Sustainable Urban Mobility Challenges and Innovations in Africa: Reengineering mobility for People

Engr. Emmanuel John, FCAI, MNSE, MCILT
Director of Administration & Strategy
Transportation Growth Initiative, Abuja Nigeria

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Outline

• About Transportation Growth Initiative
• The Core Message of this Presentation
• Some Definitions
• The Problems of Urban Mobility in Africa
• The Reforms: Current Efforts and Visions
• Global Indicators and demand for competitiveness
• Ongoing projects
• Way forward
About Transportation Growth Initiative (TGI)

An NGO with membership cutting across transportation organizations and individuals from the private sector, relevant Government Ministries and Agencies, Academics, Civil Society and other professionals with Corporate HQ in Abuja, Nigeria

W: www.tgi.org.ng  E: info@tgi.org.ng  Or tgi.secretariat@gmail.com
M: +234 8035994482, 8058298679
THE MESSAGE

The World exist for people, so are cities, not for cars
It is important that we define 3 key words that are critical to this topic: Transportation, Equity, Sustainability & Mobility

- **Transportation**: Movement of people and goods from one destination to the other. It is concerned with Movement and reaching destinations.

- **Mobility**: Ability to move and be moved freely and easily. It is concerned with People their Freedom & Ease (Accessibility).

- **Equity**: the quality of being fair to all concerned; impartial access to public facility by residents irrespective of class.

- **Sustainable Development**: Developments that meet the needs of the present without compromising the ability of future generations to meet their own needs.
The Problem with Current Mobility Practices
Population Growth & Urbanization

Estimated Change in Population, by Region, 2010 to 2050

% Growth Between 1990 - 2010


PEW RESEARCH CENTER
Nigeria

The Netherlands

Japan

Source: http://populationpyramid.net/
Half of the world’s road traffic deaths occur among Motorcyclists (23%), Pedestrians (22%), Cyclists (5%), 31% of deaths among Car occupants and the remaining 19% among unspecified road users.

38% of all African road traffic deaths occur among pedestrians.
Nigeria loses about 3% of GDP from Road Traffic Crashes

$ billion(USD) of cost of crash

3% of GDP($B)

$ billion(USD) of cost of crash
Road fatalities and severe injuries in Africa / Year

- "Business as usual"
- African Objective

Y-axis: 0 - 600,000
X-axis: 2011 - 2020

2011: 322,000 (AA) vs. 270,000 (African Objective)
2020: 540,000 (AA) vs. 270,000 (African Objective)
Governance Issues

• There is difference in Governance patterns affecting adoption of initiatives
• A number of decision makers does not see mobility as a fundamental factor for socio-economic development
• We have limited resources to meet the growing demands, unfortunately, this slim resources is depleted by corruption, and ineffective governance
• Mobility developments focus more on the big things neglecting the little things that really matter
• For instance a greater majority of residents cant afford beyond an NMT for daily commute yet NMT is not factored into most mobility developments
Data

- Inadequacy
- Sometimes unreliable
- For cities as Lagos or Abuja you will get some data but secondary cities?
- Every development: policy, investment, plans is predicated on something
Out of School Children

- About 10 million children are out of school in Nigeria, the Story is the same across Africa. There are four major reasons for this; one of it is the distance between schools and homes which are most times not walkable especially for the girl child.

- Create efficient, affordable and convenient mobility and a quarter of these children will be back to school.

- We cannot say this doesn’t matter,
More challenges

- Traffic Congestion that consume 3% of GDP, (OECD Report)
- Increased urban noise that causes exhaustion, tiredness among other health implications
  - Pollution that kills 7m people per year according to WHO 2012 report
  - Global warming that is threatening humanity
- Tear and wear on vehicle and road & overstretch enforcement agencies
How Did we Get Here:
The Journey to “Affluence”

- Affluence
- Big boy; Bye to NMT
- He is feeling funky
- This is where most people started from, they aim higher
What Will Happen By 2050
The Way out: Sustainable Equity in Mobility: Public Transport Combined with Cycling and Walking is the Answer
I did not Say it: The Entire World Say So

- Check the Different UN Resolutions
- 12 Targets of the 17 Sustainable Development Goals (SDGs), 2016
- “The Future we want”: Transport as a fundamental element in human development, 2012
- “Global Sustainable Transport Outlook Report” 2014 by the UN High Level Committee on Sustainable Transport
- The World Bicycle Day, 12TH April, 2018
- The UN Decade of Action on Road Safety 2020, etc

All of these point to one thing: that the car has become much of an enemy to humanity and the time is rife to diversify to sustainable modes of transport
Between now and 2050, there will be a massive drift from the use of gasoline fuel vehicles to electric & autonomous vehicles.
The Reforms: Current Efforts
Lagos is making progress with public transport (BRT and Light Rail) but with little efforts on NMT.
The city was building for cars

Abuja
Where do people live in Abuja

70% of the workforce in Abuja leaves in the suburbs and feed into the city center every work day and return in the evening.
Lot 1a & 3 nearly completed and ready for commissioning (yellow and deep blue lines)

A contractual agreement for the second phase (Lot 1b and 2) of Abuja Rail Mass Transit was signed between the FCT Administration and Messers CCECC Nigeria Limited in Mach, 2017

Lots 4, 5 & 6 of the Abuja light rail are available for interested investors
The completed 1st Phase will convey 350,000 commuters daily.

It’s a $792m China Exim bank funded project, expanded to cover the 2nd phase to $1.79b.
Abuja is in partnership with the Federal Ministry of Environment. A $73m Green Bond has just been raised with European partners with a BRT component on a second corridor.

The third corridor is available for concession.

Vision for seamless intermodalism.
We Must Take Strategic Steps to Reach the Future

• We need to return from building cities for cars and start rebuilding cities for people; Let’s return the city to the original owners: THE PEOPLE

• We need a revolutionary reform in the lands use and housing sectors to address the inequality; Let low and middle income live in the city center while the high income earners live at the outsketch

• We need to develop policies on population growth and address urbanization; 4 children is too much

• We need to equitably provide transport facilities that cater for people with disability, women, elderly and other vulnerable members of society

• Doing these will require that we reorder our investments in infrastructure provision
A more equitable approach

How we usually plan streets

Shrink the car by magnifying public transport and NMT
At the current growth rate, trips by cars and 2Ws will double or triple by 2030.
A typical city: Sustainable scenario

Trips per day

2013 2031: Status quo 2031: Sustainable
How do we get there?

For every million residents:

- 80 km of complete streets
- 2,000-4,000 shared cycles
- 400-600 city buses
- 20-30 km of rapid transit
## Investment needs by city size

<table>
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<th>City population category</th>
<th>&lt; 1 million</th>
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Investment needs in Nigeria’s largest cities

2030 requirement:

- 2,000 km of complete streets
- 15,000 city buses
- 670 km of rapid transit
Ongoing Projects

• 62% of Nigeria’s population are 24yrs and below; most of this people are in the schools

• Culturing these young people to ride bicycle as a way of life is reshaping the future of mobility

• As a pilot, Ochenuel Limited, TGI working with 3 other companies have developed a comprehensive bike share program for Nigerian Universities

• A Sustainable Urban Mobility Course in being started in November 2018 to bridge the knowledge gap
There is a huge Knowledge Pap

- Too few schools offer under graduate courses on transportation
- Whereas countries of Europe especially have universities that offer direct courses on Urban mobility
- Knowing transportation does not actually mean knowing urban mobility
- Beyond post graduate programs we need undergraduate transportation courses and with specialties in urban mobility
- We have a number of workshops like this hosted by UNDP, SSATP, UN-HABITAT, etc, but that are limited in outreach
- But more importantly, we need existing policy makers at all levels to understand urban mobility otherwise its waste of energy
Partners are needed to actualize some of the initiatives
E: info@Ochenuel.com.ng  W: www.ochenuel.com  M:+2348035994482
1\textsuperscript{st} United Nation’s World Bicycle Day 2018

“Dad don’t drop me off, buy me a bicycle

…it makes me happier and healthier”
We are leading campaigns on urban cycling
What is a Street Meant for?

Thus saith the Lord of Host: there shall yet old men and old women dwell in the streets of Jerusalem... And the streets of the city shall be full of boys and girls playing in the streets thereof

- Zachariah 8:4-5
Would may like copies of books I am privileged to author for more on these.
Theme:
THE ROLE OF TRANSPORTATION IN THE SUSTAINABLE DEVELOPMENT GOALS

Venue: International Conference Center, Central Business District, Abuja Nigeria

Transportation plays a cardinal role directly in 5 of the 17 Sustainable Development Goals (SDGs) and indirectly in 7 other goals. Over the years, Nigeria’s development has been impeded by a wide range of challenges limiting its ability to meet the growing demands to provide mobility services that are adequate, reliable, safe, sustainable and affordable, and more importantly, support other critical sectors of its socio-economic development. It is for this reason that Transportation Growth Initiative will be leveraging on the SDGs, Nigeria’s Prioritized targets, and other global indicators to answer the many questions in its transportation system in Nigeria and Africa. The Conference will come out with a blue print that will provide a platform for awareness, generate public interest and outline role of stakeholders in improving transportation efficiency.

You will meet with decision makers, captains of industry, academics, operators, researchers and other stakeholders who will present their latest research, technical and operational papers in this consolidated plenary session. There will be exhibition over stalls, roundtable sessions and interactive assembly.

CONFERENCES SUB-TEAM

1. Climate change and mobility
2. Good governance and policy
3. The role of transportation in poverty reduction
4. Mobility, Urban spaces and connectivity

ABSTRACT SUBMISSION

Abstracts must be between 250 and 350 words, fonts size 12 Times New Roman, double line spacing. All papers will be peer-reviewed and published in the TGI Journal. Make abstract submission to conferences@tgi.org.ng. Check the conference segment of the TGI website for further details and downloadable formats for full papers.

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ALL ENQUIRIES

Transportation Growth Initiative (TGI)
Corporate Head Office: 4, Magnus Street,
Wuse Zone 5, Abuja, Nigeria. Website: www.tgi.org.ng
Email: info@tgi.org.ng or info@tgi.org.ng
Mobile: 08099448821, 0803280877
