, Passengers of public transport are considered part of active mobility, because apart from the physical activity involved in using public transport, it means that passengers will use walking or cycling to complete the last mile .

# Current Situation

# Para-transit

**Four factors resulted in the development of para-transit in Africa. These includes;**

- Car-centric development/investments
- Poverty and unemployment
- Lack of or inadequacy of efficient public transport to move the masses
- Lack of or poor policies, regulations and enforcement systems



**Why has its proliferation continued**

- The above factors are not changing, where it does, the change is insignificant or uncoordinated to make a difference
- Politicians use it as a source of empowerment and political patronage

# What does para-transit bring to the table?

These benefits are more individual focused than the collective good

- Solution to mobility problems, and estimated 70% of Africa's population use para-transit – Soludo 2020.
- They provide alternatives for last mile, personal mobility, they are faster in traffic built ups as their sizes enable maneuverability through traffic and use of alternative routes,
- they have lesser waiting time and reach destinations usually not accessible with cars
- Provides a variety of cheaper mobility options including car-sharing, bike-sharing, and micro-transit that minimizes cost
- Employment; para-transit provides crucial access to jobs, goods, and services
- Quick source of income – a study on Motorcycle operators in Yola, Nigeria says each rider makes about \$7 a day



# Impact on vulnerable residents

- Vulnerable road users are the most challenged in terms of financial capacity, access, mobility limitations and acceptability in the public domain
- For instance the man on the wheel chair is denied access to jobs so he has no income to own a car, yet infrastructure are not designed to allow him use his wheelchair for mobility, so the informal transport is the nearest best for his mobility
- Similarly, in most cases, the family car is only 1, the man goes with it, yet the woman have more trips to make, link trips and many times have no income to own her own car, this makes para-transit a useful mobility option for her



# So then what's the problem

With the above benefits, why the hues and cries about para-transit? Are the bans and restrictions really necessary? Are there options even if there is need? But wait!



Air pollution is the 2<sup>nd</sup> highest killer disease now in Africa killing 1.1 people in 2019



Traffic congestion costs developing countries 3 % of GDP



Road fatalities causes about 3-5% of GDP in Developing countries

## See the troubles they brought

- Until recently, para-transit systems were not planned for and therefore, no effective regulations, no effective government oversights – any human system that is not under control is dangerous system: what does these result to:
- Road crashes, fatalities & environmental hazards
- No end of life policy in most African countries, so the para-transit vehicle will continue to carry passengers until such a time that it cannot move, to the detriment of passengers and other road users
- Recklessness and gross road misconduct against regulations
- In some cities, their unions have become somewhat a parallel government, in fact a monster, you venture not offend them
- Crime and criminality

Each of these issues bother on life and death, the economy, image and tourism potentials of a city/nation

So should we ban or not????



# Women are particularly vulnerable



- Exposure to harassment and intimidation, without records for tracing perpetrators
- Lack of quality, standards and acts of recklessness that challenges the comfort of women
- Lack of fare collection issues that puts women at the receiving end especially during a hype
- Boarding discomforts



# Para-transit transformation model

S/NO	Activity	Action	Goal
1	Develop a reform plan	<ul style="list-style-type: none"> <li>- To align with the mobility strategy/plan of the city</li> <li>- Shows clear strategy with clear timelines</li> <li>- Define responsibilities</li> <li>- All vulnerable groups effectively factored into the plan</li> </ul>	5yr/10yr plan delivered
2	Institute a properly enforced regulations/discipline	<ul style="list-style-type: none"> <li>- Review or enact regulations</li> <li>- Train and orient enforcement agencies</li> <li>- Provide enforcement tools</li> <li>- Properly license them</li> <li>- Define end of life of the vehicles and enhance fleet quality</li> </ul>	Sanitize the para-transit
3	Reorganize, train and reorient them within a short term target	<ul style="list-style-type: none"> <li>- Define the boundaries of their service</li> <li>- Ensure each persons understand and are capable of obeying regulations</li> </ul>	Scaled discipline
4	Decarbonize, then digitize them	<ul style="list-style-type: none"> <li>- Adopt cleaner fuels through government support</li> <li>- Digitize them</li> </ul>	Green transport
5	Appraisal	<ul style="list-style-type: none"> <li>- Has steps 1-4, diligently implemented, transformed the para-transit system up to 80% success rate?</li> <li>- If yes, sustain the integration, if not do 6</li> </ul>	Decision point
6	De-commercialize them	<ul style="list-style-type: none"> <li>- Stop the use of tricycle and motorcycles for commercial purposes, transform shared taxi and mini buses into modern shared taxi</li> <li>- Plan the private owners into regular private transport</li> <li>- Integrate operators into mainstream public transport</li> <li>- Stop registration of commercial 2 or 3 wheelers except for freight</li> </ul>	Make NMT and PT the focal point of transport development

## This Brings us Back to Active Mobility

- There is recent awakening on active mobility development in Africa
- But this is largely limited to one or two big cities in a country
- There is willingness to have meetings and talk than to act
- Many countries and cities have policies that are not implemented
- Development partners such as UN Habitat, UN Environment, TUMI/GIZ, HVT/UKAID, ADB, SSATP/World Bank, etc are largely responsible for the limited progress being made so far, not necessarily a deliberate decision by the actors

# Why we need to move fast

- Today's active mobility systems are deficient and negate the safety of vulnerable groups especially women
- Even though 78% of Africans are walking daily as means of transport, yet, 95% of roads in Africa fail to provide acceptable level of service for pedestrians and 93% fail to provide acceptable level of service for cyclists.
- So we have streets that are non connected, uncompleted or truncated
- Streets that are not lit and have no shades
- Roads with walkways that are taken over by traders, parking and other activities
- As a result, 44% of all fatalities in Africa are pedestrians and cyclists
- And many would rather seek for alternative mobility than walk or cycle

# Flat walking surfaces & guide tiles contribute to accessibility for people with disability



✗ An uneven surface can make a footpath difficult to use.



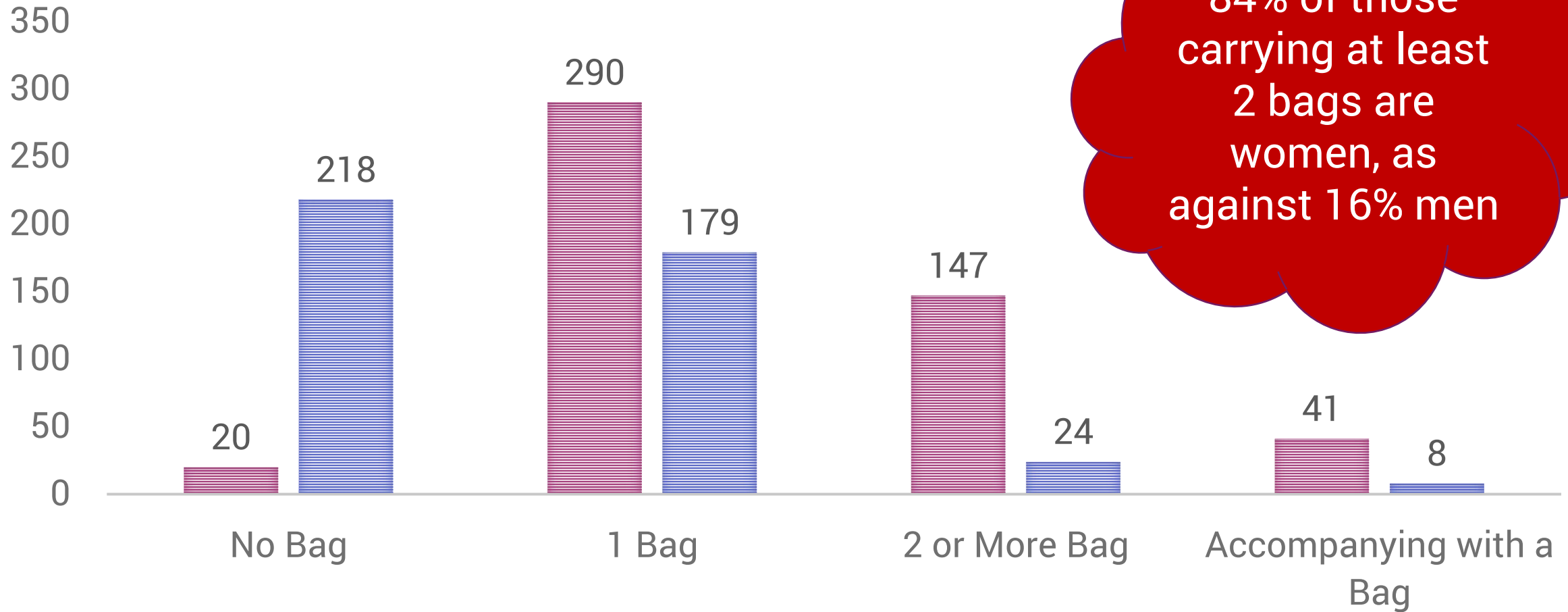
✓ Footpaths with proper surfacing can be used by pedestrians.



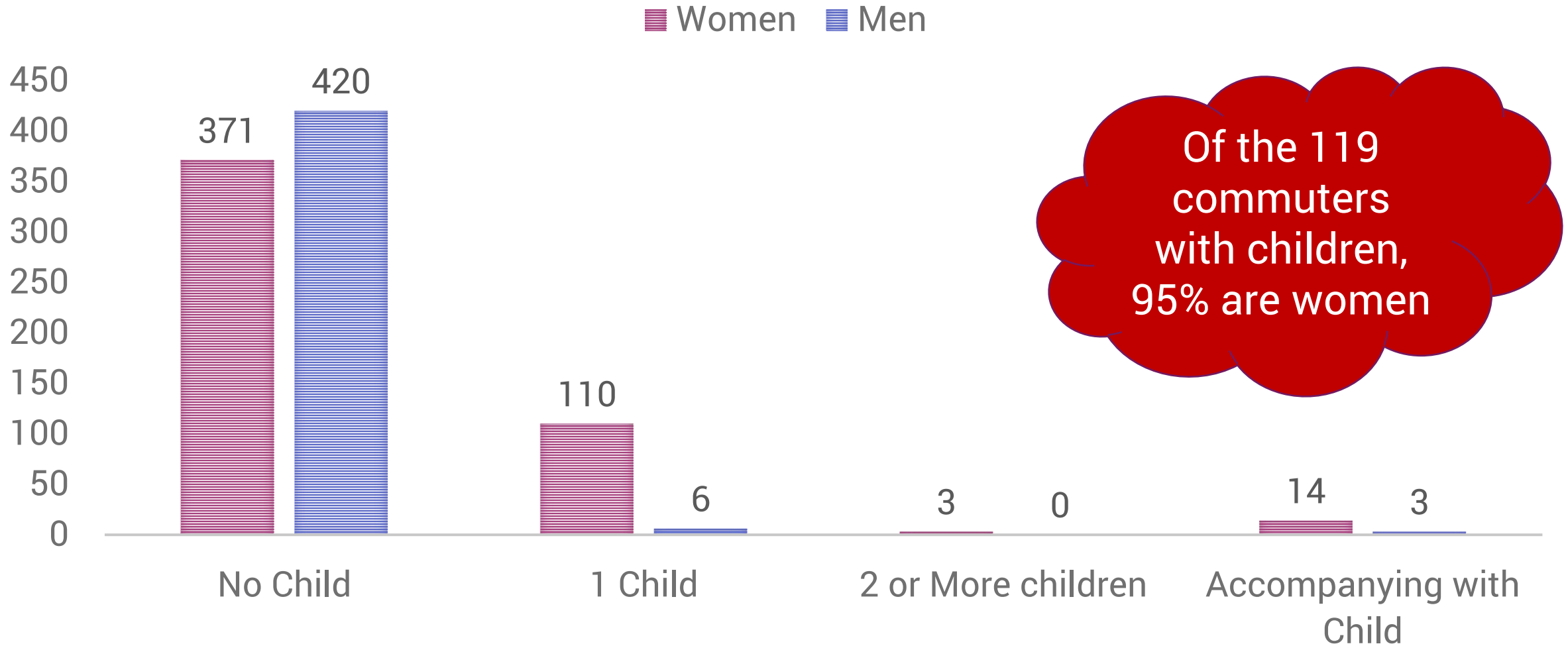
# A Recent Study in the City of Abuja

# Who is Carrying a Bag or Bags

Women Men



# Who is Carrying a Child or Children



## Take Example of Area 3 Junction in Abuja

- Loads in the hands
- Load on the head,
- Baby at the back
- To climb 2-storey building with steep staircase
- Nearly a kilometer added to her trip

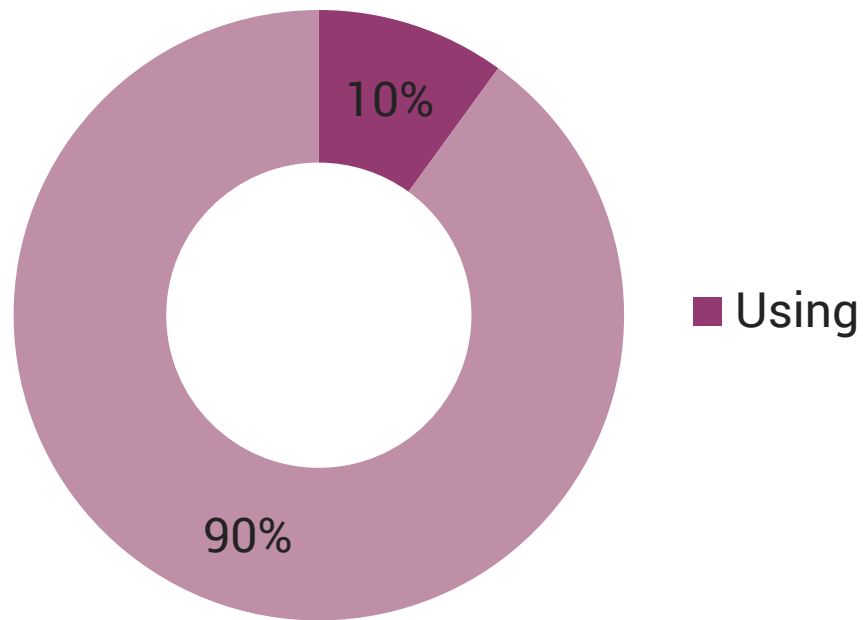




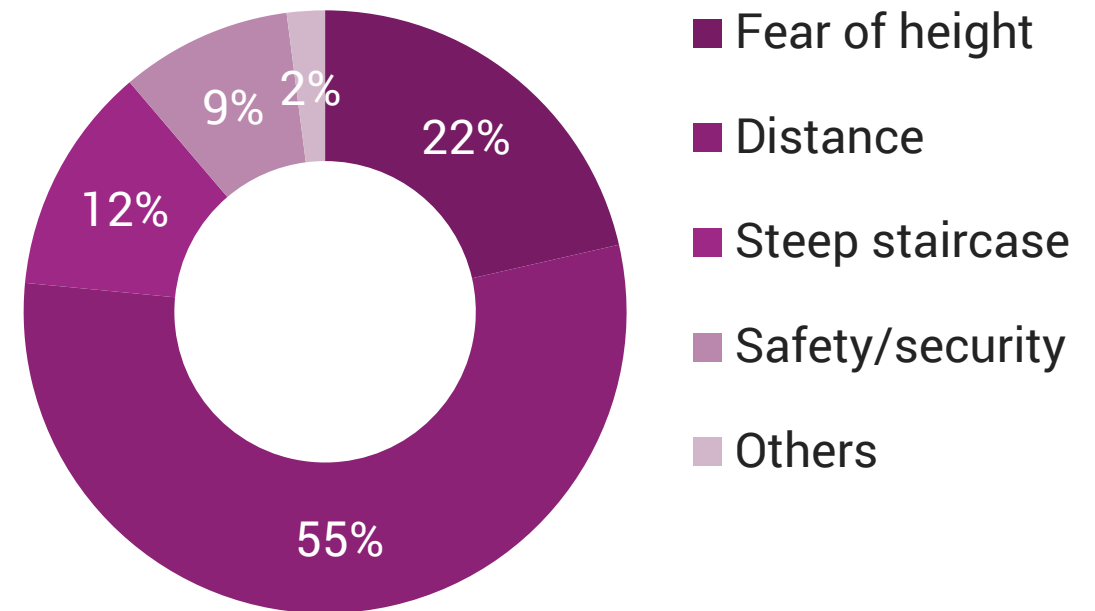
# Features of the Pedestrian Bridges in Abuja

S/NO	ITEM	INFOR	REMARKS
1	Total Number of pedestrian bridges studied	14	
2	Average distance between the bridge and actual crossing points	260m	The bridges are a bit odd in terms of location and design. The city authority said these roads were not intended to have these bridges because the areas are not envisioned to have pedestrian trip generators, and the question to ask is that, were we supposed to have a ghost city.
3	Height of the bridges	6m	Equivalent to two storey building.
4	Bridge lengths	140m	From foot to foot. This is the same for all the bridges except Sheraton –Yar' Adua Center and Jabi VIO pedestrian bridges which are 26m and 27m respectively.

## Who's using the bridge



## Why are You not Using the Bridge?



# What's the way out

# Why are all of these?



- An infrastructure development that gives ownership of roads to the car driver
- An infrastructure development that is not gender sensitive
- Complementary road and transport facilities that are not gender sensitive
- **Policies, manuals and legislations that does not recognize gender**

We must not forget that “if all you have in your hand is a pen, everything around you looks like a book — *African Proverb*”



## It is important to talk a bit about speed

- The Global plan of action for road safety recognizes speed as the most critical risk factor to road safety globally,
- While globally, a third of fatalities are attributed to speed, it is 50% in Nigeria plus about 30% other factors speed related, with similar situation across cities of Africa
- Resolution 11 of the Stockholm declaration as sustained by the UN resolution declaring the second decade of action on Road safety demand 30km/h as default speed in urban areas



## What do we do therefore?

- The blanket banner for failure to effectively develop sustainable transport in Africa is ONE; some said it is funds, others said it is **awareness**, or is it general capacity or **political will**?



## What do we do therefore?

- Develop a plan/strategy/policy, with specific goals and timeline
- Identify funding model and commit to it
- Start small but never stop
- Develop and or strengthen advocacy
- Review and update existing regulations or develop new once with appropriate enforcement system
- Work the talk, change the narrative





# Thank you for your attention

Keep in touch

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