



**XXIV<sup>th</sup> World  
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# **PROMOTING SUSTAINABLE CITIES THROUGH SUSTAINABLE TRANSPORT OPTIONS.**

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# CONTENT OF PRESENTATION

- Introduction (Centre for Cycling Expertise, CCE)
- Introduction
- Cycling
- Some Major Urban Cities' Statistics
- Bicycle Imports
- Advocacy for people friendly cities
- NMT Hindrances
- NMT Benefits
- Current developments



# Introduction (Centre for Cycling expertise, CCE)

- The Centre for Cycling Expertise (CCE) : Ghanaian NGO with the primary aim of supporting and promoting sustainable Non-Motorized Transport (NMT) in Ghana.
- A secondary but immediate aim is to develop a bicycle master plan for Ghana, working in collaboration with relevant agencies and organizations within Ghana.
- CCE is the civil society organization (CSO) spearheading NMT in Ghana in terms of cycle planning and provision



# Introduction (Centre for Cycling expertise, CCE)

CCE collaborates with a number of stakeholders including the following:

- Department of Urban Roads (DUR)
- Motto Traffic and Transport Unit (MTTU) of the Ghana Police
- Ministry of Tourism and Diasporan Relations
- Environmental Protection Agency (EPA)
- Ministry of Health (MOH)
- Ghana Highway Authority (GHA) etc



# Introduction (Quotes)

*“No matter how you define sustainability, cycling must be part of it”*

*“Cycling should not be marginalized, it should be in the middle of things”*

*Jack Short – Secretary General, International Transport Forum, Former President European Conference of ministers of Transport*



# Introduction (Quotes)

*“A vigorous five-mile walk will do more good for an unhappy but otherwise healthy adult than all the medicine and psychology in the world”*

*~Paul Dudley White, American Physician & Cardiologist,  
1886 -1973*

*“I have two doctors, my left leg and my right”*

*~G.M. Trevelyan, 1876 - 1962*



# Introduction

- In Ghana cycling and walking are the two most common forms of transport
- Walking is commonly integrated with other modes of transport
- The bicycle: yet to achieve such a feat nation-wide though in the north of Ghana about 50% are cycling



# Cycling

- Cycling plays an essential role in urban transport in most low- and middle income countries of the world
- Cycling affects survival at the lowest rank of the income ladder





# Cycling

- Cycling is not new in Ghana.
- Predominant means of transport in Northern Ghana.
- About 50% cycle to work and for pleasure
- Low cycling population in the south of Ghana. About 8% cycle



# NMT: Current issues

Cyclists & Pedestrians compete with automobile



A bus takes over walkway



Running for life at crosswalk?



Directness of route?



NMT infrastructure?



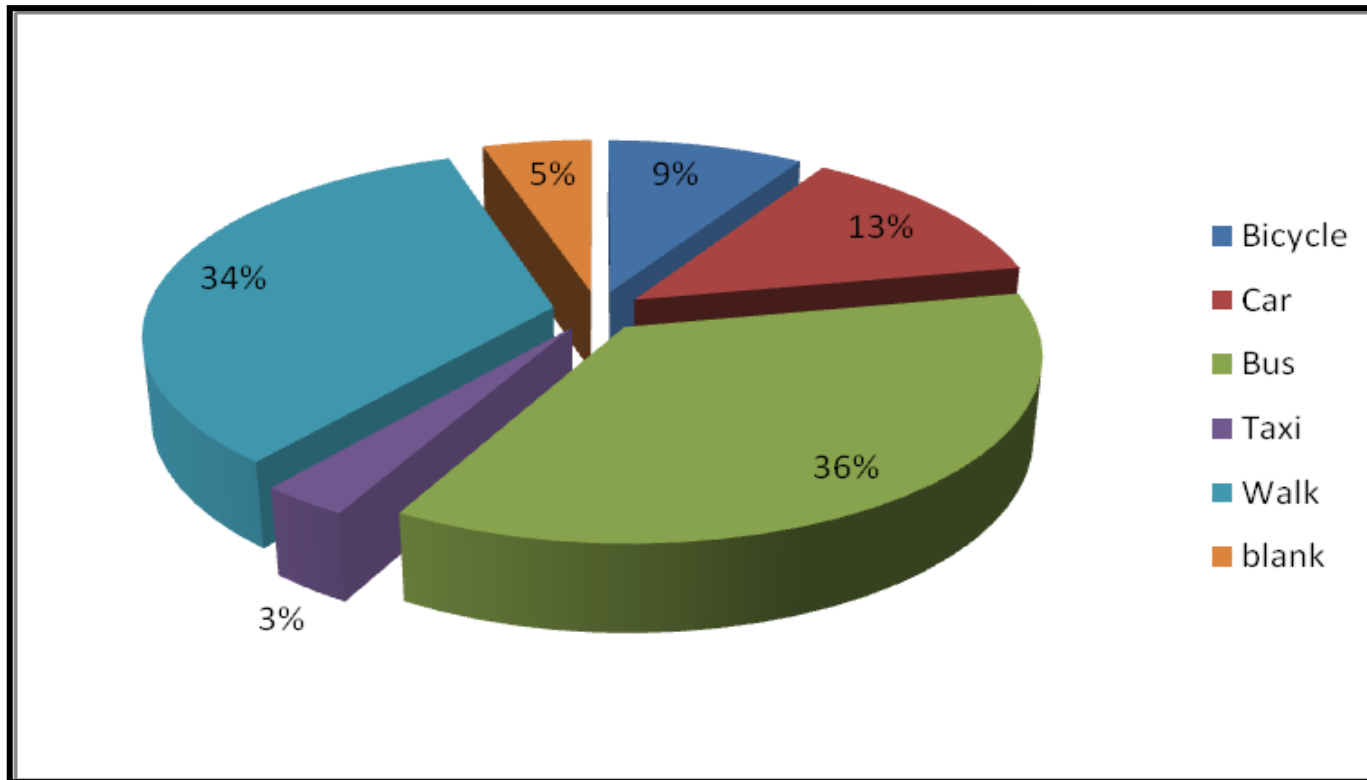
# Accra's statistics

- Increasing human and traffic population
- Greater Accra Metropolitan Area (GAMA) population to hit 4 million by 2013
- Less than 5% of Ghanaians own private motor vehicles
- About 60% of Ghana's vehicles found in GAMA (Registered vehicle population: 1.2 Million)





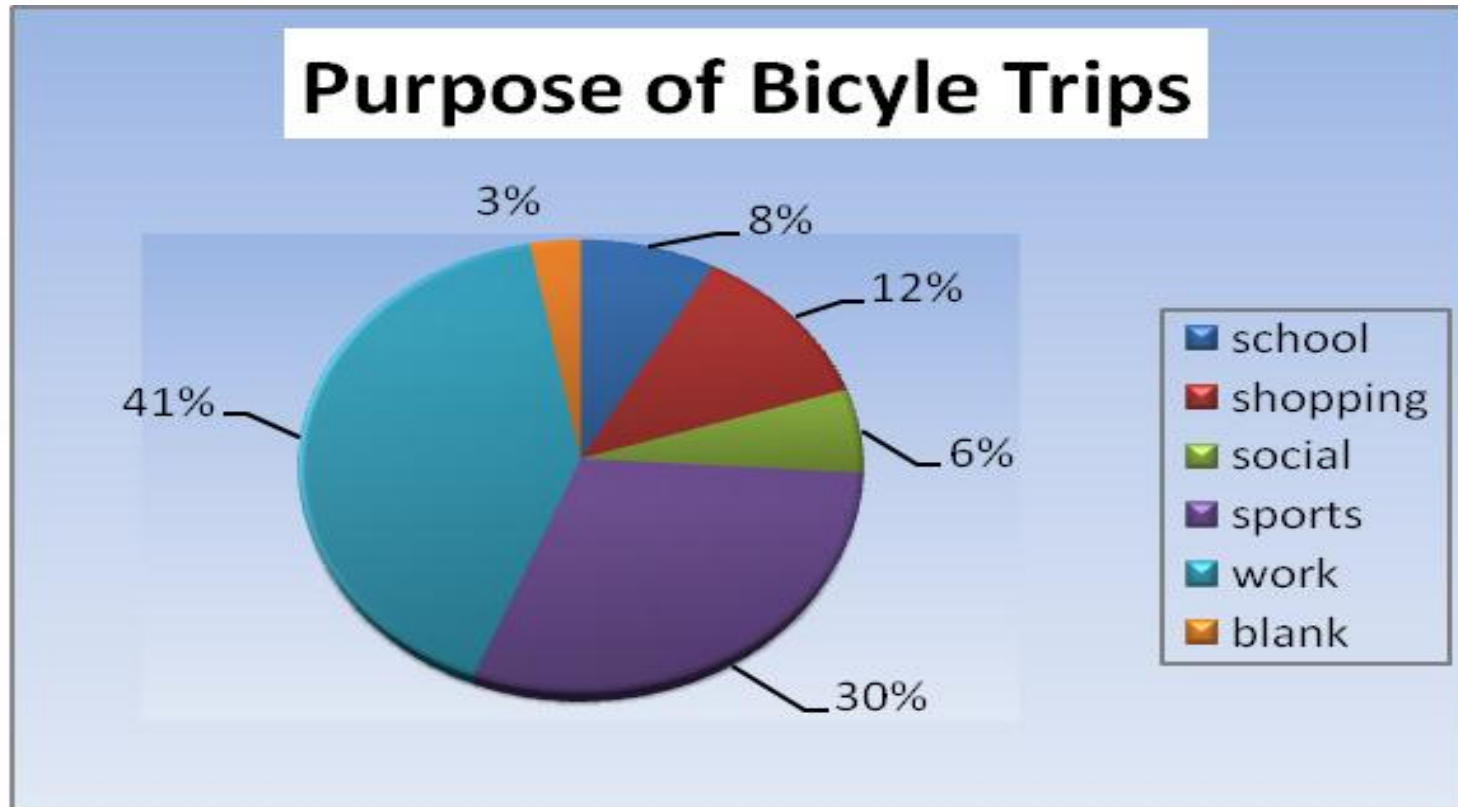
# NMT Mode Share: Accra



In the city of Accra 34% walk while 9% cycle



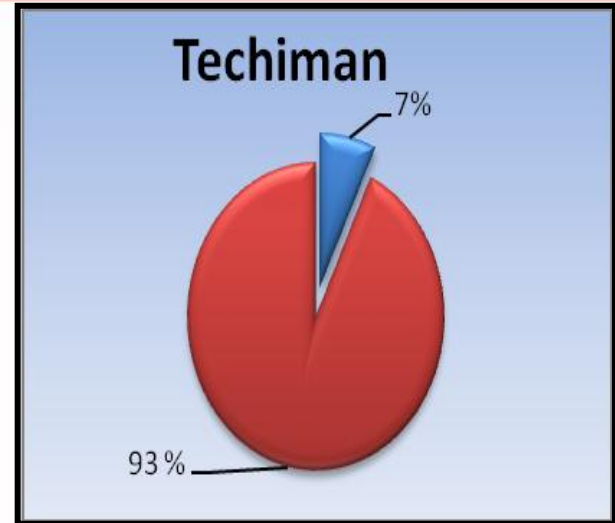
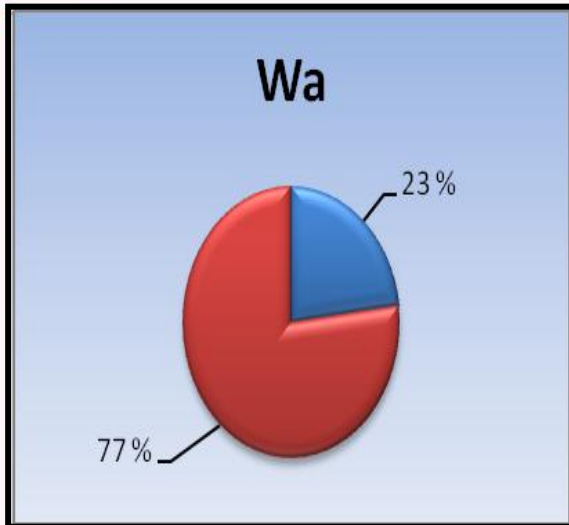
# NMT Mode Share: Accra



Of the 9% cycling in Accra, about 41% cycle to work whilst 30% cycle for recreation.



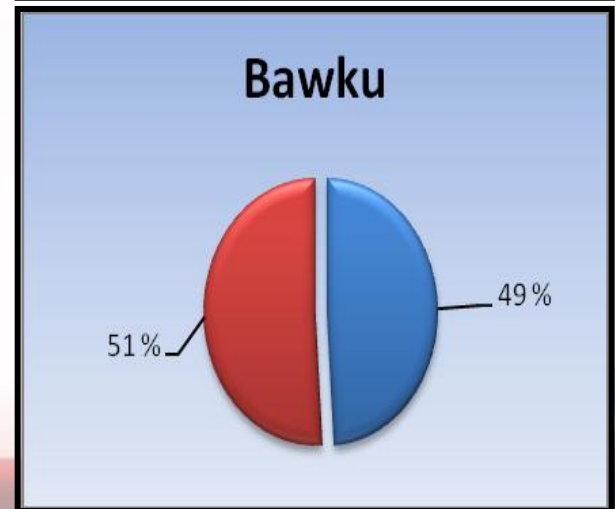
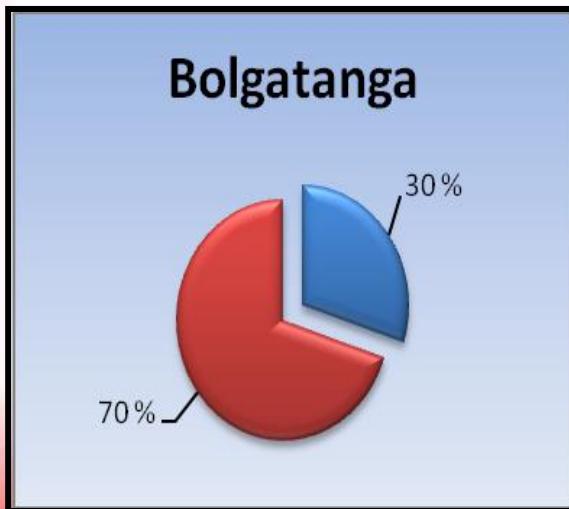
# NMT Mode Share: Other Cities



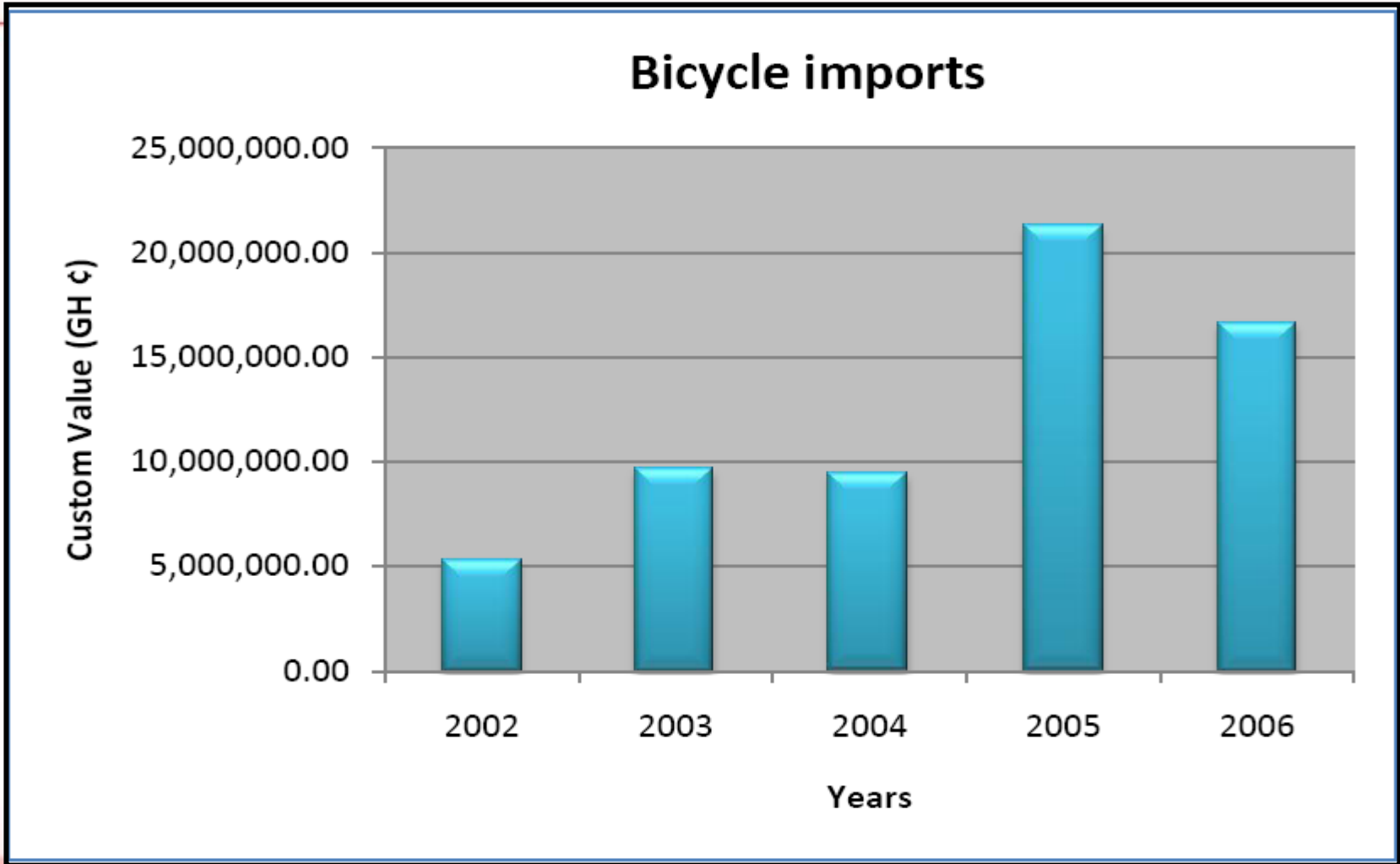
•Other modes  
versus Cycling

■ •Other modes

■ •Cycling



# Bicycle Imports



Source: Government Statistical Service



# Advocacy for people friendly cities in Ghana

- Many road infrastructure designs lacked facilities for NMT
- CCE: Fore front in the fight for NMT facility provision on Ghana's roads
- Organized Bike caravans
- It started with informal negotiations with Project Managers and contractors during construction to add cycle lanes and walkways
- NMT is now a policy aim "Ghana National Transport Policy"
- DUR and GHA now make it as matter of policy to incorporate NMT in their road designs





# Bike Caravans





# Strategic meetings

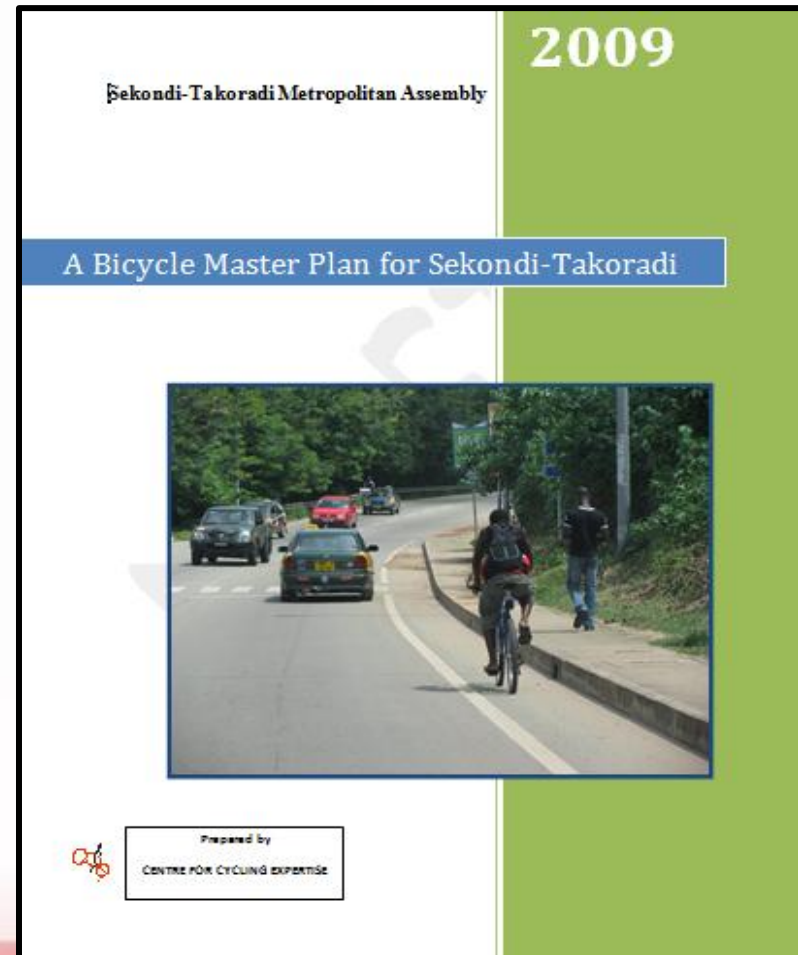
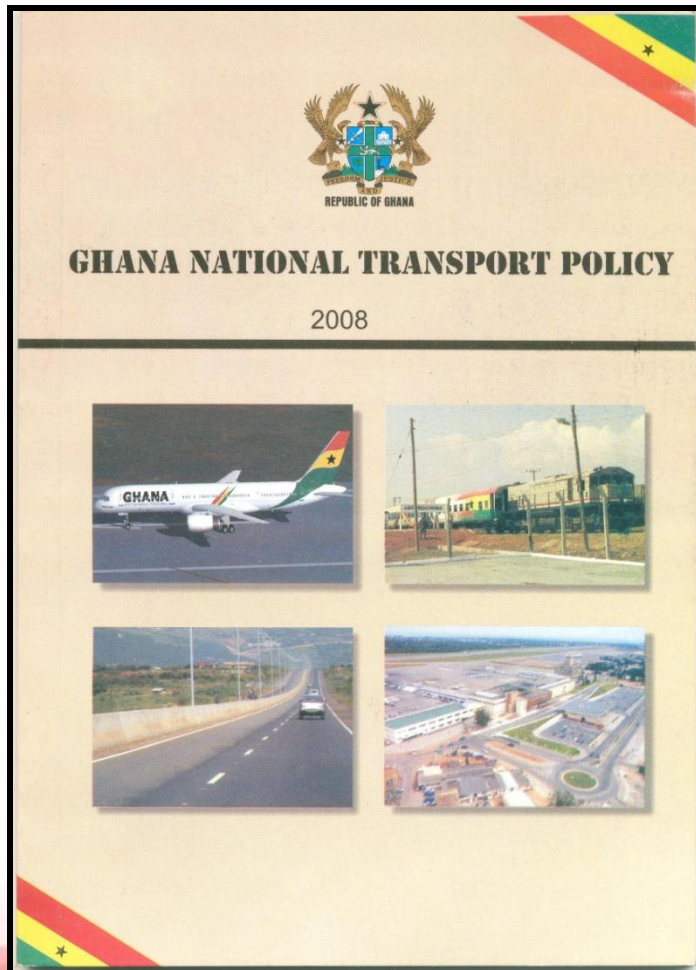




# Strategic People



# Policy and Planning Documentation





# Advocacy Pays!

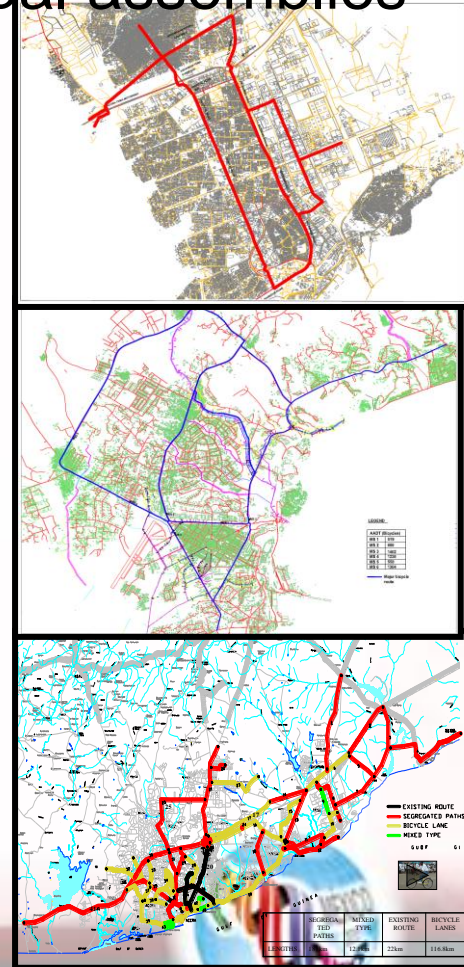


Tetteh Quarshie – Madina Road



# Advocacy: Municipal NMT Master Plans

- In collaboration with CCE the following municipal assemblies have prepared NMT master plans;
- Tema Municipal Assembly
- Sekondi-Takoradi Municipal Assembly
- Accra Metropolitan Assembly



# NMT Hindrances

- Lack of infrastructure: walkways and cycle lanes
- Encroachment of walkways and cycle lanes by hawkers and motorists
- Obstructions within walkways and cycle lanes which make them unsafe
- Poor signage of NMT infrastructure
- Safety issues: impatience of motor drivers, lack of education, etc



# NMT Hindrances

- **Safety issues**

Year	Pedestrians	Car	HGV	Bus	Motorcycle	Pick-up	Bicycle	Other	Total
2002	681	202	171	421	48	57	69	16	1665
2003	724	218	228	341	53	47	91	16	1718
2004	869	246	235	556	100	53	100	14	2173
2005	733	242	200	317	109	76	92	13	1782
2006	770	206	270	382	94	34	84	16	1856
<b>Total</b>	<b>3777</b>	<b>114</b>	<b>1104</b>	<b>2017</b>	<b>404</b>	<b>267</b>	<b>436</b>	<b>75</b>	<b>9194</b>
%	<b>41.08</b>	<b>12.1</b> <b>2</b>	<b>12.01</b>	<b>21.94</b>	<b>4.39</b>	<b>2.90</b>	<b>4.74</b>	<b>0.82</b>	<b>100</b>

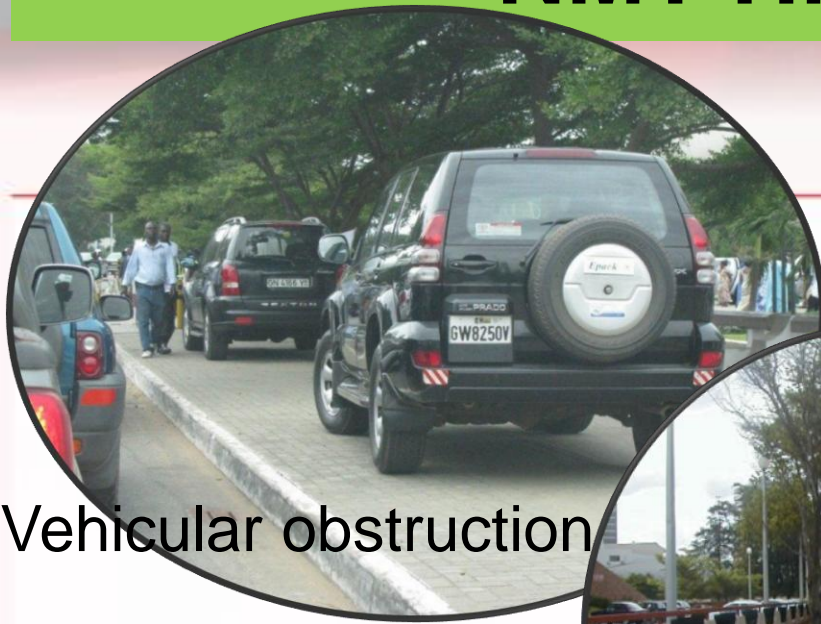
Distribution of Fatalities by Road User Class (2002 – 2006)

- **Pedestrian risk of exposure is high. Accounted for 41% of fatalities.**
- **Cyclists also prone to accidents. Accounts for about 4.7% fatalities**





# NMT Hindrances



Vehicular obstruction



Advert signs



Lack of technical know-how



Kerb obstruction



No NMT infrastructure

# NMT Benefits

## *Improved safety*



## *Reduced pollution*



## *Reduced Congestion*



## *Health Benefits*



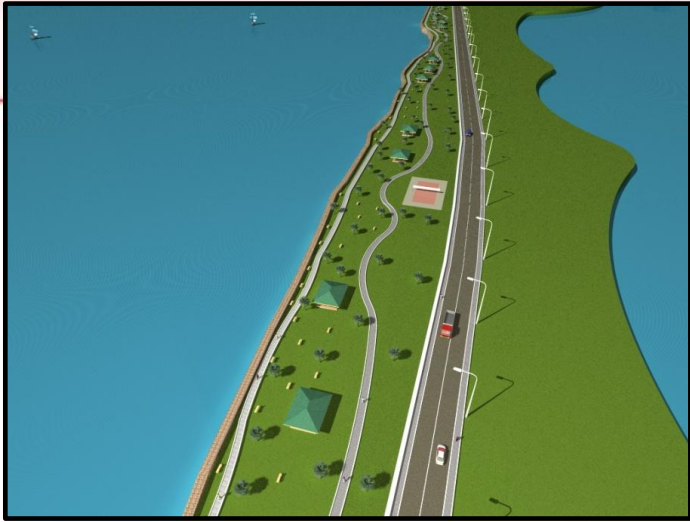


# Current developments

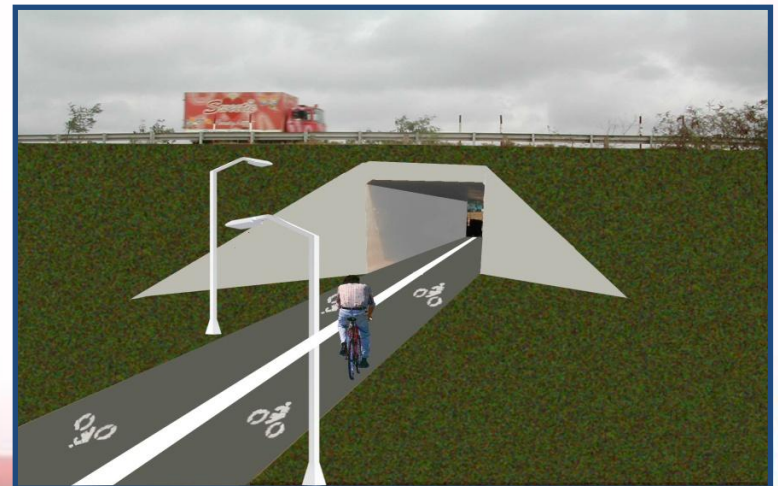
- *Eg. Accra*



# Proposed Concepts



Proposed Design concept for Tema Beach Development



Proposed Conceptual design for Ashaiman Underpass

# Conclusion

- Develop and publish a National NMT Strategy.
- Develop city specific NMT Master plans
- Continued professional education and development for practicing engineers
- Revise undergraduate and graduate engineering programs by incorporating NMT





# Thank you

