TRANSPORTATION INFRASTRUCTURE DEVELOPMENT IN AFRICA: IMPLICATIONS AND OPPORTUNITIES FOR COMMUNITY ENGAGEMENT

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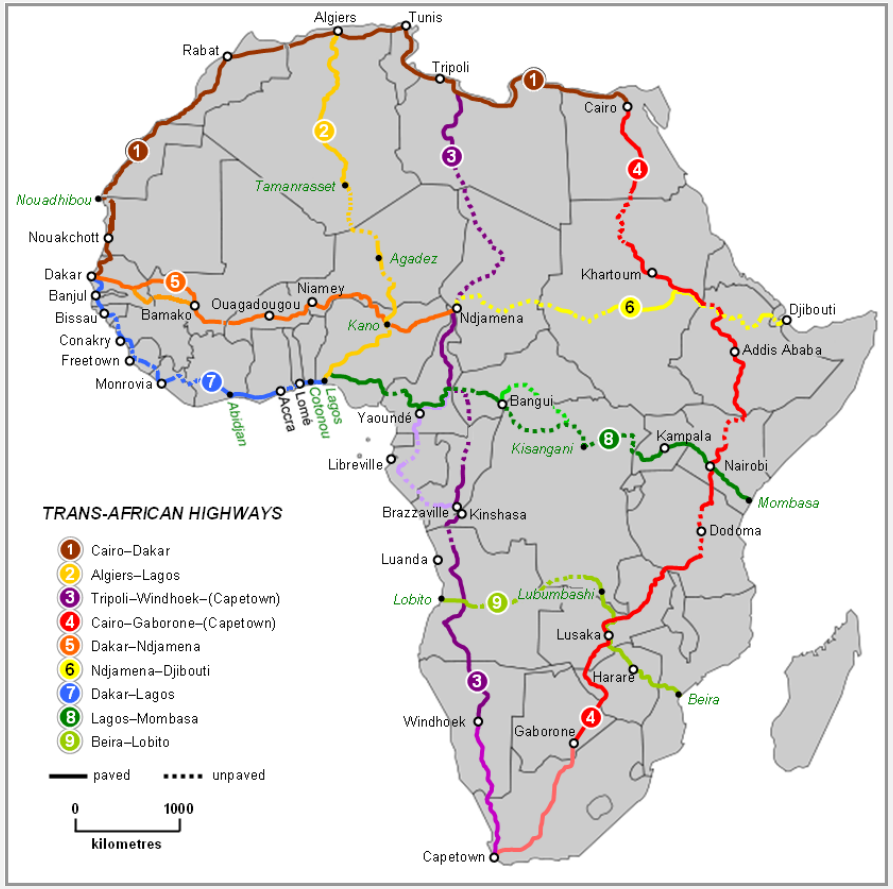
STRUCTURE OF PRESENTATION

- Transportation Infrastructure in Africa – The Changing Landscape
- Sustainable Development Goals and Transportation Infrastructure
- Current Development Trends (Starting 2010)
- Urban Transportation Projects and the Role of the Community
- Implications: Land Acquisition, Employment and Community Engagement
- Conclusion

TRANSPORTATION INFRASTRUCTURE IN AFRICA

O.R.Tambo International Airport, Johannesburg

6th October Bridge, Cairo

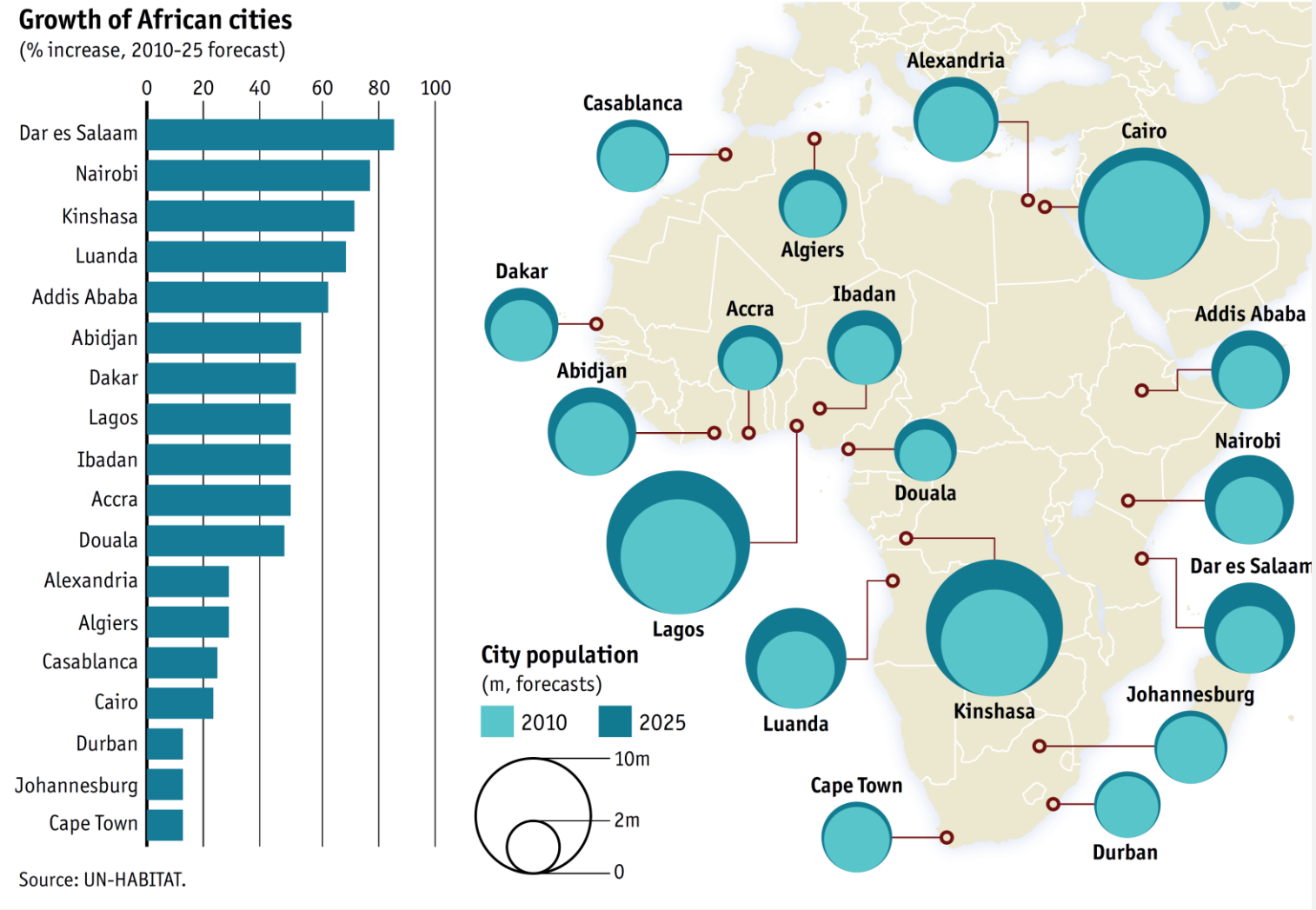


Proposed Trans African Highway Network

Mombassa – Nairobi Railway Network, Kenya

Luanda International Airport, Angola

THE CHANGING LANDSCAPE



- Over the **next ten years**, there will be a distinct **network of urban spaces** across the entire landmass.
- Sprawling cities present both opportunities and challenges for urban development and the communities witnessing it, especially in countries which are mostly rural.
- **Multiplicity of stakeholders** and **conflicts in their interests** will soon be a major challenge in the attempt to further augment accessibility across the landmass.

SUSTAINABLE DEVELOPMENT GOAL

- Investment in infrastructure and innovation are crucial drivers of economic growth and development.
- With over half the world population now living in cities, mass transport and renewable energy are becoming ever more important, as are the growth of new industries and information and communication technologies.
- Technological progress is also key to finding lasting solutions to both economic and environmental challenges, such as providing new jobs and promoting energy efficiency.
- Promoting sustainable industries, and investing in scientific research and innovation, are all important ways to facilitate sustainable development.
- More than 4 billion people still do not have access to the Internet, and 90 percent are from the developing world. Bridging this digital divide is crucial to ensure equal access to information and knowledge, as well as foster innovation and entrepreneurship.

Reduction in pollution levels by use of affordable and clean energy

Increasing mobility through public transit which runs on clean energy.

Investment in ICT at both the regional and urban level.

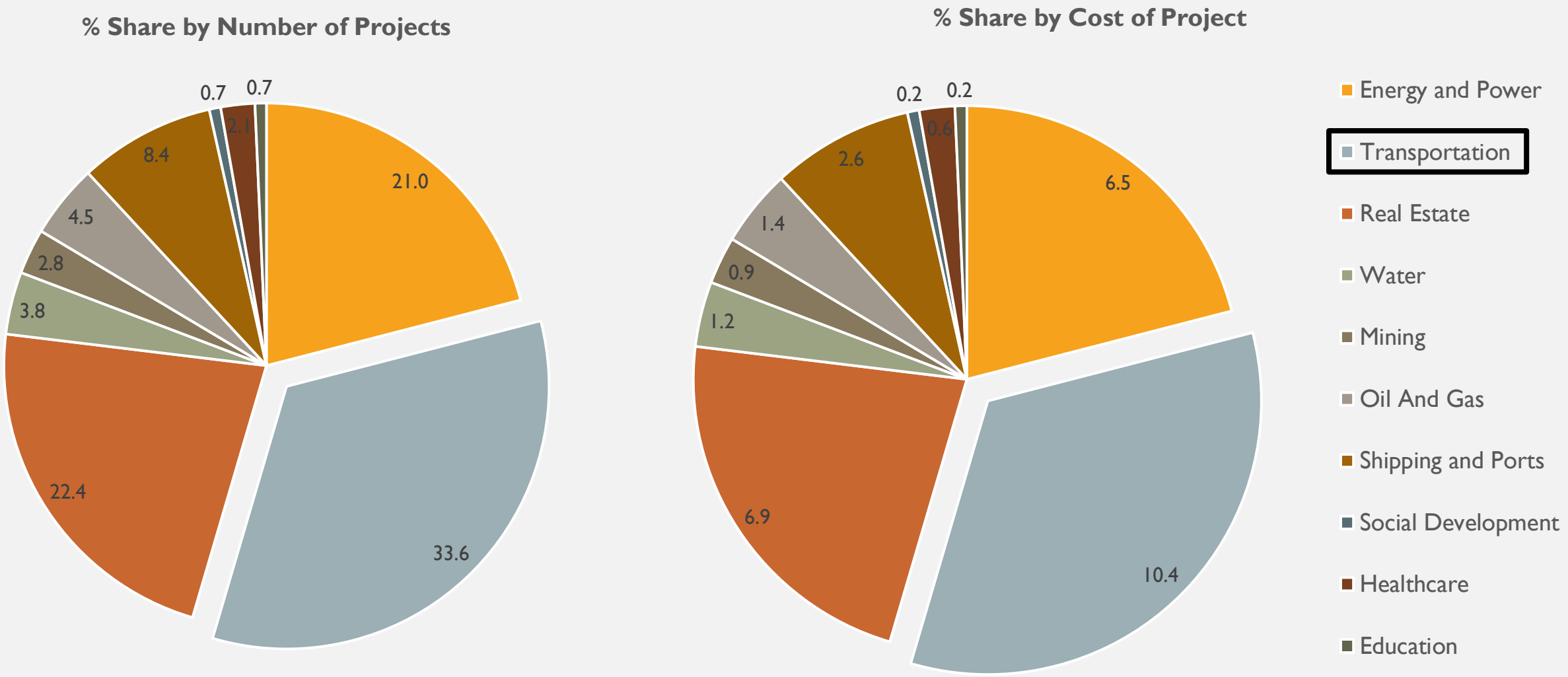
TRANSPORTATION INFRASTRUCTURE: CONNECTIONS WITH SDGs

Affordable public infrastructure cutting across the formal and informal sectors of the economy.

Development processes guided by environmental and social impact assessments.

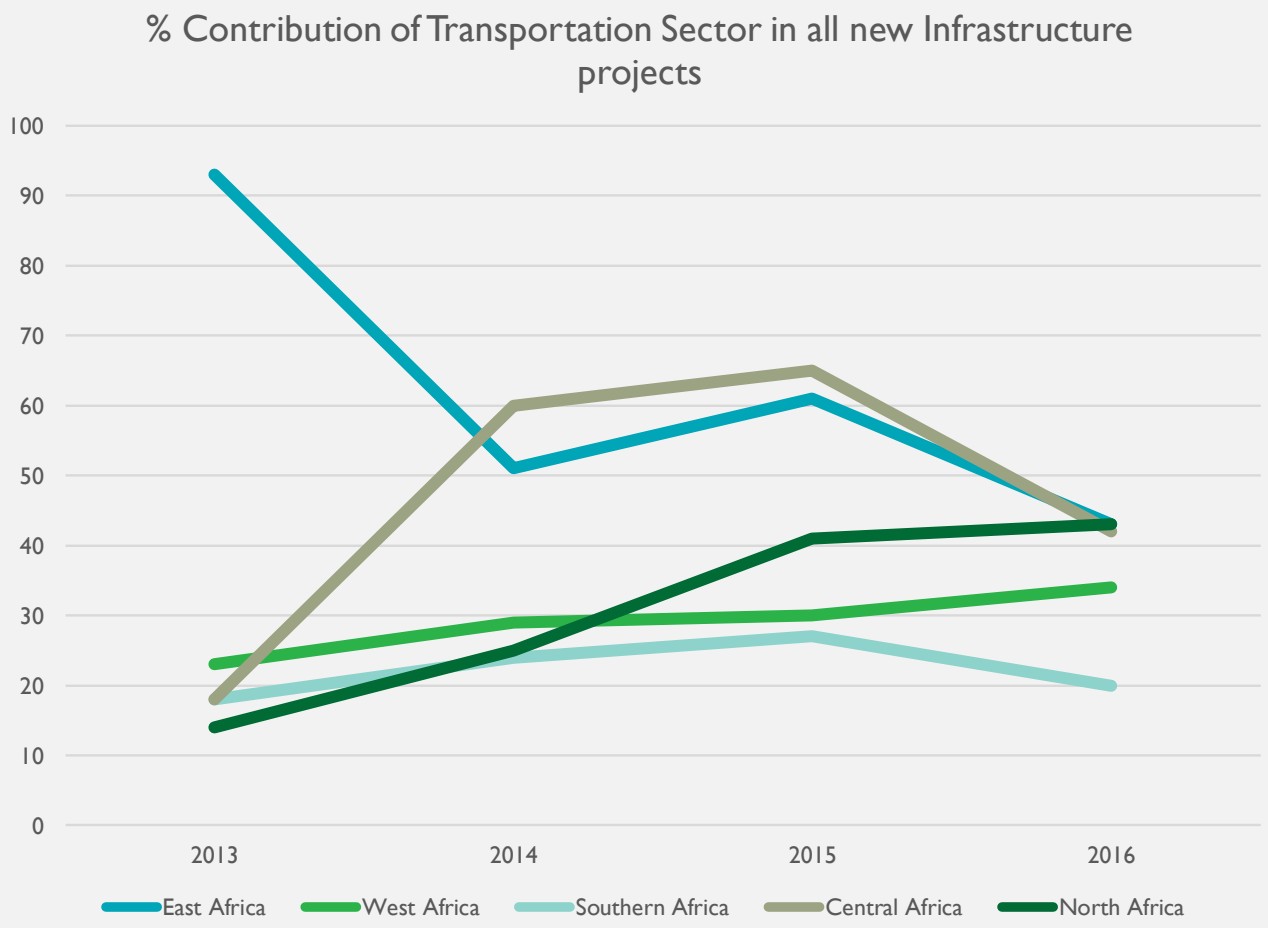
Stakeholders coming together and working in collaborative partnerships that voice the public consensus.

CURRENT DEVELOPMENT TRENDS IN TRANSPORTATION



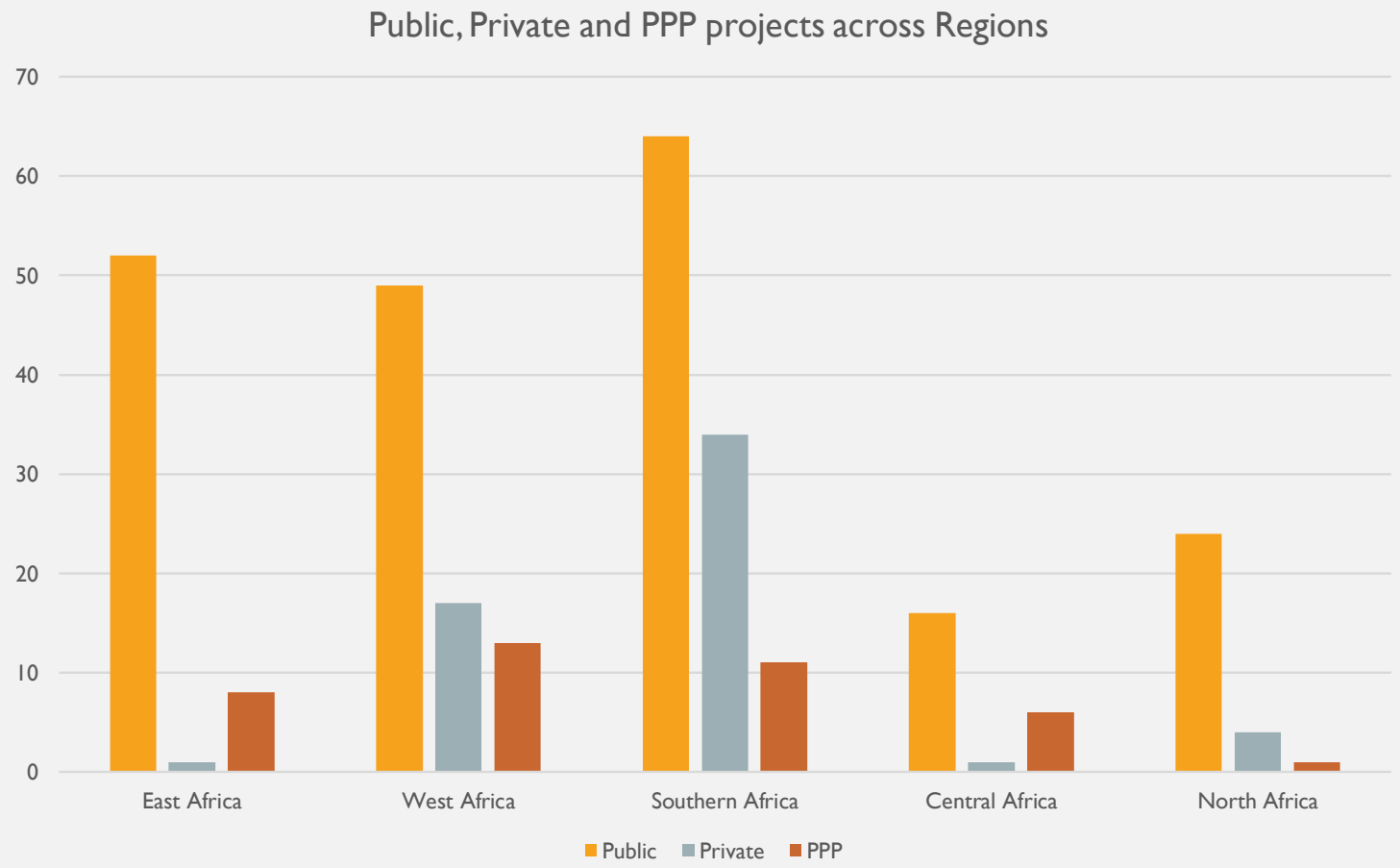
Source: Deloitte Trends Analysis '16

CURRENT DEVELOPMENT TRENDS IN TRANSPORTATION



Source: IMF 2015

CURRENT DEVELOPMENT TRENDS IN TRANSPORTATION



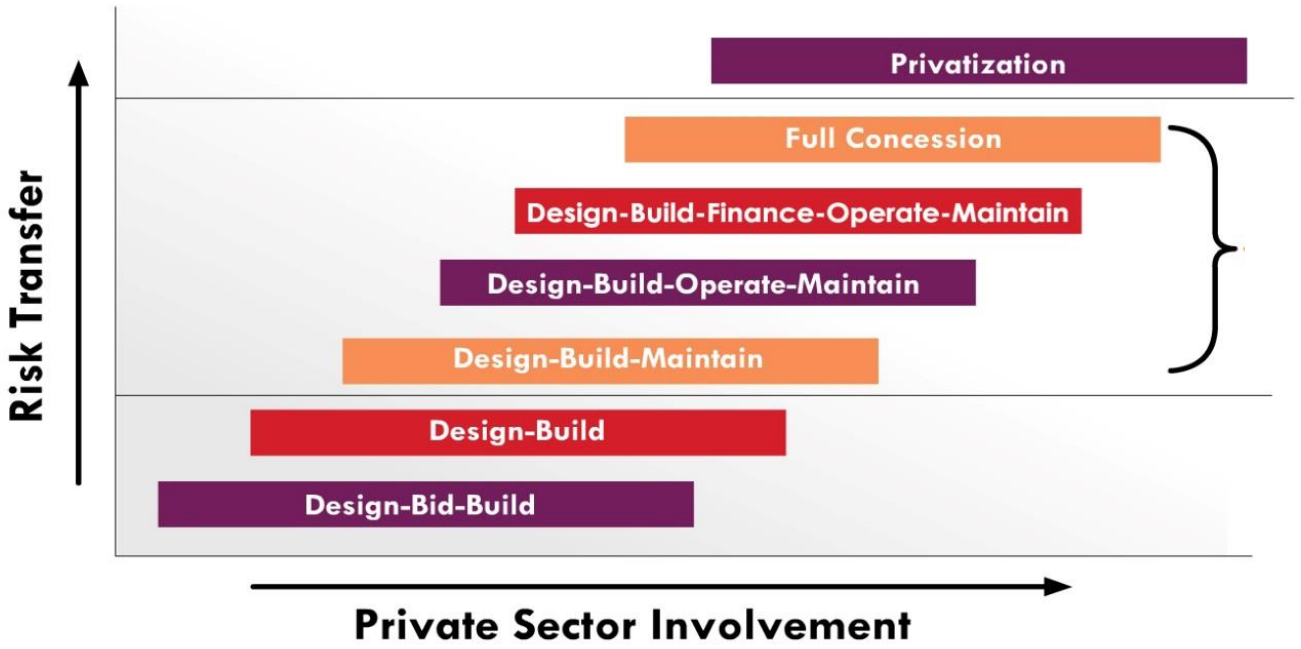
- Across all the regions, **public delivery** has been the prominent mode of service delivery in recent years.
- However, the increased amounts of PPP projects are an **opportunity** towards collaborative investments from the private sector.

Sources of Funding	Percentage (%)
National Governments	28.3
Private Domestic Investment	14
International DFIs	13.6
China	12.6
African DFIs	9.8

Source: IMF 2015

CURRENT TRENDS IN TRANSPORTATION – SERVICE DELIVERY

- Increased Opportunities for Community Engagement
- More Accountability in Service Delivery
- Transfer of Risk to Private Sector implies an increase in need of democratic frameworks to facilitate infrastructure development.



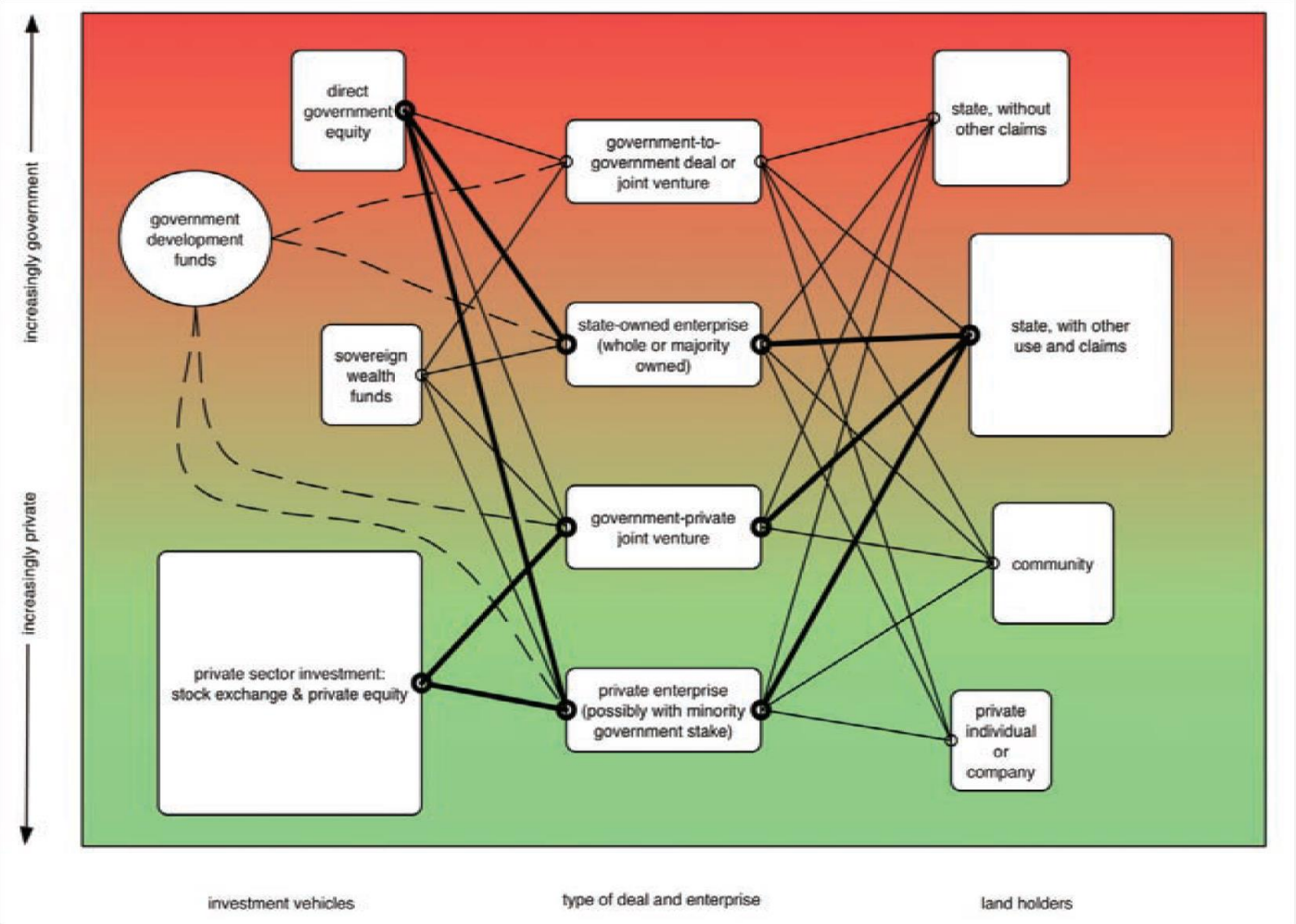
PUBLIC PRIVATE PARTNERSHIPS

- Is involvement of the **Private Sector** beneficial and in the best interest of the community?
- Is the involvement of the **Private Sector** along with the **Public sector** better?

Image Source: "Social Welfare Analysis for Alternative Investment Public-Private Partnership Approaches." Transportation Research Part A: Policy and Practice, Vol. 88 (2016): 86-103, Rick Geddes, Omid M. Rouhani and Oliver Gao.

URBAN TRANSPORTATION PROJECTS – LAND ACQUISITION

- The linkages in this systems diagram help in understanding complexity of development processes and the multiplicity of agents which acquire land primarily held by private individuals, enterprises, communities and the state.



Source: Implications of Acquisition of Land for Special Economic Zones: A Case Study of NMSEZ, Shamil Khedgikar (B.Planning Thesis 2015, SPA Delhi)

URBAN TRANSPORTATION PROJECTS – CASE STUDIES (OVERVIEW)

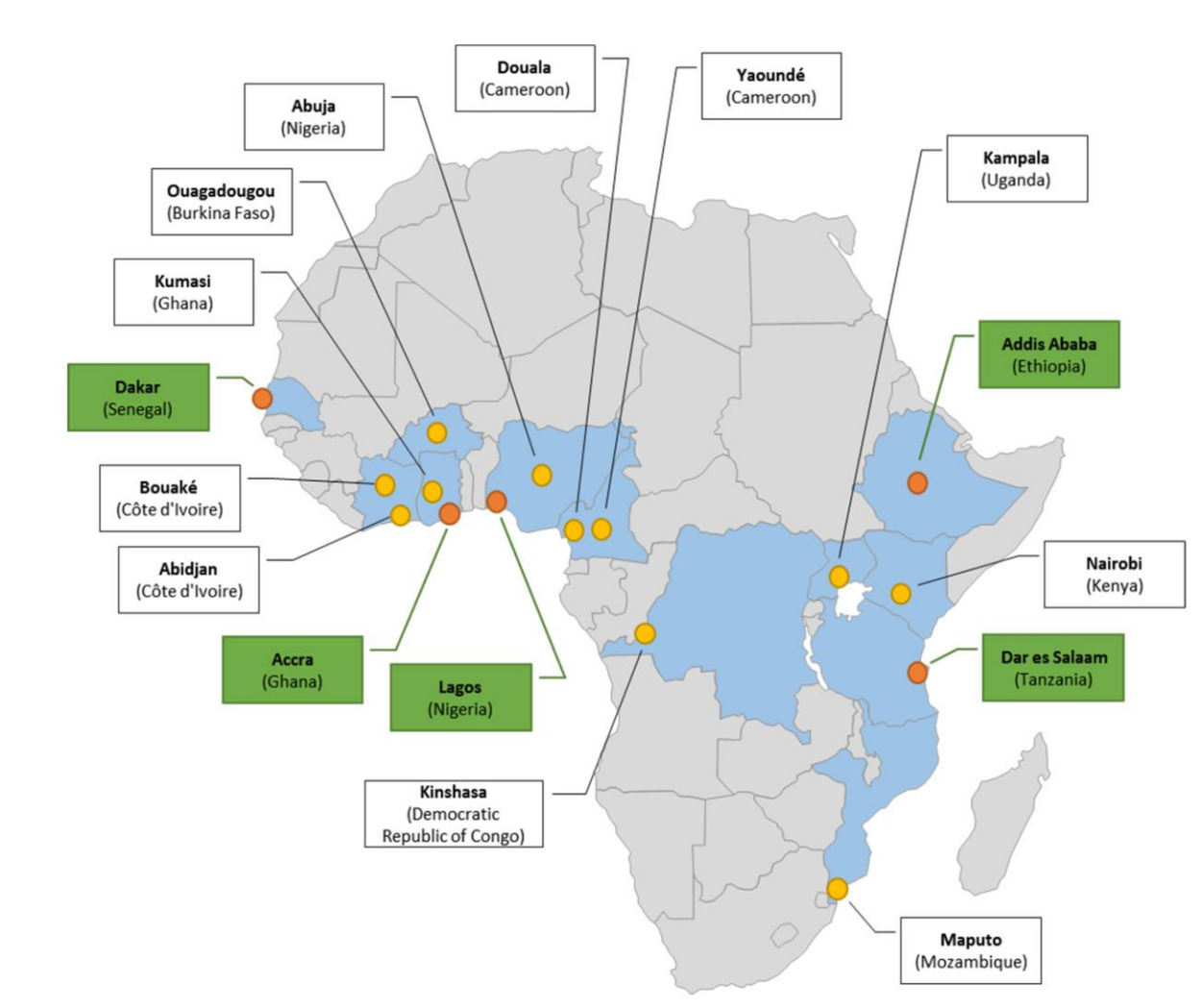
Region/Country	Name	Value in billion US Dollars
East Africa		
Kenya	Mombasa-Nairobi Railway	3.8
Ethiopia	Awash-Woldia-Hara Gebeya Rail Project	1.7
Ethiopia	Mekelle-Hara Gebeya-Woldia Railway Project	1.5
West Africa		
Nigeria	Calabar-Kastina-Ala Super Highway Road Project	3
Nigeria	East-West Road Project	2.3
Southern Africa		
Angola	Luanda International Airport	3.8
Central Africa		
Gabon	Libreville - Port-Gentil Road Project	0.6
Cameroon	Yaounde-Douala Highway	0.5
Northern Africa		
Algeria	Hauts-Plateaux Motorway	8.9
Morocco	Tangier - Casablanca Rail	4.1
Morocco	Reseau Ferroviaire Rapide Project	2.8
Algeria	Tissemlit-Boughezoul Rail	2.1
	Total	35.1

Source: OECD 2016

- Funding and ownership is defined as the country where the financier or owner of the project is domiciled. In line with ownership, Governments are increasing their funding of projects, funding a total of 81 projects (28.3%) (both undergoing and pipeline) in the period under review.

- A balance in regional and urban transportation projects is a critical aspect of increasing connectivity uniformly across the continent. Prioritizing on ownership and regulation based on the scale of the project is an important consideration to strike a balance of investment and ultimately development across the region.

URBAN TRANSPORTATION PROJECTS



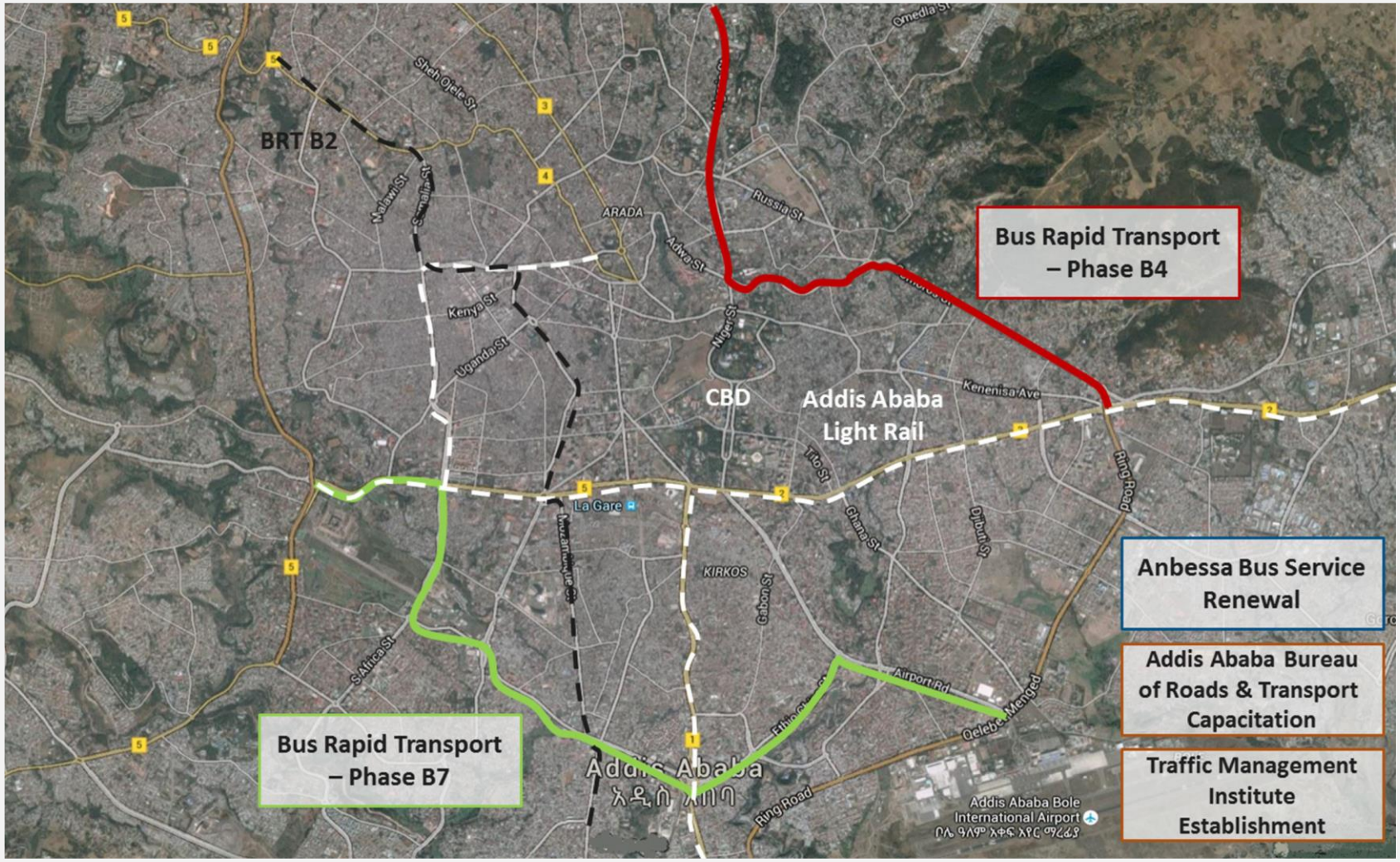
- **Diagnostic Study and Project Development/Investment Pipeline for Urban Transport in Sub-Saharan Africa.**
- 2 Stage Selection process for shortlisting critical cities in need of integrated transportation networks.
- EASI Framework (Enable, Avoid, Shift, Improve) at the heart of creating improved transportation systems

- **Priorities for Shortlisting Cities**

1. Transportation Status Quo
2. Projects in Development
3. Institutional Capacity and support
4. Policy and Regulatory environment
5. Funding and economic climate

Source: OECD 2016

ADDIS ABABA - ETHIOPIA



Planning, Design, and Construction of Bus Rapid Transport Corridor Phases B4 and B7
Priority BRT operations servicing high-density suburbs to the north and south of the CBD.

Fleet Renewal and Expansion for Anbessa City Bus Services
Acquisition of 700 new buses as part of wider program to modernise and expand systems and infrastructure

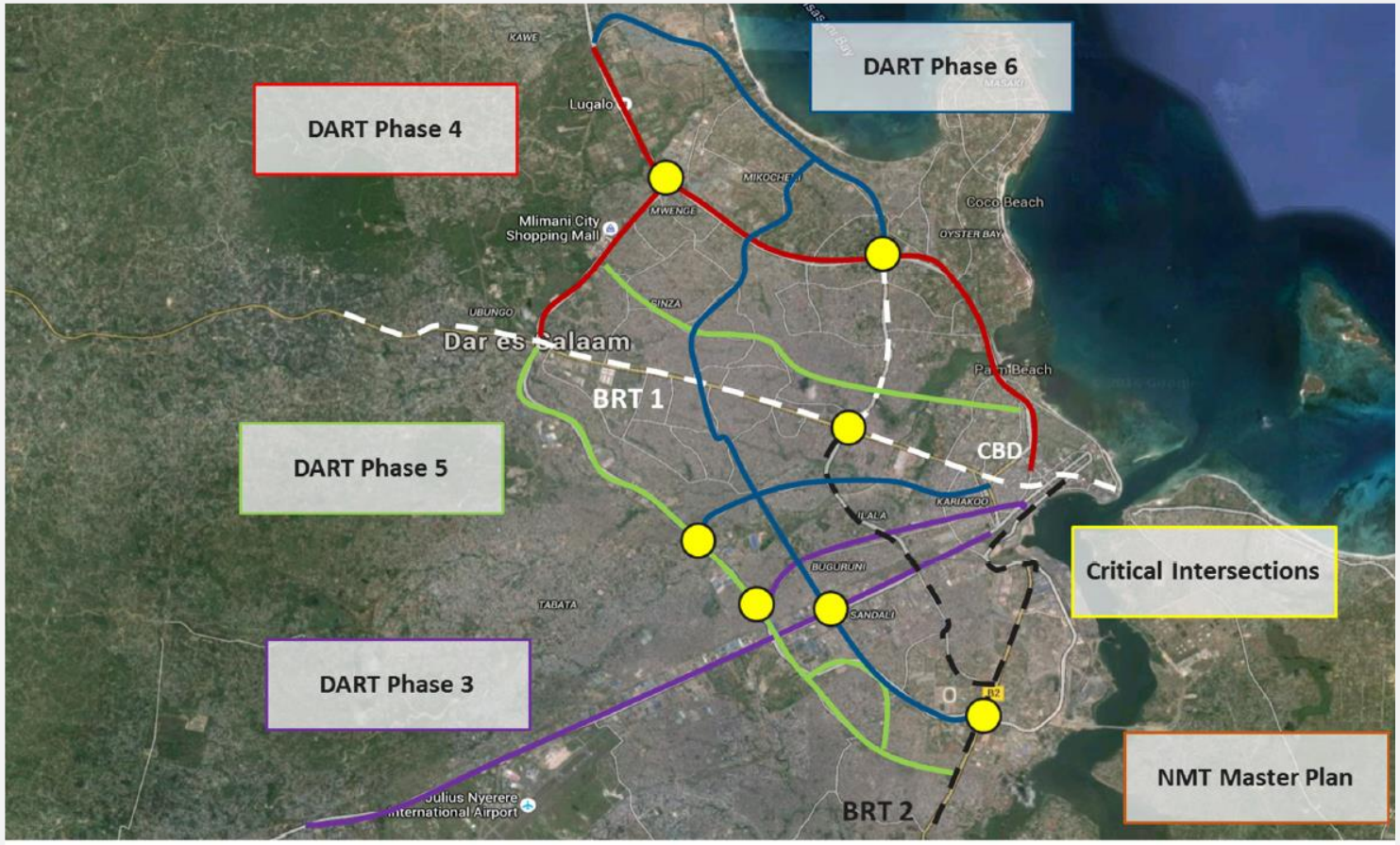
Capacity Development and Technical Support to Government Urban Transport Entities
Further capacity development at the Addis Ababa Bureau of Roads & Transport, and support to the establishment of the Traffic Management Institute

DAKAR - SENEGAL

Construction of the BRT Red Line (Phase 1)
20km priority bus service with dedicated lanes, servicing one of Dakar's busiest commuter corridors connecting CBD with fast-growing outer urban areas

Development of Phase 1 of the Train Express Régional (TER)
A National Flagship Project: an upgrade and extension of existing line to a 55km electric express rail service connecting the CBD to high growth outer urban areas and new airport

DAR ER SALAAM - TANZANIA



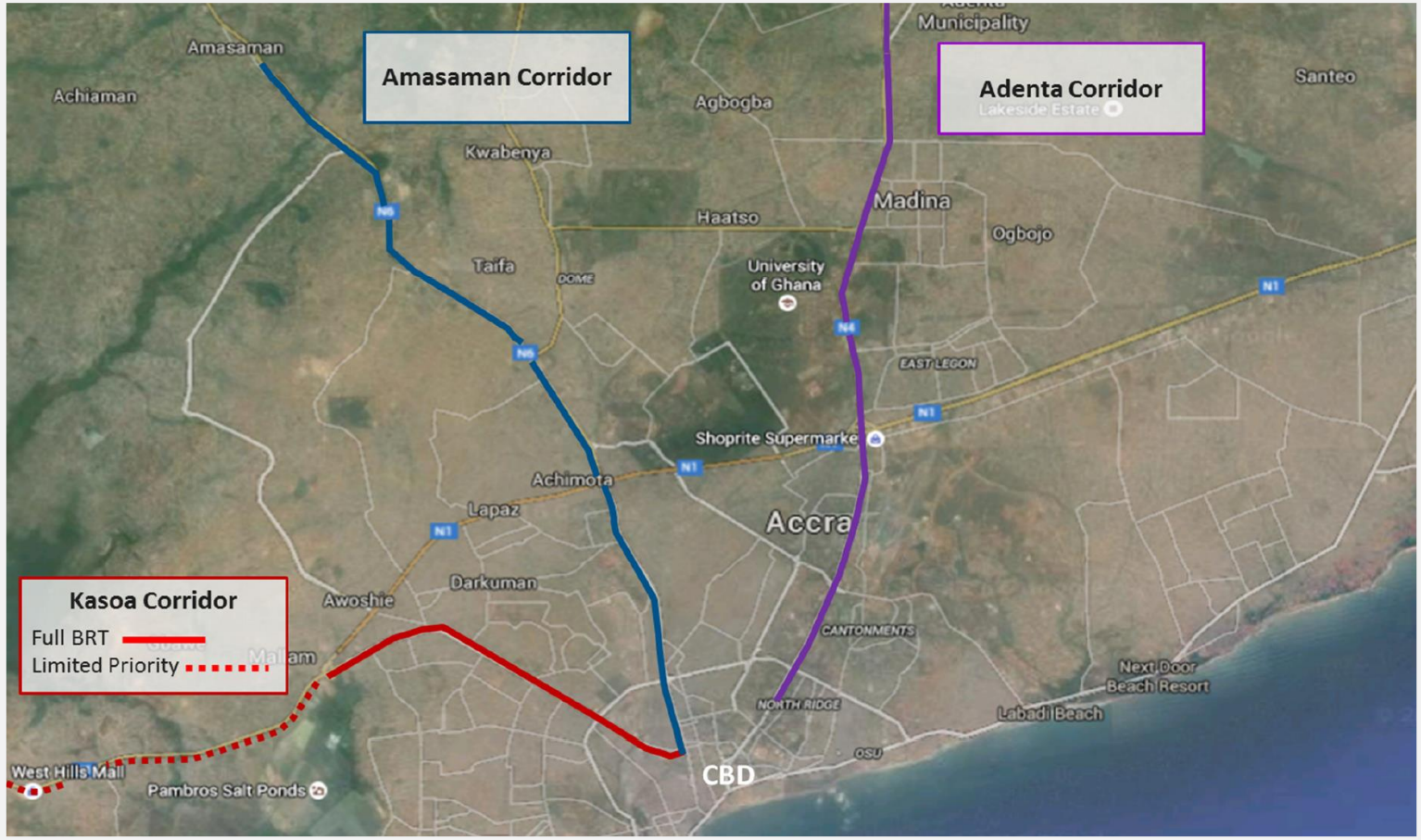
Supplementary Support for Phase 3 of the Dar es Salaam Rapid Transit Project
24km rapid bus service with dedicated infrastructure operating along the CBD-airport corridor

Construction of Phases 4, 5, and 6 of the Dar es Salaam Rapid Transit Network
Bus rapid transport corridors that complete the BRT network envisaged in the city's Transport Master Plan

Construction of Seven Intersections Critical to Improved Traffic Management
Upgrade or development of intersections at key transit points, also typically incorporating dedicated BRT lanes, cycle lanes, and pedestrian walkways

Development of a Non-Motorised Transport Plan for Dar es Salaam
To identify and coordinate NMT improvements into city's overall urban mobility strategy

ACCRA - GHANA

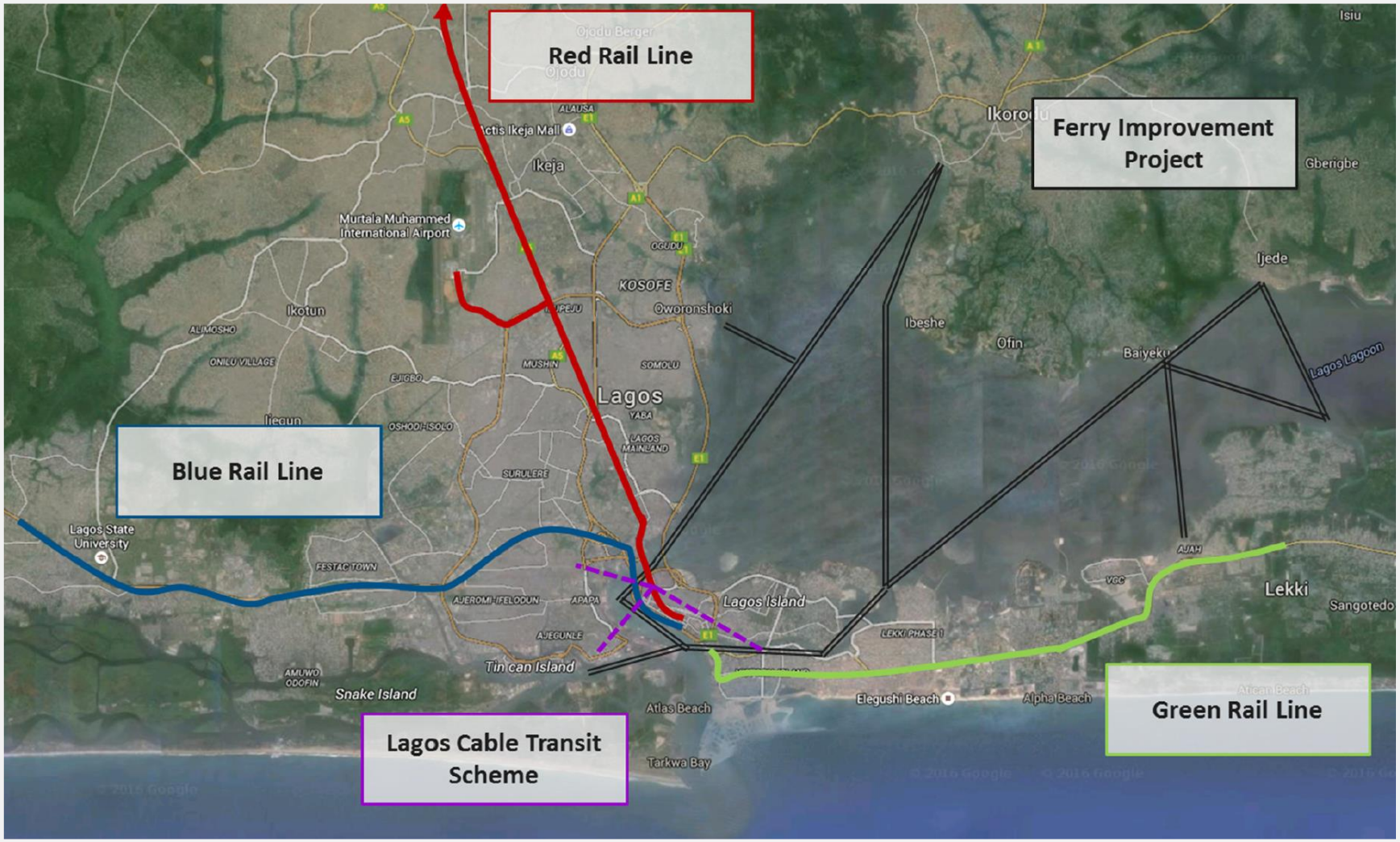


Upgrading Operations on the Amasaman Corridor to Full Bus Rapid Transport Services
Convert Type-B operations on priority corridor connecting CBD and NW of city into full BRT services

Provision of High-Quality Bus Services on Adenta Corridor and Upgrade to Full BRT
Construction of infrastructure for Type-B operations on priority 19 km north-south corridor, followed by incremental conversion to full BRT services

Development of Bus Rapid Transport Infrastructure on Kasoa Corridor
Update feasibility studies and implementation of BRT services on busiest corridor – 9km running west to CBD

LAGOS - NIGERIA



Completion of Blue Line Phase 3 Construction and Promoting Development of Red and Green Lines

Blue Line is a 27km rail route serving high-priority corridor west of the CBD; Red and Green lines envisaged as BOT PPPs serving north and east corridors

Support and Facilitate Development of the Lagos Cable Transit Scheme PPP

Three cableways providing over-water connections between Lagos Island and main outlying suburbs

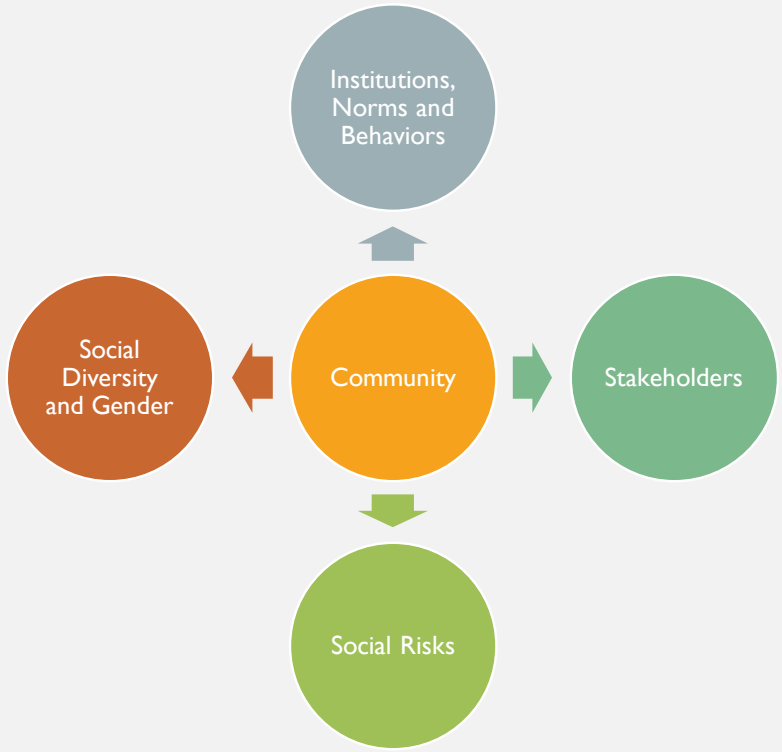
Institutional Support and Medium-Term Implementation of the Ferry Improvement Project

Project seeks to increase utilisation of Lagos waterways for formalised urban transport through multi-faceted and multi-step approach

URBAN TRANSPORTATION PROJECTS: THE ROLE OF THE COMMUNITY

- What are the key institutions implicated in the project?
- Are there underlying institutional rules and behavior that will impact(adversely or positively) on the project?

- Are there vulnerable groups among the stakeholders
- What is the gender pattern of the transport use
- What are the needs of women, people with disabilities, elderly and marginalized groups? How do transportation problems interfere with access to social services
- What other vulnerable groups may be directly affected by the transport project? (Indigenous people, ethnic groups, redundant labor force, squatters, encroachers, street vendors, etc.)



- Who are the actual and potential users of publicly and privately provided transportation?
- What interests do they hold in the public and private transportation? How much voice do they have? How much influence? Do they compete against one another?
- How are they affected? (winners/losers/risks?)
- What sort of collaboration will there be between beneficiaries and planners? What sort of collaboration will take place with local NGOS?
- Will women and other marginalized groups be given equal opportunities to express their views and concerns?

- What are the risks the project is likely to trigger?
- What are the potential risks to achieving project development outcomes?
- Is the project approach to address safeguard issues adequate?

IMPLICATIONS: LAND ACQUISITION, EMPLOYMENT AND COMMUNITY ENGAGEMENT

Land Acquisition

- Spatial nature of transportation projects automatically necessitates the involvement of multiple (types) owners of the land from whom land is acquired.
- Depending upon the nature and extend of acquisition, individuals or communities may be left bereft of their source of livelihood and end up creating complex problems that cannot always be solved through monetary compensation.

Employment

- Employment in communities which are dependent upon land may be affected in a manner that is disproportionate to the *'desired impact'* transportation projects intend to create.
- Simple macroeconomic principles indicate that detrimental effect will multiply and spillover, affecting more members and households indirectly.
- Often and especially with projects involving the role of a private developer, the displaced/affected individuals cannot replace sophisticated, skilled workers working on these projects, forcing them to seek other sources of livelihood.

Community Engagement

- Lack of efforts by both the state and the developer in capacity building, training and rehabilitating the affected individuals, increases possibilities of conflict between different stakeholders.
- The impact of bilateral and multilateral agencies in empowering and mobilizing local communities has often been limited by the nature of involvement, in part due to the methodologies of inquiry which propagate investigation from an *etic* approach, leaving the *emic* approach out of the picture.

OPPORTUNITIES FOR IMPROVEMENT

- Embracing the informality in transport networks and regulating fare structures, occupancy limits and quality standards.
- Integrating metropolitan transportation networks with international multimodal services.
- Minimal funding gap in projects which is likely to stay constant should be exploited to generate secondary employment and value added to allied sectors.
- Integration of mobile technologies to improve accessibility and ease of travel across a contiguous landmass.

THANK YOU!