The Development of the Dar es Salaam Bus Rapid Transit (BRT) system

Global Platform for Sustainable Cities
GPSC African Regional Workshop – Abidjan, Cote d'Ivore
May 15, 2018

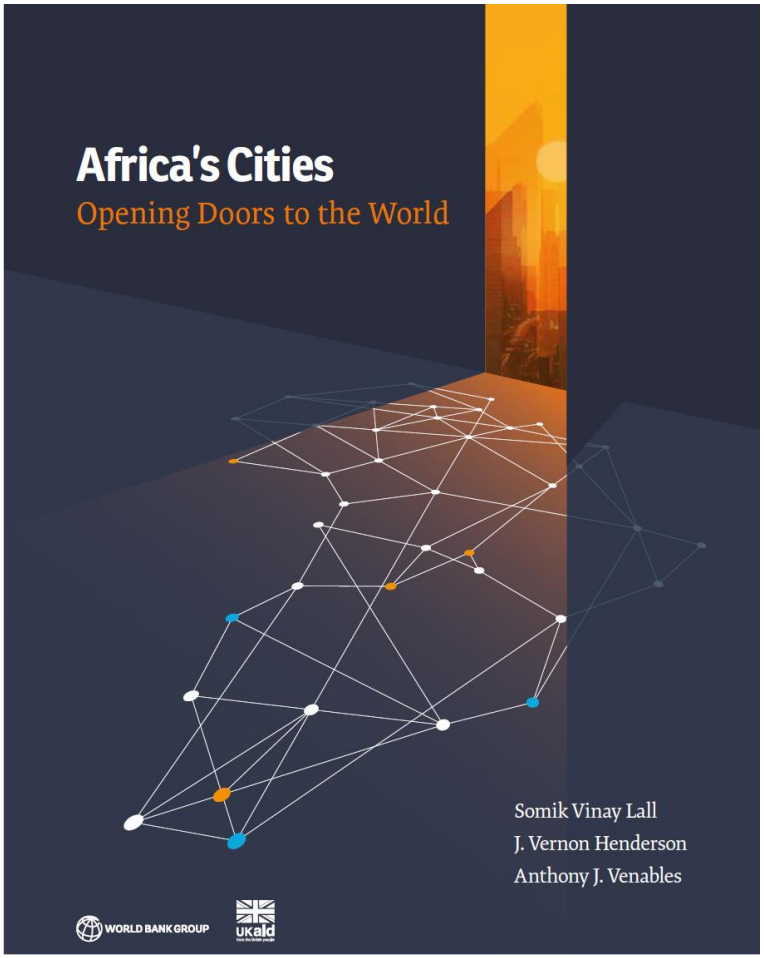
Yonas Eliesikia Mchomvu, Snr. Transport Specialist;
World Bank, Dar es Salaam, Tanzania

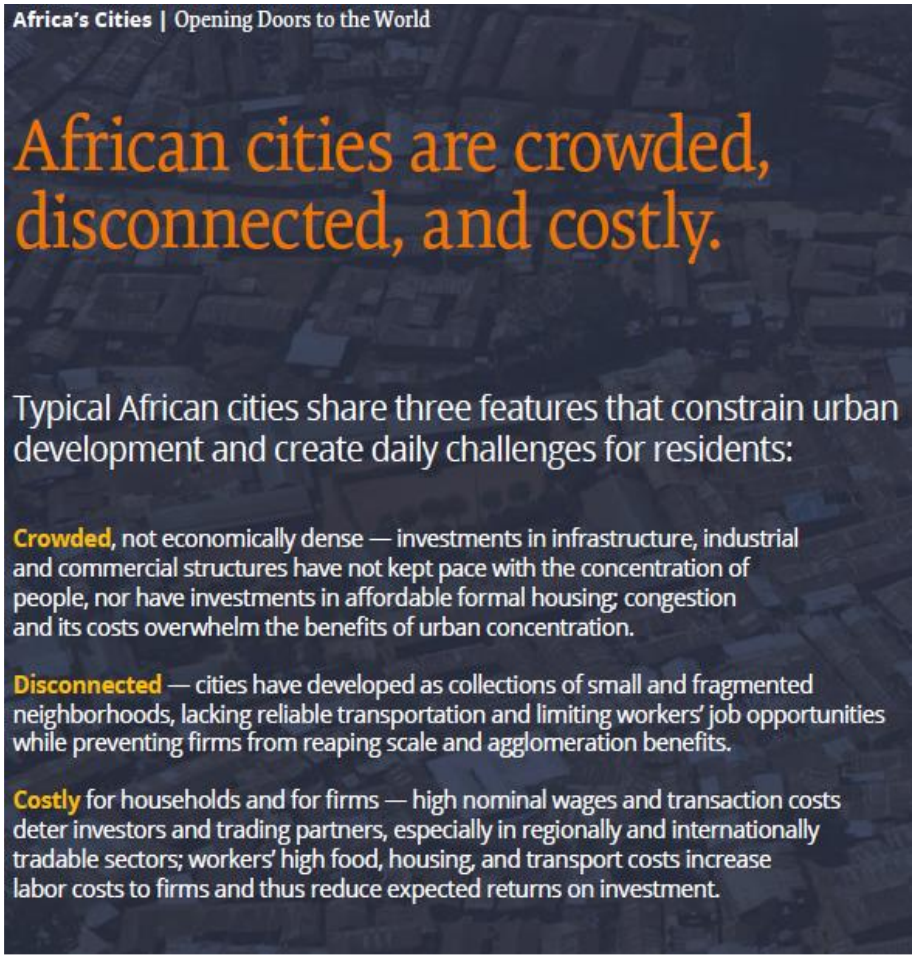
@Yonas_TZ1

Outline

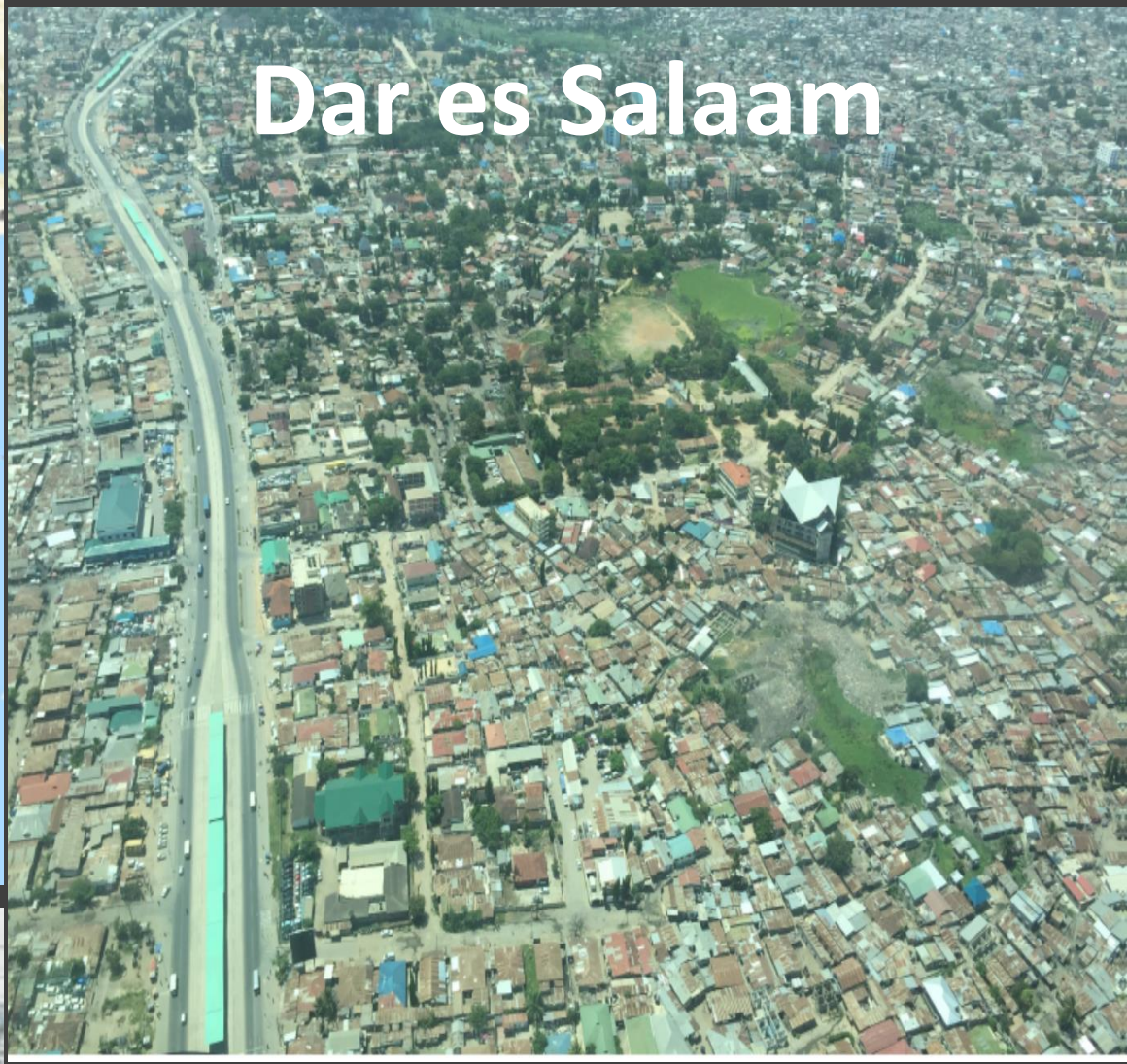
- Context & Conceptual Design
- Dar BRT Development
- TOD - Corridor Development Strategy

Context: African Cities are Costly & Disconnected!





Dar es Salaam



- 3rd Most Rapidly Urbanizing City in Africa
- Master-plan dated 1979
- Massive Traffic Congestion

Traffic Congestion – by Private Cars!

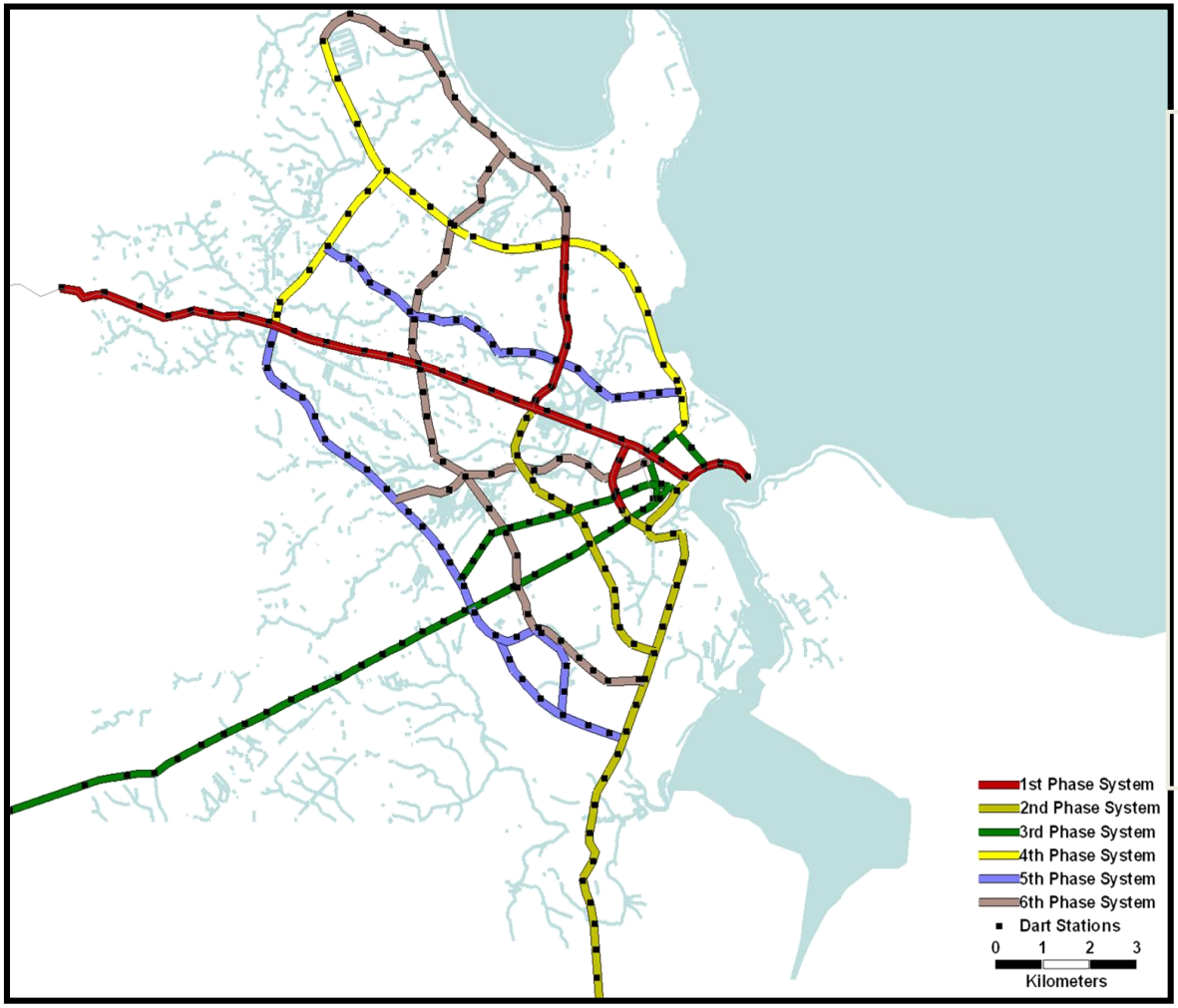
Transport Mode	No. of Trips (1,000)	% to total	% to total (excluding walking)
Walking	744.3	25.9	
Private Mode	376.5	13.1	17.7
Bicycle	39.5	1.4	1.9
Motorcycle	24.6	0.9	1.2
Passenger car	158.1	5.5	7.4
Pick-up, van	99.4	3.5	4.7
Taxi	18.2	0.6	0.9
Others	36.6	1.3	1.7
Public Mode	1,751.7	61.0	82.3
Dala dala	1,714.6	59.7	80.6
Intercity bus	2.4	0.1	0.1
School bus	34.7	1.2	1.6
Total	2,872.6	100.0	

Source: 2007 HIS by JICA Study Team

Traffic Survey Findings (Modal Split) in 2007:

- Public Transport – 61%
- Private Cars – 11%
- Walking & Cycling – 27%

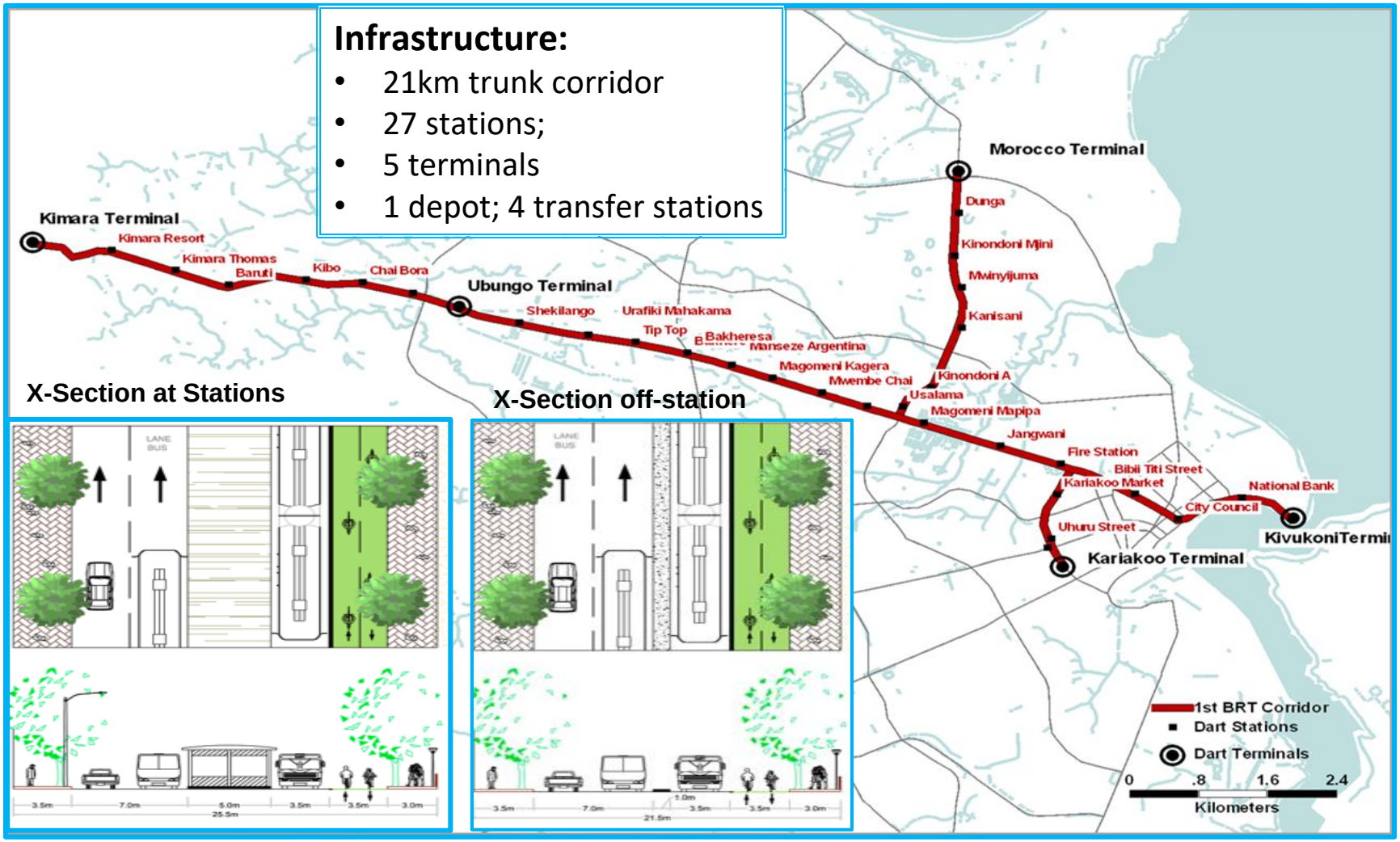
BRT Trunk Network (2007)



Six BRT Phases

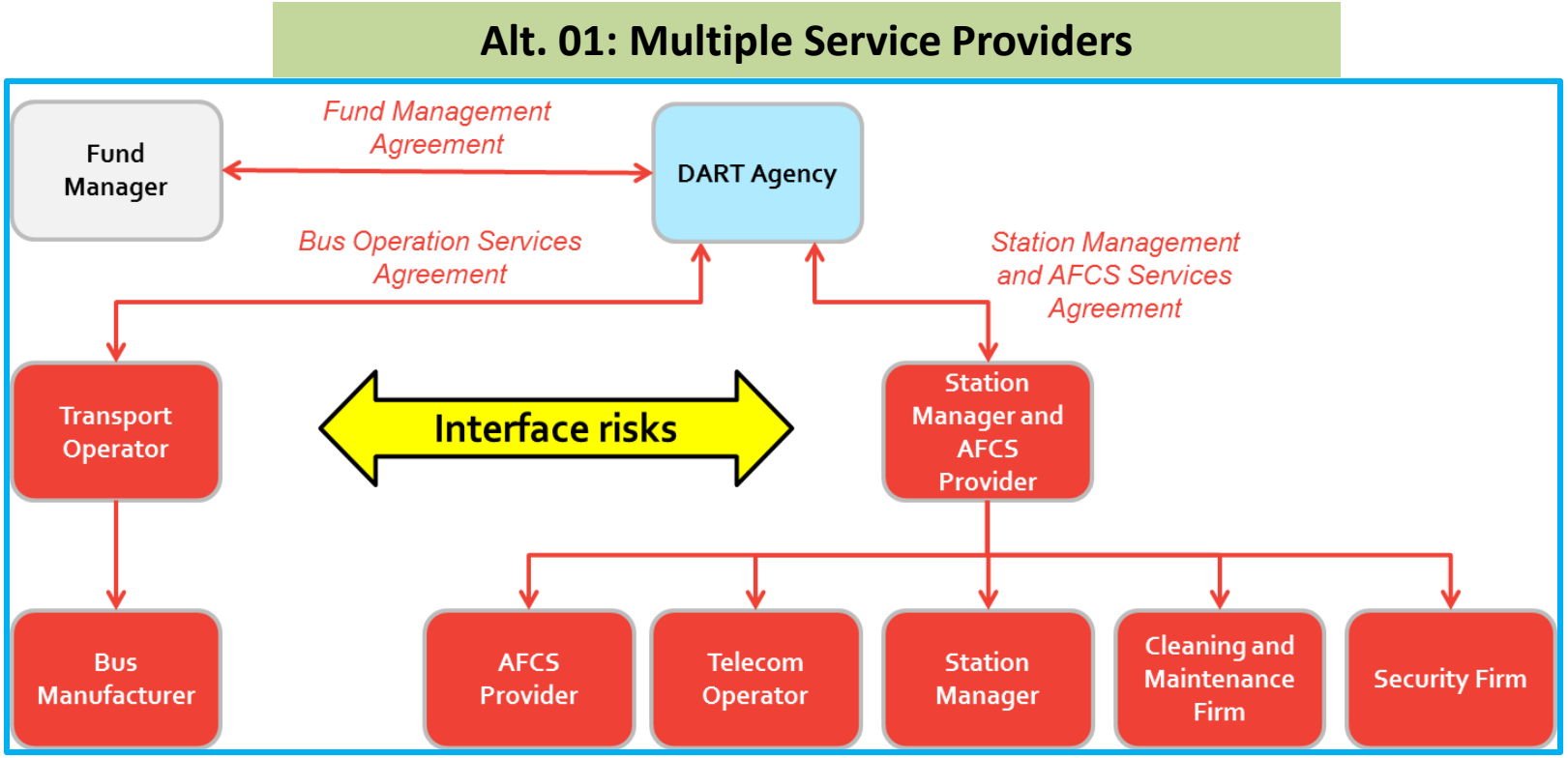
- Phase 1 (2009) – 20.9 km
- Phase 2 (2013) – 19.3 km
- Phase 3 (2017) – 23.6 km
- Phase 4 (2021) – 16.1 km
- Phase 5 (2025) – 22.8 km
- Phase 6 (2035) – 27.6 km
- Total : 137 km

BRT Phase 1: 2008 - 2016

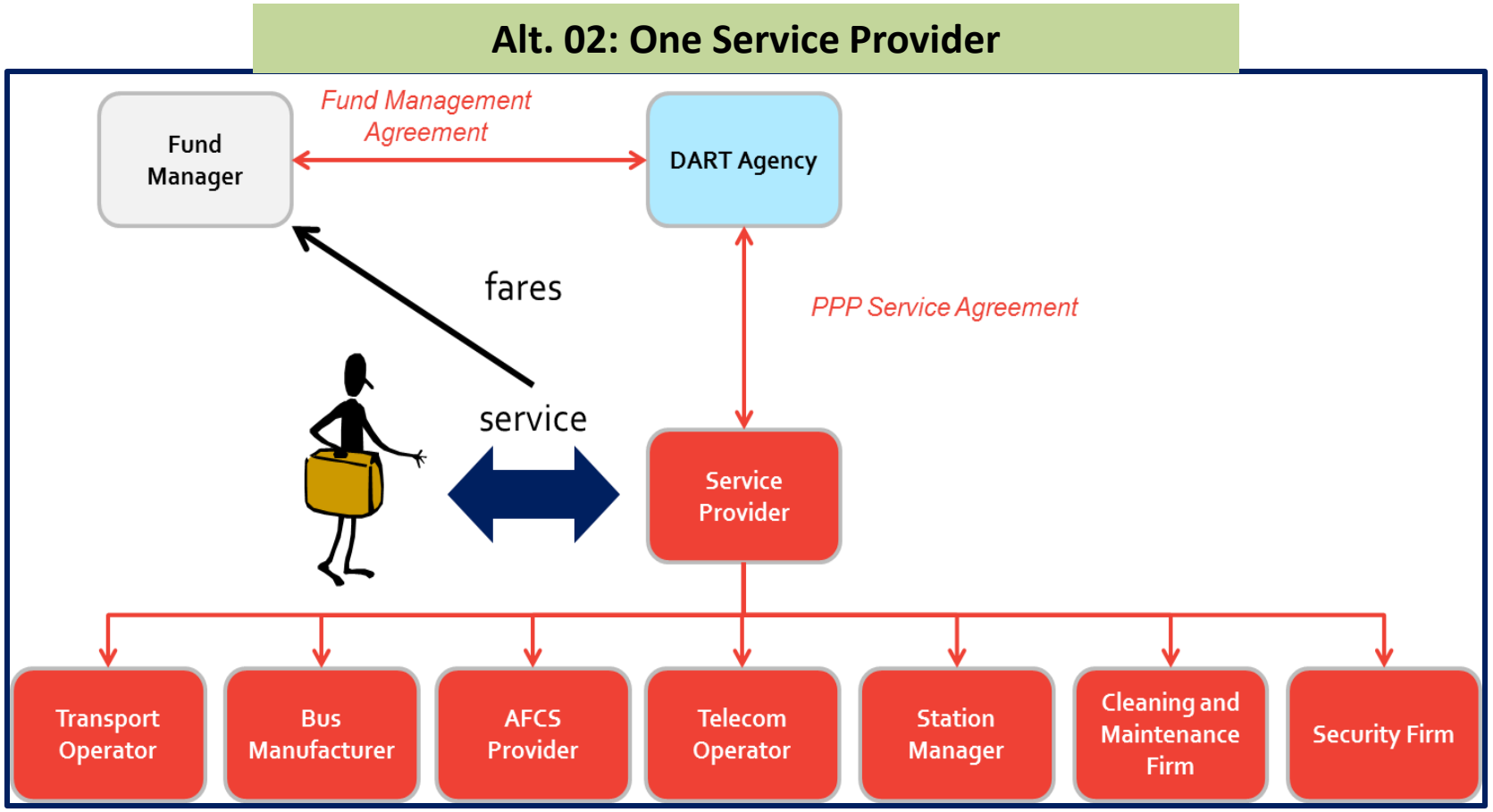


BRT Operations – PPP process

- Transaction Advisors hired => Road Show – June 2014
- Services: Trunk Buses (150psgr) – 177 Nos. & Feeder Buses (80psgr capacity) – 128 Nos; Automated fare Collection system & Fund Manager



BRT Operations - PPP process



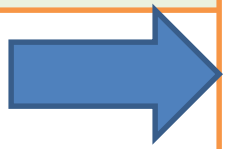
- One Contract with a 'Strong' Service provider
- Preferred when Govt Agency has Inadequate Capacity

BRT Operations - PPP process

- Single Service Provider structure selected (Oct. 2014)
- Interim Services to be Introduced – misuse of infra
- Existing Minibus Operators – Organize & Operate as ISP

Interim Service Providers Contract (April 2015)

- Bus Fleet: 5 Trunk and 71 Feeder
- Actual Supplied: 39 Trunk & 101 Feeder
- Contract amended – Operations Commenced May 2016



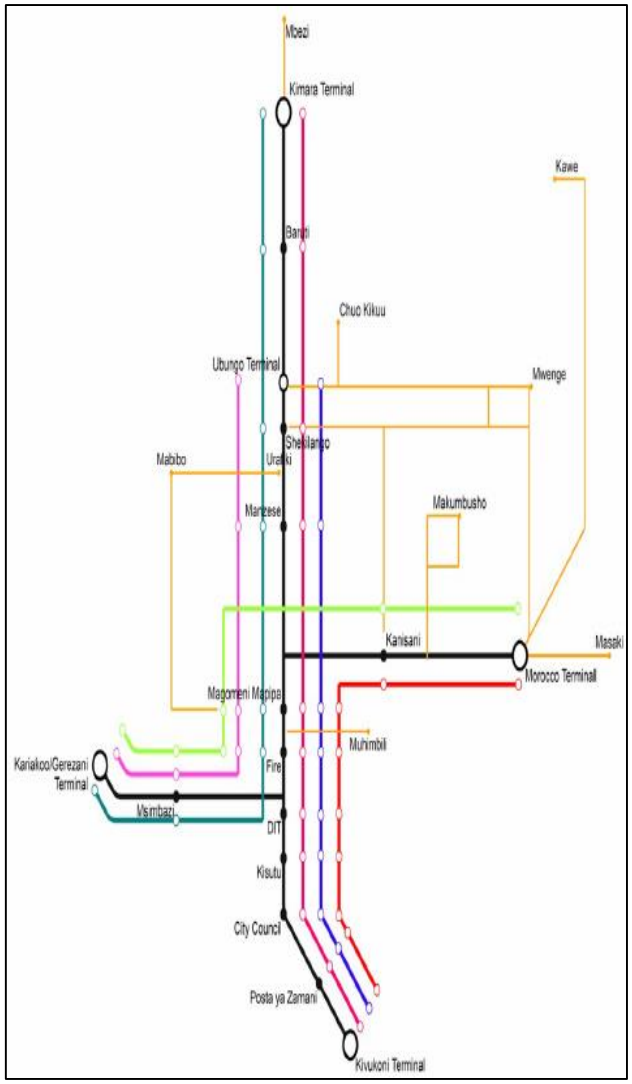
Final Structure (Process to be Completed in June 2018)

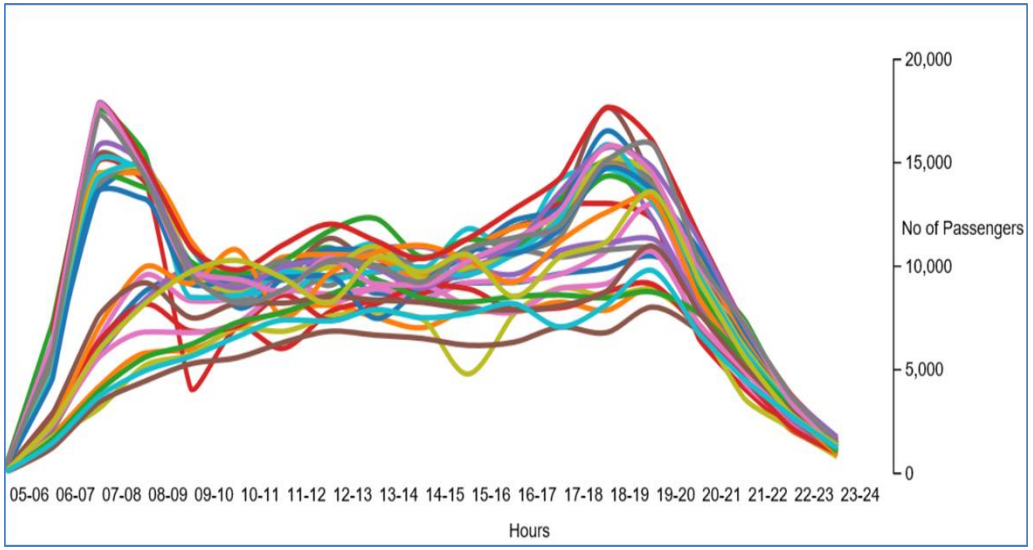
- Bus Operator 1 (ISP)
- Bus Operator 2 (Competitive)
- Fare Collector & ITS Operator (Competitive)
- Fund Manager (Competitive)

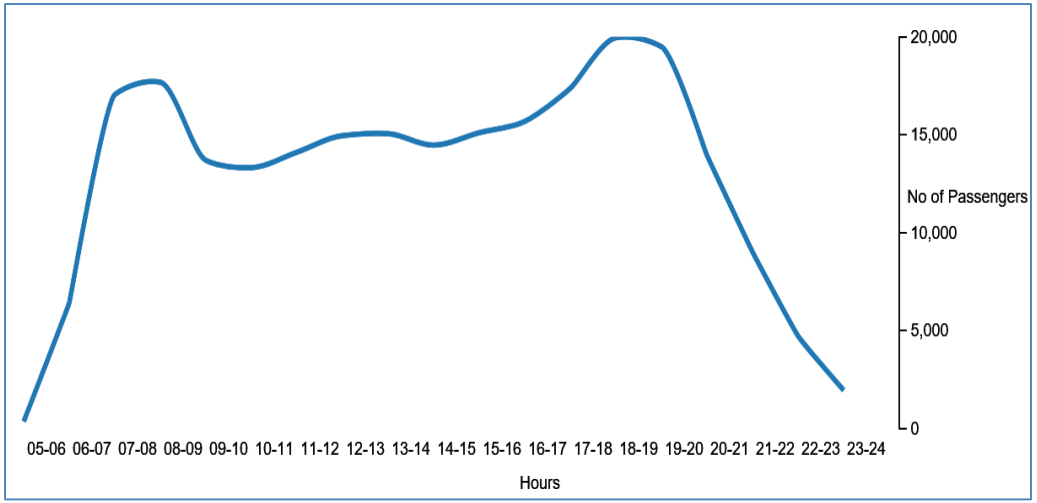
Transformation so far by ISP Operation

BRT average Daily Ridership - 200,000 passengers!

BRT Interim Operations







Dar es Salaam - ITDP
Sustainable Transport Award 2018
First African City to be awarded!

TOD Process: Intensive Engagement (Two Years)

Key Principles !

Return on investm
infrastructure sp

Viable and suitable
for the local context
7

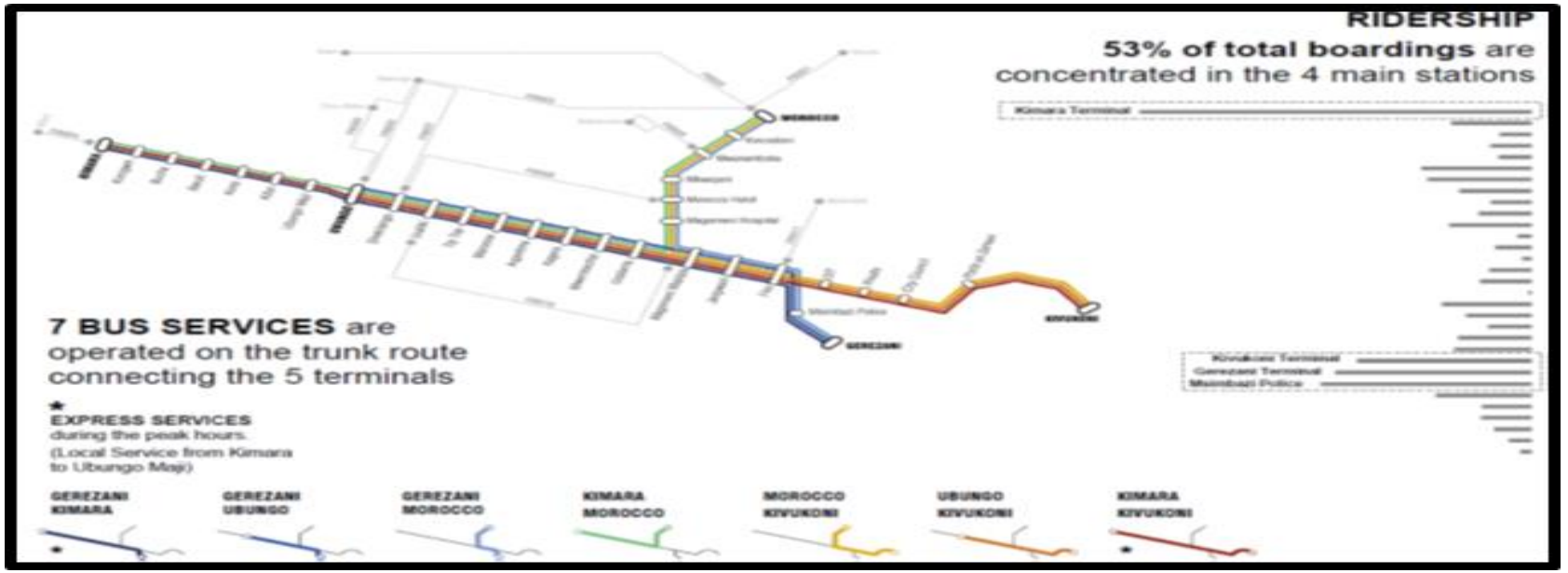
Quality placemaking and
vibrant communities
6

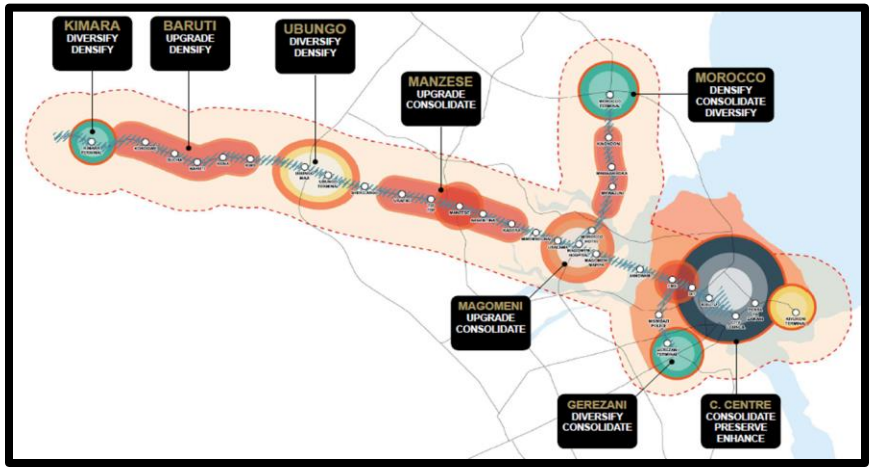
Excellent
and wa

Key Stakeholders Consultation &

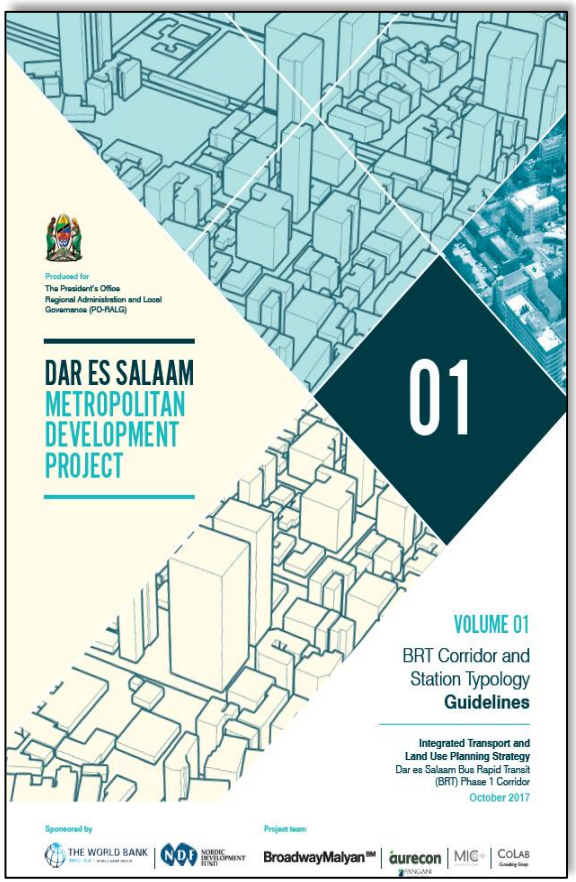
Public Exhibition!

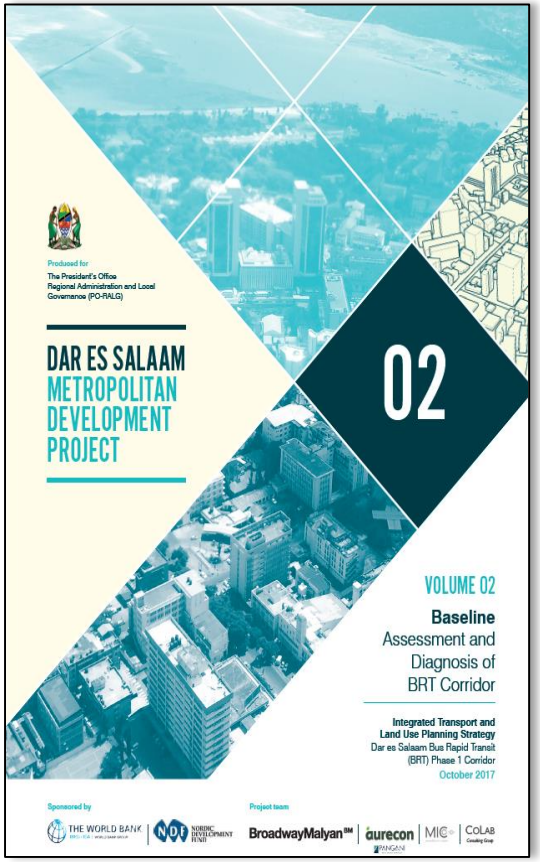
Corridor Analysis – Ridership, Accessibility

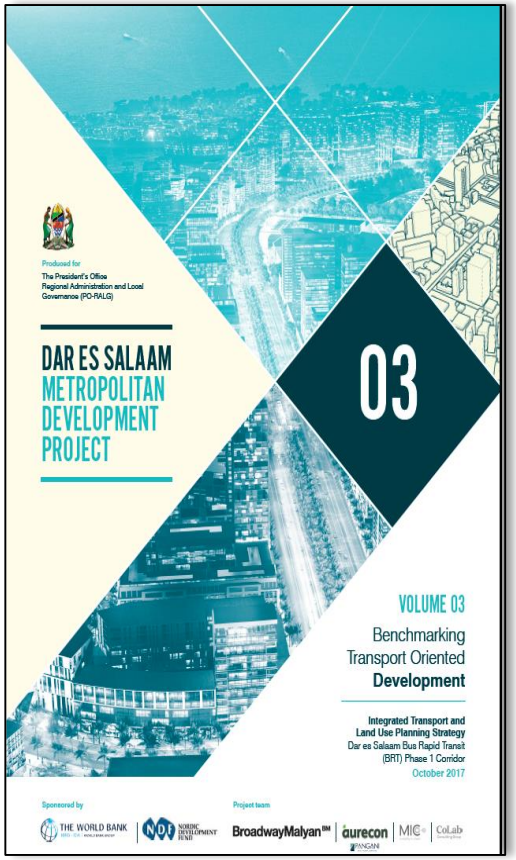




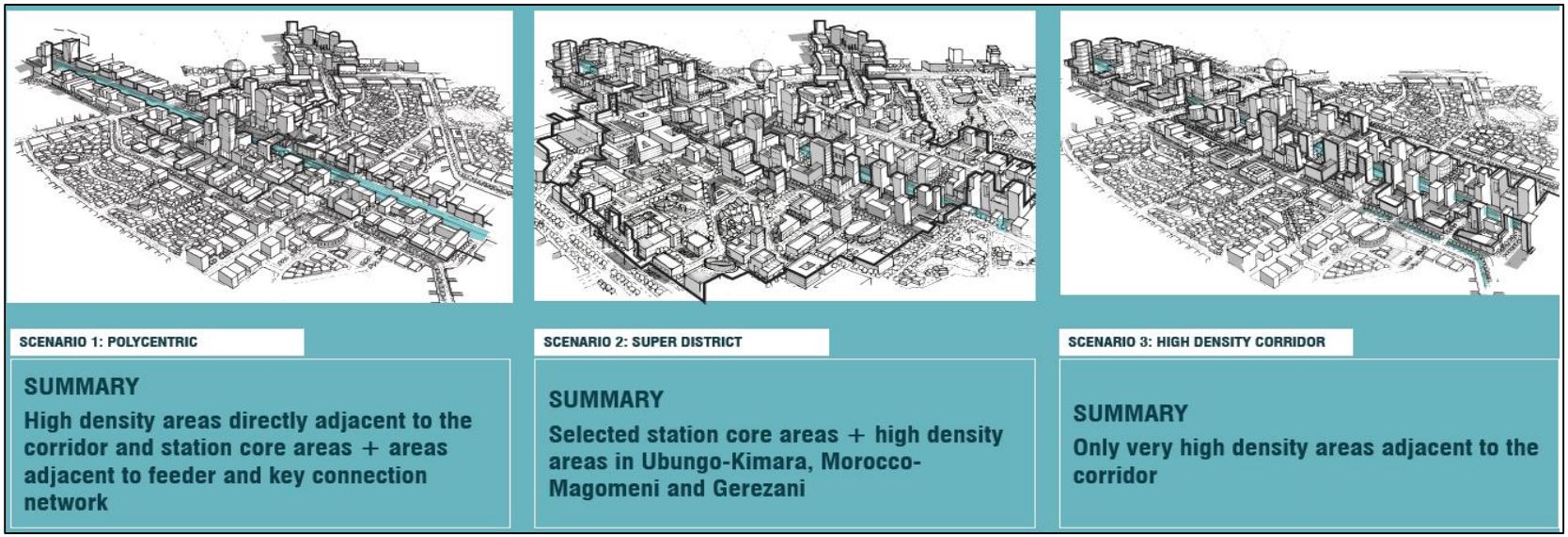
Key Deliverables!







TOD Scenario analysis



SCENARIO 1: POLYCENTRIC

SUMMARY

High density areas directly adjacent to the corridor and station core areas + areas adjacent to feeder and key connection network

SCENARIO 2: SUPER DISTRICT

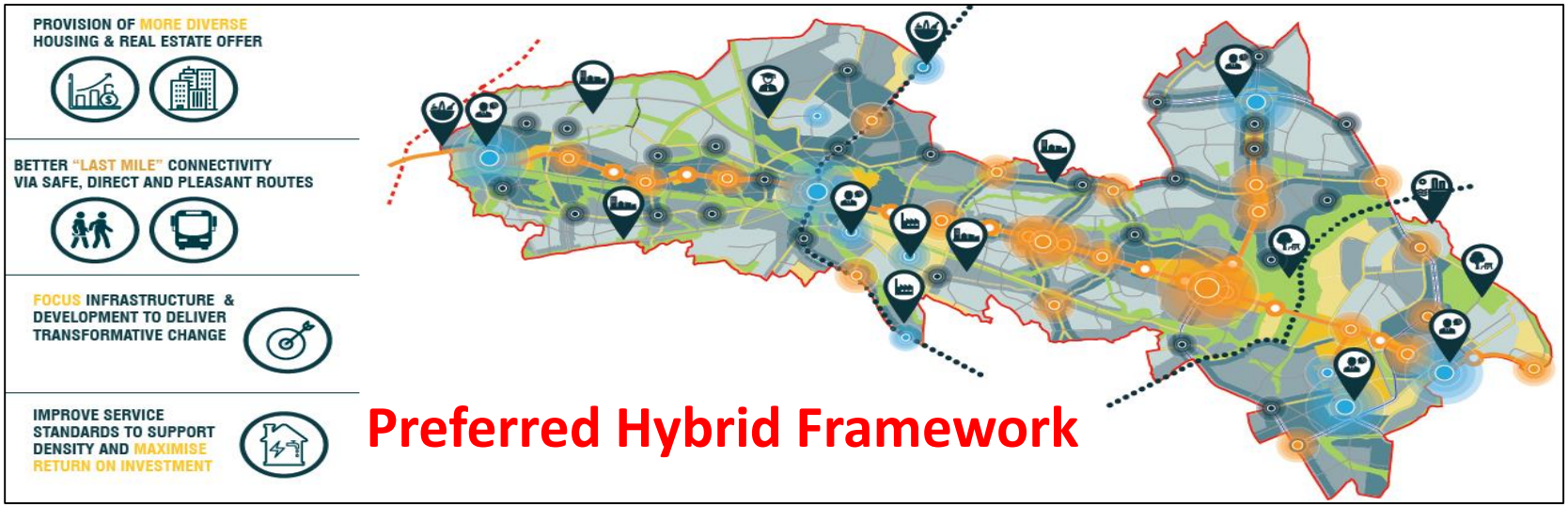
SUMMARY

Selected station core areas + high density areas in Ubungo-Kimara, Morocco-Magomeni and Gerezani

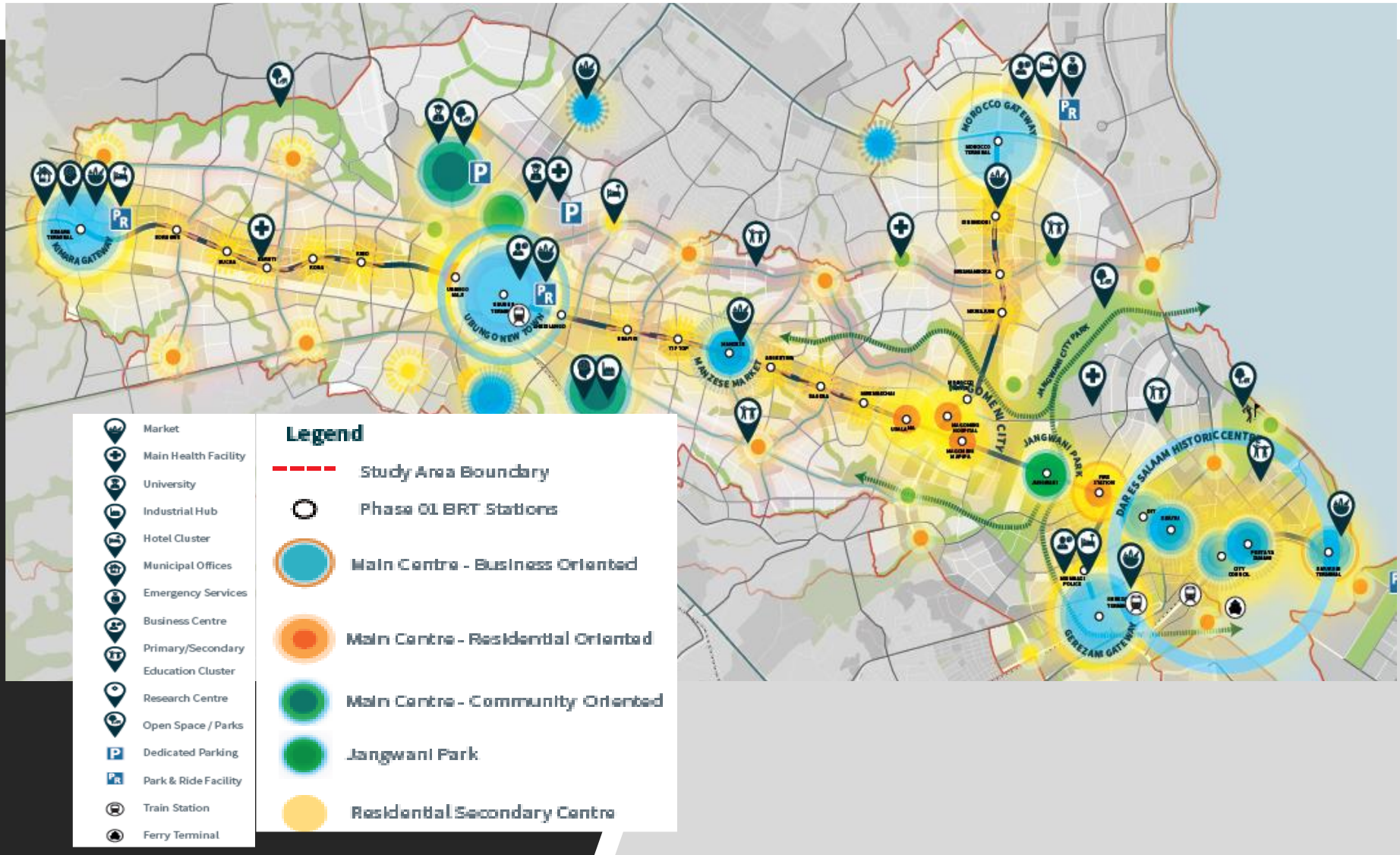
SCENARIO 3: HIGH DENSITY CORRIDOR

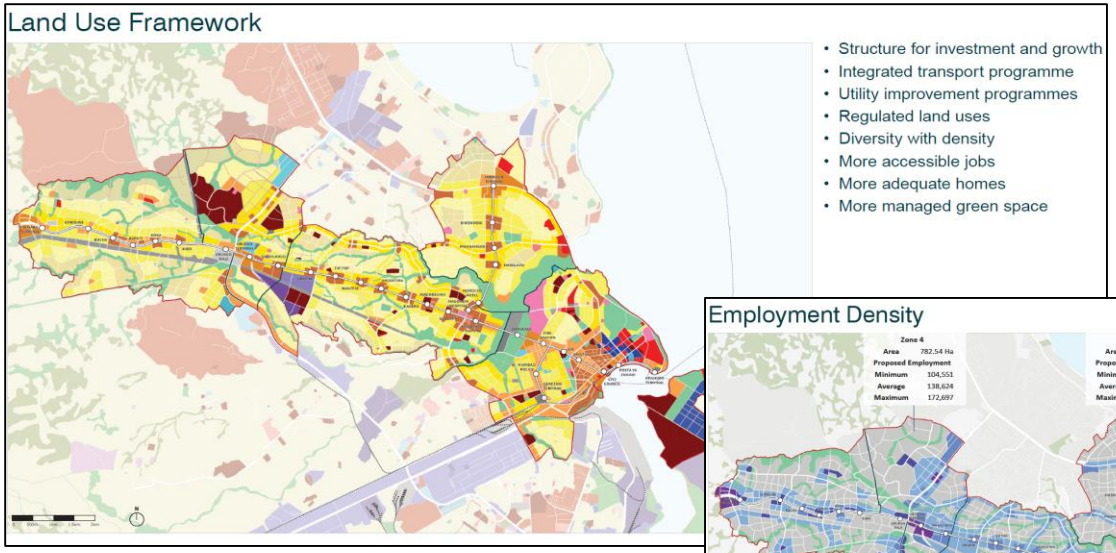
SUMMARY

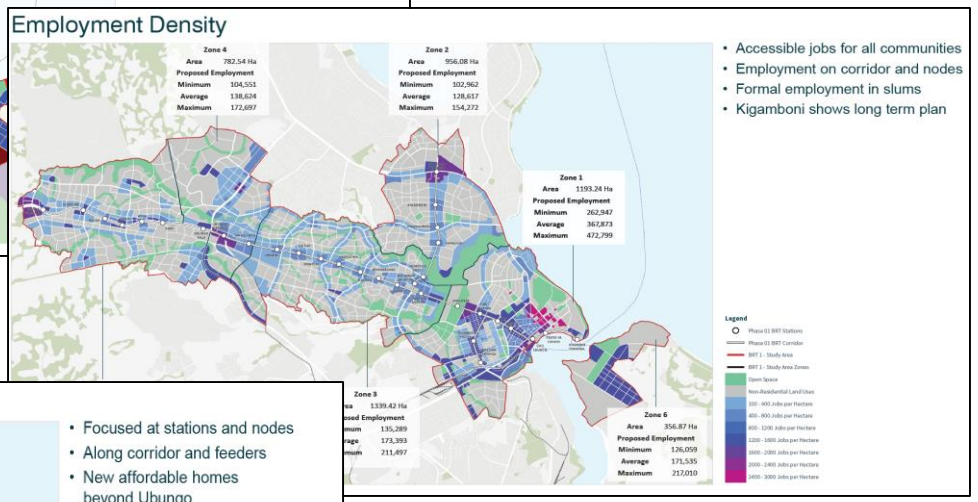
Only very high density areas adjacent to the corridor

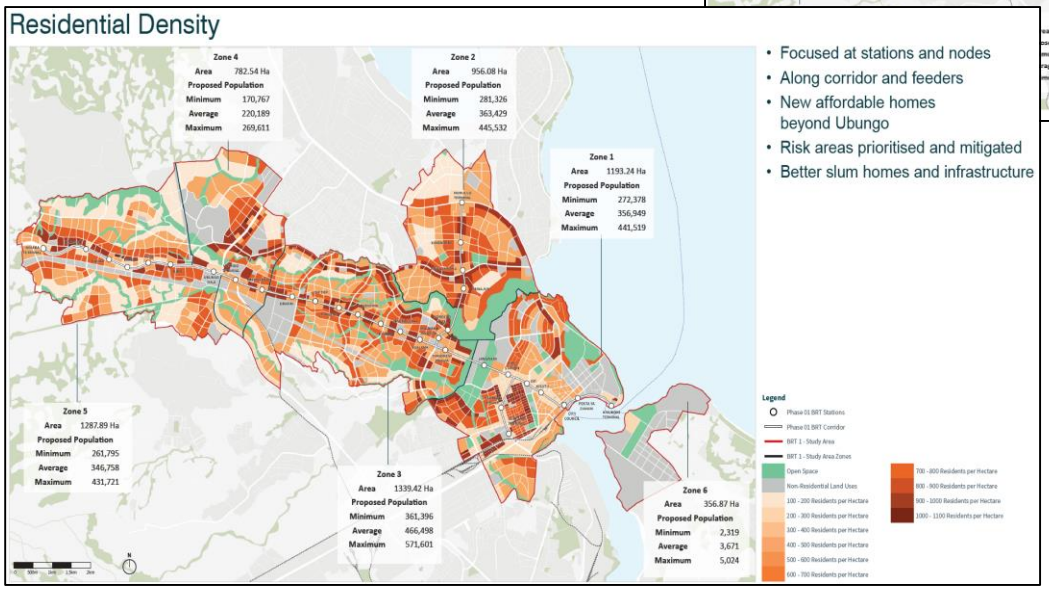


Phase 1 Corridor Framework









Framework for Land-use, Employment & Residential Density

TOD Two Pilot Areas

UBUNGO Pilot:

US$100m Development Cost

Estimated US$35m LVC

Gerezani Pilot Project:

Development Cost - US$62m

LVC – US$4.5m

Next Steps:

- **Gazetting of the CDS**
  - **Opportunity for TOD based Masterplan!**
- **PPP Feasibility Studies**
- **Transactions for Development of Two Pilot Hubs**
- **Scaling up of CDS to cover remaining BRT Phases (2-6)**

Thanks for Listening