

# GREATER AMMAN MUNICIPALITY



**Nisreen Daoud**

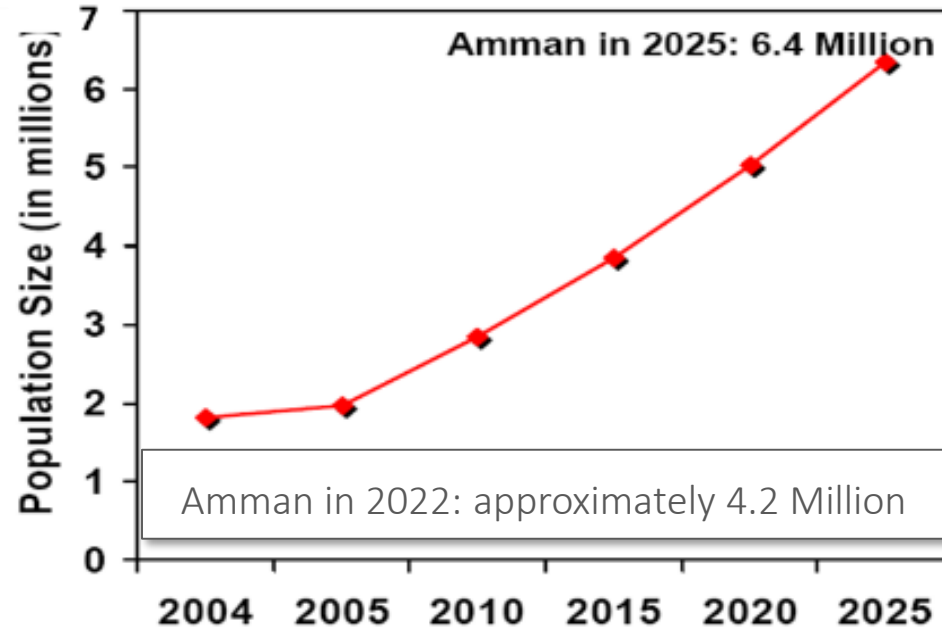
Manager of sustainable development  
and Amman resilience Unit

- Amman is the Capital of Jordan and the country's economic, political and cultural center.
- Located in the Centre of Jordan, with a population around 4.2 Million inhabitants.
- The city has an area of 800 square kilometers. With a rich history that goes to around 8000BC,
- Amman is considered today as one of the most modernized Arab cities. It is a major tourist destination in the region, and it is continuously trying to improve its image and products to attract tourists and investors while keeping its identity preserved.



# Amman Development challenges

- **Rapid Urbanization**
- **Scarce natural resources (in particular water)**
- **Successive influxes of refugees**
- **Urban Sprawl**
- **Inadequate Roads & Transport Infrastructure**
- **Loss of Agricultural Land**
- **Socioeconomic Segregation**
- **Declining Housing Affordability**
- **Single-Use Zoning & Development**
- **Unemployment**



- **Topography & hilly slopes**
- **High annual growth rates in energy consumption**

# Greater Amman Municipality Vision:



**A leading Municipality to make the city of Amman Organized, modern, smart, resilient, safe, attractive, with a soul, friendly and livable, proud of its heritage and authenticity.**



# GAM Sectors



## Public Services Sector, with directorates covering:

- Public Transport and Infrastructure
- Traffic planning
- Road maintenance
- Public facilities and gardens (open spaces)
- Engineering



## Districts and Environment, with directorates covering:

- Solid waste management
- Construction inspections
- Environmental licensing



## Health and Agriculture, with directorates covering:

- Agriculture and forest management
- Health inspection
- Management of public markets



## Community Development, with directorates covering:

- Cultural affairs
- Sports and entertainment
- Social affairs



## Planning and economic development, with directorates covering:

- Planning, master planning and zoning
- Building permits and licensing
- Sustainable Development and resilience



## Finance and Administration

- in charge of financial control and the municipality's revenues and expenses.

IT directorate, Amman urban observatory, sustainable development unit, GIS department

# GAM Major Strategies

## Amman Resilience Strategy

5 Pillars  
16 goals  
54 Actions

Integrated and Smart City

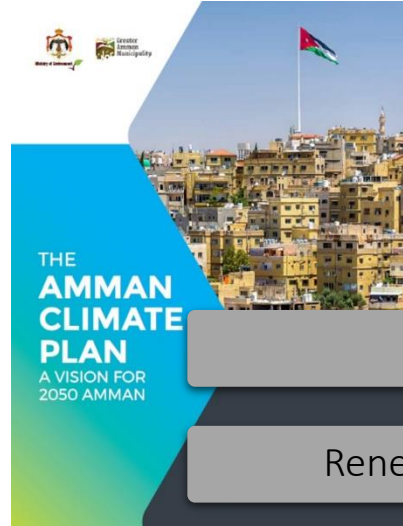
Environmentally Proactive City

Innovative and prosperous City

Young and Equal City

A united and proud City

Launched  
2017



6 Pillars  
21 goals  
51 Actions

Buildings

Renewable energy

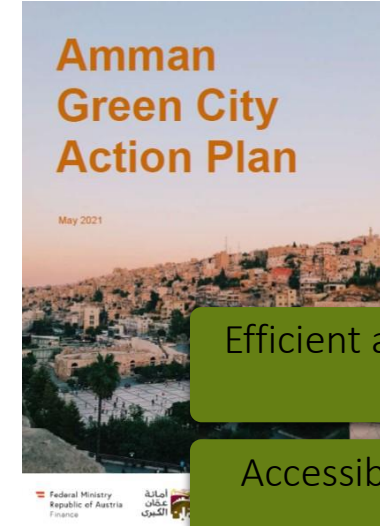
Transport

Solid Waste

Water and waste water

Urban planning

Launched  
2019



6 Pillars  
19 goals  
64 Actions

Efficient and resilient energy systems and buildings

Accessible, diverse and low-carbon mobility systems

Resource efficient and holistic waste management systems

Integrated water resources management

Comprehensive and reflective land use planning

Responsive and forward-looking climate adaptation practices

Launched  
2021

# Amman Resilience strategy

5 Pillar

**Integrated City**

**Environmentally Aware City (Climate change)**

**A regional innovation hub**

**Youth Centered City**

**A united and diverse City**

16 Goals

Improve the mobility systems

Meet our Climate change obligation

Leverage existing assets to promote Amman and attract investment

Invest in our youth

Promote sense of belonging amongst citizens

Promote walkability

Invest in renewable energy resources and energy efficiency

Capitalize our existing human resources of both genders to attract investment and create employment

Build an inclusive and empowered youth community

Promote participation and engagement

Institutionalize spatial city planning

Promote the application of green codes and guidelines

Connect the city digitally

Improve our waste management

Build capacity and improve processes within GAM

Manage our water resources efficiently

54 Actions



Amman's Pillars, Goals and Actions

## 1 An integrated and smart City

We will...

- A. Improve the mobility systems
- B. Promote walkability
- C. Institutionalize planning in the city
- D. Connect the city digitally

Amman Resilience Strategy

### Goal D: Connect the city digitally

Acceleration in the uptake of digital technologies and rapid innovation is reshaping the way people live in cities. We need to ensure that both help Amman function better. Jordan is ranked among the countries with high smart phone ownership and internet usage rates. Approximately 95% of Jordanians own mobile phones and there is a 53% internet usage rate. It is estimated that 95% of those aged 18-29 hold mobile phones in Jordan. We aim to make digital technologies integral to the city's processes to inform an integrated approach to city planning, service delivery and decision making but also to boost our digital economy and create employment opportunities. We aim to mobilize our citizens, youth and businesses to be part of a Smarter Amman.

54

### Action 1.D.1 Develop an ICT smart city roadmap

We will develop a Smart City roadmap to serve the needs of the citizens. The plan will enable Amman to adapt, grow and respond effectively and efficiently in response to the city's changing needs, such as public services, traffic congestion and more. The road map will integrate information and communication technology (ICT) to manage a city's assets and services and will serve as the foundation for developing KPIs for a Smart Amman.

<b>Owner</b> GAM (IT Dep.)	
<b>Status</b> New	
<b>Timescale</b> Medium	
<b>Partners</b> <ul style="list-style-type: none"> <li>• Ministry of Communication and Information Technology</li> <li>• Funding Agencies</li> </ul>	

- Resilience Value**
- Make Amman an attractive place where people want to live and work.
  - Enhance citizens' wellbeing through the provision of effective city management and service delivery.
  - Promote transparency and restore the trust between the government and the people.
  - Provide employment opportunities.

#### Action 1.D.2 Establish a centralized GIS database

We want to harness and combine city data into a centralized GIS database for use by all, to enhance multi-sectoral decision-making, and create an integrated approach to the city's planning. This action will assist citizens, investors, developers to have access to an integrated digital base for the Amman masterplan.	<b>Owner</b> GAM (GIS Dep.)	
	<b>Status</b> New	
	<b>Timescale</b> Medium	
	<b>Partners</b> <ul style="list-style-type: none"> <li>• Platform partner opportunity</li> <li>• Miyahuna</li> <li>• Jordan electricity company</li> <li>• Ministry of Communication and Information Technology</li> </ul>	

**Resilience Value**  

- Promote a comprehensive, flexible and integrated coordination between partners to ensure high quality integrated city planning.
- Enhance the city's economic performance.
- Improve quality of life through the provision of evidence based decision making.

#### Action 1.D.3 Establish a coordination plan for service providers within the city

The coordination plan will be a component of our smart city action plan. We will prepare a coordination plan between service providers to plan and operate the city effectively and efficiently. We will identify and prioritize the data needed, and enable common data standards by using the GIS database. We will also establish real time data mechanisms to facilitate coordination. This will help support development, investment, and data sharing.	<b>Owner</b> GAM (Roads Directorate - Coordination Department)	
	<b>Status</b> New	
	<b>Timescale</b> Short	
	<b>Partners</b> <ul style="list-style-type: none"> <li>• Platform partner opportunity</li> <li>• Miyahuna</li> <li>• Jordan electricity company</li> <li>• Ministry of Communication and Information Technology</li> </ul>	

**Resilience Value**  

- Promote integrated and comprehensive planning, participation, and partnership to better the quality of life in the city.

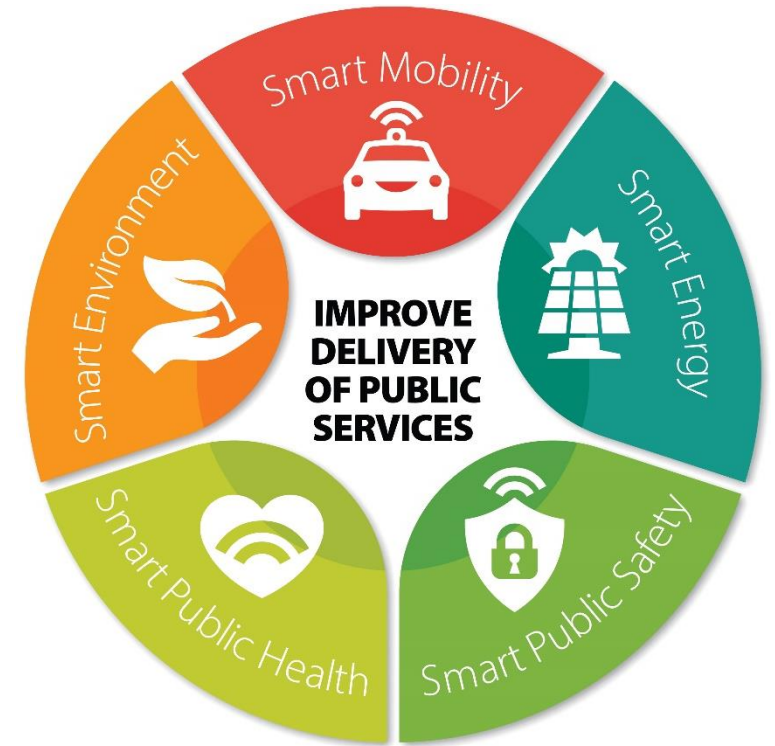
Establish a common response plan for agencies supporting refugees and marginalized communities in Amman and use it to pilot innovative programs that improve service delivery in urban environments, such as targeting and profiling activities, approaches to partnership, or using urban design to achieve humanitarian goals.



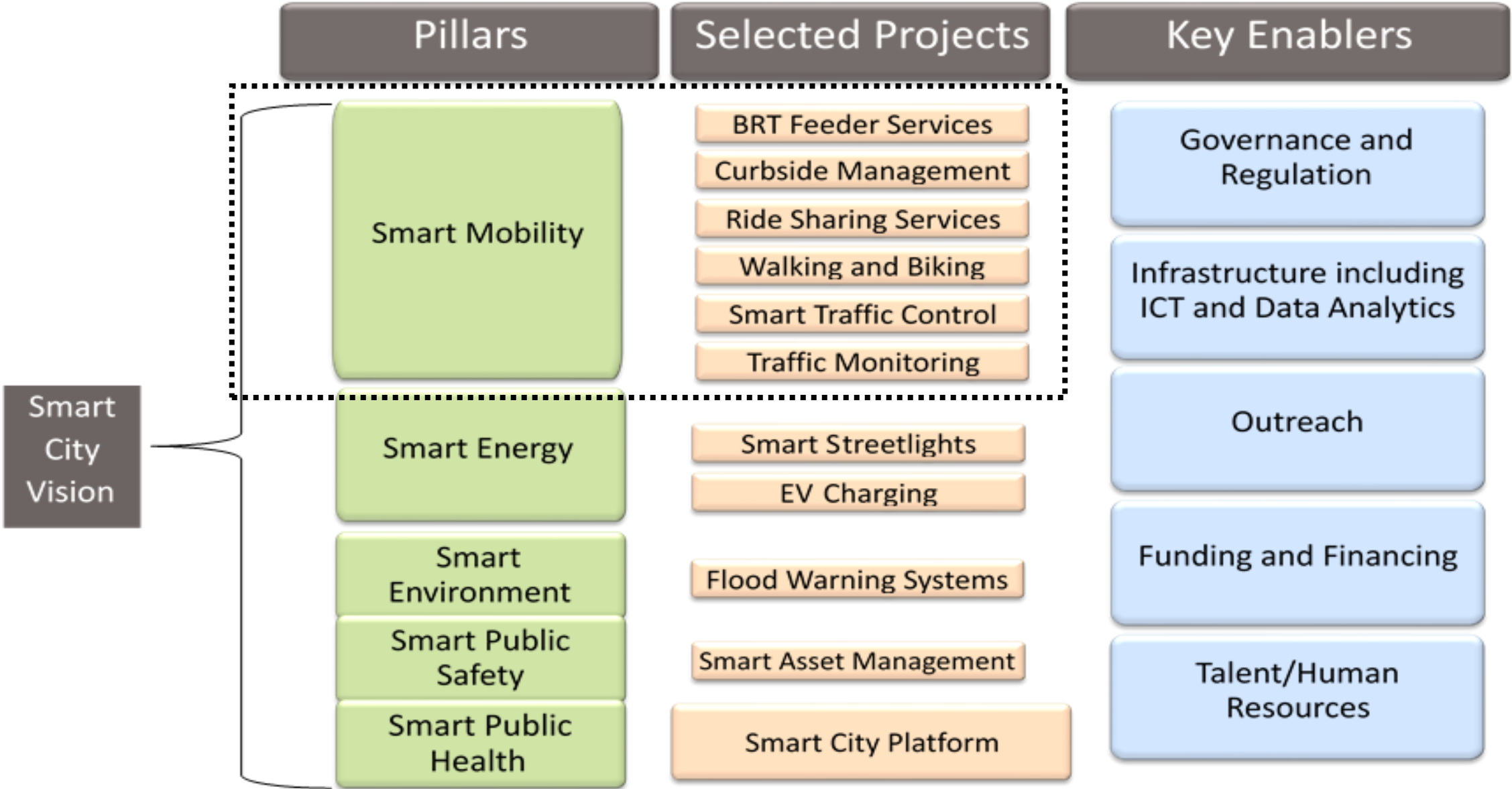
# Amman Smart City Roadmap

## Smart City Vision And Goals

- Vision - improve the management, efficiency, reliability, and quality of the urban infrastructure and associated public services for the citizens of Amman.
- Goals
  1. Improve the efficiency of the city as a system by interconnecting the different infrastructure components, services offered, and people working with them, and reducing costs through monitoring and information sharing.
  2. Increase the use of practical technology to address transportation-related challenges.
  3. Provide accessibility to disadvantaged populations, the elderly, and women.
  4. Achieve sustainable and resilient development.
  5. Increase the capture and use of data to measure technology performance.
- Smart City Roadmap complements and helps achieve the objectives set out in the Amman Resilience Strategy and Green City Action Plan.



# GAM Smart City Projects





AMMAN BUS RAPID  
TRANSIT PROJECT  
(BRT)  
PHASE I

# Amman Bus Rapid Transit Project (BRT)

*The project aims to deliver premium quality, economically feasible, car-competitive mass transit system for all of Amman's citizens.*

The main objectives of Amman's BRT urban network are the following:

- Improvement of mass public transportation as well as traveling conditions and accessibility to employment areas;
- Reduction of GHG emissions;
- Strengthening management capacity building in the city of Amman (as this is the biggest public transport project in the country).

The BRT project started in 2010. It stopped in the summer of 2011 amid concerns over its feasibility and funding capacities, which saw the Cabinet suspend it and halt all related tenders.

In 2015, the government decided to resume the project, as part of a plan to provide transport solutions and ease traffic congestion in Amman. The system will be expanded over time to cover all of Amman's neighborhoods.

# Amman Bus Rapid Transit Project (BRT)

- The Amman BRT Phase I consists of three lines, two of which serve major destinations within the city of Amman while the third connects Amman with Zarqa.
- Phase I is in the final stages of construction, with experimental operation in mid-2021 and full operations planned for end-2023 once the private operator is selected.



# Amman Bus Rapid Transit (BRT)

By enhancing safety, reliability and accessibility, the Project has the potential to:

- Enhance the mobility of women, refugees, the youth, and the elderly, thereby improving their access to essential services and employment opportunities and reducing the gaps in labor force participation.
- The Project is also expected to cause a modal shift towards public transport, thereby reducing traffic congestion as well as traffic-related accidents eventually reduce GHG emissions.

**Table 5-4: CO2 Emission Calculation Results for BRT Routes**

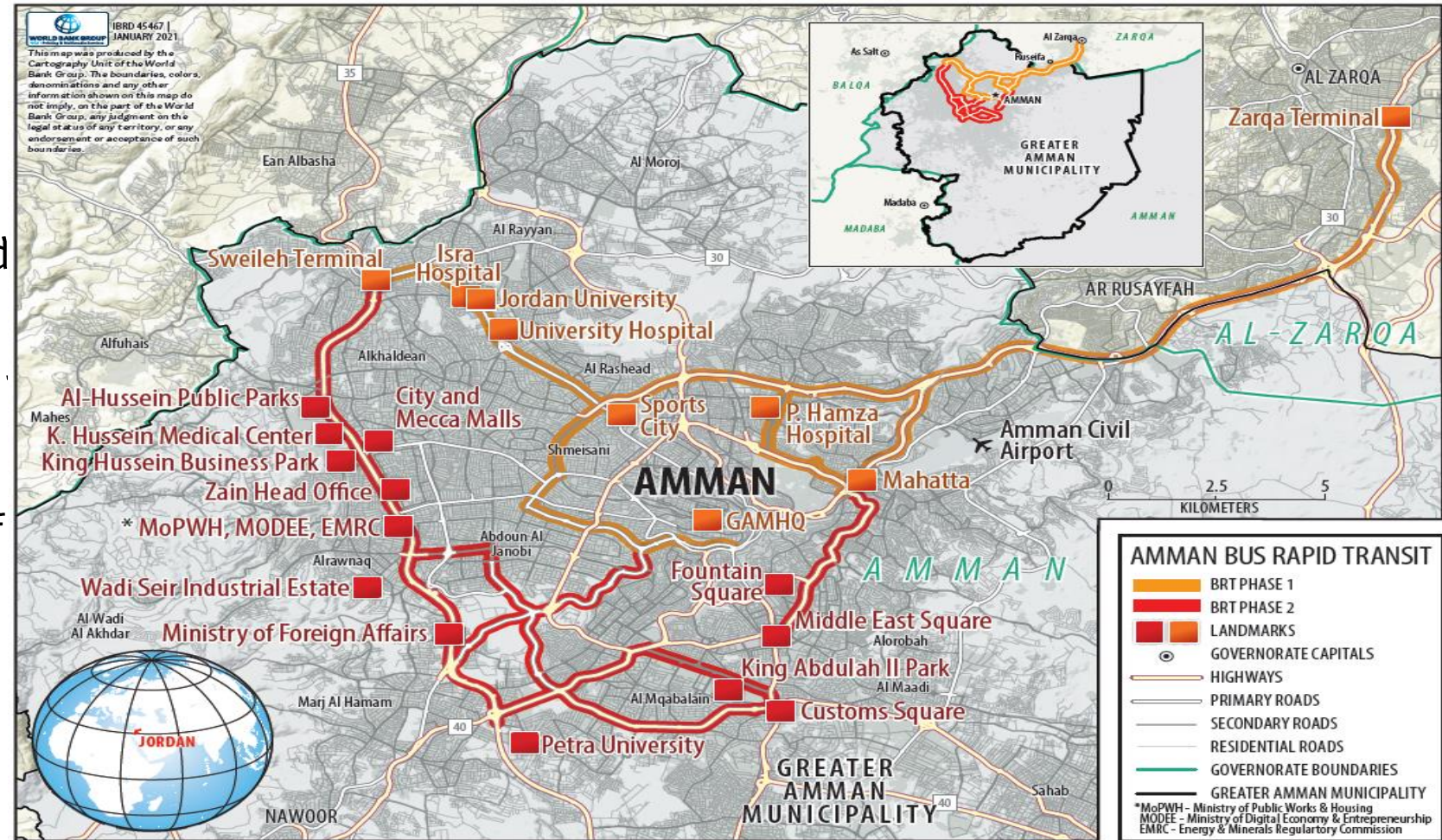
Route	Baseline CO2 Ton/yr (Base flow only No BRT)	Project CO2 Ton/yr (base flow plus BRT)	% Reduction
1	223,582	179,930	20
2	68,457	63,736	7
3	269,395	245,271	9

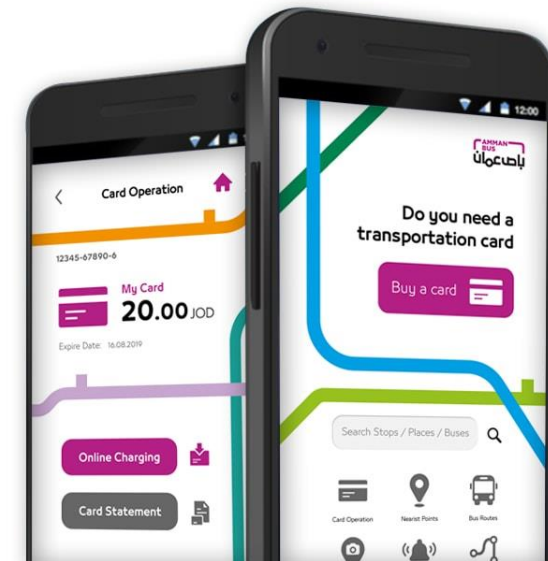
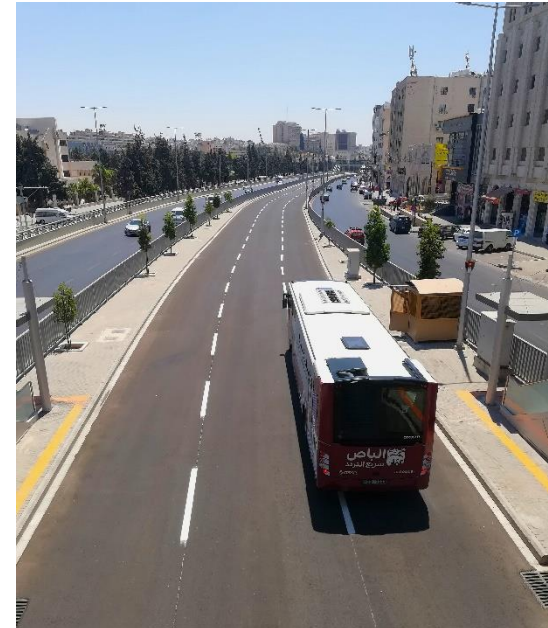
*Environmental and Social Impact Assessment Report for the Amman and Amman-Zarqa Bus Rapid Transit (BRT)- 2017*

*In order to better manage the project, Greater Amman Municipality established Amman BRT infrastructure directorate to supervise and follow up the design, implementation and operation of Amman BRT system in collaboration with GAM partners.*

# Amman Bus Rapid Transit (BRT) - Phase II

- This project aims at expanding / complementing Phase I to provide accessibility to key activity areas.
- It consists of 50km of dedicated BRT lanes within the Western side and parts of South Amman.
- The specific route infrastructure and associated components such as number of park-and-ride; bus depots, terminals, etc, are still to be determined through an on-going preliminary technical assessment funded by the World Bank.









THANK YOU