

**UNIVERSITY OF LEEDS ALUMNI
ASSOCIATION OF GHANA**

**TRANSPORT GROUP PROJECT
PROPOSAL**

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PROPOSED PROJECTS

- **Concept 1: Work zone safety issues.**
- **Concept 2: Animated book for children on road safety.**
- **Concept 3: Speed limit road marking and artwork on trunk roads in Ghana.**

SPEED LIMIT ROAD MARKING AND ARTWORK ON TRUNK ROADS IN GHANA

- This is an investigation of driver behaviour to the use road marking and artwork as an information and guidance tool on speed limit on trunk roads.
- This will combine the use of art work and an inscription of the speed limit on the carriageway.

INTRODUCTION

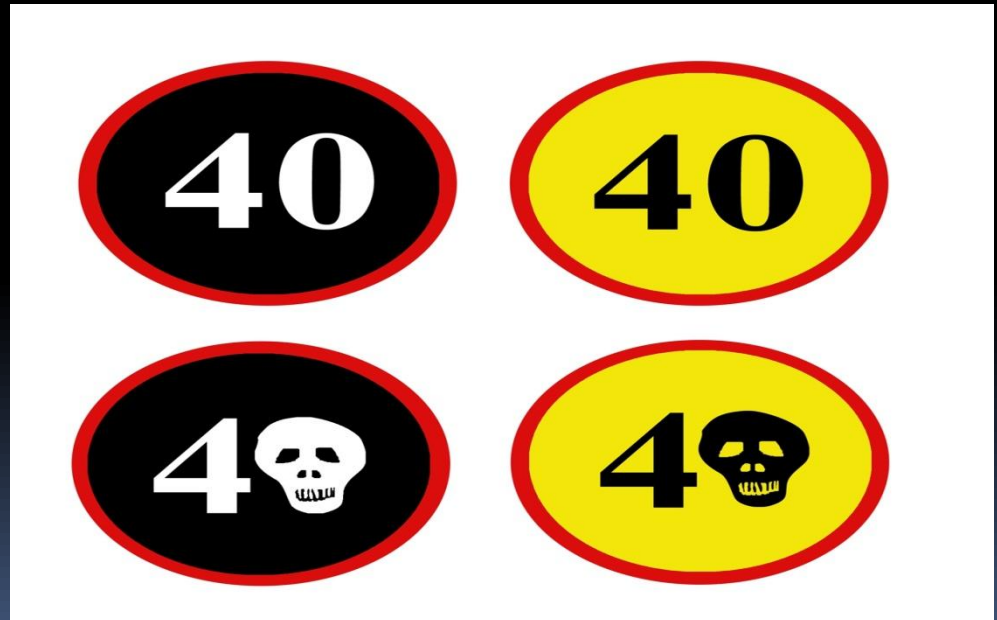
- Transportation plays key role in the socio-economic development of every country including Ghana
- Daily travel for work, education, leisure and other purposes in Ghana are made possible by road transport.
- These advantages however come with costs to society notable among which are road accidents

BACKGROUND TO PROJECT

- Ghana faces tremendous challenges in improving road safety. For instance, in the first three months of 2011, the country has recorded 540 deaths through road crashes already.
- High speeds resulting from lack of knowledge and disrespect for speed limits has been a major cause of road accidents in Ghana.
- About 60% of total road fatalities in 2010 were caused by high speeds on trunk roads.

PROJECT OBJECTIVE

- Changing driver behaviour towards speeding through speed limit road marking and art work on trunk roads in Ghana



PRINCIPLE

- Traffic signs simply perform three basic functions
 - firstly giving orders,
 - secondly to warn and
 - thirdly provide information to motorist and road users.
- These are done with shapes and colours. Speed limit signing is normally in the form of a circle and its function is to give an order.

APPLICATION OF SPEED LIMIT SIGN IN GHANA

- Generally speed limit signs are provided on post and mounted to the side of the carriageway. The speed is indicated with black digits with a red border on a white background.



APPLICATION OF SPEED LIMIT ROAD MARKING IN GHANA

- Road marking speed limit has been used on mountainous roads on the Akwapim ranges between Mamfe to Adeiso and Aperede to Trom roads.



PROPOSED SPEED LIMIT ROAD MARKING



MERITS OF SPEED LIMIT ROAD MARKING

- The speed limit marking is an integral part of the roadway.
- Vandalising of marking is minimised.
- Marking is in the line of vision of the driver, distraction of driver attention can be prevented.
- Incorporation of artwork feature could better impress on driver's mind.
- Marking can be visible in heavy fog, misty or harmattan conditions.

DEMERITS OF SPEED LIMIT ROAD MARKING

- Cultural barriers.
- Periodic repainting required as it may fade with time.
- Potential for disregard of speed limit.

PROPOSED ROADS FOR TEST CASE

- Accra – Tema Motorway
- Mallam – Kasoa Road

METHODOLOGY

- Speed surveys on test road, before and after.
- Inscription of speed limit and art work on test road.
- Driver questionnaire on acceptability or usefulness of measure.

KEY ISSUES FOR ANALYSIS

- Analysis of speeds on the road.
- Analysis of Ghana Highway Authority maintenance provision and effect on road safety.
- Analysis of achievement /performance of the road marking intervention.
- Acceptability by road users.
- Analysis of attitude/behaviour change of drivers towards speeding.

FUTURE ISSUES

- Explore linkages between the driver behaviour and road marking and art work.
- Development of a standardised approach for the measure.
- Replication of the intervention on other roads.

KEY ISSUES FOR DISCUSSION

- Appropriateness of proposed project for speed and accident reduction ?
- Any modifications or changes needed?
- Likely challenges in implementation and solutions?
- Funding issues?