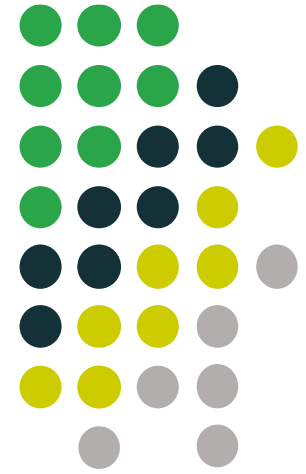


Road Transport Performance Report (2007 – 2017)



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Outline



- Introduction
- Methodology
- Adopted Road Performance indicator framework
- Key findings
- Conclusion
- Recommendations

Introduction

Performance indicators are an essential part of road asset management



- Transport systems influences economic development, safety, security, air quality, environment management, social equity, land use and urban growth.
- In Kenya, transport sector contributes 5% of GDP; similarly 5% for European Union, New Zealand. Road transport is dominant mode.
- Need for robust performance measurement to allocate limited resources efficiently

Introduction

No unified sector wide performance monitoring system in place for the Roads Sector



- Several performance monitoring systems used in road sector – Vision 2030 and Medium Term Plans, Performance Contracting, Agency Strategic plans, Annual Roadworks planning and reporting, Road Management system....
- Transport Sector indicator framework developed in 2007 but not implemented
- This paper aims to:
 - i. synthesize key road transport performance indicators into a unified framework; and
 - ii. evaluate the road transport performance from 2007 - 2017

Methodology



Relied on secondary data sources. Key limitation is availability of data

- Reviewed policy framework – African Union Agenda 2063, Vision 2030, Sustainable development goals, Integrated National Transport policy
- Compared different performance monitoring systems (OECD, 2001; Haas et.al, 2009; Neely, 2005; SLoCAT, 2015; Sustainable Mobility for All, 2017)
- These systems address the social, economic, political, engineering and environmental performance of the road network.
- Both quantitative and qualitative techniques used to compute indicators.
- Benchmarked Kenya performance with comparator counties (Ethiopia, Tanzania, Nigeria) and aspirator countries (India, South Africa, Malaysia, China)

Methodology

Road Transport performance indicator framework adopted for study

- (i) Economic performance and sector output to GDP
- (ii) Revenues and expenditures
- (iii) Reliability and quality of the road network
- (iv) Equity, access and inclusivity
- (v) Efficiency of road network in national and regional logistics
- (vi) Traffic and travel demand
- (vii) Environmental performance –fuel economy, emissions and air quality
- (viii) Road Safety
- (ix) Social and governance performance
- (x) Research, technology and innovation

Performance indicators should be directly tied to user expectations in terms of comfort, safety, accessibility, mobility, price and reliability (Körbe K.. and Koppel, 2012)

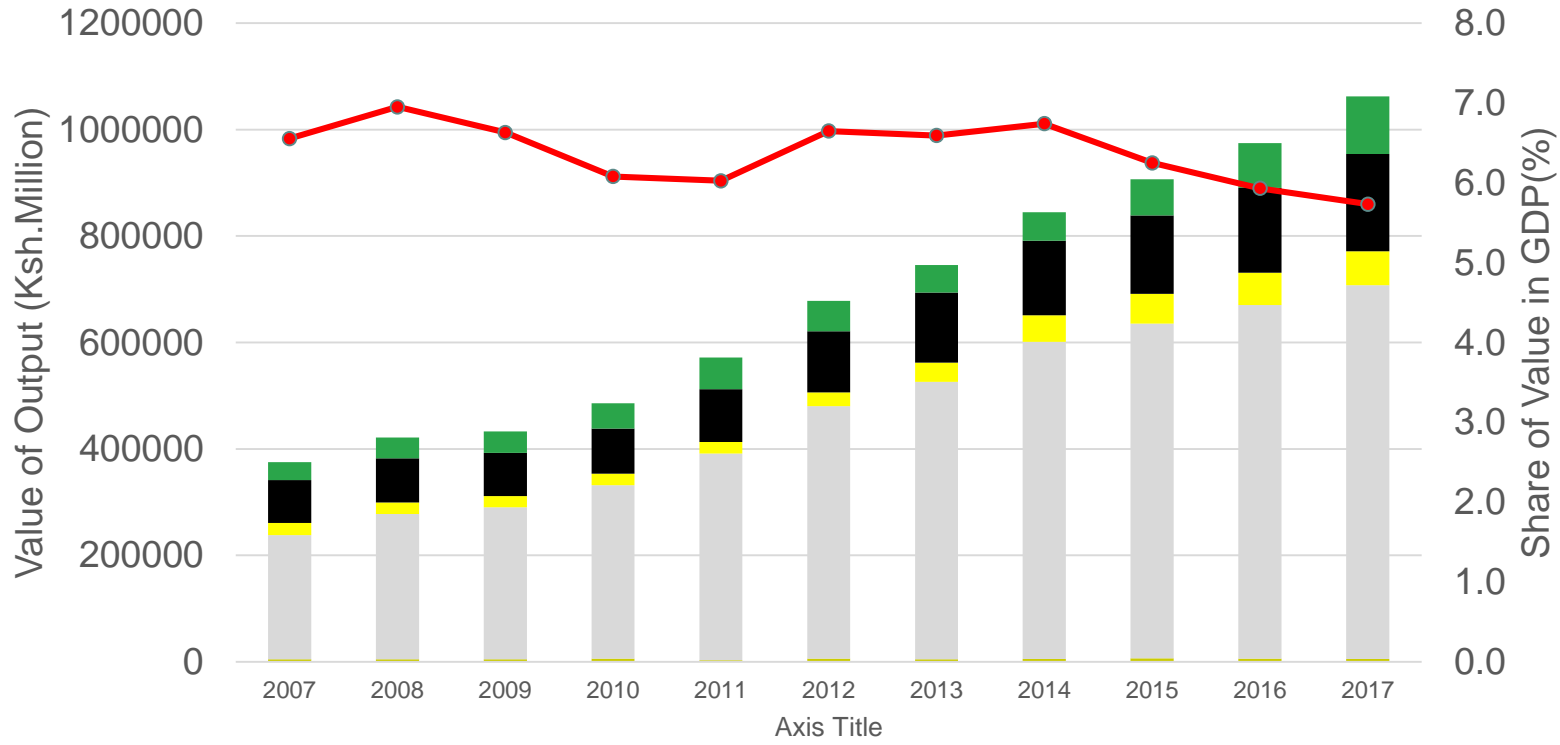


(i) Economic performance

Sector contributes 5 % to GDP but declining; other sectors growing at higher rate eg ICT sector



Value of Output in GDP



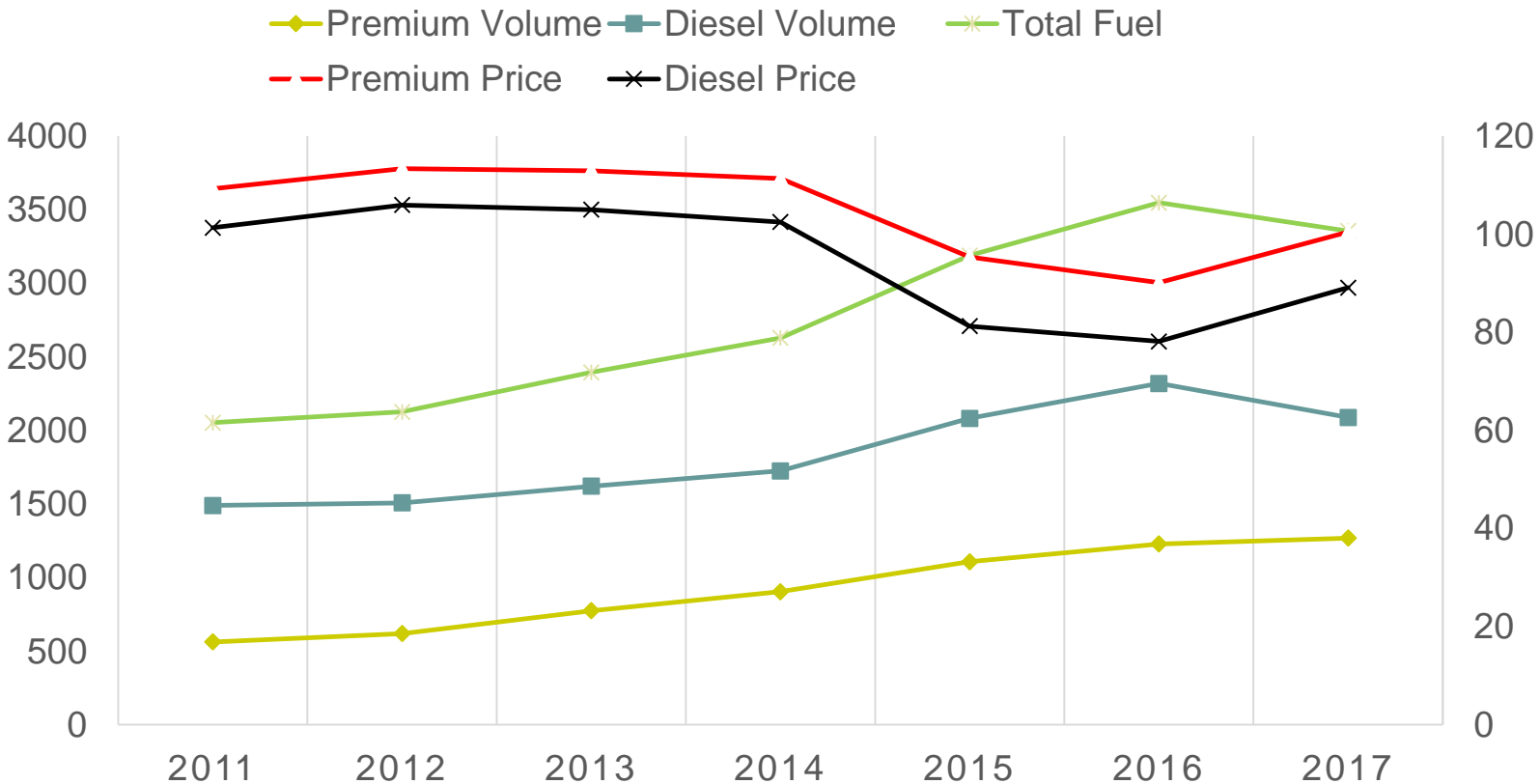
Legend: Railway (yellow), Road (grey), Water (yellow), Air (black), Services incidental (green), GDP (red line)

Economic performance

Consumption of premium and diesel fuel increased while average pump prices declined



Fuel Consumption and Prices

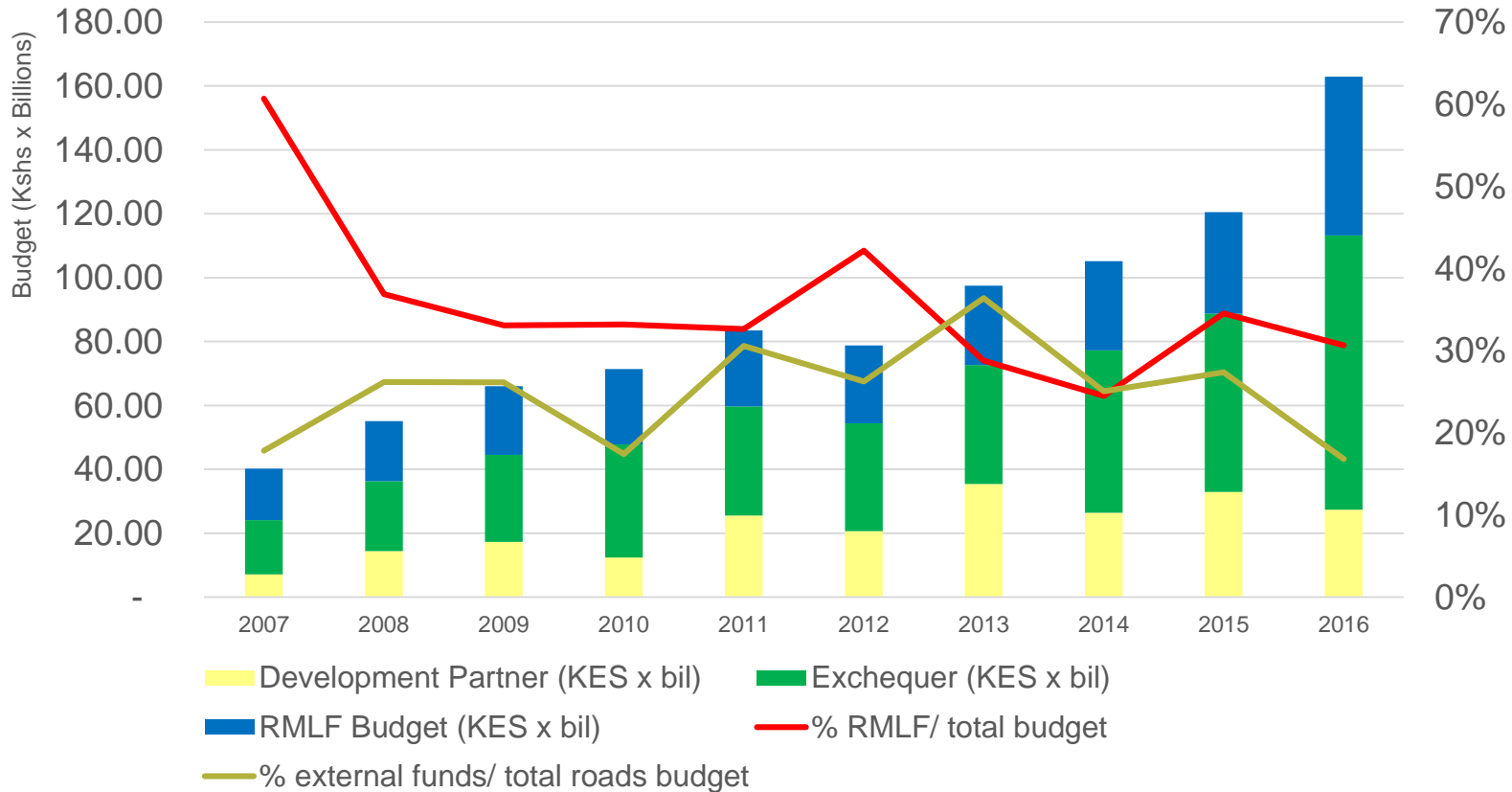


Revenues and expenditures

Roads budgets increased substantially. % of maintenance budgets declined.
% Development partner funds fluctuated



Chart Title



Revenues and expenditures

extra costs imposed on road users can be up to x2 the savings on maintenance.
Investment in road maintenance gives x 2 return of that from new road construction

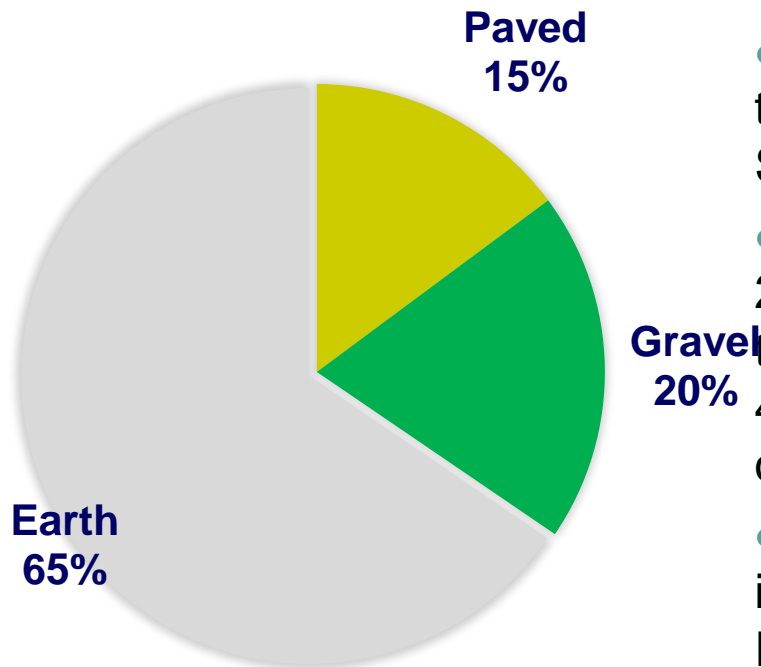
- The funding to Road as % to GDP increased from 1% in 2007 to 2% of GDP (est. 74bil USD, 2017). This is below the recommended 4% in Sessional Paper No. 5 of 2006. China spent 5% of GDP in 2015
- Absorption of roads funds increased significantly from 46% and 67% for RMLF and development in 2007 to 88% and 67% in 2016.
- Over the last ten years, the backlog maintenance has increased significantly.
- annual maintenance is 90billion per year; budgets available for roads are 55% of network needs



Reliability of the road network



It is not economically sustainable to maintain a large unpaved road network. Our road network prone to disruptions in rainy season.

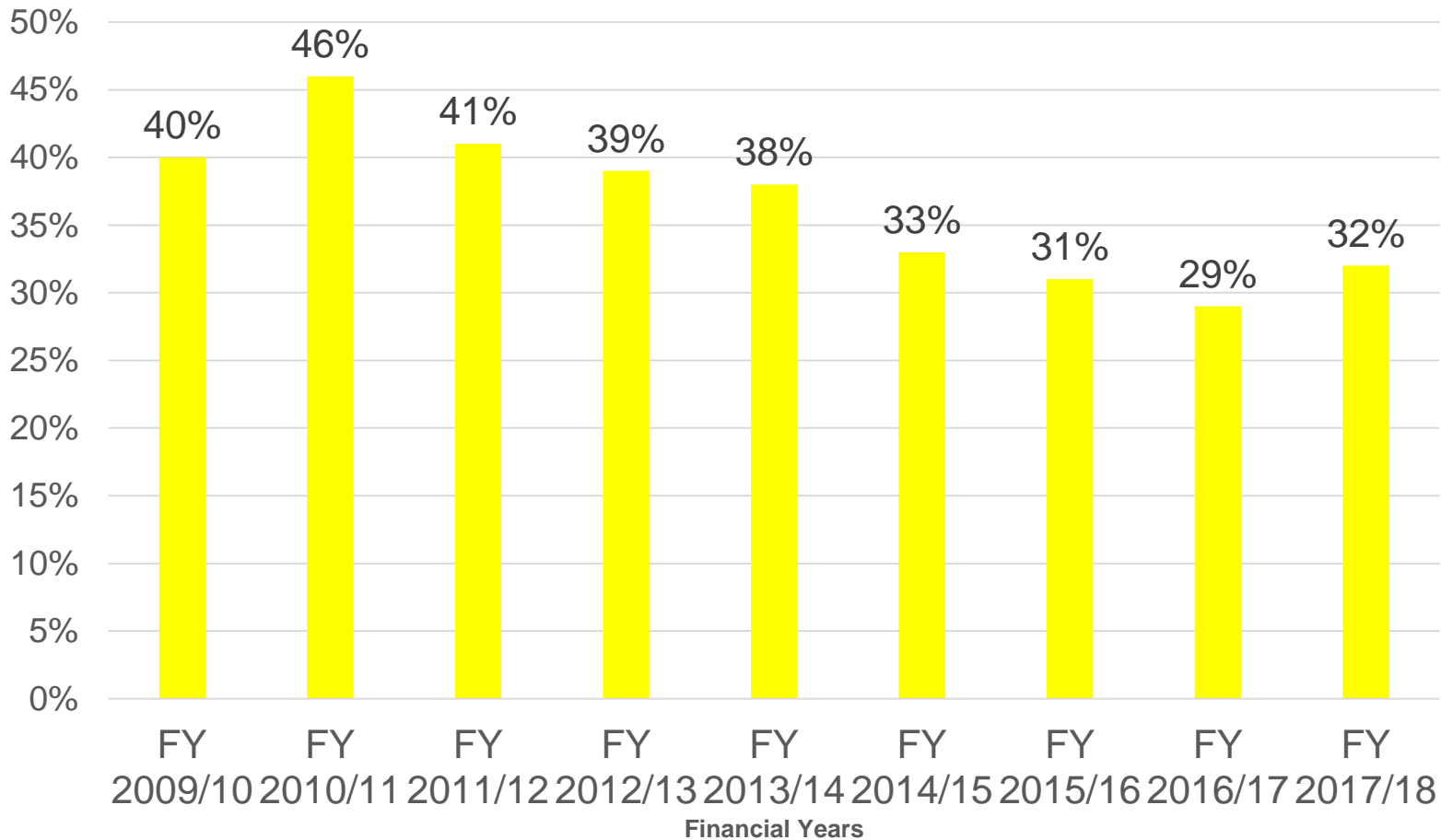


- Kenya has a road network of 161,451km
- Kenya is ranked 32nd in the world in terms of road network length and 3rd in Sub-Saharan Africa
- Kenya has a road density of 21.61km/100km² comparatively better than Ethiopia with road density of 4km/100km². (Road density is FAO Suite of Food Security Indicators)
- 60th in terms of road quality, roads have improved slightly (Global Enabling Trade Report 2016)
- The total length of paved roads per 1,000 inhabitants in Kenya is 21.9km less than the EAC member countries' average of 25.3km. (African Development Bank, 2014)

Reliability of the road network



extra costs imposed on road users can be up to x2 the savings on maintenance.
Investment in road maintenance gives x 2 return of that from new road construction



● Road maintenance coverage

Conclusion

Growth in travel demand has outstripped supply.

The last 10 years has seen improvements in road transport performance especially on the Northern Corridor (lower travel times and transport costs).

Constraints which require urgent action:

- Inadequate funding for road maintenance and development (need to increase network coverage and also increase paved road network to enhance network reliability)
- Severe traffic congestion in urban areas
- High traffic crash fatality rate
- Need to reduce by 50% the average CO2 emission and fuel consumption by the year 2050
- Low participation of women, youth and persons with disabilities in disabilities in the sector



Recommendations



Establish a Road transport performance monitoring framework; indicators linked to user expectations in terms of comfort, safety, accessibility, mobility, price and reliability

Enhance road network quality and reliability by increasing maintenance coverage and increasing paved road network.

Financing. Increase budgets for road maintenance and development to 4% of GDP as recommended in Sessional Paper No. 5 of 2006

Public transportation. invest in mass rapid transport systems, other transport modes (commuter rail).

Emissions. implement policy instruments and technologies to recommended fuel economy and emissions standards.

Road safety. Scale up interventions to reduce road fatalities

Leverage ICT to enhance road transport services.



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