Amman
Resilience Strategy

Welcome

Young

Diverse

PIONEERED BY THE
ROCKEFELLER FOUNDATION

100 RESILIENT CITIES

ning

This photo represents our three aspirations for a Resilient Amman

"Jordan is on the path to set the right model for itself and to transform its challenges into opportunities. Our history is witness to the resilience of Jordan and Jordanians and to the fact that we can accomplish a lot with very little means. It is a path worth international support."

Quote from His Majesty Abdullah II bin Al-Hussein

Contents

Letter from the Chairman of Amman's Municipality Committee, Dr. Yousef Al- Shawarbeh

Since ancient times Amman has always been resilient with its people and has been able to deal successfully with all the situations and migration waves it witnessed. Today, Amman is a diverse city within the national unity framework, just as in its old history, the city of brotherly love: Philadelphia, its ancient name. As we join the 100 Resilient Cities network, we aim to deepen our knowledge of the international model tools used to deal with the shocks and stresses facing today's cities which are characterized by population growth and climate change, in order to build and enhance our city's resilience in line with the directives of His Majesty King Abdullah II Bin Al-Hussein.

The city's resilience is a basic requirement to create integrated societies, address the needs of their people and ensure their well-being. Therefore, we found that this initiative is pioneering in terms of bringing together individuals, companies, institutions, civil society organizations and international organizations to consider the problems and explore opportunities and initiatives. We used that as a basis to draft our first Resilience Strategy, which is different from previous strategies as it is inclusive and diverse, and joining 100RC network gave us access to learn from the best practices of other cities.

As we seek to put this strategy into practice, through implementation of its actions, I would like to thank the employees of GAM who worked on the drafting of this strategy. I would like also to thank 100 Resilient Cities network and the Rockefeller Foundation which supports this initiative, for helping us in developing our strategy, in collaboration with our strategic partner Arup and we look forward to more collaboration to build a better future for our city and its people.

Dr. Yousef Al-Shawarbeh

Chairman of Amman's Municipality Committee

Letter from the Chief Resilience Officer, Fawzi Masad

The city of Amman and other Jordanian cities are facing major challenges that hinder their development and growth. These challenges arecompounded by the instability in the region. Water scarcity, power cuts, high population growth rate and migration, economic problems and unemployment, climate change, inadequate infrastructure and public transportation, rising traffic congestion, and other environmental, social and cultural issues are some of these challenges. Greater Amman Municipality (GAM) however, has managed to address many of them and has increased its services provision proportionally with the sharp increase in the population, which has more than doubled over the past decade.

This unprecedented urban growth and population increase have led to greater pressure on the resources of the Municipality, affecting its capability to develop and grow. Thus, following the traditional ways of working will not produce the desired results and will not achieve our vision of "having Amman a city that is an organized, modern, smart, safe, attractive, lively, friendly, viable, proud of its heritage and its roots". Therefore, it was essential for GAM to think of innovative ways to break away from the daily work and to move towards sound pre-planning of the city's future, to enable us to move from a reactive approach to proactive approach in the implementation of plans and initiatives according to the best international practices. Our actions today will shape our city's future.

GAM participation in 100 Resilient Cities network came following a call by the organization;that Amman, with all its components, whether individuals, communities, institutions or businesses; is capable of confronting, adapting and growing despite the tremendous shocks and permanent stresses it is subjected to.

The comprehensive five pillar strategy aims to address all aspects of life and the needs of the city. It was developed with a wide participation by all stakeholders from both public and private sectors, local and international civil society organizations, youth, academia and others who met to discuss the city's future and draw a road map based on its potential. This strategy that we present to Ammanis, addresses transforming our challenges into opportunities to develop our city together and ensure the well-being of our people, children and future generations.

The strategy is a live document as the city is subject to periodic improvement and development in response to unexpected changes and future needs. We welcome any additional contributions from our partners that further promote the city's resilience.

We would like to present our greatest gratitude to the former Mayor of Amman, Mr. Akel Biltaji, for his faith in the city's capabilities, his efforts to join the network and his continuous support during the development of the strategy. We also would like to thank Dr. Yousef Al-Shawarbeh, who supported this initiative in his capacity of former deputy mayor and current Chairman of Amman Committee. We also would like to thank all the employees of GAM for their active participation, as well as all honorable stakeholders whose contributions had a great impact on the success of our endeavor.

We would like also to thank the 100 Resilient Cities network for their support and for providing us with the opportunity to be part of those 100 other cities around the world in strengthening our capabilities and building the city's resilience, and finally to our strategic partners Arup for their sincere contributions to the development of the strategy.

Eng. Fawzi Masad

Amman Chief Resilience Officer

Letter from 100RC President, Michael Berkowitz

On behalf of the entire 100 Resilient Cities family, I want to congratulate the Greater Amman Municipality, Mayor Dr. Yousef Al-Shawarbeh , former Mayor Biltaji, and Chief Resilience Officer Fawzi Masad, on the release of the city's Resilience Strategy, a major milestone for the city and 100RC's partnerships with it.

The cultural, political, and commercial heart of Jordan, Amman has also grown into a formidable regional metropolis. This Strategy sets out a clear vision for the way forward, enabling the city to thrive rather than merely survive its various challenges. Resilient Amman addresses not only the city's potential shocks, such as the refugee crisis, terrorism, and extreme weather, but also Amman's stresses, such as inadequate public transportation, water scarcity, aging infrastructure, and high unemployment.

This inspiring document does this by placing Amman's citizens, especially its younger population, at its center, with initiatives that create opportunity and allow for the city's natural talent to develop. With this as a foundation, we are confident that Amman can build a strong, resilient future.

The leadership and commitment of former Mayor Biltaji, and Engineer Fawzi Masad, Amman's Chief Resilience Officer, have guided the city to this major moment. This Strategy represents the beginning of the exciting work to come in the months and years ahead, including projects with 100RC Platform Partner, the International Rescue Committee. And 100 Resilient Cities' partnership with the city is also just beginning. Now we can collectively begin implementing the actions and initiatives contained in the following pages, which will positively impact the lives of all who call Amman home. From its early work and active engagement with the network, Amman is well positioned to help us in leading the global urban resilience revolution, especially by becoming a regional resilience champion and paving the way for other cities in the Middle East.

We at 100 Resilient Cities could not be more pleased to be a partner in these efforts and look forward, together with Amman, to create a new global standard.

Michael Berkowitz

President of 100 Resilient Cities – Pioneered by the Rockefeller Foundation

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Introduction

About this Strategy

This strategy sets out the vision for a resilient Amman and the pillars, goals and actions that will help us achieve it.

During Phase I of the strategy development process, we aimed to understand the present resilience status of the city, through assessments of our shocks, stresses, and potential scenarios affecting our city assets, and most importantly through engagement with the city's stakeholders, including Greater Amman Municipality departments, private-sector, NGOs, universities, youth organizations and more. At the end of Phase I, we identified discovery areas or themes that we need to address to build the city's resilience.
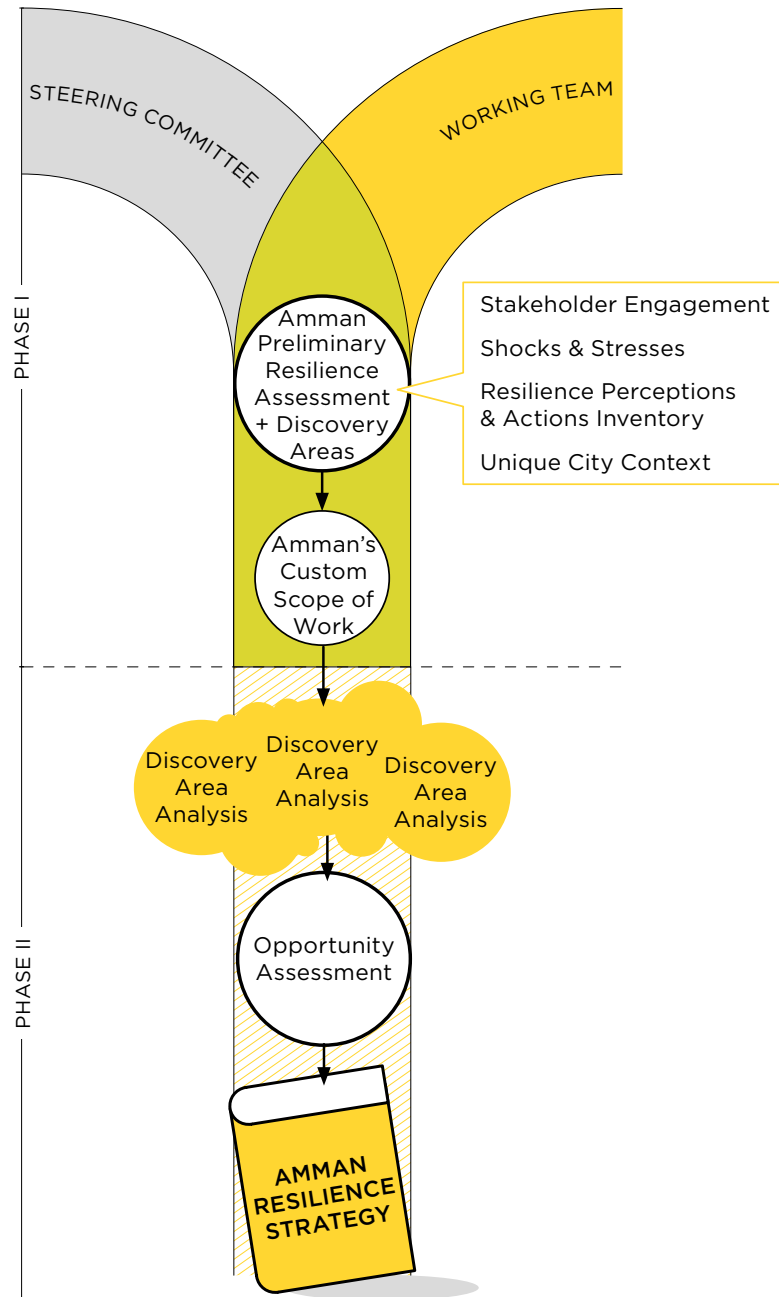
In Phase II, we delved more deeply into the discovery areas and undertook a number of diagnostic activities to understand the resilience challenges, which resulted in identification of a number of opportunities, specific priorities and initiatives which will help us improve the resilience of the city. We prioritized these opportunities using the Resilience Lens tool, and with close collaboration with our stakeholders. From this we produced a shortlist of opportunities that have resilience value and implementation potential. This strategy includes the actions identified in this process.

VISION

PILLARS GOALS   ACTIONS
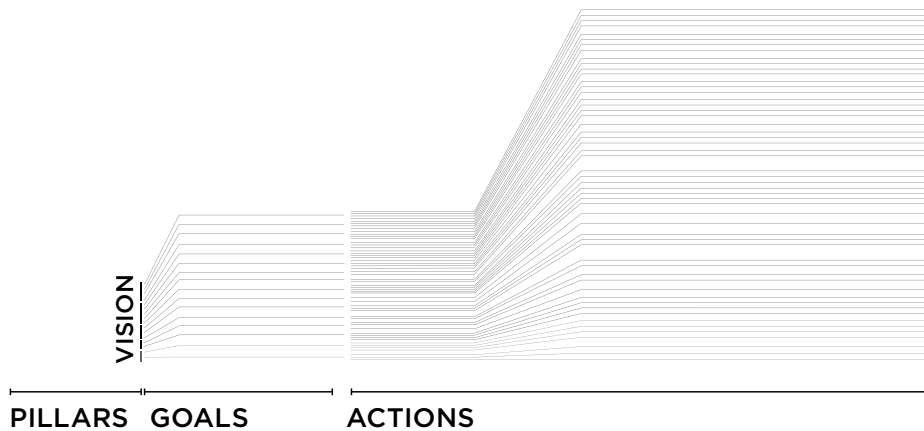
Strategy structure, from vision to actions

Process

The diagram illustrates the process that we have
followed to develop our resilience strategy.

STEERING COMMITTEE

WORKING TEAM

PHASE I

Amman Preliminary Resilience Assessment + Discovery Areas

Stakeholder Engagement

Shocks & Stresses

Resilience Perceptions & Actions Inventory

Unique City Context

Amman's Custom Scope of Work

PHASE II

Discovery Area Analysis

Discovery Area Analysis

Discovery Area Analysis

Opportunity Assessment

AMMAN RESILIENCE STRATEGY

Amman Resilience Strategy Process

15

Amman's Resilience Journey

Phase I

of our approach is all about understanding the resilience issues facing Amman. At the end of this process, we produced an initial assessment of its resilience – known as the Preliminary Resilience Assessment (PRA), and identified Discovery Areas, which are thematic areas around which deeper analysis and broader engagement was undertaken in the next phase.

Amman selected to join 100RC network

December 2014

Agenda setting workshop

January 2016 at Amman's Al-Hussein Cultural Center

The Agenda Setting Workshop was the first step towards the development of Amman's Resilience Strategy. The workshop brought together diverse stakeholders to introduce them to the 100RC initiative, familiarize them with resilience concepts, and identify Amman's critical resilience challenges. It was attended by around 100 people.

Appointment of City Resilience Officer (CRO) and Amman Resilience Team

January 2016

Eng. Fawzi Masad was appointed as CRO and the Office of Resilience was established. The Resilience Team was initiated to support the CRO in developing Amman's city resilience strategy.

Preliminary Resilience Assessment (PRA) and identification of Discovery Areas

August 2016

The PRA was released in August 2016. This summarises all the activities carried out in Phase I. From it, five Discovery Areas were identified:

1. Efficient institutional financial planning

2. Comprehensive urban development

3. Effective legislation

4. Resourceful environment

5. Robust community

A final cross-cutting Discovery Area was also identified:

6. Improve Amman's ability to cope with sudden increase of population

PHASE I

Development of City Resilience Strategy

January – May 2017

From this we started to develop the pillars, goals and actions that form the basis of the resilience strategy. The pillars are:

• An integrated and smart city

• An environmentally proactive city

• An innovative and prosperous city

• A young and equal city

• A united and proud city

Field of Opportunity and Resilience Lens

December 2016

Bringing together the findings of the discovery area analysis and diagnostic work, we used the Resilience Lens tool to collate a list of practical, viable, resilience building opportunities that we could realistically implement over the short and longer term. The tool helped us assess the resilience contribution of the opportunities and their practical viability in the real context of the city to create the Field of Opportunity.

During the Field of Opportunity (FoO) workshop, we prioritized the opportunities with the Steering Committee to identify a set of resilience-building, implementable initiatives to take forward in the final strategy, and identify our resilience goals. Five pillars and 16 goals were identified for Amman.

Diagnostic work

October/November 2016

• Diagnostic activities helped us to understand how the city is currently performing, to identify potential risks and vulnerabilities, gaps in knowledge, and opportunities for collaboration and strategic action that could bring broader social, economic, cultural and environmental benefits.

• Diagnostic activities were carried out to develop more detailed research and analysis of our selected Discovery Areas, in order to improve our understanding of the issues and uncover potential opportunities and actions that could be addressed through the Resilience Strategy. More than 60 opportunities were produced either through Working groups discussions, research, analysis, comparative analysis with other cities, or extension of an existing program/action/initiative already underway.

Phase II

focuses on a combination of technical assessment and strategic stakeholder alignment and engagement. This information underpins the development of the final city resilience strategy. During this phase, the city develops its Discovery Areas into opportunities, taking into consideration learnings from Phase I and the PRA. This results in specific priorities and initiatives for implementation in the city's resilience strategy. The strategy outlines the key resilience challenges and opportunities the CRO and city are committed to addressing, and the activities the city and its partners will implement to strengthen its resilience.

PHASE II

City resilience

What is city resilience?

City resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.

Amman has adopted the use of the City Resilience Framework to help assess our state of resiliente. 100RC framework – developed by Arup and The Rockefeller Foundation - called the City Resilience Framework (CRF) helps cities to identify their resilience strengths, weaknesses and opportunities. Cities are complex systems comprising multiple overlapping systems. The CRF acts as a lens to understand this complexity and the drivers that contribute to city resilience. The framework is made up of 4 main dimensions and 12 drivers that together illustrate what makes a resilient city.
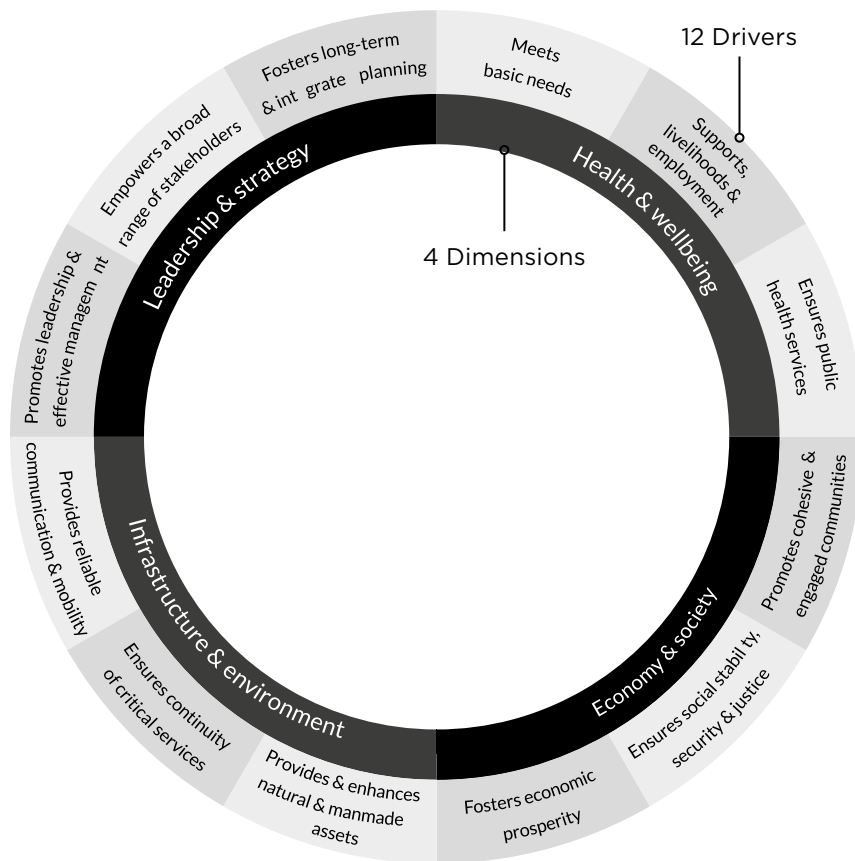
City Resilience Framework (Arup and Rockefeller Foundation, 2014)

Shocks and stresses

A city's ability to remain competitive whilst supporting the wellbeing of its citizens may be influenced by sudden shocks and ongoing stresses. A shock is a sudden, acute event that occurs infrequently, such as a major flood or terrorist attack. A stress is a chronic condition that gradually weakens the city's fabric on a daily or cyclic basis, such as high rates of unemployment and severe traffic congestion.

Qualities

A resilient city also exhibits seven qualities, which should be evident in the way the city – or any system, function or asset within the city – operates. These are:

Reflective

able to learn from past experiences to inform future decisions.

Resourceful

able to recognize alternative ways to use resources at times of crisis, in order to meet needs or achieve goals.

Inclusive

able to create a shared sense of ownership in decision making throughout the city, incorporating the knowledge and perspectives of all majority and minority groups.

Integrated

able to coordinate work across institutions and systems to catalyse additional benefits.

Robust

comprising well-conceived, constructed and managed systems, capable of withstanding sudden shocks.

Redundant

purposefully incorporating spare capacity to accommodate disruption due to extreme pressures, surges in demand or an external event.

Flexible

willing and able to adopt alternative strategies in response to changing circumstances or sudden crises.

About 100RC

100 Resilient Cities - Pioneered by The Rockefeller Foundation (100RC), is dedicated to helping cities around the world become more resilient to the physical, social, and economic challenges that are a growing part of the 21st century. 100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks – earthquakes, fires, floods, etc. – but also the stresses that weaken the fabric of a city on a day to day or cyclical basis. By addressing both the shocks and the stresses, a city becomes more able to respond to adverse events, and is overall better able to deliver basic functions in both good times and bad, to all populations.

Amman and 100RC

In December 2014, Amman was selected to join the second cohort of the 100 Resilient Cities (100RC). As a member of the 100RC Network, Amman receives technical support and resources from 100RC to develop and implement a City Resilience Strategy, including hiring and engaging a Chief Resilience Officer (CRO) to work in the city government on resilience initiatives. In January 2016, Mayor of Amman, Mr. Akel Biltaji, appointed engineer Fawzi Masad as CRO, a new position created to lead city-wide resilience building efforts.

The importance of being in this network is for Amman to share and exchange learnings from other cities globally.
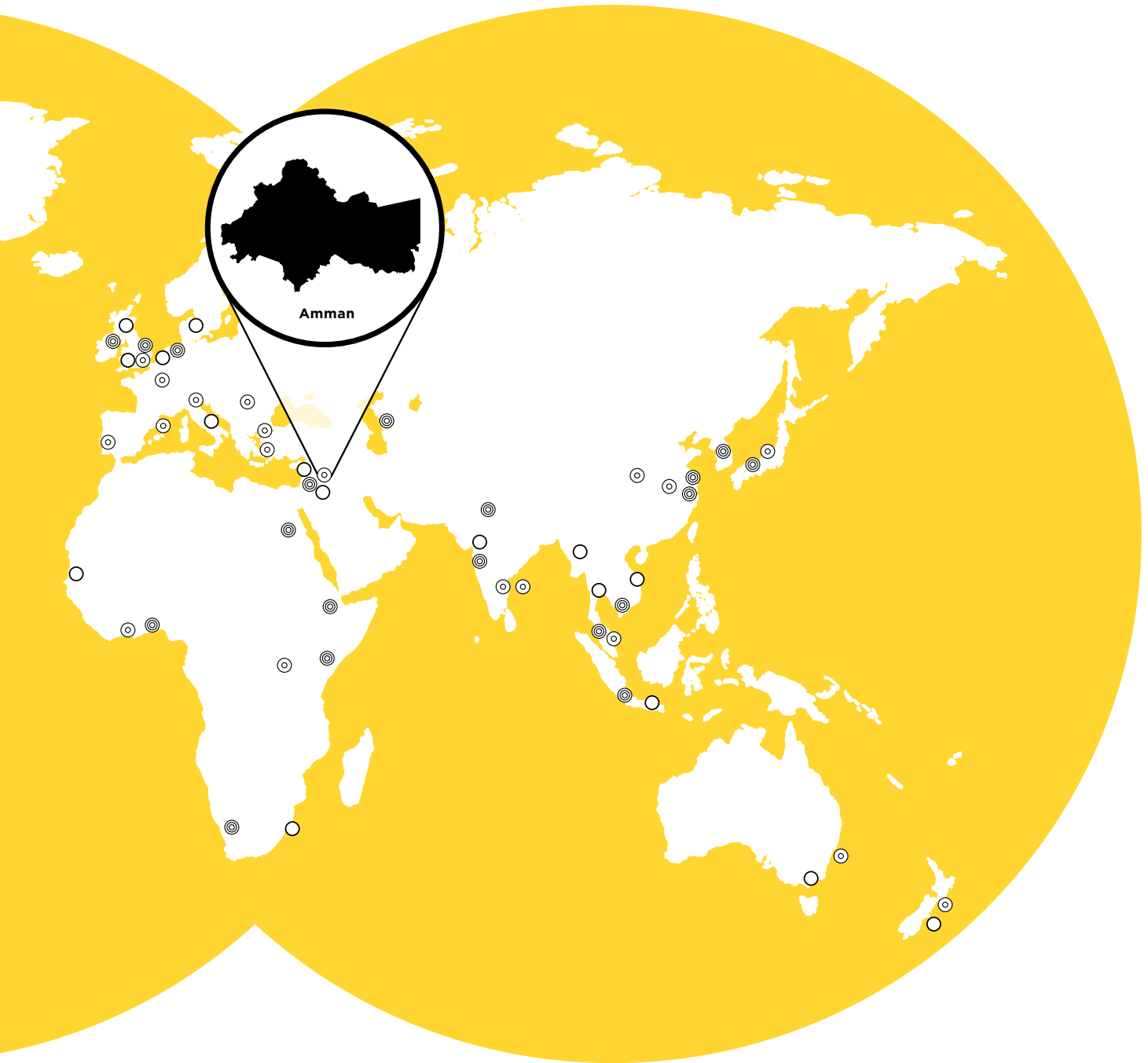
○ ROUND ONE CITIES

Bangkok	Medellin	San Francisco
Berkeley	Melbourne	Semarang
Boulder	Mexico City	Surat
Bristol	New Orleans	Vejle
Byblos	New York City	
Christchurch	Norfork	
Da Nang	Oakland	
Dakar	Porto Alegre	
Durban	Quito	
El Paso	Ramallah	
Glasgow	Rio de Janeiro	
Los Angeles	Rome	
Mandalay	Rotterdam	

◎ ROUND TWO CITIES

Accra	Juárez	Santiago, Metropolitan Region
Amman	Kigali	
Athens	Lisbon	
Barcelona	London	Singapore
Belgrade	Milan	St. Louis
Bengaluru	Montreal	Sydney
Boston	Paris	Thessaloniki
Cali	Pittsburgh	Toyama
Chennai	San Juan	Tulsa
Chicago	Santa Fe	Wellington City
Dallas	Santiago de los Caballeros	
Deyang		
Huangshi		

Amman

◎ **ROUND THREE CITIES**

Addis Ababa	Kyoto	Pune
Atlanta	Lagos	Salvador
Belfast	Louisville	Seattle
Buenos Aires	Luxor	Seoul
Calgary	Greater Manchester	Tbilisi
Can Tho	Melaka	Tel Aviv
Cape Town	Greater Miami and the Beaches	The Hague
Colima	Minneapolis	Toronto
Guadalajara (Metro)	Montevideo	Washington DC
Haiyan	Nairobi	Yiwu
Honolulu	Nashville	
Jaipur	Panama City	
Jakarta	Paynesville	

Vision for a Resilient Amman

A welcoming, young and diverse city, balancing the old and the new, the progressive and the traditional. Amman promotes a culture of sharing and inclusivity, pioneering regional change.
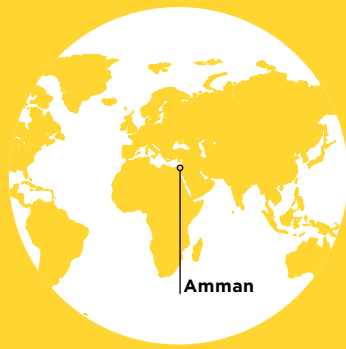
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Amman and Resilience

Jordan Armed Forces Band playing
traditional bagpipe instrument
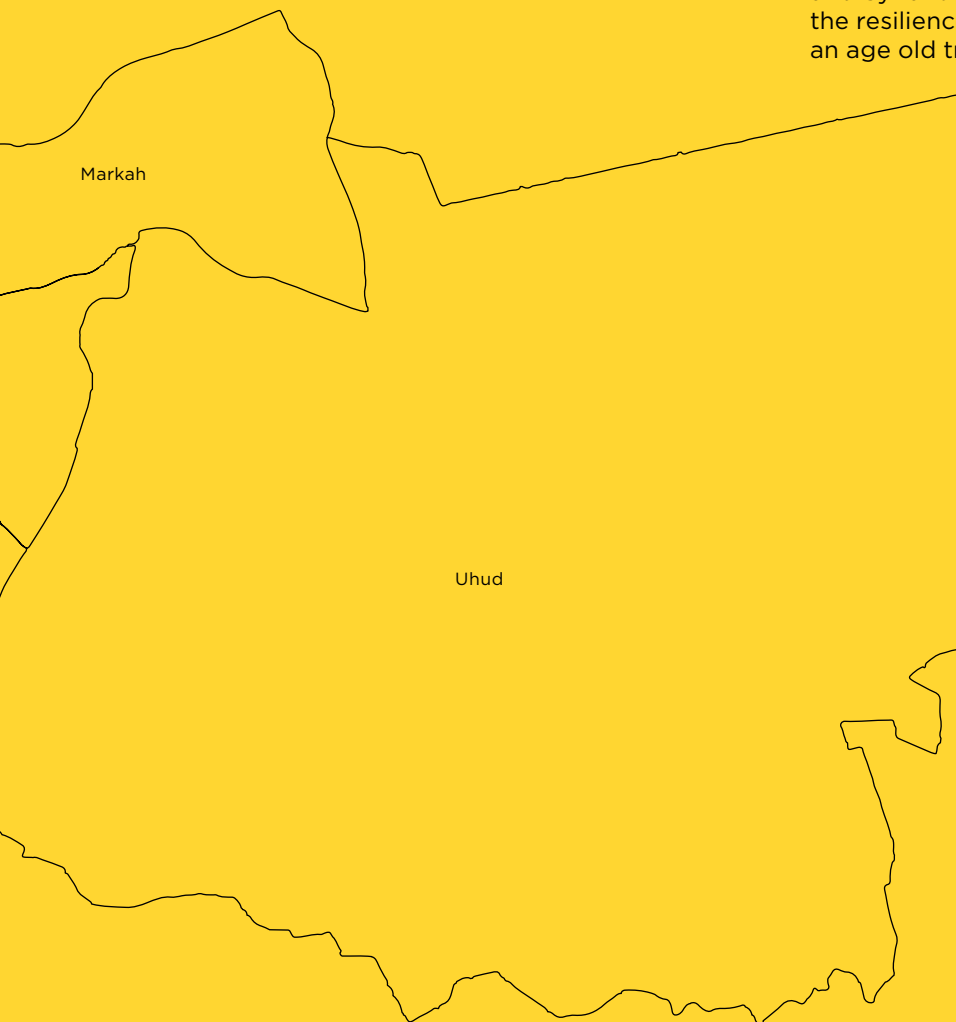© Bashar Bakhet

Amman city profile and context

Map of Amman and its districts

Amman is one of the Middle East's thriving metropolises. It is the political, cultural, and commercial center of Jordan and a successful regional economic powerhouse. Amman is home to around 4 million residents, more than 42% of Jordan's total population.

Despite its turbulent history, Amman has grown to be a regional hub in the Middle East, providing a strong example of tolerance, progress, and peacefulness. Amman – whose ancient name, Philadelphia, means the 'city of brotherly love' - has shown resilience throughout the ages, welcoming Circassian people in the 19th century, Palestinians in the 20th, and Iraqis and Syrians in the 21st century. In Amman, we see the resilience building process as the continuation of an age old tradition rather than a new approach.

Markah

Uhud

Modern day Amman

1921-1948

Amman became the capital of Transjordan in 1921. The city grew rapidly from a first recorded area of 2km^2 in 1925, to around 19km^2 in the 1940s. By this time, Amman had an estimated population of more than 33,000.

1870-1900

Encouraged by the Ottoman Empire, Muslims escaping religious prosecution from Russia – Circassians - settled at the ancient site of Amman, forming the nucleus of the modern city.

1900-1921

The city expanded due to the construction of the Ottoman Hejaz railroad in 1905 and the foundation of the Hashemite Emirate of Transjordan in 1921.

1948-1967

Expansion spread across the slopes of the mountains to accommodate large numbers of Palestinian refugees fleeing the Palestinian conflict in 1948. By 1967, the city's population swelled to over 500,000 people, spread over an area of around 42km^2.

Economy

Amman is divided administratively into 22 districts, each with a high level of autonomy to deliver city services. The municipality controls all of its services, except for zoning, planning, infrastructure, design and construction, which are carried out centrally in the Municipality main offices .

Greater Amman Municipality (GAM) is financially independent, with a large percentage of its revenues self-generated through service taxes, fees and investment projects. The remainder comes from part loans.

Amman has a strong banking industry. However, in recent years, Amman's economy has suffered the knock-on effects of the global financial crisis and regional conflicts. Tourism has also dropped and unemployment has risen; economic growth is at a six-year low of 2.5%.

Despite these challenges, Amman is the fourth most visited city in the region, with more than a million tourists arriving each year and associated revenues in excess of one billion USD. Amman is also a popular destination for medical tourism, which contributes over one billion USD to the economy annually.

Unemployment in Amman is high – currently around 15% - especially amongst women and young people. The Syrian crisis is not helping. Despite not being legally allowed to work until recently, non-Jordanian migrants have long competed for low-paid casual work in the informal sector, which accounts for more than 40% of all national employment. Recent legislative changes mean that Syrian refugees will now receive identity cards, helping them to access the formal job market. This is expected to have an impact on employment rates and the overall economy.
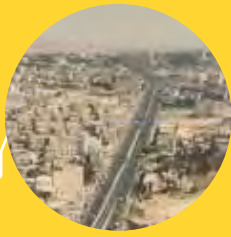
1967-1992

Urban sprawl brought neighbouring villages into the city of Amman. Palestinian refugees continued to settle in the city. By the late 1980s, Amman's population rose to around 1.5 million, with an area of around 530km^2.

1992-2007

The city continued to expand, growing to 2.5 million over 680km^2 by the mid-2000s.

2007-2009

An urban master plan was developed to regulate urban sprawl. The accession of several new districts led the population to increase to over 2.8 million, over a land area of nearly 2000km^2.

2009-2016

A re-evaluation of the Amman Master Plan has led the city to reconsider merging the new districts to Amman, the City now spread on area of approximately 800km2. In recent years, successive conflicts in Iraq and Syria have brought new waves of refugees to the city, driving its population to more than 4 million. Non-Jordanians represent around one third of Jordan's population.

Climate

Amman has a varied topography and diverse climate. Extreme micro-climates mean that snow is not uncommon in the western and northern parts of the city, whilst at the same time rain is frequent in the center and east, and high temperatures are a challenge in the south-eastern parts of the city.

Migration

Amman has a long history of tolerance towards refugees and migrants, having accommodated new populations following the Palestinian-Israeli conflict in 1948, the Arab-Israeli War in 1967, the Gulf Wars in the 1990s and early 2003, the recent Iraq war, and ongoing Syrian conflict.

Jordan's population increased by nearly 87% in the last decade, reaching 9.5 million in 2015.

The majority of this growth came from non-Jordanians, who represent around one third of the Kingdom's population (2.9 million), of whom 658.000 are registered Syrian refugees.

The sharp rise in the city's population has placed a huge strain on the city's resources and infrastructure, including water, education, unemployment, transportation, housing, and medical services. This has contributed to an 83% increase in public debt, a 30% increase in youth unemployment, a 40% increase in demand for water, and a 17% increase in rental costs.

Despite these pressures, in Amman we are proud of our diverse identity, which we see as a strength. Diversity and tolerance are vital to our past, our present, and our future. They are also at the heart of our resilience strategy.

Amman's resilience challenges

As a city that has grown rapidly and adapted to accommodate large migrant populations throughout its history, we are already familiar with the concept of resilience. But as other pressures such as climate change, lack of economic diversity, and resource constraints increase, we are now facing new challenges for which we must prepare.

The following table shows the infrequent shocks and ongoing stresses that affect Amman identified by our stakeholders in the working groups.
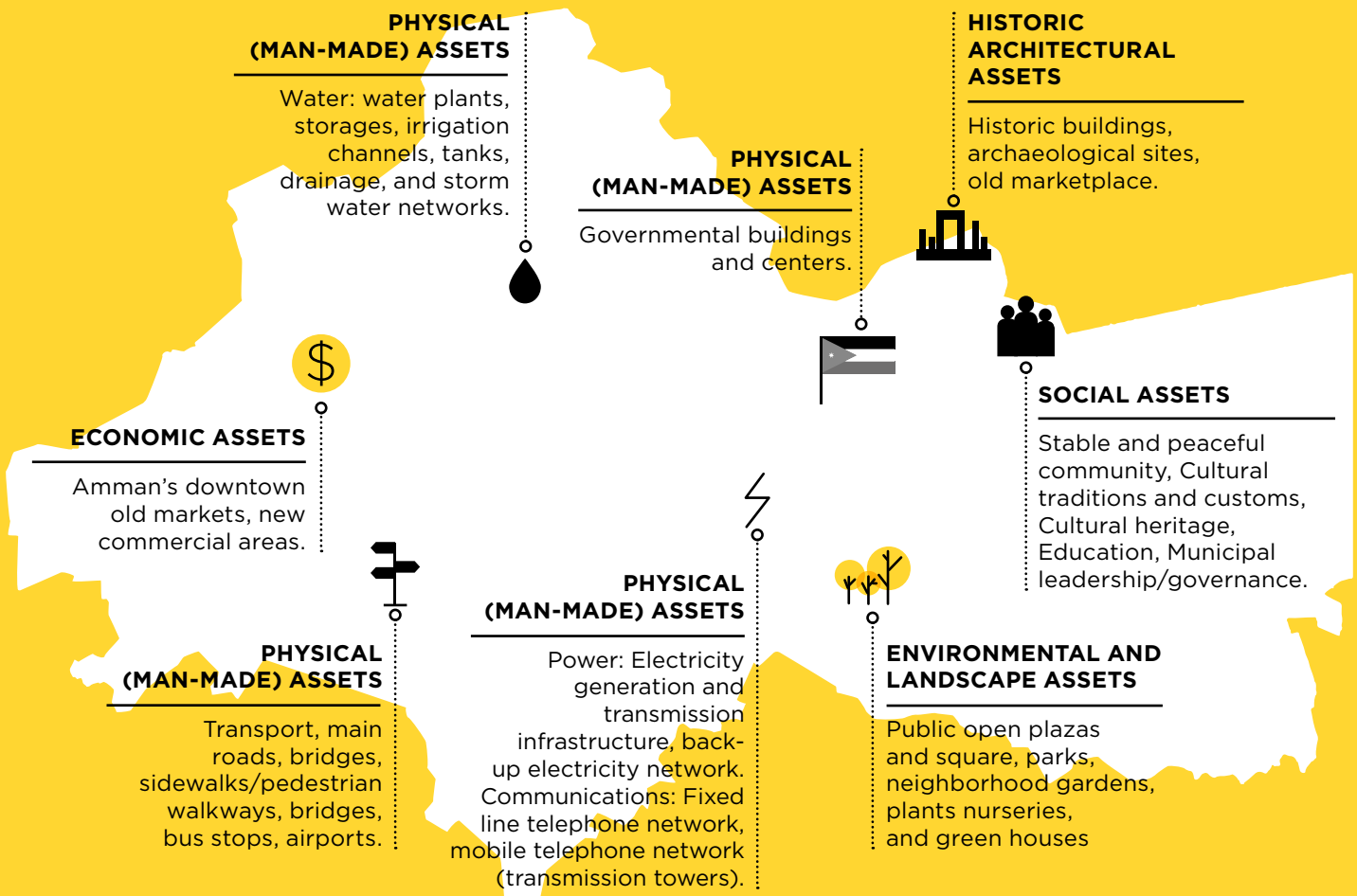
ACUTE SHOCKS

- Economic crisis
- Terrorism
- Major infrastructure failure
- Drought
- Heatwaves
- Flash / surface flood

CHRONIC STRESSES

- High energy costs
- Water shortage
- Lack of natural resources
- Limited access to financial assistance
- Major influx of refugees and/or asylum seekers
- Changing demographics
- Low quality services especially in health and education
- Urbanization
- Unemployment
- Lack of affordable housing
- Lack of diverse livelihood opportunities
- Traffic congestion/ lack of public transport system

Summary of City Assets

PHYSICAL (MAN-MADE) ASSETS

Water: water plants, storages, irrigation channels, tanks, drainage, and storm water networks.

PHYSICAL (MAN-MADE) ASSETS

Governmental buildings and centers.

HISTORIC ARCHITECTURAL ASSETS

Historic buildings, archaeological sites, old marketplace.

ECONOMIC ASSETS

Amman's downtown old markets, new commercial areas.

SOCIAL ASSETS

Stable and peaceful community, Cultural traditions and customs, Cultural heritage, Education, Municipal leadership/governance.

PHYSICAL (MAN-MADE) ASSETS

Transport, main roads, bridges, sidewalks/pedestrian walkways, bridges, bus stops, airports.

PHYSICAL (MAN-MADE) ASSETS

Power: Electricity generation and transmission infrastructure, back-up electricity network. Communications: Fixed line telephone network, mobile telephone network (transmission towers).

ENVIRONMENTAL AND LANDSCAPE ASSETS

Public open plazas and square, parks, neighborhood gardens, plants nurseries, and green houses

Climate-related challenges

Unusually heavy rains often lead to flooding in lower-lying areas of the city, and its elevation exposes it to hazardous blizzards. Recent snowstorms have paralyzed the city, affecting schools, transportation and the power grid. The city has responded to these disruptions by establishing protocols for emergency operations, including rapid-response communications centers and elaborate community coordination processes.

Recent influx of migrants

has put pressure on the city's infrastructure and its ability to deliver basic services, this includes our waste management and transport systems. While the city has well-managed road, tunnel, and bridge infrastructure, there is little in the way of reliable public transport infrastructure, forcing residents to rely heavily on cars.
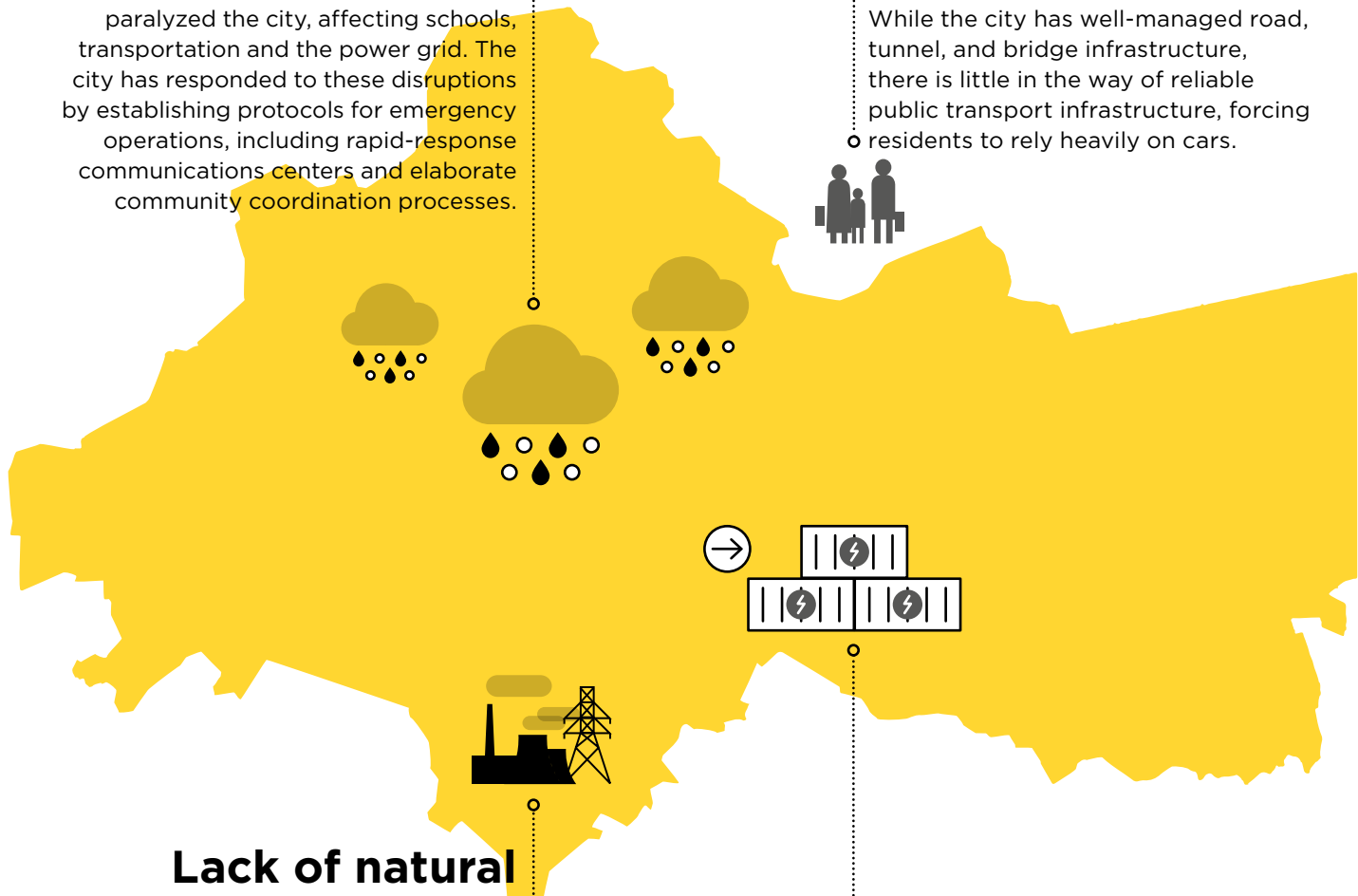
Lack of natural resources

including energy and water, also render the city heavily reliant on imports from the wider region. This leaves the city exposed to price volatility and insecurity of supply. Compounded by increasing demand from a growing population, Amman must find ways to meet its future resource needs without compromising its ability to deliver reliable and high quality services.
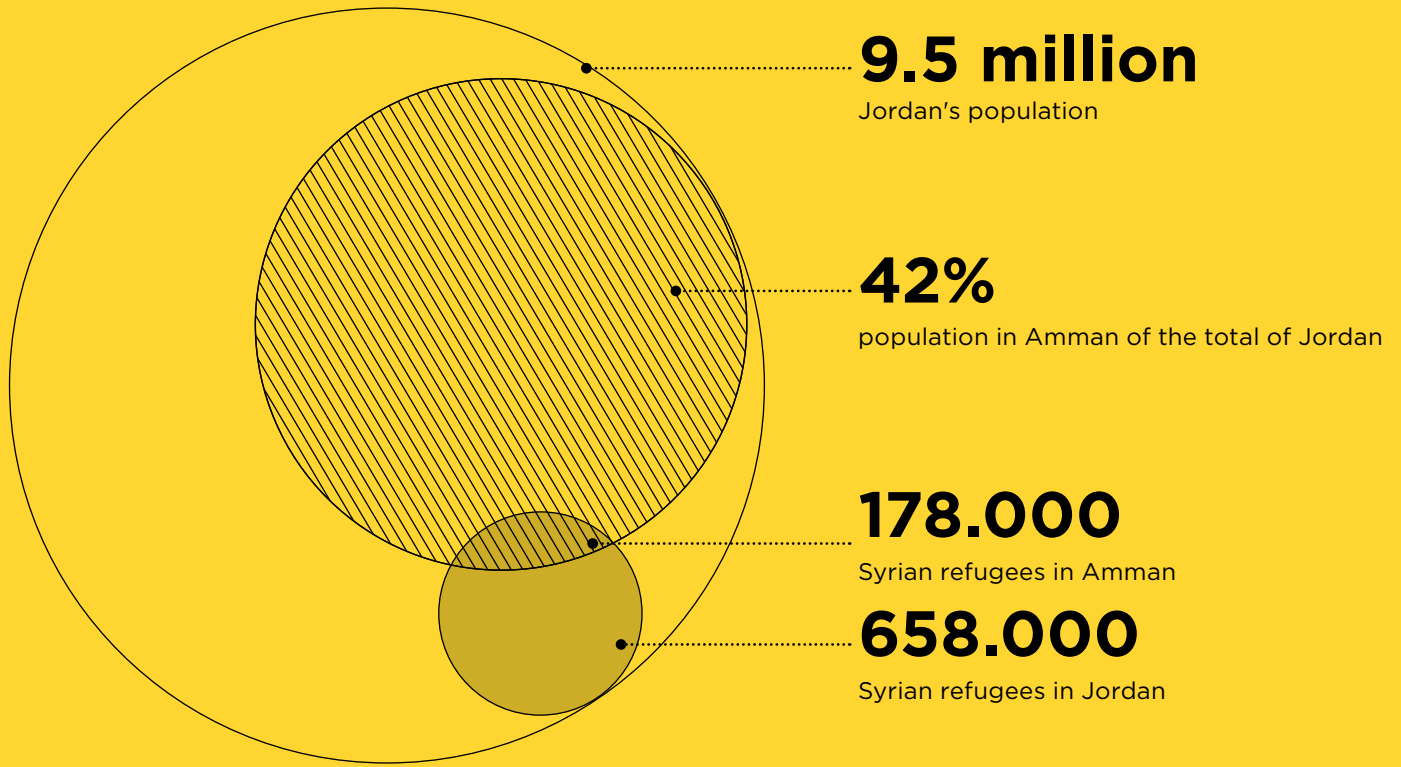
Economic challenges

Regional instability and a difficult business and investment environment that discourages foreign investments have also contributed to economic stagnation and a growing threat to the continuity of the city's services and systems.
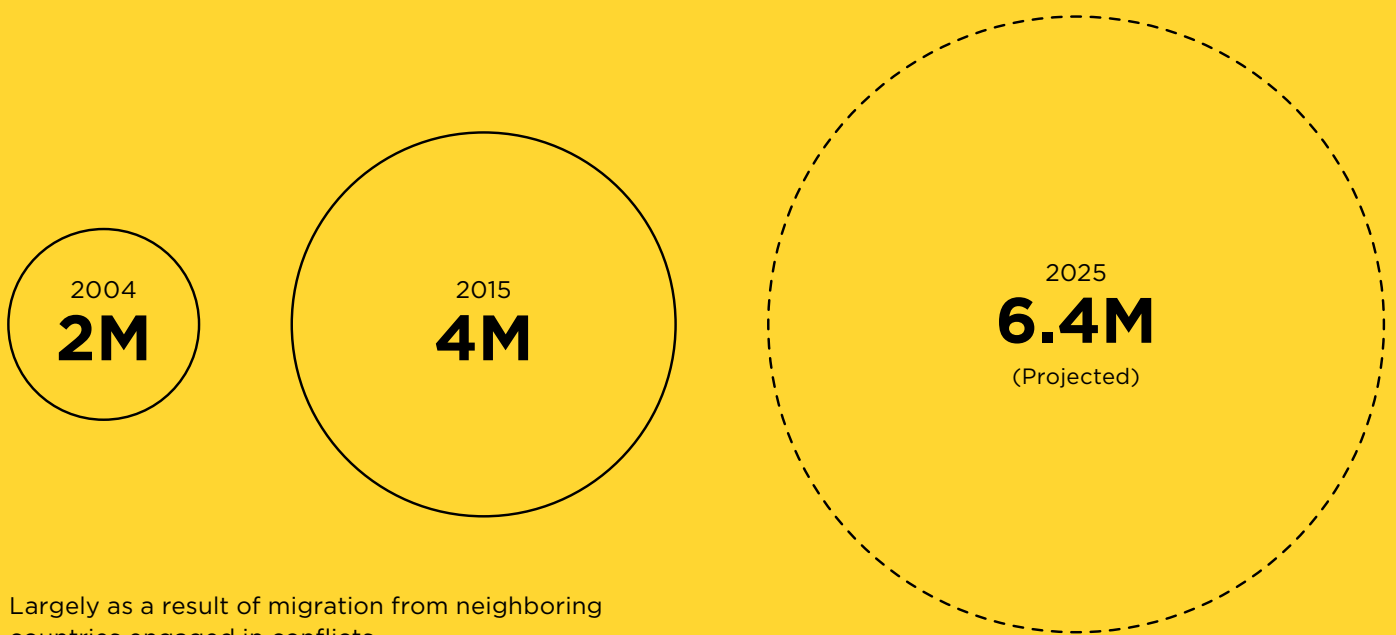
Key Statistics

THE 2ND LARGEST HOST OF REFUGEES PER CAPITA IN THE WORLD

9.5 million
Jordan's population

42%
population in Amman of the total of Jordan

178.000
Syrian refugees in Amman

658.000
Syrian refugees in Jordan

POPULATION GROWTH OF AMMAN

2004
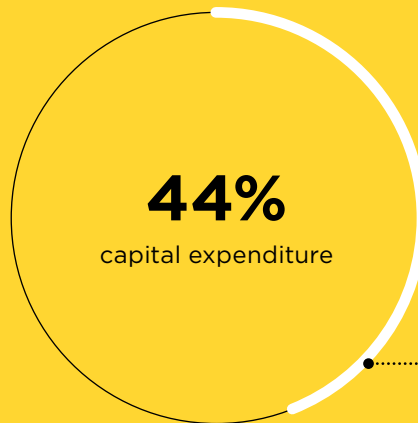**2M**

2015
4M

2025
6.4M
(Projected)

Largely as a result of migration from neighboring
countries engaged in conflicts

More than half of Amman's population is

aged under 25

15% unemployment rate. Especially high amongst

women and young people

CAPITAL
EXPENDITURE
ALLOCATION
IN 2016

44%

capital expenditure

was allocated for

infrastructure

projects

RESULTS OF THE
RECENT INFLUX
IN AMMAN'S
MIGRANT
POPULATION
(2011-2015)

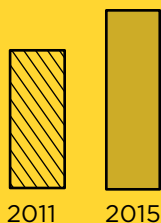Annually total fiscal impact
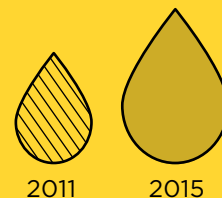more than

$2.5 billion =

6%

of Jordan's GDP

= # 25%

of government annual revenues

2011   2015

30% increase

in youth unemployment

2011   2015

40% increase
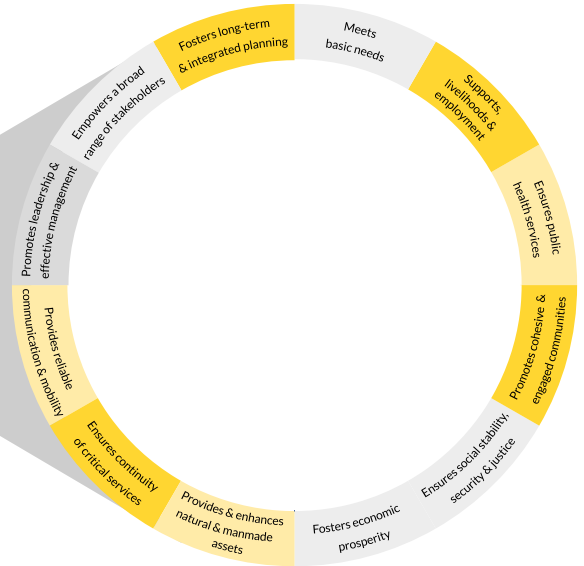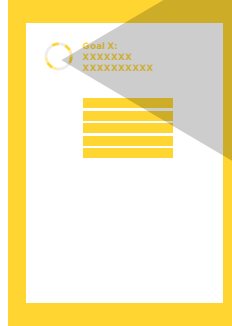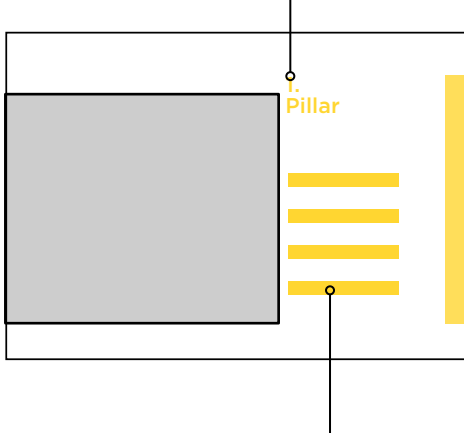
demand for water

3

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Amman's Pillars, Goals and Actions

How to read the chapter:

Pillars (1, 2, 3, 4, 5)

a strategic direction that the city will pursue to achieve the vision.

1.
Pillar

Goal X:
XXXXXXX
XXXXXXXXX

Fosters long-term & integrated planning

Meets basic needs

Empowers a broad range of stakeholders

Supports, livelihoods & employment

Promotes leadership & effective management

Ensures public health services

Provides reliable communication & mobility

Promotes cohesive & engaged communities

Ensures continuity of critical services

Ensures social stability, security & justice

Provides & enhances natural & manmade assets

Fosters economic prosperity

Goals (A, B, C...)

a tangible and attainable objective.

The graphic adjacent to the goal represents the Resilience Value mapped on the CRF drivers. Refer to page 14 for more information.

Actions

the specific project level, including tactical activities to help accomplish the objectives.

GOAL

PILLAR

ACTION

Action 1.A.1

DESCRIPTION	Owner	SDG's
	Status	Resilience Value
	Timescale	
	Partners	

This call out stand the research into vulnerable people including people with disabilities and directed also to refugees according to the research into the refugee crisis in Amman undertaken by IRC, which proposes adaptations to resilience actions in the strategy that would make them more inclusive of underprivileged residents. More details can be found on page 114.

Case study category
Case study title

These boxes refer to inspirations from other 100RC cities, best practices or challenges in context.

Summary of our Pillars, Goals and Actions

The diagram illustrates and gives an overview of the pillars, goals and actions included in this strategy, their resilience value mapped on the CRF alongside the relevant Sustainable Development Goals (SDGs). More details about each goal and action can be found in chapter 3 and 4.

1
An integrated and smart City

2
An environmentally proactive City

3
An innovative and prosperous City

4
A young and equal City

5
A united and proud City

A. Improve the mobility systems

B. Promote walkability

C. Institutionalize planning in the city

D. Connect the city digitally

A. Manage and fulfil climate change commitments

B. Improve energy efficiency and energy security, including by diversifying energy sources

C. Apply green building codes and guidelines

D. Manage our water resources efficiently

E. Improve our waste management system

A. Leverage our existing human capital to create employment

B. Support entrepreneurs, start-ups and incubators

C. Empower women

A. Integrate and engage young people equally

B. Support our youth through cultural campaigns

A. Promote a sense of belonging amongst citizens

B. Promote participation and engagement

5 PILLARS   **16 GOALS**   **54 ACTIONS**

1. Develop an integrated mobility plan — 9 11
2. Plan and construct an efficient BRT system — 9 11
3. Plan and construct a Metro System in the main corridors — 9 11
4. Develop an urban mobility observatory — 9 11

1. Review and update 'Street Manual' — 3 9 11
2. Create a walking map — 3 11
3. Explore tactical urbanism opportunities — 3 11
4. Organize a design competition for Amman's Hijazi railway — 3 9 11

1. Finalize and implement Amman Strategic Master Plan 2060 — 9 11 16
2. Develop a strategic development plan for East Amman — 11
3. Establish an urban resilience research centre — 11
4. Develop a storm water drainage masterplan — 11 13

1. Develop an ICT city action plan — 11
2. Establish a centraliaed GIS database — 11
3. Establish a coordination plan for service providers within the city — 11

1. Create a team responsible for our climate change portfolio — 11 13
2. Develop a Climate Change Action Plan — 11 13
3. Network and collaborate with international agencies on climate change — 11 13
4. Deliver the Green Amman 2020 initiative — 11 13

1. Identify and implement energy saving solutions for municipal assets (buildings, streets, public spaces etc.) — 7 9 13
2. Develop solar power generation facilities — 7 9 13
3. Incentivize the public to adopt electric vehicles — 11 13
4. Replace GAM fleet vehicles with electric vehicles — 11 13

1. Incentivize application of green building codes — 7 9 13
2. Develop public awareness campaigns relating to green building solutions and technologies — 13

1. Deliver rainwater harvesting plan — 6 13
2. Implement greywater recycling at GAM sites and assets — 6

1. Develop and implement Waste Management Framework — 9 12 13 17
2. Establish waste to energy facilities — 11 12
3. Review, update and reactivate Amman Green Growth plan — 11 12
4. Implement pilot projects for waste management activities — 11 12
5. Implement other waste transfer stations in north and west Amman — 11 12

1. Work with the educational institutions to match education to future skills requitements and reduce child labor — 5 8
2. Organize an annual job fair — 5 8
3. Expend youth empolyment programs to include migrants — 4 10 16

1. Incentivize start ups/incubators — 8 10
2. Collaborate with TED x Amman (or similar platform) — 8 10
3. Organise outdoor Urban Food Fest of Amman — 8 10

1. Promote work from home program — 8 10
2. Pioneer day care centres in GAM buildings — 8 10

1. Promote Amman Youth Voluntary Service — 4 16
2. Enhance citizenship and engage young people in discusssions on future cities trends — 4
3. Local Youth Council — 16

1. Leverage municipal buildings to create youth centres — 8
2. Support cultural, social and sports-related initiatives in the city — 9 10
3. Engage with local and international youth organizations — 4 5 11
4. Design awareness campaigns to prevent youth extremism — 16

1. Organize an 'I love Amman' competition — 10 11 16
2. I Love Amman youth ambassadors and young leaders — 10 11 16
3. Citizenship, rule of law, and cross-sectoral awareness campaigns — 10 11 16
4. Develop a cross-sector city branding strategy — 8

1. Organize a structured dialogue (mass consultation/ roundtable) — 5 10 16
2. Mayoral Outreach — 11 16
3. Integrate Amman youth leaders into municipal decision-making — 16

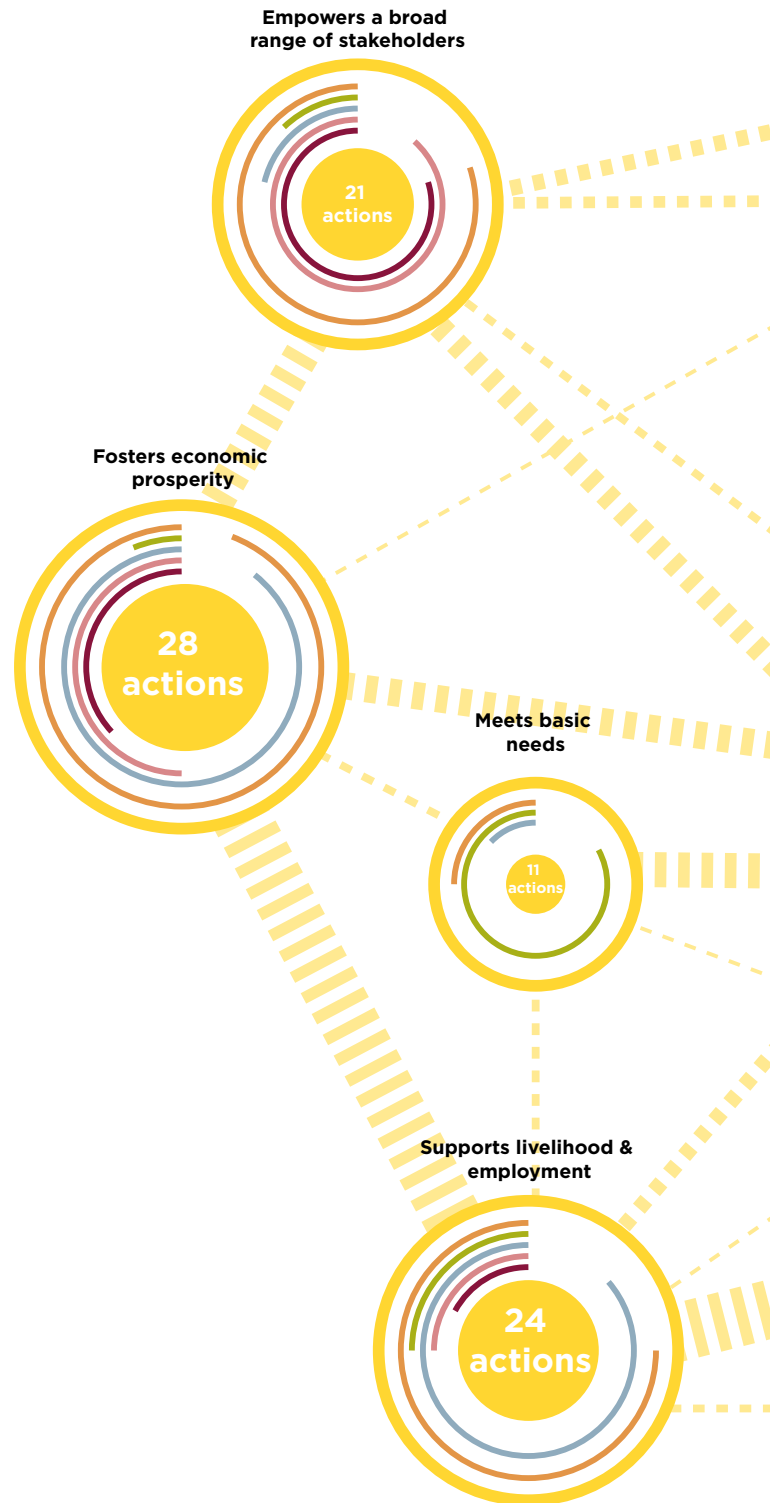**Relevant Sustainable Development Goals**
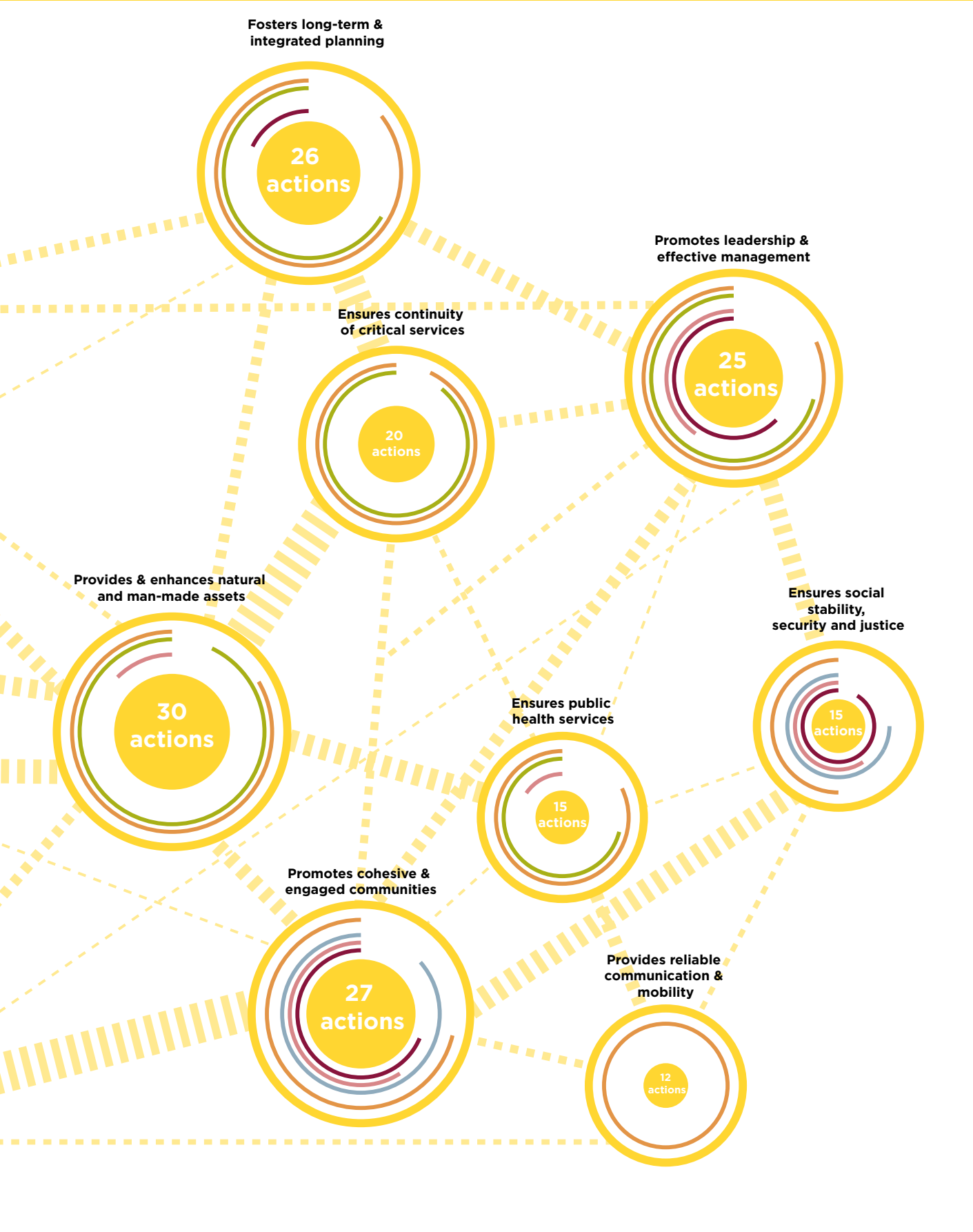
Resilience value mapped on the CRF

Amman Strategy Overview

The diagram illustrates the interdependencies of the resilience values of all the actions in the strategy.

The elements of the diagram include:

1. Circles representing the resilience values mapped on 12 CRF drivers. The size of the circle represents the number of actions possessing this resilience value, i.e. the larger the circle, the higher the number of actions possessing this value.

2. Concentric lines inside the circles - these represent the proportion of the actions that are located in the respective pillars, i.e. under Meet Basic Needs, around 80% of the actions are in pillar 2.

3. Connecting lines - these represent the interdependencies and cross cutting values of the actions. The width of the line represents the number of actions that corelates, i.e. the wider the line, the more actions that create interdependencies.

Empowers a broad range of stakeholders

21 actions

Fosters economic prosperity

28 actions

Meets basic needs

11 actions

Supports livelihood & employment

24 actions

Fosters long-term & integrated planning

26 actions

Promotes leadership & effective management

25 actions

Ensures continuity of critical services

20 actions

Provides & enhances natural and man-made assets

30 actions

Ensures social stability, security and justice

15 actions

Ensures public health services

15 actions

Promotes cohesive & engaged communities

27 actions

Provides reliable communication & mobility

12 actions

Ras Al Ain, Amman.
© Bashar Bakhet

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

Goal A:
Improve the
Mobility Systems

Inadequate Mobility and Transportation system form a major environmental, economic and social challenge for Amman. The decline in attractiveness of public transport as a travel option led people to depend more and more on private car ownership causing chronic congestions and expand demand on parking. This is not a sustainable solution and money and time consuming especially for the underprivileged population.

Greater Amman Municipality has developed a Transportation and Mobility Master Plan (TMMP) based on information and surveys conducted more than ten years ago. However; this plan was not implemented for various reasons excluding part of the first stage of the Bus Rapid Transit system.Due to extensive increase in population during the last decade and the expansion of urban areas; it is essential to update the TMMP taking into account these major changes. We need a more efficient smart mass transport network/ systems. This should include demand management measures, making the road network more modern, more responsive and thus more efficient. This work will be underpinned by the latest research carried out in relation to transport and congestion.

Action 1.A.1
Develop an integrated mobility plan

Developing an integrated mobility plan is one of the city's top priorities aiming at addressing traffic congestion, the increase in private car use, lack of mass transport and safe pedestrian infrastructure. We will use demand management mechanisms and smart data to inform and operate the mobility plan. This will help us set up pilot projects in the medium term. As part of the sustainable transport strategy, a series of key performance indicators (KPIs) will be developed and used to measure its success. This will enable the plan to evolve and to be focused or reshaped as appropriate.

Smart applications including e-payments and real time communication and tracking systems will be introduced and provide fair opportunities and a competitive environment for all taxi operators. This will be supported by clear legislation that protects the rights of all parties. It will also encourage partnership between the public and private sectors.

Owner
GAM (Transport Directorate)

Status
Ongoing

Timescale
Medium

Partners
• Ministry of transport
• Land transport Regulatory Commission

Resilience Value
• Decrease traffic congestion, and provide a safe environment for pedestrians and drivers alike.
• Integrate land-use and transportation planning to deliver public transport infrastructure.
• Produce behavior change in citizens travel mode in favor of more walking and more public transport use.
• Contribute to the emissions reduction and improve the city's air quality.

Consider the mobility challenges and opportunities from residential neighborhoods in Amman (particularly the most marginalized and isolated among them) and critical places of employment (i.e. zones such as Sahab Industrial City, King Hussein Business Park, and Queen Alia International Airport free zone) or service provision centers.

Action 1.A.2
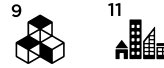## Plan and construct a comprehensive and efficient BRT system

We will deliver a premium quality, economically feasible, car-competitive mass transit system for use by all of Amman's citizens including car owners. Amman's BRT will be the city's first bus rapid transit system, in which high-capacity buses run in exclusive and segregated road lanes. Buses will run as frequently as every 3 minutes along Amman's busiest corridors. There will be 3 routes; from Sweileh in North West Amman to sport city intersection, and from sport city intersection to Jordan Museum in Ras-Al-Aln in east Amman, and from Al-Mahatta through Yarmouk street towards East South Amman limited to infrastructure enhancement along this route. The system will be expanded over time to cover all of Amman's neighborhoods. This action includes the development and design of BRT stops, stations, passenger information, vehicle specifications, interchanges and bus terminals. The BRT system currently under construction aims is increase the use of public transport from 13% to 20% by 2019.

Owner
GAM (Transport Directorate)

Status
Ongoing

Timescale
Long term/ phased

Partners
Ministry of transport

9   11

Resilience Value
- Provide a safe and modern public transport system to reduce reliance on the car, and encourage alternative modes of transport.
- Enhance accessibility for citizens to goods and services, in particular through the provision of a comprehensive and affordable public transport system.
- Reduce emissions from transport (cars) and improve air quality and public health.
- Contribute to Amman's aspirations of efficiency, inclusivity and sustainability.

Inspiration from Bangkok

Integrated Mass Transport System Master Plan

Bangkok will develop a master plan for an integrated transport system, including the Mass Transit Master Plan, feeder system and other modes of public transportation such as bus and water transport to ensure connectivity across the city.

To maximize the use of an integrated and robust public transportation system in Bangkok, the Master Plan and budget for system operation will be prepared based on detailed studies, review and analysis of relevant research on secondary public transportation systems, physical volumes of traffic data and mobility information, forecasting public transit use and passengers, and assessing the efficiency of secondary public transportation in reducing road congestion.

Action 1.A.3
Plan and construct a Metro System in the main corridors

Design, build and operate a light rail public transport system, operating at a high capacity in the main corridors in Amman. The routes and locations of this network will be integrated within the strategic master plan of Amman and in cooperation will all related stakeholders. The first phase of the action will be to undertake a feasibility study, followed by a pilot project that will include a light rail route linking the busiest link between south and North-east Amman, including; infrastructure stations, terminals, vehicle specification and operating system.

Owner
GAM (Transport Directorate)

Status
New

Timescale
Long term

Partners
• Ministry of transport
• Land transport Regulatory Commission

9   11

Resilience Value
• Provide a safe and modern public transport system to reduce reliance on the car, and encourage alternative modes of transport.
• Enhance accessibility for citizens to goods and services, in particular through the provision of a comprehensive and affordable public transport system.
• Reduce emissions from transport (cars) and improve air quality and public health.
• Contribute to Amman's aspirations of efficiency, inclusivity and sustainability.

Action 1.A.4
Develop an urban mobility observatory

We will set up an urban mobility observatory to collect smart data to enable us to create an integrated mobility plan, and to share information, research, and knowledge on urban mobility. The observatory will also become a transport control center for the city to monitor and manage mobility issues efficiently and effectively.
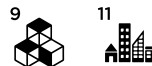
Owner
GAM (Amman Conservatory)

Status
New

Timescale
Medium

Partners
• Ministry of transport
• Land transport Regulatory Commission
• Amman Urban Observatory

9   11

Resilience Value
• Ensure a data-driven decision making approach.
• Promote integrated and efficient mechanism to managing mobility issues.
• Support crisis management on the transport network.
• Help to manage emergency vehicles, and evacuation routes.
• Help to influence traveler behaviors by warning of incidents along routes and redirecting people to other modes of transport.
• Improve quality of life in the city through effective monitoring and management.

Ensure that the urban mobility observatory monitors the movements of displaced and marginalized residents, particularly in identifying barriers to their freedom of movement, such as a lack of transportation options within a marginalized neighborhood or fear of discrimination or violence while riding public transportation.

Goal B:
Promote walkability

One of the major issues in Amman is the dominance of cars in the streets causing increased traffic congestion and air pollution. Our hilly urban landscape has an abundance of pedestrian friendly streets and alleyways, but walking culture is almost non-existent. This is due to the lack of basic infrastructure such as safe sidewalks and pedestrian crossings. Cities around the world are moving towards promoting walking as one of the major sustainable and active modes of transport as a response to environmental and health challenges, and to reduce congestion, GHG emissions, and healthcare costs for both people and governments. We want to take advantage of our weather to promote walking for all, especially the most vulnerable in society. This will link with our cultural assets, adventure tourism, and the digital economy for the youth. We will find the right balance between pedestrians and vehicles.

Action 1.B.1
Develop, review and update Amman's 'Street Manual'

As transport infrastructure is evolving, and cities becoming multimodal, including pedestrians and cyclists, it is important to review and produce a streets manual that reflects urban settings. This, in design terms within cities, moves away from intercity geometric standards for network layouts. We will review and update our Street Manual to provide guidance for practitioners involved in the planning, design, provision and approval of new streets, including modifications to existing ones. This action aims to increase the quality of streets through good design, creating more people-oriented streets and providing a safe urban environment for all citizens including the most vulnerable.

Owner
GAM (Roads Dir.)

Status
Ongoing

Timescale
Short

Partners
• Ministry of Transport
• Land Transport Regulatory Commission
• Universities
• Ministry of Public Works
• Higher council for affairs of persons with disabilities

3   9   11

Resilience Value
• Provide guidance to city planners to design safe, high standard streets that provide universal and inclusive accessibility and promote a walkable environment.
• Encourage active and healthy lifestyles, and increase activities in public spaces.
• Support local businesses and boost economic activity.
• Provide an affordable mode of transport
• Encourage social interaction and cohesion amongst the communities.

Action 1.B.2
Create a walking map

We will start by identifying a number of possible routes in the city to create a network that connects our neighborhoods. We will integrate our existing assets such as Rainbow street, the old downtown, the Citadel, the Roman Theatre, art galleries and others with the identified network to create an inclusive walking map for the City aimed at all ages of the population and tourists alike. We will provide the required walking infrastructure based on our revised 'Street Manual'. We will create a walkability app and public campaigns to promote walking as an active mode of transport.

Owner
GAM (Engineering Directorate)

Status
New

Timescale
Long term/phased

Partners
• Ministry of Transport
• Ministry of Tourism
• NGO's

11

Resilience Value
• Connect our neighborhoods and communities.
• Promote active and healthy lifestyles for all ages.
• Reduce the use of private vehicles and CO_2 emissions.
• Enhance the city identity and support tourism.
• Increase in the footfall in the city will support local businesses and boost economic activity.

Action 1.B.3
Explore tactical urbanism opportunities

Tactical urbanism, a term that has become common and popular in 2010-2012, is used to describe temporary, pop-up, small-scale, low-cost place-making interventions to the built environment that improve the livability of our cities and inspire long-term change. Tactical urbanism interventions can be applied to streets, alleyways, parking spaces, and parking lots. Amman will work with the youth, communities and NGOs to temporarily reclaim space dedicated to vehicles to increase the vitality of our street life, create safe places for people to be active and social. We want to create meaningful temporary public realm spaces. We also aim to engage and learn from other 100RC cities who have implemented similar interventions. We want to empower citizens and make our streets lively again.

Owner
GAM (Engineering Directorate)

Status
New

Timescale
Medium

Partners
• Ministry of Tourism
• NGOs

3   11

Resilience Value
• Provide meeting and gathering spaces in the city.
• Promote neighborhood vitality and local economic development.
• Create opportunities for youth to be involved and participate in the redesign and reprogramming of spaces.
• Help temporarily reclaim spaces designated to cars
• Introduce more green spaces to urban environment.

Explore opportunities to use tactical urbanism to promote dialogue and interaction among diverse community groups, particularly among the youth. Events such as "pop-up football matches" or other similar events may work to promote social cohesion. Further, allowing diverse youth groups to explore opportunities for tactical urbanism themselves (for example, allowing youth groups to organize an activity within a municipally owned public space or activities to connect refugee youth with others in more established neighborhoods) may encourage positive creativity and serve as a way of promoting urban citizenship.
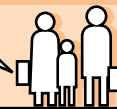
Action 1.B.4
Organize a design competition for Amman's Hijazi railway

The Hijazi Railway extends from the most northerly part of Jordan to the south. It was built by the Ottomans around 100 years ago, with the aim of connecting Istanbul and Mecca. It is now one of Jordan's most highly valued assets. It has also contributed to raising property prices along the route. Today, the Railway Corporation organizes weekly tourist and family oriented trips along a 10 km section of track using a steam engine and restored wagons. We believe this asset could make a more interesting and effective contribution to the city and its citizens. Using the New York City Highline project as a case study, we will organize a design competition to revitalize the railway as a major historical asset that connects the city, and as a means to engage communities in more active, green and open spaces in the city. The railway has the potential to serve as a social/meeting hub, a cycling and walking route, an entertainment venue, and a green public space.

Owner
Jordan Hijaz Railway Corporation

Status
New

Timescale
Long term

Partners
• GAM
• Ministry of Transport
• Ministry of Tourism

3 **9** **11**

Resilience Value
• Provide a safe, green public space, helping to connect the northern and southern parts of Amman.
• Bring communities together and support social cohesion.
• Revitalize the city's physical and historic assets.
• Promote walking and cycling, increase access to green spaces, and enhance public health.
• Attract investment and create job opportunities.

© James Corner Operations

Inspiration from other cities

New York Highline

The New York City High Line is a 2.33 km linear park built in Manhattan on an elevated section of a disused Central Railroad spur called the West Side Line. Inspired by the 4.8 km Promenade Plantée (tree-lined walkway) in Paris, the High Line has been designed as an aerial greenway and 'rails-to-trails' park.

The High Line is a highly innovative public space, offering visitors an outdoor experience unlike anything else in New York. The setting provides the perfect conditions for successful public-facing events, with visitor numbers reaching 60,000+ on the park's busiest days.

An integrated water drainage and retention system helps to reduce stormwater run-off while greenery provides shading and cooling, helping to lower the urban heat island effect. The park has also contributed to significant urban development and increased land values along the route.

Goal C: Institutionalize planning in the city

Amman has grown from a city of 29Km^2 in 1961 to a metropolis of 800Km^2 to date with an urban area of 630Km^2. This growth is a result of a number of factors including rural urban migration, concentration of economic activity and services in the capital but most importantly the influx of refugees from the surrounding countries especially in the last few years following the conflict in Syria which are putting pressure on the city's infrastructure. Amman's quality of life is threatened by the increase in traffic congestion, air pollution, reduced pedestrian accessibility, dominance of vehicular roads, lack of open public spaces, all compounded by the lack of strict urban planning. We aim to institutionalize urban planning in the city to allow for a sustainable growth for the future.

Action 1.C.1
Finalize and implement Amman Strategic Master Plan 2060

We will develop a comprehensive Strategic Master plan for the city that guides development and enhances the quality and character of the built environment. The plan will encourage compact urban growth to make the best use of existing services, promote public transport use, improve pedestrian accessibility, create a natural heritage system that builds on the city's parks, forests and green spaces, protect the agricultural land, and promote mixed use developments to foster diverse economy.

Owner
GAM (Planning Directorate)

Status
Ongoing

Timescale
Long Term/phased

Partners
• Land and Survey department
• Royal Geographic Center
• Amman Urban Observatory

9   11   16

Resilience Value
• Direct the future growth and guide the physical development of the city to the year 2060.
• Promote integrated and sustainable development practices.
• Protect and celebrate the natural and cultural heritage of Amman.
• Enhance the quality of life through an integrated masterplan.
• Help the city deal with multidisciplinary issues like disaster risk reduction.
• Encourage economic development initiatives.
• Support the public transportation plans and projects.

Action 1.C.2
Develop a strategic development plan for East Amman

In the short term, we will develop a strategic development plan for East Amman to address urban sprawl, direct, control and manage growth, and identify new areas for development and investment. GAM will start implementing a detailed master plan for one of the zones.

Owner
GAM (Planning Dir.)

Status
Ongoing

Timescale
Long Term/phased

Partners
• Land and Survey department
• Royal Geographic Center
• Amman Urban Observatory

11

Resilience Value
• Address urban sprawl as a result of increase in population growth.
• Provide new areas for development and investment.
• Create employment opportunities.

Leverage foreign businesses interested in supporting the refugee response to invest in marginalized neighborhoods such Al Hussein or Al Hashmi Al Shamali. The development plan should include disproportionately marginalized neighborhoods and feature housing and transportation solutions while strengthening consumer markets. Further, the design of the plan should include the community engagement of displaced residents in order to both inform a more contextually appropriate strategy and promote the citizenship of displaced and marginalized residents within Amman.

Action 1.C.3
Establish an urban resilience research center

We will establish a city resilience research center with the aim to engage and raise awareness with the communities and community councils about city resilience challenges and drivers of change in Amman, to build capacity in related topics such as disaster preparedness, or in taking climate action. We also want to promote partnerships between the public and the private sectors to offer training courses, awareness programs, and opportunity to undertake urban resilience and sustainability research in selected topics targeting all segments of the society.

Owner
GAM (Resilience Amman Office)

Status
New

Timescale
Medium

Partners
• 100 Resilience Cities Network
• Universities
• NGOs
• Youth societies

11

Resilience Value
• Support building resilience in the city by building capacity and awareness about Amman's resilience challenges across all age groups.

> The urban resilience research center should include research and data consolidation regarding the needs and experiences of refugees, asylum seekers, and other persons of concern, all with a specific focus on gender equality, as well as recurrent monitoring and evaluation of the programs and initiatives meant to serve them.

Action 1.C.4
Develop a storm water drainage masterplan

A number of areas in Greater Amman are frequently affected by flash floods as a result of heavy rainfall. In November 5th, 2015, the flash floods caused loss of lives, and damage to infrastructure, buildings, and cars.

The existing storm water drainage in Amman requires comprehensive improvements that address the a) legal requirements including the ambiguity around ownership structure of wadi beds, and regulations for development b) long term planning, c) the existing facilities and capacities, d) specification and e) maintenance.

We will therefore develop a storm water masterplan for Amman as this is one of the main urgent issues that the city needs to address.

Owner
GAM (Roads Directorate)

Status
New

Timescale
Medium

**Partners**
• N/A

11   13

Resilience Value
• Enhance the performance and resilience of our stormwater system.
• Help the city to manage and reduce risks resulting from flash floods.

Challenge in context

Flash flooding is a recurring challenge in Amman. On November 5th 2015, a 30 minute heavy rainfall event caused a severe flash flood in the city causing loss of lives, damaged properties, flooded streets, and people trapped in their cars and homes. For us, designing and managing our storm water effectively is one of our main resilience priorities.
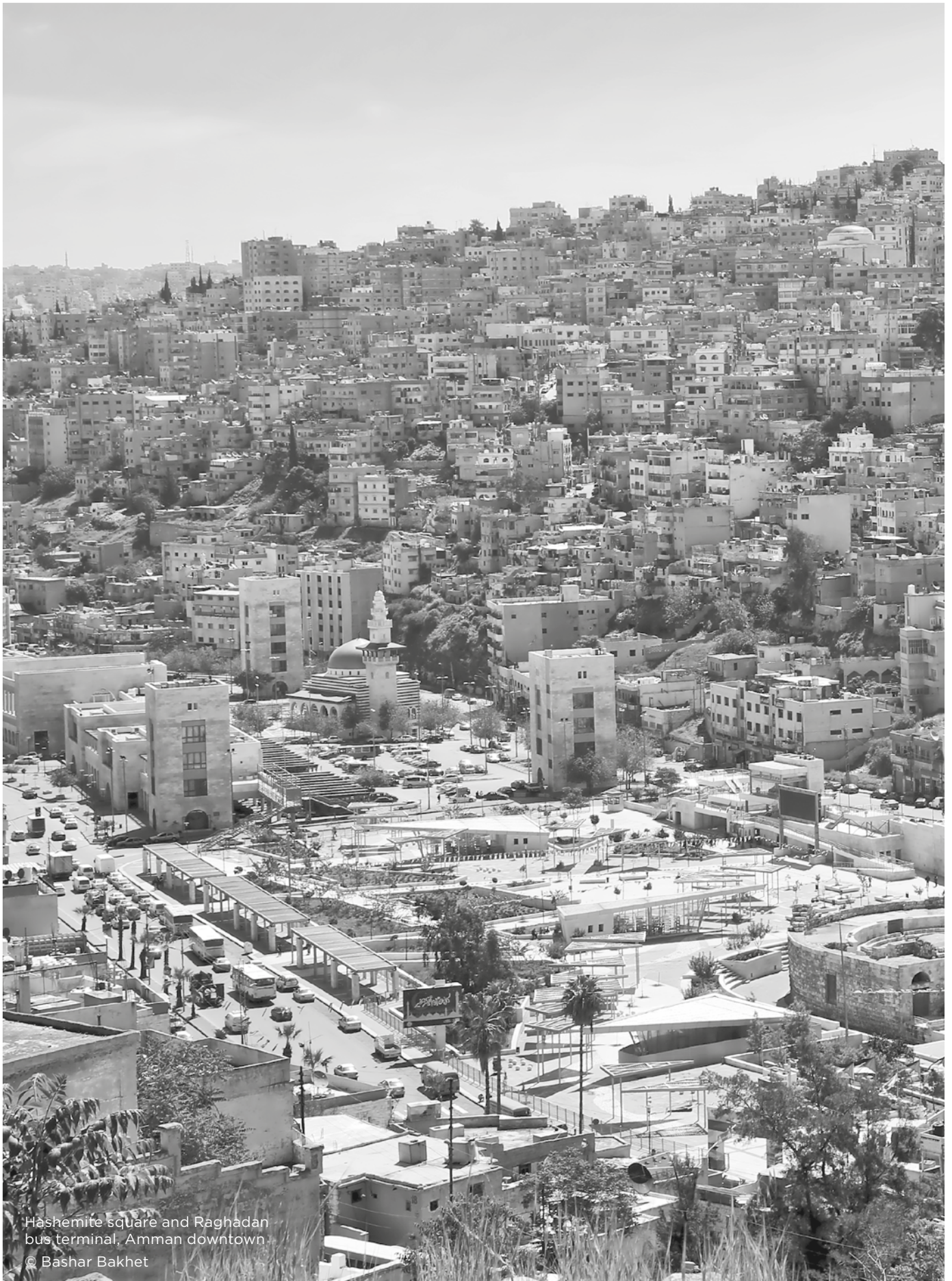
Hashemite square and Raghadan
bus terminal, Amman downtown
© Bashar Bakhet

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.

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.

Owner
GAM (IT Dep.)

Status
New

Timescale
Medium

Partners
• Ministry of Communication and Information Technology
• Funding Agencies

11

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-sectorial 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.

Owner
GAM (GIS Dep.)

Status
New

Timescale
Medium

Partners
• Platform partner opportunity
• Miyahuna
• Jordan electricity company
• Ministry of Communication and Information Technology

11

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.

Owner
GAM (Roads Directorate - Coordination Department)

Status
New

Timescale
Short

Partners
• Platform partner opportunity
• Miyahuna
• Jordan electricity company
• Ministry of Communication and Information Technology

11

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.

Queen Alia International Airport by
renowned architect Norman Foster
© Andrew Moore

Green forest of Amman
© Hisham Shama

2 An Environmentally proactive City

We will...

A. Manage and fulfil climate change commitments

B. Improve energy efficiency and energy security, including by diversifying energy sources

C. Promote application of green building codes and guidelines

D. Manage our water resources efficiently

E. Improve our waste management system

Goal A:
Manage and fulfil climate change commitments

Enhance the city's capacity for climate change mitigation and adaptation. This includes meeting the city's commitments made during the COP21 climate change negotiations in Paris and ongoing work with the C40 Cities Climate Leadership Group. Improving integrated planning will help us to protect the environment and reduce the impact of climate change on our city. This will help to create new job opportunities, support the economy, and enhance citizens' wellbeing.

Action 2.A.1
Create a team responsible for our climate change portfolio

This team will coordinate the city's actions in relation to mitigating climate change. Activities include recruiting staff with appropriate skills, modifying internal policies, coordinating with relevant stakeholders, establishing a database of the city's ongoing actions, and monitoring progress to ensure the city meets its GHG emissions reduction obligations.

Owner
GAM (Amman Resilience Office)

Status
Ongoing

Timescale
Short

Partners
• Ministry of Environment
• C40

11   13

Resilience Value
• Elevate the city's climate change challenges.
• Integrate city wide climate actions.
• Increase knowledge sharing and networking between cities facing similar challenges.
• Create employment opportunities.
• Support the delivery of environmental policies and activities.

Action 2.A.2
Develop a Climate Change Action Plan

Establish an integrated plan describing the actions the city will take to mitigate and adapt to climate change. The plan will address improving air quality, protecting natural resources and ecosystems, sustainable development, updating and enforcing environmental laws, and cooperation with other institutions (e.g. universities). It will also explain the support that will be needed from institutional actors, policy adjustments needed to leverage resources, and process for monitoring progress.

Owner
GAM (Mayor's Consultant)

Status
New

Timescale
Long term/phased

Partners
Ministry of Environment

3   11

Resilience Value
• Improve air quality and public health.
• Protect natural resources and ecosystems.
• Support integrated planning and strengthen environmental governance.
• Help to develop flexible emergency plans in the event of climate change related emergencies and incidents.

Action 2.A.3
Network and collaborate with international agencies on climate change

Engage with international agencies and networks to learn more about updating city standards and strategies, sharing information on climate adaptation and implementing the latest solutions and technologies.

Owner
GAM (Resilience Amman Office)

Status
Ongoing

Timescale
Short

Partners
100RC network

11   13

Resilience Value
• Facilitate networking and knowledge sharing.
• Support integrated planning and strengthen environmental governance.

Action 2.A.4
Deliver the Green Amman 2020 initiative

Continue to deliver the Green Amman 2020 initiative. This action includes documenting and classifying existing green areas, increasing per capita green space, delivering city greening projects, increasing urban and rooftop agriculture, enhancing partnerships and raising awareness about green initiatives.

Owner
GAM (Green Amman 2020 Committee)

Status
Ongoing

Timescale
Long term/phased

Partners
Green Amman 2020 Committee

3   11

Resilience Value
• Protect existing natural capital.
• Deliver sustainable and best practice greening opportunities.
• Provide employment opportunities.
• Increase public participation in greening initiatives.
• Support the development of public private partnership.

Learning from other cities
Copenhagen Climate Adaption Plan

The city of Copenhagen developed its Climate Adaption Plan in response to evidence that the city faces significant risks from extreme water-related hazards including torrential rain and flooding from the sea.

The plan adopts a flexible approach to climate adaptation which can be developed and adapted gradually over several years. It includes strategies and programs to minimize the risks of future climate change as well as to improve Copenhageners' quality of life.

It focusses on three levels of adaptation: 1) reducing the likelihood of an event happening, 2) reducing the scale of the event, and 3) reducing the city's vulnerability to an event. Examples of adaptation measures include: disconnection of storm water from the sewer by separation or SUDS, establishing dikes, raising building elevation, building green structures such as floodable parks and green spaces, and monitoring the impact of the changing climate on public health.

King Hussein Park
© Hana Ianakat

Goal B:
Improve energy efficiency and energy security, including by diversifying energy sources

Jordan's dependence on foreign energy sources is amongst the highest in the world, with 96% of the country's energy coming from imported oil and natural gas from neighboring Middle Eastern countries. Reliance on foreign imports is a significant burden on the national economy. New approaches to energy generation are needed to help move to a safe and sustainable low carbon economy and increase energy security. The development of new and renewable energy sources and technologies is a top priority in achieving this goal.

Action 2.B.1
Identify and implement energy saving solutions for municipal assets (buildings, streets, public spaces etc.)

This action includes implementing smart, green solutions such as LED lighting and solar technologies, reducing energy and water consumption, and upgrading HVAC and monitoring systems. This will help to improve the efficiency of municipal services, achieve cost savings, reduce environmental impacts, and meet Amman's energy needs without compromising our development priorities.

Owner
GAM (Investment and Assets Directorate)

Status
Ongoing

Timescale
Short

Partners
Amman Urban Observatory

7   9   13

Resilience Value
- Improve the resource efficiency of municipal services.
- Achieve cost savings.
- Reduce environmental impacts.
- Meet energy needs without sacrificing development priorities.
- Enhance data collection on GAM assets.

Action 2.B.2
Develop solar power generation facilities

Solar energy is a cheap and non-polluting source of energy. Amman's long, hot, dry summers and short, cool winters, are especially well suited to solar photovoltaic (PV) technologies. We have begun and will continue to install PV panels on the roofs of GAM buildings. We will continue to develop a planned solar farm in East Amman, which will be used to power GAM buildings, facilities, parks, street lighting and municipal activities. This action will be tied to the Amman Strategic Master Plan 2060.

Owner
GAM (Engineering Directorate)

Status
Ongoing

Timescale
Short

Partners
Ministry of Environment

7   9   13

Resilience Value
- Provide safe and green energy.
- Decrease reliance on fossil fuels.

Action 2.B.3
Incentivize the public to adopt electric vehicles

Promote the use of EVs through a field demonstration pilot project to increase credibility in the reliability of the technology. GAM will provide incentives for uptake, including fees reductions for taxi fleets, free parking in GAM parking spots, and free charging stations.

Owner
GAM (Fleet Dir.)

Status
New

Timescale
Medium

Partners
• Ministry of Transport
• Public security directorate/ Department of Traffic

11   13

Resilience Value
• Reduce transport emissions and improve air quality.
• Increase public awareness of, and uptake in low carbon technologies.
• Create job opportunities.

Inspiration from Santiago de Chile

Area of Green Transportation

Santiago de Chile plans to create a regional 'Area for Green Transportation' to cut emissions of greenhouse gases and other pollutants. Initiatives include the promotion of zero-emission vehicles, low-emission public busses, green taxis, electric mobility facilities, electric public cars (car sharing), and incentives for the adoption of electric vehicles.

Action 2.B.4
Replace GAM fleet vehicles with electric vehicles

As part of the Amman Smart City initiative, GAM will replace its municipal fleet with electrical vehicles (EVs). This will help to limit emissions, pollution, and damage to the environment. It will also contribute to reducing the high costs associated with importing fossil fuels.

Owner
GAM (Fleet Dir.)

Status
Ongoing

Timescale
Long term/phased

Partners
N/A

11   13

Resilience Value
• Reduce transport emissions and improve air quality.
• Reduce costs from importing fossil fuels.
• Reduce GAM internal expenses.

Goal C:
Promote application of green building codes and guidelines

To accommodate increasing resource scarcity, climate change impacts, increasing population, and poor economic development, the city must look to clean and efficient energy resources and green solutions.

Action 2.C.1
Incentivize implementation of building codes and guidelines

The application of green building codes is mandatory in all buildings in Amman, however the building guidelines are not. This action therefore will incentivize the implementation of green building guidelines particularly in large-scale buildings, with the ultimate aim of turning the guidelines into codes.

Owner
GAM (Planning Directorate)

Status
Ongoing

Timescale
Short

Partners
- National Building Council at the Ministry of Public Works and Housing
- The Building Research Center at the Royal Scientific Society (RSS)
- The Jordan Green Building Council
- A/E Business Council
- The Jordan Engineering Association
- The Contractor's Association
- The Housing Investors Association

7 9 13

Resilience Value
- Regulate urban and building development.
- Protect natural capital and the environment.
- Promote civic participation and decision-making.

Action 2.C.2
Develop public awareness campaigns relating to green building solutions and technologies

Initiate public awareness campaigns promoting the benefits of green building practices (relating to energy, water, and materials), energy efficiency and water conservation for new and existing buildings.

Owner
GAM (Branding and Communication Department)

Status
New

Timescale
Short

Partners
- Hawa Amman Radio
- GAM press center

13

Resilience Value
- Protect the environment and precious water resources.
- Promote knowledge and best practice sharing.
- Promote civic participation and trust through structured dialogue between the city and its people.

Goal D: Manage our water resources efficiently

Water scarcity is amongst Jordan's most critical issues. To control water consumption, at present, water is delivered only once a week to citizens and businesses. Demand is also intensifying due to the increasing needs of those displaced by Syria's civil war. The population currently receive much less than the recommended WHO standard of 120 liters /person/day and this has been aggravated by the Syrian refugees. The Red -Dead Canal is expected to be operational by 2022, helping to bridge the gap between our current water resource and demand.

Action 2.D.1
Deliver rainwater harvesting plan

Provide a plan for the development, management and implementation of rainwater harvesting in Amman to ensure sufficient water resources to fulfil demands. Rainwater will be collected and reused at specific sites, such as the King Abdullah II Park.

Owner
GAM (Roads Dir.)

Status
Ongoing

Timescale
Short

Partners
Miyahuna

6   13

Resilience Value
- Promote the conservation of precious water resources through sustainable alternative.
- Raise awareness about water scarcity risks and promote responsible usage.
- Enhance resource efficiency.

Action 2.D.2
Implement water recycling at GAM sites and assets

Water recycling will help GAM to manage increasing water scarcity. This action will include an onsite demonstration to raise awareness about water usage and promote sustainability and individual responsibility for environmental protection. We aim to scale this action up and roll out across the city over time.

Owner
GAM (Engineering Directorate)

Status
New

Timescale
Short

Partners
N/A

6

Resilience Value
- Promote the conservation of precious water resources through sustainable alternative.
- Raise awareness about water scarcity risks and promote responsible usage.
- Enhance resource efficiency.

Goal E:
Improve our waste management system

Waste management was identified as an important strategic goal for Amman. A core objective is to improve GAM's capacity for planning and management of municipal solid waste services including enhanced cost effectiveness through private sector involvement, where feasible. Updating legislation, increasing knowledge, and improving, physical assets and infrastructure will strengthen the operational, financial, and environmental performance of the waste management system in Amman.

Action 2.E.1
Develop and implement a waste management framework

At present, there is little coordination between stakeholders responsible for setting policies, planning, and carrying out waste management services at the national level. To remedy this, the Ministry of Environment will prepare a national waste management framework. This will include plans to update waste management laws, define responsibilities amongst all the stakeholders in Jordan including Amman, partnerships with the private sector, regulations related to waste, methods of treatment and disposal of all waste types, and penalties. This action will contribute to streamlining waste segregation, collection, recycling and reuse processes including addressing electronic waste sorting project.

Owner
Ministry of Environment

Status
Ongoing

Timescale
Short

Partners
GAM

11 12

Resilience Value
- Improve waste management system efficiency.
- Encourage waste reduction.
- Improve air quality and public health.
- Restore trust between the government and citizens.

Action 2.E.2
Establish waste to energy facilities

The waste-to-energy project aims to decrease the amount of waste sent to landfill by recovering the recyclable content and producing renewable energy in the form of fuel and/or electricity.

Owner
GAM (Resilience Amman Office)

Status
Ongoing

Timescale
Short

Partners
Ministry of Environment

9 12 13 17

Resilience Value
- Reduce waste sent to landfill, thus limiting associated environmental and economic impacts and costs.
- Provide low carbon energy.
- Support livelihoods and employment.
- Protect the environment.
- Raise public awareness about waste and contribute to changing longer term behaviors.

Action 2.E.3
Review, update and reactivate Amman Green Growth plan

Amman's Green Growth Plan (AGGP) was launched in 2009 but was not completed. The plan focused on 4 key pillars related to energy: transport, waste, water and urban forestry. The government recently launched the National Green Growth Plan. We will review and restart the AGGP as part of the national plan.

Owner
GAM (Environment Dir.)

Status
New

Timescale
Short

Partners
Ministry of Environment

11 12

Resilience Value
- Move towards a low carbon economy that creates more jobs and enhances social inclusion whilst reducing environmental impacts.

Action 2.E.4
Implement pilot projects for waste management activities

Implement pilot projects in the field of environment and waste management such as Green-Points (for waste that is unsuitable for street collection such as furniture and construction waste), the recovery of recyclable materials, and the organic compost production project. Included in this, we will develop an organic compost production project via a public-private partnership. This will produce compost at Ghabawi landfill site to be used as a soil conditioner in agriculture and landscaping activities. This action will be carried out in collaboration with the community and the private sector to demonstrate how new waste solutions can be effective and promote uptake.

Owner
GAM (Environment Directorate)

Status
New

Timescale
Short

Partners
Ministry of Environment

11 12

Resilience Value
- Raise public awareness around waste management and change behavior in favor of waste reduction.
- Promote public-private partnership projects.
- Encourage circular economy.

Action 2.E.5
Implement other waste transfer stations in north and west Amman

Provide a processing site for the temporary deposition of waste in the North and East areas of Amman. The existing station is located in the east and is not sufficient to process the quantities of solid waste being produced daily in the city.

Owner
GAM (Engineering Directorate)

Status
Ongoing

Timescale
Medium

Partners
Ministry of Environment

11 12

Resilience Value
- Improve air quality and public health.
- Provide efficient waste management.
- Improve city planning processes.

Ghabawi Landfill
© Bashar Bakhit

Ghabawi landfill site
© Dima Zogheib
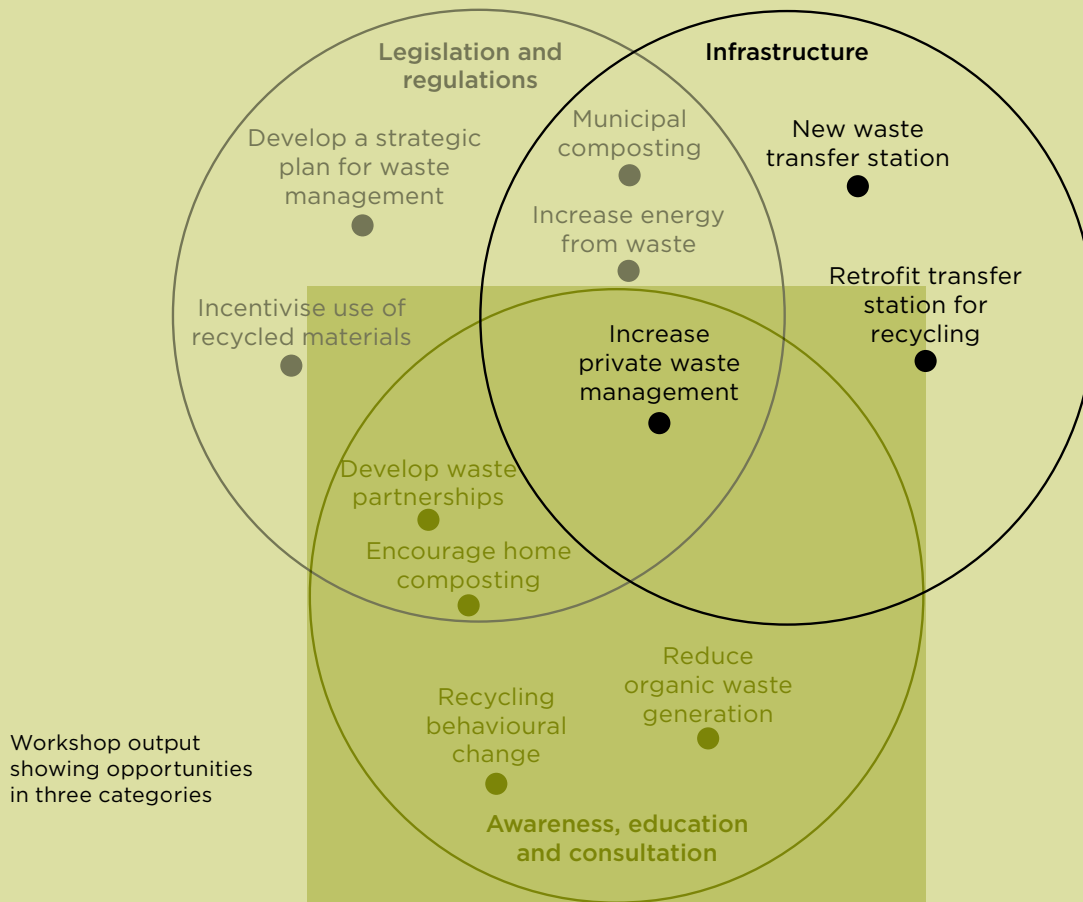
Working with our partners

Waste Systems Studio

Waste management was identified as an important strategic goal for Amman. Relevant stakeholders were invited to feed in to a focused workshop to examine the city's current waste management procedures and explore how to improve and enhance the system's future resilience.

The workshop was conducted over three days, starting with an optional site visit to three waste management sites. The main workshop was held over two days at the King Hussein Cultural Centre in Amman, with 80 people in attendance.

The workshop was designed to:

- Increase participants' knowledge of the current waste situation in Amman (e.g. the major sources of waste, collection and treatment arrangements and facilities, and markets for recyclable materials)

- Identify relevant waste stakeholders in the city (e.g. from the Municipality, private enterprise and NGO sector) and consider their potential roles in working together to deliver a more resilient service

- Understand the waste system's interdependency with other city systems and identify potential synergies (e.g. with energy, industry, agriculture)

- Identify city-wide opportunities and actions that the city (and stakeholders) should take to develop a more resilient waste management system

Legislation and regulations

Develop a strategic plan for waste management

Incentivise use of recycled materials

Infrastructure

Municipal composting

Increase energy from waste

New waste transfer station

Retrofit transfer station for recycling

Increase private waste management

Develop waste partnerships

Encourage home composting

Reduce organic waste generation

Recycling behavioural change

Awareness, education and consultation

Workshop output showing opportunities in three categories

Participants recognized the role of the landfill site in managing the city's waste, but also identified opportunities for diversifying the waste management in Amman in response to the city's shocks and stresses.

Opportunities developed during the workshop fell into three distinct categories:

- Strengthening legislation;

- Developing infrastructure; and

- Improving awareness, education and consultation regarding waste management.

Potential actions agreed across these categories included: increasing source segregation of waste, increasing treatment of organic waste, and increasing the use of energy-from-waste.

The level of participation at the workshop suggests there is a strong will amongst organizations in Amman to improve how waste is managed. Findings from this workshop led to the conclusion that Greater Amman Municipality would benefit from improvements to waste management (see Actions under 2.E). This will set out a practical plan for undertaking the actions and opportunities identified, and capitalize on the interest and momentum raised by the workshop.

Aerial view of Al Abdali
© Fares Khalifeh

3 An Innovative and Prosperous City

We will...

A. **Leverage our existing human capital to create employment**

B. **Support entrepreneurs, start-ups and incubators**

C. **Empower women**

Goal A:
Leverage Our Existing Human Capital to Create Employment

Our human capital is a key source of competitive advantage in Jordan. Jordan is one of the best educated countries in the Arab world with a literacy rate at 93.3% distributed equally amongst men and women. With a 15% total unemployment rate, of which 29% is amongst our youth, we need to limit brain drain and have a greater emphasis on knowledge-based economy to provide better employment opportunities for highly educated citizens including the youth and migrants.

Action 3.A.1
Work with the education institutions to match education to future skills requirements and reduce child labor

We will work with local education institutions to undertake surveys and gather data to better understand the skills that will be needed in the future. Collaboratively, we will explore the opportunity to set up job centers, career advice service, design training programs, and awareness campaigns to ensure students acquire the right skills needed in the labor market. We will also work with the Ministry of Education to implement awareness raising campaigns and training programs for inspectors against child labor.

Owner
GAM (Social Services Dir.)

Status
New

Timescale
Short

Partners
• Ministry of Education
• NGOs
• Local education institutions

5   8

Resilience Value
• Expand the employment opportunities.
• Encourage the youth to select the education that best suit the present and future market demand which will contribute to Amman's economy.
• Develop skills to enable people to access sustainable livelihoods.
• Grow a buoyant and prosperous economy for Amman, retaining young people in the city. avoiding out-migration.

Ensure that the skills of refugees and marginalized populations are known and considered in this action.

© Pittsburg Resilience Strategy

Inspiration from Pittsburg

Providing 21st century education for youth

Under the "People" pillar, the city sets the goal to eliminate barriers to opportunity for education and employment for all residents. Among the actions for implementation, the city plans to scale current pilot and small-scale efforts to integrate 21st century job skill training into formal school programming, for example Science, Technology, Engineering, Arts, and Math (STEAM) initiatives.

This will allow Pittsburgh's children to receive training and build skills necessary to pursue 21st century jobs in engineering, computer science, advanced manufacturing, and more – sectors that characterize Pittsburgh's key growth industries.

Action 3.A.2
Organize an annual job fair

We will organize an annual job fair in collaboration with the universities, educational institutions, local and international organizations to bring recruiters closer to our university graduates and students to increase employment and internship opportunities. This will become an opportunity for our youth to discover the skills required for certain jobs.

Owner
GAM (Social Services Directorate)

Status
New

Timescale
Short

Partners
• Local universities and educational institutions
• Ministry of Labor

5   8

Resilience Value
• Social and economic benefits to job-seekers and recruiters via job creation and skills development.

Action 3.A.3
Expand youth employment programs to include migrants

To understand the skills and capabilities of young people, including migrants, we will conduct assessments in coordination with NGOs. This will help us to ensure young people are guided towards the appropriate city activities, training programs, and voluntary services. We will leverage our existing assets as training centers to facilitate employment opportunities.

Owner
GAM (Investment and Assets Directorate)

Status
New

Timescale
Short

Partners
• Ministry of Labor
• Youth societies
• Civil Service Bureau

4   10   16

Resilience Value
• Support youth entrepreneurship and leadership.
• Support knowledge sharing and networking
• Empower young people and build youth skills and capabilities.
• Increase civic engagement and sense of belonging especially for migrants.
• Build social cohesion.

Traditional sweet of Amman, Knafah
© For9a.com
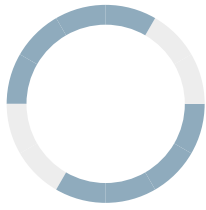
Goal B:
Support entrepreneurs, start-ups and incubators

Entrepreneurship in Amman is on the rise. Jordan lacks the natural resources but is filling this gap by investing in its human capital. With one of the best educated countries in the Arab world and high internet connectivity in the region, Amman is an ideal place for entrepreneurs and tech start-ups. We want to support entrepreneurs using the municipal assets and network to allow them to transform their ideas into viable businesses.

Action 3.B.1
Incentivize start-ups/incubators

We will incentivize start-ups by our citizens and migrant population by subsidizing municipal buildings to offer co-working spaces to support start-ups, new businesses and creative industries. We will support in the promotion of their products.

Owner
GAM (Investment and Assets Directorate)

Status
New

Timescale
Longterm

Partners
• Ministry of Labor
• Youth societies
• Civil Service Bureau

[8] [10]

Resilience Value
• Invest in youth through encouraging entrepreneurship.
• Enhance municipal city assets.
• Provide better employment opportunities.
• Attract investors.
• Support innovation and leadership.
• Support youth as the leader of the city's future.
• Reduce the negative impact of the increasing migrant number by using their skills in support their wellbeing and support the city's economy.

Ensure that 10% of startups promoted through this action are refugee-owned and registered businesses, particularly those run by women, and promote the presence of refugee-owned businesses in non-refugee resident areas to promote social cohesion.

Promote one-stop-shops in marginalized neighborhoods to facilitate information on registration and licensing for new businesses, as well as providing information on the Ministry of Labor work permit processes for new businesses that want to employ refugees.

Showcasing best practice
Amman Design Week

© Almadenah News.com

Amman Design Week is an immersive annual design experience, supported by Her Majesty Queen Rania Al Abdullah. The event focuses on creating a forum for learning, exchange and collaboration. It empowers designers through the cross-pollination of communities and ideas. The second edition of the nine-day annual celebration will take place from 6 - 14 October 2017.

Building on the success of last year's event in terms of audience engagement, innovation, and designer achievements, Amman Design Week will continue to grow annually. In time, it will become a hallmark for educational and cultural programming in the city, establishing Jordan as a recognized hub for design, creativity and modern Arab culture.

Action 3.B.2
Collaborate with ideas-sharing platforms (e.g. TED x Amman)

Ideas-sharing platforms are designed to spread ideas in communities around the world. We aim to collaborate and partner with these platforms such as TEDx or similar to elevate our young entrepreneurs, give them international exposure and inspire other entrepreneurs.

Owner
GAM (Branding and Communication Department)

Status
New

Timescale
Short

Partners
• TEDx
• Platform partner opportunity

8   10

Resilience Value
• Promote public participation.
• Attract investors.
• Support youth through international platforms.
• Elevate the profile of our young entrepreneurs.

Inspiration from other cities

Souk el Akel (Street Food Market) – Beirut, Lebanon

Souk el Akel is a public market space in Beirut that attracts chefs from all over Lebanon. It takes place every Thursday in Downtown Beirut and centers around 25 food vendors and outlets. Guests can enjoy a stroll and a bite to eat, or a full alfresco dinner.

The souk attracts people from all walks of life, celebrating Lebanon's vibrant culinary traditions and providing a platform for local chefs and producers.

Souk el Akel's mission is simple: to bring people together through a shared love of great food and a sense of pride in their community.

Action 3.B.3
Organize outdoor Urban Food Fest of Amman

We will organize a food celebration event with culinary foods from Jordan and the world, to give the opportunity for local food-related businesses and entrepreneurs to share their specialties', to provide a platform for local producers to market their produce and to inspire local cooks and chefs. We want to draw on the experience from Souk Al Akel in Lebanon by making this Urban Fest a mobile culinary experience set up in the city's neighborhoods and open spaces. The event becomes a space where the communities come together, socialize, and engage with entrepreneurs and local bloggers.

Owner
GAM (Branding and Communication Department)

Status
New

Timescale
Short

Partners
Local entrepreneurs, producers and bloggers

8 10

Resilience Value
- Support innovation and entrepreneurship.
- Promote city branding.
- Celebrate and market the city's food heritage.
- Nurture social cohesion.

© Producer – Wiki Commons

Showcasing Best Practice
Souk Jara

The Souk (market) is a major tourist attraction, featuring handicrafts, antiques, crafts, food, streetwear, art and traditional products from around the Kingdom. It is open every Friday on summer days. Souk Jara is a popular, easy-going flea market established by Greater Amman Municipality in coordination with JARA (the Jabal Amman Residents' Association). It is held on Fawzi Malouf Street, off the lower end of Rainbow Street, and often includes impromptu concerts, film screenings and other activities.

Ommona Amman festival celebrating citizenship,
belonging and inclusive
© Bashar Bakhet

Goal C:
Empower women

Despite the high education achievement in Jordan, women's participation in the work force remains modest at 14%. The public sector is the preferred place for women to find employment opportunities due mainly to its flexibility. We want to empower the home makers and working women and give them incentives to participate in Amman's workforce.

Action 3.C.1
Promote work from home program

We will initiate various programs including culinary program to celebrate women who cook from home, by giving them incentives to acquire licenses and set up businesses from their home.

Owner
GAM (Planning Directorate)

Status
New

Timescale
Short

Partners
GAM press center

8 10

Resilience Value
- Integrate women into the city's workforce.
- Support entrepreneurship and employment opportunities.
- Celebrate cultural heritage.

Action 3.C.2
Pioneer day care centers in GAM buildings

We will support women's participation in the workforce by setting up day-care centers in GAM buildings, and convert 5 GAM cultural and social centers into day-care centers by 2025.

Owner
GAM (Social Services Directorate)

Status
New

Timescale
Short

Partners
N/A

8 10

Resilience Value
- Enhance public participation, gender equity and women's empowerment.
- Ensure that women have equal rights to economic resources, enhance social cohesion.

Work with civil society organizations to identify and support women-run businesses in marginalized neighborhoods and invite them to utilize the day care centers, while providing safe transportation services for them and their children.
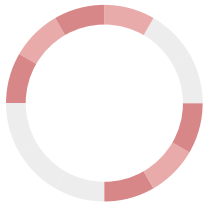
Jeel 962 , youth for sustainable development
© Bashar Bakhet

4 A Young and Equal City

We will...

A. **Integrate and engage young people equally**

B. **Support our youth through cultural campaigns**

Goal A:
Integrate and engage young people equally

Amman has a large youth population. This goal aims to build an inclusive and empowered youth community who are engaged in key city issues, and involved in decision-making and governance to create the leaders of tomorrow.

Action 4.A.1
Promote Amman Youth Voluntary Service

Promote youth volunteerism to aid the development of Amman. The city will reward those who take part by providing skills training, certificates and recommendations.

Owner
GAM (Social Services Directorate)

Status
New

Timescale
Short

Partners
Youth societies

4   16

Resilience Value
- Support engagement of young people in city development.
- Increase social cohesion amongst the youth.
- Enhance skills and build capabilities amongst young people.
- Attract sponsorship and investors

Strive to include youth volunteers representing displaced and marginalized communities, especially women and girls, in this service and in programs that operate in non-refugee neighborhoods.

Action 4.A.2
Enhance citizenship and engage young people in discussions on future cities trends

We will launch an awareness campaign directed at school age students in relation to key city issues of the future including public behavior, climate change, resource consumption (water, energy, waste). This will be carried out in collaboration with the Ministry of Education to enhance citizenship amongst young people.

Owner
GAM (Social Services Directorate)

Status
New

Timescale
Short

Partners
- Ministry of Education
- Youth societies

4

Resilience Value
- Support knowledge sharing, and networking.
- Empower young people and improve their skills.
- Support the city's efforts to enhance resilience and sustainability.

Inspiration from Thessaloniki

Foster youth participation

In support of the vision to "Co-create an inclusive city that invests in its human talent", Thessalonki sets the strategic objective to "Foster youth participation". Initiatives include the launch of Thessaloniki Youth Resilience Challenge, in which the city will collaborate with local youth organizations and initiatives to coordinate a year long program to promote youth inclusion in local decision-making processes.

The main objective is to empower the youth to become ambassadors of urban resilience and ensure they have a meaningful contribution in the implementation of Thessaloniki's Resilient Strategy.

Children municipal council election.
© Bashar Bakhet

Action 4.A.3
Local Youth Council

This action aims to represent the views of young people at a local level, giving them the opportunity to discuss relevant issues, engage with decision-makers and contribute to the community. To help young people get involved, we will create publicly available guidance on the election process, registering to vote, and engaging in civic participation.

Owner
GAM (Social Services Directorate)

Status
New

Timescale
Short

Partners
Youth societies

16

Resilience Value
- Support youth entrepreneurship and leadership.
- Enhance social cohesion and build community resilience.
- Engage the youth in decision making.
- Build youth understanding of municipal processes and promote civic participation and engagement.

Showcasing best practice

Children Municipal Council

Children Municipal Council (CMC) is a unique experience and a fundamental step towards achieving an overall aim of introducing concepts of democracy, participation and human rights values. CMCs is also considered a tool to enhance the participation building block of the "Child Friendly Cities Initiative" which is a system of good local governance committed to the fullest implementation of the Convention on the Rights of the Child and translating it into actions at the local level – where children live and have the concrete opportunity to influence decisions that affect their lives.

In 2006 - 2008 Greater Amman Municipality and UNICEF have established 4 Children Municipal Committees through conducting children elections in secondary schools (Public and Private) as well as UNRWA schools in 4 directorates and in 2009 - 2011 in 9 directorates.
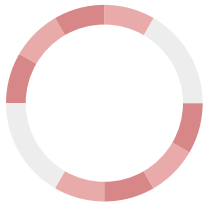
Goal B:
Support our youth through cultural campaigns

Amman's young people are the future. We need to inspire and celebrate an engaged and culturally diverse youth population. This goal will capitalize on our youth's potential and ensure young people have the opportunities they need to learn, work together and build a strong, resilient future city. This goal focuses on youth empowerment, awareness and cross-sector networking.

Action 4.B.1
Leverage municipal buildings to create youth centers

Leverage GAM assets to be used as youth centers and invest in our youth by developing focused development programs as well as informal initiatives.

Owner
GAM (Investment and Assets Directorate)

Status
New

Timescale
Long term/ phased

Partners
• Youth societies
• Funding agencies

8

Resilience Value
• Attract and increase investment in city buildings and assets.
• Support youth initiatives, skills development and future employment opportunities.

Solicit the partnership of civil society organizations in meeting the needs of vulnerable youth groups and supporting the safe and equal participation of women and girls in these centers.

© Leadersot.org

Showcasing best practice

Leaders of Tomorrow (LoT)

Leaders of Tomorrow is a Jordanian youth-led, independent social enterprise, active since 2007 in Jordan and regionally in the Middle East and North Africa. Their mission is to build a community of young leaders who are educated, critical thinking, initiative-takers, capable of serving their communities creatively. The group aims to break cycles of elitism in education and civic engagement by rediscovering and reviving public spaces. They aspire to challenge the status quo and create positive change in society.

Initiatives include DIWANIEH, FADFED, MO7AKA, FOR9A and Leaders of Tomorrow Social Innovation hub. These reflect the values of freedom of expression, freedom of thought, equal access to education and critical and creative thinking.

Action 4.B.2
Support cultural, social and sports-related initiatives in the city

GAM is responsible for providing infrastructure to support sports, cultural and social activities including playgrounds, training and cultural centers, parks and public spaces, as well as festivals, carnivals, and local celebrations. We will invest in a range of activities to support the city's efforts to enhance social cohesion, support youth and children's activities, and provide training for all segments of society (e.g. sewing and computer training for women, computer skills for all, foreign language development, and handicraft training for children, women and young people).

Owner
GAM (Social Development Sector)

Status
Ongoing

Timescale
Short

Partners
• Youth societies
• Ministry of Youth

9 10

Resilience Value
• Help build robust communities and social cohesion.
• Empower young people and women and improve skills.
• Support youth development and training.
• Attract sponsors and investors.
• Improve health and wellbeing of the youth.

Use these initiatives and events to promote interaction between diverse communities in order to strengthen social cohesion and address negative perceptions, which can lead to violence or negative coping mechanisms.
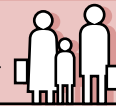
DARB - The Summer Internship Project
©www.kafd.jo

Showcasing best practice

All Jordan Youth Commission (AJYC)

The All Jordan Youth Commission was established in 2006 as one of His Majesty King Abdullah II Bin Al-Hussein's initiatives implemented by the King Abdullah II Fund for Development. The Commission aims to activate the role of Jordan's youth as a real and influential partner in public life, whether at the social, political or economic level. It does so by building capacity amongst young people and promoting a culture of initiative and volunteer work. It also promotes networking between different institutions working in the youth sector.

Action 4.B.3
Engage with local and international youth organizations

Create engagement between our youth and local and international organizations to foster a youth population committed to community service. We will create engagement via platforms, conferences, gatherings, media opportunities. GAM will also provide venues for engagement opportunities.

Owner
GAM (Social Development Sector)

Status
New

Timescale
Short

Partners
- 100RC network
- Youth societies
- Ministry of Youth
- Funding agencies

4 5 11

Resilience Value
- Support knowledge sharing and networking.
- Build youth skills and capabilities.
- Empower young people and cultivate strong future leaders. and engaged citizens

Action 4.B.4
Design awareness campaigns to prevent youth extremism

This action aims to raise awareness about culture, religion and diversity, with a view to preventing extremism. Awareness programs will be directed at young people and children, and cover the rule of law, dialogue, and youth empowerment.

Owner
GAM (Social Development Sector)

Status
New

Timescale
Short

Partners
- Ministry of Education
- Local universities
- Youth societies

16

Resilience Value
- Support youth entrepreneurship and leadership.
- Support knowledge sharing and networking.
- Empower young people and build youth skills and capabilities.
- Increase civic engagement and sense of belonging especially for migrants.
- Promote social cohesion amongst different communities.

©Bashar Bakhit

Showcasing best practice

Zaha Cultural Center

Zaha cultural center was found with the generous donation of Mrs. Zaha Jardaneh Mango. The center aims to a) provide programs, activities and services and associated facilities to stimulate the development and innovation of children, and b)provide equal opportunities for all children in Jordan by taking this experience to all governorates of the Kingdom in partnership with public and private sector. The center provides educational, cultural, humanitarian services and social programs encouraging innovation and skills development amongst children of all age groups to create the youth generation for the future. One of the focuses of the center is children with disabilities and it provides them with 75 different training programs for free.

Showcasing best practice

Youth Leadership - HRH Crown Prince Al-Hussein Bin Abdullah II

The future of Jordan's youth, their engagement in society, education and economic opportunities are amongst His Royal Highness' primary concerns. The initiatives and programs he has established are evidence of his belief that all young people can excel, given the right tools and opportunities. HRH advocates for a generation of youth which is committed to community service and volunteerism. HRH is responsible for several national youth initiatives such as **Generation Protected** which helps to raise awareness of education and drug prevention, **Haqiq** , **Qusai** which aims at creating qualified and proficient athletic trainers capable of treating sports injuries suffered by athletes during sporting events, and **The Global Forum**.

Haqiq

A national leadership program which aims to enhance, develop, enrich and help youth reach their full potential as productive leaders and caring citizens.

Cooperation with NASA

This collaboration between Jordan and NASA provides internship opportunities for Jordanians interested in pursuing a career in technology. It also includes a joint NASA/Jordanian team collaborating on building and programming a Nano satellite such as a Cubesat. This initiative seeks to inspire young Jordanian engineers, provide a boost to their careers and opportunities for further academic training. It also supports Jordan's efforts to build a cadre of highly qualified professionals in the technology and research sectors.

Global Forum on Youth, Peace and Security

The Global Forum, hosted by the Hashemite Kingdom of Jordan under the Patronage of His Royal Highness Crown Prince Al Hussein bin Abdullah II, was envisaged as a turning point towards a new international agenda on youth, peace and security.

Crown prince
© Alhussein.jo

Ommona Amman festival celebrating citizenship, belonging and inclusive communities
© Bashar Bakhet

5 A United and Proud City

We will...

A. Promote a sense of belonging amongst citizens

B. Promote participation and engagement

Goal A:
Promote a sense
of belonging
amongst citizens

Amman has a proud history of cultural diversity but lacks a strong outward-facing brand. This goal aims to celebrate our heritage and diversity, strengthen the social fabric of the city, and bring people together around a united understanding of what it is to be Ammani. This goal also promotes justice, equality, and citizenship.

Action 5.A.1
Organize an 'I love Amman' competition

Design a competition for the best city branding slogan or logo. This aims to create a sense of pride about Amman and engage citizens in celebrating and promoting the city's strengths. The competition will be open to everyone living in Amman.

Owner
GAM (Resilience Amman Office)

Status
New

Timescale
Short

Partners
- Youth societies
- Universities
- Educational institutions
- NGOs
- Local professional associations

10 **11** **16**

Resilience Value
- Develop and strengthen cultural identity and social cohesion.
- Increase civic participation and support citizenship.
- Promote engaged citizens and diverse, cohesive communities.

Include refugees and representatives of marginalized communities as ambassadors and youth leaders.

Action 5.A.2
I Love Amman youth ambassadors and young leaders

This action focuses on empowering young people as future leaders of the city. This involves giving young people the opportunity to build leadership skills through participation at events, in municipal activities, and volunteering assignments. This is designed to encourage them to be active citizens and help fulfil their potential as leaders of tomorrow. This action will be coordinated alongside the actions relating to the Youth Council and Youth Voluntary Service.

Owner
GAM (Social Development Sector)

Status
New

Timescale
Medium

Partners
- Local universities
- Youth societies
- Educational institutions

10 **11** **16**

Resilience Value
- Support knowledge sharing and networking.
- Empower young people and build youth skills and capabilities.
- Enhance trust between people and the government.
- Support delivery of city resilience building actions and approaches.
- Cultivate strong future leaders and engaged citizens.

Action 5.A.3
Establish citizenship, rule of law, and cross-sectorial awareness campaigns

Awareness campaigns in Amman are being undertaken by sector (Environment, Transport, Technology, Law etc.), and lack a cross-sector approach. We will carry out campaigns that bring together stakeholders from a variety of sectors and backgrounds to raise awareness about the city, its challenges, actions, future plans and more. We will use social media, online training programs, short films, physical meetings and workshops.

Owner
GAM (Social Development Sector)

Status
New

Timescale
Medium

Partners
- Ministry of Education
- Local universities and educational institutions
- Youth societies
- Professional associations

10   11   16

Resilience Value
- Help build robust communities and enhance social cohesion.
- Deliver high quality services and promote integrated planning.
- Increase civic participation and support citizenship.
- Promote engaged citizens and diverse, cohesive communities.

Promote urban citizenship among displaced and marginalized residents and link it to improved access to and awareness of existing services and options to citizenship pathways wherever they are available.

© Rotterdam Resilience Strategy

Inspiration from Rotterdam

Rotterdam Network City

Rotterdam's will create networks and build relationships between government, citizens, institutions, market and knowledge to facilitate each other and find an effective method for cooperation and collaboration which is the basis for a resilient system of governance for Rotterdam.

Action 5.A.4
Develop a cross-sector city branding strategy

Develop a city branding strategy for Amman in cooperation with related stakeholders that promotes the city's vision, and focuses on both the locals and visitors.

Owner
GAM (Branding and Communication Department)

Status
New

Timescale
Long term/ phased

Partners
Ministry of Tourism

8

Resilience Value
- Develop and strengthen cultural identity and social cohesion.
- Increase civic participation and support citizenship.
- Promote engaged citizens and diverse, cohesive communities.
- Attract business and investment.
- Support the tourism industry.

© Bashar Bakhet

Showcasing best practice

Amman Summer Festival

The Amman Summer Festival will be held for the 11th time in the summer of 2017. It is the only festival in Amman providing free, high quality family entertainment for all ages and sections of society. The festival showcases art, musical performances, plays, and traditional shows. The Festival Goals are to:

- Attract residents and visitors of Amman as a main summer event

- Provide free entertainment services

- Contribute to the promotion of tourism in Amman as a city of diversity

- Support and encourage local talent

- Enhance citizenship by celebrating positive messages and awareness of the city.

Goal B:
Promote participation and engagement

Bridge the gap between Amman's institutions and the citizens. Engage people in decision-making through dialog, transparency, and equality for both genders.

Action 5.B.1
Organize a structured dialog (mass consultation/ roundtable)

This action will provide the opportunity for dialog between decision-makers and citizens of all ages and segments of society. We will organize a round-table event twice a year to discuss key topical issues and promote civic participation. The outcome of the round-table will be considered for implementation following approvals.

Owner
GAM (Branding and Communication Department)

Status
New

Timescale
Short

Partners
• Hawa Amman Radio
• GAM press center

5 10 16

Resilience Value
• Build trust between the government and citizens.
• Increase public support and buy-in to city-wide resilience building activities.
• Increase civic engagement and participation.
• Improve city management and planning processes.
• Create an accessible platform, encouraging dialogue between the city and its citizens.

> Include aid and other civil society organizations, as well as local leaders/ representation from displaced and marginalized community groups, in the structured dialog. Follow the dialog with a citywide public awareness campaign on the outputs of the dialog to promote transparency and cohesion.

Action 5.B.2
Mayoral Outreach

We will provide a platform to help citizens participate in municipal decision-making. This will include regular public meetings, social media activities, a regular newsletter including greetings from the Mayor, updates on municipal activities, and invitations to talks.

Owner
GAM (Branding and Communication Department)

Status
New

Timescale
Short

Partners
• Hawa Amman Radio
• GAM press center

11 16

Resilience Value
• Build trust and dialogue between the government and citizens.
• Increase public support and buy-in to city-wide resilience building activities.
• Increase civic engagement and participation.
• Improve city management and planning processes.

Action 5.B.3
Integrate Amman youth leaders into municipal decision-making

Amman youth leaders are a group of young people who took part in the City Children Council. This group meets to discuss youth-related emerging issues in the city, for example identifying root causes of youth issues and proposing solutions. This action proposes that this group's findings should be integrated into mainstream municipal decision-making.

Owner
GAM (Social Development Sector)

Status
New

Timescale
Short

Partners
• Youth societies

16

Resilience Value
• Support youth entrepreneurship and leadership.
• Support knowledge sharing and networking.
• Empower young people and build youth skills and capabilities.
• Support city efforts to implement and enhance resilience through new approaches and ideas.

Ensure youth from all segments of the society including refugees, persons with disabilities and underprivileged youth and organized youth groups are included in the decision-making process.

© Bashar Bakhet

Showcasing best practice

Amman Marathon

The Amman Marathon takes place annually. It includes events to suit all ages and abilities, including the featured 42 km marathon, a 21 km half marathon, a 10 km fun-run, and a children's race. There is also a wheelchair race and a special category for the visually impaired. The Amman Marathon provides the unique opportunity for participants to run through the streets of downtown Amman unimpeded by traffic. It only happens once a year! Finishers are rewarded with the glorious sight of the morning sun reflecting off the city's ancient Roman ruins, an unrivalled experience of great beauty.

Mayor outreach with youth
© Bashar Bakhit

Working with our partners

International Rescue Committee (IRC) recommendations on the refugee crisis

Jordan is host to one of the biggest refugee populations in the world. The Syrian influx brings the estimate of total unregistered migrants (not just Syrians) to over 1.4 million.

The city of Amman has been a primary destination for Syrian refugees. At the start of the crisis (2011-2012), UNHCR estimated that around 20% of urban refugees settled in Amman and, three years later, that share has risen to more than 34%. While no exact figures exist, UNHCR estimates that over 181,000 persons of concern reside within the Amman Governorate, though the actual number is certainly higher.

© Samer Saliba

The IRC, in partnership with 100RC, carried out in-depth research to understand the scale of the problem and make practical recommendations that would align with Amman's goals and actions in the resilience strategy. Interviews, site visits and workshops formed the basis of the process. Based on their findings the IRC made the following recommendations:

1

Promote an inclusive approach to resilience. The strategy should extend the benefits of its resilience goals to all residents of Amman with an added emphasis on the sudden increase of population, including marginalized and displaced residents. We have added 'an inclusive city' as a cross-cutting resilience theme; and adapted actions that address the specific needs of displaced residents and host communities. In addition, we recommend including the development of an Inclusive Resilience Plan; and pursuing opportunities to include refugee and displaced populations in everyday city activities through community engagement in urban development plans or environmental awareness campaigns and activities.

2

Develop an Inclusive Resilience Plan. This may include actions such as: issuing an Amman Citizen Card to facilitate access to various service centers from both National, Municipal, and Civil Society actors while linking with the "I Love Amman" youth initiative and promoting a sense of belonging within Amman; developing an online platform to promote information sharing and feedback; adding humanitarian services to the planned coordination of services within Amman; sensitizing existing services to the unique needs of refugees; and designing an engagement strategy to ensure they are aware of and feel safe accessing services within Amman. This should have a particular focus on women and girls.

3

Work through public private partnerships. The Amman Resilience Team should network and collaborate with aid and private sector actors to address the immediate needs of displaced and marginalized residents by including them in resilience-building activities and strengthening the long-term impact of humanitarian programming.

4

Play a leadership role in the refugee response within Amman. Using its relative administrative autonomy, the Amman Resilience Team can play a convening role in the overall response to the refugee crisis within Jordan. It should promote good practice at the local level not only for the response within other Jordanian cities, but also for current and future urban displacement crises globally.

5

Identify financing opportunities through foreign investment funding streams. To finance the City Resilience Strategy, GAM should identify opportunities that currently exist through initiatives such as the Jordan Compact and linkages with existing Special Economic Zones within the Amman Governorate (i.e. those that are benefitting from the simplified rules of origin for exporting to the European Union market). By working through public private partnerships, the Resilient Amman team may be able to leverage the interest of foreign companies to support the implementation of the strategy, particularly those actions that promote inclusive resilience and contribute to the economic development of the poorer neighborhoods in East Amman.

IRC's proposed recommendations to the actions in this strategy (to make them more inclusive of refugees and marginalized residents) can be found throughout Chapter 3.

Working with other 100RC Cities

Athens Network Exchange: Cities and the Global Migration Crisis

Amman was one of the eight 100RC cities that participated in a three-day Network Exchange organized by 100RC and hosted by the Municipality of Athens in September 2016. The Network Exchange provided a forum to bring together cities, of different sizes and geographies, to address the common challenges of migrant integration in urban settings. The forum allowed cities to connect with experts, share effective city practices and tools, learn from each other, and replicate successful ideas. Cities were represented by their Chief Resilience Officers (CROs) and migrant policy officials, and included Athens (Greece), Los Angeles (United States of America), Medellin (Colombia), Montreal (Canada), Paris (France), Ramallah (Palestine), and Thessaloniki (Greece).

ATHENS EXCHANGE
By the Numbers

- 3 DAYS of site visits, presentations and working sessions

- 8 CITIES representing 7 countries and 3 regions

- 22 RESILIENCE PRACTITIONERS including 8 CROs and 14 city staff

- 30 EXPERTS from businesses, NGO, academia, local leadership, and 100RC Platform of Partners

The forum included site visits, meeting local organizations, and working sessions to understand how Athens is addressing its refugee crisis and moving toward a more holistic strategy.

Athens Network Exchange - Program Overview

DAY 1 / CHALLENGES
The day was divided into three parts. a) Scene setting providing context for the current situation in Greece, b) Global perspectives from the participating CROs on the challenge in their respective cities, and c) a panel featuring representatives of the migrant community and local organizations followed by site visits highlighting Athens' interventions in Victoria Square and the Relocation Scheme Program.

DAY 2 / SOLUTIONS
Participants worked in multi-disciplinary groups around the themes of infrastructure, social cohesion, and economic development, to arrive at best practices and new solutions to manage urban migration while building resilience.

DAY 3 / WHAT'S NEXT
City teams synthesized findings from the workshop and defined a list of aspirations and strategic approaches to share with mayors, the broader 100RC network, and to establish an ongoing community focused on cities and migration to move the collective work forward.

Outcome

The outcome of the Network Exchange included a number of Aspirations and Strategic Approaches that Chief Resilience Officers and other Exchange participants recommend for embracing the current migration crisis as an opportunity for cities to become more adaptive, cohesive, and vibrant for all their residents.

4 Aspirations and 13 Strategic Approaches have been formulated.

Aspirations are the visions Chief Resilience Officers hold for the future to guide the way their cities plan for and manage urban migration

Strategic approaches are actions Chief Resilience Officers recommend for achieving their aspirations

Plan for a Dynamic Future

By embracing global migration and incorporating human flows into urban planning, adaptive cities prepare, transform, and thrive in the face of a dynamic future.

- Incorporate migration considerations into the design of key services and infrastructure.

- Establish a city-level office dedicated to the successful integration of newcomers.

- Apply migration considerations to city-wide plans and resilience strategies.

- Develop more granular and coordinated data collection to improve integration initiatives.

Embrace Newcomers

By welcoming and integrating migrants, inclusive and cohesive cities become better places for all residents.

- Promote migration through a narrative that emphasizes common goals, values, and opportunities.

- Promote initiatives that foster regular interactions between new and existing populations to strengthen communal bonds and mitigate the effects of false stereotypes.

- Address migrants' fundamental needs while promoting initiatives that reduce real or perceived competition among newcomers and native residents.

Thrive Together

By valuing and leveraging the talent of migrants, equitable cities create opportunities for all residents and vulnerable populations.

- Improve access to financial services for migrants and other vulnerable groups.

- Create opportunities for migrants to generate income despite rigid labor markets, through cash-for-work programs and paid training schemes.

- Support immigrant-owned businesses and incorporate the needs of immigrant entrepreneurs into traditional economic development priorities and strategies.

Lead for Change

By partnering with local, national, and international actors, leading cities create an enabling environment for best managing the reception and integration of newcomers at the local level.

- Actively campaign to receive policy and funding support for better managing migrant reception and integration in urban areas.

- Fill in policy and funding gaps creatively by tweaking local mandates and leveraging public-private partnerships.

- Leverage and improve coordination – at all stages, from planning to implementation - withhumanitarian aid agencies, NGOs, businesses and local organizations, to avoid duplications and maximize collective impact.
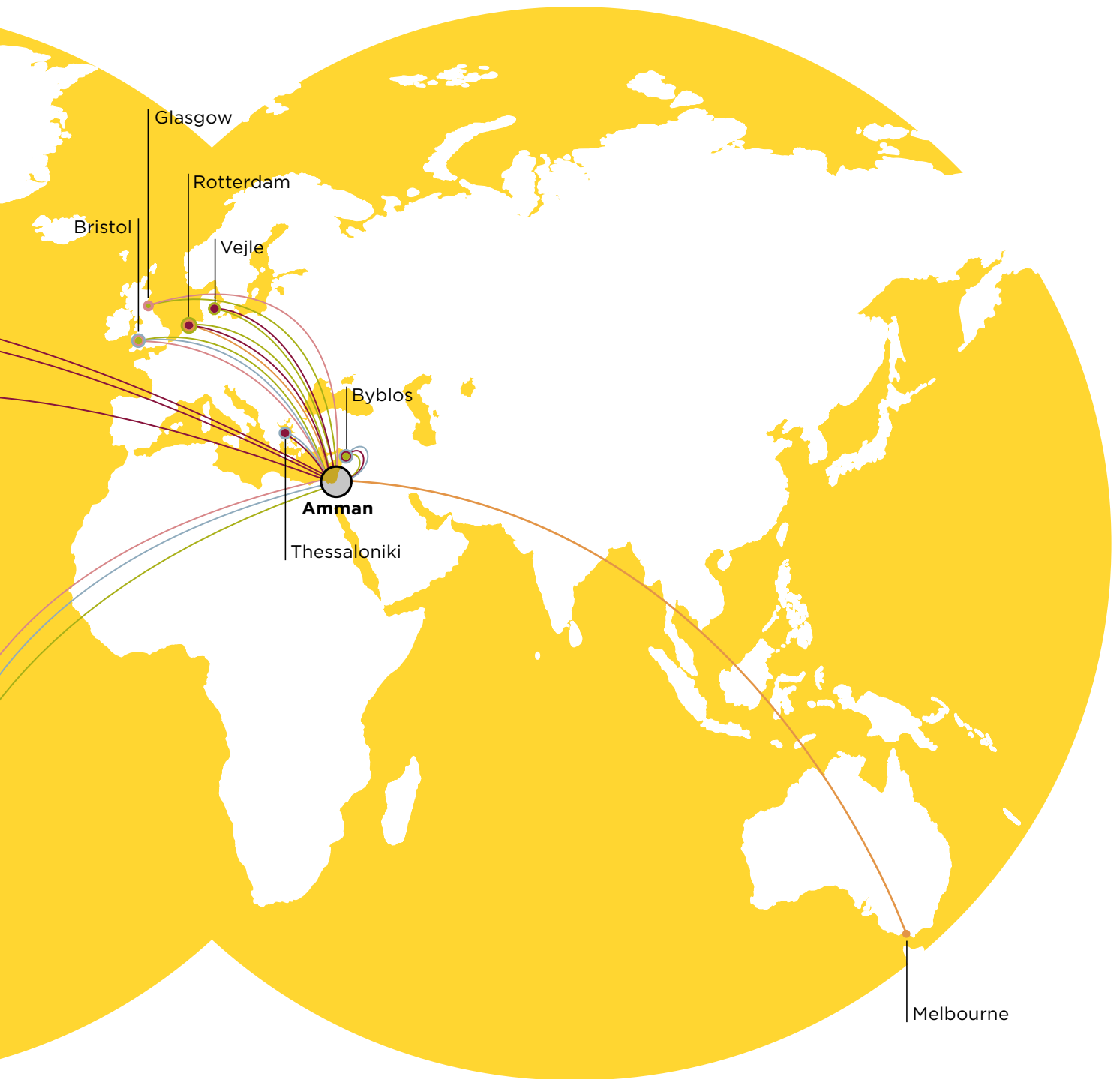
For Amman, the Network Exchange was both an inspiration and a validation for the content of our resilience strategy, and has catalyzed concrete actions to strengthen the role of our city as welcoming, united, and equal.

Links and learning from other 100RC cities

The network of Chief Resilience Officers provides the opportunity for cities to engage with and learn from their peers. We will use the network to find inspiration for some of our actions and learn from the experiences of other cities carrying out similar activities or challenges. The following table illustrates some of the actions being taken in the 100RC network, relevant to Amman's proposed actions.

San Francisco

Boulder

Medelin

Rio de Janeiro

- Integrated and smart city
- Environmentally proactive city
- Innovative and prosperous city
- Young and equal city
- United and proud city

Glasgow

Rotterdam

Bristol

Vejle

Byblos

Amman

Thessaloniki

Melbourne

Integrated and smart city

City	Pillar/Action	Details
Melbourne	Metropolitan cycling network	Melbourne's metropolitan councils will collaborate with citizens and Victoria's main transport bodies to establish a metropolitan bicycle path network, to help make cycling a safer and more practical alternative to car travel. This aims to create and sustain buildings, infrastructure and activities that promote social cohesion, equality of opportunity, and health.
Rotterdam	Street of the future	This action will seek to conceive the street of the future. We imagine new multi–utility service corridors, improved subsurface 3D mapping, enhanced co–ordination and dialogue and thorough market and citizen engagement will help us to determine now what infrastructure investments are needed to ensure sufficient flexibility for the street of the future.

Environmentally proactive city

City	Pillar/Action	Details
Rio de Janeiro	1.A:Establish Rio de Janeiro Climate Change Panel (p.39)	Set up a Climate Change Panel for the city of Rio de Janeiro involving experts from various scientific fields to study climate trends with the Panel of Climate Change (IPCC 2013) and future iterations as basis. This will investigate, publish and communicate results of climate change research and its impacts on the city of Rio, as well as provide support for decision-making on urban planning and inform other fields of knowledge and the civil society.
Rio de Janeiro	5.B: Valorization of solid and organic waste	Involve the civil society in the valorization of solid and organic waste. Minicenters of recycling and composting will be established in neighborhoods. Actions should involve the composting of organic residue for the use of residents and distribution for urban gardening and local agriculture, and can involve many techniques of composting, in various scales. Besides, those minicenters must promote opportunities to increase the useful life of materials, through reuse and exchange.
Vejle	Develop a holistic strategic wastewater plan for Vejle	The Municipality of Vejle is one of few municipalities developing a holistic wastewater strategy that addresses the challenges of climate change, water supply, existing municipal water plans, and water quality. We want to pioneer this integrated approach and set a benchmark for other municipalities to develop the most efficient and sustainable solutions. The plan will provide the municipality with an important overview of the current systems and identify where further investment is needed to secure a fit-for-purpose and resilient wastewater system for Vejle.
Bristol	15. Climate change adaptation plan	A plan will be developed to future-proof the city by identifying the major climate hazards and their potential impact, a framework for adaptation, and identification of strategies to build climate resilience.
Glasgow	2B2. Climate ready design	Prepare guidance on climate ready design and promote adoption by developers, planners and designers, particularly focusing on building retrofit to ensure long-term fitness for function.
Rotterdam	1 km2 sustainable Roofscape city centre	Rotterdam was the first municipality in the Netherlands to successful support green roofs, with currently more than 220.000m2 of green roofs in Rotterdam. Techniques for greening roofs have developed and can now effectively cater to multiuse roofs including urban farming, solar panels, water storage and even sports facilities. These spaces can contribute enormously to the sustainability and viability of the city center. It contributes to a favorable climate for businesses, tourism and offers an attractive and healthy environment for young families and professionals. This action for a sustainable roofscape brings the enthusiasm of Rotterdam and the policy objectives together to publicize the many opportunities of large scale green roofs retrofit. We are aiming to create green roofs covering 1,000,000m2 across our city center.
Byblos	2.B.1 Prepare a strategy for an efficient, reliable and renewable energy supply to reduce dependency on the national grid	Byblos will explore options to determine the optimal mix of energy sources to meet its demands. We will also ensure the use of incentives - such as tax credits, subsidies, and feed-in tariffs - and loans - like the low-interest NEEREA loans supported by the Central Bank of Lebanon - to promote the adoption of renewable energy generation and consider interventions to improve energy efficiency and reduce demand, particularly through sustainable building design and operation.

Innovative and prosperous city

City	Pillar/Action	Details
Rio de Janeiro	5.E: Evaluate Social and Environmental Impacts of Investments	Develop tool to calculate the social and environmental impacts of new investments, public and private, with focus on foreign investments, considering indicators such as carbon emissions, job creation and the potential for circularity.
Bristol	16. Establishing a resilient city financing structure	Bristol will explore options for establishing a Resilient city financing structure by aggregating a suite of small and large scale place-based projects focusing on improving local resilience (e.g. flood defenses, green infrastructure, community facilities and new housing). The structure would seek to blend public and private money and take a long term view (at least 25 years) to achieve a social as well as a financial return on investment. We aim to deliver jobs and skills for local people, whilst empowering citizens to support projects they are passionate about, and providing key infrastructure assets for Bristol.
Byblos	5.A.1 Support and encourage Small and Medium-sized Enterprises (SMEs) in existing and potential industry sectors	Byblos will incentivize SMEs to locate in the city by offering them space and communication/logistical facilities. We will build a local knowlegde base to promote research and innovation around our targeted industries. This will draw young creative entrepeneurs from local universities to settle in Byblos. This action will create incubators for new creative products and activities.
Thessaloniki	2.E.3 Establish an ' Education to Career' consortium	This consortium will include municipalities, academic institutions, primary and secondary educational networks, private sector stakeholders and training institutes. These groups will collectively assess existing efforts to support young people from education through to early career, identifying gaps and impoving services available to support this process.
Thessaloniki	2.E.6 Develop leadership programs for young women	This action will convene stakeholders to develop young women's leadership programs, providing incentives and an award to recognize effective approaches.

Young and equal city

City	Pillar/Action	Details
Rio de Janeiro	6.A: Educate Youth for Resilience	The project Resilient Youth aims to develop and implement a curriculum on Urban Resilience for students of municipals schools, reaching 100,000 children until 2020. The Resilient Youth program will comprise three main subjects: 1) The impact of climate change in cities and how this affects youth's lives; 2) The basics of civil defense, with notions about disaster preparedness; 3) Sustainable consumption and resource efficiency, mainly that of water and energy, as well as notions of reuse, recycling, upcycling and transformation of materials and products. The project is based on the premise that children need to be knowledgeable of the risks in their neighborhood and city, and develop a resilient behavior at the start of life. This will increase the knowledge of citizens about risks and vulnerabilities; promotes culture of prevention and disaster preparedness, supports the efficient use of resources.
Bristol	30. Young Future Bristol	Young Future Bristol has been set up to target this future skills gap and build a new generation of coders and technologists and internationally to support the delivery of a technology engagement programme for young people. They provide the "kit" (laptops and Raspberry Pis) and technical expertise and guidance to help young people develop digital skills for the future workplace.
Glasgow	4A7. Educational resilience	Facilitate an educational resilience exchange between our young Glaswegians and their peers in fellow 100RC cities, inspiring a stronger sense of global citizenship and awareness of shared resilience challenges.

United and proud city

City	Pillar/Action	Details
Rotterdam Network City	Rotterdam network city: Creating networks of government, citizens, institutions, market and knowledge	There is a changing role for the government, instead of a central guiding policy role, the role is increasingly shifting to frameworks, facilitation and enabling. The community and the market have increasing ambition to tackle social issues and therefore also expect to get more space and support from the government to do so. It is important that the market, community and government facilitate each other and find an effective method for cooperation and collaboration. That is the basis for a resilient system of governance for Rotterdam. Make it happen: the motto for the city encompasses this. This action is intended to ensure that we become more aware, that we recognize the importance of networks and platforms for engagement and that we share our knowledge around key initiatives.
Vejle	Co-creation strategy: Deliver an action plan for co-creation between citizens, businesses, unions and institutions.	We will develop and implement a co-creation strategy in Vejle. We want to be a resilient and co-creative municipality that, together with its citizens and civil stakeholders, create communal and better welfare solutions for our citizens. Through co-creation we will increase our resilience capacity and facilitate engaged citizen groups.
San Francisco	Empower Neighbors and Neighborhoods through Improved Connections

4.3: Forge Partnerships to Empower Neighborhoods | The Office of Resilience and Recovery will work closely with the Invest in Neighborhoods program, run by the Office of Economic and Workforce Development, to identify and build partnerships that advance the goals of this strategy. Invest in Neighborhoods works to strengthen and revitalize neighborhood commercial districts around the city by marshaling and deploying resources from city departments and nonprofit partners. This includes services such as loan programs, façade improvement grants and technical assistance for small businesses, leveraging city services to help small businesses thrive, increase neighborhood quality of life, improve overall physical conditions and, in turn, build community capacity. |
Medellín	4.D My Medellín: Digital Strategy for Citizen Participation	Maintain the online participation of people over the four years, to use it as a channel for listening, through which the city's public administration can keep receiving ideas for the development of Medellín.
Boulder	Action 3.1 Create Community Resilience Centers	Ensure the continuity of all critical life-safety services at a network of community resilience centers. Boulder will also create place-based platforms for assembly, cooperation and education. By basing and delivering community outreach, activities and other functions (e.g., mobile farmers markets, food trucks, fix it clinics, recycling support, etc.) from these locations, these centers can be integrated into the new focus on neighborhood- based engagement during good times as well as crisis.
Thessaloniki	2.C.3 Establish skills development centers	Thessaloniki will establish skills development centers for both newcomers and long-time residents to improve the economic conditions for the low-income and vulnerable communities.
Byblos	3.A.1 Create neighborhood committees to represent and advocate for the communities within Byblos	The committees will be made up of 4-5 people. The representation of vulnerable groups will be essential in each neighborhood committee. They will work together to change and improve their neighborhoods to achieve better outcomes for the community living and working there. They will as well become the link between the Municipality and the community.

Sakeyat Addaraweesh, Jabal Al-Waibedeh, one of the oldest steps connecting Amman.
© Bashar Bakhet

4

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Stakeholder Roles and Implementation

4.1
Stakeholder roles

Stakeholder consultation in development of strategy

The involvement of the city's stakeholders was very important in the development of the resilience strategy. We brought together and consulted with stakeholders from different sectors of the city, including city officials, governmental bodies, NGO's, local communities, academic institutions, and youth organization to discuss our resilience challenges, and collectively develop the opportunities for our resilience strategy. This has allowed us to:

- Gather different perspectives in the process of shaping our strategy and the future of Amman.

- Provide the CRO with a solid comprehensive understanding of the city's current context and the opportunities to build resilience.

- Build a resilience strategy that is supported and owned by the city as a whole.

- Ensure transparency in building the city strategy.

- Empower people to participate in the strategy development, and thereby activate the community and promote community cohesion.

Role of the resilience steering committee

With support from the Mayor, the CRO created an interdisciplinary group of city staff and non-city government stakeholders tasked with providing guidance on the development of the Amman resilience strategy and other associated activities. The role of the Amman Resilience Steering Committee include:

- Provide advice to Amman Resilience Team on the content of Amman resilience strategy.

- Act as a resource to provide the necessary data and best practice for Amman resilience strategy.

- Provide social networking platform by representing and communicating with other stakeholders in cooperation with Amman city team.

- Provide guidance and advice to help Amman Resilience Team to solve any obstacles or problems.

- Monitor performance and obtain the approval and support of all partners involved in the adoption of the city resilience strategy.

- Assist the CRO to develop a robust, actionable funding strategy focused on achieving Amman's resilience priorities.

4.2
Operationalizing resilience

Operationalizing resilience is about making the plans proposed in the strategy happen. Following the release, we will start planning and preparing a detailed implementation plan in consultation and collaboration with the relevant stakeholders and partners. This also requires developing the city's performance to deliver these actions in collaboration with the city's stakeholders to work together, supporting one another to ensure objectives can be met and actions delivered for a more resilient Amman.

As part of this process, the Greater Amman Municipality will establish a cross-sector internal development plan for all GAM employees to invest in our human capital, and support GAM vision and goals. GAM will also review and update internal municipal processes to simplify procedures and increase the efficiency of GAM. For example,

providing a services center. GAM will review and update municipal laws and regulations to help us in building the city's resilience, this will include updating and establishing acquisition law, planning law, and building law with clear responsibilities.

Additionally, in order to improve our waste management system, GAM will establish a national training center for environmental issues particularly waste management. The center will provide annual internal training to GAM employees and external training for other organizations and other cities in the region, including the proper use of equipment, and on health and safety issues.

Finally, GAM will establish a resilience research center to engage communities and community councils in relation to disaster preparedness, public health, climate action, and other services.

4.3
Monitoring and evaluation plan

4.3.1
A description for managing and monitoring progress

A set of indicators have been selected from GAM's existing Key Performance Indicators (KPIs) to help us monitor and evaluate our implementation progress in the short and long term.

GAM currently applies two sets of KPIs; international KPIs and institutional performance KPIs. These are derived from international city KPIs such as the Habitat Agenda KPIs and the Urban Child Development Index (UKID). The GAM specific KPIs are used for monitoring, assessment and evaluation of GAM projects specifically. The KPIs are divided into 7 themes; institutional performance, financial management, infrastructure, city branding, society, urban planning and investment, and environment and health.

Relevant GAM KPIs have been selected to monitor, review and evaluate Amman resilience strategy to allow us to address emerging issues, improve performance and ensure accountability. In addition, the Resilient Amman team will monitor implementation progress against the strategy pillars, goals and the resilience dividend each action set out to achieve.

These are outlined in the summary of goals and actions in section 4.5.

4.3.2
City Resilience Index First User Challenge

Amman is one of ten City Resilience Index (CRI) First User Challenge cities selected to pilot the CRI Online Tool. The twelve goals of the CRI correlate to the twelve drivers in the City Resilience Framework, and provide a complementary tool to measure and monitor the impact of the resilience actions. By conducting a CRI assessment, Amman will measure its baseline resilience performance on 156 qualitative and quantitative indicators, generating a qualitative and quantitative resilience profile. The qualitative profile will measure how Amman's policies, and practices contribute to its resilience, while the quantitative profile will identify the city's current resilience performance. Repeating the CRI assessment at regular intervals will provide Amman with a holistic evaluation of the impact of resilience actions. This process will be led by Amman's CRO Fawzi Masad. The tool will allow the city to undertake a self-assessment to identify the strengths and weaknesses in its resilience performance using the CRI, creating a baseline to plan from and measure future progress. The tool guides users through a set of activities to describe their city, manage data collection and reporting, generate a Resilience Profile and submit a brief narrative report.

The process is expected to take between 6-8 weeks for completion. Amongst Amman's motivations in applying for the First User Challenge was the opportunity to measure and assess our baseline resilience performance as a crucial first step for implementing and understanding the impacts of the Resilience Strategy. We also identified the opportunity to continue stakeholder engagement initiated during the strategy development process.
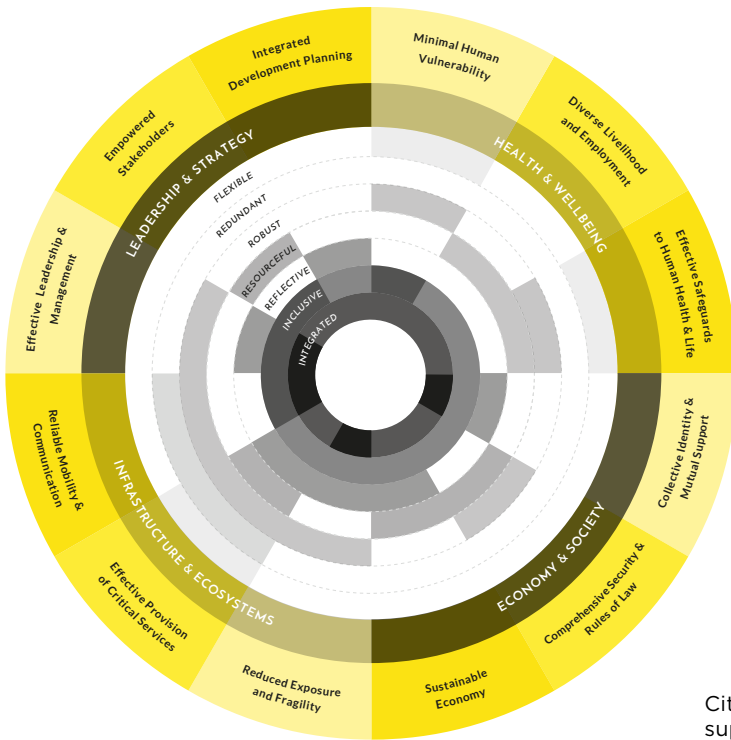
City Resilience Index, developed by Arup and supported by the Rockefeller Foundation , 2017
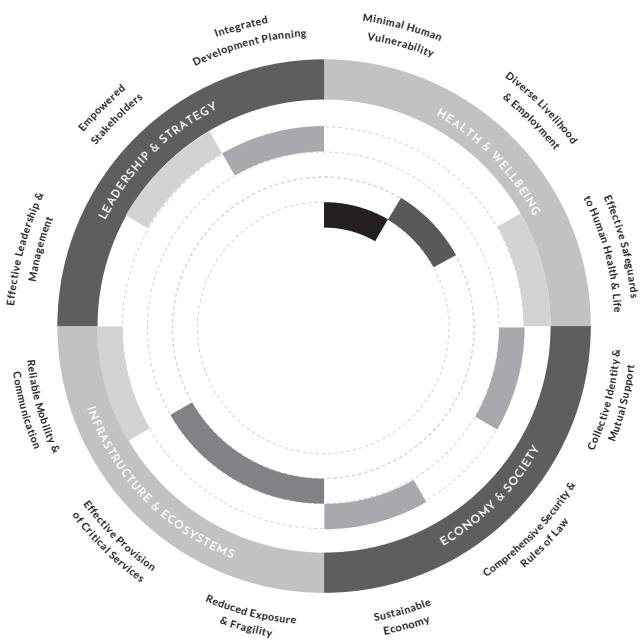
Qualitative resilience profile

An example of a Qualitative Resilience Profile is shown above. The Resilience Profile is the composite of City Resilience Index Goals, based on the average scores of each relevant Indicator.
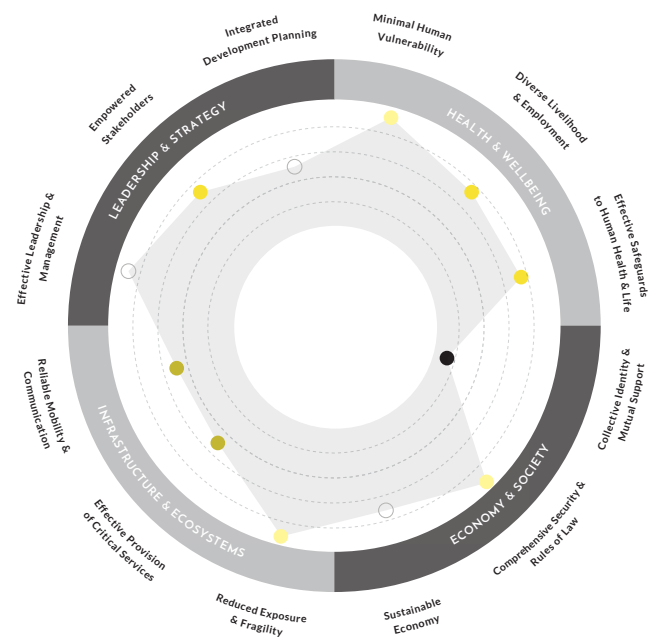
Quantitative resilience profile

An example output produced from the Quantitative Metrics is shown above. The Quantitative Resilience Profile is the composite of City Resilience Index Goals, based on the average scores of each relevant Indicator.

4.3.3
Sustainable Development Goals

Pioneered by the United Nations (UN) the Sustainable Development Goals (SDGs) include seventeen aspirational goals and 169 targets, covering a broad range of sustainable development issues including ending poverty and hunger, improving health and education, making cities more sustainable, combating climate change, and protecting oceans and forests. SDGs build on their predecessor Millennium Development Goals (MDGs) and have been adopted by the 194 countries that make-up the UN General Assembly. UN member states will be expected to use SDGs to frame their agendas and political policies over the next 15 years.

SDGs are directly relevant to enhancing city resilience. As such, in setting out our resilience pillars and actions, we have cross-referenced our goals against the SDGs. The symbols are included in chapter 3 to illustrate which SDGs are met by each action in the Amman resilience strategy. This will allow us to compare with globally recognized framework and help us to monitor progress against the goals we set ourselves.

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

UN Sustainable Development Goals (SDGs)

4
QUALITY
EDUCATION

5
GENDER
EQUALITY

6
CLEAN
WATER AND
SANITATION

10
REDUCED
INEQUALITIES

11
SUSTAINABLE
CITIES AND
COMMUNITIES

12
RESPONSIBLE
CONSUMPTION
AND PRODUCTION

16
PEACE, JUSTICE
AND STRONG
INSTITUTIONS

17
PARTNERSHIPS
FOR THE GOALS

4.4
Implementation in progress

The implementation of some of the actions in the strategy is already under way.

Amman BRT

The implementation of the BRT system consists of three major categories, including:

1. Infrastructure (bus lanes, stations, terminals)

2. Operations: the operation of the system will be handled by a private operator to be selected through competitive bidding. The operator will be responsible for providing the buses, developing the depot, hiring and training drivers, as well as handling customer service functions.

3. Ticketing system: an effective payment system is essential for supporting the operations of the BRT. This is especially true for expediting passenger loading/unloading and reducing the bus dwell time at each station.

The operation of the system can only take place after the completion of the infrastructure work. Construction work for the bus lanes also includes road work to alleviate current traffic congestion problems at some of the key intersections along the BRT routes.

The first stage of Amman BRT was divided into 16 construction packages; Package 1 and 2 are already constructed and Package 3 is under construction, the rest of the packages are under work for tendering :

Yajouz intersection

Queen Rania Street-Jordan University

Queen Rania Street-Jordan University

Press Tunnel

Shaheed street

Aqsa Street

Istiqlal Street

Mahatta Terminal

Sweileh Terminal

Sharif Naser Bin Jamil Street

Sport City Intersection

Kindy Street

Princess Basma Street

Omar Matar Street

Yarmouk Street

Fountain Plaza-Ras Al-Ain
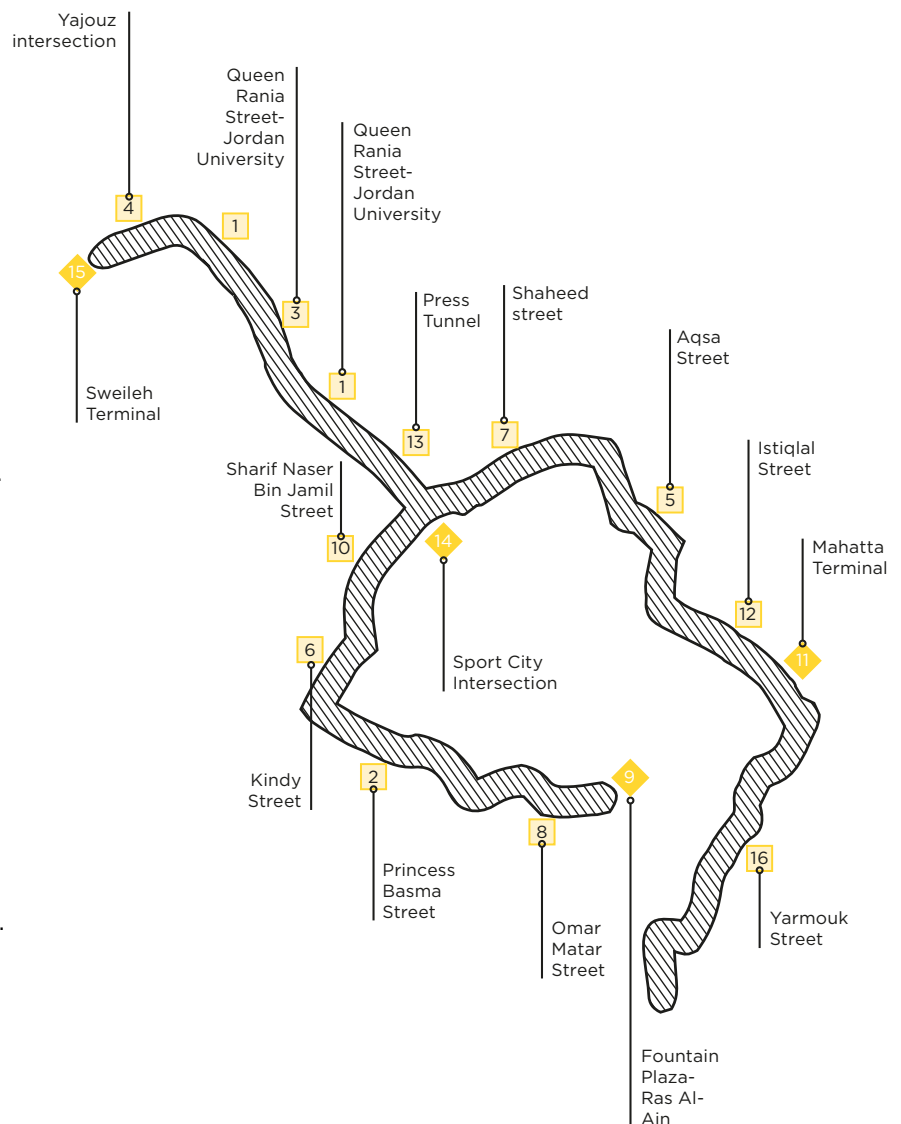
Business from home licenses

Greater Amman Municipality has called on citizens to take advantage of regulations issued in 2012 to facilitate businesses based from home. These regulations aim to provide new job opportunities especially for unemployed citizens, new graduates, housewives, and people with disabilities which prevent them from working outside their home.

Article VI of the professions permit regulations legalizes informal professions licensing, and lowers the financial burdens for startup businesses.

According to the regulations, businesses at home are divided into three categories: 1) intellectual professions such as advisory and design, public relations, secretarial, sales and marketing services; 2) handicrafts include knitting, embroidery, ceramics and the decoration and manufacture of candles and soap; and 3) food processing services like jam , bakery and pickles productions, and the preparation of vegetables, herbs and legumes.

Feasibility study for Amman Metro

A study is under way to determine whether establishing an underground railway system in Amman is possible and feasible. The proposal to establish a metro transit system in Amman seeks to ease traffic congestion in the capital by providing commuters with transportation alternatives to private vehicles.

GAM and CROIBC/CREC, a Chinese railway engineering company, signed a memorandum of understanding (MoU) to carry out a study on the feasibility of establishing a metro system in Amman.

The company will look into the topography of Amman, its population and several other elements that determine the viability of such a project. Results of the study will be presented in two years. If the metro project is deemed feasible, it will be implemented in parallel with the Bus Rapid Transit (BRT).

Green Amman 2020

GAM has put the environment as one of the municipality's top priorities, and is taking action to enforce legislation for the protection of the environment. As part of this, GAM is currently implementing a scheme to increase the total area of green open spaces in the city to make Amman a green and citizen-friendly capital by 2020.

4.5
Detailed summary of actions

Pillar 1	Goal (We will...)		Action		Owner	Partners
	A	Improve the mobility systems	1	Develop an integrated mobility plan	GAM (Transport Directorate)	• Ministry of transport • Land transport Regulatory Commission
			2	Plan and construct an efficient BRT system	GAM (Transport Directorate)	• Ministry of Transport
			3	Plan and construct a Metro System in the main corridors	GAM (Transport Directorate)	• Ministry of transport • Land transport Regulatory Commission
			4	Develop an urban mobility observatory	GAM (Amman ConO)	• Ministry of transport • Land transport Regulatory Commission • Amman Urban Observatory
	B	Promote walkability	1	Review and update 'Street Manual'	GAM (Roads Directorate)	• Ministry of transport • Land transport Regulatory Commission • Universities • Ministry of public works • Higher council for affairs of persons with disabilities
			2	Create a walking map	GAM (Engineering Directorate)	• Ministry of transport • Ministry of Tourism • NGOs
			3	Explore tactical urbanism opportunities	GAM (Engineering Directorate)	• Ministry of Tourism • NGOs
			4	Organize a design competition for Amman's Hijazi railway	Jordan Hijaz Railway Corporation	• GAM • Ministry of transport • Ministry of Tourism"
	C	Institutionalize planning in the city	1	Finalize and implement Amman Strategic Master Plan 2060	GAM (Planning Directorate)	• Land and survey department • Royal Geographic Center • Amman Urban Observatory
			2	Develop a strategic development plan for East Amman	GAM (Planning Directorate)	• Land and survey department • Royal Geographic Center • Amman Urban Observatory
			3	Establish an urban resilience research centre	GAM (Resilience Amman Office)	• Universities
			4	Develop a storm water drainage masterplan	GAM (Roads Directorate)	N/A
	D	Connect the city digitally	1	Develop an ICT smart city roadmap	GAM (IT Department)	• Ministry of communication and information technology • Funding agencies
			2	Establish a centralized GIS database	GAM (GIS Department)	• Platform partner opportunity • Miyahuna • Jordan electricity company • Ministry of communication and information technology
			3	Establish a coordination plan for service providers within the City	GAM (Roads Directorate - Coordination Department)	• Platform partner opportunity • Miyahuna • Jordan electricity company • Ministry of communication and information technology

Timeframe	Status	Relevant Sustainable Development Goals	KPI	Sector
Medium	Ongoing	9 11	Increase the use of public transport by 40% by 2025	Urban planning
Long term/ phased	Ongoing			Urban planning
Long term	New			Urban planning
Medium	New			Urban planning
Short	New	3 9 11	Improve one major street in every district by 2020	Urban planning
Long term/ phased	New	3 11		Urban planning
Medium	New			Urban planning
Long term	New	3 9 11		Urban planning
Long term/ phased	Ongoing	9 11 16	Release the updated master plan	Urban planning
Long term/ phased	Ongoing	11		Urban planning
Medium	New			Buildings
Medium	New	11 13		Urban planning
Medium	New	11	Target to be defined once the roadmap is complete	Information, Communication & Technology
Medium	New			Information, Communication & Technology
Short	New			Information, Communication & Technology

Pillar 2	Goal (We will..)		Action		Owner	Partners
An environmentally proactive City	A	Manage and fulfil climate change commitments	1	Create a team responsible for our climate change portfolio	GAM (Resilience Amman Office)	• Ministry of Environment • C40
			2	Develop a Climate Change Action Plan	GAM (Mayor's consultant)	• Ministry of Environment
			3	Network and collaborate with international agencies on climate change	GAM (Resilience Amman Office)	• 100RC network
			4	Deliver the Green Amman 2020 initiative	GAM (Green Amman 2020 Committee)	• Green Amman 2020 Committee
	B	Improve energy efficiency and energy security, including by diversifying energy sources	1	Identify and implement energy saving solutions for municipal assets (buildings, streets, public spaces etc.)	GAM (Investment and Assets Directorate)	• Amman Urban observatory
			2	Develop solar power generation facilities	GAM (Engineering Directorate)	• Ministry of environment
			3	Incentivize the public to adopt electric vehicles	GAM (Fleet Directorate)	• Ministry of transport • Public security directorate/ Department of traffic
			4	Replace GAM fleet vehicles with electric vehicles	GAM (Fleet Directorate)	N/A
	C	Promote application of green building codes and guidelines	1	Incentivize implementation of building codes and guidelines	GAM (Planning Directorate)	• National Building Council at the Ministry of Public Works and Housing, the Building • Research Center at the Royal Scientific Society (RSS) • The Jordan Green Building Council • A/E Business Council • The Jordan Engineering Association • The Contractor's Association • The Housing Investors Association
			2	Develop public awareness campaigns relating to green building solutions and technologies	GAM (Branding and Communication Department)	• Hawa Amman Radio • GAM press center
	D	Manage our water resources efficiently	1	Deliver rainwater harvesting plan	GAM (Roads Directorate)	• Miyahuna
			2	Implement grey water recycling at GAM sites and assets	GAM (Engineering Directorate)	N/A
	E	Improve our waste management system	1	Develop and implement Waste Management framework	Ministry of Environment	• GAM
			2	Establish waste to energy facilities	GAM (Resilience Amman Office)	• Ministry of Environment
			3	Review, update and reactivate Amman Green Growth plan	GAM (Environment Directorate)	• Ministry of Environment
			4	Implement pilot projects for waste management activities	GAM (Environment Directorate)	• Ministry of Environment
			5	Implement other waste transfer stations in north and west Amman	GAM (Environment Directorate)	• Ministry of Environment

Timeframe	Status	Relevant Sustainable Development Goals	KPI	Sector
Short	New	11, 13	Reduce GHG emission ratio	Climate Change
Long term/ phased	New			Climate Change
Short	Ongoing			Climate Change
Long term/ phased	Ongoing			Climate Change
Short	Ongoing	7, 9, 13	Reduce energy consumption by 50% by 2025	Climate Change
Short	Ongoing			Climate Change
Medium	New	11, 13		Climate Change
Long term/ phased	Ongoing			Climate Change
Short	Ongoing	7, 9, 13	Number of building to implement green building guidelines. Undertake 3 yearly events and campaigne to promote green building guidelines	Climate Change
Short	New	13		Climate Change
Short	Ongoing	6, 13	Reduce water consumption in GAM assets by 30% by 2025	Climate Change
Short	Ongoing	6		Climate Change
Short	Ongoing	11, 12		Infrastructure
Short	Ongoing	9, 12, 13, 17	Reduction of waste going to landfill by 50% by 2025	Infrastructure
Short	New			Infrastructure
Short	New	11, 12		Infrastructure
Medium	Ongoing			Infrastructure

Pillar 3	Goal (We will..)		Action		Owner	Partners
An innovative and prosperous City	A	Leverage our existing human capital to create employment	1	Work with the education institutions to match education to future skills requirements and reduce child labor	GAM (Social Services Directorate)	• Ministry of Education • NGOs • Local education institutions
			2	Organize an annual job fair	GAM (Social Services Directorate)	• Local universities and educational institutions • Ministry of labor
			3	Expand youth employment programs to include migrants	GAM (Investment and Assets Directorate)	• Ministry of Labor • Youth societies • Civil Service Bureau
	B	Support entrepreneurs, start-ups and incubators	1	Incentivize start ups/ incubators	GAM (Investment and Assets Directorate)	• Ministry of Labor • Youth societies • Civil Service Bureau
			2	Collaborate with ideas-sharing platforms (TED x Amman)	GAM (Branding and Communication Department)	• TEDx • platform partner opportunity
			3	Organize outdoor Urban Food Fest of Amman	GAM (Branding and Communication Department)	• Local entrepreneurs, producers and bloggers
	C	Empower women	1	Promote work from home programme	GAM (Planning Directorate)	• GAM press center
			2	Pioneer day care centres in GAM buildings	GAM (Social Services Directorate)	N/A

Pillar 4	Goal (We will..)		Action		Owner	Partners
A young and equal City	A	Integrate and engage young people equally	1	Promote Amman Youth Voluntary Service	GAM (Social Services Directorate)	• Youth Societies
			2	Enhance citizenship and engage young people in discussions on future cities trends	GAM (Social Services Directorate)	• Ministry of Education • Youth societies
			3	Local Youth Council	GAM (Social Services Directorate)	• Youth Societies
	B	Support our youth through cultural campaigns	1	Leverage municipal buildings to create youth centres	GAM (Investment and Assets Directorate)	N/A
			2	Support cultural, social and sports-related initiatives in the city	GAM (Social Development Sector)	• Ministry of Youth • Youth societies
			3	Engage with local and international youth organizations	GAM (Social Development Sector)	• 100RC network • Youth societies • Ministry of Youth • Funding agencies
			4	Design awareness campaigns to prevent youth extremism	GAM (Social Development Sector)	• Ministry of Education • Local universities • Youth societies

Pillar 5	Goal (We will..)		Action		Owner	Partners
A united and proud City (#Iamman)	A	Promote a sense of belonging amongst citizens	1	Organize an 'I love Amman' competition	GAM (Resilience Amman Office)	• Youth societies • Universities • Educational Institutions • NGOs • Local professional associations
			2	I Love Amman youth ambassadors and young leaders	GAM (Social Development Sector)	• Local universities • Youth societies • Educational Institutions
			3	Citizenship, rule of law, and cross-sectorial awareness campaigns	GAM (Social Development Sector)	• Ministry of education • Local universities • Youth societies • Professional associations
			4	Develop a cross-sector city branding strategy	GAM (Branding and Communication Dept.)	• Ministry of Tourism
	B	Promote participation and engagement	1	Organize a structured dialogue (mass consultation/ roundtable)	GAM (Branding and Communication Dept.)	• Hawa Amman Radio • GAM press center
			2	Mayoral Outreach	GAM (Branding and Communication Dept.)	• Hawa Amman Radio • GAM press center
			3	Integrate Amman youth leaders into municipal decision-making	GAM (Branding and Communication Dept.)	• Youth societies

Timeframe	Status	Relevant Sustainable Development Goals	KPI	Sector
Short	New	5, 8	Provide training for 10,000 people by 2020	Education
Short	New			Economic development
Short	New	4, 10, 16		Economic development
Long term	New			Economic development
Short	New	8, 10	Support more than 20 start-ups by 2025	Economic development
Short	New			Economic development
Short	New		Increase number of vocational licenses to 4000 by 2025	Economic development
Short	New		Increase number of daycares from 2 to 10 by 2025	Economic development

Timeframe	Status	Relevant Sustainable Development Goals	KPI	Sector
Short	New	4, 16	Form the Youth Council by 2020	Community & Culture
Short	New	4	Undertake 3 yearly events for youth voluntary service and engaging young people	Community & Culture
Short	New	16		Community & Culture
Long term/phased	New	8		Community & Culture
Short	Ongoing	9, 10	3 campaigns per year One multi-purpose hall in every district by 2022	Community & Culture
Short	New	4, 5, 11		Community & Culture
Short	New	16		Community & Culture

Timeframe	Status	Relevant Sustainable Development Goals	KPI	Sector
Short	New		Develop a City branding strategy by 2018	Governance & Policy Administration
Medium	New	10, 11, 16	4 cross-sector awareness campaigns per year	Community & Culture
Short	New		Have an I Love Amman logo by end of 2017	Governance & Policy Administration
Long term/phased	New	8	Train 10 young leaders yearly	Governance & Policy Administration
Short	New	5, 10, 16	Undertake 2 roundtable events per year	Equality & Equity
Short	New	11, 16	Monthly newsletter by email starting 2018	Equality & Equity
Short	New	16		Equality & Equity

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Glossary

Pillar
a strategic direction that the city will pursue to achieve the vision.

Goal
a tangible and attainable objective.

Goal objective
intended purpose or outcome of a goal.

Ongoing action
an action which we already implementing in the city and which is contributing to our resilience. We will ensure that these actions continue.

Action status
is an indication of whether the action is new to the city or ongoing.

Sector
is the specific professional area or discipline the actions belongs to.

Short-term
This timescale is defined between 1-3 years.

Medium term
This timescale is defined between 3-5 years.

Long term
This timescale is defined between 5-10 years.

Phased
This timescale is defined as implemented in phase.

Platform partners
Offer a series of tools and services from 100RC partners from the private, public, academic, and non-profit sectors, giving cities access to the resources they need to become more resilient.

GAM
Greater Amman Municipality.

6

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Acknowledgements

Steering Committee

H.E. Dr. Yousef Shawarbeh
Head of Amman Committee

Engineer Ziad Rihani
Deputy head of Amman committee

Mr. Akel Biltaji
Former Amman Mayor

Lawyer Hazem Niemat
Former Deputy Mayor

Engineer Fawzi Masad
Amman CRO/ Mayor's assistant
for technical affairs

H.E. Omar Hamza
Ministry of Social Development
Secretary General

H.E. Dr. Ahmad Qtetat
Ministry of Health Secretary General

H.E. Dr. Saleh Alkharabsheh
MOPIC

Engineer Emad Al-Tarawnih
Ministry of Industry,
Trade and Supply

Colonel Dr. Adel Al-Shorman
Public security department

Engineer Monir Oweis
Miyahuna

Engineer Layla Abu Rabee
Miyahuna

Mr. Sabri Al-Khassib
Amman Chamber of Commerce

H.E Senator Zeiad Al-Humsi
Amman Chamber of Industry

Engineer Omar Agha
Abdali Group

Mr. Moin Qadada
Manaseer Group

Agenda-Setting Workshop

A/E business council

Abdali Investment & Development

AIG

Al Mutakamelah- Company
Comprehensive Multiple
Transportations Company

Amman Chamber of Commerce

Amman Governor

CEERISK Consulting Limited

Civil Defense

Department of Palestinian Affairs

EDAMA jo

FES Friedrich-Ebert-
Stiftung Jordan & Iraq

French Development Agency AFD

Greater Amman Municipality

Green Amman 2020

Higher Council of Youth

Housing Bank for Trade & Finance

INJAZ

International Rescue Committee

Jordan Green Building Council

Jordan Metrological Department

Jordan Telecom Company- Orange

Jordan University

Jordanian Contractors Association

Jordanian Engineers Association

KfW Development Bank

Land Transport Regulatory Commission

Leader of Tomorrow/ DIWANIEH

Ma'an Nasel

Middle East University

Ministry of Planning and
International Cooperation

Ministry of Public work and Housing

Ministry of Transport

Miyahuna Jordan

Nuqul Group

Ramallah Senior City Advisor

Royal Court

Royal Jordanian
Geographical Center

Royal Medical Services

TKIYET UM ALI (Food for Life)

Turath: Architecture & Urban
Design Consultants

Yaghmour Architects

Athens CRO

Thessaloniki CRO

Paris CRO

Amman CRO

Byblos CRO

Ramallah CRO

Phase I Meetings
Working group #1-
Economic / Financial

Head of Working Group:
Amman Mayor Akel Biltaji

Group Members:
European Bank for Reconstruction
and Development (EBRD)

FES Friedrich-Ebert-
Stiftung Jordan & Iraq

Greater Amman Municipality

Housing Bank for Trade & Finance

Jordan Kuwait Bank

Ministry of Planning and
International Cooperation

Working group #2-
Infrastructure

Head of Working Group:
CRO Fawzi Masad

Group Members:
Greater Amman Municipality

Housing and Urban
Development Corporation

Jordanian Contractors Association

Jordanian Electric Power Company

Land Transport Regulatory
Commission

Miyahuna Jordan

Projacs Jordan

Working group #3- Society

Head of Working Group:
CRO Fawzi Masad

Group Members:
Amman Governor

DIWANIEH

Greater Amman Municipality

INJAZ

International Rescue Committee

Middle East University

Ministry of Health

Ministry of Labor

Public Security Directorate

TKIYET UM ALI

Working group #4-
Environment /
Sustainability

Head of Working Group:
CRO Fawzi Masad

Group Members:
National Information
Technology Center

Edama Jo

Environmental Police

Greater Amman Municipality

Green Amman 2020

Ministry of Environment

Ministry of Municipal Affairs

Private Sector

UNDP

USAID

Phase II Meetings

Discovery Area 1: Efficient institutional financial planning

Liabastre Thierry, AfD

Akel Blltaji, Amman Mayor-Greater Amman Municipality

Hamza Al-Asad, European Bank for Reconstruction and Development (EBRD)

Richard Probst, FES Friedrich-Ebert-Stiftung Jordan & Iraq

Samer Yaseen, Greater Amman Municipality

Mutasem Hindawi, Greater Amman Municipality

Ibrahim Khreis, GAM

Mahmoud Hamam, Housing Bank for Trade & Finance

Murad Amer, Jordan Kuwait Bank

Sawsan Aruri, KfW Development Bank

Fedaa Jaradat, Ministry of Planning and International Cooperation

Rana Zeidan, Nuqul Group

Mohammah Al-Awamlah, Royal Court

Hussein Khirfan

Tariq Awad

Discovery Area 2: Comprehensive urban development

Samar Kilani, A/E business council

Fawzi Masad, Chief Resilience Officer

Ahmad Malkawi, Greater Amman Municipality

Akram Khreisat, GAM

Ayman Smadi, GAM

Reema Oudeh, GAM

Mohammad Kreishan, Housing and Urban Development Corporation

Nazzal Armouti, Jordan University

Tareq Al-Hreni, Jordanian Contractors Association

Mohammad Ali Seafan, Jordanian Electric Power Company

Bashar Bitar, Jordanian Engineers Association

Mohammad Al-Qaryouti, Land Transport Regulatory Commission

Sahar Aloul, Ma'an Nasel

Mohammad Al-Habasheen, Ministry of Public work and Housing

Eng. Zeyad Shawaqfeh, Miyahuna Jordan

Abdallah Qtaishat, Orange

Nidal Ershaid, Projacs Jordan

Rami Dhaher, Turath

Farouq Yaghmour, Yaghmour Architects

Discovery Area 3: Effective legislation

Firas Abu Qaood, Amman Governor

Akel Blltaji, Amman Mayor-Greater Amman Municipality

Samer Yaseen, Greater Amman Municipality

Ahmad Malkawi, GAM

Ayman Smadi, GAM

Nemeh Qatanani, GAM

Ibrahim Hashem, GAM

Nancy Abu Hayyaneh, GAM

Nisreen Al-Araj, GAM

Reema Oudeh, GAM

Mohammad Kreishan, Housing and Urban Development Corporation

Mohammad Ali Seafan, Jordanian Electric Power Company

Mohammad Al-Qaryouti, Land Transport Regulatory Commission

Samir Kilani, Ministry of Environment

Akram Abu-Zaid, Ministry of Labor

Ministry of Planning and International Cooperation

Jeries Dababneh, Miyahuna Jordan

Mohammah Al-Awamlah, Royal Court

Discovery Area 4: Resourceful environment

Fawzi Masad, Chief Resilience Officer

Maher Matalka, Edma Jo

Ruba Al-Zubi, Edma Jo

Amer Al-Khreisat, Environmental Police

Nisreen Al-Araj, Greater Amman Municipality

Zaydoun Nsour, GAM

Reema Oudeh, GAM

Ahmad Malkawi, GAM

Emad Dabbas, Green Amman 2020

Ghadir Al Majali, International Rescue Committee

Samir Kilani, Ministry of Environment

Salameh Assasfeh, Ministry of Municipal Affairs

Khaled Awashreh, National Information Technology Center

Diya Elfadel, UNDP

Hussein Khirfan

Discovery Area 5: Robust community

Fawzi Masad, Chief Resilience Officer

Firas Abu Qaood, Amman Governor

Yassin Abu-Awad, Department of Palestinian Affairs

Diwanieh

Ibrahim Hashem, Greaater Amman Municipality

Rasha Awaly, GAM

Nancy Abu Hayyaneh, GAM

Salem Hasanat, Higher Council of Youth

Deema Bibi, INJAZ

Ghadir Al Majali, International Rescue Committee

Maher Manasrah, Middle East University

Mohammad Amin, Ministry of Health

Akram Abu-Zaid, Ministry of Labor

Bashar Ghannam, Ministry of Social Development

Suha Al Balawneh, Public Security Directorate

Samer Balkar, TKIYET UM ALI

Sami Hourani, Leaders of tomorrow

Waste Management Studio

100 Resilient Cities
Al-Nasser Group
Amman Green 2020
Architects Engineers Business Council (A/E BC)
Arup
C40
Dar Al-Omran- Environment Division
Development Assistance Group Europe – DAE
Efficiency Development for Energy and Food / Eefco

Energy conservation and
environmental sustainability society
Engicon
German-Jordanian University
Greater Salt Municipality
Green Future
Hebron and Bethlehem
Governorates.
Hima consultants
IBES
Jordan Engineering Association
Jordan Green Building Council
Jordan University
Ministry of Planning and
international Cooperation
Mostaqbal Engineering and
Environmental Consultants
Mustafa Al-Jaar Establishment For
Consultations
oxfam
Rusaifeh Municipality
Sahab Municipality
Union of Jordanian Environmental
Socities
University of Jordan
UNRWA
Veolia
World Bank, MNA Transport Sector
based in the West Bank and Gaza
Country Office
Zarqa Municipality
ZAWATI BROTHERS Company

IRC Workshop

100 Resilient Cities
Al-Hashemi Head of local community
Al-Osar society
Amman Leaders
Danish Refugee Council
International Rescue Committee
Greater Amman Municipality
Public Security Directorate
Reach Initiative
Sanabel Al-Khair society

Resilience Amman Team

Nisreen Daoud
Nancy Haddad
Rand Majali
Sameer Saeed

100 Resilient Cities

Luis Alvarado Martinez
Samer Bagaeen
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Andrew Brenner
Leah Flax
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Young

Diverse

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100 RESILIENT CITIES