

Greening the Urban Environment

A modern, articulated bus with a green and white color scheme is driving on a city street. The bus has "BOMBARDIER" on the front and "FLEXITY Freedom" on the side. The background features several tall, modern skyscrapers under a clear blue sky.

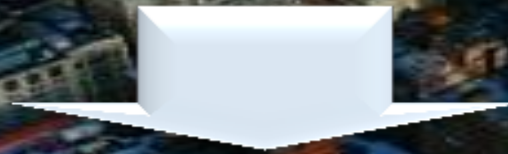
Mass Transit: An Integrated Approach to Sustainable Urban Development

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Urban Challenges



Rapid urbanization
Climate change
Scarcity of natural resources
Shrinking public budgets



Unsustainable urban environments

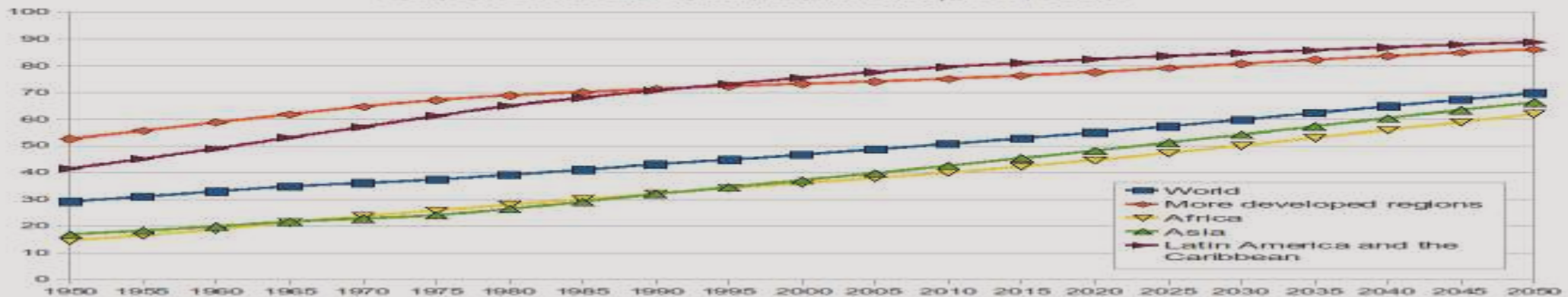


Rapid Urbanization



By 2050, 70% of the worlds population will be living in cities.

Percentage of Population Living in Urban Areas by Region, 1950-2050.
Source: UN World Urbanization Prospects, 2007.



Urbanization in Egypt

- 43.1% of Egypt's population live in cities;
- 56% in the Greater Cairo Region (GCR) as well as Alexandria governorate;
- Urban planning, infrastructure and service delivery has not been able to keep up with rapid urbanization experienced over the last four decades.

Cairo_Egypt

1800


1800



Ills of Urbanization

Poor environmental conditions



A photograph of a city skyline at dusk, featuring several tall skyscrapers and a river in the foreground. The sky is a deep blue, and the buildings are illuminated with warm lights. The text is overlaid on a semi-transparent dark box in the lower half of the image.

Cities are economic engines, they are the major consumers and distributors of goods and services responsible for:

- most of the world's energy consumption
- 50% of the world's economic output.



Cities should be connected, competitive, and attractive.

Urban Solutions



Cities should adopt environmental, economic and socially responsible solutions through:

Sustainable landuse planning
Innovative housing strategies
Strategies for green urban dvlp.
Sustainable mobility & transport

Energy conservation & renewable energy
Sustainable building practices
Green governance & economy
Waste Management & Recycling

Sustainable Mobility & Transport



An aerial photograph of a city skyline at sunset. The sky is a mix of orange, yellow, and light blue. In the foreground, a complex multi-level highway interchange with several lanes of traffic is visible. The city buildings are densely packed, with many skyscrapers. A prominent dark, angular skyscraper stands out in the center. The overall scene depicts a highly urbanized area with significant infrastructure.

The U.S. Model

- Rapid urbanization w/ almost no investment in public transport.
- Congestion tackled w/ further car-based infrastructure.



- Car-dependent settlement patterns.
- Numerous cities around the world followed similar development patterns.

The EU Model

- An “integrated transport paradigm”
- Funds channeled into public transport.



Copenhagen: A Success Story



Developing Nations Experience

BRT Success Stories

- Bogotá, Colombia
- Ahmadabad, India
- Istanbul, Turkey
- Johannesburg, South Africa
- Curitiba, Brazil & many more



The Egyptian Experience

A modern Cairo Metro train, painted in teal and yellow, is stopped at a station platform. The train's front features a large windshield with the word 'ATTABA' and the number '001' displayed above it. Several passengers are visible inside the train. The platform is illuminated by overhead lights, and a sign above the train reads 'إلى إمامة / Imbaba Direction'. The train is positioned on tracks, and the platform is visible on the right side of the image.

The Cairo Metro Network

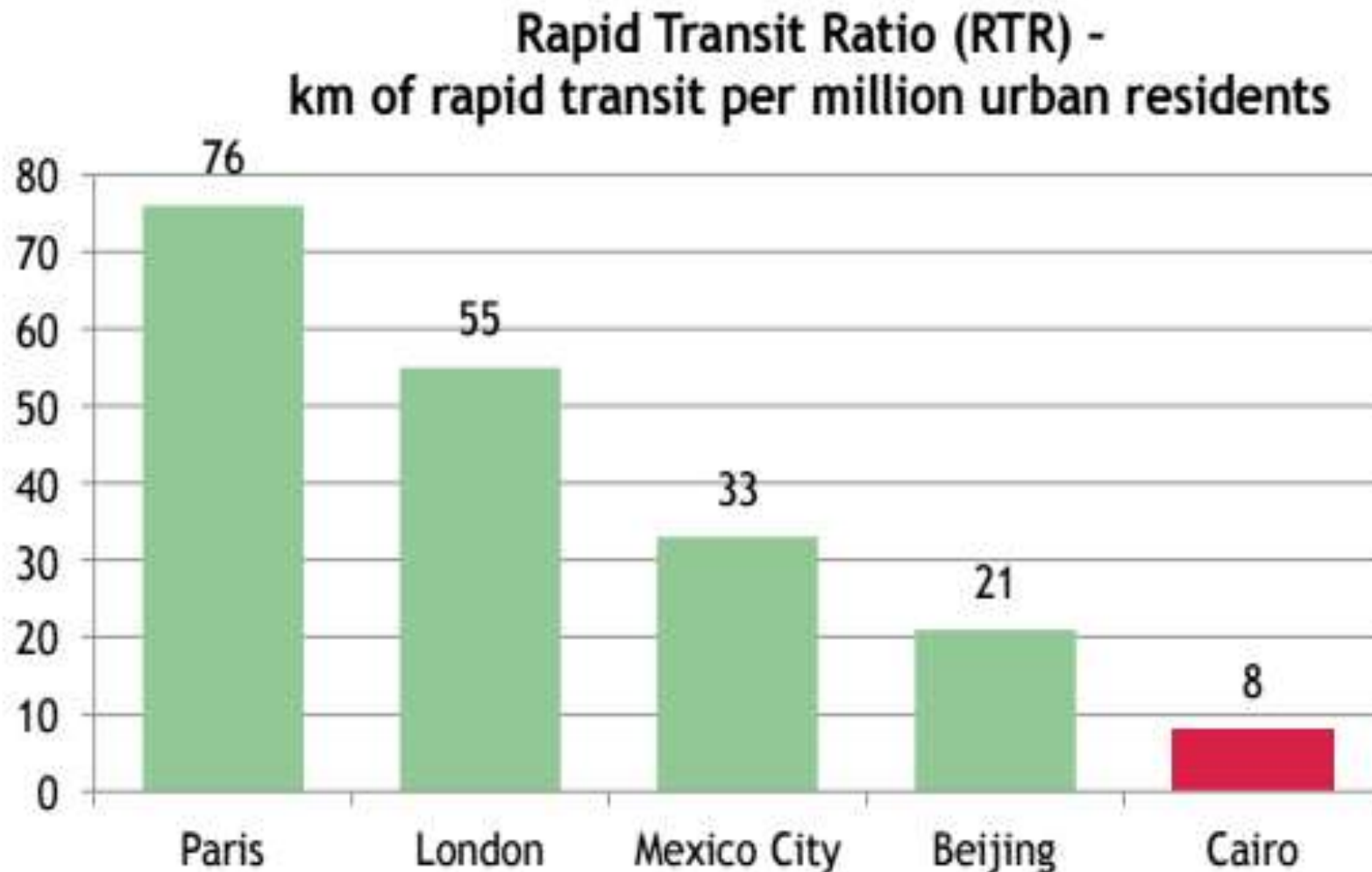
- Spans 78km w/ three lines;
- Carries around 4.1 million passengers per day;
- Reported to have the highest number of boarding's per km of any metro system .



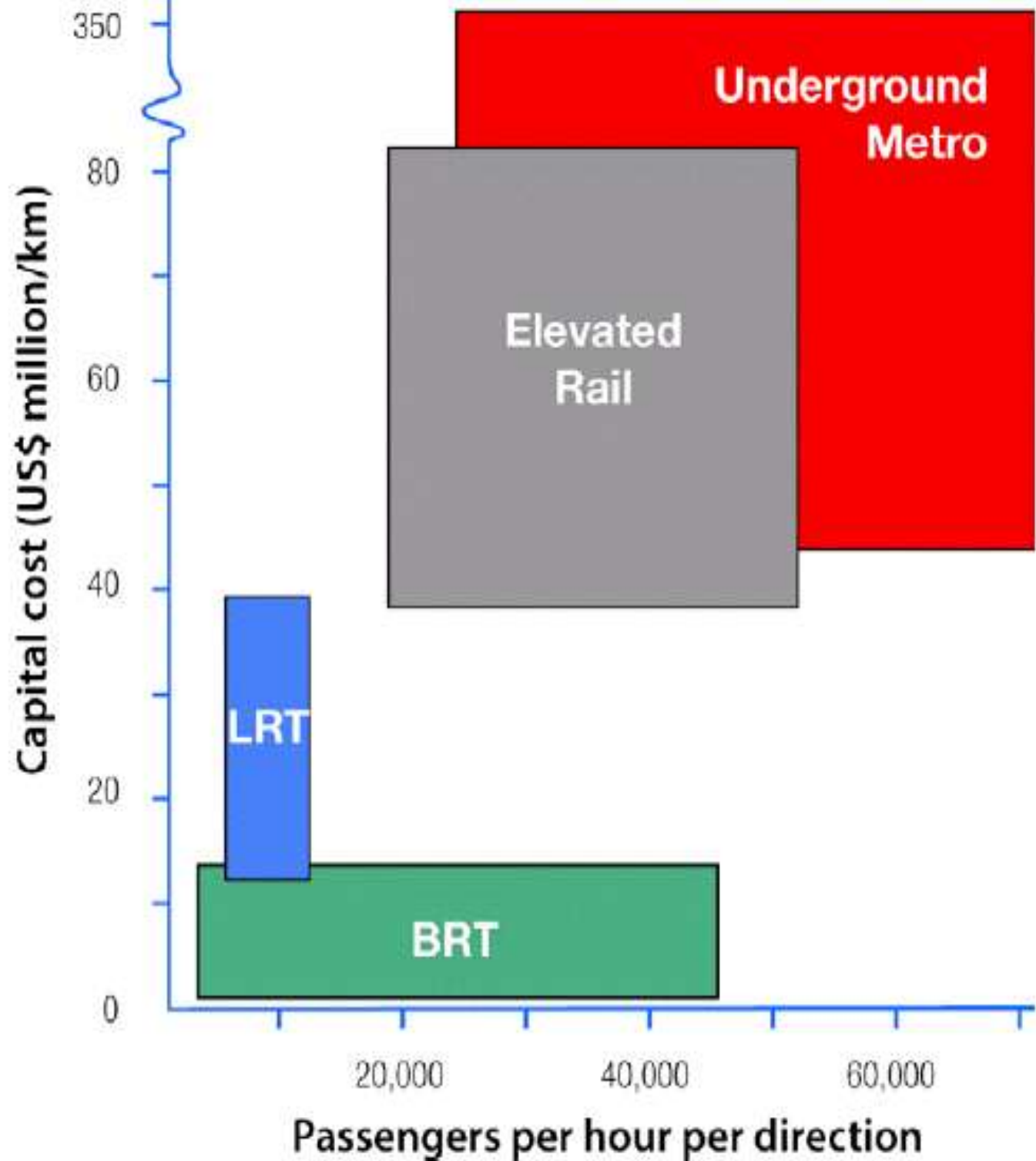
Other Transportation Modes

- Bus, minibus, and microbus routes.
- GCR bus network (approx. 450 official bus & minibus routes, along w/ numerous informal microbus services.
- CTA operates 3,000 buses on 366 routes.

Yet, still lacking kilometers of sufficient transit service



Capital Cost



Benefits of Mass Transit

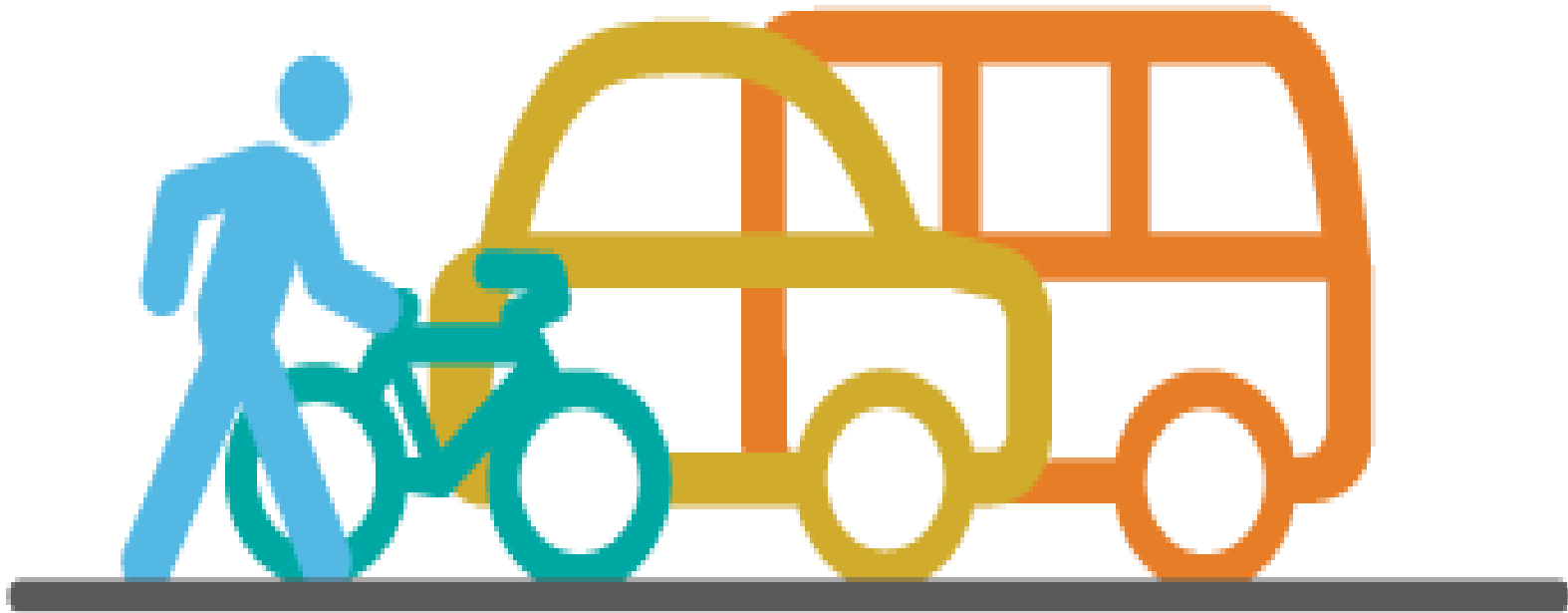
on 1 light rail train



Benefits of Mass Transit



Multi-modal Transportation Network



DO THE RIGHT MIX

OUR DREAM



Greenway Network & Nile Promenade

Giza City Greenway Network



الفكر المقترح للقطامين الاول والثاني

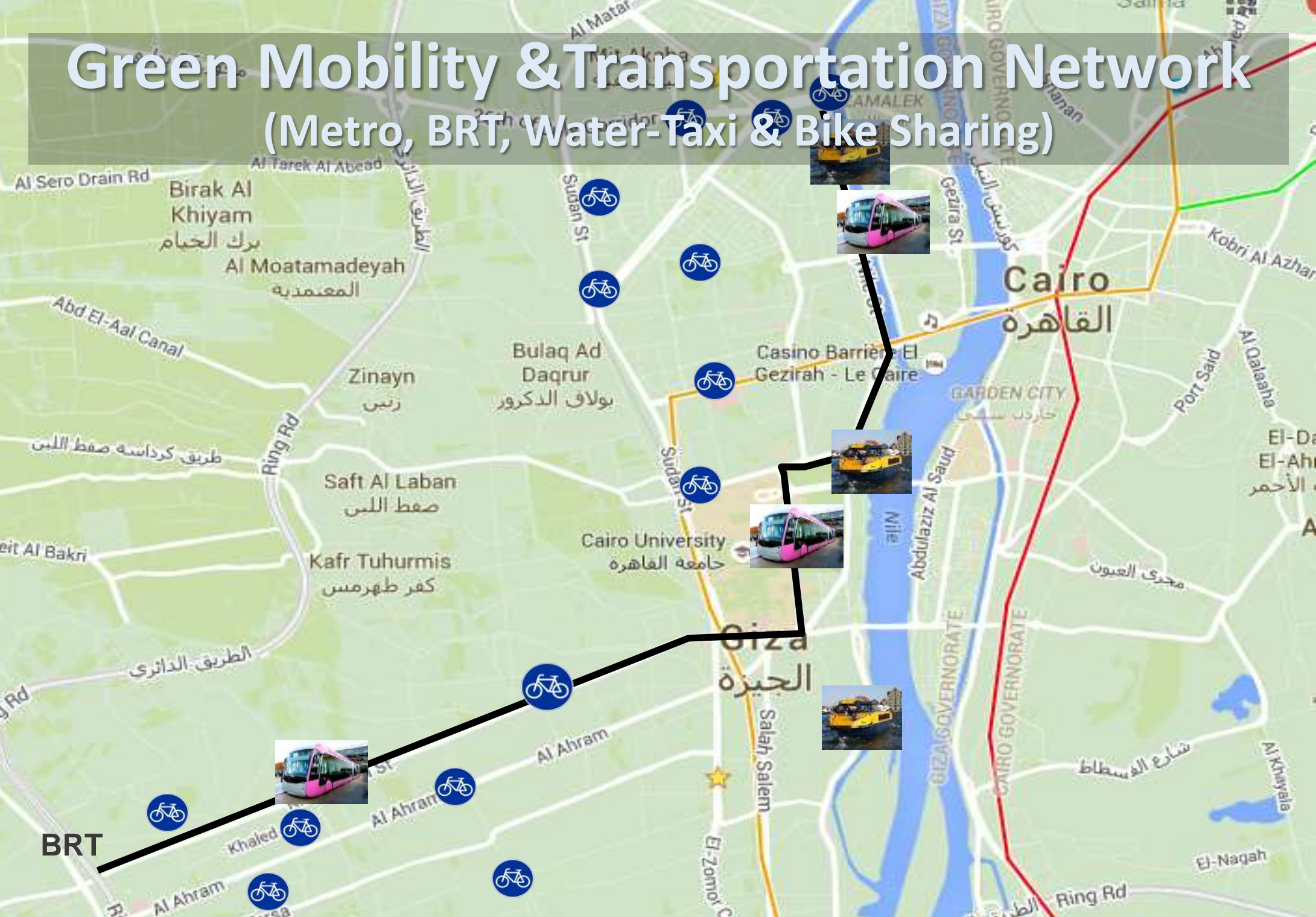


الفكر المقترح للقطامين الثالث والرابع



Green Mobility & Transportation Network

(Metro, BRT, Water-Taxi & Bike Sharing)









حديقة الأورمان

كوبرى الجامعة

حديقة الحيوان



حديقة الأورمان

كلية الهندسة

جامعة القاهرة



MAY 2015

مشروع تطوير منطقة جامعة القاهرة





THANK YOU

GRACIAS
ARIGATO
SHUKURIA

TASHAKKUR ATU
YAQHANYELAY
SUKSAMA
EKHMET

MEHRBANI
GRAZIE
PALDIES

BOLZİN
MERCI

BIYAN
SHUKRIA

JUSPAXAR
KOMAPSUMNIDA
MAAKE

DANKSCHEEN
SPASIBO
SHACHALUYA
HERASTAWIT
GOZAIMASHITA
EFCHARISTO

TINGKI
YUSPACHAYAN
MAKETAJA
MAYSKA
IBR
UNACHEESI
SHOMO
MAKETAZ
ABDANCIJAB

CHILTU
HERIOTI
HERASTAWIT
GALJINO
AGUYJE
FARAKAJE
ATTO
AMWA
MERSI
SPACIBO
SEKRUJA
HEKACHALUYA
SHOMO

YAVYAPUCH
MEDAWAGSE
BABKA
SAVCO
LAJ
MAKETAZ