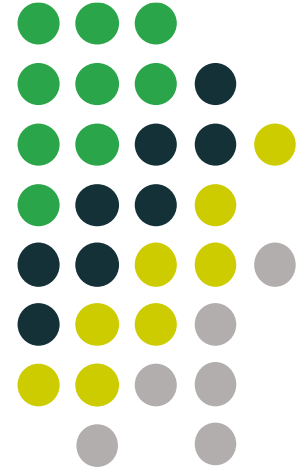


# Research and Innovation in the Region



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# Introduction:

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## Theme:

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### ***Transport Solutions to transform lives: Research & Innovation for safe, efficient and seamless transport***

#### Aims:

- To enhance knowledge management, collaboration and partnership in transport research within the region;
- To influence transport policy decisions through research;
- To promote uptake and update of research findings amongst road practitioners;
- To provide a forum for sharing of experiences and exchange of ideas on innovations amongst transport sector practitioners.



# Intro...

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## Role of Research & Innovation:

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- Tool to achieve accelerated development of transport systems
- Requires capability across market insights, right skills, clear strategies, competitive technologies, effective processes, supportive systems and well managed projects
- MoTIHUD has set out deliberate efforts to develop cost effective, world class infrastructure facilities and services through Research and Development to support the country's socio-economic development.

# Intro..

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## Current Challenges in Roads Sub-sector:

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challenges include:

- Rising construction costs,
- Traffic congestion,
- Premature pavement failures and
- High traffic accidents.
- Coordination/standardization is more complicated in a 2 tier Govt system/Region
- Coordination of various professionals involved – Planners, Engineers, environmentalists etc.

# Research and Innovation

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## Research:

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Research is expected to facilitate:

- Better delivery of more durable roads,
- Lower transport operating costs,
- Shorter travel times,
- Lower accident and fatality levels,
- Improved designs and standards for construction and maintenance for more efficient and cost-effective operations.

# Research and Innovation....

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## Innovation:

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### Expected to:

- Maintaining smarter, efficient roads at reasonable costs.
- Provide more intelligent designs, procurement and construction of infrastructure,
- Infuse intelligence into infrastructure to obtain more and better information from the operation of the network
- Provide intelligent management/use of the assets.

# Research & Innovation....

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## Status in Kenya

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### MTRD Acquisitions:

State of the art testing equipment for testing and data collection include:

- Digital Road profiler;
- Falling Weight Deflectometers (FWD);
- Triaxial equipment; and,
- Accelerated pavement simulator.

# Research & Innovation....

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## Achievements:

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- Collaborative research with the Road Authorities & Private sector - HRBs
- Lab, field trials and demonstration sites for low cost surfacings, single layers pavements and alternative road construction materials
- Several Research Study Reports available;
- Review and updating Pavement Design Guidelines for Low Volume sealed Roads (PDG1);
- Final Draft Pavement Design Guidelines using Do nou Technology; and
- Final Draft Geosynthetics Pavement design Guidelines and RDM III.



# Research & Innovation....

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## Parting Shot:

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- Research & Innovation in the region is very low.
- Work on Collaboration, Coordination
- Linkages between the industry and academia to solve Transport/Road Challenges