Evaluation Report 4/2019

Case Study Report for the
Evaluation of the Strategic Development Phase for the Global Future Cities Programme

May 2019
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1. INTRODUCTION

A sample of eight interventions has been selected for in-depth assessments. The criteria for the selection of the sample intervention relate to: country/region, pillars, success rates, and market maturity and professional capacity.

Table A10.1: Proposed sample for case studies

<table>
<thead>
<tr>
<th>City</th>
<th>Country</th>
<th>Region</th>
<th>Pillar</th>
<th>Success Rate</th>
<th>Maturity/capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belo Horizonte</td>
<td>Brazil</td>
<td>Latin America</td>
<td>Transport</td>
<td>71%</td>
<td>Medium</td>
</tr>
<tr>
<td>Durban</td>
<td>South Africa</td>
<td>Africa</td>
<td>Planning</td>
<td>74%</td>
<td>High</td>
</tr>
<tr>
<td>Abeokuta</td>
<td>Nigeria</td>
<td>Africa</td>
<td>Transport</td>
<td>34%</td>
<td>Medium</td>
</tr>
<tr>
<td>Ankara</td>
<td>Turkey</td>
<td>Asia</td>
<td>Planning</td>
<td>71%</td>
<td>Medium</td>
</tr>
<tr>
<td>Yangon</td>
<td>Myanmar</td>
<td>Asia</td>
<td>Resilience</td>
<td>42%</td>
<td>Low</td>
</tr>
<tr>
<td>Bandung</td>
<td>Indonesia</td>
<td>Asia</td>
<td>Transport</td>
<td>58%</td>
<td>Medium</td>
</tr>
<tr>
<td>New Clark City</td>
<td>Philippines</td>
<td>Asia</td>
<td>Planning</td>
<td>47%</td>
<td>Medium</td>
</tr>
<tr>
<td>Ho Chi Minh</td>
<td>Vietnam</td>
<td>Asia</td>
<td>Resilience</td>
<td>42%</td>
<td>Medium to High</td>
</tr>
</tbody>
</table>

The sample’s coverage is as follows:
- 80% of the countries
- 42% of the cities
- 27% of the interventions
- 21% of planning interventions
- 25% of transport intervention
- 50% of resilience interventions
2. BELO HORIZONTE

City: Belo Horizonte  
Project/intervention: Intelligent Mobility in Expresso Amazonas (IMEA)

Excerpts from intervention documents

a. Context*

The metropolitan region of Belo Horizonte (RMBH) consists of 34 municipalities and hosts more than five million people. While most towns are small- or medium-sized, 69 per cent of the total population is concentrated in the municipalities of Betim (pop. 427,904), Contagem (pop. 652,660) and Belo Horizonte, which is the main city with a population of 2.36 million. More than 600,000 people live in the Metropolitan Belt of 16 municipalities surrounding the central municipalities. Belo Horizonte is also the physical core of the region and the main destination and point of transit for any means of transportation. However, the State aims to develop a system to make the Metropolitan Region into a polycentric area and integrate the existing railways, railroads and metro lines for the integrated development of RMBH. Urbanisation processes are leading to significant pressures on infrastructure, housing and basic services. Despite a good system of urban economy, governance, planning and delivery capabilities, current urbanisation trends could lead to wide-ranging detriments to many sectors, including food and water systems, human health, buildings, transport, energy and ecosystems.

The city has already promoted significant public transport infrastructural investments. The municipality of Belo Horizonte was the first in Brazil to enact an Urban Mobility Plan (PlanMob-BH) in 2013. The city’s mobility plans are ambitious and the implementation rate of PlanMob-BH has struggled to meet the provisions. Belo Horizonte is becoming a smart city through the Smart City Programme. Intelligent Mobility, Intelligent Transportation Systems (ITS) and Big Data play a key role. However, realising the potential of ITS and big data depends on improvements in assessment practices to find what works best. It also highlights the data capabilities of domestic institutions to integrate data systems. Significant improvements in these areas are critical to the success of ITS. Some of the challenges include:

- Inter-operability: the various stakeholders, such as client agencies in a multi-agency project may not have the mandate to share data, and the data to be exchanged may not conform to standardised formats;
- Data Analysis: data sets can be so large and complex that they become difficult to process using traditional data processing applications and existing data management tools. Therefore, to yield useful results often challenges the capacity of agencies to interpret it, especially in developing countries;
- Documenting Effectiveness: lack of case studies to highlight the technological and institutional conditions required for success on the implementation and results of ITS; and
- Public Acceptance around Privacy: There is growing recognition of the risk and challenge around data privacy. Anonymity of data is essential for using big data for transport planning.

The latest mode share analysis from 2012 showed that 37% of trips are made by car or motorcycle. This is expected to increase to 45% in 2030. At the same time, the mode share of pedestrians and cyclists is expected to increase slightly to 37%, while public transport is predicted to decrease to 18%. The growth of private motorised vehicles is one of the major reasons contributing to a decline in public transport. This calls for strong investments to improve public transport, making it more efficient and attractive to users. Between 2016 and 2017, public transport in Belo Horizonte lost approximately 10% of total passengers, who considered the service expensive and of poor quality. The latest Public Transport Customer Satisfaction Survey from 2016, showed that 76% of the interviewees evaluated the public transport as ‘fair’ (39.6%) or ‘poor’ (36%), whilst only 24% rated it as ‘good’. The main problems raised were unprecedented waiting time and crowded buses. Women, who represent 70% of public transport users, cited a lack of safety inside the bus as a primary concern.**

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* Extracts from Belo Horizonte’s Interventions Documents:

** Note on Data Privacy: The text notes the importance of anonymising data for use in transport planning to protect privacy.
The current challenges that BHTRANS faces have to do with identifying appropriate tools. These include: smart mobility technologies to undertake digital surveys, thus simplifying the process of Origin and Destination surveys. This reduces survey costs and conduct them regularly for effective monitoring. This is in addition to obtaining public transportation operational data, such as vehicle occupancy, GPS tracking of vehicles, and data on the accessibility of different population groups. There would be a focus on those in vulnerable situations, such as passenger boarding/alighting statistics, in order to provide a more gender-sensitive service.**

As the New Master Plan of Belo Horizonte foresees mechanisms that make Transit-Oriented Development (TOD) viable along Amazonas Corridor, the intervention will play an essential role to enhance the adoption of such mechanisms. The TOD planning strategy aligns transport and the use of land to implement a 3C city model. That is, compact, connected and coordinated cities. As the 3C city model focuses on a higher concentration of people living closer to collective transport, with more jobs located closer to stations. Therefore, this makes it easier for all citizens to reach parks, schools and work.

b. **The intervention**

To narrow the geographical scope, the intervention aims at the integration of the proposed Intelligent Mobility System within the Amazonas Corridor, the main transport corridor of the metropolitan region, in the South-West part of the municipality. The corridor is the object of many project proposals for expanding and optimising its capacity. However, one of the main challenges is to optimise the public transport service: currently Avenida Amazonas, the principal route of the corridor, has the highest volume of buses in Belo Horizonte. The Amazonas Corridor represents one of the most important axes for the city of Belo Horizonte (BH). The importance of this corridor for the city stems first and foremost from the strategic role it plays in connecting the regions of Barreiro and Oeste and the municipalities of Betim and Contagem to the city centre, where most of the formal jobs are located. The south-west areas of BH are defined by the lowest Human Development Index (HDI) in the city, with both formal and informal low-income neighbourhoods. The residents of these areas represent the main users of public transport and they are the most affected by the system’s inefficiency and lack of accessibility. This issue represents a challenge at the municipal scale as approximately 20 per cent of citizens live in informal settlements, public social housing or on irregular land subdivisions.

Specific components of the Intervention are:

- Baseline Assessment to contextualise the capacity of Belo Horizonte to implement an Intelligent Mobility Solution (IMS) and set goals to be achieved with the intervention;
- Mapping and evaluating technological alternatives for the Intelligent Mobility in the Expresso Amazonas (IMEA);
- Viability Assessment to recommend an Intelligent Mobility System (IMS) for the Expresso Amazonas, including Pilot monitoring and evaluation of technologies alternatives;
- Pre-implementation Stage: a) Design of the intervention; b) Business Model; c) Bid process management; and d) IMEA Action Plan.**
- Implementation. Help key stakeholders to build capacity and enable the sustainability of the intervention; Support the implementation of data architecture and analytics; and Provide a strategy to scale up intelligent mobility system to entire system of Belo Horizonte

In 2017 Belo Horizonte promoted an innovative project called the Mobility and Urban Inclusion Programme in Belo Horizonte with the aim of integrating urban mobility and transport planning with the upgrade of formal and informal low-income settlements. The project strategy focuses on two key interventions: 1) The optimization and integration of the transport system along the Amazonas Corridor, the so-called Expresso Amazonas; and 2) The urban renewal of an informal settlement called Vila Viva Cabana do Pai Tomas through the improvement of the infrastructure system, the upgrade and creation of public spaces and the development of social housing units for resettlement. The project is currently under negotiation for finance with the World Bank, but the Municipality has already allocated a budget to cover part of it. Such an initiative is in alignment with the GFCP proposed intervention and could amplify significantly its transformative potential.
### Thematic cluster:
Data systems for multi-modal mobility

### Objectives**/**
The main objective is the adoption and optimization of a technology to support a more efficient transportation and mobility management system while, at the same time, encouraging public transport as the main mode of transportation. Specifically, the new technology would support supervision and counting of passenger movements in the public transport vehicles, including boarding and alighting at the stations. *p.11

The main objective** (modified) of the intervention is to provide better service focused on accessibility, gender sensitivity and inclusion through implementation of an intelligent mobility solution that will enable BHTRANS to understand travel needs and patterns of public transport users. The intervention proposes to:

- Recommend and support the implementation of an Intelligent Mobility Solution integrated into the current system of Belo Horizonte;
- Identify and map the gaps and areas of opportunities for ITS in the current and future mobility system;
- Provide a comprehensive plan to roll out an Intelligent Mobility in Expresso Amazonas, including goals to be achieved and an action plan;
- Provide a business model for stakeholders;
- Provide capacity building related to intelligent mobility; and
- Provide a stakeholder engagement plan to ensure public acceptance of the proposed solutions.

### Alignment with SDGs, NUA and other UN-Habitat strategies
Reference is made to:*
- The SDGs 1, 3, 4, 5, 8, 9, 11 and 13;
- Reference to NUA’s commitment to work towards transit-oriented development by promoting public transport, walking and cycling.

**SDGs**

**SDG 3:** Safer, greener and more accessible public transport will ensure healthy lives and promote well-being, improving air quality (SDG 3.9) and reducing road traffic accidents (SDG 3.6).

**SDG 8:** By making Belo Horizonte a more accessible and vibrant city, the intervention would enhance access to job opportunities (SDG 8.5) and support productive activities, decent job creation, and entrepreneurship (SDG 8.3).

**SDG 9:** Affordable and accessible mobility will help to optimise infrastructure, increasing reliability, sustainability and resilience (SDG 9.1).

**SDG 11:** By enhancing the use of public transport and integrated transport planning (SDG 11.2), as well as helping inclusive urbanization improving connectivity and accessibility of informal and low-income neighbourhoods (SDG 11.3), intelligent mobility could actively contribute to the creation of a sustainable social environment.

**SDG 13:** Integrated planning will also support Belo Horizonte’s efforts in addressing climate change, promoting mechanisms for effectively lowering greenhouse gas emissions (SDG 13.2).

**SDG 17:** Intelligent mobility systems will increase the capacity of the local government in data management and analysis (SDG 17.18), with improved knowledge sharing, expertise and technology (SDG 17.16) enhancing revenue generation as well as promoting the participation of the private sector (SDG 17.1).
NUA*

- Intelligent mobility and connectivity: AFINUA 3.1 and 3.3
- Access to basic services, particularly in unplanned areas: AFINUA 4.5 and 5.4
- Promotion of sustainable density and mixed uses: AFINUA 3.4
- Land value capture and sharing mechanisms: AFINUA 5.5
- Better mobility system and its integration will include tools for fostering inclusive local economic development: AFINUA 4.4

f. Primary target group and stakeholders:**

The primary target group are members of low-income households (men, women, youth and disabled people) living in informal settlements that commute from their residential areas to their work places, educational institutions, and social service providers. (The target group(s) is only indirectly defined)

Key stakeholders are those who are directly involved in the planning, design, conception and implementation of the intervention. They include:

- BHTRANS: Transport and Traffic Authority of Belo Horizonte;
- COP-BH: Centre of Operations in Belo Horizonte;
- PRODABEL: Information Company of Belo Horizonte;
- SUMOG: Sub-secretariat for the Modernisation of Management;
- State Government;
- SETRA BH: Bus Operators Union of Belo Horizonte; and
- SINTRAM: Bus Operators Union of Metropolitan Area of Belo Horizonte.

Primary stakeholders are those who have interest in the utility of the deliverables of IMEA, such as the use of the database generated to apply to other ends. These stakeholders will also contribute to guarantee the IMEA is aligned with GFCP objectives. They include:

- Municipal Secretariat of Urban Policy (SMPU);
- Municipal Secretariat of Economic Development (SMDE);
- Municipal Secretariat of Environment (SMMA);
- Housing and Urbanisation Company of Belo Horizonte (URBEL);
- State Secretariat for Transport and Public Works (SETOP);
- Civil Society: Nossa BH and other potential organisations/councils to be defined; and
- Academia: Federal Centre for Technological Education of Minas Gerais (CEFET-MG), Federal University of Minas Gerais (UFMG), Pontifical Catholic University of Minas Gerais (PUC-MG).

Secondary stakeholders are those who are attractive in terms of supporting the IMEA due to their specific nature and/or resources. They include:

- Ministry of Planning, Development and Management;
- Ministry of Science, Technology and Innovation;
- Brazilian Company of Urban Trains (CBTU); and
- Development banks and agencies:
  a. National Bank for Economic and Social Development (BNDES);
  b. CAIXA (Brazilian Bank);
  c. World Bank;
  d. Agence Française de Développement; and

g. Specific outputs of the intervention are*/**: 

- Baseline data and IMEA Plan
- Assessment of technological alternatives and costs
- Overview of funding sources
- Feasibility assessment and recommendations
- Business model
- Specification of services
- IMEA action plan
h. **Short-term outcomes***

Data plays a critical role in how evidence-based decisions are made and how evidence-based policies, strategies, plans and implementation programmes are developed. Better data availability and analysis capacity on the main transport corridor of BH will bring increased capacity to prioritize strategies and tools for decision-making based on informed statistics and other holistic projections. At the same time, the capacity-building component of the intervention will contribute to reaching the level of maturity of human resources within the Municipality of Belo Horizonte to work and sustain intelligent mobility technologies. It will provide the necessary tools for evaluating and monitoring the impact of urban plans, policies and strategies within the local administration. This increased availability of data and increased evidence-based decision-making capacity will also improve the ability to plan economic growth in an inclusive and sustainable way. It will improve accessibility to employment and promote innovative professional opportunities while also enabling a reduction of time and resources toward an efficient and environmentally-safe urban development.

i. **Medium-term outcomes***

Improving the monitoring and the management of the public transport network, the intervention would improve the efficiency of the transport system and allow the delivery of a more convenient and reliable public transport and better integration of transport modes. The availability of quality, accessible, timely and reliable data disaggregated by income, sex, age, ethnicity, disability and geographic location could be reflected in the planning and delivery of a public transport options that can target the needs of informal settlement, as well as women, elders and vulnerable groups. In the middle-term, this could contribute to increased access to public transport for low-income communities in the catchment area of the Expresso Amazonas. It could also help in improving safety and security of stations and buses, especially for women and elders. Therefore, in the mid-term, the city could experience an increased use of public transport especially by woman, the elderly, youth and people with disabilities. Better connectivity can also improve the life condition of the low-income communities around the Expresso Amazonas, thanks to access to jobs and services. Finally, by including methods to account for user experiences in the measurement of the service, citizens’ participation can be increased, while embedding gender equality approaches and target vulnerable groups. This will enhance the ability of the municipality both in the elaboration of inclusive and more sustainable plans and strategies and in their monitoring and evaluation processes.

j. **Long-term impact***

In the long-run, the city can experience a reduction of traffic congestion due to a broad use of efficient public transport and a decrease in the use of private cars. This can lead to a reduction of Greenhouse Gas emissions and increased air quality, enhancing citizens health prevention and the city liveability. Increased number of riders will increase public revenue generation due to higher payments from user fees. At the same time, transport-oriented-development approaches around the Expresso Amazonas corridor could increase land values and open the possibility for land value capture and an increase in public revenue generation. Expanding intelligent mobility systems to the whole municipal and metropolitan area, Belo Horizonte could also experience a better-integrated transport planning not only using technology for increasing the service efficiency but extracting data for better governance and integrated management. This could result in plans, frameworks and approaches to promote a more sustainable, resilient and socially-inclusive Belo Horizonte.

k. **Technical viability***

Capacity and market maturity: Belo Horizonte has the highest density of IT enterprises in Brazil and one of the biggest start-up communities are located in the city within San Pedro Valley. While there are some specialized data departments within the municipality such as the semi-private company PRODABEL “Empresa de Informática e Informação do Município de Belo Horizonte”, professionals responsible for transport planning within BHTrans need further capacity in data analysis and management. While this is addressed in the intervention through capacity building, this can pose a moderate barrier for the success of the intervention.

**Financial:** The GFCP will support the planning and design of the intervention in Belo Horizonte. There is funding identified for the Build Phase with partial funding being provided by the Ministry of Cities. The project is also already under negotiation for financing from the World Bank in form of concessional loans.
The city has sufficient capacity to identify long-term revenue streams that can fund these loans as well as support the long-term operation of the intervention. Moreover, Belo Horizonte has adequate enabling conditions to use public-private partnerships, which can be an adequate instrument to finance the intervention.

**Legal:** There is a political will and complimentary legislation to facilitate the intervention in Belo Horizonte. There is a strategic programme of the Municipality called Belo Horizonte Cidade Inteligente (Smart City) to promote the ICT sector and technological infrastructure in the city. A clear commitment of the city to invest in collective mobility also aligns with the intervention. Some barriers could be associated to a lack of coordination and standardization of data across city departments as well as lack of privacy laws.

**Spatial:** On the spatial side, the intervention has low barriers. Population densities and land use plans align with the plan for the Amazonas Corridor, being one of the main corridors of the city, situated in highly dense residential areas and connecting main economic and industrial nodes in the city. Moreover, there are comprehensive transport plans in the city that align with the purpose of the intervention in investing into increased efficiency of the Amazonas Corridor, as a main road access in the city.

**Barriers related to contextual factors**

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Planning &amp; Design</th>
<th>Build</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Market Maturity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Financial</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Legal</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Spatial</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

Given that there are already many activities to increase transport efficiency in Belo Horizonte through increased investments in data infrastructure and management, the intervention in Belo Horizonte has a low transformative impact. Currently, BHTrans is implementing an Intelligent Collective Transport System (Sistema Inteligente de Transporte Coletivo – SitBus) through which 1000 cameras and sensors have been installed to monitor traffic, numbers of vehicles and numbers of people at bus stops. Nevertheless, it is important to mention that the intervention focuses in one of the main transport corridors of the city and that it does bring an innovative approach in its purpose to combine it with capacity building to BHTrans.

The overall likely success rate for each of the Implementation Phase's the sub-phases has been assessed at 74% for the Planning and Design Phase, 74% for the Build Phase, and 66% for the O&M Phase. The overall likelihood of success is estimated at 71%.

**Risks**

The following risks have been identified:

- Change of current government administration which could put the intervention at risk;
- Lack of expertise or knowledge to analyse and interpret big data;
- Legal problems to import international equipment;
- Lack of passenger's engagement to interact with the IMS
- Delay on the bidding process may compromise the implementation stage
- Resistance from bus operators to accept new ideas and proposals of technologies
- Lack of adequate provision for privacy of transportation users
- Lack of capacity to translate data into information that can effectively support decision-making
- Lack of adequate provision for privacy of transportation users
- Lack of capacity to translate data into information that can effectively support decision-making
| n. | **Consulting expertise:****  
11 team members have been identified with various expertise. The duration of their assignment varies from 8 to 35 months. Social scientists are not included. |
|---|---|
| m. | **Deliverables**** (See also Chapter 5 of the ToR for more details)  
- City Diagnostic report on data lifecycle, human resources and public transport operation and plans;  
- Analysis Report of Gaps and Opportunities for ITS within the current mobility system;  
- Intelligent Mobility in Expresso Amazonas Plan and Action Plan;  
- Framework of intelligent mobility technologies alternatives;  
- Engagement Missions UK-Brazil;  
- Launch a call for proposals for technological alternatives to the status quo;  
- Pilot monitoring and evaluation of technological alternatives;  
- Recommendation and scalability of the Intelligent Mobility Solution (IMS);  
- Business model;  
- Stakeholder engagement plan;  
- Support the bid process; and  
- Implementation Plan for an integrated Intelligent Mobility Solution for Expresso Amazonas. |

Sources: *City Context Report. **ToR. ***TVA.
Themes related to the evaluation questions

<table>
<thead>
<tr>
<th>EQ</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><em>Consistency with national goals, policies, strategies and urban development plans.</em> <strong>&lt;br&gt; Bello Horizonte is the capital of the State of Minas Gerais, Brazil’s second most populous state. The is some mentioning of the State’s future development scenario. The main emphasis is on the metropolitan region and the City of Bello Horizonte. The IMEA intervention will be related to the plans of the Metropolitan Region of Bello Horizonte, Bello Horizonte City and 34 municipalities.</strong></td>
</tr>
<tr>
<td>2.</td>
<td><em>The project’s responsiveness to SDG, NUA and other UN-Habitat strategies.</em>&lt;br&gt; The CCR refers to the following SDGs: 3, 8, 9, 11, 13 and 17&lt;br&gt; The CCR refers to the following AFINUA key items: 3.1, 3.3, 3.4, 4.4, 4.5, 5.4 and 5.5&lt;br&gt; The ToR refers to the following SDGs: 1, 3, 4, 5, 8, 9, 11 and 13&lt;br&gt; The ToR makes reference to NUA’s commitment to work towards transit-oriented development by promoting public transport, walking and cycling.</td>
</tr>
<tr>
<td>3.</td>
<td><em>Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens (Implementation Phase).</em>&lt;br&gt; The intended outputs and outcomes are relevant for local authorities and citizens. The relevance for citizens varies according to income category, location and type of residential area.&lt;br&gt; The dialogue during the Charrette session (9 August 2018) and Validation Workshop (1 November) demonstrated interest and a high degree of consensus among the participants.</td>
</tr>
<tr>
<td>4.</td>
<td><em>Inclusion of vulnerable groups in the project design and implementation</em>&lt;br&gt; There is a clear intent to include vulnerable groups in the intervention, but the intent could have been more clearly elaborated and analysed.</td>
</tr>
<tr>
<td>10.</td>
<td><em>Achievement of outcomes during the Strategic Development Phase</em>&lt;br&gt; • City officials were well aware of the challenges confronting the Expresso Amazonas Corridor. An enhanced understanding of potential solutions by using Intelligent Mobility was achieved.&lt;br&gt; • A framework for the intervention has been conceived and validated consistent with the anticipated impact.&lt;br&gt; • Targeted training has been conducted preparing city officials for the Implementation Phase.</td>
</tr>
<tr>
<td>11.</td>
<td><em>The extent to which city level stakeholders have been involved in the design in the project intervention</em>&lt;br&gt; BH Trans – Transport and Transit Company of the Municipality of Bello Horizonte has participated jointly with other municipal offices (housing, economic development, environment, infrastructure, planning &amp; budget, urban policy, security &amp; prevention, and information. The Secretariat for Transport and Public Works has also participated. Besides the private sector, academia and NGOs have taken part.</td>
</tr>
<tr>
<td>12.</td>
<td><em>Cooperation with other partners</em>&lt;br&gt; Cooperation is planned with Ministry of Planning, Development and Management and Ministry of Science, Technology and Innovation – as well as the Brazilian Company of Urban Trains (CBTU). Consultations will be held with development banks and agencies to secure funding for the intervention’s investments.</td>
</tr>
<tr>
<td>13.</td>
<td><em>Changes made during the identification stage</em>&lt;br&gt; The thrust of the intervention has remained on the Expresso Amazonas.</td>
</tr>
<tr>
<td>14.</td>
<td><em>Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights</em>&lt;br&gt; Women represent 70% of users of the public transport system in Bello Horizonte. The importance of gender equality is well recognised in the intervention documents. Issues related to youth, climate change and human rights (use of personal data) could be further elaborated.</td>
</tr>
</tbody>
</table>
The generation and publication of disaggregated data by the Intelligent Mobility System (IMS) in Belo Horizonte will be emphasised to support public policies that meet the practical and strategic interests of vulnerable groups. This will lead to an improved accessibility to public transport for low-income communities as well as woman, the elderly, youth and people with disabilities.*

15. **Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase**
The overall likely success rate for each of the Implementation Phase's the sub-phases has been assessed at 74% for the Planning and Design Phase, 74% for the Build Phase, and 66% for the O&M Phase. The overall likelihood of success is estimated at 71%. A moderate barrier is the professional capacity with BHTrans, which needs strengthening as regards transport planning, management and data analysis.

Summary of short-term outcomes:
- Improved data availability and analysis capacity on main transport corridors;
- Adequate municipal capacity to operate and sustain intelligent mobility technology;
- Capability to plan economic growth in an inclusive and sustainable way.

Summary of medium-term outcomes:
- More reliable, comfortable and convenient transport and better integration of transport modes;
- Improved public transport planning due to availability of reliable and disaggregated data;
- Increased access to public transport for low-income communities in the catchment area of the Expresso Amazonas;
- Increased usage of public transport by women, the elderly, youth, and people with disabilities;
- Improved livelihood conditions in low-income settlements due to better connectivity and regularity of public transport services;
- Enhanced municipal capacity for preparation of strategies and plans for urban mobility.

Summary of emerging impact:
- Relatively increase of public transport and decrease of private cars;
- Increased cost-effectiveness of public transport due to higher revenue generation;
- Increased public revenue generation due to land value captures;
- More effective transport planning by expanding intelligent mobility systems;
- More sustainable, environmentally friendly, resilient and socially-inclusive urban environment.

16. **The city’s ownership and its likely enhancement of sustainability**
The underlying challenges for the intervention are well recognised by the municipal officials and will thus contribute to enhancement of the sustainability of the results – once these have been achieved.

17. **Encouragement of further collaboration among city stakeholders**
The undertaking of the intervention is likely to require substantial inter-municipal coordination and willingness for participation among the target groups.

18. **City’s capacity in place to sustain attained results**
The professional capacity to operate and maintain the applied technology and equipment should be developed in parallel with the Build Phase, which would also contribute to enhancing sustainability. Inter and intra municipal coordination should be addressed to ensure effective communication and decision-making during the O&M Phase.

Sources: *City Context Report. **ToR. ***TVA
### 3. DURBAN

**City:** Durban, South Africa  
**Project/intervention:** Enhanced institutional and governance coordination for supporting alignment of stakeholder plans working on Transit Oriented Development

**Extracts from intervention documents**

<table>
<thead>
<tr>
<th>a. <strong>Context</strong>*</th>
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</table>
| The eThekwini Metropolitan Municipality (eMM) comprises Durban city and its surrounding towns. The eMM had formerly seven independently-governed local councils but was in 2000 transformed into one City Council. The city area is approx. 2,297 km² with 3.5 million inhabitants. The population growth is affected by high rates of in-migration. Many migrants reside in informal settlements in the urban periphery. Apartheid and post-Apartheid planning have left as a legacy, a deep mismatch between areas of residence and areas of employment concentration. Durban has a significant base of public transit ridership, but most riders are economic disadvantaged. The major issue is the high social and economic costs, especially in terms of residential patterns, due to the current urban structure.  
  
  eMM is currently focusing on achieving a more spatially efficient, inclusive, integrated and compact urban form where employment, social services and opportunities are easily accessible and connected to all parts of the city. In this regard, a Transit-Oriented Development Strategy (TOD) was identified transversally by several planning instruments as a key spatial response to advance socio-spatial transformation. However, certain gaps have been identified which hamper the implementation of these strategies. These include a lack of:* &**  
  
  • Coordination among policies, regulations and planning;  
  • Coordination among various stakeholders;  
  • Experience in private investors’ involvements and insufficient financing mechanisms;  
  • Technical capacity within the relevant eMM departments.  
  • Gaps in public infrastructure provisions;  
  • Inadequate land value capture, public-private partnerships, finance and incentive mechanisms;  
  • Lack of supportive data to make informed decisions. |

<table>
<thead>
<tr>
<th>b. <strong>The intervention</strong>*</th>
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</table>
| Technical support is required to develop an organisational structure by identifying sector roles and responsibilities in planning, implementing and managing TOD within the municipality and the lead and coordinating function for aligned inter-governmental and private sector initiatives. Furthermore, technical support is also required to identify overarching strategy and policy statements for TOD especially for the C2 and C3 corridors. This will be based on a combination of the stakeholders’ vision, the city’s goals, national development priorities and best management practices in TOD, best practices in land use management, transport and financial modelling, utilisation of value added in public and private land, and context-specific urban design and urban management.*  
  
  The strategy and supportive policy statements will seek to unlock the development potential of the corridors in relation to properties within the trunk corridors and feeder routes. This will identify a series of catalytic investments to allow all public interventions to be focused in a spatial context to leverage private and public investment.*  
  
  The rationale of the proposed intervention is to design and develop an institutional model and governance structure with the fiscal and financial powers that function as a special purpose vehicle (SPV) for enhanced co-ordination of TOD planning, implementation and management. It is envisaged that this institutional model will entail the establishment of an entity that will have jurisdiction over the entire municipal area and incorporates and co-ordinates all participating stakeholder plans and initiatives under a single roof.* |

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*extracted content*
c. **Thematic cluster**: Multi-modal mobility strategies and plans; and Urban strategies and plans.

d. **Objectives**
The overall objective of the proposed intervention is to develop a multi-sectoral institutional model that acts as a coordination tool to plan, implement and operationalise TOD and to formulate a change management process to foster alignment of stakeholder plans, both public and private sector. (Slightly different from the ToR).

e. **Alignment with SDGs, NUA and other UN-Habitat strategies**
Reference is made to:
- Increased accountability: SDG 16 (targets 16.6 and 16.7)
- Increased capacity and coordination: SDG 17: (targets 17.1, 17.14, 17.17, 17.8)
- Entrepreneurship and reduced inequality: SDG 8 & 10 (targets 8.3 and 10.1)
- Inclusive urbanisation and resilient infrastructure: SDG 9 & 11 (targets 9.1 and 11.3)
- Increased access to basic services: SDG 7 & 6 (targets 6.1, 6.2 and 7.1)

Shared vision of NUA (Clause d) and Article 118.
AFINUJA: 1.4, 1.6, 3.1, 4.2, 4.4, 4.5, and 5.4.

f. **Primary target group**:
- Residents in the previously disenfranchised areas;
- Majority of the city’s residents have limited access to safe, efficient, affordable and scheduled transport;
- Universal accessible transport to people with mobility constraints is needed, e.g. people with disabilities.

g. **Specific outputs** of the intervention are:
- Development of a baseline: Analysis of the existing mobility situation and trends, as well as existing plans, policies and legal frameworks;
- Stakeholder engagement and consultation plan;
- Change Management Framework: governance and organizational structures, implementation mechanisms and tools for efficient planning, implementation and operationalization of TOD Strategy and policy statements for TOD Implementation; and
- Strategy and policy statements for TOD: Overall intervention design and set up, viability, risk management plan and targets, together with a communication and marketing strategy.

h. **Short-term outcomes**
Through enhancing the institutional governance for supporting Transit-Oriented Development (TOD), the intervention could promote the implementation of an organizational structure and operational polices to lead and coordinate the alignment of governmental and private sector initiatives and plans. The Management Framework proposed by the intervention will support a transversal management approach, increasing the ability of eMM for planning, implementation and management of TOD for improved corridor efficiencies. Mainstreaming of participatory and cross, inclusive and pro-poor approaches will ensure the embedding of cross-cutting issues into the transit-oriented strategies and plan.

i. **Medium-term outcomes**
Mechanisms and tools for efficient planning, implementation and operationalisation of TOD Strategy for Durban will help the elaboration of strategies to promote compact, mixed-use development along rapid transit corridors and nodes, intensifying uses while sustaining walkability to provide adequate first and last mile connectivity.

Jointly with the other Durban intervention “Improved data integration, collection and analysis to facilitate collaborative informal settlement action”, the two interventions could develop a mainstreaming approach for inclusive urban regeneration, densification and transport corridor development which would link social, economic and spatial improvement.
Evaluation of the Strategic Development Phase for the Global Future Cities Programme

j. **Long-term impact***
A well-planned, implemented and operationalised transit-oriented development will improve mobility within the metropolitan area while also increasing efficiency, quality and reliability of public infrastructure. The deployment of land value capture mechanisms will strengthen municipal finances and increase municipal capacity for revenue generation.

At the same time, it will accelerate spatial integration and service delivery along the corridors and nodes, facilitating the distribution of a greater investment flow along densification corridors. In particular, the better connection between township nodes and Central Business Districts, with subsequent better access to basic services, livelihood opportunities and amenities, will bring higher rates of sustainable and inclusive economic growth throughout the entire eThekwini Municipality.

k. **Technical viability***
Capacity and market maturity: The main barriers relate to the attitudes of professionals to new ways of working and methodologies that integrate different aspects of planning. Not all spatial planners are comfortable with nuanced planning methodologies. This may impact upon the uptake and reception of the intervention by planners deeply rooted in traditionally siloed fields.

Financial: For the actual implementation of the enhanced coordination for supporting plans for TOD beyond the GFCP, the city will have to undertake large investments in infrastructure and related transport services. This may pose challenges in coordination and management of investments. Barriers could include the siloed approach still taken to urban development at the municipal level.

Legal: The enhanced coordination for supporting plans for TOD does not face major legal barriers. In the short term, it is essential that policy-makers in the area of transport are made aware of the Programme's attempts to bring together TOD plans. In the medium and long term, TOD should become a larger part of all urban planning and development strategies.

Spatial: For the intervention on enhanced coordination for supporting plans for TOD, it is also imperative that in build phase, TOD plans continue to reflect the city as it changes and develops overtime, and do not ignore how the city's priorities change overtime. In the operations phase, it is essential that data and information from both interventions feed into a larger integrated system for ensuring funding and financing can be directed in a sustainable way.

**Barriers related to contextual factors**

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Planning &amp; Design</th>
<th>Build</th>
<th>Operations</th>
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<tbody>
<tr>
<td>Capacity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
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<tr>
<td>Market Maturity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
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<tr>
<td>Financial</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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<tr>
<td>Legal</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Spatial</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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</tbody>
</table>

There is a medium transformative potential for the intervention on institutional coordination, given its potential to increase cross-sectoral planning and remove traditional siloes from the fields of planning especially in informal areas, as well as transport planning.

The overall likely success rate for each of the Implementation Phase's the sub-phases has been assessed at 66% for the Planning and Design Phase, 66% for the Build Phase, and 66% for the O&M Phase. The overall success rate is thus 66%.
### I. Risks**

The Consultant is expected to conduct a strategic impact assessment as part of the final phase of the project. Impact features shall be identified incl. expected shift in modal share towards public transport, walking and cycling, improvements on road safety, accessibility levels, environmental considerations such as emission and air pollution reduction.

Some risks include those already identified during the charrette in October 2018, which included the following:

- Corridor development is currently underway and there are already a number of challenges.
- There are existing departmental siloes that are hindering integrated corridor development which are not sufficiently unpacked and mitigated at this stage;
- Institutional attitudes towards the TOD are still rigid and may hinder acceptance of the proposed intervention;
- Lack of transversal financing models may hinder the implementation of the intervention;
- Risks of displacement and gentrification. Consider concept of Equitable TOD and propose mitigation strategies with a pro-poor focus.
- Strategies have been developed as part of the GO! Durban project and negotiations are currently underway aimed at exploring integration and inclusion of informal minibus industry.

### m. Deliverables

The conceived deliverables have been related to a four phased approach (Section 3.2). The four-phased approach is proposed for this project:**

- Phase 1, short-term: identify and document best practices in institutional and financing modalities for the TOD and stakeholder mapping;
- Phase 2, short-term: establish a stakeholder engagement process to develop a short-term transitional structure and propose an organisational model/special purpose vehicle (SPV) as a long-term measure to serve as a co-ordination tool for the planning, implementation and operationalisation of the TOD to foster alignment of stakeholder (both public and private sector) plans;
- Phase 3, short and medium term: formulate a change management process and tools to align stakeholders to the transition of organizational/SPV goals and processes to effect change by implementing strategies and policies; and
- Phase 4: identify and develop overarching strategy and policy instrument for the TOD.

It is envisaged that eThekwini will set up a multi-disciplinary team with the requisite skills to engage throughout the project cycle with nominated representatives both from within the municipality and other external stakeholders. These will collectively form a Project Steering Committee chaired by the Deputy City Manager (Human Settlements, Engineering Services and Transport Cluster). This team will represent the interests of the city and will engage directly with both the UKFCO and the Consultant.**

### n. Consulting expertise:**

A wide variety is of expertise is proposed. 12 disciplines are mentioned. Social scientists are not included.

Sources: *City Context Report. **ToR. ***TVA.
### Themes related to the evaluation questions

<table>
<thead>
<tr>
<th>EQ</th>
<th>Theme</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Consistency with national goals, policies, strategies and urban development plans.</strong>&lt;br&gt;The National Development Plan (NDP) Vision 2030, which emphasises the importance of spatial transformation of South African cities. The spatial component of NDP is the Integrated Urban Development Framework (UDF).&lt;br&gt;One of the key instruments aimed at supporting these restructuring efforts is the National Treasury’s Urban Network Strategy (UNS). The UNS is a transit-oriented development (TOD) investment planning, development and management approach. Under this strategy the National Treasury is implementing a Cities Support Programme (CSP). Key to the CSP is spatial targeting. The UNS provides a systematic approach to leverage private sector investments in strategic locations via a co-ordinated set of spatially-targeted interventions.<strong>&lt;br&gt;The municipality has made efforts to initiate projects in line with the UNS and the Built Environment Performance Plans (BEPP). These are supporting the transformation of the spatially fragmented apartheid city to one that is more spatially efficient and inclusive and have been identified as transformation corridors. The implementation of the GO! Durban’s Integrated Public Transport Network (IPTN) is one of the major investment programmes that would have a positive impact on transforming the city.</strong>&lt;br&gt;The BEPP follows the strategic direction set in the Spatial Development Framework (SDF) and there is a high level of accord between the spatial priorities of the SDF and the BEPP (a short-term, spatial focus and prioritised, urban restructuring plan). Both plans give prominence to promoting economic growth, higher residential densities and mixed land uses along the public transport corridors of the GO! Durban IPTN, granting momentum to a transit-oriented development (TOD) approach. eThekwini’s strategic planning approach to development is outlined in its Integrated Development Plan (IDP), a statutory requirement in terms of the Municipal Systems Act (Act 32 of 2000). The Spatial Development Framework is a core component of the IDP. The IDP is underpinned by strategic global, national, regional and local policies. The priorities, values, goals and principles are detailed as part of the strategic approach of the IDP. The Municipal Spatial Development Framework (MSDF 2018/19) is a key spatial transformation tool which guides the implementation of the IDP spatially. The Built Environment Performance Plan (BEPP), a requirement of National Treasury, has been prepared and adopted by the Municipal Council simultaneously with the IDP and SDF. The BEPP is a pre-requisite for the receipt of the nationally-allocated performance-based Integrated Cities Development Grant (ICDG) funding.**</td>
</tr>
<tr>
<td>2.</td>
<td><strong>The project’s responsiveness to SDG, NUA and other UN-Habitat strategies.</strong>&lt;br&gt;The CCR refers to the following SDGs: 6, 7, 8, 9, 10, 11, 16 and 17&lt;br&gt;The CCR refers to the following AFINUA key items: 1.4, 1.6, 3.1, 4.2, 4.4, 4.5 and 5.4&lt;br&gt;The ToR refer to SDG 11, and does not include a reference to the AFINUA key items</td>
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<tr>
<td>3.</td>
<td><strong>Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens.</strong>&lt;br&gt;Based on the context analysis, the intervention appears highly relevant. The dialogue during the Charrette session (27 October 2018) and Validation Workshop (29 November) demonstrated interest and a high degree of consensus among the participants (mainly municipal staff).</td>
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<tr>
<td>4.</td>
<td><strong>Inclusion of vulnerable groups in the project design and implementation</strong>&lt;br&gt;Limited reference is made to inclusion of vulnerable groups in project design and implementation in the CCR and ToR. Limited consultations with the citizens’ stakeholder groups have been conducted. In-depth consultations have been conducted with senior municipal staff on the strategic framework and citizens’ needs for commuting and transformation of the urban settlement structure.</td>
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<tr>
<td>10.</td>
<td><strong>Achievement of outcomes during the Strategic Development Phase</strong>&lt;br&gt;• An enhanced understanding of solutions to challenges related to urban sprawl and commuting problems through the Transit Oriented Development approach and associated urban planning has been achieved;&lt;br&gt;• A framework for potential interventions has been outlined related to the anticipated impact – subject to further detailed planning during the next phase.&lt;br&gt;• Targeted training has been conducted preparing city officials for the implementation phase.</td>
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</table>
11. **The extent to which city level stakeholders have been involved in the design in the project intervention**

National, provincial and municipal level public stakeholders have been identified, as well as CSOs, academia and the private sector. The Charrette Session included participants mainly from the eMM, one from GiZ, three from the sugar plant, one from KwaZula-Natal University and one from Durban University of Technology. The Validation Workshop included mainly municipal officials and a representative from the eThekwini Transport Authority.

12. **Cooperation with other partners**

Consultations were held with potential partners, but a cooperation framework has not yet been formally established – and is only like to be so during the Planning and Design Phase.

13. **Changes made during the identification stage**

The Intervention concept related to the corridor development has remained unchanged. The number and selection of specific corridors have been debated, but the final priorities may only be made during the Planning and Design Phase.

14. **Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights**

The cross-cutting issues have not been elaborated to any great extent. The consultant is tasked with “preparation of an approach to ensure that cross-cutting issues are integrated into the intervention.

15. **Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase**

The overall likely success rate for each of the Implementation Phase’s the sub-phases has been assessed at 66% for the Planning and Design Phase, 66% for the Build Phase, and 66% for the O&M Phase. The overall success rate is thus 66%.

**Short-term outcome summary:**
- Organisational structure for supporting TOD;
- TOD operational policies;
- Management framework for improved corridor efficiency;
- Transit-oriented strategies and plan.

**Medium-term outcome summary:**
- Mechanisms and tools for operationalisation of the TOD strategy;
- Strategies for promotion of compact and mixed-use development along rapid transit corridors and nodes;
- Approach for urban regeneration, densification and transport corridor development.

**Long-term impact summary:**
- Improved mobility within the metropolitan area;
- Improved quality and reliability of public infrastructure;
- Strengthened municipal finance due to land value capture;
- Accelerated spatial integration and service deliver along the corridors and nodes;
- Increased investment flows along the corridors;
- Improved connection between township modes and the Central Business District;
- Higher rates of sustainable and inclusive economic growth.

16. **The city’s ownership and its likely enhancement of sustainability**

The underlying challenges for the intervention are well recognised by the municipal officials and will thus contribute to enhancement of the sustainability of the results – once these have been achieved.

17. **Encouragement of further collaboration among city stakeholders**

The undertaking of the intervention will require substantial coordination of a varied group of city stakeholders having each their respective interests.
18. City’s capacity in place to sustain attained results
The city has a good professional capacity, but not all planners are comfortable with nuanced planning methodologies – the planners are deeply rooted in traditional siloed fields.

Sources: *City Context Report. **ToR. ***TVA.
4. ABEOKUTA

City: Abeokuta
Project/intervention: Development of transport policy and capacity building

Extracts from intervention documents

a. Context*

Abeokuta is the largest urban centre and capital of Ogun State, located in South West Geopolitical Region of Nigeria. Ogun State lies to the north of Lagos State, to the west of Ondo State, and to the south of Oyo State and Osun State. The population was 700,000 in 2013 according to the population census.

Abeokuta is built in the centre of the Lagos-Ibadan extended urban region or conurbation, and forms part of the larger metropolitan economic area. The Lagos-Ibadan economic corridor is key in this regard, highly supported by key infrastructure such as the E1 Expressway between Lagos and Ibadan. The A5 Expressway also connects Lagos with Abeokuta, offering an alternative route to Ibadan. The A1 runs parallel to the E1, via Sagamu, and collectively, these three major arteries are instrumental for the concentrations of businesses and industrial activities in the area, as well as trade exchanges within the region, over 80 percent of which passes through Ogun State.

This strategic location, matched with presence of diverse local resources, rapid population growth and enhanced political status has generated dynamic economic activity. A few large-scale industrial establishments, and numerous medium and small-scale plants engaged in saw milling, are present in the town, as well as business activities mainly in trade, personal services, finance and insurance services. Modern Abeokuta is also an agricultural trade centre and an exporting point for various commodities. Furthermore, the local, state and federal governmental agencies are also a big employer.

The Ogun State consists of twenty local government areas (LGAs). The City of Abeokuta was originally situated within two LGAs, Abeokuta North and Abeokuta South. However, following its rapid urbanization, the built-up area has exceeded the existing administrative and institutional boundaries, spreading across several LGAs in Awekoro, Obafemi-Owode and Odeda. Although under state mandate Ogun State is responsible for overall urban and physical planning, there are no specific institutional structures able to oversee governance and urban management for the overall metropolitan area, also referred to as Greater Abeokuta.

During the process of identifying and finally defining tentative interventions for Abeokuta, governmental entities and other actors were consulted on urban issues through - bilateral meetings and focal group discussions with the Ogun State Ministries of Urban & Physical Planning and Works & Infrastructure, as well as the Bureau of Transportation. A larger workshop with local government officials and stakeholders from civil society, the private sector, and academia has facilitated the identification and definition of two specific interventions within areas that match the priority programmes and processes currently underway within the city. Ogun State together with the UK FCO and UN-Habitat, has identified the following two areas of interest and relevance:

- Preparation of a Master Plan & Guidelines for Urban Renewal
- Preparation of a Public Transport Policy

The first intervention aims to provide technical assistance to the development of a Master Plan for greater Abeokuta, including a framework guiding urban renewal projects and upgrading informal settlements. The second intervention will identify a set of considerations and specific tools to tackle mobility challenges, with the aim of preparing a Policy for Public Transport for Abeokuta’s urban core. The Policy will potentially be expanded to the larger State of Ogun and provide input to other strategic urban development documents. This Fact Sheet is concerned with the second intervention.
b. **The intervention***

Abeokuta faces a number of challenges within the transport sector, for example, congestion, air pollution, limited choices for alternative transport options, long travel times etc. In particular, the public transport sector is underdeveloped, meaning that people are reliant on mainly unregulated public transport options that are mainly operated by private companies. To address this situation, the Ogun State Government has, over time, initiated various interventions in the public transport sector, like High Occupancy Vehicles for Mass Transit. However, most often these schemes have, for various reasons, either not been fully implemented or fully successful. To address the overall need to strengthen the mobility and public transport system, the proposed intervention includes the preparation of a public transport policy for Abeokuta. This would eventually be scaled up and adopted for all of Ogun State.

The policy could also be the basis for preparation of a future Transport Master Plan for Abeokuta. The Public Transport Policy will also support the Bureau of Transportation and the state government to make effective and well-informed decisions within the mobility and transport sector, including allocation of resources, management capacities and regulatory frameworks. The intervention will also include a capacity and development component primarily targeting senior officials and staff members of the Bureau of Transportation, but not excluding other relevant stakeholder, which will help ensure the sustainability of the intervention. The aim is to enable the Bureau to better position itself to plan, manage, implement and operate mobility and public transportation projects in Abeokuta, as well as in Ogun State in general.

The major modes of road transportation in the town are private cars and taxis. Public transport is offered primarily through the use of minibuses, unlicensed private vehicles used for passenger transport (known as kabukabu) as well as motorcycles (Okada). Tricycles are also prominent along some routes and are gradually becoming a common feature of transportation in the city. Thus, intra-city passenger transport services in Abeokuta are dominated by informal means and unregulated private operators. High occupancy vehicles (HOVs) are not common in Abeokuta, and they are mostly used by educational institutions such as the State Polytechnical University for transporting students from the city centre to the campus at the outskirts of the city. Shared taxis are the most common mode of public transport in Abeokuta and supply a major source of labour in the city. There is no infrastructure for non-motorized transport, such as bicycle lanes or sidewalks suitable for pedestrians. However, walking is still the most common mode of transport for short distance trips.

c. **Thematic clusters:**

Multi-Modal Mobility Strategies and Plans

d. **Objectives***

The specific objective of the Public Transport Policy and capacity building intervention is to support the Ogun State Government in better planning the public transport sector (Service, Operations, Infrastructure etc.) in alignment with Abeokuta's urban planning. The overall objective will be to put in place policies that can ensure reliable, efficient, safe and affordable transport services in the City. This will be achieved by conducting rapid assessment of the characteristics of the urban transport sector and road networks, existing legal, institutional and administrative framework, current urban transport and road management systems, travel demands, traffic volumes, vehicle fleets, expected traffic growth, etc.

The general objectives of the intervention include the following:

- Improve the quality of public transport;
- Improve public transport accessibility for all, especially vulnerable groups;
- Increase public transport ridership and mode share;
- Public transport industry transformation and safety;
- Ensure a means of sustainable private sector participation in public transportation and identify funding strategies.
- Increase the technical know-how of the staff of the Bureau of Transportation and other transport stakeholders;
- Support Ogun State Government to establish strong internal capacity for policy development, policy oversight, performance monitoring and evaluation in the transport sector.
Alignment with SDGs, NUA and other UN-Habitat strategies.
The intervention has the potential to contribute towards:**

- Goal 11.2: “By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.”
- Goal 11.2.1: “Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities.”
- Goal 11.3: “By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.”
- Goal 11.a: “Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.”
- Goal 3.6: “By 2020, halve the number of global deaths and injuries from road traffic accidents.”
- Goal 3.9: “By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.”
- Goal 9.1: “Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.”
- Goal 13.2: “Climate Change Mitigation - Integrate climate change measures into national policies, strategies, and planning.”

The CCR furthermore points to:*
- Inclusive Economic Growth: SDG 5.a and SDG 8.3
- Effective Institutions: SDG 17.16

The Transport Policy together with the Urban Master Plan promote better urban economy and municipal finances in Abeokuta. Business and financial models that will include formal and informal transport operators will be developed, design and implementation of tools for fostering inclusive local economic development (AFINUA key 4.4) and different strategies for the financial implementation of urban and transport projects formulated (AFINUA key 4.1, 4.2).

Primary target group:*
Citizen participation in developing transport and urban planning plans will increase a gender equality approach more integrated in strategies and plans. Women and marginalized groups will be taken into account during the implementation phase of the Programme in order to ensure the affordability of the transport system and, therefore, increase their ability to access employment and services. In the long term, the implementation of improved urban transportation as well as urban renewal programmes in Abeokuta, will potentially increase the quality of life, including the promotion of economic equality and poverty reduction.

The impacts of this intervention on the cross-cutting issues of human rights, gender, youth and climate change include the following:**
- Reducing accident rates;
- Contributing to equal opportunities in terms of physical access to education and employment, particularly for those who cannot or do not drive including, for example, children, youths, women and the elderly;
- Reduce air and noise pollution from private motorised transport.

Specific outputs of the intervention:* 
The main outputs of this intervention are:
- A baseline assessment on existing policies and plans
- A vision and policy for public transportation
- An initial environmental, social and economic impact assessment
- A regulatory and institutional framework
- Budget and financing mechanisms
- Capacity building
- Public participation and community engagement
h. **Short-term outcomes***
In the short term, within the 2-3 years of the Global Future Cities Programme implementation in Abeokuta will increase its capacity to plan and transform the urban environment towards a more environmentally sustainable, economically prosperous and socially inclusive city. The Urban Master Plan (UMP) for Abeokuta will strengthen institutional capacity and increase its ability to plan inclusive economic growth in a sustainable manner through a variety of developed tools such as financial plans for financing infrastructure, proactive strategic actions for boosting employment, implementation strategies and alignment with national strategies and market needs to attract investors and customers to the project. The Transport Policy also includes funding strategies for the development, operations and maintenance of public transport schemes in Abeokuta and Ogun State. The Urban Master Plan and especially the Urban Renewal Guidelines for Abeokuta will increase local capacity for planning the city under a more comprehensive and socially inclusive approach. The intervention should develop instruments to ensure land ownership rights and limit evictions or disruption of livelihoods. As relocation or involuntary resettlement should be avoided, the Guidelines will encourage in site development.

i. **Medium-term outcomes***
In the mid-term timeline of 3-7 years, the institutional context in Abeokuta will be more prepared for better plan and manage sustainable urban planning and transport in the city. Once the Urban Master Plan will be adopted, the city will count with an established land-use and structure Plan, instruments for planning urban extensions and rehabilitating existing urbanized areas with focus on environmental protection, pedestrian and non-motorized mobility, provision of open public spaces, and the integration of mix use and public facilities. Adequate densities will be promoted in order to attain the economies of agglomeration and promote urban vibrancy. The Transport Policy will set the framework for the implementation of better urban mobility and connectivity in Abeokuta.

j. **Long-term impact***
Cultural heritage, as well as the natural areas, such as the Ogun river and other water bodies, should be protected by law in the long term. The implementation of urban renewal projects derived from the Guidelines for Urban Renewal and the Urban Master Plan should improve access to basic services in the traditional informal settlements, and increase the creation of job opportunities, improve access to green and public spaces, and provide more equitable and effective urban services and affordable housing. The attainment of more secure, safe, and accessible public transport, particularly for women and elder is another Programme expected outcome of the Programme in the long term. The Transport Policy will promote better mobility and accessibility for poor women and men and other marginalized groups. Additionally, it should contribute in the reduction of traffic congestion and air pollutant emissions, lower costs of transporting goods and increased efficiency of the transportation system. The intervention is likely to lead to remove barriers to prosperity and economic development through:**

- An expansion of the public transport sector, providing new employment opportunities;
- Increased connectivity, especially between rural and urban settlements, which is expected to increase economic interactions Public Transport Policy;
- Unlocking growth in new areas through the alignment of land use and transport planning;
- Improved accessibility of public transport for all, allowing those who do not or cannot drive to access market places and jobs more independent of location (particularly important for women in Abeokuta who have to move their wares from different parts of the city to their selling points);
- Travel cost and time savings, which bring economic benefit to businesses and individuals alike.

k. **Technical viability***
*Capacity and market maturity:* There is a significant lack of capacity and market maturity to effectively plan, regulate and monitor transport and urban planning operations and services within Abeokuta, nor to coordinate transport policies with urban planning. This translates into medium barriers during the planning and build phases. The high barriers during the implementation phase relate to an especially significant lack of capacity to enforce plans and policies in Abeokuta.
Financial: Both interventions face medium financial barriers during the build and operations phase. This is associated with the financing implications that both interventions will have if they want to implement the projects in the long run and achieve a long-term impact. The financial capacity of Abeokuta is good and shows signs of improvement over the last years. However, there is a strong dependency from national transfers. The large-scale investments that will derive from the interventions for its implementation will most probably require seeking for national transfers.

Legal: The city lacks local spatial planning and institutional coordination to ensure efficient development in the city of Abeokuta. There is limited legal authority to pursue land use planning as and they must seek approval from wider State Ministries to put policies in place. The main local governments Abeokuta North and South cannot exercise control over urban land in the city without approval from wider state bodies. In Urban renewal land ownership is contested and there are several informal settlements in traditional land where there are competing claims based on ancestral ownership. On the transport side, there are significant barriers related to the lack of clarity of responsibilities on transport planning and management in Ogun State.

Spatial: High barriers on the spatial aspects of the implementation relate to a lack of strategic and land use plans in the city. While the intervention of the Urban Masterplan will address this, the unplanned nature of the built environment could hinder the implementation. Further, population growth and an urban growth that follows a pattern of urban sprawl can put further pressure for implementation.

### Transport Policy: Barriers related to contextual factors

<table>
<thead>
<tr>
<th>Contextual factors</th>
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Transformative potential: Given the current lack of plans and strategies in Abeokuta the interventions can have a high transformative impact to fill in this gap. The interventions have the potential to significantly improve land use planning, the sustainable management of population growth and city expansion and the improvement of connectivity. There is a low likelihood of achieving long-term positive impact including the promotion of economic equality and poverty reduction, the protection of heritage and natural areas, increasing access to basic services in low income areas, reducing congestion and enhance safety in transport.

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### Risks:**

In delivering the assignment, Consultant would have to provide a Mitigation Plan for some certain risks, including but not limited to the following:
- Delay in decision making and getting feedback from Government Ministries, Departments and Agencies;
- Government institutions being non-responsive or slowly responding to the Consultant’s request for data or meetings;
- Rejection from stakeholders to meet with the Consultant or attending any critical workshops;
- Limited data availability which requires the Consultant to conduct full data collection process, which might affect the time and cost of the project;
- Resistance from few groups of people within the government to accept new ideas and proposals.
### Deliverables:**
Outputs from the consulting services:
- **Output 1: Baseline assessment**
  - a. Desk review and assessment of the public transport, urban planning and institutional components for Abeokuta;
  - b. Baseline data collection and database development;
  - c. Public transport routes analysis and demand analysis.
- **Output 2: Stakeholder engagement and participatory process**
  - a. Stakeholder analysis;
  - b. Public participation process.
- **Output 3: Policy rationale**
- **Output 4: Policy development**
- **Output 5: Monitoring and Evaluation framework**
- **Output 6: Capacity building**

### Consulting expertise:**
Key members of the consulting team:
- Team leader transport planning
- Transport planners (2)
- Traffic management specialist
- Traffic/Highway engineer
- Data collection specialists (2)
- Human resources management specialist

A social scientist is not included in the project team.

Sources: *City Context Report. **ToR. ***TVA.
**Themes related to the evaluation questions**

<table>
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<th>Theme</th>
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| 1. | **Consistency with national goals, policies, strategies and urban development plans.**
The Ogun State Government has considerable power to engage in the regulation of transportation activities, operations and for transport planning. The Bureau of Transportation was thus established in 2003 and vested with the provision and preservation of road infrastructure which includes marking of roads, installation of traffic signage and street furniture, signalization, traffic studies, road traffic engineering designs and alignment. It is also responsible for the formulation of transportation policy in the State. The Bureau of Transportation has the principal responsibility over transport policies in Abeokuta, however, there are a number of limitations hampering the exercise of this responsibility. Ogun State does not have an integrated transport plan, nor any notable legislation on transport planning in the State or City at present. Although there are a number of isolated transport projects taking place in the city – e.g. inter-city bus systems – there has been little effort to consolidate the projects and devise a harmonised plan for the city.
The charrette session (24 September 2018) included representatives from the Bureau of Transport (Ogun State) and Ministry of Urban and Physical Planning. |
| 2. | The intervention’s responsiveness to SDG, NUA and other UN-Habitat strategies.  
The CCR refers to the following SDGs: 3, 5, 8, 9, 11, 13 and 17  
The CCR refers to the following AFINUA key items: 4.1, 4.2 and 4.4  
The ToR refer to the following SDGs: 3, 9, 11 and 13  
The ToR does not include a reference to the AFINUA key items. |
| 3. | Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens.  
The intervention outputs and outcomes are relevant to the citizens, the local authorities in Greater Abeokuta and the Ogun State. |
| 4. | Inclusion of vulnerable groups in the project design and implementation  
The vulnerable groups are included through reference to the SDGs, AFINUAs, the cross-cutting issues, and anticipated long-term impacts. There have been limited consultations with representatives from the primary target group/beneficiaries during the identification process. |
| 10. | Achievement of outcomes during the Strategic Development Phase  
An enhanced understanding of solutions to transport issues in general and public transport in particular were generated as part of the identification process building on existing concerns. The proposed intervention was validated through the various steps of the identification stage – concluded with the draft ToR for the intervention. |
| 11. | The extent to which city level stakeholders have been involved in the design in the project intervention  
Ogun State comprises 20 local government authorities, five of which constitute the overall metropolitan area of ‘Greater Abeokuta. There is no specific institutional structure to oversee governance and urban management for the City. Ogun State is responsible for overall urban and physical planning. It is not clear how representatives from the five LGAs have been (they do not appear in the Charrette Report). Representatives from professional bodies, trade unions, NGOs, academia, and the private sector to part in the charrette session. |

Potential partners for project implementation are:*  
- Ogun State Urban & Regional Planning Board,  
- Bureau of Transportation,  
- Ministry of Finance,  
- Ministry of Housing,  
- Ministry of Works,  
- Ogun State Property Investment Company,  

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12. **Cooperation with other partners**
No other cooperation partners have been identified.

13. **Changes made during the identification stage**
The scope of the intervention has remained unchanged, but the intervention framework has become more focused during the identification process.

14. **Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights**
Cross-cutting issues:* Both Programme interventions address differentiated analysis with emphasis on gender, age, and socio-economic characteristics in order to account for the differential impacts experienced by women, children, the elderly, persons with disabilities, inter alia when they are forcibly evicted. This will inform the development of plans and proposals that enhance gender equality, youth opportunities and economic growth. Economic incentives for women, youth and disadvantaged groups, will be taken into account for the urban transport fares and subsidy system, as well as issues of safety and security in the transport system as an important aspect especially from a gender perspective. The Monitoring and Evaluation framework within Transport Policy and the Urban Master Plan addresses the development of indicators that cover gender equality, protection of vulnerable groups, and human rights. NB: A social scientist is not included in the project team!

15. **Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase**
The overall likely success rate for each of the Implementation Phase’s sub-phases has been assessed at 50% for the Planning and Design Phase, 34% for the Build Phase, and 18% for the O&M Phase. The overall success rate is 34%.

**Summary short-term outcomes:**
- Increase its capacity to plan and transform the urban environment¹
- Urban Master Plan (UMP) for Abeokuta¹
- Instruments to ensure land ownership rights and limit evictions
- The Transport Policy
- Funding strategies for public transport schemes in Abeokuta and Ogun State.

**Summary medium-term outcomes:**
- Adopted Urban Master Plan¹
- Land-use and Structure Plan¹
- Instruments for planning urban extensions¹
- Instruments for rehabilitating existing urbanized areas¹
- Framework for the implementation of better urban mobility and connectivity

**Summary of long-term potential impact:**
- Improved access to basic services in the traditional informal settlements¹
- Increased the creation of job opportunities¹
- Improved access to green and public spaces¹
- Enhanced equitable and effective urban services and affordable housing¹
- More secure, safe, and accessible public transport, particularly for women and elder
- Improved mobility and accessibility for poor women and men and other marginalized groups
- Reduction of traffic congestion and air pollutant emissions
- Lower costs of transporting goods and increased efficiency of the transportation system.

¹ Preparation of a Master Plan & Guidelines for Urban Renewal
### 16. The city’s ownership and its likely enhancement of sustainability
Initially, the City has taken great ownership to the intervention. But since the outlook for the Build and O&M phase are dim, the sustainability aspects are accordingly low. The City has limited autonomy on its own and correspondingly limited mandate to make major decisions – and will thus depend on the degree to which it can influence the Ogun State.

### 17. Encouragement of further collaboration among city stakeholders
The preparation of the Transport Policy would warrant as much collaboration among the City’s and State’s interest groups to mobilise and sustain the transformation process. A Project Committee will be formed and should preferably have a broad representation to promote collaboration among key stakeholders. The involvement of the City’s LGA would be essential.

### 18. City’s capacity in place to sustain attained results
The city’s capacity to sustain the results of the intervention is an open issue, as it is not certain what result will be generated in consequence of the UK FCO’s support.
5. ANKARA

City: Ankara
Project/intervention: Increasing Quality and Accessibility of Streets in Çankaya Neighborhoods

Extracts from intervention documents

<table>
<thead>
<tr>
<th>a.</th>
<th><strong>Context</strong></th>
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<tr>
<td>The city plays an important role in the development and integration of the national territory as a hub where several infrastructure networks converge. Ankara is well connected to the rest of the country by roads and railways. With a current population of 5.445 million, the capital has experienced rapid growth during recent decades. Additionally, official sources forecast the city's growth will mean it will be come to more than 10 million people by the 2030s. Despite many attempts of government and planners, Ankara's urbanisation process has been characterized by sprawl and fragmentation (Yasser, 2015). Although the road network and the public transport system have developed significantly in the past three decades, the urban sprawl makes mobility a critical issue for the city's functionality (Batuman, 2012).</td>
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The city has a two-tier governance and planning system with the Ankara Metropolitan Municipality (AMM) covering the wider metropolitan area of some 25,000 km$^2$, within which 25 District Municipalities provide services on a local level. The Çankaya District Municipality, with almost one million inhabitants and 267 km$^2$, is the main district in the city and hosts the central historic areas as well as some government buildings and embassies.

There are structural deficiencies at a human scale in the city's built environment. One major issue is the highly-neglected pedestrian circulation and the lack of social interaction in open public spaces. Narrow sidewalks, often occupied by cars in the residential neighbourhoods, leave little room for pedestrian circulation and nor do they allow the development of a socially active and inclusive street life. Public interaction in the city is confined to reserved areas such as semi-public parks or buildings. This includes community centres, shopping malls and cafes. As a result of the provision and quality of open public spaces, the air pollution and the adequate accessibility and connectivity in the city are challenges that Ankara needs to resolve.

Governance: Ankara has a mature and established city governance structure, which is decentralized from the national level to the regional level and then to the district municipalities. In Ankara central government has a stronger role in some dimensions of transport and urban planning, particularly because it is the capital city, and the Çankaya district municipality hosts the national ministries. As such, the Programme’s interventions must be aligned with the national agendas. The Ministry of Environment and Urbanisation (Directorate General of Physical Planning) issues regulation defining municipalities’ mandate, and holds rights to plan preparation at the regional, provincial, and district level. The Ministry of Transport and Infrastructure is involved in Ankara city as the main investor and implementer of transport infrastructure, including highways, high speed rails and the Ankara Metropolitan Municipality's Metro. Moreover, the Ministry of Environment and Urbanisation and the Ministry of Culture and Tourism also govern public space (protected heritage areas fall under the control of the Ministry of Culture and Tourism). TOKI, the national housing agency, has planning rights over public housing areas even if it contradicts with the planning of municipality.

Urban Planning Hierarchy: Ankara, like other metropolitan municipalities in Turkey, is subject to a planning hierarchy with three main plans: the Environmental Order Plan, the Master Development Plan and the Implementation Development Plan. Legally they need to be consistent, as the lower-level plans have to follow the higher order one. The Environmental Order Plan is the strategic spatial development plan in the metropolitan scale. Normally, across Turkey, this is the legal responsibility of the Ministry of Environment and Urbanism but in Ankara it is delegated to the AMM.
This plan covers ‘strategic’ land use - for example it pinpoints new areas to be developed and for what purpose. The current Environmental Order Plan for Ankara was ratified in 2018 and covers the period until 2038. The second order plan is the **Master Development Plan**, which is a district-scale land use plan. This is developed by the AMM and is a zoning plan for the urban area. The third order plan is the **Implementation Development Plan** and this consists of sub-district scale application plans and is developed by the local district municipalities. This includes precise development measurements (i.e. land use and functions, heights, floor-area-ratios, densities) and guides issuing of building permits. The 25 district municipalities draft these plans. Urban planning at district level needs to be approved by the metropolitan municipality. Due to lack of capacity from local governments, however, there is often limited implementation of these plans in practice.

b. **The intervention**

The Global Future Cities Programme aims to provide technical assistance and capacity building to the Çankaya District Municipality for improving the streets and the open public space of its neighbourhoods to favour a more liveable urban environment and to promote better life quality. The intervention targets neighbourhood scale actions and the incentive revolves around changing the streetscape, including cross-sections, towards better open public spaces and urban quality. The development of living streets, designed primarily for the interests of pedestrians and cyclists, contributes to a more safe space, especially for children, elderly and women while, at the same time, reducing barriers for the disabled.

The approach to implement street redesign and upgrades, while increasing the proximity and accessibility of urban services and developing more accessible and safer open public spaces for pedestrians, has a high impact on the quality of life of residents. Furthermore, the streets are often catalysts for increasing urban economy and security and strengthening the sense of community identity and collective ownership. The intervention will develop urban designs, implementation plans and replicable methodologies. Additionally, it will include neighbourhood design workshops, public information exchange tools and joint decision-making mechanisms at a local level. This localised planning approach can also use digital planning tools for better data utilization and, potentially, be integrated into the nationwide Smart City Strategy currently being developed by the Ministry of Environment and Urbanization. The Programme will increase the municipality’s capacities for onsite implementation as well as for developing and organizing inclusive planning practices. Additionally, a **Handbook for Healthy Streets** will be prepared and training for technical staff developed so the methodology can be upscaled and extended to other Turkish municipalities as a model.

The unsatisfying streetscape and public space provision has been one of the major causes of the migration from the central areas to the suburbs. Nevertheless, the public space opportunities in the western and south extension are confined to gated communities that are not accessible to all citizens. Five areas have been identified as tentative locations for the intervention in order to provide a better understanding of the specific intervention context. Although this selection does not define the final areas for the future intervention, they constitute a representative sample for studying the potential and viability of the Programme.

c. **Thematic clusters:**

- Public space

d. **Objectives**

The main objective of the “Healthy Streets in Çankaya Neighbourhoods” intervention (hereafter known as “the Intervention”) is to increase the technical capacity of the Çankaya Municipal District to design and implement public space projects. This is in order to improve the prosperity and liveability of the Çankaya streets and ensure accessibility to open public spaces that are inclusive, safe, useable, attractive and healthy.

The specific aim is to turn degraded streets in the neighbourhoods into valued public spaces. This would be attained by: reengineering street layouts and shifting the use of open spaces. Additionally, by controlling vehicle speeds and traffic volumes, the intervention will promote the use of nonmotorized transport including bicycling and walking. It will also make streets safer, especially for women and children, and enhance livelihoods, economic development and the vibrancy urban spaces.
e. **Alignment with SDGs, NUA and other UN-Habitat strategies**

Contribution to Sustainable Urban Development:*  
- Inclusive and sustainable cities: SDG 11  
- Resilient Infrastructure: SDG 9 and SDG 15  
- Improved Security in Public Space: SDG 3 and SDG 15  
- Inclusive economic growth: SDG 8  
- Participatory decision-making process: SDG 5 and SDG 10  
- Strengthening domestic resource mobilisation: SDG 17  
- Enhance policy and regulatory coherence: SDG 1 and SDG 17  

In addition, the ToR makes references to: SDGs 12, 13, 16**  

Reference is made to AFINUA key items: 1.4, 1.6, 2.3, 3.1, 3.3, 3.4, 3.5, 4.5, and 5.6*  

The Global Future Cities Programme seeks to achieve higher rates of sustainable and inclusive growth while increasing long-term investments in sustainable urban projects. Urban and mobility plans, strategies and policies provide greater awareness, capability and confidence, while establish regulatory frameworks resulting in higher incentives for partnerships and financial mechanisms.

f. **Primary target group and stakeholders:****  

Primary target group: Citizens in selected neighbourhoods of Çankaya Municipal District  

Main stakeholder: Çankaya District Municipality

Possible project partners:*  
- Ankara Metropolitan Municipality  
- Elected neighbourhood headmen  
- Citizens’ assembly  
- Chamber of planners, Ankara branch  
- NGOs

In addition, the following stakeholders should be involved during the implementation phase:**  

Governments and Public Institutions at the National, Regional and Local Levels  
- Ministry of Environment and Urbanism;  
- Governorate of Ankara and District Governorate of Çankaya;  
- Ankara Metropolitan Municipality;  
- Muhtar (elected neighbourhood representative/speaker) of the neighbourhoods  

Civil Society Organisation, NGOs, Media, and Academia  
- Neighbourhood initiatives / associations / collectives (if any are present in the neighbourhoods selected);  
- Related and interested CSOs / NGOs;  
- Professional chambers (associations) of city planners, architects, landscape architects, etc.;  
- Universities: METU, Gazi, Hacettepe, Bilkent, Atılım, TED and Ankara Universities, especially the Departments of Urban and Regional Planning, Architecture and Public Administration.

Private Sector  
- Local associations (chambers) of artisans and craftspeople (shopkeepers are members registered to these chambers)

g. **Specific outputs of the intervention:****  

Outputs/main achievements:  
- Criteria for prioritizing the spatial pilot areas;  
- Public space assessment and pilot area definition;  
- Healthy streets urban design and implementation programme;
h. **Short-term outcomes***
The Programme in Ankara can positively impact the municipal technical and managerial capacity whilst increasing citizens’ inclusion in decision-making processes. Both interventions will include capacity-building components for more sustainable and resilient urban planning and design, especially related to non-motorized transport implementation and the adaptation of streets and open public spaces towards greener areas. Additionally, the Baseline Studies that include disaggregated data collection, the Methodology Document for prioritisation of pilot areas and the Goals’ impact Assessment will increase municipal capacity for evaluating impact of urban plans and decision making based on informed demographic, economic, cultural, environmental and other holistic projections.

The interventions will include participatory processes during the whole implementation phase that will prioritize the gender equality and youth representation during the consultation and validation processes. Finally, as the two main stakeholders, the Ankara Metropolitan Municipality and the Çankaya District Municipality, belong to different tiers of government the Programme will constitute an opportunity for improving integrated governance and multi-level coordination.

i. **Medium-term outcomes***
One of the main objectives that both interventions will contribute to increased mobility and accessibility through the promotion of public and non-motorised transport systems and the removal of physical barriers in the public space. Cleaner air and more quantity of green areas will be also part of the expected outcomes in the mid-term. Once the Pilot Projects of both interventions have been implemented and the Multimodal Mobility and Public Space standards and frameworks developed, the city will potentially increase its public space quality, urban security and accessibility, especially for women and disadvantaged groups.

The implementation of multimodal transport and bicycle systems can increase ability to access employment and services, particularly for youth and the lower-income population, while it can reduce traffic congestion and goods’ transportation costs. The improvements on Çankaya neighbourhood’s street layout will also impact the accessibility of people with disabilities and women and contribute to increased safety of streets and better quality of open public space.

j. **Long-term impact**
Upgrading of streets in Çankaya’s neighbourhoods has a potential impact for increasing urban quality and economic growth in the long-term perspective. More accessible and vibrant streets are a catalyst of job opportunities creation and poverty reduction. Furthermore, the development of greener public spaces, non-motorized transport alternatives and higher accessibility to urban services will impact positively on citizens’ life quality and the reduction of air pollution. Finally, better-qualified civil servants in Ankara will potentially plan and manage more inclusive urban spaces, increase efficiency on public transport and will have tools for better addressing the impacts of climate change. The Dissemination Strategy for Çankaya municipality will promote the replication of the intervention in other districts of Ankara and Turkey.*

The Intervention, over the long term, would realise the benefits of the implementation of the Healthy Streets plans and capacity improvements. At the neighbourhood and street levels these impacts would include:**

- Lowered carbon emissions;
- Increased quantity of green coverage;
- Reduction in the number and severity of accidents and near-misses;
- Improved quality of the urban environment;
- Encouragement of healthier and more sustainable lifestyles;
- Improved quality of life and well-being;
• Improved pedestrians and cyclist mobility;
• Improved urban space accessibility for the elderly, disabled and visually impaired;
• Improved urban environments for children;
• Increased opportunities for social interaction within residential streets;
• Achievement of community involvement and local empowerment; and
• Strengthened sense of community identity and collective ownership.

The effects at the municipal / city level would include:**
• Increased capacity of the municipal staff in urban design, planning and execution of Healthy Streets;
• Higher degree of community involvement in the decision-making processes of the municipality;
• Improved techniques in construction and road-building services of the municipal staff.

### Technical viability***

**Capacity and Market Maturity:** The technical capacity and market maturity in Ankara for both interventions can be considered medium in the whole project cycle. There is a mature urban planning system in place in Turkey. However, this is poorly integrated with infrastructure planning, and planning for economic growth. The intervention implementation during the GFCP should provide tools and improve the technical capacities especially for the operations and maintenance phases.

**Financial:** Beyond the support of the GFCP, both interventions in Ankara will require significant capital investments in order to be implemented. While Ankara has generally a solid fiscal and revenue generation capacity, the financial barriers are medium as the city will need to identify revenue sources for significant capital investments. Increasing Quality and Accessibility of Streets will most likely require investment from the national government which can pose barriers having in mind the current economically volatile context of Turkey.

**Legal:** The intervention on Increasing Quality and Accessibility of Streets in Çankaya neighborhoods has low barriers in the legal aspects. On one hand, the project is directly connected with the ongoing “Healthy cities” municipal policy and the District has the competencies for implementing the intervention. On the other hand, as the central government is based on Ankara, the coordination between the local, metro and national governments should be good and, therefore considered as an opportunity for the successful intervention implementation. Nevertheless, the central government is experiencing an internal re/structuration. This can affect the definition of roles and competencies of both the District and Metropolitan Municipalities.

**Spatial:** On the spatial side, the Increasing Quality and Accessibility of Streets in Çankaya's District should not find significant barriers during the implementation of the Global Future Cities Programme. The project will carry out a district-wide public space assessment and prioritize the pilot areas that are most suitable for implementing the intervention regarding financial, technical and spatial viability. However, if the operating/maintenance of the intervention in the long term is not adequately performed it can reverse in the decrease of urban quality.

#### Barriers related to contextual factors

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The two interventions for Ankara have a medium transformative impact in the city. They both focus on transforming public space and increasing accessibility especially for women and vulnerable groups. Moreover, both interventions enhance citizen participation in the decision-making processes. Increasing Quality and Accessibility of Streets in Çankaya Neighborhoods can also leverage the revitalization of the degraded city center and enhance local economic development.
The overall likely success rate for each of the Implementation Phase’s sub-phases has been assessed at 90% for the Planning and Design Phase, 66% for the Build Phase, and 58% for the O&M Phase. The overall success rate is 71%.

Risks:**
Conceivable risks for the successful implementation would be in the acceptance levels of the measures by residents in the selected neighbourhoods (such as car owners who park their cars in the street). As public participation is an integral part of the project, this risk is minimised. Recent economic crisis in the economy has resulted in a savings programme for public expenditures. It is expected that the transfers from the national budget will be shortened by around 30%. In the case that the shortage or obligatory savings are realised, the municipality may be forced to reconsider its priorities and re-adjust its spending. Even though there is limited risk for the design and planning phase, the implementation programme may be delayed.

Deliverables:*
The main deliverables of this intervention are:
- Methodology document for the prioritization of urban areas for streets and public space upgrading in Çankaya, regarding the SDG and New Urban Agenda criteria
- Çankaya district-wide Urban Context Assessment and the Strategic Plan for Streets Rehabilitation in Çankaya
- Urban Designs and Physical Implementation Plans for a selected (pilot) neighbourhood of Çankaya
- Streets Design Standards for Çankaya Municipality, developed through participatory processes and which can be adapted to municipal regulatory framework for urban planning and implementation
- Guidelines and Standards for “Healthy Cities”
- Dissemination Strategy for the municipality to promote the concept beyond the boundaries of the Çankaya municipality, preferably nationwide
- Training and capacity building to municipal staff for implementing further upgrading streets projects in Çankaya district
- Strategic Development Goals impact assessment of the intervention

Consulting expertise and implementation arrangements:**
The duration of the service is 24 months, with expectations to start from April 2019 until April 2021. During that time, the Consultant will be working in the project office/studio provided by the municipality and in the neighbourhoods as the work requires. A total minimum of inputs of 185 human-months from both international and national consultants, including the core team, is estimated.

The Consultant builds up a project core team composed of one team leader and three key experts (Design, Training, Communication) for each pillar. The Consultant is expected to propose a team of long-term experts for the successful realisation of the project. A pool of short-term experts, trainers and facilitators to realise specific tasks should be presented in line with this methodology and project proposal. Experts in the following fields are regarded as crucial for the project:
- Data and Information gathering and compilation;
- Urban design / spatial design; and
- Public participation.

The service provider will have two main roles in the intervention’s implementation process. The first would be the responsibility for the preparation of the analysis, plans and reports. The second role of the service provider, as the Consultant, is to be responsible for increasing the capacity of the Çankaya District Municipality in designing and implementing Healthy Streets Projects. The Municipality will set up a project management unit (PMU) and a technical task force for the realization of the project objectives.

An advisory board / consultative committee will be formed to monitor and provide direction on the project implementation. The advisory board should include: members from Çankaya municipality’s management and council, representatives from the Ministry of Environment and Urbanism (GD of Spatial Planning), Ankara Metropolitan Municipality, Chamber of City Planners, Chamber of Architects, Chamber of Landscape Planners, university urban planning departments in Ankara, Governorate (and/or District Governorate of Çankaya), ‘Muhtars’ of the pilot neighbourhoods, representatives of shopkeepers and residents of the neighbourhoods, and representatives of the UK FCO.

Sources: *City Context Report. **ToR. ***TVA.
### Themes related to the evaluation questions

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| 1. | **Consistency with national goals, policies, strategies and urban development plans.**
The intervention is aligned with: the Environmental Order Plan is the strategic spatial development plan in the metropolitan scale; the Master Development Plan, which is a district-scale land use plan, developed by the Ankara Metropolitan Municipality (AMM) and is a zoning plan for the urban area; and 3) the Implementation Development Plan and this consists of sub-district scale application plans and is developed by the local district municipalities. Due to lack of capacity from local governments, however, there is often limited implementation of these plans in practice.
The neighbourhood-scale Public Space Design Plans and the Bicycle Strategy and Master Plan for Ankara are important tools for a better urban management and development of the city, and they will contribute as reform drivers for more efficient urban planning, transparent policy making processes and more resilient and inclusive cities. |
| 2. | **The intervention’s responsiveness to SDG, NUA and other UN-Habitat strategies.**
The CCR refers to the following SDGs: 1, 3, 5, 8, 9, 10, 11, 15, 17
The CCR refers the following AFINUA key items: 1.4, 1.6, 2.3, 3.1, 3.3, 3.4, 3.5, 4.5, and 5.6
The ToR refer to the following SDGs: 1, 3, 5, 8, 9, 10, 12, 13, 15, 16 and 17
The ToR does not make reference to the AFINUA key items. |
| 3. | **Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens.**
The intervention is deemed highly relevant for the Çankaya Municipal District and the citizens in the selected neighbourhoods. |
| 4. | **Inclusion of vulnerable groups in the project design and implementation**
The intervention focuses on transforming public space and increasing accessibility especially for women and vulnerable groups. |
| 10. | **Achievement of outcomes during the Strategic Development Phase**
- An enhanced understanding to the challenges and solutions addressed by the intervention has been achieved.
- A validated framework for the intervention has been developed.
- Awareness on the capabilities and capacity required to implement the intervention has been created. |
| 11. | **The extent to which city level stakeholders have been involved in the design in the project intervention**
The city/municipal authority and key city stakeholders have been much involved. The primary target group has only been indirectly involved.
The charrette took place on 9 August 2019 and the validation workshop on 6 November 2019. Whereas the charrette had a multi stakeholder attendance, the validation work only included 11 from the Çankaya Municipal District. |
| 12. | **Cooperation with other partners**
The intervention is anticipated to be implemented in cooperation/consultation with CSOs, NGOs, media, academia and the private sector. |
| 13. | **Changes made during the identification stage**
No major changes of the intervention’s scope have occurred during the identification stage. |
| 14. | **Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights**
The four Cross-Cutting Issues of UN-Habitat, as identified in the Strategic Plan 2014-2019, are mainstreamed to ensure that all UN-Habitat work targets those with the most need and promotes socially and environmentally sustainable cities. In this regard, the interventions detailed for Ankara are shaped under the mainstreaming of environmental safeguards, youth, gender equality and Human Rights. |
Cross-cutting Issues:**
- Increased citizen participation in developing municipal plans;
- Integrated gender equality approach in policies, strategies and plans;
- Integrated plans, frameworks and approaches to promote more sustainable, resilient, and socially inclusive cities;
- Increased mobility and accessibility for poor women and men and other marginalised groups (the elderly, youth and the disabled);
- Increased access to safe, inclusive, accessible and green public spaces, in particular for women and children, the elderly and persons with disabilities;
- Strengthened urban-rural linkages (food security); and
- Better capacity of local governments to ensure land ownership rights and limit evictions or disruption of livelihoods.

15. **Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase**
The overall likely success rate for each of the Implementation Phase’s the sub-phases has been assessed at 90% for the Planning and Design Phase, 66% for the Build Phase, and 58% for the O&M Phase. The overall success rate is 71%.

**Summary short-term outcomes**
- Enhanced municipal technical and managerial capacity
- Increase municipal capacity for evaluating impact of urban plans
- Citizens’ inclusion in decision-making processes
- Improved integrated governance and multi-level coordination

**Summary medium-term outcomes:**
- Increased mobility and accessibility through the promotion of public and non-motorised transport systems
- Reduced traffic congestion
- Cleaner air and more quantity of green areas
- Increased public space quality, urban security and accessibility
- Improved access to employment and services, especially for youth and low-income groups
- Improved accessibility and safety for people with disabilities and women.

**Summary of long-term impact:**
- Increased urban quality and economic growth
- Increased public space and improved accessibility
- Increased employment opportunities and poverty reduction
- Improved public transport services
- Improved pedestrians and cyclist mobility
- Increased well-being due to reduced air pollution
- Enhanced municipal management capacity for promoting inclusive urban spaces

16. **The city’s ownership and its likely enhancement of sustainability**
The municipal has taken ownership of intervention, which is likely to enhance the intervention’s sustainability.

17. **Encouragement of further collaboration among city stakeholders**
The municipal authority is intending to cooperate broadly with other city stakeholders.

18. **City’s capacity in place to sustain attained results**
The municipal’s capacity is somewhat in place but will need to be further developed to sustain the attained results.
6. YANGON

City: Yangon
Project/intervention: Revitalizing Streetscapes – unlocking the potential for Yangon’s city assets

Extracts from intervention documents

<table>
<thead>
<tr>
<th>a. Context*</th>
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<tbody>
<tr>
<td>Administratively, Yangon City is part of the Yangon Region, administered by the Yangon Regional Government (YRG) that is divided into four districts composed of 44 townships. Yangon City can be identified by the townships administered by the Yangon City Development Committee (YCDC), which includes 33 of the 44 townships under YRG’s jurisdiction. The total area spans approximately 1000 km², while the urbanised land represents approximately half of it. However, YRG also recognises a regional spatial development area, Greater Yangon, which includes Yangon City and parts of the six neighbouring townships. Currently the population of the urban wards in the 33 Townships of Yangon is estimated at around 5.1 million inhabitants, while estimates in 2016 suggested the Metropolitan area population at between 6.5 and 7 million.</td>
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</tbody>
</table>

Increasing urbanisation is putting pressure on the City’s infrastructure, and this in turn is putting many areas with historical buildings and practices at risk of being lost. These ‘assets’—once a compelling example of human-centred streetscapes—are under pressure from car-centric urban planning. For this reason, a growing movement of heritage conservation is beginning to inform the City’s development, primarily focusing on individual architectural landmarks, which are the physical elements of the City’s heritage, as well as intangible aspects of the traditions and customs of the diverse communities that call Yangon home.

Flooding is a fairly new phenomenon in the Central Business District (CBD) and is only expected to worsen. Climate change is expected to lead to increased volume and more frequent rainfall while projected sea level rise will have a similar effect. In addition, Yangon is built on a wetland, giving it a high-water table, which only exacerbates water challenges in the city. Due in part to poorly-maintained drainage and insufficient solid waste management, certain areas of the city flood regularly and this further compounds flood-related issues of public health and sanitation. Flood resilience is something that residents must contend with on a regular basis and, for this reason, new approaches that integrate communities in resilience planning must be explored.

Currently, the largest drainage survey ever completed is underway (as of October 2018) and is mapping the drainage in the Six Townships. The data collection was conducted by use of LiDAR (Light Detection and Ranging), which has the ability to measure distances using lasers and reflected pulses. This work is funded by the World Bank who is also providing data that will guide programmes on water management by the Dutch Government, Asian Development Bank and others. Many initiatives focus on necessary infrastructure upgrades which are necessary to support a growing population. However, many approaches to public space do not include a focus on marginalised communities, participatory design and economic empowerment—aspects which are key and central aspects of the GFC Programme.

It is indeed the intersection of these two elements—heritage and flood resilience—that provides an avenue to explore tangible urban revitalisation through tangible pilot projects, while strongly advocating for a new approach to the provision of public space. Out of these pilot projects, lessons-learnt and evidence-based recommendations can be extracted to further develop policies and regulations.

Currently core societal functions such as administration, banking, business and commerce are located in the CBD of Yangon, and the great interest in developing this area and others is transforming the cityscape at a rapid pace. The urban grid system in the CBD laid out by the British colonial government was designed for a time when the horse-drawn carriage was the principal mode of transport.
Today, the grid serves as a relatively efficient network for transport which, however, is hindered by a mismatch with the current volume of vehicular traffic. It should be appreciated that the CBD can be a model for human-centred development once again. The CBD constitutes a strong asset for the city, which should be preserved and revitalised in order to accommodate changes in the City's planning and function over time.

The CBD contains six townships, which relate to the original 1852 plan. Nowadays, with the lack of focus on public transport, the once human-centred streetscape designs have turned into car-centred streets, with motor vehicles having gained dominance over pedestrians. Typical streetscapes in the CBD consist of 5-7 storey buildings defined within the grid system. Most of this development took place in the 1920s and 30s adherent to the grid and were either residential or mixed-use developments. According to YCDC's Provisional Zoning and Land Use Plan, Yangon has 189 officially listed heritage buildings, all of which are public. The list is the only statutory protection for built heritage in Yangon to prevent the gradual degradation of historic buildings. Many actors in the Yangon urban context recognise the architectural value of the older, mostly colonial buildings in the CBD and see financial potential in their renovation, especially those with a higher potential for capital investment. Most renewal activities, however, are undertaken without any value capture mechanism in place.

Yangon does not have any all-encompassing policy or strategy to protect both tangible (hard) and intangible (soft) heritage assets in the CBD. However, Yangon Heritage Trust (YHT), an NGO promoting the built and cultural Heritage of Yangon, has developed a strategy which attempts to account for this: the Yangon Heritage Strategy. In the document, which was developed independently and does not have legal status, long-term planning and immediate action are combined, with an attempt to join conservation and development in order to identify key principles for a liveable Yangon. The strategy puts great emphasis on the upgrading of streets within the CBD. Improving walkability, greening and providing adequate space for commercial and communities activities is recognised as a necessity for a comprehensive conservation strategy, enhancing and giving value to the historic and cultural patrimony of Yangon.

As defined in the Yangon City Development Law (2013), Yangon City Development Committee (YCDC) is the principal operational authority in Yangon, providing core municipal services in the city. However, YCDC's role is highly influenced both in practical and in legislative terms by the Yangon Regional Government (YRG). The Yangon Regional Government is the principle decision-making body of the region. Despite the fact that a Strategic Urban Development Plan for Greater Yangon was drafted in 2013 and includes general outlines on the direction for urban growth in the city, there is a lack of a comprehensive land use plan for the city. This SUDP is yet to be translated into a legally-recognised document with specific guidelines.

b. **The intervention**

The focus area under the Urban Planning pillar was heritage in urban development and under resilience, specifically flood resilience was identified. In order for the intervention to achieve the GFCP objectives, broader definitions of both heritage and flood resilience were taken. To better capture the diverse understandings of heritage in Yangon, the approach has been adapted to encompass components of both the built environment and cultural practices, reflecting the complex and multicultural underpinnings of the City's history. Similarly, flood resilience not only refers to incidences of inundation per se, but looking at alternative solutions to sewerage, drainage, water supply and erosion, solid waste management and public awareness.

Consequently, it was determined that the proposed intervention should focus on revitalising streetscapes in Yangon's CBD. The proposed intervention merges heritage and flood components as part of an integrated urban planning approach, addressing the interface between buildings, (semi-)public space and livelihoods. The planned intervention includes four main inter-linked components:

a. The design and construction of pilot project(s) at three streetscapes;

b. The extraction of lessons-learnt and subsequent development of evidence-based recommendations for policies, regulations and methodologies both: at city and municipal level – replicable across other areas of Yangon; and at city-region and metropolitan level – scaling up the approach for application on a larger geographic scope and strategic level;

c. A component of capacity building for government, local academia and professional bodies; and

d. Public awareness raising and outreach on urban issues.
The aim of the intervention is to unlock the potential of the city's latent assets and to focus on the development and implementation of replicable and scalable showcases that can embody and be exemplary for the future sustainable development of Yangon.

c. **Thematic clusters:**
   - Heritage and Urban Renewal
   - Resilience and Flood Management

d. **Objectives**
The intervention proposed is the revitalisation of streetscapes in Yangon's CBD. This project aims to unlock the potential of Yangon City's latent assets by developing pilot projects from which recommendations can be extracted. These recommendations can be used to guide future urban processes and may include regulations on the management and governance of public space, new policies related to the public realm as well as methodologies that can be used to improve design practice in the city.

e. **Alignment with SDGs, NUA and other UN-Habitat strategies**
Contribution to Sustainable Urban Development:
   - Sustainable cities and communities: SDG 11
   - Sustainable & resilient infrastructure: SDG 1 and SDG 9
   - Increased resilience: SDG 3
   - Increased economic growth: SDG 8
   - Peaceful and inclusive societies: SDG 5 and SDG 16
   - Participatory decision making: SDG 16 and SDG 10
   - Enhancing multi stakeholder partnership: SDG 17.

Reference is made to AFINUA key items: 2.2, 2.3, 2.4, 3.1, 3.5, 3.6 and 5.2

Reference is made to:
   - Besides SDGs 11, reference is made to SDG1, SDG 3, SDG 5, SDG 8, SDG 9, SDG 10, SDG 16 and SDG 17.
   - AFINUA Key items 2.2, 2.3, 2.4, 3.1, 3.5, 3.6 and 5.2

The Programme's intervention should address disaggregated data collection with emphasis on gender, age and socio-economic conditions in order to develop KPIs within a gender equality, youth and human rights perspective. Differential criteria for public space design for women, youth and disadvantaged groups will be considered as part of the Streetscape Pilot Projects. Furthermore, awareness on social inclusion and human rights will be taken into account as part of the whole Programme.

f. **Primary target group:**
Small and medium business sector is embedded in the dominant residential use of the CBD, and represents for many residents the main locational advantage of the area. However, street vendors constitute one of the most evident feature of the street life, and make up a significant portion of street users in the CBD. In addition to residents and visitors, vendors play a large role in the dynamic use of space in the CBD.

Main stakeholder:
   - Yangon Regional Government (YRG); and
   - Yangon City Development Committee (YCDC)
g. **Specific outputs** of the intervention are (ref. d, project matrix)**:

<table>
<thead>
<tr>
<th>Phase</th>
<th>Outputs</th>
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</table>
| **Inception Phase**          | - Key performance indicators  
|                              | - Overall capacity development strategy  
|                              | - Definition of the participatory process for pilot implementation   |
| **Feasibility Phase**        | - Pre-feasibility study: spatial, legal and financial assessment to determining geographic scoping and project pilot sites;  
|                              | - Assessment of financial tools;  
|                              | - Assessment of key stakeholders’ capacity;  
|                              | - Strategic impact assessment.                                           |
| **Physical Development Phase** | - Successful completion, delivery and installation of pilots.            |
| **Evaluation and Consolidation Phase** | - Monitoring and evaluation of the impact of the intervention related to Programme objectives, SDGs’ and NUA |

h. **Short-term outcomes**

The technical assistance to the City of Yangon for the development and implementation of the streetscape revitalisation intervention in the CBD will directly contribute to improving the governance and management of the city, including better coordination and cooperation between different tiers of government. This feeds into a capacity-building component, oriented both towards civil servants and key stakeholders, which aims to have a long-term impact by addressing city-wide systematic challenges through the implementation of key performance indicators.

One of the main short-term outcomes, is the increased capacity for planning and managing the impacts of climate change while protecting the cultural heritage of the city centre. YCDC will also see an improvement in its ability to access sustainable financing for the implementation of public space and basic infrastructure projects. Capacity building will also take place with local academia and professional bodies to empower those with knowledge to contribute to their local context in new ways. Public awareness raising and outreach will ensure that the intervention is understood on the ground.

The development of Key Performance Indicators (KPIs) will help assess the contribution and impact of the intervention on the objectives of the Global Future Cities Programme (GFCP), the Sustainable Development Goals and the New Urban Agenda. This will have an impact on local capacity to monitor and evaluate urban plans, policies and strategies, as well as to be able to better prioritise strategies for decision making.

The GFCP implementation phase in Yangon will engage with partners from the public sector and academia and include participatory planning processes with communities. Participation of citizens—especially youth, women and vulnerable groups—in the development of municipal plans will be increased and equal contribution of marginalised groups to decision-making processes is a direct output of the Programme.

i. **Medium-term outcomes**

Following the GFCP implementation process, evidence from data collected during the Streetscape Pilots, will impact upon the development and introduction of new policies and legislation around streetscapes in the city. Specifically, evidence gathered will contribute to addressing the protection of cultural and natural heritage whilst increasing access to safe, inclusive and accessible public spaces, in particular for women and children, older persons and persons with disabilities. Better mobility and accessibility in the CBD should also be addressed in the medium-term, and in conjunction with this traffic congestion and associated emissions will be reduced leading to human health and environmental benefits. Additionally, public space improvements and basic infrastructure can contribute to an increased reliability on public services, while enhancing the quality of life to include the promotion of economic equality and creation of job opportunities, particularly for women and youth.*
Complementary outcomes stated in the ToR**

- Sustainable and inclusive urban growth: increased public health, safety and security in public spaces; increased understanding and involvement among the general public on urban development.
- Increased economic opportunities: Sustainable finance mechanisms for the operation, maintenance and management of pilot areas including enhanced alignment of municipal budgets and value capturing mechanisms; Opportunities to transfer outcomes to future activities in other areas within the CBD or Yangon city by local and regional government and communities; Increased economic exposure, value and interest in the assets of targeted streetscapes, enhancing and sustaining livelihoods, and potentially resulting in opportunities for local businesses to work together with international businesses including UK businesses.
- Improved governance and capacity: Increased community involvement and representation (also by vulnerable communities including women, children, older persons, PWDs, and the poor) in city planning and implementation processes.

Long-term impact*

The intervention in Yangon addresses components of sustainable urban design for public space, integrated and participatory governance models, as well as legal considerations for streetscape revitalisation and financial mechanisms for sustainable operation, maintenance and management of the pilot areas. Additionally, the intervention will explore financial tools to unlock and capture value of assets to leverage the municipal and regional budgets (of YCDC and YRG respectively).

In the long-term, the lessons learned after the implementation of the GFCP and the replicable exercise in public space transformation will have an impact on increasing the capacity of the main stakeholders for developing comprehensive urban renewal instruments that enhance linkages between spatial, economic and social development. Furthermore, the city can increase the number of integrated plans, frameworks and approaches to promote more sustainability, resilience, and social inclusion, not only for the CBD but also city-wide.

Expected long-term impact**

- Sustainable, inclusive urban growth:
  - An overarching strategic urban development framework for Yangon, officially adopted and mandated at the regional government level;
  - Inclusive development planning as the norm for approaching future projects;
  - Advocacy, involvement and implementation of urban initiatives by the general public.

- Improved Quality of Life
  - Improved living conditions and reduced pollution and flood risk (public health, safety);
  - Building stronger and safer communities with an increased sense of ownership and engagement;
  - Movement towards improved human rights, gender equality and social inclusion;
  - Vulnerable communities including women, children, older persons, PWDs, and the poor participating in decision making processes.

- Economic opportunities & poverty reduction
  - Sustainable municipal finance;
  - Increased economic value of assets incentivises further investment;
  - Improved streetscapes and public space accessibility enhance economic opportunities & livelihoods.

- Governance
  - Policies and regulations in place to ensure sustainable, inclusive urban growth;
  - Sufficient capacity and skills (number and expertise) to guide urban development in Yangon.

Technical viability***

The barriers for implementation of the intervention in Yangon are generally high, partly due to the introduction of an alternative approach to urban development processes. Barriers can be expected throughout the project cycle, in particular regarding the sustained operation and management of the pilot sites.
Capacity: YCDC has significant individual human capacity with many highly qualified staff in a wide variety of departments. The challenge is not a lack of capacity, however, YCDC has very limited ability to take decisions or act on their own accord due to its complex legal status and relationship with YRG. In view of this, there is a strong commitment from technical officers within the various YCDC departments willing to support the GFCP. Although strategic integrated urban planning is a relatively new phenomenon, there is positive reception to the approach and therefore during the planning and design phase, capacity in this systematic sense is likely to improve.

Market maturity: The urban development process in Yangon is fairly unstable in its ability to serve the interests of a wide variety of stakeholders. There are few system-wide elements that govern how planning decisions are made, and partially for this reason, there is still significant resistance to foreign developers.

Financial: The financial context currently poses several critical challenges for Yangon City Development Committee (YCDC). Despite currently undergoing an administrative restructuring, YCDC does not have their own budget and must apply for finances to the Yangon Regional Government (YRG). Beyond the GFCP-financing of the pilot project(s) during the ‘planning and design’ phase, there is no guarantee of financing for future similar projects. YCDC currently has no strategy for revenue generation and capital expenditure. There is however significant possibility to leverage existing budgets for location-specific infrastructure upgrading.

Legal: The second part of the intervention within the GFCP Programme, aims at the development of policies that support the provision and management of public space in the city. This links to the replicability of the pilots, but also to ensuring that public space is a priority and an integral part in future development schemes, taking into account both the environmental aspects of flood resilience and social aspects such as urban heritage. It has been suggested that engaging private developers through POPS (Privately Owned Public Space) schemes, may be a legal remedy for the challenges of limited public space in the city while engaging sufficiently with the private sector. The city however currently has no unified framework or guidelines to regulate PPP agreements, which increases the risk of any public-private agreements.

Spatial: On the spatial side, the absence of any legislated masterplan or even strategic development framework, severely limits the impetus to develop sustainable solutions to public space that integrate both components of heritage conservation and technical components of flood resilience. There is a barrier related to possible private developers’ interests which could jeopardise their use as public spaces. Without adequate zoning regulations the city is at risk of allowing developments that jeopardise the ‘carrying capacity’ of existing systems and infrastructure. This is especially evident through increases in vehicular traffic, appropriate accounting for hydrologic and topographic data or predicted population growth, density estimations etc. Lack of baseline information and strategic plans on how to accommodate the existing population in the city exposes especially vulnerable communities to displacement and other challenges.

### Barriers related to contextual factors

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Planning &amp; Design</th>
<th>Build</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Market Maturity</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Financial</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
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<tr>
<td>Legal</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Spatial</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
</tr>
</tbody>
</table>
The intervention in Yangon has a moderate transformative potential with regards to promoting both social inclusion as well as the growth of Small and Medium Enterprises (SMEs). Local buy-in and will for change is strong, especially given the nascent market and emerging development trends in the city and wider region. In the short term, through the initial 2-3 years implementation phase of the intervention, the GFCP can contribute significantly to enhancing the opportunity for the existing internal capacity of YCDC to be realised and enacted.

The overall likely success rate for each of the Implementation Phase's the sub-phases has been assessed at 58% for the Planning and Design Phase, 34% for the Build Phase, and 34% for the O&M Phase. The overall success rate is 42%.

### Risks**

The risk areas have been identified as:
- Poor streetscape management;
- Ineffective and un-inclusive participatory approach and poor public awareness;
- Capacity within YCDC departments
- Limited municipal finance;
- Poor data availability;
- Engagement with stakeholders.

### Deliverables**

A matrix consisting of components (not the same as the intervention components), activities, outputs and deliverables. The two components are: A pilot component; and an evidence-based recommendation development component. The four phases are: Inception Phase; Feasibility Phase – pilot project assessment and design and implementation strategy; Physical Development Phase; and Evaluation and Consolidation Phase.

### Consulting expertise:**

14 professional disciplines have been identified. The total number of man-months are 230. One social scientist “Gender and Inclusion Specialist” is included.

**Sources:** *City Context Report. **ToR. ***TVA
Themes related to the evaluation questions

<table>
<thead>
<tr>
<th>EQ</th>
<th>Theme</th>
</tr>
</thead>
</table>
| 1. | Consistency with national goals, policies, strategies and urban development plans.*  
There is no reference to national goals, policies and strategies. The Yangon Regional Government (YRG) is the principle decision-making body of the region. The Yangon City Development Committee's (YCDC) role is highly influenced both in practical and in legislative terms by the YRG.  
The Yangon City Development Law (2013) defines the principal operational authority in Yangon, providing core municipal services in the city.  
Despite the fact that a Strategic Urban Development Plan (SUDP) for Greater Yangon was drafted in 2013 and includes general outlines on the direction for urban growth in the city, there is a lack of a comprehensive land use plan for the city. This SUDP is yet to be translated into a legally-recognised document with specific guidelines. Yangon does not have any all-encompassing policy or strategy to protect both tangible (hard) and intangible (soft) heritage assets in the CBD. However, Yangon Heritage Trust (YHT), an NGO promoting the built and cultural Heritage of Yangon, has developed a strategy which attempts to account for this: the Yangon Heritage Strategy. In the document, which was developed independently and does not have legal status, long-term planning and immediate action are combined, with an attempt to join conservation and development in order to identify key principles for a liveable Yangon.  
The Charrette session (31 August 2018) included participants from the ‘Union Government’: Ministry of Construction; Ministry of Transport and Communications; Ministry of Social Welfare, Relief and Resettlement; Ministry of Hotels and Tourism; and Myanmar Port Authority.  
The Validation Workshop (28 November 2018) was opened by the Minister for Finance and Planning, who requested all partners to continue their engagement – indicating that the central government is informed about the intervention. |
| 2. | The project’s responsiveness to SDG, NUA and other UN-Habitat strategies.  
The CCR refers to the following SDGs: 3, 5, 8, 9, 10, 11, 16 and 17 *  
The CCR refers the following AFINUA key items: 2.2, 2.3, 2.4, 3.1, 3.5, 3.6 and 5.2*  
The ToR refer to the following SDGs: 1, 3, 5, 8, 9, 10, 11, 16 and 17**  
The ToR refer to the following AFINUA key items: 2.2, 2.3, 2.4, 3.1, 3.5, 3.6 and 5.2** |
| 3. | Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens.  
The intended intervention – as defined during the Strategic Development Phase through its outputs and outcomes – is deemed highly relevant for citizens in the CBD specifically and for Yangon City generally. The intervention approach will be replicable in other districts and wards in Yangon City and elsewhere in Myanmar. |
| 4. | Inclusion of vulnerable groups in the project design and implementation  
With appropriate reference to SDGs and AFINUA Key Items vulnerable group are in theory included in the project/intervention design but have not participated significantly in the identification process. Only one social scientist is included in the proposed consultancy team. |
| 10. | Achievement of outcomes during the Strategic Development Phase  
An enhanced understanding of solutions to heritage conservation and flood protection challenges were generated as part of the identification process building on existing concerns. The proposed intervention was validated through the various steps of the identification stage – concluded with the draft ToR for the intervention. |
| 11. | The extent to which city level stakeholders have been involved in the design in the project intervention  
The departments of the YCDC have been heavily involved in the identification process and to some degree the YRC as well. NGOs have been consulted, particularly Yangon Heritage Trust and Doh Eain (a multi-discipline restoration and placemaking social enterprise based in Yangon). The citizens of the intervention area have only participated indirectly in the process. |
12. **Cooperation with other partners**  
Other potential partners include: the World Bank, JICA, ADF, the Embassy of the Netherlands.

13. **Changes made during the identification stage**  
The scope of the intervention has remained unchanged, but the intervention framework has become more focused during the identification process.

14. **Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights**  
Climate change is significantly integrated as flood protection is a key component of the intervention. Gender and youth are mentioned but not very detailed. Human rights may implicitly be integrated due to the reference to the SDGs, but not specifically mentioned.

15. **Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase**  
The overall likely success rate for each of the Implementation Phase's the sub-phases has been assessed at 58% for the Planning and Design Phase, 34% for the Build Phase, and 34% for the O&M Phase. The overall success rate is 42%.

**Summary of short-term outcomes:**
- Capacity to address city-wide systematic challenges;
- Improved governance and management of the City and coordination between tiers of government;
- Increased capacity for planning and managing the impacts of climate change while protecting the cultural heritage;
- Increased ability to access sustainable financing for development;
- M&E capacity to assess effects of strategies, policies and plans and for priority setting;
- Public awareness and citizens mobilization to enhance stakeholders’ and beneficiaries’ participation in the transformation process.

**Summary of medium-term outcomes:**
- Introduction of new policies and legislation around streetscapes in the City;
- Evidence gathered on protection of cultural and natural heritage;
- Evidence gathered on increasing access to safe, inclusive and accessible public spaces;
- Improved mobility and accessibility in the CBD (including people with disabilities) and reduced air pollution through reduced car usage;
- Increased reliability on public services.

**Summary of long-term impact:**
- An overarching strategic urban development framework for Yangon
- Models for streetscape revitalisation and related financial mechanisms;
- Financial tools to unlock and capture value of assets to leverage city and regional budgets;
- Increased capacity for developing comprehensive urban renewal instruments;
- Capacity for CBD and city-wide integrated plans and M&E procedures;
- Enhanced quality of life including economic equality and job creation, particularly for women and youth.

16. **The city’s ownership and its likely enhancement of sustainability**  
Although the YCDC is very supportive of the intervention, the ownership and sustainability are challenged by inadequate autonomy and capacity.

17. **Encouragement of further collaboration among city stakeholders**  
A working committee will be established with members from YRG and YCDC for oversight of the execution. Inclusion of representatives from the wards, CSO, academia and the private sector could facilitate a broader collaboration among city stakeholders.

18. **City’s capacity in place to sustain attained results**  
The city's capacity to sustain the results of the intervention is an open issue, as it is not certain what result will be generated in consequence of the UK FCO’s support.

Sources: *City Context Report. **ToR. ***TVA
7. BANDUNG

City: Bandung
Project/intervention: Development of an Integrated Public Transport System in Bandung

Extracts from intervention documents

a. **Context**

Bandung is the capital of West Java Province and is the third-largest city in Indonesia after Jakarta and Surabaya, with 2.5 million inhabitants. Its metropolitan area, Greater Bandung consisting of the municipalities of Bandung and Cimahi and three regencies (Bandung, West Bandung and Sumedang) is the second-largest metropolitan area in the country with a population of more than 8.5 million inhabitants. The total area of Bandung Municipality is 167 km² and is divided into 30 districts covering 151 sub-districts. Expansion of the urban areas and the rapid growth of the economy significantly increases the mobility needs and transportation demand. The traffic congestion, the high growth rate of the private vehicle fleet and the high level of air pollution and greenhouse gases are the main indicators of the difficulties of the public transport in providing an adequate and sustainable service to a thriving city such as Bandung. The regulated public system is based mainly on the Trans Metro Bandung (TMB), a government-subsidized bus system, and the angkot (city public transport), the favourite mode for local commuters, since it provides wider coverage area and affordable rates.

However, the infrequent service, small coverage, low speed and slow boarding strongly reduce the ability of the TMB to contribute to the public transport system. The angkot represents an outdated service with a low level of comfort and organisation. The Bandung Transport Masterplan aims to improve the public transport system. The Bandung Urban Mobility Project (BUMP), which defines a broad list of interventions to improve the mobility system's quality. The discrepancy between the planning and the implementation phases represents one of the main barriers to the improvement of the system. The commitment of the municipality, the abundant solution proposal and the tendency to promote more sustainable and innovative transport modes need to be managed through a more integrated system that could allow an effective monitoring of the existing structure, a coherent prioritisation of the interventions and a solid financial plan for the implementation.

The Bandung Transport Master Plan, effective from 2015, has been specifically developed with the aim to reach the goal of increasing the public transport market share by 40 per cent. The Plan supports the creation of an effective transport service composed by different modes. A rail-based mass trans system is proposed through the implementation of LRT and Monorail routes, in order to offer an alternative to the Trans Metro Banding. Moreover, there is a call for increasing the existing bus fleet to improve frequency and coverage of the service and the creation of a dedicate touristic transportation service. The Plan also suggests the application of smart technology to the mobility system of the city, with the aim of improving the quality of the service. The document considers other transport modes, motorised and not-motorized, such as angkot and bike sharing, to develop a diffused and effective feeder system.

The Bandung Urban Mobility Project has been published by the city before the Master Plan. It represents a list of projects that the Municipality should implement for a sustainable urban development. Aiming to cover all the main components of an innovative transport system, the Plan include a wide range of proposals, starting from LRT, monorail, TMB and cable car and taking into consideration solutions for non-motorised transport, for example, through elevated pedestrian walkways and a bike-sharing system. Furthermore, the document explores managerial and innovative development aspects of the mobility system, regarding solutions for the parking management, the implementation of an electronic road pricing and the application of the Transit Oriented Development (TOD) principles. Some of the projects have already been implemented form 2013 and 2018, in particular a new school bus system of eight routes and a tourist service composed of 12 vehicles on five routes.
**b. The intervention***
The intervention consists of the development of an Integrated Public Transport System for the whole city of Bandung, with the overall aim of providing a better public service: a safe, affordable and sustainable mobility system. It will outline a clear design of the Integrated Public Transport Network, including the infrastructure and fleet scheme and the costing of the identified operations.

In order to give the local agencies, the tools to manage the new systems and to overcome the existing technical and financial limits, the intervention will focus on detailing a new management structure. It will provide a regulatory framework, with emphasis on the relations with private operators, and it will delineate a business, financial and operational model for concessions, fares and subsidy, general procurement and partnership options. A capacity-building programme will be organized to ensure the effectiveness of the intervention and to ensure the involvement and collaboration of the government and relevant stakeholders such as bus operators, drivers and council members. The starting phase of the intervention will focus on the integration of the Trans Metro Bandung (TMB) and the existing paratransit (angkot), as the key starting point toward an integrated mobility system and on a more sustainable, accessible and safe service for all.

In summary the Integrated public transport system has the potential to:
- Improve the quality and accessibility of the infrastructure and service in all public transport system in Bandung
- Reduce the use of private vehicle, and improve safety, reduce cost of travel, especially for low-income users
- Guarantee a better accountability in the provision of public transport infrastructure and service from the government and better allocation of funding into more sustainable modes of transport
- Improved business opportunities for informal bus industry stakeholders and more equal job opportunities are created for both men and women in the public transport industry
- More inclusive, safer and better-accessible public transport for the vulnerable group, mobility-impaired users, women, children and the elderly

The intervention is in line with the principles and projects of the Bandung Transport Masterplan and acts as strong driver of city ambitions to provide high standard services and to become a recognized smart city by 2031, as outlined in the Bandung Urban Mobility Project (BUMP).

**c. Thematic clusters:**
Multi-modal mobility strategies and plans (5)

**d. Objectives**
The objective is to “provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons” (SDG target 11.2). This will be achieved through the development of an Integrated Public Transport System in Bandung by integrating the existing informal public transport (such as angkot minibuses) and the Trans Metro Bandung (TMB) services and the provision of access through non-motorised transport, such as walking and cycling.

The intervention is also designed to achieve the following sub-objectives, as a result of creating an Integrated Public Transport System in Bandung:
- Improving the quality of public transport;
- Improving access to public transport by promoting NMT;
- Public transport industry transformation;
- Providing a comprehensive plan and business model for the government and stakeholders; and
- Improving government capacity in delivering and managing public transport.

**e. Alignment with SDGs, NUA and other UN-Habitat strategies**
Contribution to Sustainable Urban Development:*  
- Safe and inclusive public transport: SDG 11  
- Reliable infrastructure: SDG 3 and SDG 9  
- Increased access to employment: SDG 5 and SDG 8  
- Participatory Decision-making process: SDG 11 and SDG 16  
- Capacity development: SDG 17
NUA alignment:*
- Roads, streets and transport corridors are central to liveability: AFINUA key item 2.3
- Multimodal transport integrated with walking and cycling options promotes compactness and accessibility, social cohesion, and economic productivity: AFINUA key item 3.4
- Extending of transport services to underserviced and marginalised groups: AFINUA key item 5.4
- Financial sustainability of the transport system: AFINUA key item 4.2
- Delivering basic transport infrastructure and services: AFINUA key item 4.5

Gender equality and vulnerable groups are emphasised.*

Reference to SDG targets in ToR**
SDG targets: 11.2, 11.2.1, 11.3, 11.a, 3.6, 3.9, 9.1 and 13.2
There is no reference to AFINUA key items

f. **Primary target group and stakeholders:**
The primary target group is low-income groups that rely on safe, reliable and affordable transport for reaching work places and public services.

Main Stakeholder:*
- Bandung Planning Agency
- Bandung Land Transport Authority
- Bandung Public Works Agency

Possible project partners:*
- PT SMI – Indonesia State-Owned Infrastructure Financing Company;
- World Bank;
- Ministry of Transportation;
- GIZ

g. **Specific outputs of the intervention:***
- An implementation plan, procurement plan and action plan to develop an integrated public transport system in Bandung;
- New integrated public transport institutions established with responsibility for the development, procurement, construction and operation of the integrated transit system; and
- Improvement of the quality and accessibility of the infrastructure and service in all public transport systems in Bandung.

h. **Short-term outcomes**
One of the main challenges of the city is the lack of coordination and integration of statutory and non-statutory plans. In the short-term future, the Integrated Public Transport System in Bandung, through its capacity-building component, will positively impact the municipal technical and managerial capacity whilst increasing citizens’ inclusion in plans development and decision-making processes. The Integrated public transport system will restructure the organisation of the current public mobility and it will include specific short-term actions to provide the city with integrated plans, frameworks and approaches to promote more sustainable, resilient, and socially inclusive cities. Moreover, the integration between different transport modes at the city-wide scale will allow an improvement of the mobility system’s governance and will promote a better coordination and cooperation between different levels of government and with different public departments. The intervention will include economic viability analysis and prioritize projects within an implementation plan, that will increase Bandung Municipality ability to better plan a sustainable investment framework and to promote an inclusive economic growth in a social and environmental smart manner.

i. **Medium-term outcomes**
In the mid-term the potential outcomes in the city will depend on: the legal effectiveness of the statutory framework for the integrated public transport system; the successful implementation of the strategic projects in integrating the existing paratransit transport (angkot) and the Trans Metro Bandung (TMB); and the success of the capacity-building programme for the public administration and for the transport system operators.
In the mid-term the implementation of the intervention could lead to a progressive and general improvement of the city mobility system in terms of efficiency, quality and reliability. The prioritization of the integration between the paratransit and semi-informal system (angkots) with the main public bus network (TMB) is a main challenge. The angkots represent the most used transport mode and often the only alternative for the lower-income groups. For this reason, it is expected to be a more secure accessible public transport system, particularly for women and disadvantaged groups. Consequently, the new system will lead to and increased ability to access employment and services. These impacts will be not limited only to the user but also to the provider (operators) of the services. The public assistance and inclusion in a wider mobility system through a process of direct engagement and participatory planning will guarantee their permanence in the market, with more organised and stable financial revenues.

**j. Long-term impact***

In the long-term, strengthened capacities of civil servants are expected to enable connecting mobility planning to a sustainable urban transformation and resilience. The intervention will impact the city-wide scale and improve spatial planning at different levels. In particular, the integration of different transport modes and their alignment with the city land-use has the potential to improve accessibility to jobs, commerce and services. Moreover, support to implementation of a Transit Oriented Development programme – in alignment to the Bandung Urban Mobility Plan – would enhance more connected, accessible, financially and environmentally sustainable urban development. This will contribute to the effective implementation of comprehensive urban plans that enhance linkages between the spatial, economic and social development.

The progressive implementation of the governance and regulatory framework, the development and application of well-structured business, financial and operational models; and the physical realisation of planned and designed projects will allow a gradual improvement of the public service. First, an increased accessibility and mobility through the public system will be extended to all parts of the city, including the peri-urban areas in which most marginalized groups live. Second, the better service provided has the potential to reduce private transport use, and as a result reduce the growing traffic congestion. In the long-term all these achievements will lead not only to a more lively and accessible public space, but also to a reduction of energy consumption, of air pollution and greenhouse gas emissions and to a development of healthier urban environment for the citizens.

**k. Technical viability***

The barriers for implementation are in general moderate in Bandung throughout the project cycle especially regarding the building and operation phase. In particular, there are high barriers with regards to the aspects of professional capacity, market maturity and legal conditions.

*Capacity and Market Maturity:* The barriers regarding the capacity and market maturity are high especially with regards to the future building and operation phases. On the one hand, the capabilities of the public sector in transport planning are weak especially compared to those of the private sector. On the other hand, although there are policies and frameworks for transport planning as well as technical standards on TOD, there is a lack of proper guidelines on how to implement these.

*Financial:* Bandung faces some challenges regarding revenue generation as it has a low own source of revenue generation capacity and expenditures depend on the central government especially regarding transport. As the intervention focuses mostly in capacity building and technical support for a better management of the transport system, these barriers will not pose serious challenges in the long-run. Nevertheless, the city will have to find revenue streams to finance the physical interventions proposed such as the setting up and maintenance of the fare system as well as the financing of the identified pilot project.

*Legal:* On the legal side, there are medium barriers especially related to a fragmented metropolitan transport governance. The provincial and municipal government share responsibilities in their mandate over transport projects due mainly to a mismatch of jurisdiction between the municipality’s jurisdiction and the actual metropolitan area. The fragmented governance structure is especially significant as a barrier particularly since the intervention focus explicitly to improve the integration between the angkots feeder system and the formal network.
**Spatial:** From a spatial point of view, there are low barriers overall, with only medium barriers during the planning and design phase. As one of the main purposes of the intervention is to integrate the angkot paratransit system with the wider transport network, there can be some barriers during the planning and design phase due to the lack of planned transport routes and its alignment with the rest of the transport network. Given that these challenges are meant to be addressed through the intervention, these barriers are expected to be low in the build and operation phases.

**Barriers related to contextual factors**

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Planning &amp; Design</th>
<th>Build</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Market Maturity</td>
<td>Low</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Financial</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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<tr>
<td>Legal</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Spatial</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
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The intervention in Bandung has a high transformative potential, particularly the intervention of transport. The Program aims at contributing to the inclusion of the Angkot system into the formal transport planning, which has not yet been attempted in the city. Considering that the Angkot system is mostly used by low income communities, it has the potential to increase accessibility to services and jobs for low income communities. The overall likely success rate for each of the Implementation Phase’s the sub-phases has been assessed at 74% for the Planning and Design Phase, 50% for the Build Phase, and 50% for the O&M Phase. The overall success rate is 58%.

**Risks:**

In delivering the work, the Consultant shall anticipate risks that might become an impediment or even delay the intervention. The Consultant needs to create a plan to mitigate the following risks:
- Delays in the decision-making process during the scenario development or prioritisation phases;
- Government institutions being non-responsive or slowly responding to the Consultant’s requests for data or meetings;
- Rejection from stakeholders to meet with the Consultant or attend any critical workshops;
- Limited data availability which requires the Consultant to conduct a full data collection process, which might affect the time and cost of the project;
- Resistance from select groups of people within the government to accept new ideas and proposals; and/or
- Strategic issues that requires other level of governments (provincial, national, state-owned company), that are outside the city government’s jurisdiction.

**Deliverables/tasks:**

The ToR is output-based. It will cover the following tasks:
1. Current and Future Public Transport Demand Analysis
2. Integrated Public Transport Network Planning and Design
3. Infrastructure and Fleet Design (Including Costing)
4. Regulatory Framework and Institutional Design
5. Minibus Industry Transition Model
6. Business, Financial and Operational Model
7. Economic Due Diligence
8. Project Implementation Roadmap
9. Capacity Building Programme

The Consultant shall lay out a plan for knowledge management for the project. This is especially important to ensure the continuity of project during the implementation, as many key government counterparts involved in the project might change during the 24 months of the project duration. A backstopping strategy needs also be laid out by the Consultant to ensure the government is well equipped and informed with project updates and progress, as well as challenges and bottlenecks.
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<table>
<thead>
<tr>
<th>n. Consulting expertise and implementation arrangements:***</th>
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<tbody>
<tr>
<td>The duration of the consultancy services is 20 months. The proposed consulting team comprises: 9 international consultants with combined 57 man-months of inputs; and 9 national consultants with a combined 47 man-months input. The duration of the team members inputs varies from 12 to 2 months. The professional profiles are mainly technical – one social safeguard consultant is included in the team with a 3 months input.</td>
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<td>A Steering Committee will be formed to oversee the project objective and provide direction on the intervention. Representatives from the Bandung City Agency of Planning Research and Development, City Transportation Agency, and UK FCO will serve in the Steering Committee and be responsible for the supervision of the progress of the work on a regular basis and to review and affirm the proposals from the Consultant.</td>
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<tr>
<td>Additionally, the Consultant also need to consult with relevant national ministries such as the Ministry of Transport, Bappelitbangda (Planning Research and Development Agency, Bandung City Government) and Finance Ministry.</td>
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Sources: *City Context Report. **ToR. ***TVA.
### Themes related to the evaluation questions

<table>
<thead>
<tr>
<th>EQ</th>
<th>Theme</th>
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<tbody>
<tr>
<td>1.</td>
<td>Consistency with national goals, policies, strategies and urban development plans.**&lt;br&gt;The intervention is in line with the principles and projects of the Bandung Transport Masterplan and acts as strong driver of city ambitions to provide high standard services and to become a recognized smart city by 2031, as outlined in the Bandung Urban Mobility Project (BUMP).</td>
</tr>
<tr>
<td>2.</td>
<td>The project’s responsiveness to SDG, NUA and other UN-Habitat strategies.&lt;br&gt;The CCR refers to the following SDGs: 3, 5, 8, 9, 11, 16 and 17*&lt;br&gt;The CCR refers to the following AFINUA key items: 2.3, 3.4, 4.2, 4.5 and 5.4*:&lt;br&gt;The ToR refer to the following SDGs: 3, 9, 11 and 13**&lt;br&gt;The ToR do not refer to the AFINUA key items</td>
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<td>3.</td>
<td>Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens.&lt;br&gt;The intervention is deemed highly relevant for Bandung City and its citizens, but the enabling environment has a number of challenges, especially as regards the governance aspects but also the increasing urban population.</td>
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<td>4.</td>
<td>Inclusion of vulnerable groups in the project design and implementation&lt;br&gt;The vulnerable groups are included in the intervention objective and these groups will potentially benefit from expanded city-wide public transport services.</td>
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<td>10.</td>
<td>Achievement of outcomes during the Strategic Development Phase&lt;br&gt;• An enhanced understanding to the challenges and solutions addressed by the intervention has been achieved.&lt;br&gt;• A validated framework for the intervention has been developed.&lt;br&gt;• Awareness on the capabilities and capacity required to implement the intervention has been created.</td>
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<td>11.</td>
<td>The extent to which city level stakeholders have been involved in the design in the project intervention&lt;br&gt;The city/municipal authority and key city stakeholders have been much involved. The primary target group has only been indirectly involved.&lt;br&gt;The charrette was conducted on 14 August 2018 with participants from National Government (National Planning Agency, Ministry of Transport), Regional Government, Bandung City Local Government, State-owned Investment Company, Bandung Institute of Technology, and the WB.&lt;br&gt;The validation workshop was conducted on 30 October 2018 with participants from Bandung City Local Government, neighbourhood agencies, and universities. The participants generally agreed on the proposed ToR with some minor changes.</td>
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<tr>
<td>12.</td>
<td>Cooperation with other partners&lt;br&gt;Possible project partners:*&lt;br&gt;• Ministry of Transportation;&lt;br&gt;• PT SMI – Indonesia State-Owned Infrastructure Financing Company;&lt;br&gt;• World Bank and GIZ.</td>
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<tr>
<td>13.</td>
<td>Changes made during the identification stage&lt;br&gt;No major changes of the intervention have occurred during the identification stage.</td>
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<td>14.</td>
<td>Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights&lt;br&gt;Explicit reference is made to gender equality. Implicit reference is made to climate change by achieving reduced greenhouse gases. The human rights aspect is indirectly touched upon by wanting to secure the right to affordable transport services. Similarly, youth access to educational institutions and work places could be improved by better transport services.</td>
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15. **Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase**

The overall likely success rate for each of the Implementation Phase's sub-phases has been assessed at 74% for the Planning and Design Phase, 50% for the Build Phase, and 50% for the O&M Phase. The overall success rate is 58%.

**Summary short-term outcomes:**
- A reformed organisational set-up capable of addressing transport challenges;
- Enhanced municipal technical and managerial capacity developed for promoting integrated public transport;
- Citizens’ views and priorities well reflected in planning and decision-making processes;
- Increased mobility due to better coordination of the various transport modes.

**Medium-term outcome summary:**
- Improved statutory framework for integrated public transport;
- Improved performance of public administration and transport operators;
- Improved performance of the city’s mobility system;
- Improved working environment and stable revenues for operators;
- Improved accessibility to work places and public services;
- More secure and accessible transport services for women and vulnerable groups.

**Summary of long-term impact:**
- Increased rate of urban transformation and resilience due to better interface between mobility improvements and urban spatial planning;
- Improved governance of transport services;
- Reduced use of private transport and traffic congestion;
- Reduced energy consumption, greenhouse gas emissions and air pollution;
- Continuous improvement of accessibility to work places, commerce and public services
- A healthier urban environment.

16. **The city’s ownership and its likely enhancement of sustainability**

The city has taken ownership of intervention, which is likely to enhance the intervention’s sustainability, which is challenged due to governance and capacity issues.

17. **Encouragement of further collaboration among city stakeholders**

The intervention is city wide, so replication within the city is not an option. There would be good opportunities for further collaboration with the intended primary beneficiaries and informal transport operators.

18. **City’s capacity in place to sustain attained results**

The barriers regarding the capacity are high especially with regards to the future building and operation phases. On the one hand, the capabilities of the public sector in transport planning are weak, on the other hand, although there are policies and frameworks for transport planning as well as technical standards on TOD, there is a lack of proper guidelines on how to implement these.
8. NEW CLARK CITY

City: New Clark City
Project/intervention: Integrated Sustainable Plan for New Clark City

Extracts from intervention documents

a. Context*

New Clark City is a planned city, currently being developed on a former military base in the Philippines by the Bases Conversion and Development Authority (BCDA) and various private sector companies. The new city is expected to be the country's first smart, resilient and green metropolis. The city aims to address growing environmental problems caused by climate change by being disaster resilient in a region that has been heavily impacted by natural disasters. BCDA was created in 1992 to convert former US military bases to create integrated developments that combine residential areas and economic opportunities. It is currently responsible for the overall development of New Clark City and has involved multiple private sector partners to develop specific areas. For the first phase of the project two joint venture partners are involved, namely Alloy MTD and Fillinvest.

The new city is expected to be 9,450 hectares in size and reach a population of 1.2 million, while providing 800,000 jobs. However, there is no timeline for when the entire plan will be implemented including set targets for when these estimates will be reached. As part of the first phase, the city will host the 30th South East Asian Games, scheduled for late 2019, and BCDA is currently constructing a world-class sports complex and accommodation for the participants. Government buildings will also be moved from the capital of Manila to New Clark City during the first phase of construction due to its proximity. The new development lies within the Clark Special Economic Zone located in the municipality of Capas. It is in an area with a differentiated topography, where the altitude shifts from 54 and 800 metres above sea level, making the new city less prone to flooding. In addition, its geographic location makes it less vulnerable to earthquakes and other natural hazards according to the Philippine Institute of Volcanology and Seismology.

According to BCDA, the new city is planned to incorporate smart and green features within its design, including:

- Walkable development based on mass transportation
- Green building codes
- Water retention ponds and parks
- Airport and sea links
- Preservation of biodiversity
- Urban farming
- Low carbon footprint
- High bandwidth internet everywhere

The first Master Plan was developed by PROS Architects and Planners in 2012. Some conflicts between PROS and the BCDA led to a design competition for a second iteration of the Master Plan. This led to the current version being done by AECOM, which was completed in 2014. The current layout of the Master Plan incorporates a commercial centre surrounding a Central Park, which is itself surrounded by multiple districts. The Central Park aims to provide residents with a central recreation area while also retaining water from heavy rainfall. A civic centre includes the National Government Administrative Centre. New Clark City has an innovation district, which is aimed at attracting industries from all around the Philippines, specifically in the manufacturing and agricultural sectors. University Heights is, perhaps unsurprisingly, planned to be a university district, attracting international and national academic institutions offering high-level and specialised courses and providing a new campus for the University of the Philippines.
New Clark City offers a unique opportunity to showcase good and sustainable urban planning in the Philippines by enhancing public space availability, encouraging the use of non-motorised ways of transport and the creation of mixed use and inclusive developments. However, the future development shows a lack of, respectively, affordable housing provision, mixed-use planning and walkable neighbourhoods, adequate streets and lack of baseline data upon which to base strategic planning. The city proposes a development that is not linked to population growth forecasts. Strategic planning is significantly hampered by a governance system that includes many different actors involved in the planning and design of the area, but which lacks a solid common framework that guides the development. This includes regulations, benchmarks and a comprehensive and grounded Master Plan. Part of the reasons is that the BCDA as a client lacks the capacity and skills to manage the development of the city. Moreover, there is potential to include the existing community living in the area within the development through a comprehensive inclusive housing strategy that offers just and fair resettlement solutions. This also has the potential to increase participation in the plans and strategies of the city and increase inclusiveness.

The latest masterplan, developed by AECOM,3 has been analysed according to the Sustainable Urban Planning Principles proposed by UN-Habitat.4 These principles support the three key features of sustainable neighbourhoods and cities: compact, integrated and connected. This is especially relevant in the case of New Clark City as the city claims to be a model for sustainable development in the Philippines, being the country’s first smart, green and resilient city. However, the pattern of squares, neighbourhood parks, streets, natural and sport areas is not carefully addressed in the masterplan and, although the Baseline Design Guidelines mentions a ‘walkable neighbourhood/well-connected park network’ and ‘green Infrastructure’ as key urban design strategies, a proper hierarchy of open and green spaces is not taken into consideration. At the same time, the area of the forest, which constitute a potentially immense resource for the city, does not appear to be sufficiently connected and integrated in the urban development. On the other hand, the Master Plan displays a clear hierarchy of roads, which is also emphasised in the Baseline Design Guidelines, which describe various strategies to create a pedestrian-friendly environment with a comprehensive network of pedestrian walkways, arcades, covered walkways and elevated pedestrian links.8 Nonetheless, this is mostly planned in connection to the large parks and through the commercial and institutional core. Similar strategies should be studied to fit the residential areas of the plan, in close relation with the finer grain of neighbourhood level green spaces. A more careful approach to the ‘public space structure’ of the plan would also enhance enhances community cohesion and civic identity and offer a higher quality of life.

b. The intervention*

There are three proposed interventions in New Clark City which complement each other in order to achieve the maximum potential for sustainable urban development: a participatory design of the Central Park, the set-up of a sustainability unit and the development of a sustainable livelihoods and housing strategy. While the design of the park can be of value in increasing the quality of public space in the new city, the Sustainability Unit can ensure that the principles of sustainable urbanisation can be implemented and enforced in the city. The Sustainable Livelihoods and Housing Strategy can ensure inclusivity and address the risk of forced evictions within the existing community.

i. Participatory Design of the Central Park

First, the Global Future Cities programme will support the city in the design of the Central Park. The design will be an opportunity to showcase the value of enhancing public space provision in new planned cities. At the same time, it will demonstrate the value of public space in the Philippines by showcasing a model of green, inclusive, safe and accessible public space that could be replicated in other cities in the country. This is especially pertinent in the context of the Philippines where public space generally is not adequately provided and protected.

ii. NCC Sustainability Unit

Additionally, a Sustainability Unit will be established with the objective to contribute to building the capacity within the Authority as a development entity and implementer. The Unit will strengthen the overall strategic planning approach as well as the introduction and establishment of solid frameworks, regulations and guidelines that collectively will promote sustainable urban development. In this sense, the intervention would have a capacity-building component while also informing the development and implementation of the masterplan through recommendations, guidelines, regulations and further developing the KPIs into measurable benchmarks.
iii. Sustainable Livelihoods and Housing Strategy

Finally, the Programme would support the development of a housing strategy aiming at a diverse provision. This would take into account different beneficiary groups such as age, family structures and affordability. Through the housing strategy for the existing community can be addressed through a participatory process, the gathering of baseline data and information and the development of a resettlement strategy that is fair and adequately compensates for the losses in the community.

c. **Thematic clusters:**
The intervention relates to two clusters: 1) Public space; and 2) Urban strategies and plans

d. **Objectives**
The objective is to transform the built environment and the natural environment of the city to create appropriate livelihood conditions for all urban residents with special attention to the existing communities.

e. **Alignment with SDGs, NUA and other UN-Habitat strategies**

**Contribution to Sustainable Urban Development:**
- Sustainable cities and communities: SDG 11
- Enhanced quality of life: SDG 9
- Capacity building: SDG 17
- Increased resilience: SDG 13
- Inclusivity and reduced inequality: SDG 5 and SDG 10
- Increased access to better services: SDG 6 and SDG 7.

**NUA alignment:**
- Urban planning and design: AFINUA key items 3.1, 3.3, 3.4, 3.5 and 3.7
- Legal validation of the revised Masterplan: AFINUA key items 2.2, 2.3, 2.6 and 2.7
- Local revenue generation (land value capture): AFINUA key item 4.1

The ToR indicate that the intervention relates to all 17 SDGs; and refers AFINUA key item 4.6.**

**Cross-cutting issues:**
The intervention in NCC can significantly contribute to Sustainable and Inclusive economic growth, creating a better environment for local economic development and business opportunities through the enhancement of an efficient, compact and inclusive city model. Moreover, the capacity of BCDA in sustainable urban planning, revenue enhancement, evidence based planning and participatory mechanisms can be enhanced. Besides, human rights and social safeguards are especially promoted through this intervention by enhancing the inclusiveness of low-income communities, farmers and indigenous people. While currently there is a high perceived risk for the existing community in NCC, the intervention has the potential to address this risk and provide comprehensive solutions to the existing community living in the area. Through sustainable urbanization and the promotion of evidence based and strategic planning Climate Change, Gender equality and the Inclusion of Youth can also actively be promoted in the future.

f. **Primary target group and stakeholders:**
The primary target group is low-income citizens, with particular attention to the existing communities.

The main stakeholder is BCDA.

The BCDA is currently developing Phase 1 along with its various partners. These include the following: Japan Overseas Infrastructure Network (JOIN), AECOM, Nippon Koi, PKII, Surbana Jurong, FillInvest and Alloy MTD Philippines, Inc.

The Build Build Build program of the National government is spearheaded by the BCDA, the National Economic and Development Authority (NEDA), the Department of Transportation (DOTR) and the Department of Public Works and Highways (DPWH). One of the priority projects is the railway to connect Clark to Metro Manila.
As the host municipality of New Clark City, Capas, Tarlac, it is important to align and harmonise the developments. The updating of the Comprehensive Land Use Plan (CLUP) of Capas, Tarlac is ongoing.

A Memorandum of Agreement was signed in 2015 to establish a University of the Philippines (UP) campus in New Clark City. As part of the agreement, UP will get 70 hectares to build “an academic and research campus of the UP system”. The state university will have use of the land for fifty years, which can be renewed for another fifty in the future.

There are four Indigenous People (IP) groups currently (Bamban Aeta Tribal Association or BATA, Mabalacat Aeta Tribal Association or MATA, Calumpang Aeta Tribal Association or CATA, Samahang Aeta Tribal Association or the STA). The Aetas IP group, are claiming ownership 30 km from the foot of Mt Pinatubo. Yet the entire area of NCC is declared under BCDA via Proclamation 163.2. There is an identified Certificate of Ancestral Domain Title (CADT) in an area near Sacobia, which is roughly 10,000 hectares (a road construction is currently planned to pass through).

g. **Specific outputs** of the intervention:*

**Participatory Design of the Central Park**
- Baseline and Feasibility Studies that include a geodetic survey and ecosystems analysis as well as an analysis of possible financing mechanisms for the building and operation of the Park;
- Design of the New Clark City Central Park that includes the principles of site assessment following SDG 11.7 of public space provision;
- City-wide public space recommendations that analyse the connectivity and accessibility of the park in the broader public space provision of the city;
- Training and capacity building for the development and management of the NCC Central Park specifically regarding how the park can be financed and maintained in the future.

**NCC Sustainability Unit**
- Baseline Study/Preliminary Feasibility Study and Set up Strategy of the Sustainability Unit. This includes a strategy for the institutionalization of the Sustainability Unit;
- Development of KPI benchmarks that specifically focus on the principles for sustainable urban planning and design as well as the implementation of the Goals;
- Design Review of the city's Master Plan in accordance to the Goals and the principles for sustainable urban planning and design;
- Training and capacity building for the creation of the city's Sustainability Unit, especially with regards to sustainable urban planning and Goals’ implementation, monitoring and evaluation.

**Sustainable Livelihoods and Housing Strategy**
- Baseline and Feasibility Study, including Social Situation Analysis and Impact Assessment of the population;
- Participatory Planning and Design Process for defining the baseline study and the citywide recommendations;
- Citywide housing and sustainable livelihood recommendations that promote targeted solutions for the different needs of the population;
- Training and capacity building for the implementation of the Housing Strategy and sustainable livelihoods, which is especially focused on financing mechanisms and participatory tools for urban planning.

h. **Short-term outcomes**

Within the 2-3 years of implementation, the Global Future Cities Programme can contribute to enhanced capacity for strategic and long-term planning, awareness of the SDG tools for participatory planning and revenue generation. This can be achieved through the three training programmes that are supporting the Sustainability Unit, the Housing Strategy and the design of the Central Park, which will focus on the implementation of the SDGs, the use of participatory mechanisms for the development of plans, policies and strategies, and the application of financing mechanisms such as land-based finance for cross-subsidisation of housing and other key public infrastructure.
The Programme will also contribute to better monitoring and evaluation mechanisms for sustainable urbanisation. The development of benchmarks and KPIs that include the SDGs and the principles of sustainable urban planning will provide stronger benchmarks for urban planning that are in accordance with international standards. Through the training programme of the Sustainability Unit, this will be enhanced by supporting capacity building on how to enforce and monitor these benchmarks in the long-run.

The baseline studies that will be conducted including the design of the Central Park as well as on the existing community in the city, will contribute to enhanced evidence-based planning. Given the current lack of baseline information to inform plans and projects, these studies contribute to better practices in urban planning. Moreover, the Programme can contribute to increased participation in developing municipal plans. This can be achieved through the participatory process that will be included as an output of the Housing Strategy and will include the existing community in defining the current development of the city. This will be further strengthened through the training programme on participatory tools for urban planning.

### Medium-term outcomes*

In the mid-term timeline of 3-5 years, if the interventions are executed and translate into the legalisation of the initiatives and consequent capital investments on the ground, this could lead to more provision and better quality of green public space, increased provision of affordable housing and inclusive city, mixed use developments that promote equal access to services and housing and increased land values and a prosperous real estate market. This can be achieved if the revision of the masterplan, the housing strategy and the design of the Central Park and public space recommendations contribute to defining the future urban development in the city and to the provision of affordable housing, better and increased provision of public space and a change in the city development model into a compact, inclusive city that enhances mixed use developments and accessibility to services and jobs.

Besides, the building of the park can affect the surrounding land prices, which can be turned into increased revenue generation for the city with the implementation of adequate mechanisms of land-based finance. Similarly, the change of the city development model into a more compact, mixed use which is walkable and has transport-oriented development can increase quality of life and the attractiveness of the city, thereby having an impact as well on land values. Inclusiveness of woman, the elderly and youth can be promoted through the implementation of the design of the park. The design can be adapted to women, the elderly and youth but this means promoting different uses and adapting the safety and accessibility standards. In the long-term the park would have to be adequately maintained and operated in order to ensure its continued accessibility for women, the elderly and youth.

### Long-term impact*

In the long-term, the implementation of a sustainable, compact and inclusive city model can have an impact on the creation of a vibrant city that fosters local economic development and enhanced and more equal access to jobs and economic opportunities. The condition to achieving this impact is that the strategic support of the Global Future Cities Programme in promoting more sustainable urban development through the review of the masterplan, urban planning benchmarks and the promotion of quality public space and affordable housing is continued in the five to 15 years of implementation. Moreover, if the Sustainability Unit is implemented successfully and the benchmarks developed by the Global Future Cities Programme are enforced, this can act as a way to monitor and evaluate the long-term execution of the sustainable urban planning principles.

While the inclusiveness of the indigenous communities, farmers and low-income groups can partially be promoted in the mid-term with the implementation of the Housing Strategy, full inclusiveness of the existing community could be achieved in the long-term. The development of solutions that will offer an alternative for forced evictions to the existing community is only achievable if a policy of finding comprehensive and affordable options for the existing community is maintained in the future. Increased resilience towards climate change can be also achieved as a long-term effect of the intervention. While the design of the Central Park can offer some design solutions for increased resilience towards flooding, the sustained enhancement of evidence-based and strategic planning can trigger resilient practices in the development and implementation of plans and strategies. This can contribute to proactive resilient urban planning mitigating the effects of climate change in the future.
**Technical viability***

The barriers for implementation are in general high in New Clark City (NCC) throughout the project cycle especially regarding the building and operation phase. In particular, there are high barriers with regards to the spatial, financial and legal conditions.

**Capacity and Market Maturity**: The lack of capacity within BCDA is a significant challenge especially regarding the plan and design phase of the project cycle. Town planning (urban planning and design) is a relatively new profession in the Philippines, with only a few planning skills and a lack of incentives for people to work in local governments. This is exacerbated in the case of BCDA, which lacks skilled urban planners that can support long-term planning and successfully review the work undergone by the different private sector actors involved in the development of the site.

**Financial**: While the GFCP will support the strategy development of the Comprehensive Sustainability Plan for New Clark City (CSP-NCC), there is a high uncertainty to how the new city will be able to finance the actual implementation and maintenance of the intervention in a long-term perspective. Beyond the scope of the Public Private Partnership (PPP) agreements through which the city is being developed, NCC currently has no strategy for revenue generation and capital expenditure. This includes no current financial mechanisms related to collection of fees, taxes or the use of land-based finance mechanisms. The latter can specifically hinder the actual implementation of the housing strategy and the design of the Park in further project cycle stages beyond the GFCP support. Besides, as NCC is not recognized as a formal city administration, there is no institutional body in place that can access national and international funds.

**Legal**: Although there are national policies that support the intervention, given that NCC is not recognized as a city and neither BCDA as a local government, there is uncertainty as to how the city will comply with these frameworks. The city has currently no unified framework or guidelines to regulate PPP agreements, which exacerbates the risks of public-private agreements. Moreover, while there is anecdotal evidence that suggests that the existing community has tenure rights based on ancestral land, there is a lack of clarity on the legal framework that would be applied for finding appropriate resettlement and compensating solutions for the current community.

**Spatial**: On the spatial side, the Masterplan and strategic documents of the city do not follow the principles of sustainable urbanization with an especially prominent lack of mixed use, inclusive developments and connectivity. Moreover, the land use plan is not sustained on adequate hydrologic and topographic data as well as population growth and density estimations. Lack of baseline information and strategic plans on how to accommodate the existing population in the city puts community at risk of displacement.

### Barriers related to contextual factors

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Planning &amp; Design</th>
<th>Build</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
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<tr>
<td>Market Maturity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
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<tr>
<td>Financial</td>
<td>Low</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Legal</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Spatial</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>
The intervention in NCC has a high transformative potential with regards to promoting both social inclusion as well as sustainable urbanization overall. The existing community is currently completely neglected in the current plans for NCC, offering the Global Future Cities Program an opportunity to reverse this situation by offering fair and participatory housing solutions for the existing community within the future city. Additionally, the focus of the intervention on the SDGs and the introduction of benchmarks for sustainable urbanization can have a transformative impact in reversing the currently unsustainable vision projected in the present Masterplan. Moreover, land-based finance approaches can have a positive impact in introducing financing mechanisms to cover the costs for the necessary public infrastructure that inclusive and sustainable urbanization requires.

The overall likely success rate for each of the Implementation Phase’s the sub-phases has been assessed at 42% for the Planning and Design Phase, 34% for the Build Phase, and 34% for the O&M Phase. The overall success rate is 37%.

### i. Risks:*

The risk assessment relates to:
- Political risks – election 2022
- Pace of implementation – a rapid pace of development
- Financial – lack of sources of funding
- Institutional – institutionalisation of the Sustainability Unit is critical
- Participatory approach – engagement of affected communities

### m. Deliverables/ Tasks:*

The planned duration is three years and the intervention will be implemented in three phases:

**Phase 1:**
- Baseline Study
- Preliminary Feasibility Study
- Design review of the NCC Masterplan
- Key Performance Indicators/ Benchmarks
- Social Situation Analysis and Impact Assessment
- External Institutional Situation Analysis and Impact Assessment
- Internal Institutional Situation Analysis and Impact Assessment
- Geodetic Survey of the NCC Central Park
- Ecosystem Study of the NCC Central Part

**Phase 2**
- Setting up of an institutional plan for the NCC Sustainability Unit
- Conceptual design of the NCC Central Park
- Site development plan for the integrated housing and livelihood areas within NCC
- Final Feasibility Study
- ToR for the implementation of the NCC Central Park
- City-wide recommendations for public space
- City-wide recommendations for a housing strategy and sustainable livelihood

**Phase 3**
- Training and capacity building for the NCC Sustainability Unit
- Training and capacity building for implementation of the housing strategy and sustainable livelihood
- Training and capacity building for the development and management of the NCC Central Park

### n. Consulting expertise and implementation arrangements:*

The proposed consultant team consist of 17 members, one of which is national. The team comprises disciplines such as planners, economists, housing specialists and architects, landscape architect, lawyer, engineers, environmental specialist, IP specialist, training specialist. Cooperation with an NGO should be established.
The selected Consultant will be required to undertake sustainable urban development of New Clark City. This will include the review of the current New Clark City Master Plan. The Consultant will also be tasked to bring in a local NGO with experience in participatory process and community engagements, guided by UN-Habitat’s ‘People Process’ for the development of the Housing Strategy and the trainings and capacity building.

A Technical Working Group (TWG) will be formed within BCDA to be the counterpart of the consultant with the objective of providing assistance and ensuring effective delivery and implementation of the interventions. The TWG will have a representative allocated for the intervention and will undergo training and capacity building in preparation for the implementation.

Sources: *City Context Report. **ToR. ***TVA.
<table>
<thead>
<tr>
<th>EQ</th>
<th>Theme</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Consistency with national goals, policies, strategies and urban development plans.</td>
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<tr>
<td></td>
<td>The current Masterplan was not found to be optimal. The challenge will be to amend the</td>
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<tr>
<td></td>
<td>Masterplan in accordance with sound urban planning and management principles. The BCDA</td>
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<td></td>
<td>does not have competent urban planners, which may affect the degree of possible</td>
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<td></td>
<td>amendments.</td>
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<tr>
<td>2.</td>
<td>The project’s responsiveness to SDG, NUA and other UN-Habitat strategies.</td>
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<tr>
<td></td>
<td>The CCR refers to SDGs 6, 7, 9, 10, 11, 13 and 17.</td>
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<td></td>
<td>The CCR refers to AFINUA key items 2.2, 2.3, 26 2.7, 3.1 3.3, 3.4, 3.5, 3.7 and 4.1.</td>
</tr>
<tr>
<td></td>
<td>The ToR indicate that the intervention relates to all 17 SDGs; and refers AFINUA key</td>
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<tr>
<td></td>
<td>item 4.6.**</td>
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<tr>
<td>3.</td>
<td>Relevance of the intended outputs and outcomes to the needs of the city, local authorities,</td>
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<tr>
<td></td>
<td>and citizens.</td>
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<tr>
<td></td>
<td>The intervention is deemed highly relevant to the city and its citizens, especially the</td>
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<tr>
<td></td>
<td>existing low-income groups, indigenous groups, and vulnerable citizens. The relevance of</td>
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<tr>
<td></td>
<td>the intervention will eventually be determined by the extent to which the substantial</td>
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<tr>
<td></td>
<td>barriers can be overcome. NCC does not have its own local government, but is associated</td>
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<td></td>
<td>with the Capas, Tarlac municipality. BCDA drives the development process.</td>
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<td>4.</td>
<td>Inclusion of vulnerable groups in the project design and implementation</td>
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<td></td>
<td>Frequent references are made to the inclusion of vulnerable groups. These have only been</td>
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<td></td>
<td>involved in the identification process.</td>
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<tr>
<td>10.</td>
<td>Achievement of outcomes during the Strategic Development Phase</td>
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<td></td>
<td>• An enhanced understanding to the challenges and solutions addressed by the intervention</td>
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<td></td>
<td>has been achieved.</td>
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<td></td>
<td>• A validated framework for the intervention has been developed.</td>
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<td></td>
<td>• Awareness on the capabilities and capacity required to implement the intervention has</td>
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<tr>
<td></td>
<td>been created.</td>
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<tr>
<td>11.</td>
<td>The extent to which city level stakeholders have been involved in the design in the</td>
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<tr>
<td></td>
<td>project intervention</td>
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<tr>
<td></td>
<td>BCDA and key city stakeholders have been much involved. The primary target group has only</td>
</tr>
<tr>
<td></td>
<td>been indirectly involved.</td>
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<tr>
<td></td>
<td>The charrette was conducted on 14 August 2018, and the validation workshop on 30</td>
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<tr>
<td></td>
<td>November 2018.</td>
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<tr>
<td></td>
<td>There are no detailed participant lists.</td>
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<tr>
<td></td>
<td>The participants generally agreed on the proposed ToR with some minor changes.</td>
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<tr>
<td>12.</td>
<td>Cooperation with other partners</td>
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<tr>
<td></td>
<td>Besides BCDA, the intervention will be coordinated with:</td>
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<tr>
<td></td>
<td>• ADB, (WB)</td>
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<td></td>
<td>• Japan Overseas Infrastructure Network (JOIN)</td>
</tr>
<tr>
<td></td>
<td>• National Economic and Development Authority (NEDA)</td>
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<td></td>
<td>• Department of Transportation (DOTR)</td>
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<td></td>
<td>• Department of Public Works and Highways (DPWH)</td>
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<td></td>
<td>• Municipality of Capas, Tarlac</td>
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<td></td>
<td>• University of the Philippines (UP)</td>
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<td></td>
<td>• Indigenous Peoples associations</td>
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<tr>
<td></td>
<td>• A NGO – not yet identified</td>
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<tr>
<td>13.</td>
<td>Changes made during the identification stage</td>
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<tr>
<td></td>
<td>No major changes of the intervention have occurred during the identification stage.</td>
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<tr>
<td>14.</td>
<td>Integration of cross-cutting issues in the project design such as gender, youth, climate</td>
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<tr>
<td></td>
<td>change, human rights</td>
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<tr>
<td></td>
<td>Human rights and social safeguards are especially promoted through this intervention by</td>
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<tr>
<td></td>
<td>enhancing the inclusiveness of low-income communities, farmers and indigenous people.</td>
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</tbody>
</table>
Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights

Human rights and social safeguards are especially promoted through this intervention by enhancing the inclusiveness of low-income communities, farmers and indigenous people. While currently there is a high perceived risk for the existing community in NCC, the intervention has the potential to address this risk and provide comprehensive solutions to the existing community living in the area. Through sustainable urbanization and the promotion of evidence based and strategic planning Climate Change, Gender equality and the Inclusion of Youth can also actively be promoted in the future.

While human rights issues are expressed clearly, there are limited references to Gender, youth and climate change.

15. Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase

The overall likely success rate for each of the Implementation Phase’s sub-phases has been assessed at 42% for the Planning and Design Phase, 34% for the Build Phase, and 34% for the O&M Phase. The overall success rate is 37%.

Summary of short-term outcomes:
- Sustainability Unit established;
- Enhanced capacity for strategic and long-term planning;
- Baseline information for the design of the Central Park as well as on the existing community in the city;
- Participatory mechanisms for the development of plans, policies and strategies;
- Financing mechanisms such as land-based finance for cross-subsidisation of housing;
- Monitoring and evaluation mechanisms for sustainable urbanisation.

Summary of medium-term outcomes:
- Revised masterplan and housing strategy;
- Increased provision for better quality of green public space;
- Increased provision of affordable housing and a more inclusive city with mixed use development;
- Mixed use developments that promote equal access to jobs, services and housing;
- Increased accessibility to green public spaces for women, the elderly and youth;
- Increased land values.

Summary of long-term impact:
- Enhanced local economic development;
- Enhanced and more equal access to jobs and economic opportunities within city;
- Full inclusiveness of the existing community;
- Increased resilience towards climate change.

16. The city’s ownership and its likely enhancement of sustainability

The city has taken ownership of intervention, which is likely to enhance the intervention’s sustainability, which is challenged by barriers related to all the five factors.

17. Encouragement of further collaboration among city stakeholders

The are plenty of opportunities for working with other stakeholders, both those involved with development projects coordinated by BCDA and the primary stakeholders.

18. City’s capacity in place to sustain attained results

The lack of capacity within BCDA is a significant challenge especially regarding the plan and design phase of the project cycle. Town planning (urban planning and design) is a relatively new profession in the Philippines, with only a few planning skills and a lack of incentives for people to work in local governments. This is exacerbated in the case of BCDA, which lacks skilled urban planners that can support long-term planning and successfully review the work undergone by the different private sector actors involved in the development of the site.
9. HO CHI MINH CITY

City: Ho Chi Minh City
Project/intervention: Development of a Geographical Information System for the drainage system in Ho Chi Minh City

Extracts from intervention documents

a. **Context**

Ho Chi Minh City (HCMC) is the largest city in Vietnam with a population of 8.4 million, exceeding Hanoi, Vietnam's capital. It is located in the south of Vietnam and is at the core centre of Ho Chi Minh City Metropolitan Area, which has a population that exceeds 20 million, 16 million of whom live in urban areas. The Metropolitan Area consists of Ho Chi Minh City and seven nearby provinces, covering an area of 30,000 km². The city is currently undergoing a period of strong economic and population growth; as it is the economic and financial hub of Vietnam, it continues to attract migrants from other provinces. The shift from a socialist to an open market economy has also encouraged the growth of private enterprises in HCMC; it currently accounts for 23 per cent of Vietnam's gross domestic product (GDP) and 20 per cent of foreign direct investment. Ho Chi Minh City is in an intra-tropical zone and has a relatively low elevation that makes it vulnerable to many of the adverse impacts of climate change. The location of HCMC has also further aggravated the impacts of flooding; being situated along the coast makes the city susceptible to storm surges. Due to the rapid population and spatial growth of the city, future risks are likely to be further exacerbated.

HCMC currently faces many issues caused by rapid population growth and subsequent land-use change; the most notable being insufficient mobility and flooding. By utilising a participatory process to engage stakeholders and citizens, these two issues were identified due to their adverse impact on the city's prosperity and economic growth. HCMC ranks among the ten cities most affected by climate change as 45 per cent of land in HCMC is less than 1 metre above sea level. Large parts of the city are exposed to floods on a regular basis, causing economic damage to key infrastructure. Canals and drains have been set up to help mitigate flooding and allow water drainage built during the French era to meet the demand of a population of what was then 2 million. The system has since been expanded but it still does not meet the demand of the growing population. The current database of drains and canals is facing several issues concerning data management and reliability; it has not been updated regularly to match the current status of the drains and many documents have also been lost or damaged due to the war, resulting in critical gaps. This is crucial as the current system is at the edge of its capacity and, without a database, the city will not be able to expand the canals and drain network.

HCMC experiences flooding regularly. The flooding is caused by multiple factors, mainly periods of intense rainfall that regularly inundate the city, especially during the rainy season which spans from June to November. In total, about 160 rain events occur throughout the year with an average accumulated rainfall of 2000mm. The wet months bring an average of 250-330mm of rainfall monthly, with a maximum of 683mm. The city also is subject to flooding from the Saigon River and waterways from the neighbouring Mekong Delta, along with discharge from upstream waterbodies and dams. As HCMC is a coastal city that is subject to semi-diurnal tidal waves from the South China Sea, with amplitude reaching a maximum of 1.5 m. This means that flooding will be further exacerbated by climate change effects; the rising sea level along with tidal pressures can inundate the majority of the city. Land-use planning has also impacted upon the areas currently flooding; weak land-use planning has not prevented any development in low-lying areas. The city has a dense network of rivers and canals; there are 2,953 canals with a total length of 4,369 km. These canals were established for a population of 2 million people. As the current population greatly exceeds that number, there is further pressure on the current system. An assessment by the Steering Centre for Urban Flood Control (SCFC) indicates that the total capacity of the drainage and sewerage system only covers 30 per cent of the total required for the city.
Many of these canals are currently facing issues relating to their capacity and quality. Built up areas around the canals also have a poor drainage system in place, forcing residents to use the canals for dumping untreated water. Many of the canals have also been used for dumping solid waste by the residents, which has limited their capacity. There have been multiple projects by international agencies that attempt to increase the capacity of the city's drainage system, including a plan developed by the Japan International Cooperation Agency (JICA) to build 6000km of canals and pipes. The infrastructure capacity was based on projects made on the time of the study, however, over the past decade, the impact of flooding has been further exacerbated; the frequency of extreme rainfall events with precipitation greater than 100mm has increased by a factor of three.

On June 19, 2001, the HCMC Drainage Master Plan was approved by the Prime Minister in Decision No. 752/QD/TTg and to be implemented by 2020. This plan included steps to treat the urban water environment in four periods: 2001-2005, 2006-2010, 2011-2015 and 2016-2020. However, based on discussions with stakeholders, there have been delays in completing the above objectives. This is due to many reasons, including a lack of financial capacity of HCMC People's Committee, and the number of stakeholders involved, making it difficult to collaborate and distribute tasks. Many of these canals have also been manipulated by residents through encroachment, making it challenging for the city to evict illegal settlers.

b. **The intervention**

The current drainage system is an integral mechanism for flood mitigation. However, its management has been strained due to issues of data management and reliability. Many documents have been lost or damaged, while others have not been updated to reflect ground conditions. The intervention proposes to digitalise the drainage system's inventory within Ho Chi Minh City. While the city is currently implementing a first pilot project to develop a digitalised inventory of a specific area, it only covers 8 per cent of the total network. The city currently heavily relies on funding from its budget and international donor agencies (DANIDA, JICA, and World Bank to name a few) for providing data on the drainage system, and a central digitalised inventory that compiles and collects this data is not present.

The intervention hence proposes to develop an inventory that compiles the information on the canals and drains network, which is updated regularly. It will provide a framework for the city to expand its network of canals and drains in the future, while also providing technical assistance and mechanisms on data management and sharing between multiple agencies. The intervention aims to review and assess the current drainage network in order to carry out geologic, hydrologic and topographic surveys of the drainage network. This will then lead to the development of a comprehensive GIS database, which can be used to develop flooding models such as catchment, city and neighbourhood scale. Long-term development strategy is also considered for integrating the data with the city, along with proposing future flood mitigation strategies.

c. **Thematic clusters:**

Flood management plans and systems (7)

d. **Objectives**

The overall objective of the Intervention is fundamentally to achieve the HCMC towards supporting Sustainable Development Goal 11.5: “By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations”.

Specifically, the Intervention is also designed to achieve the following sub-objectives, as a result of building a GIS in Ho Chi Minh City:

- Improve the quality of the overall Drainage System Management;
- Provide comprehensive data to support the decision-making process of government and stakeholders in related-issues;
- Improve the capacity of city authorities to adapt to, mitigate and control floods;
- Transform the urban management related-tasks in Ho Chi Minh City; and
- Improve understanding of flood-prone areas.
Specifically, the Intervention is also designed to achieve the following sub-objectives, as a result of building a GIS in Ho Chi Minh City:

- Improve the quality of the overall Drainage System Management;
- Provide comprehensive data to support the decision-making process of government and stakeholders in related-issues;
- Improve the capacity of city authorities to adapt to, mitigate and control floods;
- Transform the urban management related-tasks in Ho Chi Minh City; and
- Improve understanding of flood-prone areas.

e. **Alignment with SDGs, NUA and other UN-Habitat strategies**

**Contribution to Sustainable Urban Development:**

- Safe and inclusive public transport: SDG 3 and SDG 11
- Increased access to employment: SDG 8
- Capacity building: SDG 17
- Reliable infrastructure: SDG 9
- Mitigating risks: SDG 11 and SDG 16
- Better planning for climate change: SDG 1 and SDG 13

**NUA alignment**

- Provision of integrated efficient and equitable urban service framework: AFINUA key item 5.4
- Incorporating M&E tools for better impact assessment: AFINUA key item 2.9
- Coordination between multiple stakeholders for flood protection: AFINUA key item 2.1 and 3.2

The ToR refer to SDG targets: 11.5, 11.a, 11.b. There is no reference to the AFINUA key items.

f. **Primary target group and stakeholders:**

The main target group are the citizens of HCMC, especially those living in flood prone areas with particular attention to vulnerable groups living along the river banks and canals.

Main stakeholder: Steering Centre for Flood Control (SCFC)

Possible intervention partners:

- People Committee of HCMC
- People Committee of districts
- Committee for Flood Control
- Department of Construction (DOC)
- Department of Transport (DOT)
- Department of Agriculture and Rural Development (DARD)
- Department of Planning and Agriculture (DPA)
- Department of Natural Resources and Environment (DONRE)
- Department of Science and Technology (DOST) and HCMC GIS Centre
- Department of Information and Communications (DIC)
- The Investment Management Authority (IMA) – for the Environmental and Sanitation Project funded by the WB.
g. **Specific outputs** of the intervention:**

The main outputs are:
2. Methodology and detailed Reports on the Hydrologic and Topographic Surveys of the Drainage Network;
3. A comprehensive GIS for the Drainage System of HCMC;
4. Flooding risk models and scenarios according to differing scales and proposed solutions to mitigate flooding risks in vulnerable areas; and
5. A long-term development strategy of GIS for the Drainage System in HCMC.

h. **Short-term outcomes**

In the short term, the 2-3 years of the Global Future Cities Programme’s implementation in Ho Chi Minh City will positively impact the municipal technical and managerial capacity while ensuring citizens’ inclusion in decision making processes. One of the main challenges observed in HCMC is the lack of coordination and collaboration between multiple stakeholders and its impact on the multiple Master Plans developed for the city. Both interventions (the second intervention in HCMC is concerned with development of a smart ticketing system) include capacity-building components for that will lead to better governance and integrated planning processes, especially in combating climate change and its adverse impacts on Ho Chi Minh City.

Both interventions directly tackle the lack of capacity witnessed in the transport and water management sectors. The resilience intervention will assess the existing capacity, define the scope of work and undertake necessary surveys of the drainage network, while engaging technical staff in establishing flood models for the city at multiple scales. The intervention will increase the amount of information available to technical staff. It will also suggest a long-term development strategy for the GIS system that can increase the current capacity in the short term and ensure a longer impact. One of the financial challenges observed in the city is the involvement of the central government.

i. **Medium-term outcomes**

In the mid-term timeline of 3-7 years, the city will see better decision-making due to increased capacity to prioritise strategies and improved tools. The flood modelling at city-level scale can identify vulnerable areas in the drainage system and, as such, propose areas for expanding the drainage system. This can lead to a more efficient drainage system management, which can be most visible in flooding scenarios. Based on the outcomes of the flood modelling, the Steering Centre for Flood Control can propose future solutions to the city, which can lead to better flood management. The information obtained from the resilience intervention can assist the stakeholders in better planning and managing the impacts of climate change. This can be achieved through the baseline assessments conducted to review and assess the drainage system in order to define the scope and carry out surveys on the drainage network in the city. The impact could reach the city spatially via informing the planning process, especially with regards to retention areas, flood protection mechanisms that could protect vulnerable groups living within high-risk flood areas.

j. **Long-term impact**

The resilience intervention can protect vulnerable communities and infrastructure from future flooding events, which can be done by developing and integrating the data into a decision-making process for early warning, mitigate future flooding and manage the water resources of the city. The impact could also reach up to the watershed scale if the legal setting encourages collaboration and coordination amongst different stakeholders. The city can have improved tools that can enhance evidence-based planning and, as such, lead to a more sustainable, resilient and socially-inclusive city. As the city would have access to data on transport and water management this can be used to monitor progress and inform future transport and land-use plans.

Through increasing the local capacity, it is expected that the city can evaluate and monitor the impact of urban plans, policies and strategies. As both interventions are heavily reliant on data, the resilience intervention incorporates a data strategy that can allow the integration of drainage GIS data. This can allow for better plans to enhance collaboration and coordination amongst stakeholders, ensuring a sustainable growth of HCMC.
**Technical viability***

The barriers for the long-term implementation of both interventions are high, with barriers mostly concentrated throughout the project cycle and with regards to all spatial, legal, financial and capacity and market maturity conditions. The intervention on Developing a Digitalized Inventory of the Drainage System has higher barriers, mostly associated with more difficult spatial and financial conditions.

**Capacity and Market Maturity:** There are medium barriers regarding capacity and market maturity for both interventions. While the planning and policy environment is adequate, it is highly centralized. This may limit the capacity of the city to execute plans and policies. Moreover, planning and building standards in Vietnam are appropriate to the various technical, social and environmental challenges and needs, though enforcement is variable. While there are adequate plans and strategies at local level, evidence suggests that these often do not get implemented.

**Financial:** The Digitalized Inventory of the Drainage System will identify strategies for flood management and control as well as infrastructure needs for increasing the drainage system capacity. The support of these infrastructure needs in the build and operation phase can have high barriers. Allocating internal funding for resilience in HCMC is especially challenging. The city itself spends 3.5% in environment being unclear how much of this is spent in flood protection. Possible revenue generating mechanisms can be the application of land-based finance but there is currently only a small proportion of revenues being generated from land value. Moreover, it is unclear if the drainage inventory will result into the development of risk maps that can be used to define urban development and thereby have an impact on land values.

**Legal:** The top down approach of the governance structure of urban water management is one of the main legal barriers of the Digitalized Inventory of the Drainage System. Moderate barriers throughout the project cycle relates to the centralized and shared mandate of various national ministries which makes it difficult to implement any policies or strategies. Moreover, as a result of the top down approach, there is a lack of integration between urban planning and flood risk management.

**Spatial:** The Digitalized Inventory of the Drainage System can face high spatial barriers in the future, while medium barriers during the GFCP implementation phase. There is currently an incongruence between resilience and urban planning that leads to urban development in prone risk areas. This puts more pressure on water management. Moreover, this is exacerbated by rapid population growth that can put more pressure on the drainage system. Without a holistic approach towards water management the mapping of the drainage system is unlikely to succeed.

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Planning &amp; Design</th>
<th>Build</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Market Maturity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
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<tr>
<td>Financial</td>
<td>Low</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Legal</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Spatial</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
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</table>

The transformative potential impact for the Digitalized Inventory of the Drainage System is medium. On the resilience side, there are already some scattered initiatives to digitalize the drainage system. However, these are carried out in a fragmented way by external donors and agencies. The intervention will contribute to do one mapping exercise for the whole drainage system.

The overall likely success rate for each of the Implementation Phase’s the sub-phases has been assessed at 58% for the Planning and Design Phase, 34% for the Build Phase, and 34% for the O&M Phase. The overall success rate is 42%.
|Risks: **| The following risks should be taken into account:  
1. Low commitment of HCMC (Low)  
2. The high number of stakeholders may lead to complicated working conditions (Medium)  
3. Technical capacity of staff and Vietnamese counterparts (Low)  
4. Review and approval time of Vietnamese authorities (Medium)  
5. SCFC is under reorganisation and will be placed under direct management of DOC (Medium).  
6. The long-term outcomes may be limited because of financing mechanisms and governance issues (Medium). |
|---|---|
|Deliverables/ Tasks: **| In order to achieve the objectives above, the Intervention will include the following main tasks:  
1. Review and assess the Drainage System and Flooding Data Management and Applications of GIS in Urban Management in HCMC;  
2. Define the scope and carry out surveys and measurement on the Drainage Network in HCMC;  
3. Develop the comprehensive GIS for the Drainage System of HCMC;  
4. Using the newly-established GIS, develop flood models at the level and at scale of the city, catchment area and neighbourhood (sub-catchment area); and  
5. Develop a long-term strategy for GIS of the Drainage System in HCMC and propose an integration strategy with the GIS of the city. |
|Consulting expertise and implementation arrangements: **| The following positions have been proposed:  
- Int. Urban Drainage and GIS expert (team leader)  
- Vietnamese Urban Drainage expert (deputy team leader)  
- Int. GIS expert  
- Vietnamese GIS expert  
- Vietnamese Urban Development expert  
- Surveying technicians.  
There are no social scientists and human resources development experts/consultants. A Steering Committee comprising members from SCFC, UK FCO and Project Management will be set-up. A wider representation is not mentioned. |

Sources: *City Context Report. **ToR. ***TVA.
### Themes related to the evaluation questions

<table>
<thead>
<tr>
<th>EQ</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Consistency with national goals, policies, strategies and urban development plans.**&lt;br&gt;A Drainage Masterplan for HCMC was developed in 2001 with four five-year phases. The implementation has been challenged due to lack of financing and complicated coordination mechanisms. The WB has funded the Environmental and Sanitation Project. The point of departure for the intervention will be to analyse the current situation of the drainage system, funding opportunities and governance issues.</td>
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<td>2.</td>
<td>The project’s responsiveness to SDG, NUA and other UN-Habitat strategies.&lt;br&gt;The CCR refers to the following SDGs: 3, 8, 9, 11, 13, 16, and 17. The CCR refers to the following AFINUA key items: 2.2, 2.9, 3.2 and 5.4. &lt;br&gt;The ToR refer to the following SDG 11 targets: 11.5, 11.a and 11.b. There is no reference to the AFINUA key items.</td>
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<tr>
<td>3.</td>
<td>Relevance of the intended outputs and outcomes to the needs of the city, local authorities, and citizens. &lt;br&gt;The intervention is deemed highly relevant to HCMC and its citizens, but the extent of the barriers poses serious challenges.</td>
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<td>4.</td>
<td>Inclusion of vulnerable groups in the project design and implementation &lt;br&gt;The intervention objective (SDG target 11.5) makes specific reference to “protecting the poor and people in vulnerable situations”. Vulnerable groups are mentioned in outcomes and impact.</td>
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<tr>
<td>10.</td>
<td>Achievement of outcomes during the Strategic Development Phase&lt;br&gt;• An enhanced understanding to the challenges and solutions addressed by the intervention has been achieved. &lt;br&gt;• A validated framework for the intervention has been developed. &lt;br&gt;• Awareness on the capabilities and capacity required to implement the intervention has been created, but since there is a wide range HCMC key stakeholders it may not be equally well perceived among all of them.</td>
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<td>11.</td>
<td>The extent to which city level stakeholders have been involved in the design in the project intervention &lt;br&gt;The HCMC stakeholders have been greatly involved, but citizens including vulnerable groups have only been indirectly involved. &lt;br&gt;NB! The Charrette Report and the Validation Report have not been made available to the evaluator.</td>
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<td>12.</td>
<td>Cooperation with other partners &lt;br&gt;Besides the SCFC and HCMC departments, cooperation with IMA, national agencies and development partners, including the WB.</td>
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<td>13.</td>
<td>Changes made during the identification stage &lt;br&gt;No major changes of the intervention’s scope have occurred during the identification stage.</td>
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<td>14.</td>
<td>Integration of cross-cutting issues in the project design such as gender, youth, climate change, human rights &lt;br&gt;The climate change cross-cutting issue is well addressed by dealing with the susceptibility of flooding in the city. Human rights aspects are addressed by paying particular attention to the vulnerable groups. There is limited reference to gender equality and youth.</td>
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<td>15.</td>
<td>Attainment of short and medium-term outcomes and long-term impacts during the implementation Phase &lt;br&gt;The overall likely success rate for each of the Implementation Phase’s the sub-phases has been assessed at 58% for the Planning and Design Phase, 34% for the Build Phase, and 34% for the O&amp;M Phase. The overall success rate is 42%. &lt;br&gt;Summary of short-term outcomes: &lt;br&gt;• Enhanced governance and integrated planning processes; &lt;br&gt;• Improved drainage network data &lt;br&gt;• Flood models developed &lt;br&gt;• Strategy for a GIS.</td>
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</tbody>
</table>
Summary of medium-term outcomes:
- Vulnerable areas in the drainage system identified
- Plan for expanding the drainage system in the immediate term
- Plan for future expansion of the drainage system
- Improved drainage system management
- Climate change mitigation and adaptation measure identified in relation to flooding
- Retention areas defined and flood protection mechanisms constructed

Summary of long-term impact:
- Early warning system on flooding hazards
- Improved water resources and watershed management
- Evidence-based planning tools to enhance resilience
- Increased local capacity for flooding impact assessment
- GIS data on drainage integrated into the data strategy.

16. **The city’s ownership and its likely enhancement of sustainability**
The city has taken ownership of the intervention, but the extent to which ownership is shared by the various HCMC department is uncertain. The funding and governance issues may undermine the degree of ownership.

17. **Encouragement of further collaboration among city stakeholders**
There is considerable scope for collaboration among the HCMC departments. There is also substantial scope for collaboration with affected community groups – in particular the vulnerable groups. Furthermore, collaboration with central government and development partners may be prompted due to governance and funding issues.

18. **City’s capacity in place to sustain attained results**
While the planning and policy environment is adequate, it is highly centralized. This may limit the capacity of the city to execute plans and policies. Moreover, planning and building standards in Vietnam are appropriate to the various technical, social and environmental challenges and needs, though enforcement is variable. While there are adequate plans and strategies at local level, evidence suggests that these often do not get implemented. Hydraulic modelling for HCMC may be so complex that assistance may be required by prominent water institutes.