




# URBAN PLANNING & INFRASTRUCTURE IN MIGRATION CONTEXTS PROGRAMME

## CONNECTIVE CITIES

JORDAN

03 OCTOBER 2023

 **UN-HABITAT**  
FOR A BETTER URBAN FUTURE

 Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

 بلدية اربد الكبرى  
Greater Irbid Municipality

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## ABOUT UPIMC PROGRAMME



Cameroon  
Douala



Jordan  
Amman & Irbid



Egypt  
New Dimiatta

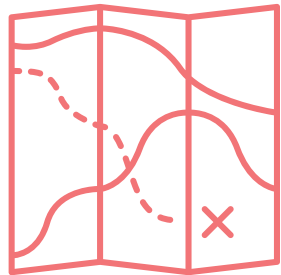
## PROGRAMME OBJECTIVE



- Improve access to reliable services and socio-economic opportunities for refugees and their hosting communities in urban contexts.
- Support municipalities with a long-term strategic approach in connecting migration affected neighbourhoods with access to public services through bankable infrastructure investments.

# PROGRAMME COMPONENTS & OUTCOMES

## COMPONENT #1



### Spatial Analytics & Urban Profiling

#### Outcome

**Improved spatial understanding** of existing situations where cities are hosting displaced populations in an urban context

## COMPONENT #2



### Develop Strategic Vision & Scenario Building

#### Outcome

Agreement reached on a **detailed strategic vision for urban development in selected neighbourhoods** based on a scenario building process

## COMPONENT #3



### Define Prioritized Infrastructure Investments & Linkages To Financing

#### Outcome

**Bankable investment opportunities identified** to support displaced and hosting communities with clear links to financing opportunities

## COMPONENT #4



### Knowledge Exchange & Capacity Sharing

#### Outcome

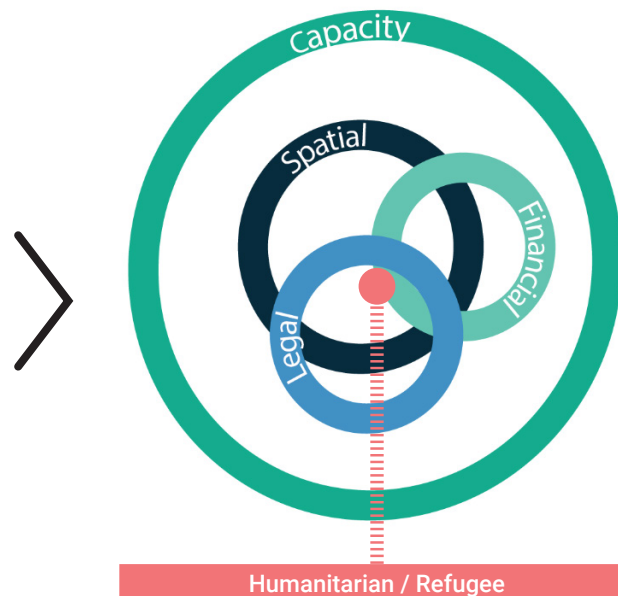
**Increased capacity** of supported stakeholders for knowledge management processes and intervention prioritisation

# THE PROCESS

Global, national, and city strategies



Evidence based city context analysis



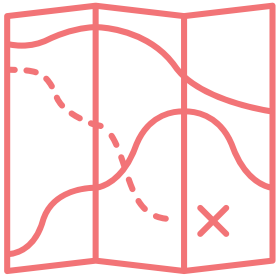
Recommendations and areas for visioning



Participatory approach and close collaboration with communities, local governments, technical experts on the ground

# WHAT IS URBAN PROFILING

## COMPONENT #1



### Spatial Analytics & Urban Profiling

Multi-Sectoral Spatial Analysis

Profile Preparation & Pilot Area Identification

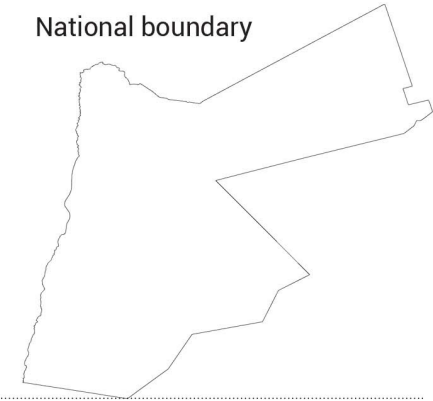
An assessment tool that spatialises the key challenges and opportunities of the city and offers guidance for the current and future planning of the city, aligned to a strategy for sustainable development.

An urban profile is a strategic thinking framework that will help guide planning efforts for cities in a sustainable direction

The dimension of hosting refugees is a key lens through which this comprehensive spatial analysis is carried out, to consider that in a protracted context, this has additional complex and fundamental impacts upon the cities' development needs, capacity and priorities.

## MULTI SCALAR APPROACH

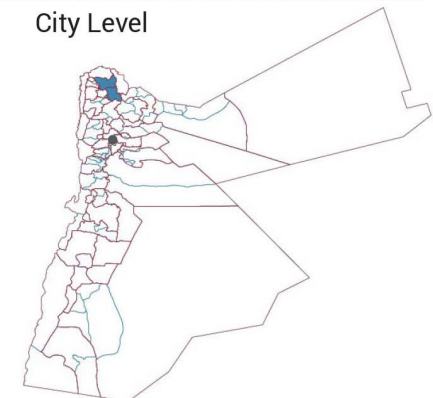
National boundary



Governorate Level



City Level



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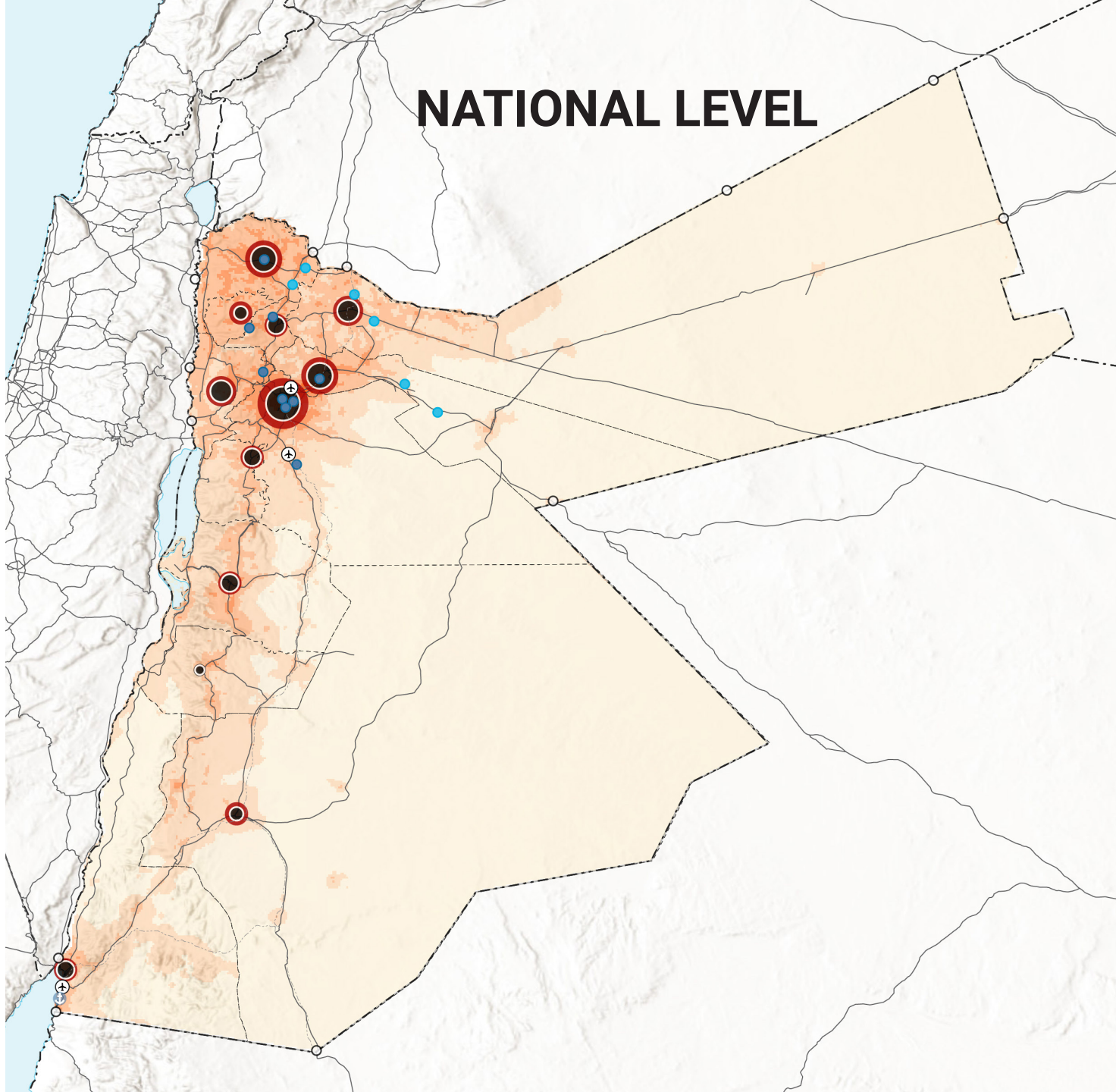
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# NATIONAL LEVEL

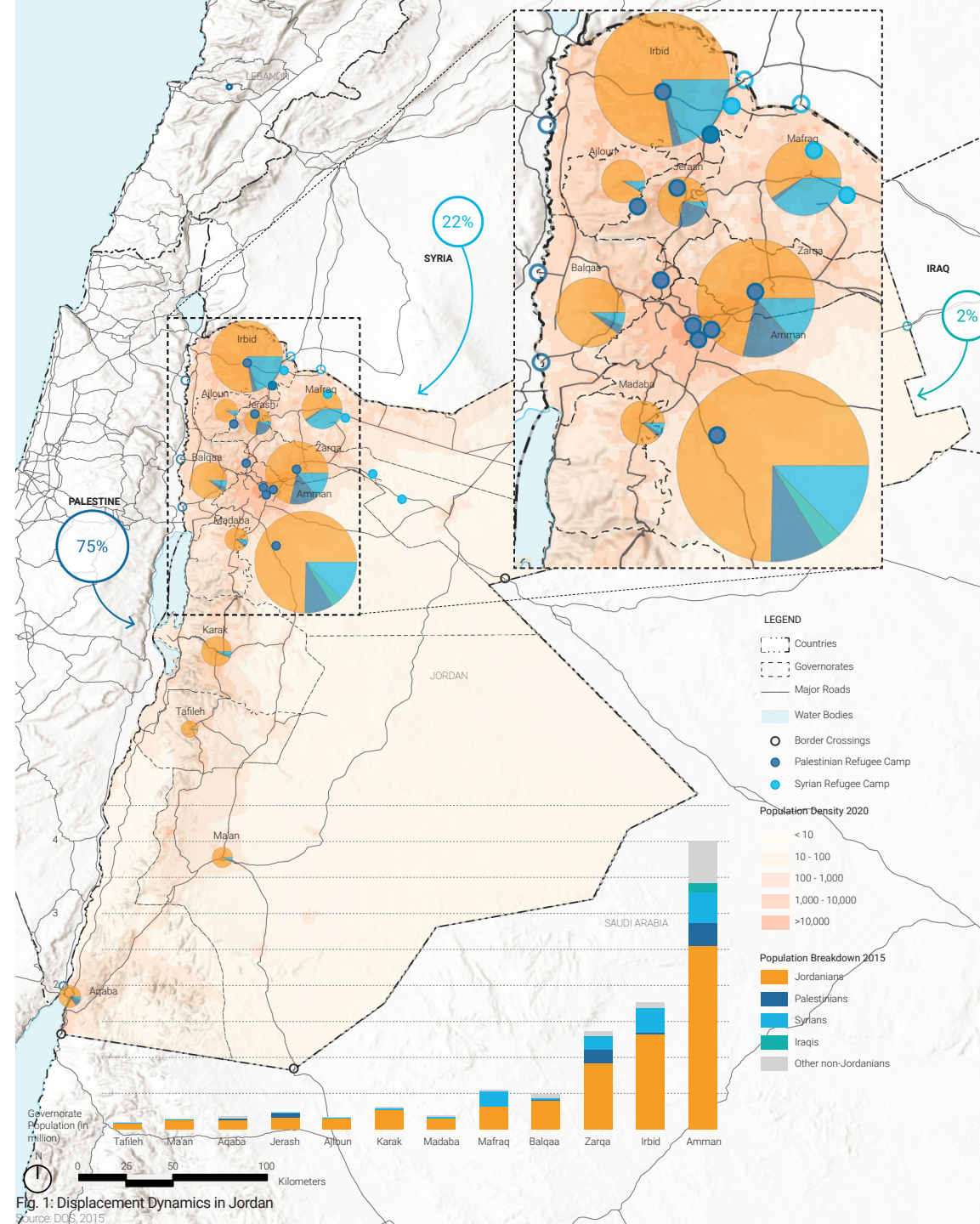


# CONTENT

- National and International Setting
- Demographics and Socio-Economic Background
- Refugees in Jordan
- Cross-Border Displacement Dynamics
- Governance & Administration System
- National Planning Context
- Land & Property Rights
- Municipal Finance
- Major Infrastructure Initiatives
- Affordable Housing
- Climate Risk Context

# NATIONAL & INTERNATIONAL SETTING

- **Jordan is one of the 50 most urbanized** countries in the world.
- **90.3% of Jordan's population** is living in **urban** areas.
- The country is characterized by **rapid Urbanisation and urban growth**.
- **Jordan's total built-up area has doubled**, over the last two decades.



## REFUGEES IN JORDAN

- Jordan is the **second largest refugee host per capita worldwide** with 89 refugees per 1,000 inhabitants.
- Jordan has been a safe haven to approximately **4 million refugees**.
- **There are 16 refugee camps in Jordan**, 13 for Palestinians and 3 for Syrians.
- **Only 20% of the refugee population reside in camps**, and the majority live in urban areas
- Refugees flow **from camps to urban areas had an adverse impact on the capacity of infrastructure and public facilities**. It has also increased **strain on natural resources, and in particular water**.
- The **housing demands increased**, specially for **affordable housing**.

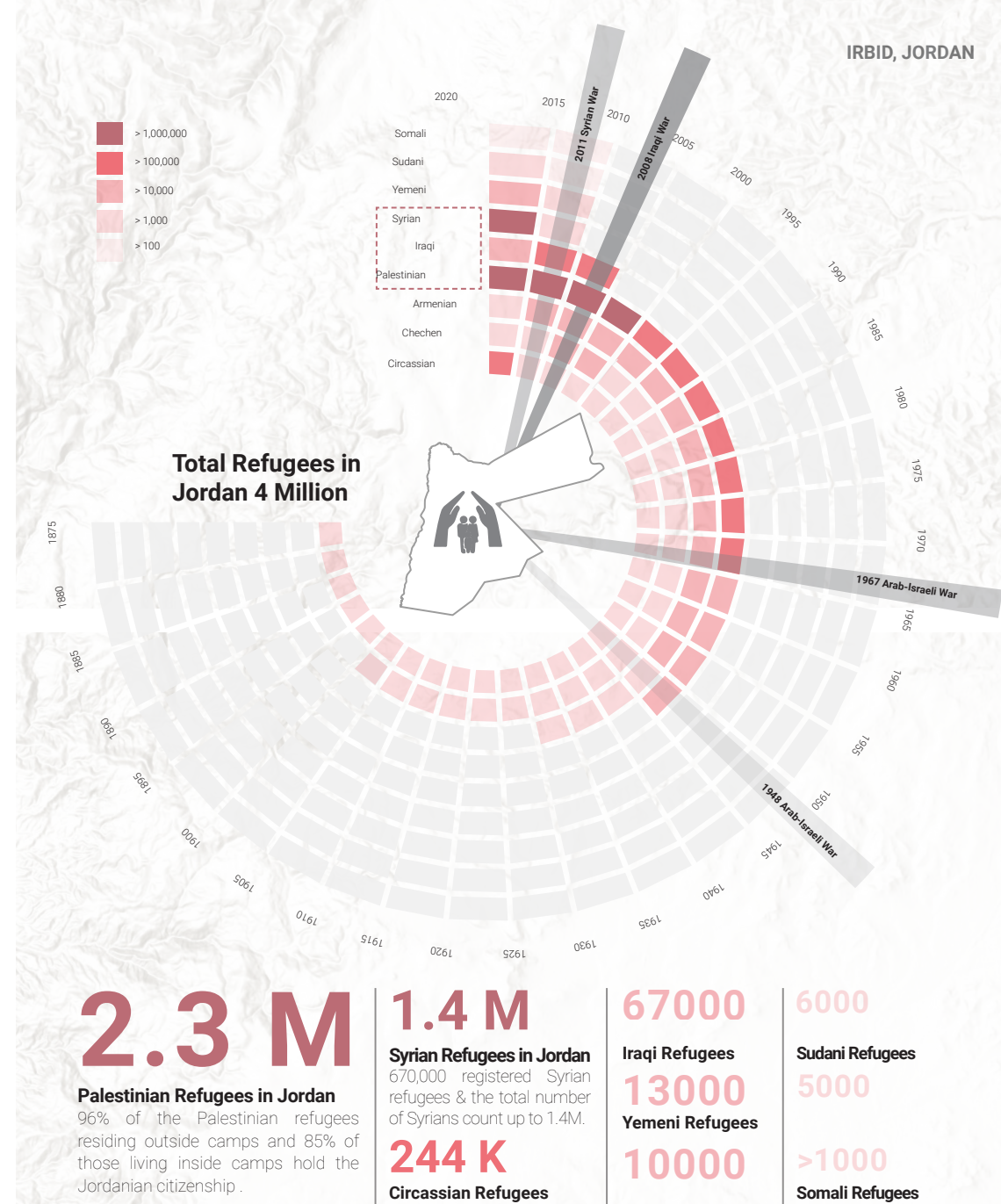
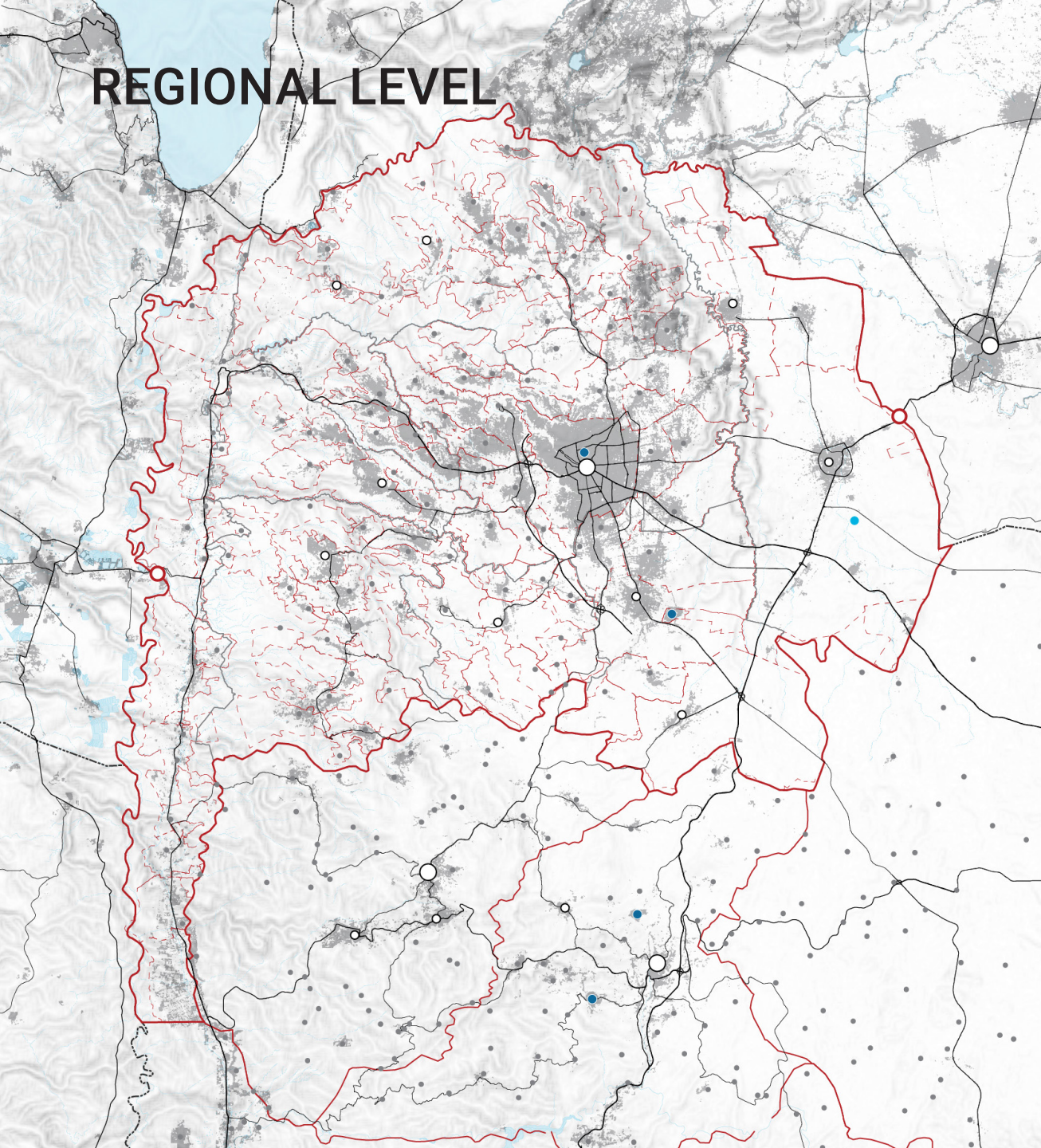


Fig. 2: Jordan Refugee Time-line

# REGIONAL LEVEL



# CONTENT



- Governorate Location & Connectivity
- Regional Land Administration and Institutional Context
- Regional Planning Context
- Demographics
- Refugees
- Regional Infrastructural Access
- Land Use
- Housing
- Local Economic Activity

# DEMOGRAPHICS

- **Irbid Governorate** is the **second most populated** governorate in Jordan after Amman.
- Most of the governorate's population resides **within GIM**.
- Irbid Governorate has the **highest** population density in Jordan.

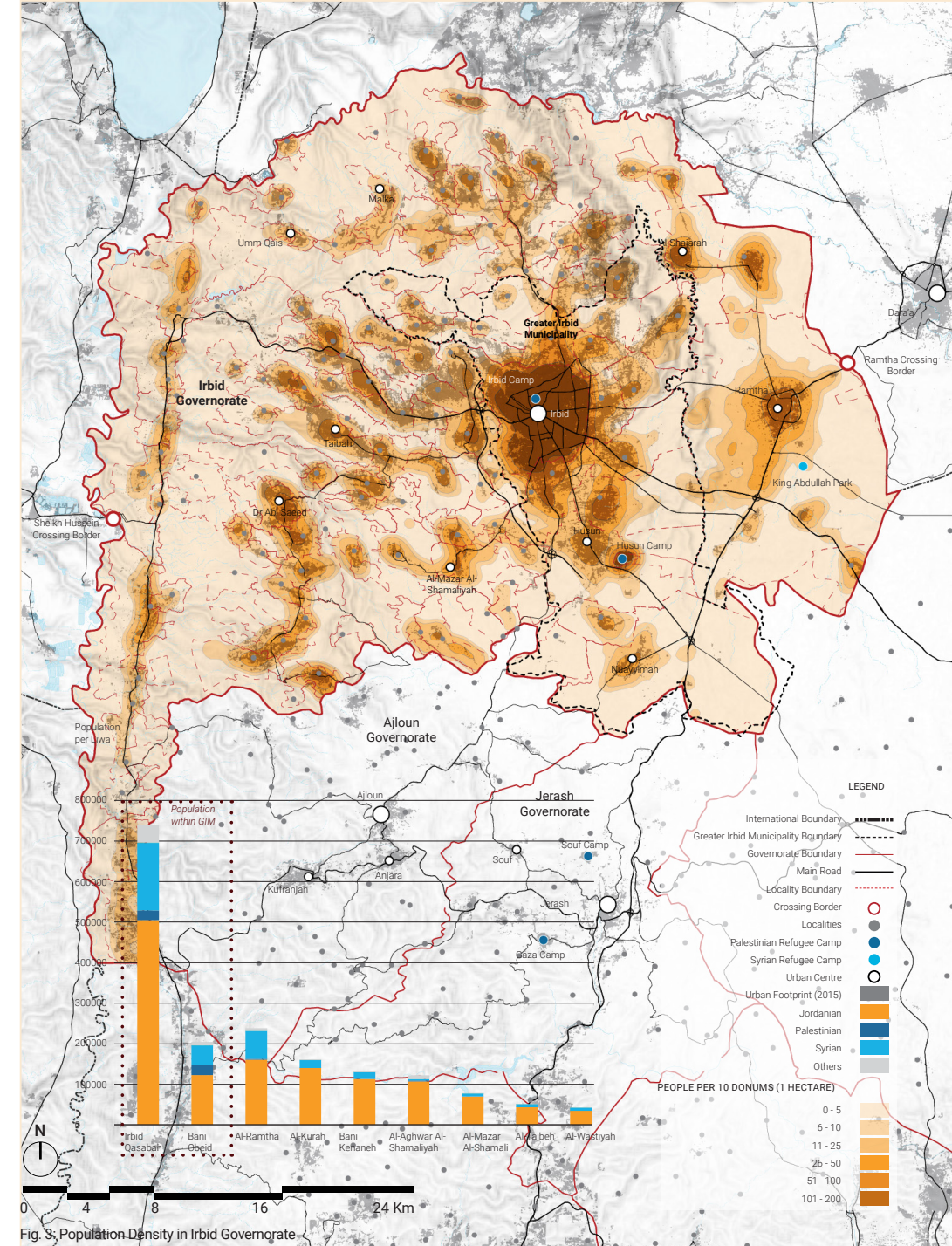
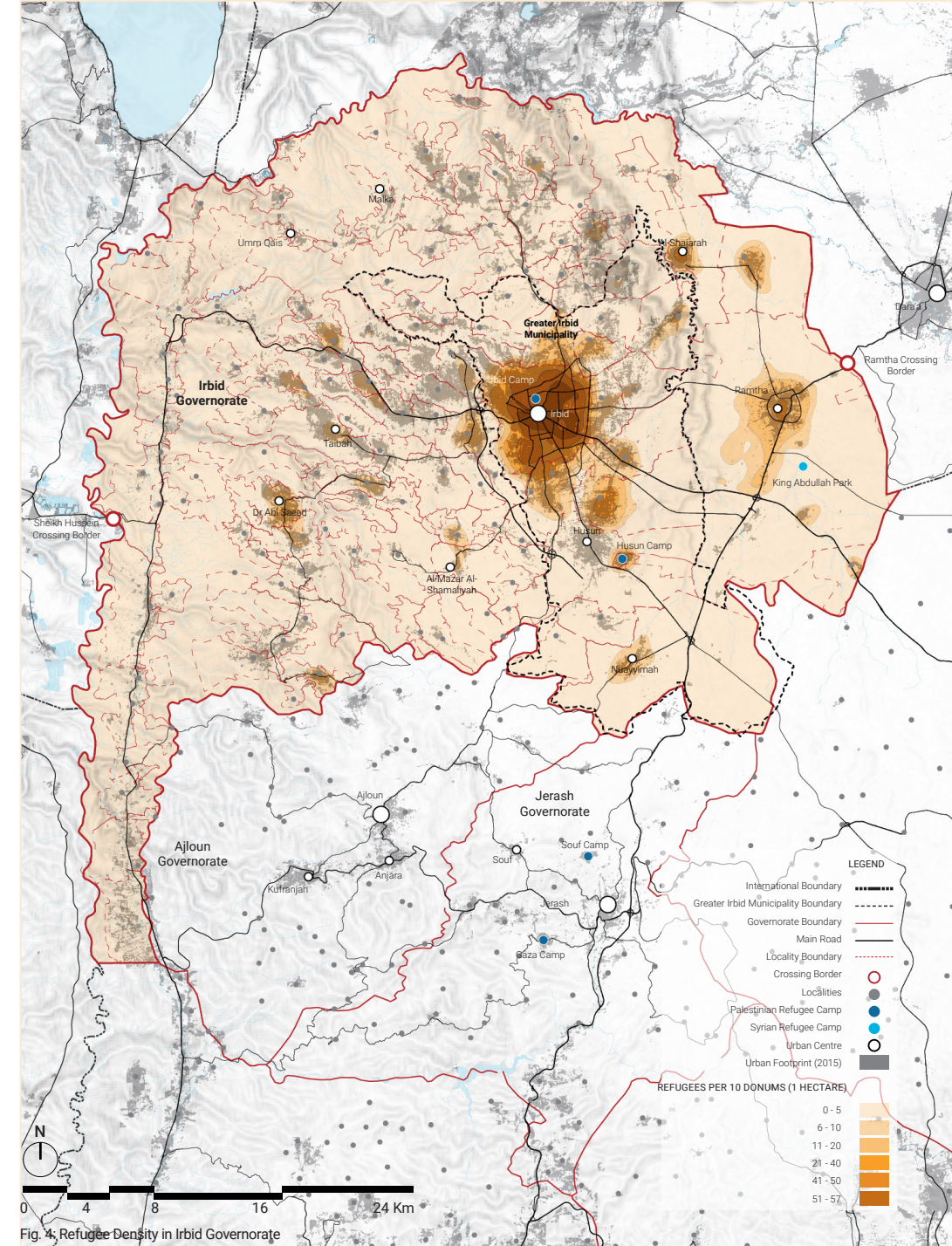
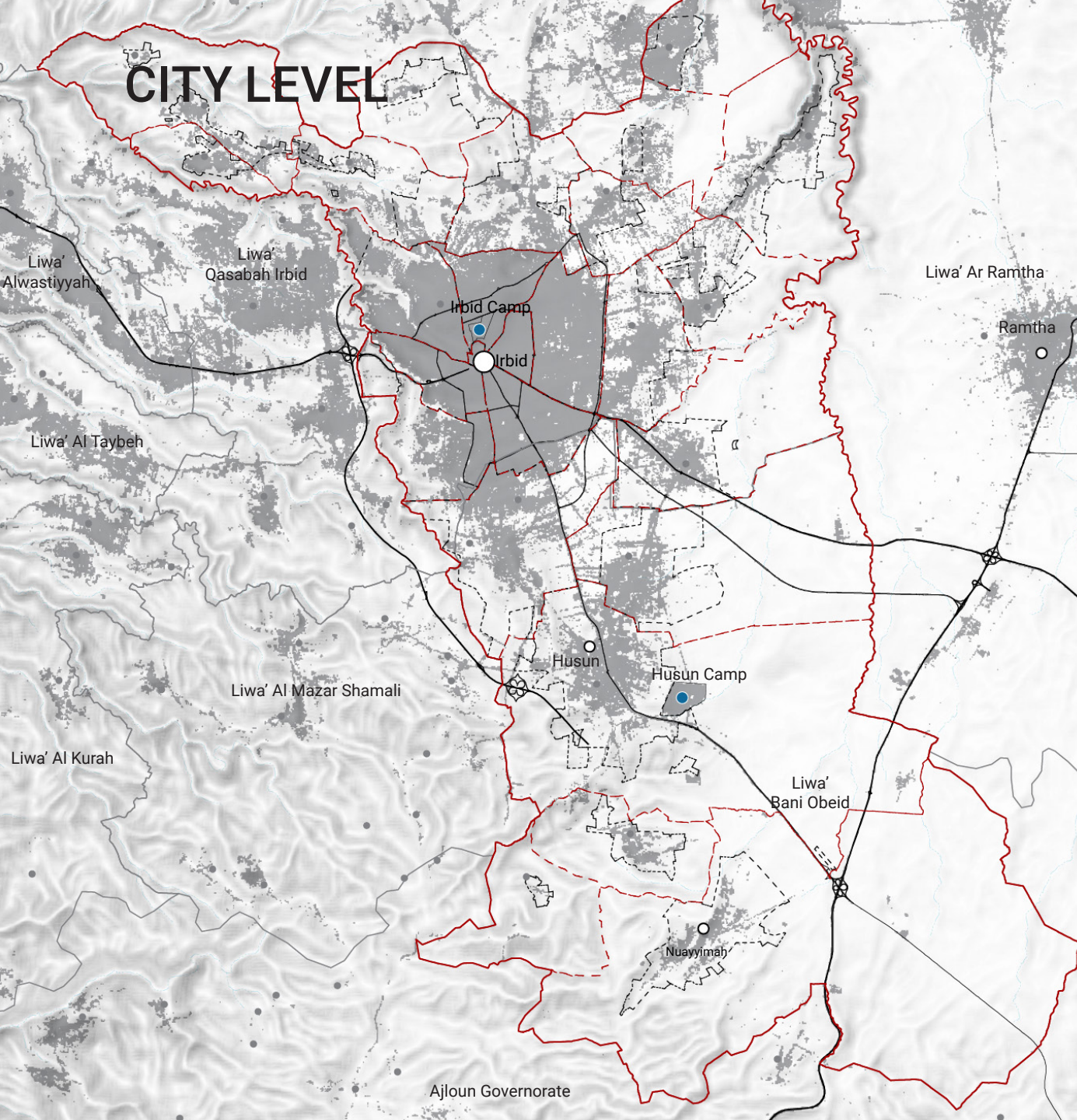


Fig. 3: Population Density in Irbid Governorate

# REFUGEES

- As of 2015, the total number of Palestinians, Iraqis and Syrians in the governorate of Irbid is **792,924**.
- The governorate has **one of the highest shares of Syrian refugees**, whereby **more than 24% of all urban refugees registered with UNHCR in Jordan are living in Irbid**.
- There are **2 Palestinian refugee camps** in the governorate, **which are managed by UNRWA**, additionally, **one of which** is operated by **UNRWA & UNHCR** (for Palestinian refugees from Syria).





# CITY LEVEL

## CONTENT

- Administration & Governance Context
- Population Density & Distribution
- Migration Context
- Urban Growth
- Land Use
- Local Economic Activity
- Natural Hazards
- Transport and Mobility
- Planned Infrastructure Investments
- Access to Basic Services
- Access to Public Facilities
- Municipal Financial Context
- Conclusion**

# ACCESS TO BASIC SERVICES

- Overall, GIM residential areas are well connected to basic service networks, including water, electricity, and telecommunication.

## Electricity and Energy

- Around 99% of the population are connected to the electricity network
- **Challenges:** High pressure on electrical transformers during the summer; Frequent electricity failures; Lack of alternative resources of electrical energy.

## Water

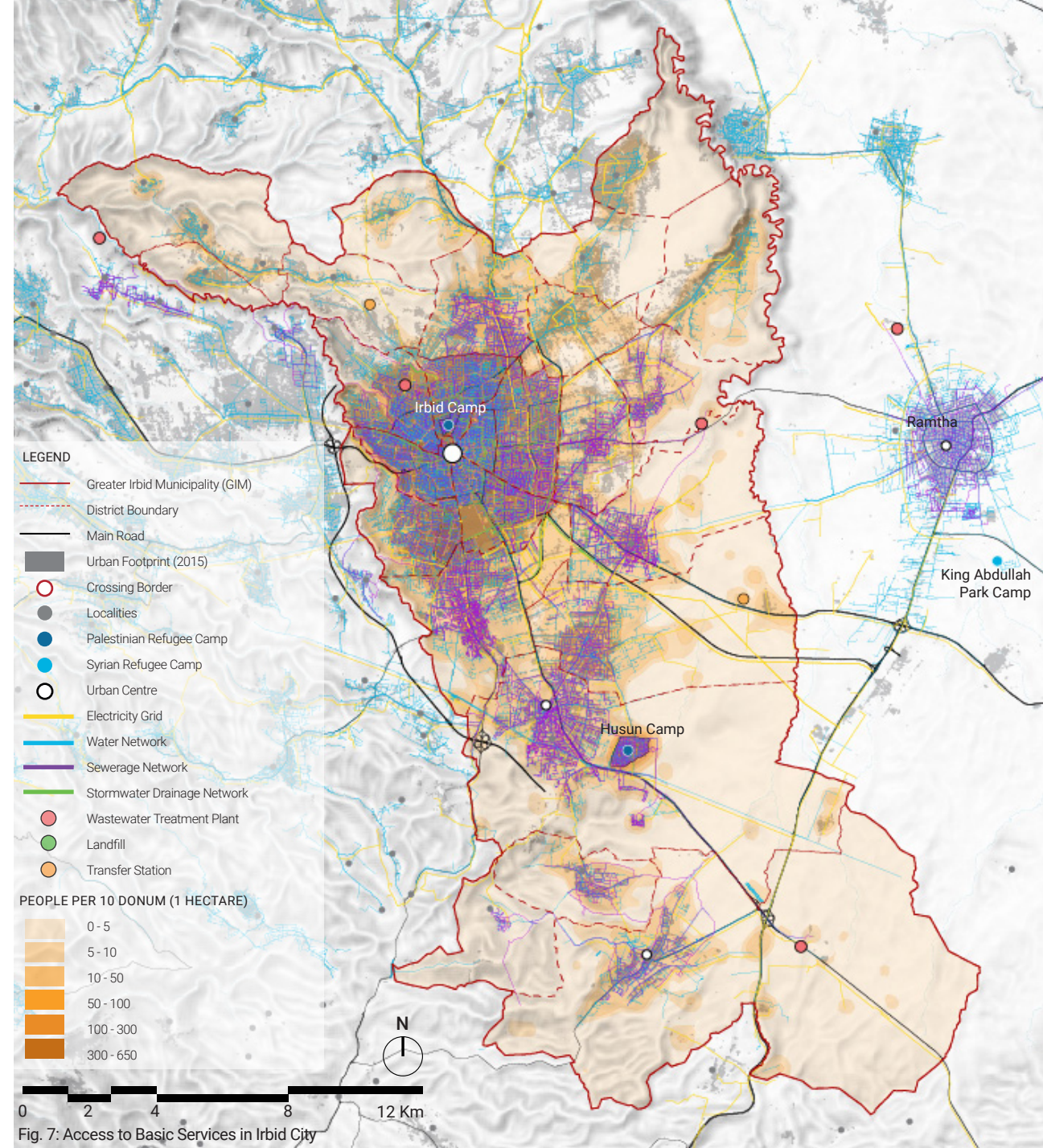
- Around 99% of the population are served by water network
- **The water loss in GIM is considered high and accounts for 37.1%.**
- **Challenges:** Old water networks; Serving buildings in sprawl areas, (increasing water losses); Water does not reach homes periodically.

## Sewerage and Wastewater

- **80% of GIM's total population is connected to a sewerage network.**

## Storm-Water Management

- Not all areas are served with storm-water drainage network. In general, storm-water drainage is considered a challenge in GIM.





# ACCESS TO PUBLIC FACILITIES

## RECREATIONAL FACILITIES



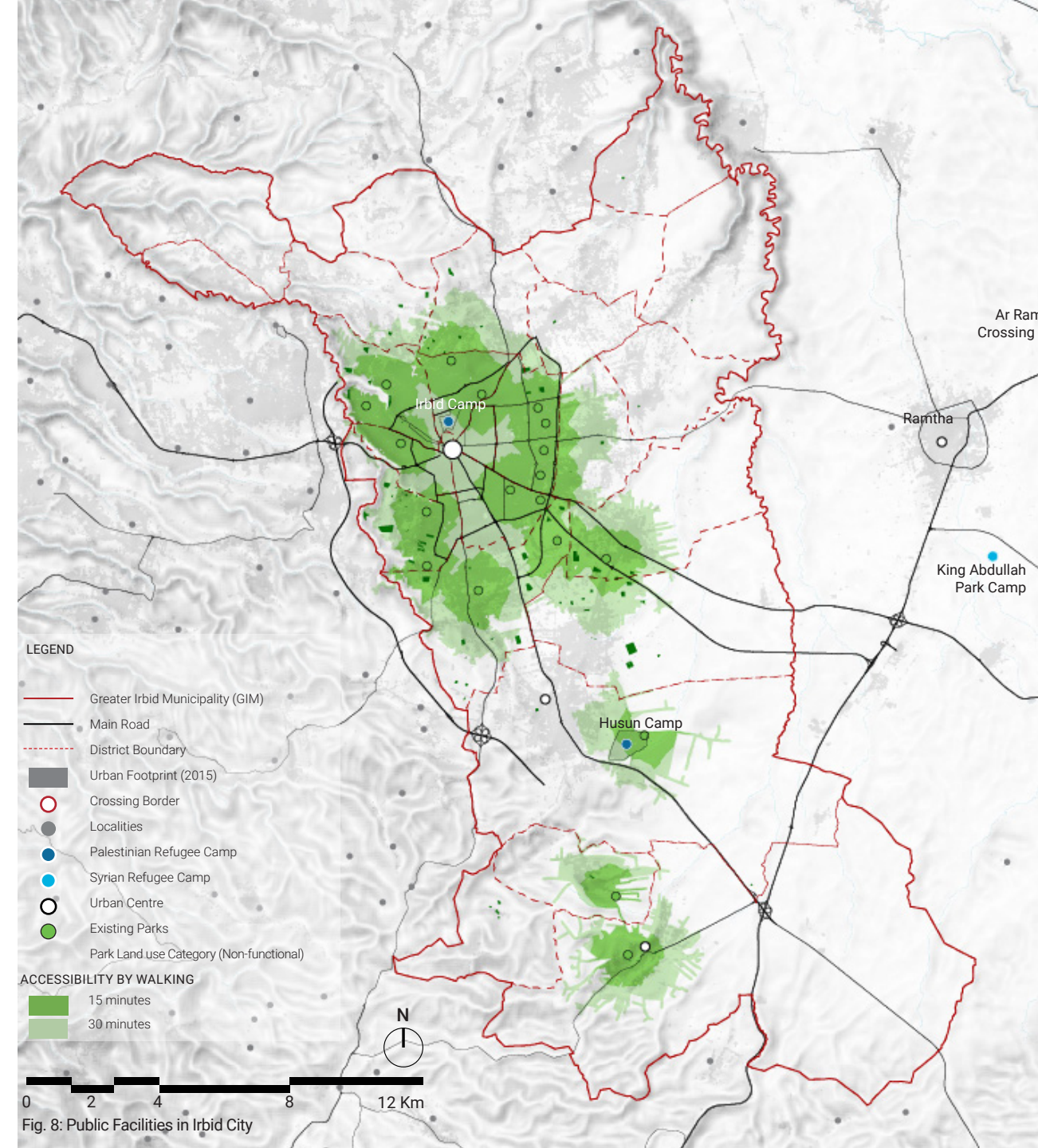
15 min

48% of the population have access to recreational facilities within 15 minute walking distance



30 min

79% of the population have access to recreational facilities within 30 minute walking distance



# CONCLUSION

- Based on 2015 census, the refugee concentration is mainly within the **city central area, Huwara District, Al Sarih District, and the Huson camp area.**
- **Five districts with the highest refugee presence were selected and evaluated in cooperation with GIM's team members to select three.**
- The selected districts **include neighbourhoods of different characteristics/unique typologies.**

District	Al-Rawda	Al-Manara	Al-Sarih	Huwara	Al-Naser
Refugee Presence	5	4	2	5	3
Needs access to Infrastructure networks	3	0	3	3	3
Needs access to public transportation	0	2	5	5	2
Needs access to public facilities	1	3	5	4	2
Drainage Storm water	5	0	3	3	5
Needs roads maintenance	4	3	4	1	4
Needs roads construction	0	0	4	5	0
<b>Total</b>	<b>18</b>	<b>12</b>	<b>26</b>	<b>26</b>	<b>19</b>

Evaluation Matrix with GIM

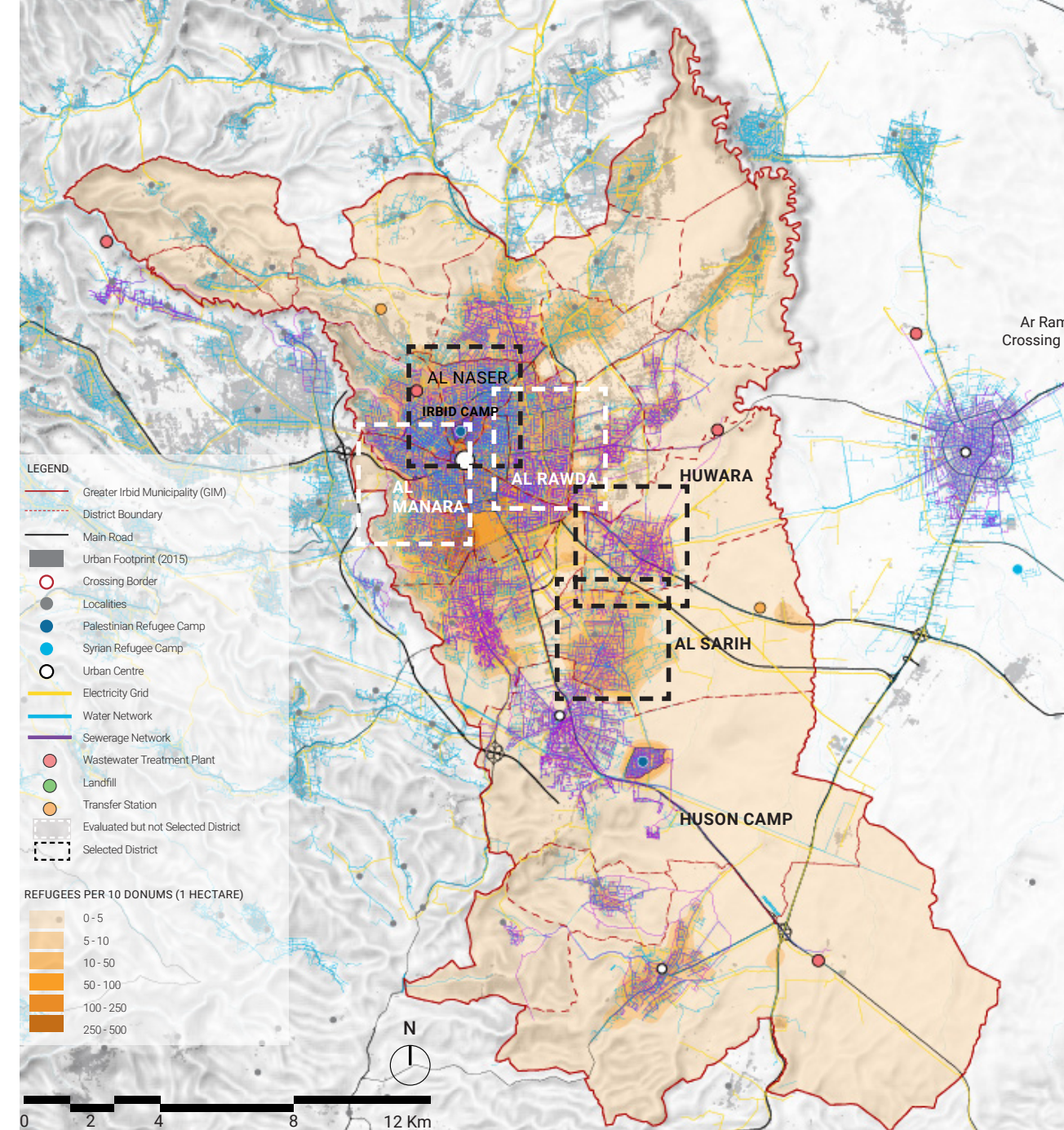


Fig. 9: Basic Services and Refugee Density in Irbid City



NEIGHBOURHOOD LEVEL

*“If we wish to rebuild our cities, we **must first rebuild our neighbourhoods**”*

*Harvey Milk*

- T District and Neighbourhood Contexts
- Access to Basic Services
- Access to Public Transport
- Access to Public Facilities & Commercial Activities
- Challenges and Interventions Needed**

# THE SELECTED NEIGHBOURHOOD

## Al Afrah Neighbourhood



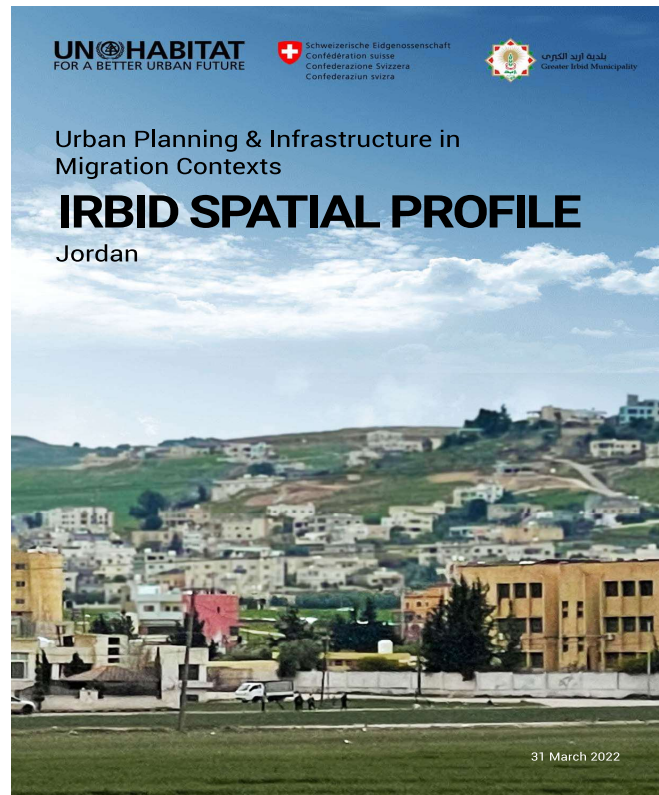
Typology: a neighbourhood that **lacks access to public facilities and public transportation**, in addition **needs infrastructure network and road maintenance**.

# ACCESS TO THE SPATIAL PROFILES



**AVAILABLE TO DOWNLOAD**

<https://unhabitat.org/irbid-spatial-profile-jordan>

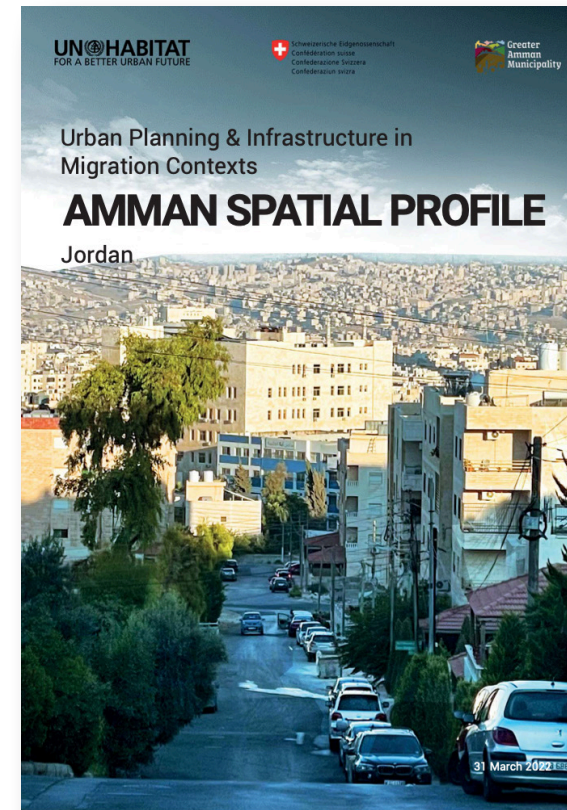


The Irbid Spatial Profile



**AVAILABLE TO DOWNLOAD**

<https://unhabitat.org/amman-spatial-profile-jordan>



The Amman Spatial Profile

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# VISION & SCENARIO BUILDING



- Vision workshop with the Local Community
- Scenario Building
- Validation with the Local Community and Key Stakeholders
- Prioritized Interventions

## COMPONENT #2



### Develop Strategic Vision & Scenario Building

**Outcome:** Agreement reached on a **detailed strategic vision** for urban development in selected neighbourhoods based on a **scenario building process**

**Output:** A developed vision for the pilot area

Building upon the analytical work and the recommendations for selection of pilot areas under component 1, this component will develop **strategic visioning and scenario building** for urban development in selected pilot neighbourhoods.

It is based on **highly participatory and inclusionary approach**, involving critical institutional stakeholders together with representatives of civil society. The scenario building will be supported by **an action plan outlining what could be done where and when**.

This will also unlock the next step for the **clear identification of strategic infrastructure interventions** and allow for technical assessment of the **intervention prioritization** and its definition.



# MAPPING CHALLENGES AND NEEDS WITH THE LOCAL COMMUNITY

20/03/2022



Participants at the Vision Formulation Workshop





## CHALLENGES

### Accessibility and Mobility



- Dangerous street crossings
- Poor access to public transport means



### Basic Infrastructure Services



- Overloaded water network
- Poor storm-water drainage
- Road infrastructure is deteriorated, no pedestrian crossings

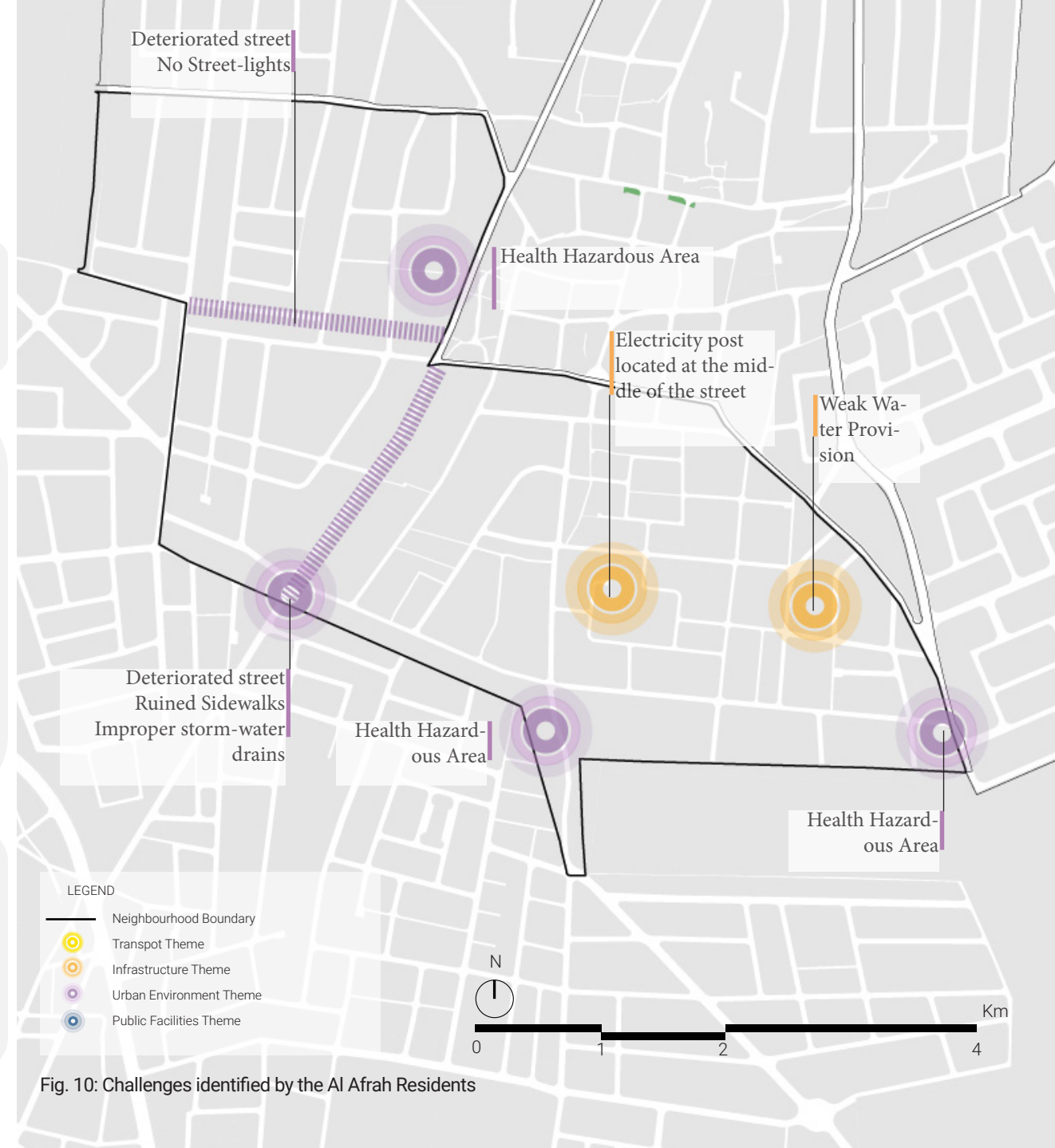


- Lack of periodic maintenance for the manholes, some manholes are kept open
- Weak provision of water
- Weak waste management and collection
- The neighbourhood is poorly lit

### Public Facilities



- Lack of a comprehensive health care facility
- Lack of diverse commercial activities
- Lack of green, public, and open spaces
- Schools are located relatively far and in a bad condition





# NEEDS

## Accessibility and Mobility



- Extend a public transport route into the neighbourhood and a fixed bus stop
- Install pedestrian traffic lights

## Basic Infrastructure Services



- Upgrade water and sewerage networks
- Rehabilitate of the road infrastructure and adding more lighting poles
- Conduct periodic maintenance for the storm-water drainage system
- Add waste containers and assign more janitors

## Public Facilities



- Establish a comprehensive health care facility
- Provide a central commercial area, a nursery, a vocational training centre, and a centre specialized for people with disabilities.
- Enhance the quality of the existing park and create new park spaces.



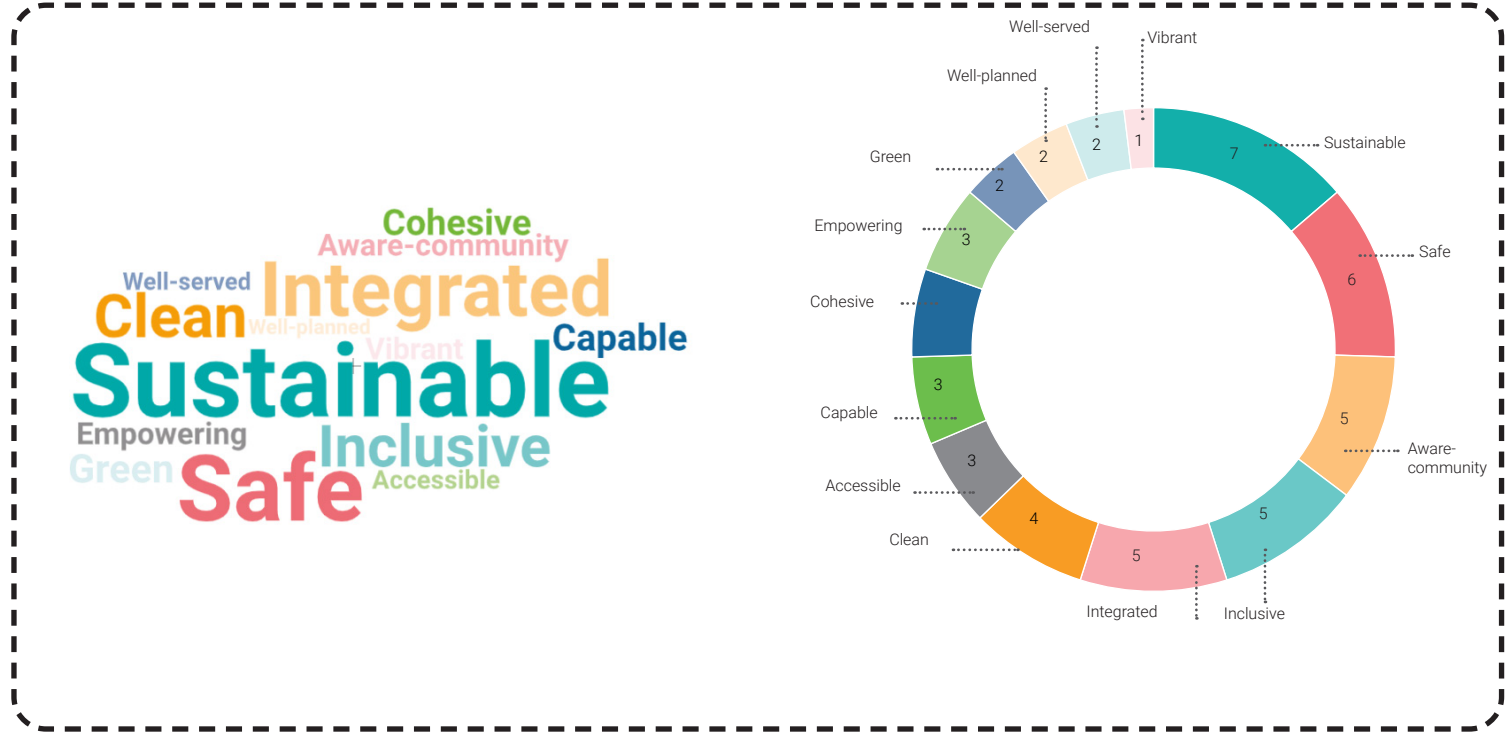
Fig. 11: Challenges identified by the AI Afrah Residents

# VISION FORMULATION WITH THE LOCAL COMMUNITY

20/03/2022



Participants at the Vision Formulation Workshop



Vision Key Words Word Cloud

Frequency of Vision Key Words proposed by Al Afrah residents

## NEIGHBOURHOOD VISION

*A Sustainable and Inclusive Neighbourhood that Empowers its Community*



Sustainable



Inclusive



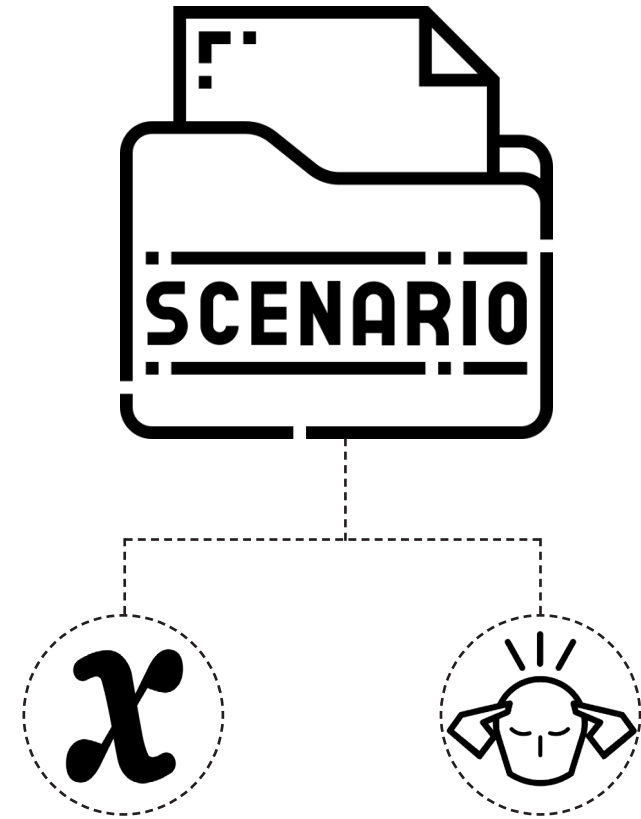
Empowering



**City of Irbid Vision 2030: A modern city that is knowledgeable, sustainable, and well-planned, embracing its heritage and attracting investments as a regional hub for education, economic prosperity, and natural and human resources**

## WHY SCENARIO BUILDING?

- Scenario building **provides an opportunity to make assumptions about the future** and how the built environment may change over time.
- It is a **way to explore, create, and test possible future conditions**, both desirable and undesirable, and **assess the probability and impact of the different scenarios on the area** in accordance with past and present trends.
- It can **guide long-term planning**, including policies, strategies, and plans, to help align the desired and likely future circumstances, and outline the important milestones along the way.
- These scenarios can **enable policy and decision makers to grasp the long-term requirements for sustained advantages and growth, and to mitigate possible complications by developing adaptive strategies.**





## ASSUMPTIONS

- There is continued political stability in Jordan.
- There is continued support from the Greater Amman Municipality to work towards durable solutions for host and refugee communities in Amman City and Al Hashmi Al Janoubi Neighbourhood.



## VARIABLES

A variable is a development or an event that has the potential to cause a change in a humanitarian situation. An assumption is based on the direction that a variable is most likely to proceed (e.g. increases or decreases in specific conditions).

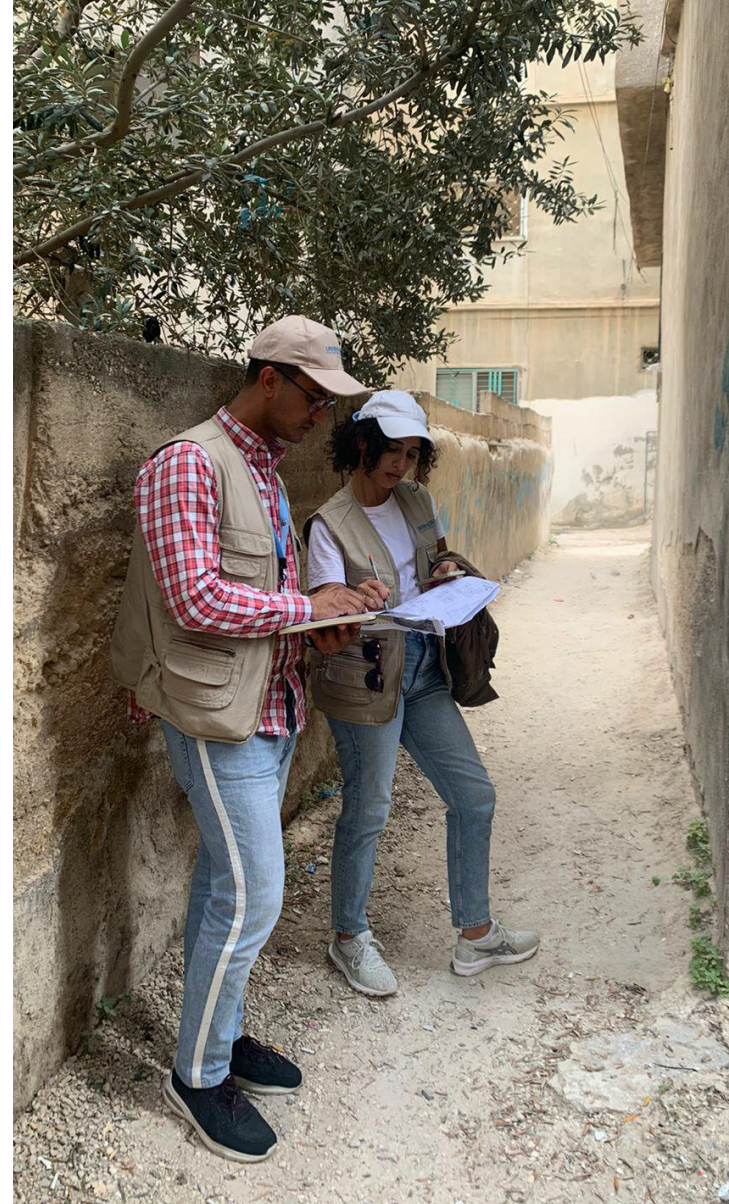
### Selected Variables

- Population Growth
- Urban Footprint
- Needed Projects
- Climate Risk & Natural Hazards
- Local Economic Development




# FIELDWORK

- A questionnaire was developed using Kobo Toolbox to **gather and manage data in order to build the scenarios.**
- The fieldwork for Al Afrah Neighbourhood entailed **collecting data and assessing the current state of the neighbourhood** in terms of building density, building conditions, number of floors built...etc.
- Data collected was used to make **maximum capacity calculations and to develop the scenarios.**



Pictures from Fieldwork

<p>Please add the code to the building</p> <input type="text"/>	<p>How many floors are below street level?</p> <input type="text"/>
<p>What is the current use of the building?</p> <p> <input type="radio"/> Residential  <input type="radio"/> Commercial  <input type="radio"/> Mixed Use  <input type="radio"/> Industrial  <input type="radio"/> Park  <input type="radio"/> Mosque  <input type="radio"/> School  <input type="radio"/> Health Care Facility  <input type="radio"/> Other         </p>	<p>Rate the current condition of the building</p> <p> <input type="radio"/> Very good  <input type="radio"/> Good  <input type="radio"/> Poor  <input type="radio"/> Fair  <input type="radio"/> Dangerous         </p>
<p>How many are the total floors of the building?</p> <p> <input type="radio"/> 1  <input type="radio"/> 2  <input type="radio"/> 3  <input type="radio"/> 4  <input type="radio"/> 5  <input type="radio"/> 6  <input type="radio"/> 7         </p>	<p>Is there any economic activity at the building?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No         </p>
	<p>Please take a picture of the economic activity</p> <p> <input type="text"/> <small>Click here to upload file. (&lt; 10MB)</small>  </p>
	<p>Any notes</p> <input type="text"/>





## FIELDWORK

### Building Conditions

- Through field investigation, buildings were categorised according to their condition into 4 main categories; these include; **good, fair, substandard, and critical.**

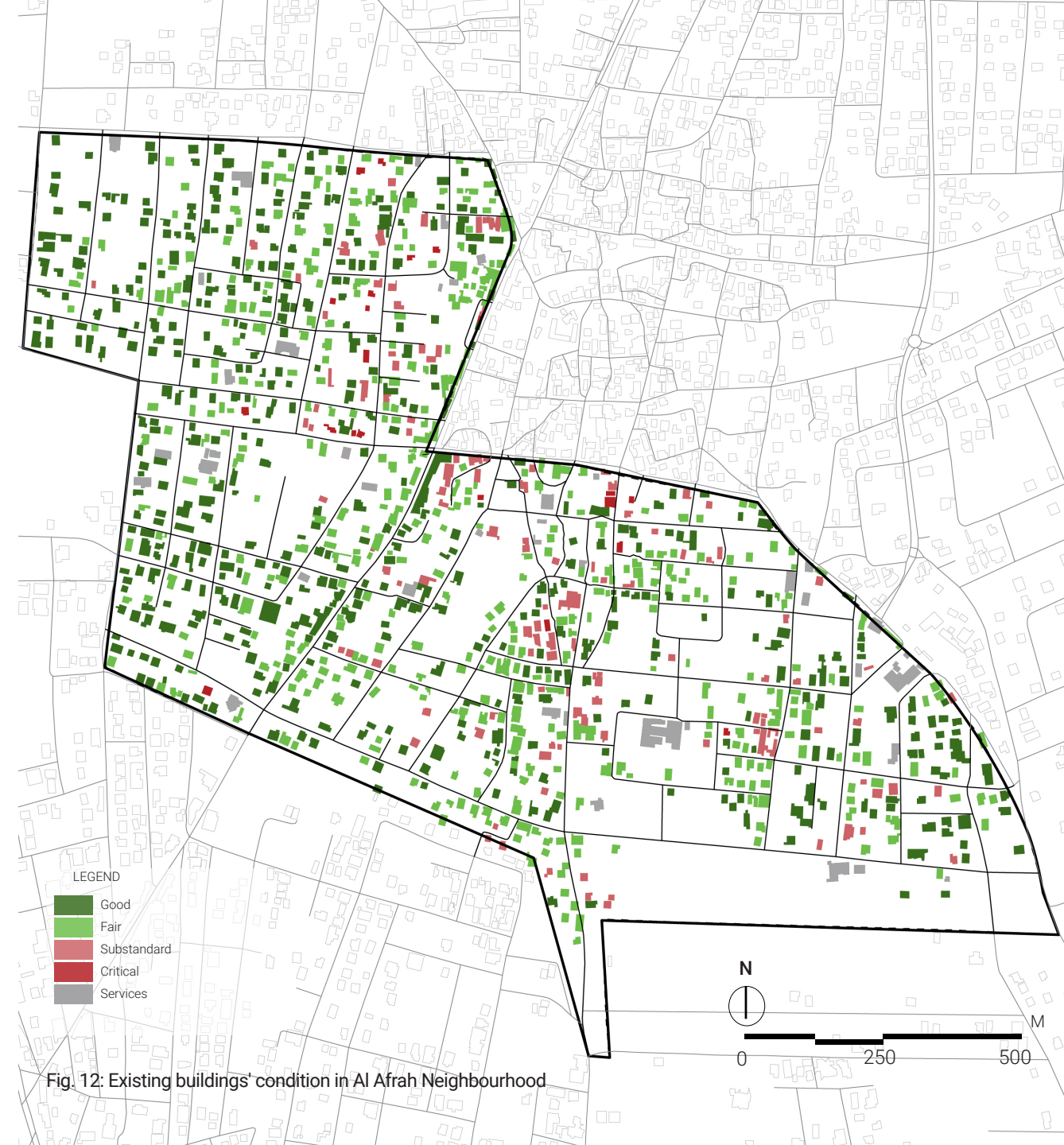
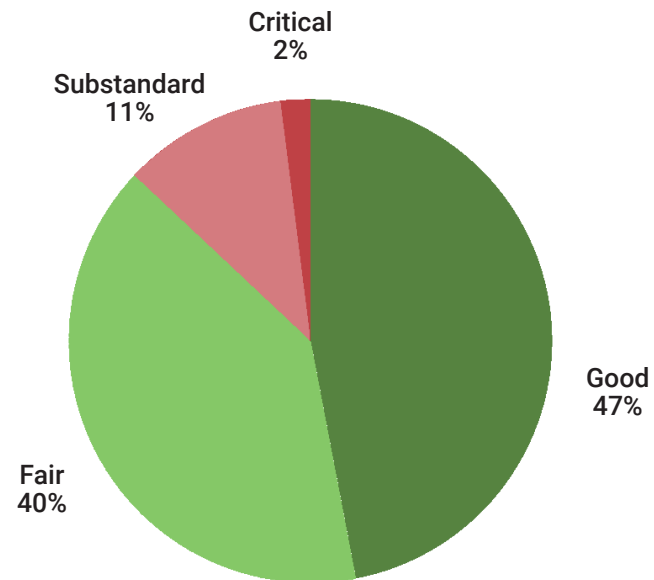


Fig. 12: Existing buildings' condition in Al Afrah Neighbourhood

# x VARIABLES

**Current  
Neighbourhood  
Population:  
13,844**



Represents existing 1000 inhabitant

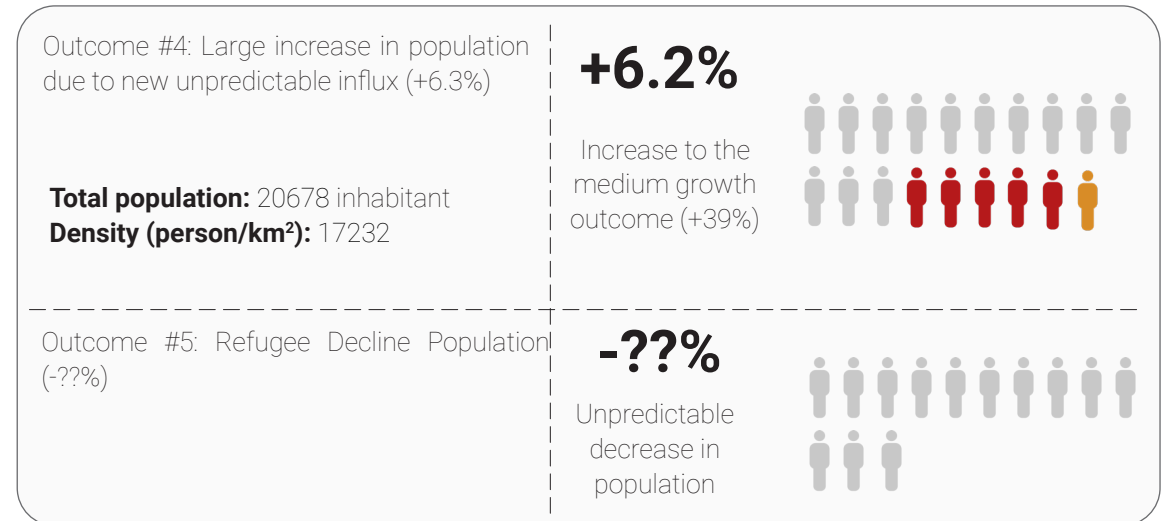
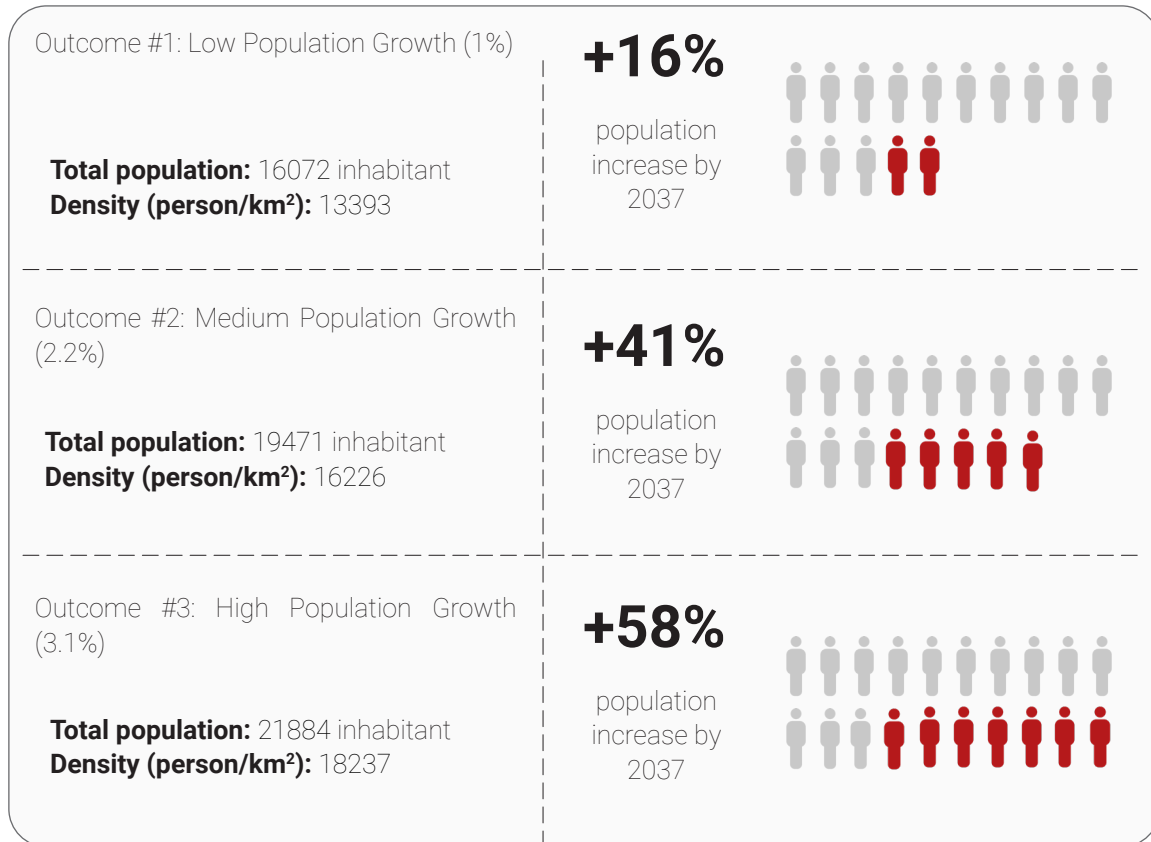


Represents forecasted additional 1000 inhabitant



Represents forecasted additional refugee 1000 inhabitant

## 1) Population Growth



# x VARIABLES

## 2) Urban Footprint

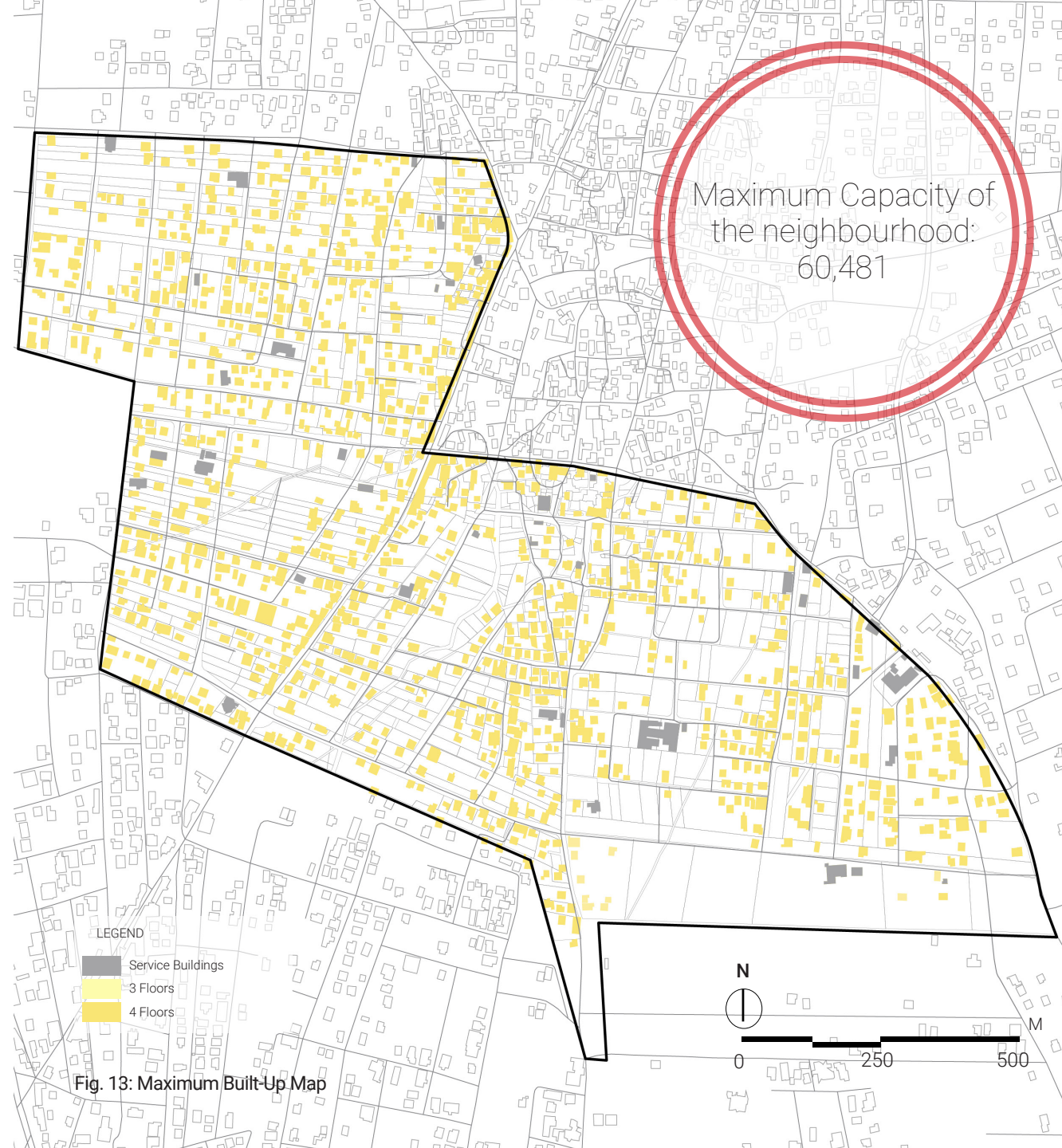
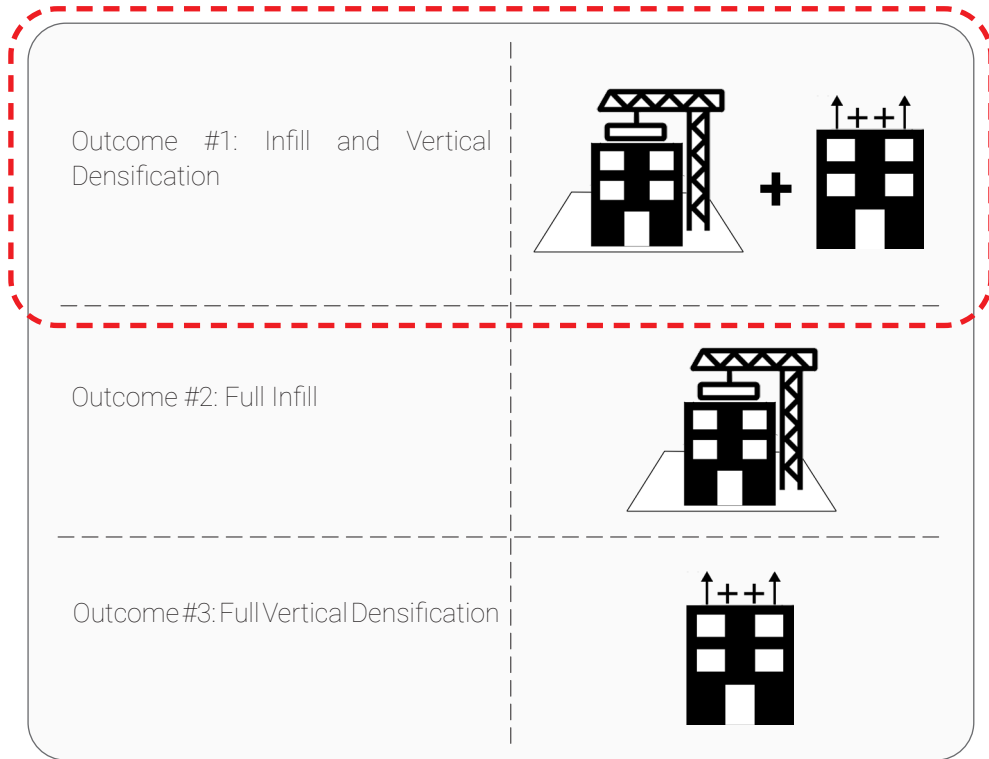


Fig. 13: Maximum Built-Up Map

# x VARIABLES

## 3) Needed Projects

Needed Project #1: Improvements to the Infrastructure Networks



Water Service

- A **capacity versus demand assessment analysis** was conducted for the existing water network, by factoring in the pipes' **diameter and length**, as well as **the number of people in the neighbourhood** currently being served (2022).
- In the future and according to the maximum capacity of the neighbourhood, **the load will multiply by 1.5** in comparison to the existing load.
- The pipe network in the north-western part of the neighbourhood has been recently upgraded under the JAICA project.

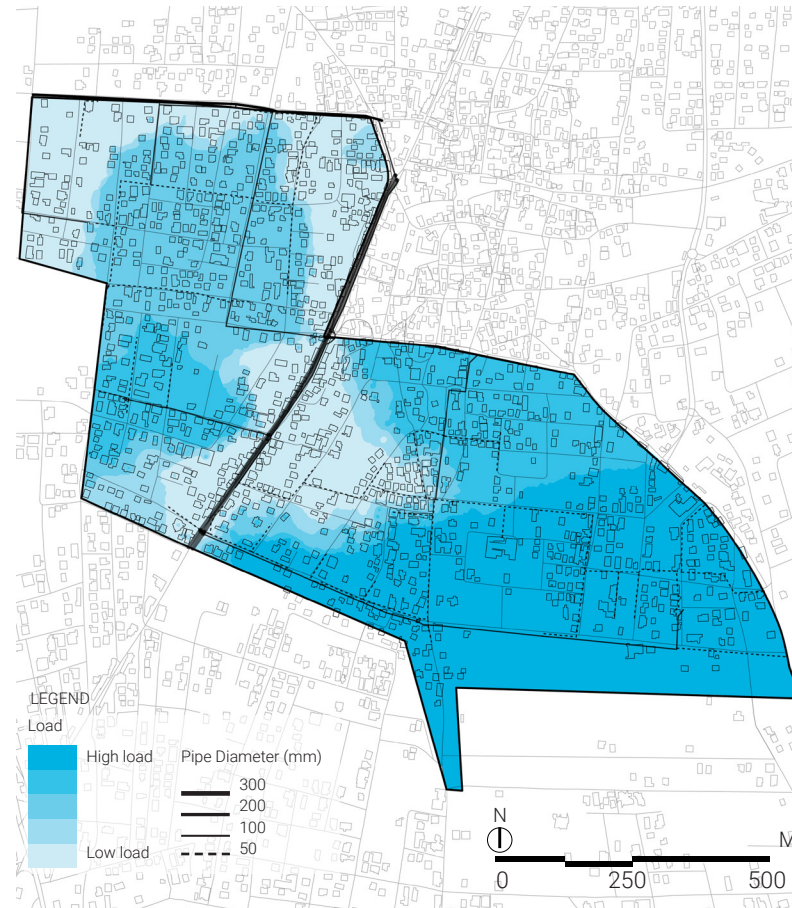


Fig. 14: The current load on the existing water network

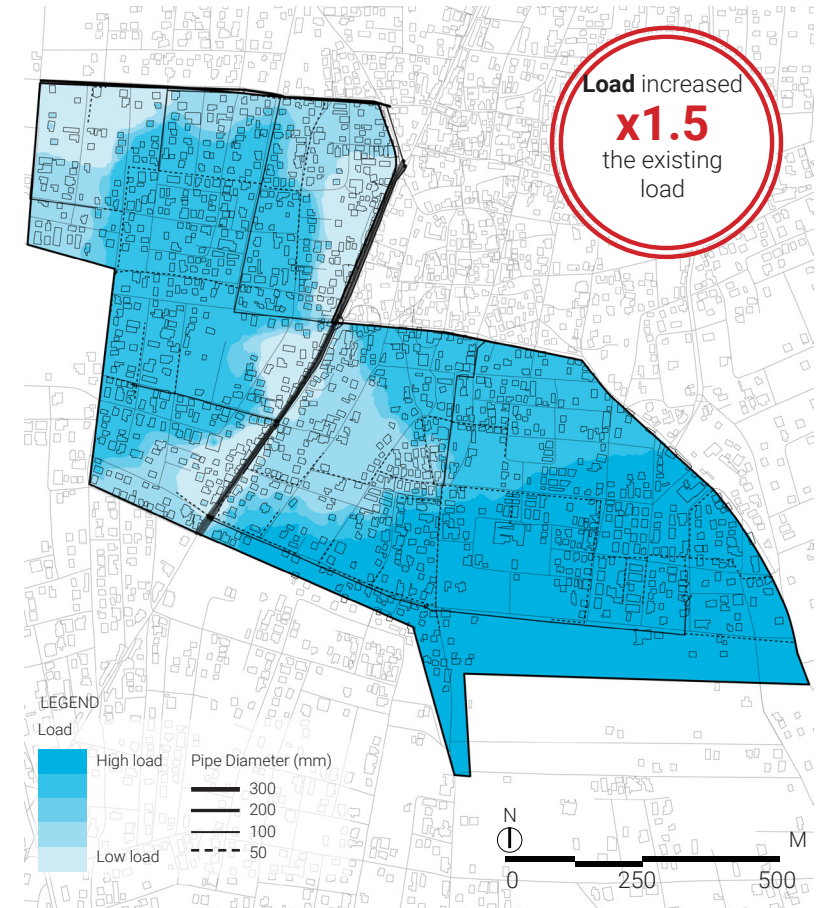


Fig. 15: Future load on the existing water network



This indicates the significant need to **upgrade the existing water network as a proactive measure** to accommodate the forecasted capacity of the neighbourhood by year 2037.

# x VARIABLES

## 3) Needed Projects

Needed Project #1: Improvements to the Infrastructure Networks



Sewerage Service

- The capacity/demand assessment tool measured the load on the existing sewerage network and revealed that there is **a relatively low load at the neighbourhood level.**
- In the future and according to the maximum capacity of the neighbourhood, **the load will multiply by 1.5** in comparison to the existing load.

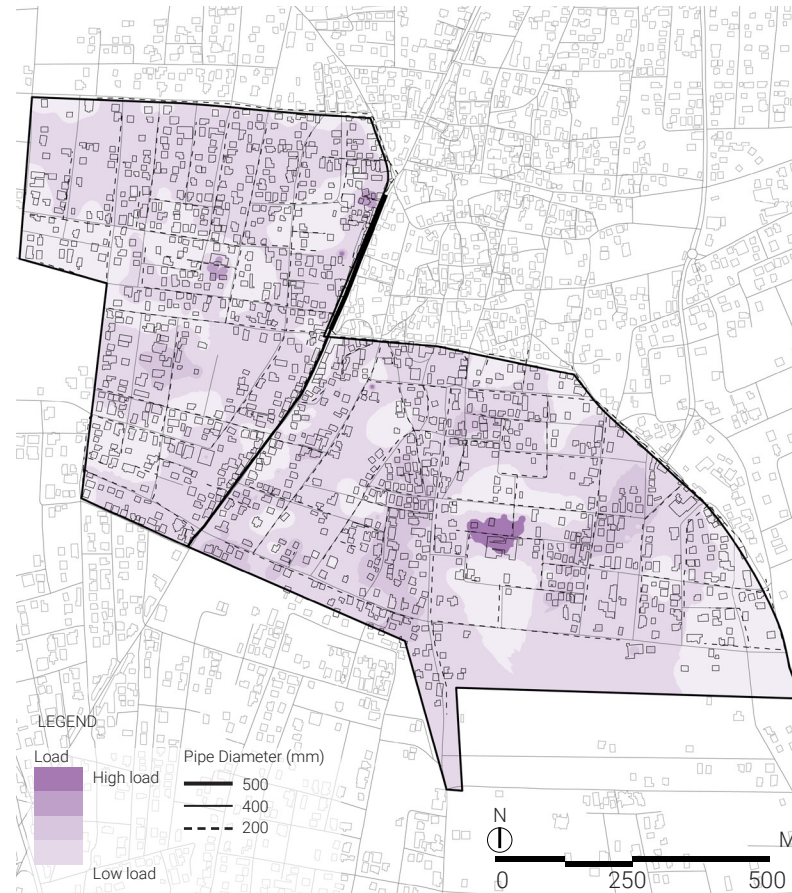


Fig. 16: The current load on the existing sewerage network

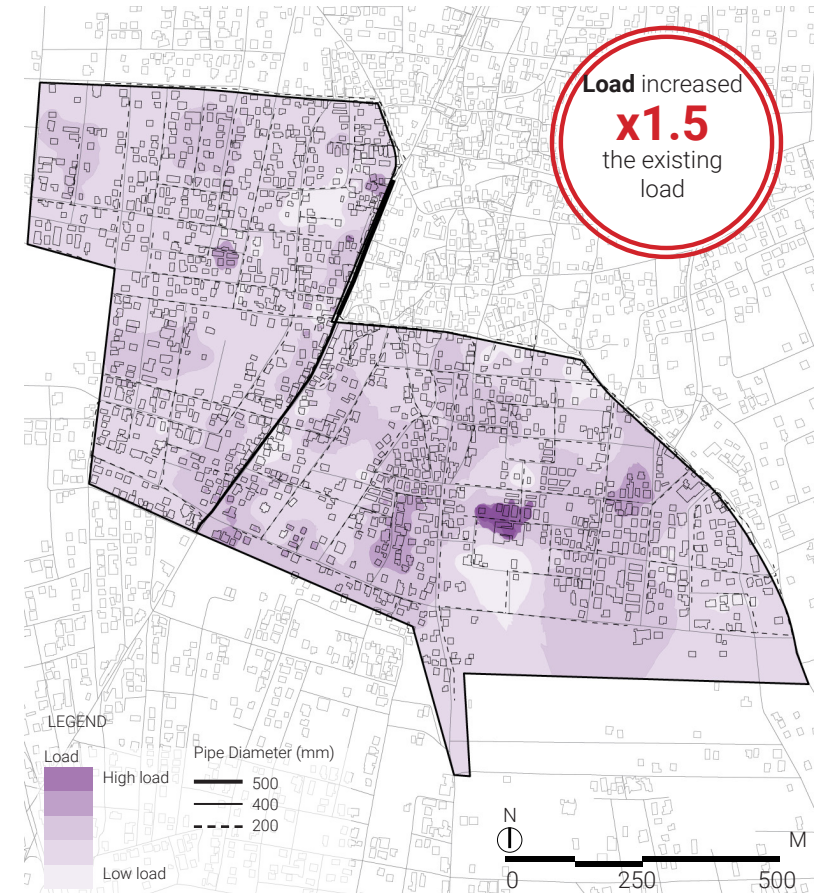


Fig. 17: Future load on the existing sewerage network



This indicates the need to provide **periodic maintenance to the manholes**. As well, **upgrading the existing sewerage network** in the future to accommodate the forecasted increase in population as a **proactive measure**.

# x VARIABLES

## 3) Needed Projects

Needed Project #1: Improvements to the Infrastructure Networks



### Electricity Service

- Analysis revealed that the **access to the electricity is currently stable** in general. However, there are some **threats related to the location of the electrical posts**.



The electrical grid should be upgraded in advance according to the increase in population. And, improvements to the spatial distribution of the electrical posts should be made.



### Solid Waste Management

- The field investigation revealed that there are public and private waste containers that are currently serving the residents. However, the solid waste management has been highlighted as a challenge, specifically regarding the unequal distribution of janitors and frequency of the waste collection service.



Improving the efficiency of solid waste collection and its general management.

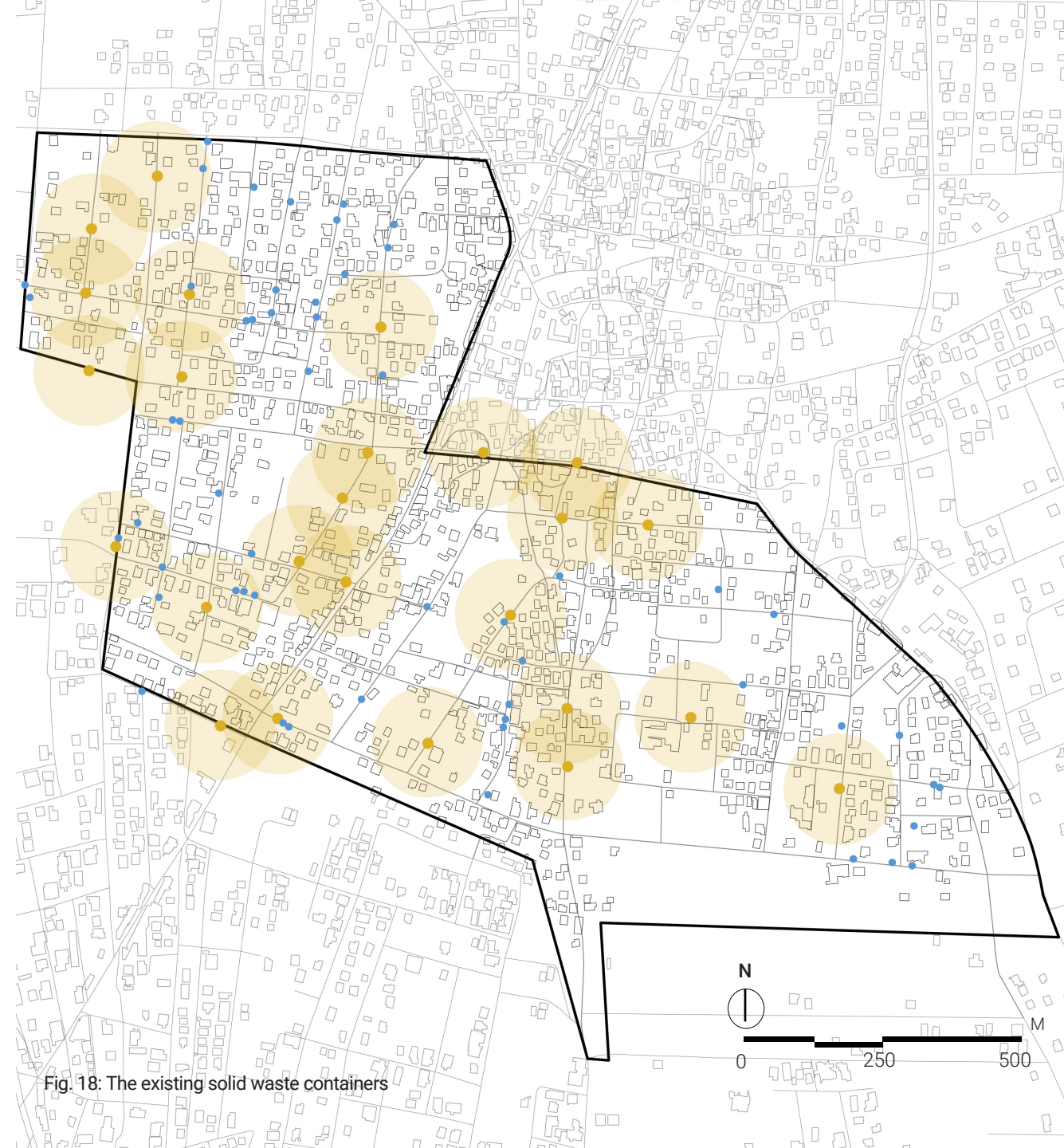


Fig. 18: The existing solid waste containers

# x VARIABLES

## 3) Needed Projects

Needed Project #2: Improved access to the Public Facilities and Commercial Activities



### Education Facilities

- There are **2 public schools** located within the neighbourhood.
- Based on the analysis, 28.1% of the population have access to public schools within a 5-minute walking distance and 100% within a 15-minute walking distance.
- There are **currently 3,849 people between the ages of 6 to 17 years old** (considered as the student population) in the neighbourhood, while **only 20% are enrolled in the public schools**. the rest either go to private schools or nearby public schools or have dropped out.
- The maximum expected increase of the student population for the target year is **an additional 1,900 students**.



To meet the needs of the additional forecasted student population, there is a need to **expand the existing, ministry owned, public school**, both vertically and horizontally and to **construct an additional school**.

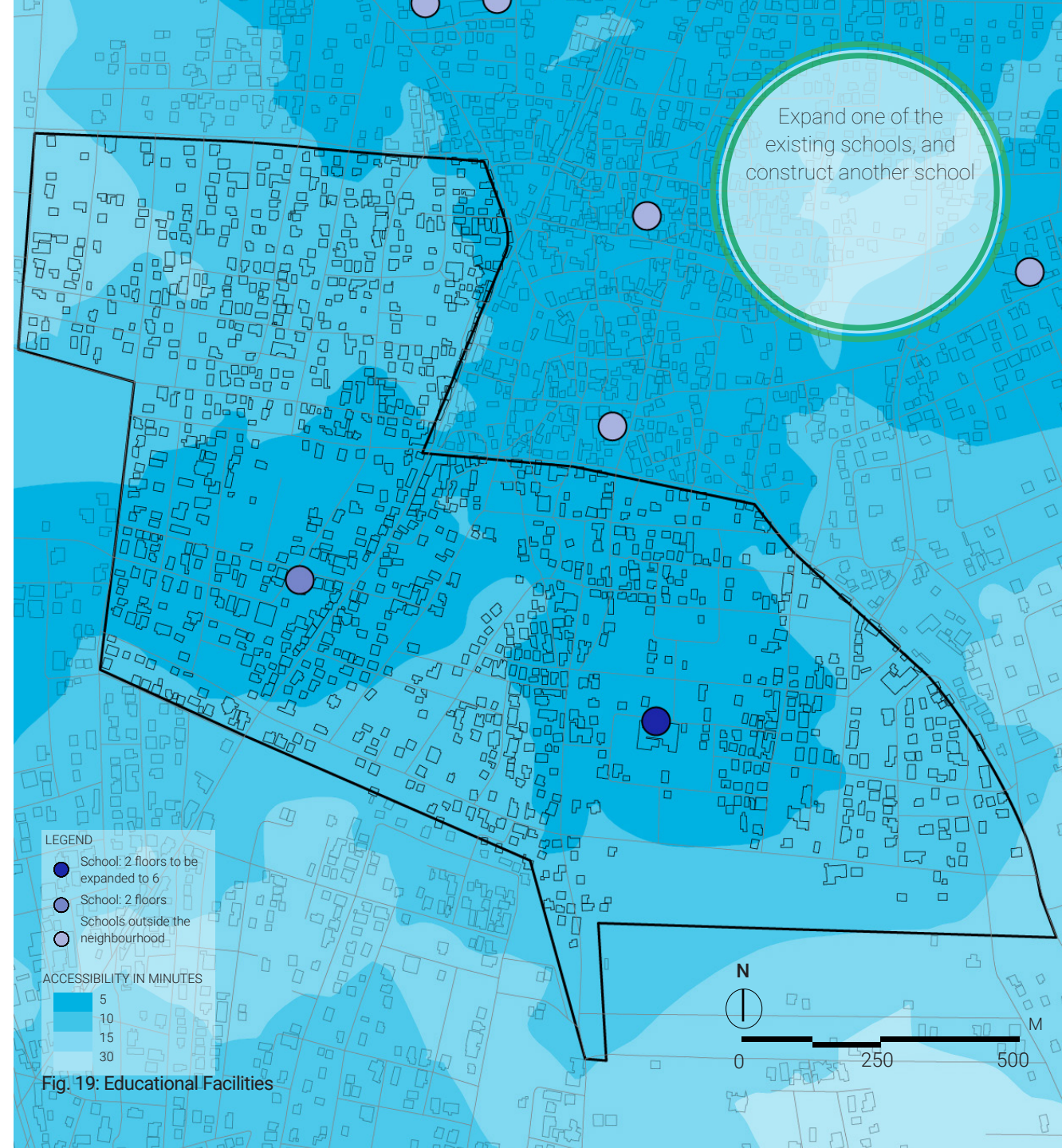


Fig. 19: Educational Facilities

# x VARIABLES

## 3) Needed Projects

Needed Project #2: Improved access to the Public Facilities and Commercial Activities



Commercial Facilities

- The current **commercial facilities** serving the residents in the neighbourhood are **mainly concentrated along the Al-Sarih main street** that runs in from North to South in the middle of the neighbourhood, in addition to some services scattered sporadically in the neighbourhood.



Updating the existing land use plan of the neighbourhood whereby some **vacant residential land can be re-designated as mixed-use typology** in the north-western side, with **commercial functions on the ground floor**. In the south-eastern side, there are vacant commercial land that can be assumed to be occupied by 2037, which would thus fulfil the basic needs of residents in this area.

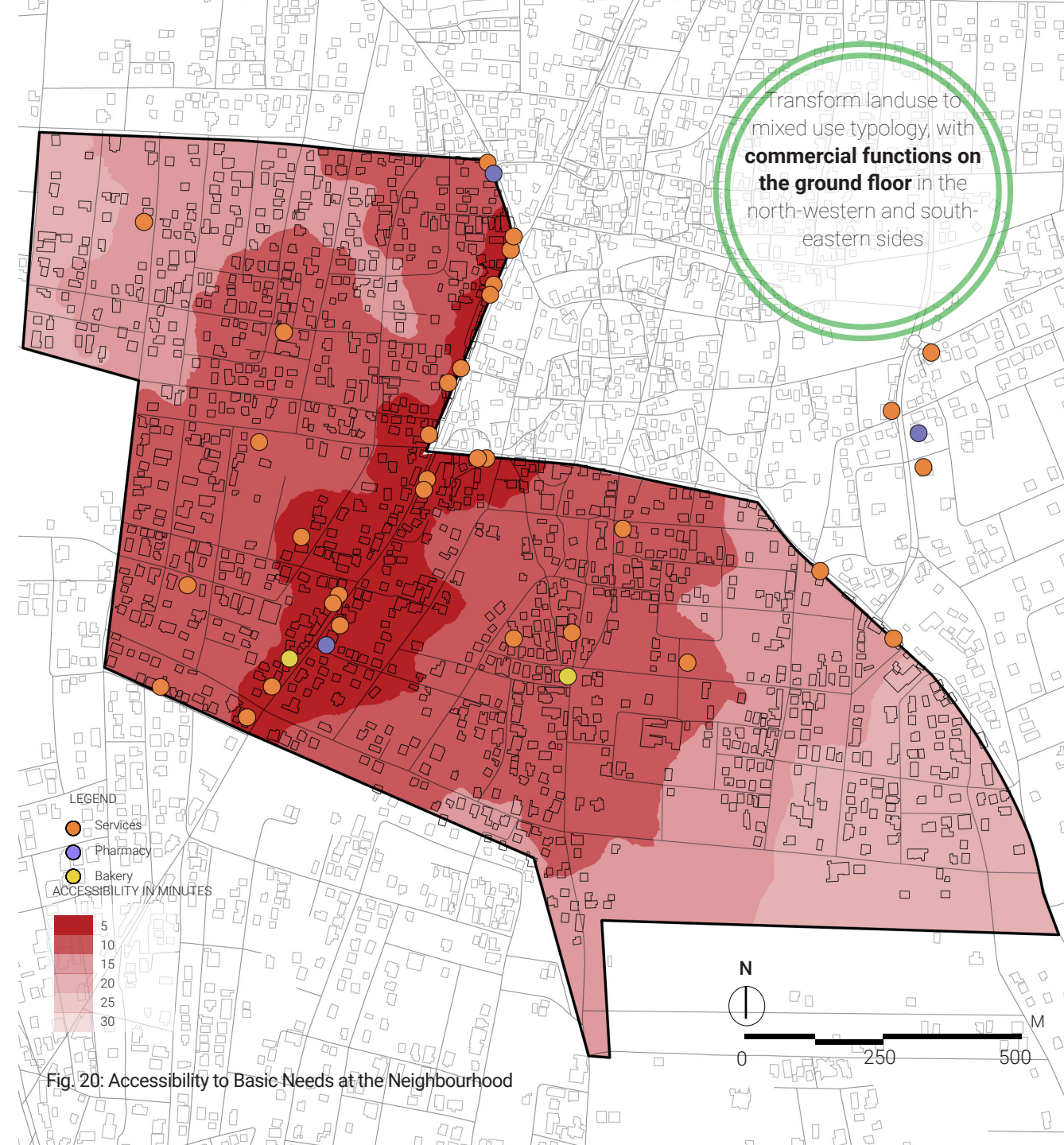


Fig. 20: Accessibility to Basic Needs at the Neighbourhood



# x VARIABLES

## 3) Needed Projects

Needed Project #2: Improved access to the Public Facilities and Commercial Activities



### Health Care Facilities

- There is poor healthcare service available and the **lack of a 24-hour emergency centre**.
- The **two public comprehensive health centres in the surrounding northern and southern neighbourhoods** are serving Al Afrah neighbourhood's residents and **are accessible to 17.5% and 82.5% of the residents within a 15 and 30-minute walking distance** respectively.
- According to the Ministry of Health standards, the **catchment area of a comprehensive health care centre is a 10km service radius**, which means in the case of Alafrah neighbourhood that it is spatially covered by the surrounding health centres.



the intervention that is needed is to **upgrade the existing comprehensive health centres** in the nearby neighbourhoods through **better services, including more staff and capacity building**, to serve the forecasted increase in population.

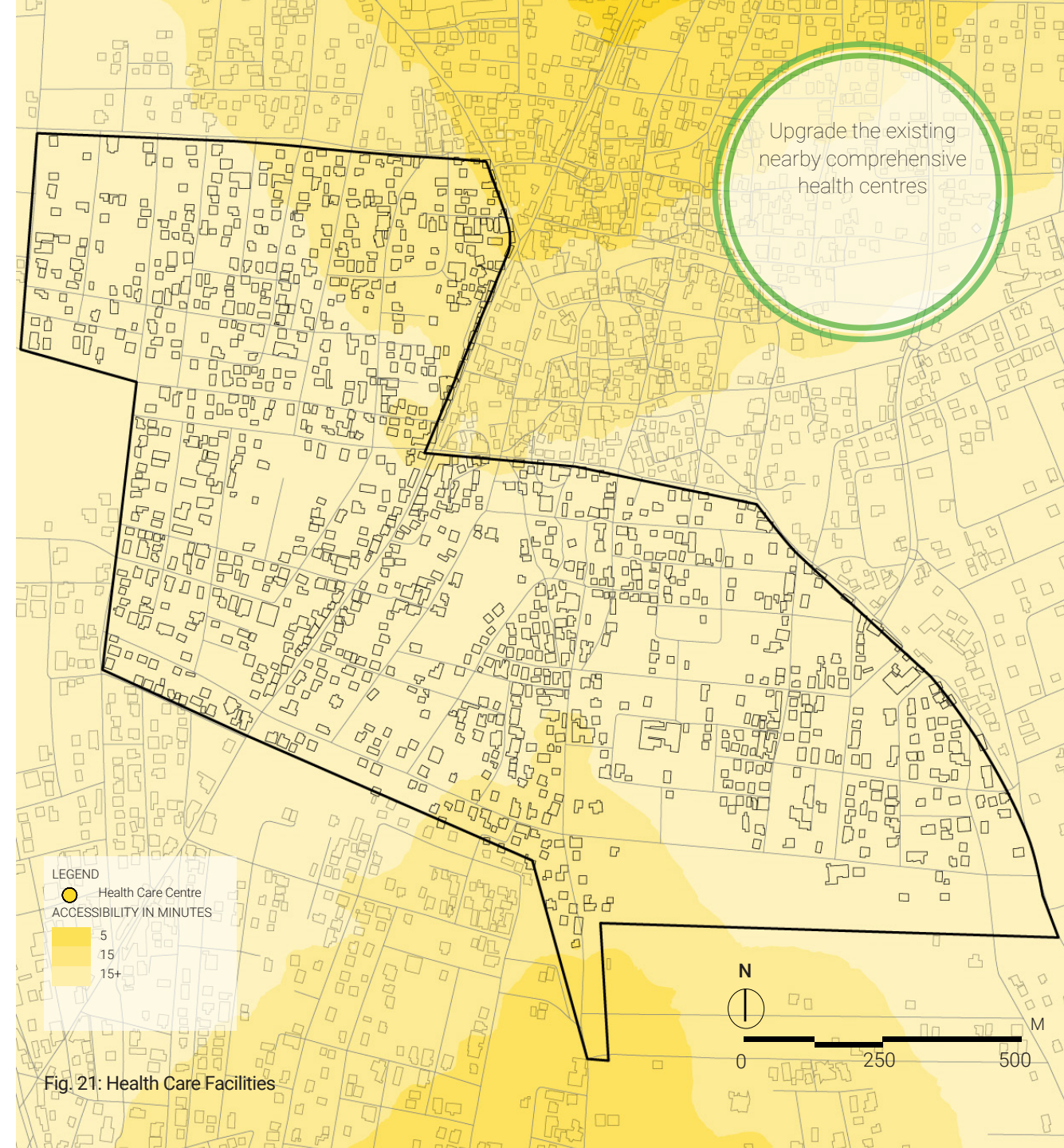


Fig. 21: Health Care Facilities

# x VARIABLES

## 3) Needed Projects

Needed Project #2: Improved access to the Public Facilities and Commercial Activities



Recreational Facilities

- There are **no parks or recreational facilities in Al Afrah**, nor in the nearby neighbourhoods.



**There is a need to create public spaces.**



Fig. 22: Recreational Facilities

# x VARIABLES

## 3) Needed Projects

Needed Project #3: Improved walkability and access to public transportation



Roads

- The residents stressed that the overall existing road network is **deteriorated, and that the neighbourhood is poorly lit.**
- The **field investigation** included **an evaluation of the road infrastructure conditions**, which were rated as good, fair, substandard, or critical.



Sidewalks

- **Most of the areas lacked sidewalks**, while the existing sidewalks in other areas were found to be in a very poor condition.
- This **negatively impacts the walkability of the neighbourhood**, which was extensively highlighted by the residents.



**Road infrastructure improvement** is urgently needed in the neighbourhood. Additionally, **lighting poles** should be added to all the roads within the neighbourhood. **Sidewalk construction and rehabilitation** are needed to serve residents and people with disabilities, **promote walkability, and increase pedestrian safety** while commuting.



Fig. 23: Road Infrastructure Assessment

# x VARIABLES

## 3) Needed Projects

Needed Project #3: Improved walkability and access to public transportation



Public Transportation

- There is **only one official bus stop** in Al Afrah neighbourhood.
- The residents explained that **the only bus route available** runs along Al Sarih street and sometimes **does not even cover its whole designated route**, making **public transport unreliable** due to unpredictable timings and the bus's insufficient route.
- The **accessibility** to the nearest bus stop is considered **unsafe** due to the **lack of pedestrian infrastructure**.



There is a significant need to **extend the public transport route** to cover the whole neighbourhood and add three bus stops at the south-eastern and north-western parts of Al Afrah, and improve the existing one.

There is a significant need to **provide pedestrian traffic lights** on main streets and **improve the walkability means** in general in the neighbourhood.

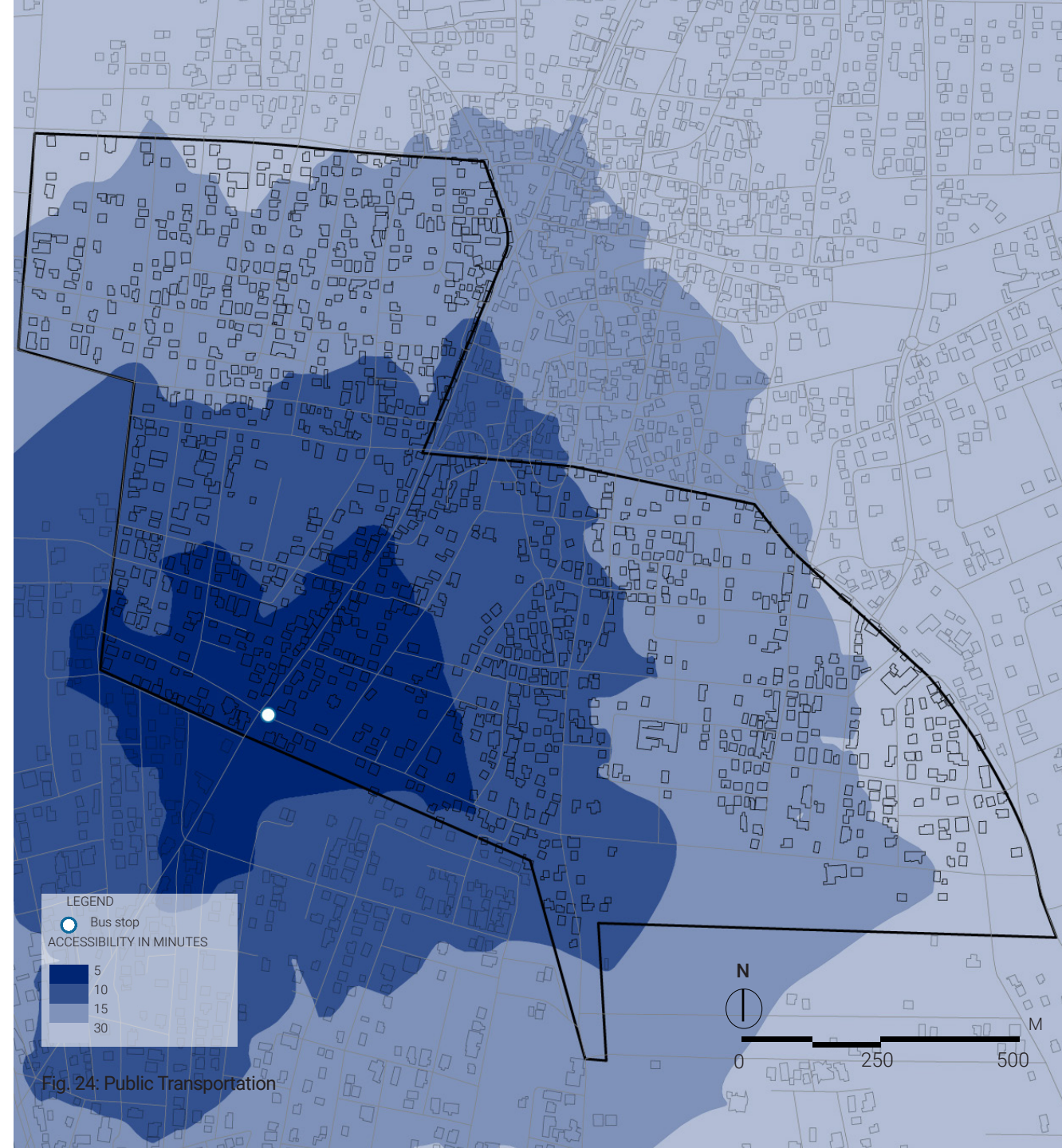


Fig. 24: Public Transportation

# x VARIABLES

## 3) Needed Projects

Outcome #1: Minimal Implementation of Planned Needed Projects	<b>MINIMAL</b>
Outcome #2: Partial Implementation of Needed Projects	<b>PARTIAL</b>
Outcome #3: Extensive Implementation of all Needed Projects	<b>FULL</b>



# x VARIABLES

## 4) Climate Risk & Natural Hazards

**Outcome #1: No specific climate change mitigation or adaptation actions are taken leading to increasing vulnerability for local communities**

**NONE**

**Outcome #2: Climate change adaptation actions are taken, leading to reduced vulnerability for local communities**

**ADAPTATION  
MEASURES**

**Outcome #3: Both mitigation and adaptation strategies are taken, leading to reduced vulnerability and improve resilience of local communities**

**ADAPTATION  
+ MITIGATION  
MEASURES**

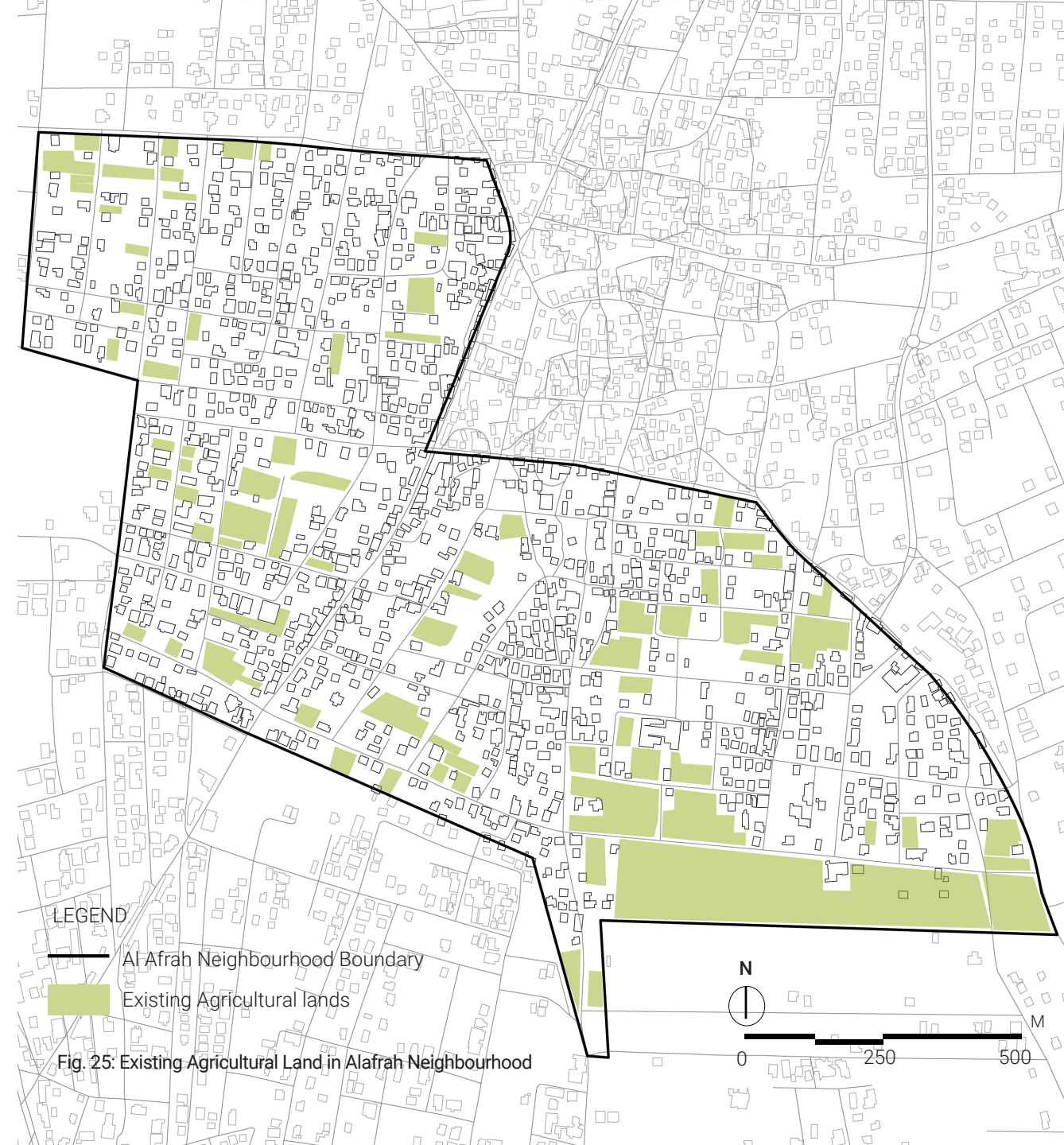


Fig. 25: Existing Agricultural Land in Alafrah Neighbourhood

# x VARIABLES

## 5) Local Economic Development

Outcome 1: Natural economic growth resulting in marginally improved access to opportunities

- Total increase in opportunities when vacant mixed land use areas are utilized: +240



**+64%**

Total increase in opportunities for hosts and refugees

**TOTAL:** 614 Job Opportunities

Outcome 2: Significant economic growth resulting in substantially improved access to opportunities for both hosts and refugees



**+124%**

Total increase in opportunities for hosts and refugees

**TOTAL:** 837 opportunities in the neighbourhood by 2037

- Total increase in opportunities when development projects are implemented: +460





# OPTIMAL SCENARIO

Variables	Population Growth	Urban Footprint	Needed Projects	Climate Risk & Natural Hazards	Local Economic Development
Outcome #1	<b>Low Growth Scenario:</b> the population growth rate will decrease to 1%.	<b>Infill and Vertical Densification approach</b> to accommodate the forecasted addition in population for year 2037	<b>Minimal implementation</b> of needed projects	<b>No</b> mitigation or adaptation measures	<b>Natural Economic Growth</b>
Outcome #2	<b>Medium Growth Scenario:</b> the population growth rate follows the estimated annual growth rate of Irbid Governorate, 2.3%.	<b>Full infill approach</b> to accommodate the forecasted addition in population for year 2037	<b>Partial implementation</b> of needed projects	<b>Mitigation</b> measures	<b>Increase</b> Business and livelihood opportunities are increased, providing additional jobs and local economic stimulus
Outcome #3	<b>High Growth Scenario:</b> the population growth rate will increase to 3.1%.	<b>Full vertical densification approach</b> to accommodate the forecasted addition in population for year 2037	<b>Extensive implementation</b> of all needed projects	<b>Mitigation and adaptation</b> measures	
Outcome #4	<b>Large increase in population due to new unpredictable influx</b>				
Outcome #5	<b>Refugee Decline Population (-??%)</b>				
<b>PROBABILITY</b>	Highly Unlikely	Unlikely	<b>Likely</b>	Highly Likely	
<b>IMPACT</b>	Significant Deterioration	Slight Deterioration	Slight Improvement	<b>Significant Improvement</b>	





# OPTIMAL SCENARIO

394

+

30553 M<sup>2</sup>

=

100%  
of expected increase in population can be accommodated

All buildings that are in **good condition** on lands classified residential B and C are **vertically densified** to accommodate **76% of the expected increase** in population by 2037

Of **vacant lands** classified as residential A,B, and C are **in-filled to accommodate 24% of the expected increase** in population by 2037

LEGEND

- Service Buildings
- Existing buildings
- Existing Agricultural-Residential Land use area
- Residential buildings for vertical densification (up to 4 floors)
- Residential infill buildings on vacant lands
- Existing basic services
- Proposed mixed land use on existing commercial land use
- Proposed public space
- Existing agriculture lands on residential landuse (to be preserved)
- Existing public facilities to be upgraded (vertical expansion)
- Proposed Bus Stops

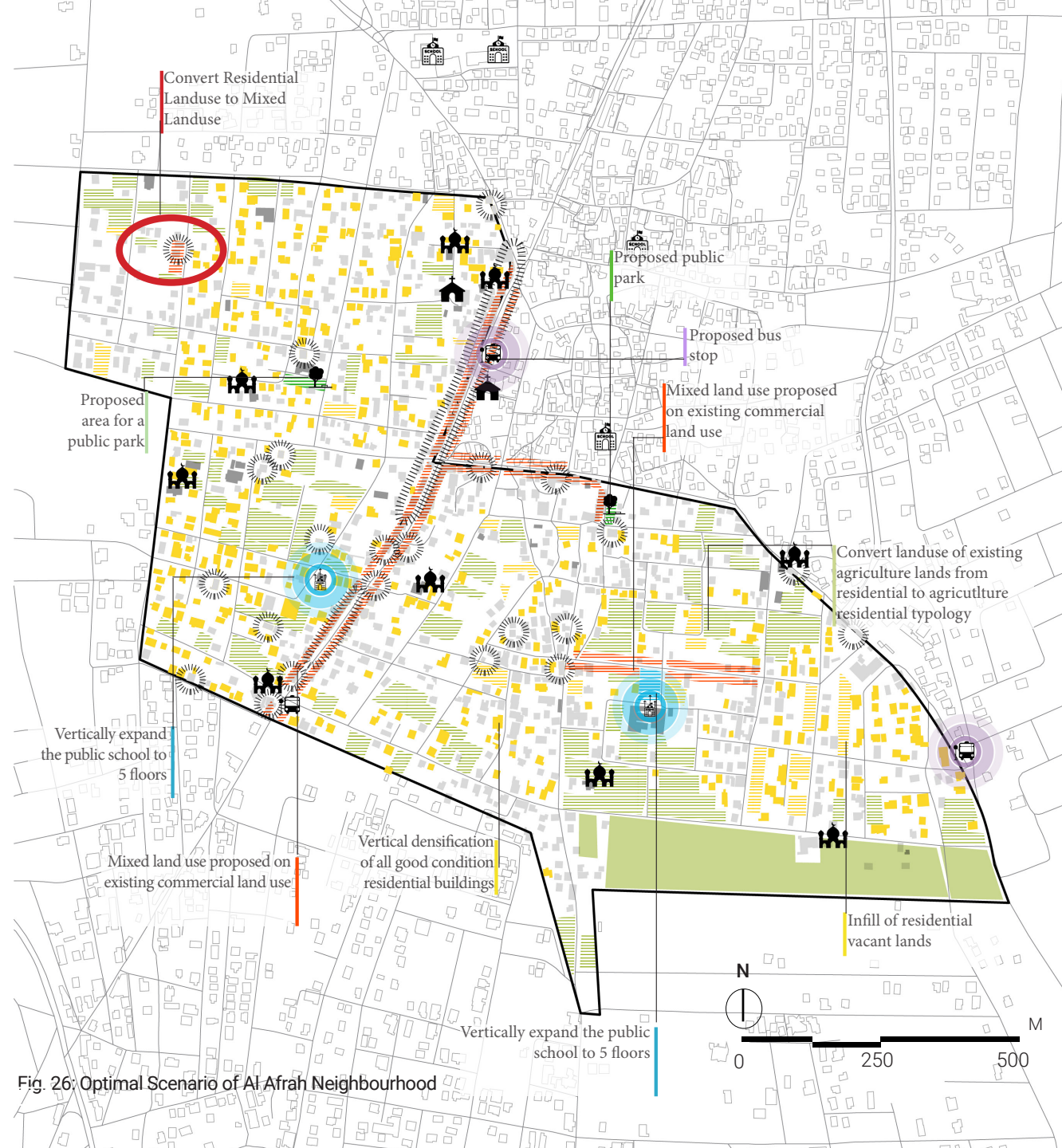


Fig. 26: Optimal Scenario of Al Afrah Neighbourhood

# 1

ABOUT UPIMC

# 2

IRBID SPATIAL  
PROFILE

# 3

VISION &  
SCENARIO  
BUILDING

# 4

**PRIORITISATION  
OF  
DEVELOPMENT  
PROJECTS**

# PRIORITISATION OF DEVELOPMENT PROJECTS

## COMPONENT #3



### Define Prioritised Infrastructure Investments & Linkages To Financing

**Outcome: Bankable investment opportunities** identified to support displaced and hosting communities with clear links to **financing opportunities**

**Output:** Infrastructure prioritisation

The urban profiles, scenarios and action plans set out the rationale and evidence to support decision makers to identify interventions for prioritised investment in municipal services that are **both financially realistic and viable**.

It will help to **prioritise investments and create linkages to financing** through preparing **pre-feasibility assessments** for the prioritised investments, including broad technical and financial feasibility and cost estimates, assessment of gender-specific benefits, community and sustainability impact assessment as well as potential economic additionalities, based on benchmarking of similar projects in the context.

# THE DEVELOPMENT PROJECTS FOR THE SELECTED PILOT NEIGHBOURHOOD

Based on the comprehensive analytical study conducted during the Spatial Profiling phase and the several consultation sessions held throughout the Visioning and Scenario Building phase, the list of needed development projects at the pilot neighbourhood was identified and presented in the developed Optimal Scenario of the neighbourhood.

The Pilot Neighbourhood of Al Afrah in Irbid

## Infrastructure Projects



Water and Sewerage Network 'Critical Areas' Upgrading



Road and Sidewalk 'Critical Areas' Rehabilitation

## Public Services



Mixed Use Development



School Upgrading



Comprehensive Health Centre Improvements



Public Park Construction



Installing Public Transport Bus Stops

**These projects were assessed and scored based on a Priority Scoring Matrix to identify the development projects that must be implemented within the short-term action plan of the neighborhood's Optimal Scenario.**

# THE FINAL PRIORITY SCORING MATRIX

Evaluation Criteria		Scoring Weight	Infrastructure Projects		Public Services					
			Upgrading the Sewerage Network Project	Upgrading the Main and Local Road & Sidewalk Networks	Upgrading of Al Sarih Comprehensive Health Centre	Updating the Land-use Plan	Upgrading the Al-Sarih Elementary Boys' School	Public Parks Development	Constructing Public Transport Bus Stop	Constructing New Schools
<b>Technical Priority</b>		%5	5	5	2	5	2	5	2	0
<b>Transformative Impact</b>	<b>Social Impact</b>	Provision of Basic Needs	1	0	1	4	1	1	0	1
		Inclusivity	5	5	5	0	5	5	5	5
		Safety	2	5	5	2	2	2	2	0
		Well Being	2	5	5	2	5	5	2	5
	<b>Environmental Impact</b>	Natural Resource Consumption	5	0	0	5	0	0	5	0
		Climate Mitigation	5	5	2	5	2	2	0	2
		Climate Adaptation	5	5	2	5	2	5	0	2
	<b>Economic Impact</b>	Healthy Ecosystem	5	5	2	5	2	5	5	2
		Job Creation/ livelihood opportunities	0	10	15	20	15	10	15	15
	<b>Spatial Impact</b>	Diversity	0	0	5	5	5	0	0	5
		% of Beneficiaries	6	10	10	2	10	10	8	10
		Connectivity	0	5	0	5	0	0	5	5
<b>Spatial Impact</b>	Butterfly Effect of development projects	1	5	1	1	1	1	4	1	
	<b>Alignment with the National Plans</b>	%5	5	5	0	0	5	5	5	5
<b>Key Stakeholder Assessment (total participants of 10)</b>		%5	5	4	2	2	1	4	3	1
<b>Local Community Assessment (total participants of 14)</b>		%5	3	5	5	3	3	4	3	0
<b>Total Scoring</b>		%100	55	79*	62*	71*	61*	64*	64*	59



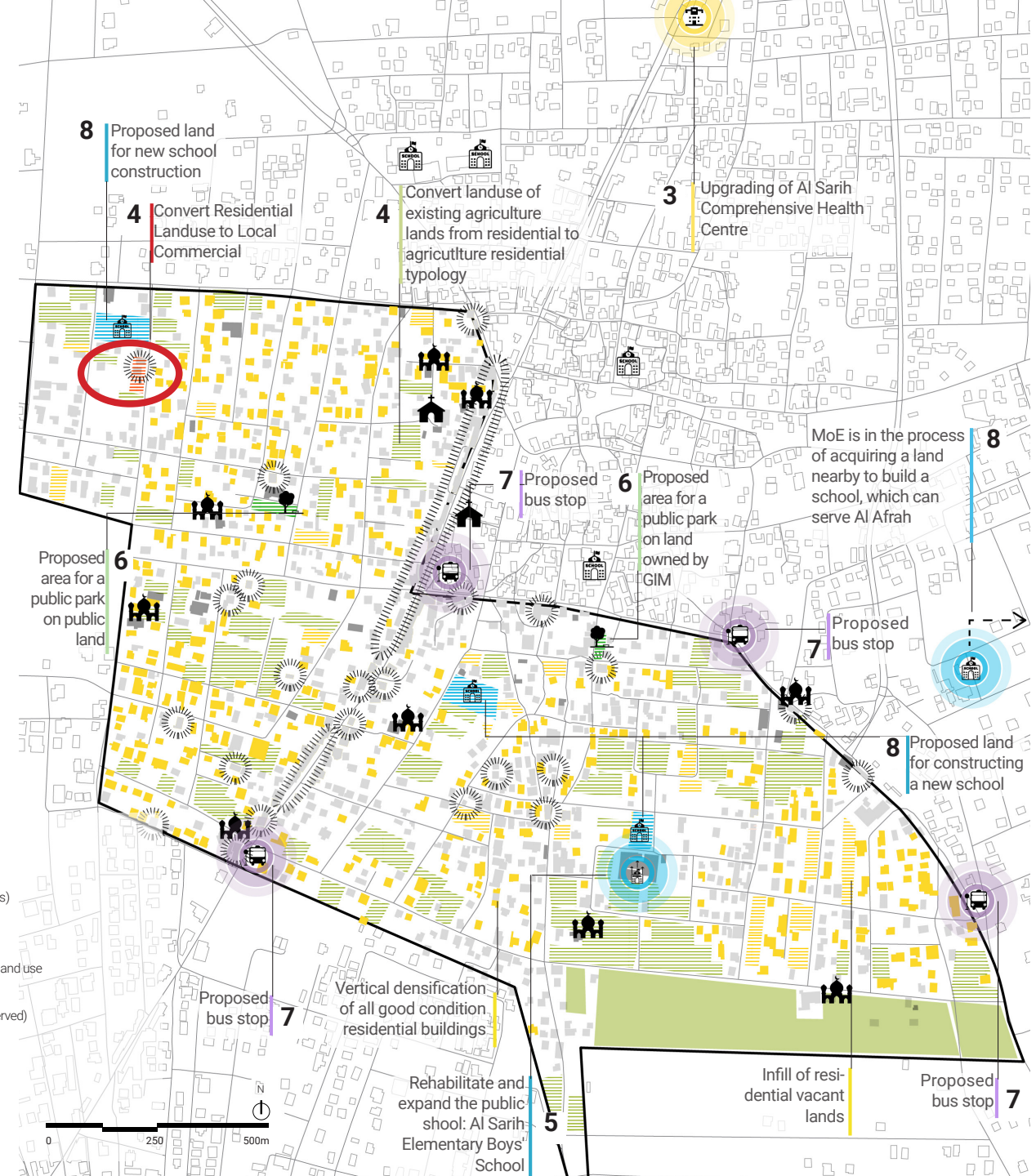
# OPTIMAL SCENARIO

## Optimal Scenario - Final Version after validation with key stakeholders

1. Upgrading the Sewerage Network;
2. Upgrading the Main and Local Road & Sidewalk Networks;
3. Upgrading of Al Sarih Comprehensive Health Centre;
4. Updating the Land-use Plan;
5. Upgrading the Al-Sarih Elementary Boys' School;
6. Public Parks Development;
7. Constructing Public Transport Bus Stops
8. Constructing Schools;

### LEGEND

- Al Afrah Neighbourhood Boundary
- Service Buildings
- Existing buildings
- Existing Agricultural-Residential Land use area
- Residential buildings for vertical densification (up to 4 floors)
- Residential infill buildings on vacant lands
- ☀ Existing basic services
- Proposed local commercial land use on existing residential land use
- Proposed public space
- Existing agriculture lands on residential landuse (to be preserved)
- Proposed land for new school
- Existing public facilities to be upgraded (vertical expansion)
- Proposed Bus Stops
- Health Centre Upgrading

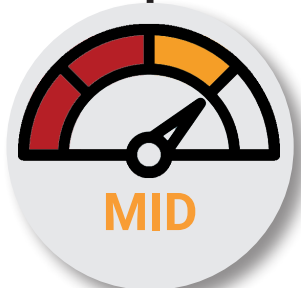


## ACTION PLAN (2023-2037)



### SHORT-TERM PHASE 2023-2027

- Upgrading of Al Sarih Comprehensive Health Centre
- Constructing Public Transport Bus Stops
- Upgrading the Main Road and Sidewalk Networks in the Identified Areas at District Level
- Updating the Land-use Plan
- Upgrading the Al Sarih Elementary Boy's School
- Public Parks Development
- Upgrading the Sewerage Network in the Identified Areas
- Upgrading the Local Road and Sidewalk Networks in the Identified Areas at Neighbourhood Level



### MID-TERM PHASE (2028-2032)

- Upgrading the Sewerage Network in the Remaining Areas
- Upgrading the Road and Sidewalk Network in the Remaining Areas at Neighbourhood Level
- Constructing a New School



### LONG-TERM PHASE (2033-2037)

- Constructing Two New Schools



**OPTIMAL SCENARIO OF AL AFRAH NEIGHBOURHOOD BY 2037**

# ACTION PLAN EXAMPLE



## CONSTRUCTING PUBLIC TRANSPORT BUS STOPS PROJECT

Actions	Responsible Entity	Year (Quarters)
<b>01</b> Allocate the budget for the project, prepare the detailed work plan, and identify the roles and responsibilities.	Land and Transport Regulatory Commission (LTRC)	2023
		2024
		2025
		2026
		2027
<b>02</b> Prepare the design and construction RFP for the bidding process and announce the bid. The RFP must include survey work, developing the detailed designs, and implementation of construction work for the bus stops.	LTRC	2023
		2024
		2025
		2026
		2027
<b>03</b> Hold the bid evaluation and selection and, accordingly, negotiate and award the contract.	LTRC	2023
		2024
		2025
		2026
		2027
<b>04</b> Finalize detailed design drawings and obtain the needed approvals.	Contractor under the supervision of LTRC and in coordination with GIM	2023
		2024
		2025
		2026
		2027
<b>05</b> Implementation of the construction work.	Contractor under the supervision of LTRC and in coordination with GIM	2023
		2024
		2025
		2026
		2027

\* Bus stops need to be reassessed, and possibly replaced, in coordination with the road and sidewalk upgrading in the area

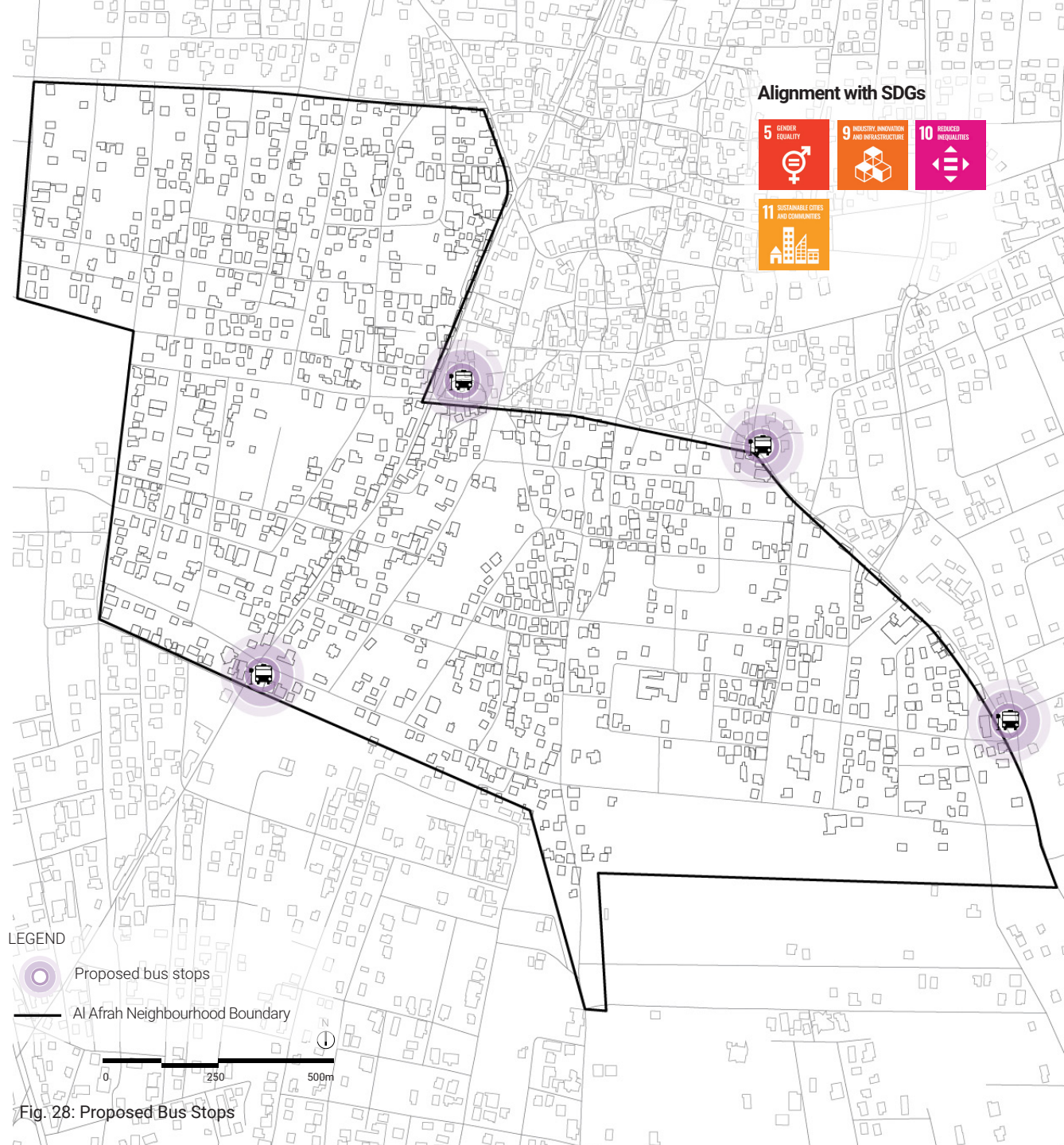


Fig. 28: Proposed Bus Stops



# INVESTMENT CARDS EXAMPLE

## TRANSFORMING THE CITY

Community & Key stakeholders Consultations, Project Prioritization, Implementation Plan, Investment Cards



**COMPONENT #3**

Define Prioritized Infrastructure Investments & Linkages To Financing

Impact assessment framework of proposed infrastructure

**SELECTED DEVELOPMENT PROJECTS MATRIX FOR AL HASHMI AL JANOUBI NEIGHBOURHOOD**

Project Name	Priority Score	Investment Type	Estimated Cost (USD)	Implementation Period
Public Staircase Project	High	Infrastructure	150,000	2023-2024
Public Staircase Project	High	Infrastructure	150,000	2023-2024
Public Staircase Project	High	Infrastructure	150,000	2023-2024

**Transforming Staircases into Accessible Social Steps**

**PROBLEM IDENTIFICATION**

The address listed in the Al Hashmi Al Janoubi Neighbourhood a total of 16, were assessed as dangerous, unsafe and need immediate attention. This has affected the mobility of the community and hindered access to basic services and economic opportunities. Improvement of the existing public staircases is among the most important needs of the neighbourhood.

**PROJECT OBJECTIVE**

Project aims to transform the existing inadequate dangerous public staircases in Al Hashmi Al Janoubi Neighbourhood into innovative inclusive public spaces. The project endeavours to address the following issues:

- To enhance the accessibility and connectivity of the host community, migrants, and vulnerable people, including people with disabilities, elderly, and children, that are residing in the neighbourhood and nearby areas.
- To provide the option for innovative public spaces through urban greening, beautification and green elements, etc. Transformation of existing public staircases into public spaces that would contribute to the overall quality of life for the residents and the neighbourhood.
- To improve the social cohesion among migrants and host communities.

**BENEFICIARIES**

**Beneficiaries:** The total population of the Al Hashmi Al Janoubi Neighbourhood including the host community and approximately 20000 residents (current and future).

**Not Beneficiaries:** Residents and visitors from nearby 8 km radius area to reach the Bus Rapid Transit (BRT) connectivity of the Hashmi Street.

**PROJECT IMPACT**

The project will improve the 16 staircases at Al Hashmi Al Janoubi Neighbourhood, enhancing the accessibility and connectivity of the neighbourhood and surrounding areas and nearby areas to their basic services, including religious and health community. Additionally, it will assist in creating a public space network and will facilitate the mobility of people in the neighbourhood by transforming the existing BRT staircases. This project is aligned with the Greater Amman Municipality Strategic Plan for 2022-2030, and supports the achievement of the 2030 Sustainable Development Agenda, specifically SDGs 3, 5, 10 and 11.

**PROJECT PARTNER**

- Owner:** Greater Amman Municipality (GAM)
- Client:** GAM
- Contractor:** To be determined after the project is approved.
- Developer:** A funding entity is needed to support the implementation of the project on ground.
- Builder:** A local design company, models will design some of the staircases.

**PROJECT LIFECYCLE**

- Feasibility, Concept & Detailed Design, Construction, and Maintenance.
- Access will design some of the staircases.

**PROJECT FINANCIALS**

**Total Cost for the 16 staircases:**

- 150,000 USD for the 16 staircases (150,000 / 16 = 9,375 USD per staircase)
- 150,000 USD for the 16 staircases (150,000 / 16 = 9,375 USD per staircase)
- 150,000 USD for the 16 staircases (150,000 / 16 = 9,375 USD per staircase)

**Current Investment commitments and type (Municipal Budget USD)**

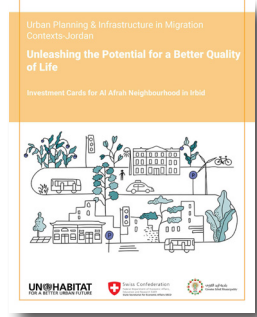
Investment needs: Survey work, General Development, Detailed Design Development, Construction, and Regular Maintenance.

**ACTION PLAN**

Actions	Responsible Entity	Year (Quarter)
1. Develop the budget and resources, prepare the detailed work plan, and identify the risks and responsibilities.	GAM	2023 (Q1)
2. Prepare the design RFP for the existing stairs and announce the call. The RFP must include survey work, developing the concept and detailed design for the staircases to incorporate public spaces, social steps, the green innovative program and the enhance social cohesion and livelihood opportunities in the area.	GAM	2023 (Q2)
3. Lead the bid evaluation and selection and, accordingly, negotiate and award the contract.	GAM	2023 (Q3)
4. Initiate survey work.	Consultant under the supervision of GAM	2023 (Q4)
5. Conduct community consultation workshops to identify needs and develop the concept.	Consultant under the supervision of GAM	2023 (Q4)
6. Develop the concept design for the social steps at Al Hashmi Al Janoubi Neighbourhood and conduct community consultation workshops to validate concept design.	GAM & Consultant	2024 (Q1)
7. Finalize detailed design drawings and obtain needed approvals.	GAM & Consultant	2024 (Q2)
8. Prepare the construction RFP for the construction of the social steps and announce the bid. Lead the bid evaluation and selection and, accordingly, negotiate and award the contract.	GAM & Consultant	2024 (Q3)
9. Implementation of the construction works.	Contractor under the supervision of GAM	2024 (Q4)



Investment Cards for Al Hashmi Al Janoubi Neighborhood- Including 5 projects



Investment Cards for Al Afrah Neighbourhood - Including 5 projects

# ACCESS TO THE VISION, SCENARIO BUILDING, AND ACTION PLAN REPORTS

 **AVAILABLE TO DOWNLOAD**

<https://unhabitat.org/vision-scenario-building-and-action-plan-for-al-afrah-neighbourhood>



Al Afrah  
Neighbourhood



 **AVAILABLE TO DOWNLOAD**

<https://unhabitat.org/vision-scenario-building-and-action-plan-for-al-hashmi-al-janoubi-neighbourhood>



Al AHashmi Al Janoubi  
Neighbourhood



# Thank you!

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بلدية اربد الكبرى  
Greater Irbid Municipality