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Report No: PAD2711

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED GRANT

IN THE AMOUNT OF SDR 36.1 MILLION
(US$50 MILLION EQUIVALENT)

TO THE

REPUBLIC OF SIERRA LEONE

FOR A

INTEGRATED AND RESILIENT URBAN MOBILITY PROJECT

May 22, 2019

Transport Global Practice
Africa Region

CURRENCY EQUIVALENTS

Exchange Rate Effective April 30, 2019

Currency Unit =	SLL (Sierra Leonean Leone)
0.72162568 SDR =	US$1
1.38575999 US$ =	SDR 1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Hafez M. H. Ghanem
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ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
ASSL	Audit Service Sierra Leone
AWPB	Annual Work Plans and Budgets
BCR	Benefit–Cost Ratio
CPF	Country Partnership Framework
CBD	Central Business District
CERC	Contingent Emergency Response Component
CoC	Code of Conduct
DA	Designated Account
DFID	Department for International Development
DRM	Disaster Risk Management
ESHIA	Environmental, Social, and Health Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union
FBC	Fourah Bay College
FCC	Freetown City Council
FM	Financial Management
FSU	Family Support Unit(s)
GBAA	Government Budgeting and Accountability Ac
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GIS	Geographic Information System
GoSL	Government of Sierra Leone
GRM	Grievance Redress Mechanism
IC	Internal Control
ICT	Information and Communication Technologies
IDA	International Development Association
IEG	Independent Evaluation Group
IFC	International Finance Corporation
IFRs	Interim Financial Reports
ILO	International Labour Organisation
IPF	Investment Project Financing
IPRs	Independent Post Reviews
IRUMP	Integrated and Resilient Urban Mobility Project
IRR	Internal Rate of Return
ISA	International Standards on Auditing
Km	Kilometer(s)
Km^2	Square Kilometer(s)
LUTP	Leaders in Urban Transport Planning Program
M&E	Monitoring and Evaluation
MFD	Maximizing Finance for Development
MoF	Ministry of Finance
MoLCPE	Ministry of Lands, Country Planning and the Environment

MoTA	Ministry of Transport and Aviation
MoWPA	Ministry of Works and Public Assets
MSWGCA	Ministry of Social Welfare, Gender and Children's Affairs
PAP	Project Affected Person
PDO	Project Development Objective
PFM	Public Financial Management
PFMICP	Public Financial Management Improvement and Consolidation Project
PFMU	Project Fiduciary and Management Unit
PIM	Project Implementation Manual
PIP	Public Investment Program
PIU	Project Implementation Unit
PPIAF	Public–Private Infrastructure Advisory Facility
PPRs	Procurement Post Reviews
PPSD	Project Procurement Strategy for Development
RAP	Resettlement Action Plan
RMFA	Road Maintenance Fund Administration
RPF	Resettlement Policy Framework
SCD	Systematic Country Diagnostic
SEA	Sexual Exploitation and Abuse
SL EPA	Sierra Leone Environmental Protection Agency
SLP	Sierra Leone Police
SLRA	Sierra Leone Roads Authority
SLRSA	Sierra Leone Road Safety Authority
SLRTC	Sierra Leone Road Transport Corporation
STEP	Systematic Tracking of Exchanges in Procurement
TDF	Transformational and Development Fund
TIDU	Transport Infrastructure Development Unit
ToRs	Terms of Reference
TSG	Technical Support Group
VfM	Value for Money

TABLE OF CONTENTS

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Sierra Leone	Integrated and Resilient Urban Mobility Project	
Project ID	Financing Instrument	Environmental Assessment Category
P164353	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[✓] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[✓] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
13-Jun-2019	30-Jun-2024

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objectives (PDO) are to improve quality public transport, address climate resilience, improve road safety in selected areas and enhance institutional capacity in the transport sector.

Components

Component Name	Cost (US$, millions)
Modernization and Professionalization of Transport Services	13.00
Strategic Resilient Mobility Investments	28.00
Building Human Capital	6.00
Project Management	2.00
Contingency Emergency Response	0.00
Unallocated	3.00

Organizations

Borrower:	Ministry of Finance
Implementing Agency:	Ministry of Transport and Aviation

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	52.00
Total Financing	52.00
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
IDA Grant	50.00

Non-World Bank Group Financing

Counterpart Funding	2.00
National Government	2.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
National PBA	0.00	50.00	0.00	50.00
Total	**0.00**	**50.00**	**0.00**	**50.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2019	2020	2021	2022	2023	2024
Annual	0.00	2.29	5.01	11.48	16.26	14.96
Cumulative	0.00	2.29	7.29	18.77	35.04	50.00

INSTITUTIONAL DATA

Practice Area (Lead)

Transport

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?	
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial

3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	High
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[✓] Yes [ ] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04		✓
Forests OP/BP 4.36		✓
Pest Management OP 4.09		✓
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10		✓
Involuntary Resettlement OP/BP 4.12	✓	
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description
Schedule 2, Section I, A, 4(a).
The Recipient shall not later than twenty-four (24) months from the Effectiveness Date establish and thereafter maintain throughout the implementation of the Project, a dedicated Urban Transport Unit (UTU) to address issues at the urban transport level in the MoTA.

Sections and Description
Schedule 2, Section I, C, 1.
The Recipient shall ensure that the Project is carried out with due regard to appropriate health, safety, social, and environmental standards and practices, and in accordance with the Safeguards Instruments.

Sections and Description
Schedule 2, Section I, C, 4.
The Recipient shall ensure that all the bidding documents and contracts include the obligation of the relevant contractors and subcontractors to: (i) adopt and implement measures to assess and manage the risks and impacts of labor influx; and (ii) adopt and enforce codes of conduct that should be provided to and signed by all workers; as applicable to such civil works commissioned or carried out pursuant to said contracts.

Conditions

Type	Description
Effectiveness	(Article IV, 4.01) The Recipient has recruited a Safeguards Specialist in Transport Infrastructure Development Unit (TIDU) with experience and terms of reference satisfactory to the Association.
Disbursement	(Schedule 2, Section III, B,1,a) No withdrawal shall be made for payments made prior to the Signature Date.
Disbursement	(Schedule 2, Section III, B,1,b) No withdrawal shall be made under Category 2 until the Recipient has furnished or caused to be furnished evidence satisfactory to the Association that measures referred to in Section I.D of Schedule 2 to this Agreement have been met in a manner satisfactory to the Association.

I. STRATEGIC CONTEXT

A. Country Context

1. **Sierra Leone has experienced significant poverty reduction in the last decade, particularly in rural areas. However, two major shocks—the Ebola crisis and the downturn in iron prices—paralyzed the country's economic growth in 2014 and 2015.** The national poverty rate declined by 12.6 percent.[1] Poverty in rural areas decreased from 79 percent in 2003 to 66 percent in 2011. The largest contribution to poverty reduction came from the agricultural sector, which represented on average half of gross domestic product (GDP) growth. Despite this rural poverty reduction, the poverty rate in Western Area, which includes Freetown, the nation's capital and largest city, increased from 14 to 21 percent between 2003 and 2011, driven mainly by in-migration. During 2014–2015, the country's GDP decreased by 20 percent due to the Ebola crisis. The country was declared Ebola free in 2016 and its economy has begun to recover, although a range of factors continue to limit economic growth and employment opportunities.

2. **Western Area has suffered dramatically from the ongoing economic stagnation, compounded by large-scale internal migration and minimal capital investment.** The population of the Western Area, which comprises Freetown and its environs, increased by 57 percent from under 950,000 in 2004 to nearly 1.5 million in 2015.[2] However, Western Area has been unable to create adequate housing, infrastructure, and service provision to keep pace with this population growth. Transportation, water, sanitation, electrical distribution, solid-waste infrastructure and services are all dramatically underdeveloped. These demographic factors have placed tremendous pressure on Western Area, which was not well positioned to accommodate growth in the first place due to its limited employment opportunities and topographical constraints.

3. **For these reasons, Western Area is at a turning point for determining whether it becomes an engine or a burden for the country's economic transformation.** As the major port city in Sierra Leone, Freetown has the potential to attract productive firms and skilled workers to cluster together as a hub for exports and to support growing income and living standards across the country.[3] Furthermore, Freetown contributes 30 percent of the country's GDP, despite housing only about 15 percent of the population. This fact indicates the city's economic potential. The prospect of attracting firms will greatly depend on easy physical connectivity among these firms, workers, customers and international markets.

4. **Moreover, the fragile socioeconomic recovery of Sierra Leone and Western Area has been hindered by frequent impacts of climate and natural disasters in coastal and southern areas.** Sierra Leone has a tropical climate with a rainy season from May to October and a dry season from November to April. Mean annual rainfall for the entire country is around 2,500 mm, the eleventh highest in the world and the second highest in Africa, just behind São Tome and Príncipe.[4] Coastal and southern areas, including Western Area of Sierra Leone, experience severe rainfall patterns with annual precipitation between 3,000 and 5,000 mm per year, peaking to more than 800 mm of rainfall monthly in July and August. These torrential storms often disrupt communications and transportation nationwide, damage people's homes and agricultural production, and cause erosion. From 1998 to 2018, natural disasters related to intense rainfalls killed more than 1,200 people and affected more than 50,000.[5] Climate change is projected to increase the frequency of heavy rainfall

[1] From 2003 to 2011. Source: Sierra Leone Systematic Country Diagnostic (SCD). The World Bank Group.
[2] Sierra Leone 2015 Population and Housing Census Provisional Results. Statistics Sierra Leone, March 2016.
[3] Reviving Urban Development. The Importance of Freetown for the National Economy. The World Bank. 2018.
[4] https://data.worldbank.org/indicator/ag.lnd.prcp.mm?year_high_desc=true.
[5] EM-DAT (May. 2018) - The OFDA/CRED - International Disaster Database http://www.emdat.be - Université Catholique de Louvain, Belgium.

events during the rainy season and the projected sea-level rise may exacerbate flooding events especially in coastal areas and Western Area.[6]

B. Sectoral and Institutional Context

Relevance of the transport sector for the country's economic development

5. **Poor people's inability to access jobs and services is an important element of social exclusion that defines urban poverty.** Organized public transport is inaccessible to a vast number of the poor because of their remote location, the poor road network and highly irregular services. As a result, the bottom 20 percent depend on paratransit (two- and three-wheelers) for daily travel, which are often more expensive than buses. For instance, people spend around the same amount of money on school fees as on travel costs to/from schools and spend nearly double in travel to medical centers than on actual medical costs[7]. A common indicator to measure accessibility is the share of the city within walking distance of public transport services. In the case of Western Area Urban, 25 percent of the population (350,000 people) lack access to transport services because they live farther than 500 meters from bus stops. Accessibility by public transport shows major disparities among neighborhoods, with over 40 percent of the populations of York (in the west) and Waterloo (in the east) chiefdoms lacking easy access to transport services. Although motorcycles are increasing exponentially in Sierra Leone and constitute a popular transport mode, they result in high negative externalities: pollution and – high numbers of accidents. Poor regulation, driving without a license, and carrying two or more passengers further compromise safety standards.

6. **Access to transport services is even more challenging for women and persons with disabilities in Western Area due to their different transport characteristics.** Safety and security constitute a major concern for women in influencing their choice of mode, time and place of travel. Available evidence suggests that around 18 percent of women have suffered sexual harassment in public transportation[8] in the past. This number increases to nearly 30 percent for poda-poda (minibus) users. In a user survey[9], 50 percent of interviewees responded that physical violence is one of the main obstacles to using public transport, and more than 10 percent mentioned theft and robbery. Persons with disabilities (PWD) are another vulnerable group that experiences barriers to accessing opportunities. There have been limited efforts to address the specific needs of PWD, who constitute about 1.3 percent of the country's total population.[10] In addition to service quality, design considerations, social dynamics and enforcement are crucial for an inclusive public transportation system.

7. **The deficient urban transport service and infrastructure are major constraints to firm's productivity.** Nearly 30 percent of the firms in Sierra Leone reported transport as a major constraint[11] to growth. According to the World Bank,[12] Sierra Leone is among the bottom ten Logistic Performance[13] economies and ranks 156 out of 160. According to the African

6 By the end of the 21st century, many climate models project mean precipitation over West Africa to increase during the rainy season with a minor delay in the start of the rainy season and slight increases in "days with extreme rain. Sea level is projected to rise throughout the 21st century and increase by 0.4 m (low-emissions scenario, RCP2.6) to 0.7 m (high-emissions scenario, RCP8.5) by 2100. https://bit.ly/2NpdUdt.
7 Sierra Leone Household Survey, 2011
8 Diagnostic of Public Transport in Freetown, World Bank, 2018.
9 Surveys conducted as part of the Diagnostic of Public Transport in Freetown, World Bank, 2018.
10 https://sierraleone.unfpa.org/sites/default/files/pub-pdf/Disability%20Report.pdf.
11 Enterprise Surveys, World Bank, 2017.
12 Connecting to Compete 2018, Trade Logistics in the Global Economy, The World Bank.
13 The logistics performance index (LPI) is the weighted average of the country's scores on the six key dimensions: 1) Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; 2) Quality of trade and transport-related infrastructure (e.g., ports, railroads, roads, information technology); 3) Ease of arranging competitively priced shipments; 4) Competence and quality of logistics services (e.g., transport operators, customs brokers); 5) Ability to track and trace consignments; 6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.

Development Bank (AfDB), the country's infrastructure compares poorly to the rest of Sub-Saharan Africa (SSA), and it was ranked 46 out of 54 countries on the AfDB's Infrastructure Development Index (AIDI) in 2016. This limits market opportunities for producers and impedes private-sector investments by increasing costs and preventing links between internal and external markets.[14]

8. **The transport sector in the Western Area is a critical contributor to job creation.** The service sector represented 20 percent of GDP in 2015 and accounted for 33 percent of the country's labor force in 2014. In Freetown, 87 percent of jobs are in the tertiary sector. The transport sector is the second largest generator of jobs. However, because more than 85 percent of these jobs are informal, most people working in the transport sector are placed in a vulnerable position.

9. **The private sector is the major provider of transport services in Freetown, accounting for nearly 85 percent of the market share.** (a) Poda-podas, which are minibuses carrying approximately up to 15 passengers, are often not professionally driven or adequately maintained, and circumvent fare regulation (passenger demand share 28 percent); (b) Shared taxis (passenger demand share 27 percent); (c) Okadas, which are two-wheel motorcycles (passenger demand share 16 percent); and (d) Kekes, which are three-wheel auto-rickshaws (passenger demand share 14 percent)[15]. Of the remaining 15 percent, the government-operated buses of the Sierra Leone Road Transport Corporation (SLRTC) account for nine percent. Small-engine motorcycle taxis (okadas) and tricycles (kekes) have increased annually by more than 20 percent over the past few years due to their low upfront cost, ability to navigate congested and unpaved roads, low barriers to entry, and high unemployment. In recent years, the SLRTC's effectiveness and efficiency have declined due to regulated low fares, increasing fuel costs, and low bus productivity.

10. **The private sector's role in the provision of transport infrastructure is limited.** The Private-Public Partnership (PPP) Act of 2010 aims to promote and facilitate the implementation of PPP transactions for infrastructure projects. However, the private sector's role in transport infrastructure provision is limited to a handful of cases, such as the Port of Freetown Container Terminal. The limited capacity of the PPP Unit (PPPU) and the National Commission of Privatization (NCP) in the Ministry of Finance (MoF) constrain the mainstreaming of this priority agenda. Other areas such as debt management and the capacity of the Road Fund limit also the expansion of the Maximizing Finance for Development (MFD) agenda for urban and rural transport investments.

Institutional Context

11. **Multiple government ministries and departments are responsible for planning, financing, management, implementation and enforcement in the urban transport sector.** Key stakeholders in the transport sector are: the Ministry of Transport and Aviation (MoTA), with overall responsibility for planning and policy; the Ministry of Works and Public Assets (MoWPA), responsible for construction and maintenance of the main road network through the Sierra Leone Roads Authority (SLRA); the Sierra Leone Road Safety Authority (SLRSA), responsible for testing and licensing all vehicles and drivers, and for traffic management; the Sierra Leone Road Transport Corporation (SLRTC), the institution responsible for regulating public transport operations as well as operating the Government-owned fleet of public transport vehicles; the Freetown City Council (FCC), responsible for the designation of on-street parking control and enforcement of parking; and the Sierra Leone Police, responsible for controlling operations and enforcing regulations. The Road Maintenance Fund Administration (RMFA) oversees the management of road funds for periodic and routine maintenance of road assets, while the MoF provides policy guidance on road-user charging. The SLRA and RMFA collectively manage all classified roads. Nationally, the RMFA is primarily responsible for monitoring and financial management (FM) in the sector. The SLRA

[14] Sierra Leone SCD. The World Bank Group.
[15] Diagnostic of Public Transport in Freetown, World Bank, 2018.

handles strategy and planning, the execution of works, including procurement, safeguards, and engineering on the primary network.

12. **The organizational structure of informal transport[16] is based on associations or unions representing the interests of specific paratransit modes.** To provide service, each association organizes itself into branches that divide the network. These branches are typically based at a station (off-street parking) or stage (on-street parking), and routes are operated from or between these points. Membership in a branch is dependent on access to a suitable vehicle, with most of these vehicles sourced through operating leases from non-participant owners. Each route is then operated on the principle of fill-in-turn prior to departure. This process is managed by branch officials, and a departure levy is raised for this purpose. The fare charged for each route is generally controlled by the Government, in negotiation with the associations, to protect the public interest. Where fares have been kept too low, the associations have responded by shortening routes to the extent that revenues can exceed operating costs. The resulting network pattern has become entrenched through the fixed location of the stations and stages and fails to meet the needs of passengers taking longer trips in an expanding city.

Key challenges facing the sector

13. **Transport services in Western Area are unreliable, inefficient and unsafe, largely due to the informality of the sector.** Informality in transport service provision contributes to the operators' vulnerability. Vehicles tend to be in poor condition and often compromise safety and comfort. The "fill-and-go" practice means that passengers may have to wait for long periods of time in off-peak hours, and that there is little hope of being able to board a vehicle mid-route. Bus stops are informal with few or no facilities. Passenger information is non-existent and fare collection often is in cash without the issuance of tickets.

14. **Road capacity in the city is unable to match the ever-growing demand and contributes to economic stagnation.** Motorization in Sierra Leone is low compared to other Sub-Saharan Africa countries, with seven vehicles per 1,000 people, compared to 30 vehicles in Ghana and 25 vehicles in Senegal.[17] However, inefficient use of street space, together with design deficiencies and limited road density, contribute to severe, chronic congestion and road-safety challenges. In the Western Area, road density per capita is 165 meters of paved road per 1,000 citizens in the Greater Freetown area, around half of the average in African cities in low-income countries (318 m).[18] At peak hours, average traffic speeds in some central areas of the city reach just 3 km per hour: lower than walking pace.[19] Public-space management is also a major challenge as vendors and parked vehicles obstruct streets and sidewalks throughout the city, particularly downtown. Facilities for pedestrians are particularly poor, with sidewalks of inadequate width and often in poor condition, forcing pedestrians to share space with vehicles in the road and frequently to navigate among motorized traffic, parked vehicles and traders under exceptionally chaotic and dangerous conditions.

15. **Road safety is a problematic issue in Sierra Leone in general, but in Western Area in particular. The country has experienced a significant increase in road trauma over the past decade.** Although the statistics on road safety are alarming at present (16 deaths per 100,000 population), the situation is expected to further deteriorate as the motorization rate and the scale of infrastructure expansion increase in the coming years. A study estimated that the number of road-crash deaths has increased by 37 percent in the 20 years between 1998 and 2017.[20] Based on available

[16] Informal transport refers to the privately operated, small-scale transport services outside the officially sanctioned public transport sector, often called "paratransit".
[17] IRF World Road Statistics, 2013.
[18] Tracking Africa's Development in Figures. AfDB. 2014.
[19] Sierra Leone Economic Update (2018),) World Bank.
[20]Institute for Health Metrics and Evaluation (IHME). GBD Compare. Seattle, WA: IHME, University of Washington, 2015. Available from http://vizhub.healthdata.org/gbd-compare. (Accessed February 20, 2019).

figures, fatalities in the Freetown area account for nearly 70 percent of all collisions and nearly 50 percent of all recorded fatalities and serious injury crashes nationally. While these figures are grave, deaths are often underreported, and the actual fatalities in WHO estimates may be nearly seven times higher.

16. **Western Area's transport system is highly exposed and vulnerable to climate change and natural disasters, especially to flash floods and landslides.** The city's geography causes transport services and infrastructure to be highly exposed to climate-change risks and natural disasters. The many waterways that cross the city's poorly engineered and constructed roads drain runoff from hilly areas. Moreover, many roads are exposed to rainfall-induced landslides due to the steep, unstable slopes in the central highlands. Climate change will aggravate this risk: projections indicate an increase in maximum one- and five-day rainfall, especially from July to September. This risk was evidenced by the August 2017 landslides and floods that resulted in the need for an estimated US$5.4 million for transport sector recovery alone.

17. **Human capital in ministries, local government, government agencies and academia in the transport sector lacks capacity, resources and proper institutional coordination.** Different levels of government have limited capacity in terms of manpower, specialized skills, and expertise, which limits their productive capacity. Local universities lack specialized training in transportation and engineering, which limits the availability of local professionals with specialized skills. The only engineering university, Fourah Bay College, lacks any formal curriculum in transport planning, transport economics, programming, use of Geographic Information System (GIS) tools, or use of new technologies to enhance transport planning. The university's basic facilities and equipment are affected by a lack of resources. Furthermore, the institutional framework for urban transport management in Western Area is limited by unclear mandates and the lack of a formal mechanism to coordinate the multiple agencies with overlapping responsibility in urban transport (MoT, SLRA, SLRSA, Traffic Police, SLRTC, FCC). This lack of coordination is evidenced, for example, in traffic management, where the SLRA, SLRSA, and Traffic Police all carry out various traffic management functions, with little or no coordination among them.

C. Relevance to Higher Level Objectives

18. The proposed project is fully aligned with the Systematic Country Diagnostic (SCD)[21], which identifies Western Area's crucial role in the development of the country as a hub for goods export, job creation and sustainable and inclusive growth. The project supports two key priorities identified in the SCD: (i) supporting poverty-alleviating employment; and (ii) increasing the productivity of informal workers. The SCD identifies as a priority and one of the main challenges the access to transport infrastructure in order to take full advantage of the country's enormous opportunities: its highly advantageous geography, its abundant renewable and non-renewable natural resources, and its young, diverse urban population. The Country Partnership Framework (CPF) is under preparation, to be delivered in FY20. The proposed project is aligned with the initial findings from the CPF under preparation. In particular the proposed project contributes to the CPF focus areas: (i) human capital; (ii) economic diversification; (iii) technology and infrastructure; and (iv) institutions, governance and transparency.

19. The project supports the World Bank Group twin goals of ending poverty by improving access to jobs and services, and of shared prosperity by including the concept of equity and inclusion in the intervention's prioritization. The project aims to reduce barriers, particularly for the poor and most vulnerable who depend on transport and walking, to accessing jobs and services in a safe and clean environment. The prioritization framework of interventions identifies excluded groups to access opportunities and prioritizes those interventions that will benefit the poorest residents as well as women and PWD. The proposed project is aligned with the 2019 World Bank Africa Strategy under four innovative areas (see Box 1).

[21] Republic of Sierra Leone Systematic Country Diagnostic (SCD), Report No. 115408-SL, February 2018.

20. The project is aligned with national and local governments' development strategies, and with transport development strategies and plans. The project supports the new city government's vision of transforming Freetown into a dynamic, efficient and clean city. Improving urban mobility is one of the clusters of the mayor's Transform Freetown plan. In addition, because of the road network's vulnerability to climate change, there is a strong commitment from the Government of Sierra Leone (GoSL) to build resilient, sustainable transport infrastructure. The proposed project aligns with the recently presented National Development Plan 2019–2023 (NDP), in particular with the following policy clusters (PC): (i) PC 1: human capital development; (ii) PC 2: diversifying the economy and promoting growth; (iii) PC 3: infrastructure and economic competitiveness; (iv) PC 5: empowering women, children, adolescents, and PWD; and (v) PC 7: addressing vulnerability and building resilience. The project is also aligned with the Integrated Transport Policy, Strategy and Investment Strategy (ITPSIP) and the Strategic Urban Mobility Policy.

Box 1. Higher-level objectives of 2019 World Bank Africa Strategy integrated in the project

- ***Building human capital and engaging with academic institutions.*** The project focuses on building human capital in government and knowledge institutions, and in the informal sector, in areas such as planning, resilience, private-sector formalization, women's empowerment, and actions against gender-based violence (GBV). The project will support excellence through the integration of FBC, the country's only civil engineering school, with the Africa Center for Excellence program, and through a partnership with the Centre of Excellence in Transport in Kumasi, Ghana.[22] The project supports the Government's "Access to Schools" program to provide transport access to educational centers.
- ***Digital Development: leapfrogging by using innovative technologies.*** The project has utilized state-of-the-art methodologies to plan transport services and investments (in partnership with local universities and government agencies), using innovative technologies for data gathering, such as use of Call Detail Records (CDR, big data from cell phones) to assess how people move, and mapping informal transport services and flooding locations with mobile phones. Furthermore, during implementation, the project will use technology to enhance mobility (i.e. blockchain and other technologies for fare collection and use of mobile devices for on-demand passenger and freight transport services), and to enhance informal sector formalization (blockchain and other technology for mobile money for market traders, mainly women, to facilitate women merchants' transactions and address the barrier to accessing formal financial institutions). Access to quality technology will be complemented with financial literacy so that the project can contribute toward closing the gap between a vast reservoir of digital potential and the lack of access to quality Internet and digital money
- ***Focusing on MFD.*** The project aims to mobilize private-sector participation in the modernization and professionalization of transport services, including informal private operators. Other MFD-related areas supported by the project may include: off- and on-street parking, depot management, on-demand transport services, and the provision of transport infrastructure to access ferry and speedboat terminals, which are operated by the private sector.
- ***Building resilience to fragility and climate change.*** Climate resilience has been at the core of project preparation and design. In collaboration with the Disaster Risk Management (DRM) and Big Data team at the World Bank, the project uses innovative methodologies to prioritize investments aimed at maximizing resilience and social and economic development. The project uses detailed risk assessment to identify exposed and vulnerable corridors and their impacts on urban mobility through state-of-the-art network analysis. The communities' resilience will be enhanced through project interventions on the selected corridors by providing a more robust mobility system during rain and flood events. The project designs also incorporate climate adaptation considerations to enhance resilience.

21. The proposed project will contribute to the implementation of the "Nationally Determined Contributions (NDC)" prepared by Sierra Leone for the twenty-first session of the Conference of the Parties (COP21). The NDC summarize the principal measures required to mitigate and adapt to climate change. The main climate change adaption measures stated in the NDC include prioritized activities that will support Sierra Leone to transition to a low-carbon and climate-resilient

[22] https://bit.ly/2XlINVE.

economy and mobilization of resources to enhance climate resilience. One of the main climate change mitigation measures stated in the NDC include absolute reduction of emissions by promoting use of public transport for passengers.

22. **Roadmap for future engagement in the transport sector.** The World Bank intends to develop a programmatic, long-term approach to support Sierra Leone's connectivity, integrated with multiple sectors (agriculture, fisheries, education, health, tourism, resilience, etc.), while at the same time contributing to building institutions and human capacity. In support of this approach, the proposed project focuses on selected corridors in the Western Area as an initial phase of intervention, with the aim of building the foundations for a larger transport program in the country. Toward the long-term objective, the project will aim to strengthen institutional capacity and develop an appropriate regulatory framework to support the Government's strategic plan to promote public transport reform. The project will also operationalize the MFD agenda in the transport sector and support the preparation of PPP operations.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

The Project Development Objectives (PDO) are to improve quality of public transport, address climate resilience, improve road safety in selected areas and enhance institutional capacity in the transport sector.

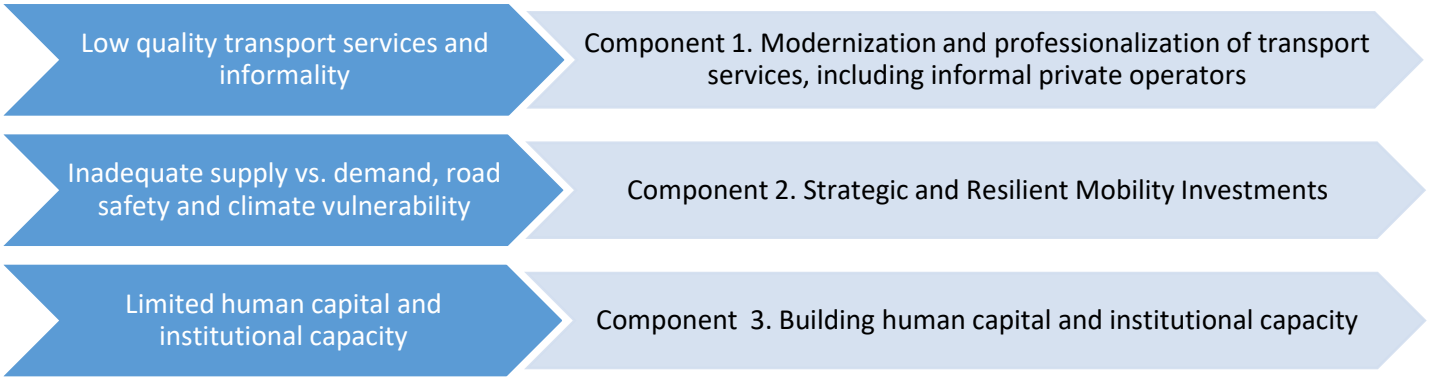
PDO Level Indicators

The proposed key results indicators (see Section VI) are: (i) Users satisfied with public transport service at selected corridors (of which female); (ii) People benefiting from improved resilient roads; (iii) Road traffic crashes involving vulnerable users along selected corridors; (iv) Development and adoption of framework for a single regulatory body for urban transport.

B. Project Components

23. **The proposed project offers an integrated approach to respond to the challenges in the urban transport sector.** Western Area Urban is now at a turning point to become an engine rather than an obstacle for transformation of the country. However, if the city continues to follow past trends of declining standards, worsening congestion, and a growing role of informal paratransit, it will be unable to contribute to the country's growth. The proposed project aims to foster changes in the way the city is growing: from a congested, vehicle-oriented city to a resilient, people-oriented city, where walking and public transport are at the core of the metropolitan vision, and with a focus on vulnerable groups such as low-income residents, women and PWD. The project includes three main components that respond to the main challenges in the sector (see Figure 1): Component 1. Modernization and Professionalization of Public Transport Services, including informal private operators; Component 2. Strategic and Resilient Mobility Investments; and Component 3. Building Human Capital and Institutional Capacity.

Figure 1. Solutions that the project proposes vis-à-vis the key challenges in the sector



24. **Component 1: Modernization and Professionalization of Public Transport Services, including informal private operators (estimated cost US$13 million equivalent, of which US$13 million financed by IDA)**

25. This component will finance the enhancement of public transport services in Western Area, with a focus on MFD in the sector. It will support the introduction of reliable, quality bus services along selected corridors in Western Area. The project expects to leverage an additional US$10 million from the private sector. Technical assistance funded by the Public–Private Infrastructure Advisory Facility (PPIAF) is informing the design of this component.

26. The World Bank financing will support: (a) establishment of a bus renewal scheme to encourage private-sector operators[23]; (b) technical assistance to strengthen the capacity of SLRTC to regulate public transport and to support the private sector in the provision of formal, regulated transport service along selected corridors; (c) capacity building and training for transport operators and drivers on safe driving; and (d) civil works, goods and services for ancillary facilities to promote the efficient use of the bus fleet, particularly focused on an integrated ticketing system, a bus management system, a control center, a bus information system, the construction of bus stops, bus priority measures, terminal and depot facilities. Fleet renewal will lead to a substantial reduction in greenhouse gases (GHG) emissions. Also, activities b, c, and d are expected to promote the efficiency of bus operations and a modal shift from private vehicles or motorcycles to buses, with an expected reduction in GHG. The renewal of transport private-sector operators will contribute to enhance women's mobility by institutionalizing measures to respond to women's safety in public transports and their specific concerns. For instance, concession agreements will require transport operators to be sensitized on GBV and on how to appropriately respond to sexual harassment, plus including requirements in the concession agreement as a Code of Conduct (CoC). This modernization will also address infrastructure and service provision mobility barriers experienced by women by designing bus stops, side-walks and services that consider mobility patterns linked mainly with the economy of care, women's personal security and use of public space. Women will also benefit from potential interventions to ease mobility to be pursued by the project, such as an integrated ticketing system.

27. This component will support the following strategic mobility solutions for passengers and logistics. In partnership with the Directorate of Science, Technology and Innovation, line ministries (education, health, agriculture), local government, and private-sector actors, this component will facilitate mobility in strategic areas, including:

[23] The financing model will benefit from past World Bank experience in introducing similar schemes in Dakar and Lagos and recent experience in Abidjan. In the bus-financing model currently under discussions with the Government, participating operators will be required to form companies that will be collectively responsible for loan repayments.

- **Bus to school program**. This activity will finance technical assistance to plan school bus service and to design the institutional framework to regulate, operate and maintain school buses, with the aim of enhancing physical access to schools. This activity will promote a modal shift from private vehicles or motorcycles to buses, with a subsequent reduction in GHG emissions.
- **Digital technology to enhance freight and passenger services**. Provision of technical advisory services for planning and regulating technological solutions for freight and passenger transport including on-demand mobility services[24] using apps and other technological solutions to facilitate agribusiness and logistical processes, and people's access to health centers, and provide safe last-mile connectivity for women and people with disabilities. One area of support includes the definition of a low-cost, locally adapted fare-collection system (using blockchain or other technologies adapted to the local context). Another area of support comprises the development of a policy and strategy for on-demand mobility services.
- **Support for the management of the GoSL's vehicle fleet**. The GoSL is in the process of developing a fleet management strategy and policy. This component will finance goods and consulting services to support a plan for management of the government fleet of vehicles. The activity will include support for developing a plan to operationalize the fleet management strategy, the generation of a database, and the institutional arrangement for implementation. The vehicle fleet management strategy will lead to substantial net savings of GHG emissions, estimated at around 2,000 tons per year (see Annex 1).

28. **Component 2. Strategic Resilient Mobility Investments (estimated cost US$28 million equivalent, of which US$26 million financed by IDA and US$2 million financed by the Government)**

29. This component will finance physical investments to improve access, climate resilience and road safety. The resettlement cost identified in the RAP under this component will be financed by IDA. The identification and prioritization of investments use the results of the state-of-the art region-wide spatial analysis that integrates sectoral (education, health, agriculture, tourism), climate change impacts (flooding and landslides), and socioeconomic data (poverty and excluded groups) to identify investments that will boost social and economic inclusion, climate resilience, and the city's competitiveness (see detailed framework in Annex 8).[25]

30. Investments follow two strategic pillars: *Integrated Corridor Management* and *Resilience Accessibility Improvement* (see Annex 1). Interventions under the first pillar aim to improve accessibility and road safety with specific engineering design to mitigate climate change impacts (see Annex 4). The objective of the second pillar is to adapt the urban mobility to the impacts of climate change and therefore targets the most climate vulnerable areas in the city. Civil works will focus on: (a) improving road conditions and rehabilitating key road sections; (b) improving drainage capacity; (c) slope stability interventions; (d) traffic management, signalization, parking, and intersection improvements; (e) pedestrian infrastructure; and (f) constructing off-street transit terminals and markets.

Component 3. Building Human Capital and Institutional Capacity (estimated cost US$6 million equivalent, of which US$6 million financed by IDA)

31. This component will finance knowledge development and institutional and academic capacity-building activities in the following areas (see further details in Annex 1):

[24] On-demand transport refers to advanced user-oriented forms of transport services, characterized by flexible routing and scheduling of small and medium vehicles.
[25] This component uses an integrated, comprehensive approach to improve climate resilience, road safety, mobility for pedestrians and vehicles, and overall management of public rights of way, following the innovative concept of *Integrated Corridor Management*.

a. **Institutional and Stakeholder's Capacity:** Strengthening the capacity of ministries and other institutions in the following areas (i) to develop a long-term vision, strategic plan and administrative regulatory and operations framework to support effective management of the transport system; (ii) preparation of studies to support an urban mobility plan and prioritized investment plan and parking policy; (iii) capacity building in the operationalization of the MFD agenda for the provision of transport infrastructure and services; (iv) capacity building in road safety: (v) enhancement of the road safety database; and (vi) enhancement of climate resilience in the planning and management of transport infrastructure and services.

With the support of this component, the Government will establish a dedicated metropolitan urban transport unit in MoTA to address the broader urban mobility issues[26]. This unit will be approved by the cabinet within 24 months after effectiveness date and among its key functions will be to: (a) develop and implement transport policy and strategy; (b) understand the sector and maintain comprehensive knowledge; (c) define performance and quality standards in assessing sector performance; (d) monitor performance and behavior; (e) oversee data management; and (f) coordinate all implementing agencies' interventions in urban transport that affect multiple city council jurisdictions. The Steering Committee will continue to be the advisory body for the TSG.

In the long term, the Government's objective is to set up a National Urban Transport Authority, bringing all urban and transport-related functions under one umbrella. The term "Authority" is used here in a broad sense without predetermining the role, functions or institutional form, which will be the subject of further studies and discussions among all stakeholders during project implementation.

b. **Academic Capacity:** Building the academic capacity of local universities, and supporting the twinning program of the engineering faculty of FBC, with the Transport Centre of Excellence in Kumasi, Ghana (see Annex 1).

c. **Women's Empowerment:** Implementing blockchain solutions to enhance the financial literacy and productivity of informal entrepreneurs and leapfrog the formalization of employment, with a focus on women's empowerment (see Annex 1 and Annex 6) and capacity building in GBV, including piloting solutions to mitigate the risk of GBV in public transport (see Annex 5).

d. **Citizen engagement:** Implementing a citizen engagement plan, with a focus on closing the feedback loop, including use of new technologies to obtain periodic citizen feedback about the project (for instance, on the quality of public transport, road safety, and safety for women), and to enhance the Grievance Redress Mechanism (GRM); and conducting a public relations/communication campaign to inform stakeholders, schoolchildren and the public about road-space management and road safety (see Annex 1).

Component 4. Project Management (estimated cost US$2 million equivalent, of which US$2 million financed by IDA).

32. This component will finance goods and services to support project management, financial auditing, data collection, Monitoring and Evaluation (M&E), and operating cost.

Component 5. Contingent Emergency Response Component (CERC) (US$0 million IDA).

33. A CERC will be included in accordance with World Bank Policy on Investment Project Financing (IPF), paragraphs 12 and 13. CERC will enable the rapid reallocation of funding among project components following an emergency. If the city faces an emergency situation and additional resources are required, the road rehabilitation (Component 2) can be limited to fewer sections. By integrating CERC into this project, the level of disaster preparedness is strengthened, thus postponing the need for time-consuming restructuring in the immediate aftermath of a crisis, when the Government is in

[26] The issue of urban mobility goes beyond the boundaries of the FCC across to neighboring municipality.

urgent need of quick liquidity. CERCs can be used for immediate and emerging risks, such as natural and manmade disasters, conflicts, epidemics and economic shocks.

34. The project lending instrument is IPF. The project costs of US$52 million are financed by a US$50 million IDA grant, and US$2 million of counterpart financing. The project includes an unallocated amount of US$3 million. The duration of the project is five years. Table 1 summarizes project activities.

Table 1. Project Cost (US$ million)

	IDA Financing	Counterpart Funding	Project Cost
Component 1. Modernization and Professionalization of Transport Services	**13.0**		**13.0**
Component 2. Strategic Resilient Mobility Investments	**26.0**		**28.0**
Urban transport interventions	*24.0*		*24.0*
Resettlement	*2.0*	*2.0*	*4.0*
Component 3. Building Human Capital and Institutional Capacity	**6.0**		**6.0**
Component 4: Project Management	**2.0**		**2.0**
Component 5: Contingency Emergency Response	**0.0**		**0.0**
Unallocated	**3.0**		**3.0**
Total Costs	**50.0**	**2.0**	**52.0**

C. Project Beneficiaries

35. The primary beneficiaries of the project are Western Area residents, businesses, government and academic institutions. The direct beneficiaries will be over 75,000 daily riders of public transport, nearly 40 percent of whom are women, over 100,000 pedestrians with safer pedestrian's facilities, and over 50,000 daily beneficiaries of improved resilient roads. The improvement of school access will benefit over 5,000 children daily. Because Lumley, one of the project locations, plays a major role in connecting rural and urban areas and in daily commuting, improvements will have a significant impact on mobility in the Western Area. The area is also becoming one of the city's most vibrant commercial centers. The construction of a bus terminal in Lumley will improve public transport services for passengers. Enhancement of pedestrian facilities will improve walkability and safety. Traffic management improvement will reduce congestion and benefit private and commercial vehicles. Improved market structures with facilities such as cultural and /training rooms will benefit informal market traders, most of whom are women. Improved access to the ferry and port will benefit (a) firms' efficiency, due to the improvement in accessibility to a major promoter of external connectivity to international markets; and (b) ferry passengers. The three intervention areas already identified (Lumley, Kissy Terminal, and Congo Cross) are crucial for accessing Freetown's Central Business District (CBD) and facilitating intra-city mobility.

36. The primary beneficiaries of Component 3–Building Human Capital, will be several government ministries and institutions (including MoTA, FCC, SLRA, SLRSA, SLRTC, Traffic Police, Sierra Leone Meteorological Department), local academic institutions and university students, local engineering community, market traders, bus operators, and the private sector.

D. Rationale for World Bank Involvement and Role of Partners

37. Drawing upon its international and regional experience, the World Bank is in a strong position to support the Government in formulating strategies to enhance private-sector participation in the transport sector and address complex urban accessibility issues. The Government lacks a dedicated urban transport agency and is constrained by limited human and financial capacity to develop comprehensive solutions. The World Bank's sustained engagement with urban mobility

issues in neighboring countries (Senegal, Ghana, Nigeria, and others), its commitment to development, technical knowledge, and convening power place the World Bank in a special position to support the Government in developing comprehensive solutions. The city's need for sustainable planning solutions is immediate, as demonstrated by the recent devastating flooding and landslides. The World Bank's international experience in disaster-risk management and its support for climate-resilience activities offer significant value added to address the city's problems.

38. The World Bank's involvement in the sector will: (a) ensure the use of technical expertise for policy analyses and project formulation, and the coordination and leveraging of financing from other development partners; (b) maximize private-sector financing for development; (c) help raise awareness of the need to go beyond investments in infrastructure to address mobility issues in the broader context of increasing urbanization, economic development, poverty reduction, and climate change; and (d) coordinate with other World Bank teams present in Sierra Leone, such as health,[27], education,[28] urban[29] or tourism,[30] to build synergies among projects and maximize benefits.

39. The project will be implemented in close collaboration with other development partners in the urban transport sector, in particular the Department for International Development (DFID), European Union (EU), Japan International Cooperation Agency (JICA), AfDB and German Society for International Cooperation (GIZ), to ensure complementarities and avoid overlap. The project will coordinate with the Gender Coordination Group, which groups most multilateral and bilateral donors, currently led by IrishAid and the DFID. For the design and implementation of activities related to Sexual Exploitation and Abuse (SEA), the project will learn from and actively coordinate with development donors that have ongoing experience on this matter in Sierra Leone.

[27] Sustainable and Efficient Health Financing and Service Delivery in Sierra Leone (P163519).
[28] Focusing Resources on Equity and Excellence of Education Project (FREE Education Program) (P167897).
[29] Fixing Freetown (P168608).
[30] Sierra Leone - Economic Diversification Project (P164212).

E. Results Chain

Components

Modernization and professionalization of public transport services
(US$13 million)

Strategic Resilient Mobility Investments
(US$28 million)

Building human capital and Institutional capacity
(US$6 million)

Activities

Informal sector formalization reform:
- Bus renewal schemes developed
- Capacity building provided for operators
- Enabling environment for public transport operations built:
  - Hard infrastructure: bus stops, depot, terminal constructed.
  - Ancillary facilities in place: ticketing system, bus management system and bus information system.

Technical assistance provided for:
- School bus operations
- Innovation for transport
- Vehicle fleet management

Integrated Corridor Management:
- Pedestrian infrastructure constructed
- Road conditions and drainage improved/rehabilitated
- Traffic management system developed
- Intersections improved
- Market and terminal constructed

Resilient accessibility improved:
- Drainage capacity improved
- Surface and payment improvement
- Slope stability improved

Institutional Capacity Enhanced
- Strategic plan and regulatory framework developed
- Feasibility studies to support strategic plans conducted
- Capacity in road safety and climate resilience improved

Other areas of support:
- Citizen Engagement and Collaborative Design
- Women economic empowerment and financial inclusion improved
- Academic capacity improved

Project Development Objectives
(PDO indicators)

CA 1,3

Improved Quality of Pubic Transport
(Users satisfied with public transport service at the selected corridors)

CA 1

Improved road safety
(Road traffic crashes involving vulnerable users along selected corridors)

CA 2 ,3

Improved Resilience
(People benefited from improved resilient roads)

CA 4

Enhanced capacity building
(Development and adoption of a framework for a single regulatory body for urban transport)

Critical Assumptions (CA):
CA1: All the measures put in place are effectively enforced
CA2: Rainfall does not exceed 50-year return period
CA3: Maintenance plans are fulfilled
CA4: Political environment remains stable

F. Lessons Learned and Reflected in the Project Design

40. An Independent Evaluation Group (IEG) of the World Bank Group's support for urban transport[31] revealed that weak institutional capacity and coordination remain a critical challenge in the urban transport sector and stated that "Institutional development support is a part of 80 percent of World Bank Group projects, yet these often focus on a single local body during a one-time project. Longer-term and more ambitious institutional reform engagements occurred in only a few cities." The evaluation concluded that, among disadvantaged groups, much less attention was paid to the special needs of women and disabled persons.

41. This project design addresses many of these concerns. First, the proposed urban transport engagement in Western Area is part of a broader initiative in SSA to reengage in addressing the mounting mobility problems in fast-growing medium, small and low-income cities. The project is the first phase of a long-term engagement to address the backlog of problems. The initial focus is two-fold: (i) to strengthen the institutional capacity of all related transport agencies—MoTA, SLTP, SLRSA, SLRTC, FCC—in understanding the complexity of urban transport, and to support a strong cross-sectoral technical team; and (ii) to improve three critical locations impacting mobility and access to jobs and services in the city. Toward this objective, the World Bank is supporting the ongoing participation of a diverse team of policy makers from various departments and agencies in the flagship Leaders in Urban Transport Planning Program (LUTP) (P146468). The IEG has recognized the importance of the LUTP program in promoting a common understanding of sectoral challenges and potential solutions.

42. An important part of the World Bank's engagement is its contribution beyond investments. Toward this effort, the project focus is on providing a platform for the World Bank to offer guidance, training, technical assistance, and learning throughout the project cycle, South–South learning and exchange, and best practices for demonstration to sector stakeholders and further adoption.

43. The project considers climate adaptation and resilience throughout its life cycle, including planning, engineering, operations, contingency planning, and overall capacity building, as emphasized by the recent Transport Global Practice (GP) World Bank Guidance Note.[32] This project includes in its design the lessons learned from said Guidance Note and best practices in each of the life-cycle phases. Through technical assistance, the project has used network science to evaluate the impact of natural hazards (for current and climate-change projections) on urban mobility. This analysis has served to provide recommendations on enhancing climate resilience in project design. The project also proposes several activities to address the lack of awareness and capacity to deal with climate-change impacts in the transport sector.

44. The project uses innovative technology in several aspects of data collection and analysis that have informed the selection and design of the interventions. Based on recent examples in cities around Africa and Asia, the project has used recently developed smartphone applications to capture and collect relevant data on urban transport routes (both formal and informal services) and on flood-vulnerable hotspots in the urban transport network. Learning from other World Bank projects, the team has partnered with the local engineering university, which has led the data-collection campaign, in order to build capacity and sustainability in data collection, storage and maintenance of the dataset. All the information collected and analyzed will inform future interventions and help the Government to prioritize policy decisions.

45. Planning and regulatory arrangements for private participation in urban transport are fundamental. The public sector must establish a strategy and the necessary institutional and regulatory arrangements to enhance formalized private-sector participation in the provision of public transport. As part of project preparation, support has been received

[31] Mobile Metropolises: Urban Transport Matters. An IEG Evaluation of the World Bank Group's Support for Urban Transport. IEG/The World Bank,. 2017
[32] Climate and Disaster Resilient Transport in Small Island Developing States: A call for action. https://bit.ly/2SYMCR6.

from PPIAF to examine the financial, operational and institutional environment of the SLRTC and the private sector. During implementation, specific areas of support to the SLRTC and private sector will be implemented with the long-term objective of bringing private-sector participation into the bus operations and reducing the financial burden on the city.

46. Facilitating access to credit and training programs for a targeted number of informal entrepreneurs could have significant productivity spillover effects.[33] Other than their own labor, informal enterprises have fewer valuable factors of production, such as capital and technology, compared to formal businesses. Credit constraint is the most important barrier for businesses to grow, according to the Enterprise Survey 2017. Informal enterprises also have less bargaining power to demand an adequate share of the value added generated in the value chain in which they operate, but the level of competition between informal firms is generally high, making the dissemination of new technology more likely.

47. The IEG evaluation also emphasized the importance of focusing on the special needs of women and people with disabilities. To understand the needs and barriers that these groups face, the team has undertaken surveys and multiple consultations with experienced national and international organizations such as Irish Aid, Rainbo Initiative, Brac Sierra Leone, International Rescue Committee (IRC), and UN Women. From these conversations, two main barriers have been identified: (i) level of education in general, and more precisely business skills and financial literacy; and (ii) the high incidence of GBV exacerbated by socioeconomic, political and institutional constraints. To address both barriers, the project has incorporated activities using the lessons learned from the abovementioned organizations to ultimately increase access to higher education, financial resources, family planning, etc., while providing the framework to prevent, mitigate and respond to GBV and SEA cases within the project's boundaries.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

48. The project implementing agency will be MoTA's Transport Infrastructure Development Unit (TIDU) with support from its TSG. MoTA has overall responsibility for policy direction, coordination and supervision for all modes of transport in the country. TIDU has the responsibility for the formulation of plans for road infrastructure and services. Within TIDU, a TSG has been set up to provide all necessary technical inputs to support project preparation and implementation, including the preparation of terms of reference (ToR), data collection, methodology, setting up baseline targets, design standards, engineering designs, M&E, safeguards, and public consultation surveys. Key positions in the TSG have been filled: project manager, engineer, and social safeguards officer. Additional persons will be recruited as required.

49. The MoF's Project Fiduciary Management Unit (PFMU) is responsible for managing the project's fiduciary aspects, including FM, procurement, and auditing. The unit is a centralized department in charge of managing the fiduciary responsibility for all IDA-financed projects.

50. From a functional perspective, multiple agencies at different levels of government are involved in the management and delivery of urban transport infrastructure and services. To ensure coordination across multiple agencies, a Project Steering Committee has been set up, chaired by the Minister of Transport and Aviation, with representation from MoTA, the FCC, Sierra Leone Police (traffic division), SLRSA, SLRA, SLRTC, MoWPA; Ministry of Lands, Country Planning and the Environment (MoLCPE), MoF, traders' union, transport union, passengers' well-being association, and representatives of such other Ministries or agencies, as required.

[33] Sierra Leone SCD. The World Bank Group.

B. Results Monitoring and Evaluation Arrangements

A results framework has been developed. It will provide the basis for M&E the project to ensure that investments are on track. The project includes a comprehensive M&E component based on qualitative and quantitative performance indicators for each subcomponent. These include transport, social, environmental, and capacity-development indicators. TIDU will be responsible for M&E and will conduct transport and social impact monitoring on a regular basis. A number of studies conducted as part of project preparation will be continued during implementation to monitor the impact of project investments. The specific output of studies is the identification of attributes of several improvements to urban mobility, focused on accountability, affordability, accessibility, availability and viability.

51. Citizen engagement will be ensured by crowd sourcing, smartphone applications, and web tools to better respond to network conditions and public transport service. Some applications have already been used for project preparation: for instance, the use of mobile phones to map formal and informal bus routes and the use of mobile data to assess the origin and destination of daily commuting trips. In addition, a citizen engagement platform will be established to improve public participation. Technologies will have a crucial role in closing the feedback loop and enriching consultations to warranty that vulnerable groups' needs are not left behind. The citizen engagement plan to be developed by TIDU will have four main pillars: (i) a GRM to manage and resolve issues related to resettlement compensation, GBV cases and others; (ii) a consultation and feedback mechanism that will ensure active citizen participation in project implementation; (iii) a clear stakeholder engagement plan; and (iv) a communications and information plan.

C. Sustainability

52. The institutional-strengthening activities of Component 3 will support the sustainability of project outcomes. This component is designed to enhance (a) institutional sustainability by supporting the development of a sound regulatory framework for urban transport; and (b) financial sustainability through the development of a regulatory framework for public transport to enhance private-sector participation in the provision of transport services.

53. The project interventions are designed to ensure robustness and sustainability with regard to projected changing climate conditions as discussed elsewhere. For example the results of the climate analysis were used to relocate the market area from its original location, which was deemed highly vulnerable to floods and mudslides due to its proximity to the Regent–Lumley stream and would have placed the sustainability of the investment at high risk.

54. The project ensures the sustainability of data collected, and the analysis and results used for the conceptualization and prioritization of interventions. The local capacity built during project preparation (in terms of data collection and analysis) will be strengthened during project implementation. The project has already established several partnerships with local institutions, including the Civil Engineering Department of FBC and the Directorate of Science, Technology and Innovation. These will become key stakeholders in data maintenance, sustainability and updating during project implementation.

55. Ensuring the sustainability of improvements in the living conditions of beneficiaries is at the core of the project's design. As a result of the interventions, traders and transport operators—two of the most vulnerable groups of beneficiaries—will access new opportunities in a safe environment. The project includes activities to raise awareness in the communities on GBV and women's economic empowerment. The project also expects to work with men and women to reduce violence in the community in a sustainable manner and ensure that if cases appear, the bases are well founded for the city to respond with well-known service providers, trained community focal points, and appropriate support for survivors even after project completion.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

56. Urban mobility issues in Western Area are the result of a difficult economic and political environment, the inability to keep pace with growing demand, and decades of neglect. The way forward will focus on improving mobility in strategic locations of the city and building capacity to ensure the sustainability of results. Using this approach, the project's objective is two-fold: first, to provide immediate relief through improved management of services and infrastructure, efficient implementation, and good coordination across multiple departments and agencies within the government; and second, to build institutions, develop appropriate policies and regulations, and identify arrangements to strengthen the delivery of public transport services and climate resilience. The project will finance studies and training to strengthen the capacity of government agencies and academia and support the development of laws, regulations and frameworks for sustainable delivery of urban transport services. It is expected that the lessons from the project will enable the Government to incrementally scale up interventions to a wider area over time. The project will ensure that all designs will undergo road-safety risk assessments and universal access design having into account people with disabilities. Appropriate risk mitigation measures will be incorporated into the design, including: (i) Land use management that fosters safer vehicle speeds and pedestrian movement; (ii) Traffic calming measures that reduce vehicle speeds or allow safer crossings; (iii) Arterial corridors that ensure safer conditions for all road users; (iv) Safe pedestrian facilities and access to public spaces; and (v) Safe access to transport corridors, stations, and stops.

57. The project has built an innovative region-wide spatial analysis to prioritize mobility services. The prioritization framework integrates the following criteria: (a) actual and potential access to economic opportunities (i.e., jobs, access to key sectors for economic diversification such as tourism, port); (b) access to social opportunities (i.e., education, health); (c) climate-related impacts (floods and landslides, based on the Multi-Hazard and Risk Assessment); and (d) socioeconomic data, including data on poverty, gender and disabilities. The accessibility analysis will assess who is actually benefiting from the interventions and make it possible to prioritize those interventions that benefit excluded groups (for instance, low-income residents, women, and PWD). The prioritized project area is chosen following close collaboration and coordination with ongoing and planned development projects in the Western Area (tourism, health, education, urban, etc.). Annex 1 details the methodological framework to prioritize mobility services and infrastructure.

58. All interventions were screened through a double climate-resilience technical assessment: resilience of the interventions and resilience through the interventions. The technical assessment included a Multi-Hazard and Risk Assessment to prioritize interventions that will bring overall resilience to the mobility of people in Western Area through the interventions. This included the use of climate projections and state-of-the-art network resilience analysis to ensure that the project design can accommodate climate network disruption of other parts of the city and enhance resilience of the urban transport system through the project itself. Once these interventions were selected, risk assessment was used to identify mitigation measures to enhance the resilience of the intervention itself in order to adapt and mitigate future damage from climate-related impacts (floods, costal erosion and landslides). The list of climate adaptation measures (see Annex 4) was then shared with the local technical consulting team preparing the bidding documents for interventions under Sub-component 2.1. This same technical assessment will be an intrinsic part of the prioritization framework used in the interventions to be determined under Component 1 and Sub-component 2.2.

59. **Justification for public-sector financing.** The absence of revenue-generating mechanisms and the non-excludable nature of the proposed project investments all but eliminate the potential for private-sector financing. However, the project will strengthen the legal and regulatory frameworks necessary for cost recovery from revenue-generating activities, such as parking, market facilities, and bus and ferry terminals. During implementation, specific areas of support

to the public transport sector will be implemented with the objective of bringing private-sector participation into bus operations and financing and reducing the financial burden.

60. The project is focused on improving public goods, including pedestrian facilities, traffic flow, and management of road infrastructure, with the objective of improving economic competitiveness and quality of life for residents. Because Lumley, one of the project locations, plays a major role in rural and urban connectivity and in daily commuting, improvements will have a significant impact on the Western Area's mobility. There is a high degree of interaction and overlap with the city's public assets (roads), the public realm (urban streets, sidewalks), general traffic flow, and bus and ferry services. The project will also contribute toward reducing externalities, including road accidents, local and global environmental pollution, and noise. Improving affordable mobility and access for all residents, including women, children, seniors, the disabled, and low-income residents without access to private automobiles, is central to the project design.

61. **The project's cost-benefit analysis demonstrates its economic viability.** The economic evaluation focused on the civil works investments under Sub-component 2.1 (Comprehensive Corridor Improvements and Transport Service Enhancements), which account for 35 percent of project costs. Over an appraisal period of 25 years, the benefit–cost ratio (BCR) is 3.7, the Net Present Value (NPV) is US$82.7 million and the Economic Internal Rate of Return (EIRR) is 78.2 percent (see further details in Annex 7). The sensitivity analysis shows economic viability (BCR would only drop to 2.5) even when considering simultaneously a 20 percent increase in cost and a 20 percent reduction in benefits. The main project costs include the capital cost for civil works and equipment in the transit terminal, road improvements, market and daycare center, traffic signals and pedestrian facilities; and O&M costs. The main project benefits included in the analysis are: reduction in travel time and traffic accidents, employment benefits, benefits to women traders, and reduction of carbon emissions (using the low-scenario values for the carbon price of US$40 per ton, based on the recommendations of the World Bank's Shadow Price of Carbon Guidance Note[34]). The economic analysis of the remaining civil works under consideration for the project will be conducted during the first year of implementation.

62. In terms of GHG emissions (CO_2 equivalent) calculations, project interventions under Component 2.1 are expected to reduce emissions from the cumulative number of passenger cars over 25 years from 65,000 tons (without-project scenario) to 55,000 tons (with-project scenario), resulting from travel-time saving, avoided congestion, and efficient travel speeds. Therefore, the gross GHG emissions with project will be 55,000 tons, while the net savings in GHG emissions will be 10,000 tons. The Social Price of Carbon calculations result in Net Present Value benefits of US$173,000 and US$347,000 for low and high scenarios, respectively (these benefits are included in the economic analysis). The net savings in GHG emissions from Component 1 (fleet renewal scheme) are estimated at 89,000 tons. The total GHG emissions saving from Component 1 and Component 2 are estimated in 99,000 tons.

B. Fiduciary

(i) Financial Management

63. The World Bank conducted a financial management (FM) assessment to determine the adequacy of the FM arrangements of the PFMU of the MoF. The objective of the FM assessment is to determine whether PFMU has acceptable FM arrangements. The arrangements include the PFMU's system of planning and budgeting, accounting, internal controls, funds flow, financial reporting, and auditing. The entity's arrangements are acceptable if they are considered capable of recording correctly all budgets, transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the entity's assets, and are subject to auditing arrangements acceptable to the World Bank. The assessment was conducted in accordance with the FM Manual effective March 1, 2010 as last revised on February 10,

[34] http://documents.worldbank.org/curated/en/621721519940107694/Guidance-note-on-shadow-price-of-carbon-in-economic-analysis.

2017. The assessment concluded that the FM arrangements of the PFMU meet the World Bank's minimum requirements for the administration of projects funds under World Bank IPF Policy and Directive.

64. The PFMU is headed by a Unit Manager who is responsible for ensuring the overall direction of work at the Unit. Under the direction and supervision of the Unit Manager, the entire PFMU FM team that comprises the Head of Finance (a qualified accountant), Senior Finance Officer (a qualified accountant), Finance Officer, Assistant Finance Officer, a Finance Assistant and two Administrative Finance Assistants is responsible for the day-to-day FM functions of specified donor funded projects.

65. The PFMU has satisfactory planning and budgeting, accounting, internal controls, financial reporting and external auditing processes in place that will support the effective and efficient use of resources for the proposed project. The related operational costs of maintaining the staff during the life of the project, including computer hardware, stationery, submitting withdrawal applications electronically, and printing of project FM reports will form part of the costs that the project will bear as part of project management costs.

66. PFMU will open a US$ denominated Designated Account (DA) at a commercial bank approved by the World Bank. The project will use report-based disbursements through the submission of quarterly Interim Financial Report (IFRs) on the sources and uses of project funds. A forecast of the first six months expenditures will form the basis for the initial withdrawal of funds from the Grant, and subsequent withdrawals will be based on the net cash requirements.

67. The project will use a cash basis of accounting and financial reporting and will submit, within 45 days of each GoSL fiscal quarter, quarterly IFRs of the project activities. At a minimum, the constituents of the IFRs will be: (a) A statement of sources and uses of funds for the reported quarter and cumulative period from project inception, reconciled to opening and closing bank balances; (b) A statement of uses of funds (expenditures) by project activity/component and by expenditure categories, comparing actual expenditures against budget, with explanations of significant variances for both the quarter and the cumulative period; and (c) a DA Reconciliation Statement.

68. The annual audited financial statements of the project must be submitted to IDA within six months from the end of the GoSL's fiscal year (i.e. by June 30 each year). The external auditors will conduct the audits using the project financial statements on ToR as agreed with the World Bank.

69. Based on the assessment conducted, the overall FM risks were rated as 'High' before mitigation. If the planned risk mitigation measures are properly implemented, the residual FM risk is anticipated to be rated as 'Substantial.' A detailed description of the FM assessment is included in Annex 2.

(ii) Procurement

70. Procurement under the proposed project will be carried out in accordance with the World Bank's (a) "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated July 2016 and revised in November 2017 and August 2018; (b) the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" dated July 1, 2016;, and (c) other provisions stipulated in the Financing Agreements.

71. **Procurement Planning**: A Procurement Plan hasbeen prepared by the Government and agreed upon by the World Bank, detailing the activities to be carried out during the first 18 months and reflecting the actual project implementation needs.

72. **Project Procurement Strategy for Development (PPSD):** For procurements involving National Procurement Procedures below the defined thresholds, national procurement systems may be used as defined by the PPSD. An open

competitive approach to the market will be the World Bank's preferred method because it offers all eligible bidders/proposers a timely and equal opportunity to provide the required goods or services. The procurement activities of this project are for non-complex construction works that have minimal requirements for complex equipment mobilization and are more labor intensive. This is backed by the fact that it is a World Bank-funded project. It is anticipated that a good number of local suppliers will take an interest in bidding for the contracts and will seek opportunities for expanding their businesses.

C. Safeguards

(i) Environmental Safeguards

73. The project is categorized as Environmental Assessment Category B. The potential environmental impacts are expected to be short term and localized and can be managed through the implementation of mitigation measures. The environmental policies applicable to the project are OP/BP 4.01 on Environmental Assessment and OP/BP 4.11 on Physical Cultural Resources. The Client has prepared and disclosed an Environmental and Social Management Framework (ESMF)[35]. The ESMF has been prepared in order to provide a framework for screening subprojects as they are determined during the implementation of project activities that are not known at project preparation. The Environmental and Social Management Plan (ESMP) will be adapted for subprojects with minimal environmental and social impact. Should the screening result indicate the need for further assessment, a separate Environmental, Social and Health Impact Assessment (ESHIA) will be prepared to identify the potential impacts and propose mitigation measures that will be factored into the design of the subproject and costed prior to the awarding of any contracts. In fulfillment of the requirements of OP/BP 4.11, a chance-find procedure has been included as part of the ESMF.

74. Under Component 2, the Client has identified the Kissy Ferry Terminal intersection, Wilkinson to Regent Road intersection, Lumley–Regent Road intersection/Juba axis, Lumley roundabout, and Lumley terminal and transit market as areas where civil works will occur in order to achieve project objectives. As a result of these interventions, the Client is currently preparing the relevant designs and has recruited a consultant who has finalized the ESHIA in accordance with Sierra Leone Environmental Protection Agency (SL EPA) requirements and OP/BP 4.01. The ESHIA and ESMP preparation was done in close coordination with the designs to ensure that the potential environmental footprint of the physical works is identified and minimized and mitigation measures are incorporated in bidding documents. The ESHIA and ESMP have been disclosed on April 2, 2019.

75. **The project environmental impacts** are mainly related to health and safety in a broader sense. More specifically for the Lumley terminal and market, solid and liquid waste management is a concern because of Lumley creek which drains the area. The Government will take measures to ensure that the stream's flow remains unimpeded during construction and operation of the market and terminal. The area is also being used as an informal solid-waste dump site. However, the FCC has indicated that the area will be evacuated before project commencement and a comprehensive waste management plan will be prepared and implemented as part of the ESMP. The site inspection revealed that the area for the market is marshland and there will be a need to fill the area with boulders or other suitable borrow material to be informed by the design engineers' geological studies. The Client will provide an assessment of the borrow pits, including a reinstatement plan, and ensure that all required permits are obtained before the borrow pits are opened for use by the project.

76. In accordance with SL EPA regulations, the Borrower has commenced the registration process of the project's physical works. The SL EPA has oversight responsibility for ensuring compliance with the project's regulations and

[35] ESMF was publicly disclosed in country and on the World Bank website on March 28, 2019 and ESIA and ESMP on April 2, 2019

guidelines. The Client is currently relying on the SLRA, and the social specialist in the TSG for environmental safeguards support. However, the Client will need to recruit an environmental safeguards officer as part of the project implementation unit due to the increased responsibilities during the project implementation phase in order to support TIDU's low capacity in terms of environmental safeguards and to begin to build internal capacity for environmental safeguards management.

(ii) Social Safeguards

77. The project activities will result in the involuntary resettlement of current occupiers. Proposed interventions under Components 1 and 2 are expected to result in the economic and/or physical displacement. Under Component 2, the construction of the Lumley transit terminal and adjoining new market, provision of access roads to the terminal and the redesign of Congo Cross Road will require the acquisition of private lands and removal of residential accommodations, vendor sheds, kiosks, car park, car-washing bay, squatters' shacks, etc. These will disrupt local economic activities, livelihoods and accommodations. A Resettlement Action Plan (RAP) has been prepared for these activities. The RAP points to potential displacement of about 914 Project Affected Persons (PAPs) with accompanying impacts, comprising disruption to trading activities, partial demolition of make-shift structures, and disruption of access to businesses. The designs and specific corridor for activities under Component 1 have not yet been determined. However, the proposed activities, including construction of bus stops, terminals, depot facilities, etc., are expected to induce displacement. Therefore, the Client has prepared a Resettlement Policy Framework (RPF) to provide guidance for assessing and mitigating resettlement risks that may occur. Both the RAP and RPF were publicly disclosed in-country and on the World Bank's website on March 28, 2019 and RAP on April 2, 2019 respectively.[36]. As per the RAP, the 914 affected PAPs are entitled to cash payments amounting to about US$2,000,000. Approval was granted by the World Bank Vice President for the Africa Region to use IDA credit proceeds to pay for the compensation. The Project Implementation Manual will specify the administrative process, accountabilities and responsibilities for use of the IDA financing for said purposes.

78. **The project will support the development of an effective stakeholder consultation strategy** and the establishment of a GRM at the community and at project levels to facilitate timely recording of complaints and resolution of likely concerns during project implementation. Grievance Redress Committees will be established to facilitate the resolution of complaints at the respective project impact sites. The stakeholder consultation strategy will ensure that those affected by the project are properly informed of GBV risks and project activities in order to obtain their feedback on project design and safeguard issues. The GRM will provide survivors with different entry points to initiate complaints and procedures for confidential reporting with safe and ethical considerations for documenting cases.

79. **Borrower capacity for safeguards implementation is low.** TIDU is responsible for overall project implementation and oversight, including management of environmental and social risks. In a preliminary assessment, the capacity and knowledge to comply with the World Bank's safeguards requirements were found to be low. In recognition of this, MoTA recruited a social safeguards officer within the TSG and together with SLRA support are undertaking its environmental due diligence. By the time of project effectiveness, TIDU will be required to have a full complement of safeguards officers responsible for environmental and social safeguards during project implementation. The project takes into account the national requirements for environmental and social regulations and will therefore comply with permitting regulations of the SL EPA. SL EPA was set up by the Environmental Protection Agency Act of 2008 with responsibility to ensure compliance with any stipulated environmental, social and health impact assessment procedures in the planning and execution of development projects, including compliance. SL EPA has been supporting World Bank-funded projects in Sierra Leone and has the required knowledge of and experience with safeguards requirements. Thus, the project will benefit from the capacity level at this national institution to develop robust mitigation measures proportionate to the risk

[36]RPF was public disclosure in country and World Bank Website on March 28, 2019 and RAP on April 2, 2019.

and impacts of the activities to be undertaken under Component 1 of the project. The World Bank's safeguards specialists will provide support and guidance to ensure that the project undertakes due diligence on environmental and social development risks and impacts throughout the project life cycle.

Citizen engagement.

80. The project has supported and will continue to support citizen engagement activities, including: (a) a participatory design approach for investments; (b) proactive participation of local university students in data collection and analysis for the project; (c) deployment of a citizen engagement plan that systemizes two-way communication with citizens closing the feedback loop, including the use of geolocation technologies to obtain feedback from targeted groups about the project in a cost-effective manner, in areas such as quality of public transport, road safety, and safety for women; (d) developing detailed procedures for grievance redress, including the pinpointing of grievance redress roles and responsibilities among government officials, creating a mechanism for providing feedback on complainants, and monitoring the status of grievance resolutions. The GRM will also be trained to be able to manage GBV project-related cases; and (e) development of a public relations/communication campaign to inform stakeholders about road-space management and road safety, among other things (Component 3). The results framework contains the following citizen engagement indicators that reflect these efforts: "Transit terminal and market design including recommendations from citizens' consultation" and "Grievances responded and/or resolved within the stipulated service standards."

81. A participatory design approach has been and will be employed to seek citizens' inputs into the works designs for the various interventions. Careful attention has been paid to seeking inputs from PWD and women's groups. Project conceptualization and design included an extensive consultative process among government, traders' and transport unions, and other stakeholders. Socioeconomic surveys and focus group discussions were also conducted to determine capacity requirements, demand for market spaces, types of goods for sale, and operational challenges. Consultations with transport operators informed the space requirements and allocations for the various types of transport modes at the terminal. In general, the interactions helped to determine auxiliary facilities that should be incorporated or existing important facilities to be replicated in the design of the transit market and terminal. The project will include measures for citizen engagement at the institutional and local levels. At the institutional level, the project's Steering Committee draws local representatives from the transport union and market women's association, including the relevant government ministries and agencies that will have direct responsibilities for strategic planning and advice in project implementation.

82. The project has promoted collaboration among local academic institutions and the Directorate of Science, Technology and Innovation for project design. First, the project involved Sierra Leone's only engineering university, FBC, in data collection on poda-poda, SLRTC and ferry routes. The students participated in survey training, mapped the routes, and generated the first map of public transport in Greater Freetown (see Annex 2), which has been used to define project investments. The same group of students also mapped road infrastructure with recurring flooding during the rainy season, using the World Bank-developed RoadLab application. The project is planning to organize a "hackathon" in collaboration with the Innovation Directorate, to use the public transport data collected by FBC students and other big data to define technological solutions (apps) by local developers that can be used to solve local issues in project areas.

83. To enhance project monitoring, transparency, and social accountability, the project will use and further develop earlier initiatives undertaken under IDA-funded projects. Phone-based applications are already being used by agencies in low-capacity regions to monitor work sites and receive citizens' feedback and grievances. The project will incorporate these mechanisms and provide training on filing, receiving, and responding effectively to stakeholders.

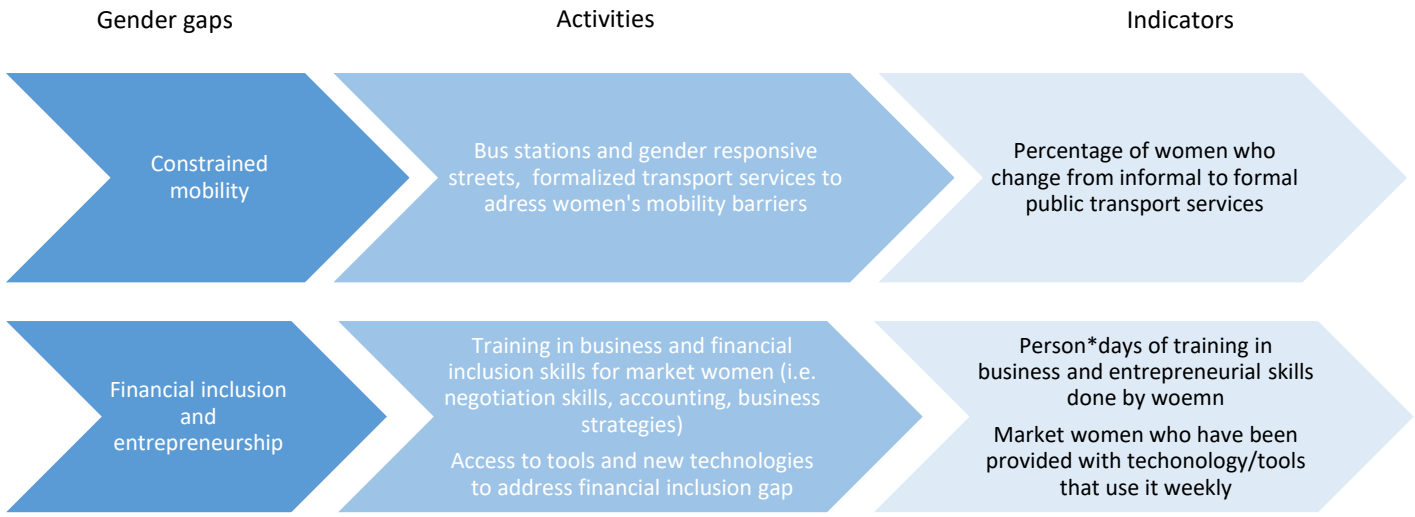
(iii) Gender (detailed in Annex 5 and Annex 6)

84. The project conducted thorough gender analysis from desk review, focus groups discussions with women traders and sex disaggregated data from a Public Transport Service Study to ensure that the project will contribute to develop gender responsive infrastructure and transport services that address women's barriers and increase their mobility. Moreover, the project has assessed GBV risks and has defined mitigation and response measures[37].

Closing the gender gap

85. Gender equality in Sierra Leone has improved in some respects in the past few years. The Government has enacted legislation on GBV and women's rights. However, the country faces challenges in implementing these laws, and several gender gaps persist. Figure 2 presents the framework for closing gender gaps. As part of project preparation, several challenges were identified for women to access public transportation. The Public Transport Service Study conducted as part of project preparation included questions to analyze differences in women's and men's mobility patterns and barriers; showcasing that the current informal sector structurally can constrain women's mobility by enabling different barriers that women face to their mobility. The survey revealed that 18 percent of women interviewed have experienced sexual harassment in public transport (30 percent in the case of informal minibuses and 4 percent in formalized buses) and 50 percent of total respondents indicated physical violence as the main barrier to access public transport services. The current informal system challenges the possibility of institutionalizing measures for enhancing women's safety, for instance, having a mechanism to report or train transport operators given the inexistence of a Bus Management System. Besides the situation of sexual harassment, transport services and infrastructure are not designed to respond either to women's mobility patterns linked with the economy of care (e.g. traveling with children, bags, in a multimodal way). Lack of sidewalks restricts women's mobility, as they mainly walk. This is also a developmental issue, as a study of ILO showcased that access to unsafe transport can restrict women's participation in the economy by 16.5 percent[38].

Figure 2. Framework for closing gender gaps



86. During surveys and focus group discussions, women market traders noted difficult working conditions and harassment and, as well, they identified elements that would make the market more attractive, such as dedicated security,

[37] Considering the recommendations of the *Good Practice Note Addressing GBV Investment Project Financing involving Major Civil Works*
[38] World Employment Social Outlook. Trends for women 2017, ILO

running water, toilets and child-care. During consultations, women traders who will be affected by the project mentioned several factors that limit their ability to reach their full potential, such as lack of collateral and formal education, regulations for accessing credit, and—most remarkably—harassment and extortion. Access to financial services is low in Sierra Leone. Results from the Global Findex[39] show that while 25 percent of men have a bank account, only 15 percent of women have one. When it comes to access to mobile money, 14 percent of men have an account compared to nine percent of women. All these factors negatively affect women's ability to develop and improve their businesses and therefore their incomes, and consequently their livelihoods are deteriorated.

87. The project will contribute to women's modal shift from informal services to formalized one which include gender responsive measures to address their mobility barriers. For this purpose, the project will institutionalize measures to address these barriers through their institutionalization in the Bus Management System of Component 1. The project will pilot in the selected corridors solutions to minimize sexual harassment in public transport, by enhancing awareness and response, trainings for operators to respond appropriately to sexual harassment in public transport, enhancing reporting mechanisms and requesting a CoC for formalized operators, which expects to reduce even more the percentage of harassment in formalize buses. The design of new buses will integrate requirements/characteristics to respond to women's mobility patterns, for instance in terms of needs when traveling with children or with products for the market; whilst women will also benefit from potential interventions such as integrated ticketing, given their multimodal travel.

88. The project will also incorporate gender responsive measures in the design of infrastructure, such as the market and bus stops. First, the design of market and transport facilities (transit terminal, bus stops, pedestrian facilities), has integrated the elements identified by women as priority in the design. For instance, infrastructure includes a gender-based violence prevention environmental design (i.e. proper lighting, open spaces) and social and health-related elements (i.e. running water, separate toilets and health facility in the market). Studies and/or methodologies like safety audits will be used to inform the design and the location of the bus stations to ensure that they respond to women's safety concerns.

89. **As for the gaps in financial inclusion, the project will provide women traders located in the market with financial literacy skills, complemented with access to tools and new technologies to address the financial inclusion and entrepreneurship gap.** The market infrastructure will be used as a hub to improve the business and entrepreneurship education of the new traders established in the market, with specific modules targeted to women's knowledge gaps (to be identified by a diagnostic); for instance, on negotiation skills, accounting, business strategies, supply and revenue management, and basic financial knowledge. Specific tools/new technologies (mobile money with blockchain technology, business plans, accounting systems) will be made available for women in the market to enhance their businesses.

90. **The project will monitor the extent to which its activities are contributing toward closing gender gaps.** Results will be measured as the percentage of women who have changed from informal to formal public transport services that includes activities to enhance their safety and specific mobility needs, plus the inclusion of potential interventions such as an integrated ticketing system that will facilitate their mobility given their multimodal mobility patterns. The target will be modest given that as experience from other countries have shown, there are other non-transport barriers related that influence women's decision to move and use public transportation, such as gender social norms. The percentage of women trained in entrepreneurial skills will be also measured, setting an ambitious target of over 70 percent given that men's level of literacy is twice that of women. However, the project will place strong emphasis on this training because low financial awareness and literacy are some of the main barriers that restrict women's ability to access financial services. The project will also measure the percentage of market women using new technology/tools to improve business and

[39] Global Findex Database 2017. Available: *https://globalfindex.worldbank.org/*

entrepreneurship. An additional indicator has been included to ensure that women's voices are incorporated in the design of the market and bus terminal.

Sexual exploitation and abuse and sexual harassment mitigation and response strategy

91. The project has assessed GBV risks and defined mitigation and response measures[40]. The risk for GBV has been rated moderate by the team from the analysis of the World Bank GBV risk assessment tool (which resulted in low risk), combined with several additional risks identified in the project area that may exacerbate the risk, such as the proximity to tourist locations, the presence of prostitution, and the presence of minor-headed households. Thus, measures to mitigate the SEA risk and respond promptly and adequately to any case that may arise. The bidding documents will clearly define the requirements and expectations for contractors and workers. The expected influx of workers is low, and local hiring will be advised in the ESMP. Promotion of the hiring of workers from the project vicinity will be included in the bidding documents as a requirement. Contractual obligations will also require the contractor to have a CoC and training on its obligations under the CoC on SEA and Sexual Harassment, as well as a GBV Action Plan. The project will provide survivors with different entry points to report cases, including the non-governmental organizations (NGO) that will be supporting the project to enhance the GRM in order to adequately and promptly address any potential project-related SEA grievances. Rainbo has been identified as a potential partner as well as an entry point. After conducting a GBV stakeholder analysis, this NGO was selected based on its expertise in case management, including referrals and medical/physical-social counseling in the closest medical facility. It has also provided training to social workers and trusted community leaders in the identification and management of cases. Rainbo manages the only medical center for GBV survivors in Freetown; this center opened in 2013 with IRC and Irish Aid as the main financing partners. The project will also obtain support from the GBV NGO to conduct awareness raising on SEA and sexual harassment within the marketplace and surrounding areas. Apart from the mitigation and response measures implemented specifically for the project, the long-term objective is to raise awareness and to establish the groundwork to ensure that focal points in the community are well trained, entry points are well known, knowledge of how and where to report is increased, and survivors receive appropriate support even after the project is finalized.

92. A social specialist with in-depth knowledge of GBV will be part of the implementing agency to support project implementation and will receive regular training by the GBV NGO. The ToR of the supervision consultant will include the need to incorporate in the team a social specialist with knowledge of GBV. A complementary activity that will help to capture all the cases occurring under the project and ensure the long-term sustainability of the project is the training for trusted market women who will be relocated in the market; this will strengthen the project's mitigation strategy and provide a close entry point for market women with regard to GBV and SEA cases.

(iv) Grievance Redress Mechanisms

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level GRMs or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

[40] Considering the recommendations of the *Good Practice Note Addressing GBV Investment Project Financing involving Major Civil Works*

V.KEY RISKS

93. Overall risk is assessed to be Substantial for the following reasons.

94. **Political Risk is rated substantial.** Sierra Leone has benefited from a generally peaceful situation since the end of the conflict in 2002. The 2018 presidential, parliamentary and local elections were held with a largely calm, peaceful transition of power. However, because the fragile situation and changes in government could adversely impact project implementation, political risk is rated substantial. To mitigate this risk, the project is building a coalition of partners comprised of multiple stakeholders, community groups and affected people, who are expected to remain strong supporters of the project.

95. **Macroeconomic risk is rated substantial.** Sierra Leone's economic growth rate moderated in 2017 despite a broad upturn in global and regional growth prospects. After recovering from the twin shocks of Ebola and the iron export collapse, economic growth moderated in 2017, reflecting weak recovery of mineral production, particularly iron ore. The main risks to Sierra Leone's growth outlook are the persistent fiscal deficit, adverse debt dynamics, weaknesses in the banking sector, and the volatility of economic growth. These may arise difficulties to contribute with government counterpart funding and high inflation that affects activities estimated cost. Stabilizing the macroeconomy is a precondition for inclusive growth and poverty reduction. Key macroeconomic and sectoral reforms will reduce the imbalances and avoid the downside risks.

96. **Institutional capacity for implementation risk is rated substantial.** The technical capacity of the city and of national stakeholders in urban transport is weak. Prior experience in working with the World Bank or other multilateral organizations is limited. To mitigate this risk, the task team will provide training of key stakeholders, and close and sustained engagement throughout implementation. The multitude of agencies with overlapping responsibilities at national and local government levels may result in poor coordination. To mitigate this risk, the Government has already established a Steering Committee with members from all the key agencies responsible for issues under the project's scope. In the medium term, the Government is planning to create an urban mobility unit within the MoTA, as a formal body to coordinate urban transport. The creation of the urban mobility unit is a dated covenant under the project.

97. **Fiduciary risk is rated high.** The PFMU within the MoF will provide FM and procurement functions for the project. A detailed action plan will be implemented to strengthen the FM system in the Consolidated Financial Unit and to ensure successful implementation. The PFMU arrangements has been assessed by appraisal and are rated acceptable to the World Bank. The overall FM risk for the project at preparation is assessed as High, but with the expected risk mitigation measures when adequately implemented, the residual FM risk is rated as Substantial. The procurement management risk for this project is rated High; after mitigation it is expected to decrease to Substantial. Risk mitigation measures are described in Annex 2.

98. **Social and Environmental risk is rated substantial.** The project's environmental and social risks are rated substantial due to the nature of the activities to be undertaken and the low capacity available in MoTA for safeguards management. To mitigate this risk, the project has prepared the required safeguards instruments to ensure that it remains in compliance with the national legislation and World Bank safeguards requirements. A preliminary GBV risk assessment indicated that at project level, the GBV risk is low but due to the identification of additional risks in the project area the final risk level was established as moderate and proper mitigations and response measures will be put in place. The potential environmental impacts are expected to be short term and localized and can be managed through the implementation of mitigation measures. The Environmental Risk is moderate because the safeguards instruments prepared are sufficient to mitigate the expected risks.

99. **Stakeholder risk is rated substantial.** Project implementation requires the coordination of multiple stakeholders to put in place sectoral reforms, such as the reform and formalization of public transport. Some of the key stakeholders are organized in parastatal organizations such as unions (transport and traders' unions) or associations (passengers' well-being association). To ensure support from such a diverse group, all affected people will actively participate in any proposed changes and a compensation system will be developed to address their specific concerns. The project design has also adopted an integrated approach to the design of facilities, informed by extensive surveys and consultation with stakeholders and users and by international and local experiences. The World Bank's involvement as a convener and motivator, and early project successes, will be important. Currently, project interventions are defined wholly by government discussion and internal consensus, and client ownership is high. Furthermore, the project will implement solutions in pilot areas, with a better chance of achieving outcomes and meeting users' expectations as compared to spreading limited resources (financial and human) thinly across the entire city. To mitigate the risk, the project will also define and implement a Citizen Engagement Plan to enhance project monitoring, transparency and social accountability.

VI.RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

Project Development Objectives(s)

The Project Development Objectives (PDO) are to improve quality public transport, address climate resilience, improve road safety in selected areas and enhance institutional capacity in the transport sector.

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
Improve access to quality public transport			
1. Users satisfied with public transport service at the selected corridors (Percentage)		35.00	60.00
1.1 Female users satisfied with public transport service at the selected corridors (Percentage)		30.00	60.00
Adress climate resilience			
2. People benefiting from improved resilient roads (Number)		0.00	50,000.00
Improve road safety in selected areas			
3. Road traffic crashes involving vulnerable users along selected corridors (Number)		120.00	60.00
Enhance institutional capacity in the transport sector			
4. Development and adoption of a framework for a single		No	Yes

Indicator Name	DLI	Baseline	End Target
regulatory body for urban transport (Yes/No)			

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Enhancing Public Transport Services			
1. Integrated fare collection system functioning (Yes/No)		No	Yes
2. Additional financing from the private sector (Amount(USD))		0.00	10,000,000.00
3. Percentage of women who change from informal to formal public transport services (Percentage)		0.00	10.00
Strategic Resilient Mobility Investments			
4. Project roads with climate adaptation and resilience interventionsinterventions (Kilometers)		0.00	20.00
5. Sidewalks improved (Meter(m))		0.00	10,000.00
Institutional Capacity Building and Studies			
6. Strategic urban mobility policy for Greater Freetown developed (Yes/No)		No	Yes
7. Parternship between local and international university (Yes/No)		No	Yes
8. Road-safety database in place (Yes/No)		No	Yes
9. Market women who have been provided with techonology/tools that use it weekly to conduct business transactions (Percentage)		0.00	35.00
10. Person*days of training in business and entrepreneurial skills done by women (Percentage)		0.00	70.00

Indicator Name	DLI	Baseline	End Target
11. Grievances responded and/or resolved within the stipulated service standards (Percentage)		0.00	90.00
12. Transit terminal and market design including recommendations from citizens' consultation (Yes/No)		No	Yes
13. Workers that have singed the code of conduct and attended the code of conduct training (Percentage)		0.00	100.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
1. Users satisfied with public transport service at the selected corridors	This indicator measures the improvement of access to quality public transport. The indicator has a sub-indicator, broken down by gender.	Baseline and once per year, starting six months after the corridor improvements are completed and operational	Public transport user's surveys commissioned by Ministry of Transport	The methodology to calculate this indicator will consists on surveys to users of public transport in the selected corridors for public transport. The survey will note the gender of individuals. The value reported will be the average of the user satisfaction obtain in all corridors. User satisfaction	MoTA

				questionnaire will use a 5-point Likert scale (1: unsatisfied; 2: moderately unsatisfied; 3: neutral; 4: moderately satisfied; 5: satisfied). Those who answer 4 or 5 would be counted as “satisfied.” The criteria to evaluate satisfaction will include questions about reliability, safety, accessibility, comfort of vehicle and costumer service. For the baseline data, the survey will be done for poda-poda users that are operating in the corridor. The survey questionnaire has been defined at appraisal and will be implemented annually to assess the impact, starting six months after the transit terminal is completed and operational.	

1.1 Female users satisfied with public transport service at the selected corridors	This sub indicators measures improvement of access to quality public transport by measuring perception of female public transport users satisfaction.	Baseline and once per year, starting six months after the terminal is completed and operational	Public transport user's surveys commissioned by Ministry of Transport	This indicator will report female answers to the public transport survey. The methodology for data collection is explained in the main indicator. Questions related to women's particular concerns (environmental design taking into account their specific needs) and sexual harassment will have a higher weight in the calculation of user satisfaction. Moreover, given the differences in mobility patterns between women and men, the surveys will be implemented at peak and off peak hours.	MoTA
2. People benefiting from improved resilient roads	The indicator measures the objective to address climate resilience by measuring the number of non-motorized and motorized transport users per day that utilize the	Annual	Field Surveys	The methodology to calculate this indicator will consist of number of non-motorized and motorized transport users per day on	MoTA

	roads with climate resilient interventions			project roads with resilient investments. The value reported will be the number of people that use all the intervened roads during 24 hours. The number of people using motorized modes will be estimated having into account average number of passengers per vehicle. The measurement will take place while schools are in session. The measurement will take place over a single day. The users include those using motorized and non-motorized modes. Climate resilient roads are defined as roads that are able to withstand intense rain events up to 50-year return period without overflowing, or include slope stabilization measures to avoid rainfall induced landslide (for that same	

				intensity events	
3. Road traffic crashes involving vulnerable users along selected corridors	This indicator measures the "to improve road safety in selected areas" part of the PDO. The indicator measures the annual number of traffic related crashes involving Vulnerable Road Users (pedestrians, bicyclists, motorcyclists) which were recorded by the traffic police. The severity of the crash can be injury or fatal (exclude non-injury or property damage only cases).	Baseline and once per year	Traffic police crash data system	Regular protocol for traffic police to record details of road crash incidents, using reliable geo-coded location of the crashes.	Traffic Police
4. Development and adoption of a framework for a single regulatory body for urban transport	This indicator measures the enhancement of capacity to manage and plan urban transport by the development of a functioning integrated regulatory body for urban transport. The government body should have well defined mandates. Functioning is understood as properly staffed and with clear organizational structure and procedures to carry out tasks, taking into	Annual	MoTA	To be reported by MoTA	MoTA

	account the institutional assessment studies developed during the first year of implementation.				

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
1. Integrated fare collection system functioning	This indicator measures the adoption of the integrated fare collection system	Annual	Progress Report	This indicator will be measured from progress reports produced by the contractor and verified by the supervisor	MoTA
2. Additional financing from the private sector	This indicator measures the expected additional financing from the private sector	Annual	Progress Report	To be reported by MoTA	MoTA
3. Percentage of women who change from informal to formal public transport services	This indicator measures the percentage of increase of women using formalized buses that previously use informal services in the intervened corridors (that includes measures to address women's mobility barriers).	Annual	Progress Report	The methodology to calculate this indicator will consist on a survey to passengers using new formal transport services and SLRTC buses with a specific question on previously used modes of transport and formality of such	MoTA

				modes. The value reported will be the percentage of women using formalized buses during 24 hours that previously were using informal modes of transportation. The measurement will take place while schools are in session. The measurement will take place over a single day.	
4. Project roads with climate adaptation and resilience interventionsinterventions	This indicators measures the kilometer of roads that had climate adaptation and resilience design as part of the project	Annual	Progress Report	This indicator will be measured from progress reports produced by the contractor and verified by the supervisor	MoTA
5. Sidewalks improved	This indicator measures the sidewalks length enhanced as part of the project	Annual	Progress Report	This indicator will be measured from progress reports produced by the contractor and verified by the supervisor	MoTA
6. Strategic urban mobility policy for Greater Freetown developed	This indicator measures the development of strategic urban mobility policy for Greater Freetown.	Annual	Progress Report	To be provided by MoTA	MoTA

7. Parternship between local and international university	This indicator measures the implementation of a formal twining program between local and foreign university	Annual	Progress Report	To be provided by MoTA	MoTA
8. Road-safety database in place	This indicator measures the implementation of the road-safety database, to be managed by SLRSA.	Annual	Progress Report	To be provided by MoTA	MoTA
9. Market women who have been provided with techonology/tools that use it weekly to conduct business transactions	This indicator measures the percentage of women out of the total of them in the new market that received tools/technology to improve their business performance and financial inclusion, that use it at least once in a week to conduct business transactions	Annual	Progress report	The methodology to measure this indicator will depend of the final tools/technology deployed as part of the project. This could include surveys with women, and automatic reports generated by the mobile money app, among others.	MoTA
10. Person*days of training in business and entrepreneurial skills done by women	This indicator measures the number of training days multiplied by number of women recipients of training in business and entrepreneurial skills.	Annual	Progress Report	To be provided by MoTA	MoTA
11. Grievances responded and/or resolved within the stipulated service standards	This indicator refers to the number of grivances registered, related to construction and implementation of the project.	Annual	Progress report	To be provided by MoTA	MoTA

12. Transit terminal and market design including recommendations from citizens' consultation	This indicator measures if there has been a collaborative effort to include citizens views and opinions in the design of the market and the terminal	Annual	Progress report	To be provided by MoTA	MoTA
13. Workers that have singed the code of conduct and attended the code of conduct training	This indicator measures the percentage of workers (consultants and contractors) hired by the project that have singed the code of conduct and received the training on the contents of the code of conduct including their GBV related obligations within the worksite and with the community.	Annual	Progress Report	To be provided by MoTA	MoTA

Annex 1: Detailed Project Description

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. The proposed project builds on the World Bank's engagement in the urban transport sector of Western Area and Sierra Leone. The project design is based on the findings of several ongoing and completed studies and technical assistance initiatives: Integrated Mobility Plan for Freetown (2013); Public Transport Diagnostic Study (2018); Freetown Urban Sector Review (2019); Transport and Resilience in Freetown Study (ongoing); Enhancing Private Sector Participation in Public transport provision study (ongoing).

2. The project includes the following components:

Component 1: Modernization and professionalization of transport services, including informal private operators (estimated cost US$13 million equivalent, of which US$13 million financed by IDA)

3. This component will finance the enhancement of public transport services in Western Area, with a focus on MFD in the sector. It will focus on improving the regulatory environment and formalization of private bus operations.

a. Bus fleet renewal scheme with private operators in response to the declining standard of bus services in the city and the need for introducing good-quality buses. The financing model will benefit from past World Bank experiences in introducing similar schemes in Dakar and Lagos and recent experience in Abidjan. The current informal operators will be required to form companies and these entities will be responsible for loan repayment. The different financing options may include using risk-sharing facilities to provide guarantees to commercial banks that then would provide loans to the private companies. Other financing options may include leasing the buses to private companies. The project expects to leverage an additional US$10 million from the private sector. A technical assistance funded by the PPIAF is informing the design of this bus renewal scheme.

b. Technical assistance to strengthen the capacity of SLRTC to regulate public transport and to support the private sector in the provision of formal, regulated transport service along selected corridors

c. Capacity building and training for transport operators and drivers and the organization of operators. Informal-sector professionalization through: (i) technical assistance to support the private sector in the provision of formal, regulated transport service along Selected Corridors; (ii) capacity building and training for transport operators and drivers on safe driving. Key elements of the reform will include:
   - Regulatory reform to introduce "controlled competition" for operating rights
   - Service contracts of sufficient duration for the recovery of vehicle investments
   - Traffic-system management that enhances operational performance in the selected area
   - Members of the collective required to accept joint responsibility for operations
   - Self-insurance of vehicles and operating risks within the operators' collective
   - Vehicle maintenance through a specialized contractor, with obligation on the part of the private operator

d. Establishment of ancillary facilities including, enabling the environment for private-sector operation of buses. World Bank financing will support private-sector operations in ancillary services to catalyze efficient use of the

fleet, which may include: (i) the introduction of an appropriate, integrated ticketing system across modes, suitable for use in a multi-operator environment and the full range of vehicle capacities; (ii) setting up a control center to manage bus operations and provide real-time customer information; (iii) construction of bus stops, terminal and depot facilities; and (iv) support for bus priority measures along selected corridors.

4. This component will also support the following strategic mobility solutions for passengers and logistics. In partnership with the Directorate of Science, Technology and Innovation, line ministries (education, health, agriculture), local government, and private-sector actors, this component will facilitate mobility in strategic areas, including:

- Bus to school program. Affordability of transport services has been identified as a key barrier to accessing educational centers (on average, people spend around the same amount of money on school fees as on travel costs to and from schools). This activity will finance technical assistance to plan school bus service and to design the institutional framework to regulate, operate and maintain school buses, with the aim of enhancing physical access to schools. This activity will promote a modal shift from private vehicles or motorcycles to buses, with a subsequent reduction of GHG emissions.

- Digital technologies to enhance planning and improve operations of mobility and logistics and supporting the job formalization process, with a focus on gender inclusion and empowerment: The component will finance the provision of technical advisory services for planning and regulating technological solutions for freight and passenger transport including on-demand mobility services using apps and other technological solutions. Technical assistance to plan and regulate technological solutions for freight and passenger transport. One area of support includes the definition of a low-cost, locally adapted fare-collection system in collaboration with the MoTA, the Directorate of Innovation of Sierra Leone, and the Innovation Lab at the World Bank (using blockchain or other technologies adapted to the local context). On-demand transport refers to advanced user-oriented forms of transport services, characterized by flexible routing and scheduling of small or medium vehicles. The on-demand services, using apps and other technological solutions, will facilitate agribusiness, logistical processes, and people's access to health centers, and will provide safe last-mile connectivity for women and PWD. One area of support includes the definition of a low-cost, locally adapted fare-collection system (using blockchain or other technologies adapted to the local context). Another area of support comprises the development of a policy and strategy for on-demand mobility services.: Finally, the project will focus in building capacity and local partnership to ensure sustainability of data collection and data analysis related to urban mobility.

- Support for the management of GoSL's fleet of vehicles. The Fleet Management Strategy is being developed by the GoSL. This component will finance goods and consulting services to support a plan for management of the government fleet of vehicles. The activity will include support for developing a plan to operationalize this strategy, data collection on vehicle conditions, generation of a database, and institutional arrangements for implementation. The vehicle-fleet management strategy will lead to substantial net savings of GHG emissions, estimated at around 2,000 tons per year (see further details below).

5. The activities under this component will result in a net savings of GHG emissions. Team estimates based on a previous study in the region suggest that the renewal scheme have the potential to save up to 2,000 tons of GHG per year. Activities (b), (c) and (d) and the "bus to school program" will promote a modal shift to buses, either by increasing the number of bus stops, or introducing priority measures to increase the attractiveness and efficiency of bus operations. The modal shift will result in a significant reduction of GHG emissions because the current modes of transportation are high-intensity emission emitters (private vehicles, motorcycles, three-wheelers and minibuses).

Component 2. Strategic Resilient Mobility Investments (estimated cost US$28 million equivalent, of which US$26 million financed by IDA and US$2 million financed by Government)

6. This component will finance physical investments to improve access, resilience and road safety. Interventions under Component 2.1, Integrated Corridor Management, have been already identified (as described in the following paragraph). Sub-component 2.2 will use the criteria defined in the region-wide spatial analysis and will be agreed during the first year of implementation.

Component 2.1: Integrated Corridor Management.

7. The investments use an integrated, comprehensive approach to improve road safety, mobility for pedestrians and vehicles, and overall management of the public rights of way from Lumley to central Freetown, employing the innovative concept of Integrated Corridor Management. The design will include a safe system approach. The three identified areas of intervention are Lumley, Congo Cross, and Ferry Junction (see Figure 1A.1). Lumley's integrated improvements were selected for the project because it plays a major role in rural and urban connectivity and in daily commuting. Therefore, improvements will have a significant impact on the Western Area's mobility. Better accessibility to the Freetown port will improve connection to international markets, while improved access to the ferry terminal will improve intermodal connectivity.

8. Investments will focus on: (a) improving road conditions and rehabilitating key road sections; (b) improving drainage capacity; (c) slope stability interventions; (d) providing traffic management, signalization, parking, and intersection improvements; (e) improving pedestrian infrastructure; and (f) constructing off-street transit terminals and markets. Climate-adaptation designs are included in all project investments with the objective of enhancing the project's resilience.

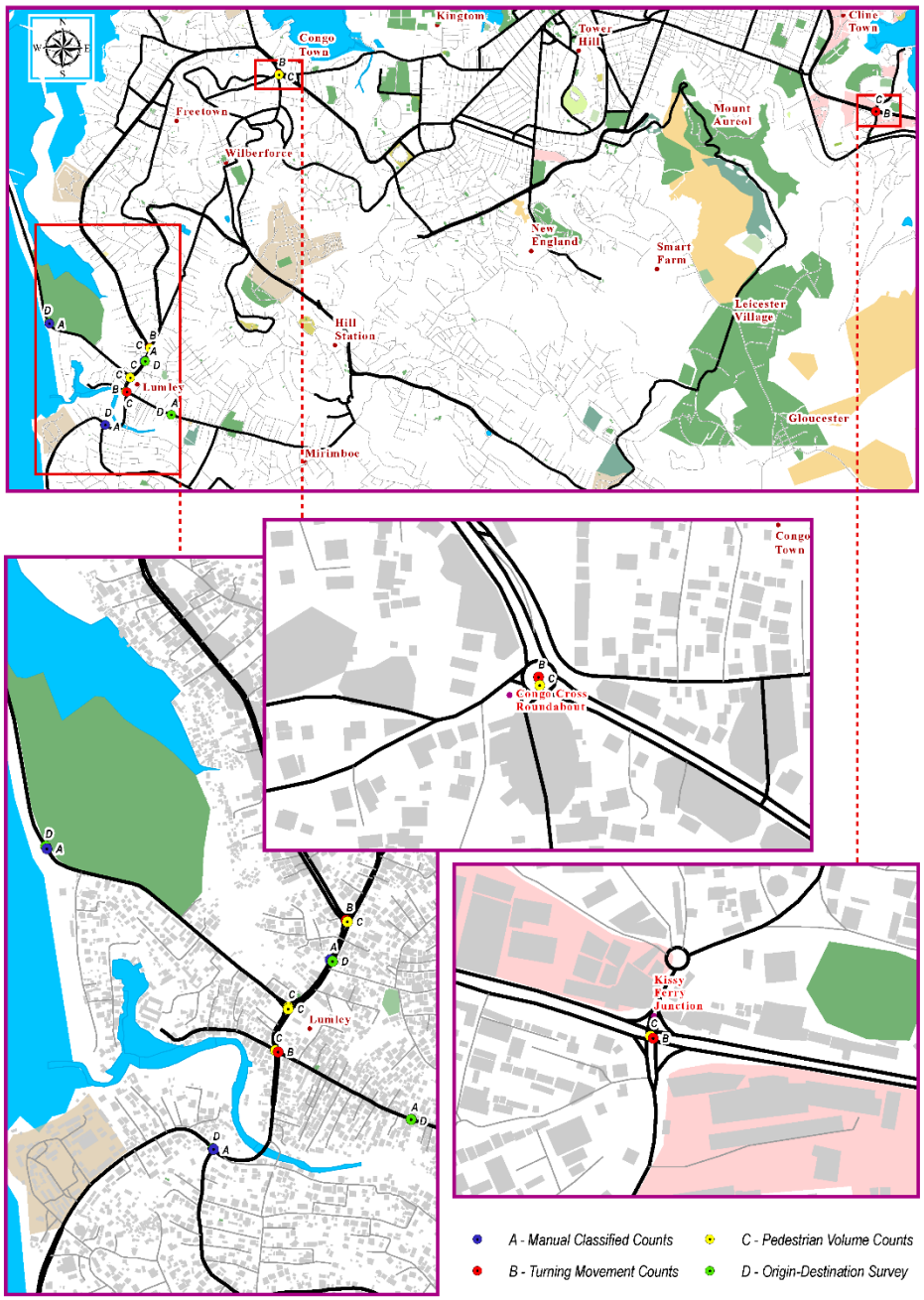
9. Investments were selected on the basis of strategic city plans and extensive consultation. The project identified a longlist of investment options, taking into account strategic plans for the city (list prioritized in the Greater Freetown Mobility Master Plan). These were discussed during a July 2017 workshop with local and national stakeholders, also including transport and traders' unions, and multiple potential investment options were proposed. Following this initial workshop, a study of the economic viability, institutional, management and organizational aspects, and the social, environmental and climate resilience implications for each investment was prepared. Extensive consultation took place for the assessment of each of the strategic interventions. The final shortlist of investments was decided during a workshop in March 2018 with the participation of local and national stakeholders. The selected interventions included: integrated mobility improvements in the Lumley area and access to CBD; and comprehensive improvement of the Congo Cross and Kissy terminal areas.

10. Important features enabling inclusiveness for all, particularly women (see Annex 6) and those living with a disability and/or with limited mobility are:

a. Urban Transport System Accessibility: Including comprehensive provision of access ramps to negotiate grade separated levels, vehicle-station interface and access to stations and careful consideration of security in public space (infrastructure and buses).
b. Prioritization to Non-motorized transport – space provision and safety.
c. Geometric design as a traffic calming passive measure to improve safety of vulnerable users.

11. Engineering designs and bidding documents have been prepared for the identified investments under this component in Lumley, Congo Cross and Kissy Junction.

Figure 1A.1: Location of the three main areas (Lumley, Congo Cross and Ferry Junction) under Component 2.1



12. **Lumley** has one of the city's most intense areas of market activity, and commercial activity has grown exponentially in recent years. The current configuration and operation of the main corridor, Juba Road, has resulted in

the sidewalk and one traffic lane being commandeered by informal market traders. This in turn has resulted in pedestrians and vehicles using one of the existing traffic lanes as a walkway and parking area. Consequently, the highway only operates as a single lane, and its theoretical vehicle capacity has been effectively reduced by 50 percent.

13. **Bai Bureh Road/Ferry Terminal** forms one of the main intersections when one approaches Freetown from the east and provides access to the ferry terminal for services to Tagrin and the port area. In this regard, the Kissy Ferry Junction plays a key role in connecting production centers with urban-area markets and international markets. The intersection now operates in an uncontrolled and largely haphazard manner with little or no control. This results in direct conflict between vehicles and pedestrians who are crossing the intersection. With the added issue that the intersection offers no street lighting, the issue of road safety for pedestrians during nighttime hours becomes more prevalent. The efficient operation of the intersection is further compounded by poda-poda and okada/tricycle drivers who park their vehicles immediately after the intersection to allow passengers to board and alight. Consequently, in the absence of any traffic enforcement, one of the two exit lanes from the intersection is blocked by paratransit activity, thus reducing the intersection's ability to efficiently discharge vehicles through the junction.

14. Table 1A.1 below presents the interventions that are envisaged.

Table 1A.1: Interventions and description of improvements under Component 2.1

Proposed Interventions	Description of Interventions
Integrated Corridor Management in three key corridors: • Lumley area (Juba road) • Congo Cross area (Wilkinson Road and Motor Main Road) • Kissy area (Bai Bureh Road)	• Reconfiguration of main intersections to provide a traffic-signal controlled operation • Improvement of road condition and drainage • Implementation of new parking restrictions • Implementation of street lightning along the corridors • Improved pedestrian facilities in the corridors (adapted for the disabled), including sidewalks and safe pedestrian crossing facilities • Provision of new public transport terminal at Lumley, offering facilities for different modes • Enforcement of new traffic management measures • Improved maintenance of highway, including routine removal of general waste • Annual review of condition of highway pavement, and subsequent maintenance where required
Establishment of transit terminal at Lumley Community (Kingston-Upon-Hull Way in Lumley area)	• Construction of transit terminal whose design is integrated with transit market • Construction of access roads to the terminal • Construction of flood-prevention infrastructure • Construction of pedestrian facilities adapted for the disabled • Road safety improvements
Construction of market at Lumley Community (Kingston Upon Hull Way in Lumley area)	• Construction of market, with segregated facilities for different products (refrigerated foods, other foods, non-food products), whose design is integrated with transit terminal. • Improvement/rehabilitation of access roads • Construction of pedestrian facilities adapted for PWD • Road safety improvements • Removal of informal dump site

15. **All interventions were screened through a double climate-resilience technical assessment: resilience of the interventions and resilience through the interventions.** The technical assessment included a multi-hazard risk assessment

to prioritize interventions that will bring overall resilience to people's mobility in Western Area through the interventions. This included the use of climate projections and state-of-the-art network resilience analysis (see Annex 4) to ensure that the project design can accommodate climate network disruption of other parts of the city and enhance the resilience of the urban transport system through the project itself. Once these interventions where selected, the risk assessment was used to identify mitigation measures to enhance the resilience of the intervention itself in order to adapt and mitigate the future damage from climate-related impacts (floods, coastal erosion and landslides). The list of climate adaptation measures (see Annex 4) was then shared with the local technical consulting team preparing the bidding documents for these interventions and were included in the technical designs.

Component 2.2: Resilient Accessibility Improvement (US$8 Million).

16. The interventions under this component will be identified during the first year of implementation, with the goal of enhancing climate-resilient accessibility to economic and social opportunities. The prioritization and identification will use the results of the ongoing technical assistance on climate resilience analysis, accessibility analysis and other ongoing projects (see the detailed framework in Annex 8). This prioritized framework will be used to screen the longlist of investments defined previously by the Government and included in the latest Integrated Mobility Plan for Freetown. The definition of the longlist will be enlarged after close collaboration and coordination with ongoing and planned development projects in the Western Area (tourism, health, education, urban development, etc.) to maximize synergy across sectors (Annex 8).

17. The list of civil works interventions under consideration will include improvement of drainage capacity, surface and pavement works, or slope stability interventions.

18. Using a similar approach as that in Component 2.1, all interventions in component 2.2 will be screened through a double climate-resilience technical assessment: resilience of the interventions and resilience through the interventions. Furthermore, the investments will be informed by the region-wide spatial analysis presented in the Annex 8.

Component 3. Building Human Capital and Institutional Capacity (estimated cost US$6 million equivalent, of which US$6 million financed by IDA)

19. Toward the long-term objective, the project will aim to strengthen institutional capacity and develop an appropriate regulatory framework to support the Government's strategic plan to promote public transport reform and operationalize the MFD agenda in the transport sector.

20. This component will finance knowledge development and institutional and academic capacity-building activities through the provision of goods, training, and consulting and non-consulting services. The proposed project comprises the following areas:

a. ***Institutional and Stakeholder's Capacity:***

i. **Strengthening the ministry's and other institutions' capacity to develop a long-term vision, strategic plan and administrative regulatory and operational framework for supporting effective management of the transport system**: In support of MoTA, other relevant government stakeholders (FCC, SLRA, SLRTC, SLRSA, Traffic Police, RMFA, NCP, PPP Unit, Sierra Leone Meteorological Department, Directorate of Science, Technology and Innovation and other agencies related to urban transport), the activities will include: the development of an administrative regulatory and operations framework for institutional coordination and public transport improvements; the development of a

framework for public transport regulation and formalizing the private sector; and a training and capacity building program to strengthen specific areas of interest and skills in transport planning, asset management, public transport operations, and other relevant areas.

ii. **Strengthening the capacity of the Urban Transport Unit**. With the support of this component, the Government will establish a dedicated metropolitan urban transport unit in MoTA to address the broader urban mobility issues[41]. This unit will be approved by the cabinet within 24 months after effectiveness date. The Steering Committee will continue to be the advisory body for the TSG. The key functions of the unit will be to: (a) develop and implement transport policy and strategy; (b) understand the sector and maintain comprehensive knowledge; (c) define performance and quality standards; (d) monitor performance and behavior; (e) oversee data management; and (f) coordinate all implementing agencies' interventions in urban transport that affect multiple city council jurisdictions.

In the long term, the Government's objective is to set up a National Urban Transport Authority, bringing all urban and transport-related functions under one umbrella. The term "Authority" is used here in a broad sense without predetermining the role, functions or institutional form, which will be the subject of further studies and discussions among all stakeholders during project implementation.

iii. **Preparation of studies to update and support an Urban Mobility Plan, a prioritized investment plan and Parking Policy.** These will include the preparation of investment plans, feasibility studies or other studies to define transport investments in Sierra Leone. The transport investment may include urban or rural areas and areas such as urban transport, the national roads network or feeder roads, and PPP transport investments.

iv. **Operationalization of the Maximizing Financing for Development approach in the provision of transport infrastructure and services:** including capacity building to local private sector, capacity building to institutions such as PPP unit, NCP, MoTA and RMFA.

v. **Road safety,** The project may assist the SLRSA and Traffic Police with the implementation of activities on road safety, including: (a) support for private-sector participation in road safety and traffic management-related issues, such as vehicle inspection and parking; (b) support for awareness campaigns about road safety, with a focus on vulnerable users such as children, women and the disabled; and (c) the preparation and delivery of a train-the-trainer road-traffic safety enforcement program for joint delivery across the SLP and SLRSA, and the preparation of a joint road-traffic safety enforcement plan for Sierra Leone.

vi. **Enhancement of the road safety database:** The development of a Road Crash Data System including the investment in hardware and training across the SLP, SLRSA and Ministry of Health and Sanitation to support the full rollout of a road-crash data system that has been developed under a pilot project funded through the DFID, housed within SLRSA.

vii. **Enhancement of climate resilience in the planning and management of transport infrastructure and services:** This will assist MoTA, the SLRA and the Disaster Management Department, Office of National Security in: (ai) the enhancement of disaster risk management for road infrastructure; (b) the identification of prioritized investments, taking into account weather shocks, climate change, and the drafting of a Transport Climate Adaptation Plan; (c) the development of a risk-based asset

[41] The issue of urban mobility goes beyond the boundaries of the FCC across to neighboring municipality.

management system; (d) the updating of the national construction standard for transport infrastructure to include climate resilience considerations; and (e) enhancement of infrastructure training at the local university.

b. ***Academic Capacity:*** This will support local engineering schools in building their capacity to train qualified engineers for the local job market. One of the potential target schools is the civil engineering school at FBC, the oldest university in West Africa and the country's only civil engineering school. The activities may include: (i) training for faculty staff; (ii) acquisition of equipment for civil and environmental engineering laboratories; and (iii) support for research programs in selected topics of transport planning, use of new technologies to enhance planning, and implementation of transport projects. This activity will support the FBC's capacity building and the knowledge exchange between it and the Regional Transport Research Centre of the Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, Ghana. KNUST is one of the selected centers of the Africa Higher Education Centers of Excellence Project (P126974). This activity aims to integrate and build on the exiting Africa Centers of Excellence (ACE) program. The project has also fostered a partnership agreement with the World Bank and University College London (UCL) to share knowledge with local universities on transport planning, transport economics, programming, use of GIS tools, and use of new technologies to enhance transport planning.

c. **Women's empowerment**: This activity will include solutions to enhance the productivity of informal entrepreneurs, with a major focus on women's empowerment. It may include: (i) providing financial inclusion and literacy for women traders located in the market by using new technologies, specifically mobile money devices; (ii) improving the business and entrepreneurship education of new traders established in the market, with specific modules targeted to women's knowledge gaps such as negotiation skills, accounting, business strategies, supply and revenue management, and basic knowledge of finance; and (iii) human rights and economic empowerment training.

d. **Citizen engagement:** implementing a citizen engagement plan, with a focus on two-way communication with citizens, including use of new technologies to obtain periodic citizen feedback about the project (for instance, on the quality of public transport, road safety, and safety for women), and to enhance the GRM; and conducting a public relations/communication campaign to inform stakeholders, schoolchildren and the public about road-space management and road safety. The project will put special attention to closing the feedback cycle so the Government becomes more accountable and the citizens are aware of the improvements done based in their opinions and complaints.

Component 4. Project Management (estimated cost US$2 million equivalent, of which US$2 million financed by IDA).

21. This component will finance goods and services to support project management, financial auditing, data collection, M&E and operating cost. It will also provide support to improve project management for project implementation and supervision, social and environmental safeguards, the GRM, SEA efforts, mitigation of gender gaps, and citizen engagement.

Component 5. Contingent Emergency Response Component (CERC) (US $0 million IDA).

22. A CERC will be included in accordance with World Bank IPF Policy, paragraphs 12 and 13. CERC will enable the rapid reallocation of funding among project components following an emergency. By integrating a CERC into this project, the level of disaster preparedness is strengthened, thus eliminating the need for time-consuming restructuring in the immediate aftermath of a crisis, when the Government is in urgent need of quick liquidity. CERCs can be used for immediate and emerging risks, such as natural and manmade disasters, conflicts, epidemics and economic shocks.

23. The project lending instrument is IPF. The project costs of US$52 million are financed by a US$50 million IDA Grant and US$2 million of counterpart financing. The project includes an unallocated amount of 3 million dollar. The duration of the project is five years. Table 1A.2 summarizes project activities.

Table 1A.2. Project Cost (US$ million)

	IDA Financing	Counterpart Funding	Project Cost
Component 1. Modernization and Professionalization of Transport Services	13.0		13.0
Component 2. Strategic Mobility Investments	26		28
Urban transport interventions	*24.0*		*24.0*
Resettlement	*2.0*	*2.0*	*4.0*
Component 3. Building Human Capital and Institutional Capacity	6.0		6.0
Component 4: Project Management	2.0		2.0
Component 5: Contingency Emergency Response	**0.0**		**0.0**
Unallocated	**3.0**		**3.0**
Total Costs	**50.0**	**2.0**	**52.0**

Annex 2: Implementation Arrangements and Support Plan

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

Project Institutional and Implementation Arrangements

24. The project implementing agency will be MoTA's TIDU. MoTA has overall responsibility for policy direction, coordination and supervision for all modes of transport in the country. TIDU has the responsibility for the formulation of plans for road infrastructure and services. Within TIDU, a TSG has been set up to provide all necessary technical inputs to support project preparation and implementation, including the preparation of ToR, data collection, methodology, setting up baseline targets, design standards, engineering designs, M&E, safeguards, and public consultation surveys. Key positions in the TSG have been filled: project manager, engineer, and social safeguards officer. Additional persons will be recruited as required.

25. The MoF's PFMU is responsible for managing the project's fiduciary aspects, including FM, procurement, and auditing. The unit is a centralized department in charge of managing the fiduciary responsibility for all IDA-financed projects.

26. From a functional perspective, multiple agencies at different levels of government are involved in the management and delivery of urban transport infrastructure and services. To ensure coordination across multiple agencies, a Project Steering Committee has been set up, chaired by the Minister of Transport and Aviation and with representation from MoTA, the FCC, Traffic Police, SLRSA, SLRA, SLRTC, MoWPA, MoLCPE, MoF, traders' union, transport union, passengers' well-being association, and representatives of such other Ministries or agencies, as required.

Financial Management and Disbursement Arrangements

27. A FM assessment of the PFMU of the MoF was conducted in accordance with Financial Management Manual effective on March 1, 2010 and as last revised on February 10, 2017.

28. The objective of the assessment was to determine whether PFMU has acceptable FM arrangements. The arrangements include the PFMU's system of planning and budgeting, accounting, internal controls, funds flow, financial reporting, and auditing. The entity's arrangements are acceptable if they are considered capable of recording correctly all budgets, transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the entity's assets, and are subject to auditing arrangements acceptable to the World Bank. The assessment was conducted in accordance with the Financial Management Manual effective March 1, 2010 as last revised on February 10, 2017.

29. **The overall FM risk for the project at preparation is assessed as High, but with the expected risk mitigation measures when adequately implemented, the residual FM risk is rated as Substantial.**

30. **Country Issues:** According to the 2014 Public Expenditure and Financial Accountability (PEFA) which included an analysis of Sierra Leone's Public Financial Management (PFM) strengths and weaknesses, the Government has taken considerable actions to improve its PFM since 2010.

31. The adoption of a number of new laws has had a positive impact on the regulatory framework for Public Finance Management (PFM). The new PFM Law that has replaced the Government Budgeting and Accountability Act (GBAA) 2005, and the Public Debt Law passed in 2011 are two important legislations contributing to the enhanced legislative framework. The establishment of the Procurement Directorate and the Public Investment Planning Unit of MoF; and capacity increases and improvements in the number and quality of staff within the MoF, the Accountant-General's Department and the Office of the Auditor-General are positive developments in the PFM environment.

32. A weakening of budget credibility and predictability for both expenditures and revenues (underestimated); minor gains in comprehensiveness not impacting on fiscal management challenges; weaknesses in expenditure control (including payroll); and low levels of transparency are weaknesses to be addressed as the Government considers moving the system to a level that is capable of directing resources to priority areas and supporting high quality expenditure outcomes.

33. PFM reform in Sierra Leone is directed at all the dimensions of the PFM system. The PFM Reforms Strategy 2014-2017 seeks to develop the basis for the GoSL to accelerate PFM reforms and establish an efficient, effective and transparent PFM system that minimizes opportunities for corruption.

34. The Strategy is being pursued under the following four themes:

- Budget Planning Comprehensiveness, and Credibility; its primary aims are to establish a credible and stable budget process, particularly to establish a transformational and development fund (TDF), public investment program (PIP) and link investment to recurrent operations and maintenance spending through the MTEF process.
- Financial Control and Accountability, Service Delivery and Oversight; the most critical objective of which is to complete the roll-out of IFMIS to major spending MDAs and bring all CG public accounts--including sub-vented accounts and DP project accounts--on to IFMIS.
- Revenue Mobilization; whose two objectives will be (1) to establish more effective tax and control regimes for extractive industries through the Extractive Industries Revenue Act and the Oil Exploration Act and (2) improving the system for recording and reconciling payment and receipts.
- Strengthening Local Governance Financial Management through Local Councils for Effective Decentralization; A critical objective shall be the consolidation of the implementation of the PETRA Accounting Package in all local councils including the real-time processing of transactions by selected councils.

35. The PFM Strategy if successfully implemented will put in place appropriate structures and processes to promote transparency and accountability and mitigate the fiduciary risk of utilizing public funds both at the country and project levels as well as have positive impact of aggregate fiscal discipline, the strategic allocation of resources and the efficiency of public service delivery. The PFM reform is being supported through a donor financed PFM Public Financial Management Improvement and Consolidation Project (PFMICP) (P133424) which include DFID, AfDB and IDA.

36. The bulk of external assistance in terms of programming has been channeled off-budget both in the sense that resource allocations are not reflected in the Government's budget documents and those funds are not disbursed through country Treasury systems. This lack of information and absence of effective instruments to guide the allocation of external financing seriously undermine the integrity and effectiveness of the budgetary system. There is insufficient transparency in public finances. The budget process is not yet transparent. The PFMICP being currently implemented aims at addressing all the above weaknesses by mobilizing funds from a number of donors to finance a comprehensive PFM overhaul of the

respective integrated systems and ensure an inclusion of donor funded projects in government chart of accounts and budgets so that eventually they are able to use existing country systems.

37. **Project Risk Assessment and Mitigation.** This section presents the results of the risk assessment and identifies the key FM risks and the related risk mitigating measures.

Table 2A.1 Risk Rating Summary Table

Risk		Risk rating	Risk mitigating measures	Conditions of Effectiveness (Yes or No)	Residual Risk rating
INHERENT RISKS					
1	**Country Level** Weaknesses in legislative scrutiny, low human capacity, declining revenues and energy challenges affecting timely and adequate intergovernmental fiscal transfers.	H	Efforts are being made to help GoSL substantially resolve and enhance revenue management framework in the medium term. The PFM Improvement and Consolidation Project seeks to address the human capacity issues including FM capacity and improve process aspects.	No	H
2	**Entity Level** The political arm of the Entity and / or management may unduly interfere with, and/or override, project FM controls.	H	An independent project FM unit with officers paid by the Project will manage the fiduciary aspects of the project to ensure independence. An independent external audit will be carried out annually under the project. The design of the project will include an enhanced accountability framework to ensure control of soft expenditures from possible abuse. Initially, regular FM reviews will be conducted by the World Bank team to provide support.	No	S
3	**Project Level** Weak FM capacity could result in slow execution of the project and delayed reporting could impact on progress.	H	PFMU will be manned by qualified personnel that will handle the day to day management for the GoSL. The performance of the staff hired in the Unit will be reviewed annually to act as a basis for renewal of their individual contracts.	No	S
CONTROL RISKS					
4	**Budgeting** Budget and annual work plan preparations may be delayed and may not be comprehensive. Risk of cost overruns and adverse variations in expenditure could arise due to potential slow implementation and padding of the related unit costs of goods and services entailed in the implementation.	M	The Annual Work Plans and Budgets (AWPB) would be submitted annually before implementation starts for review by the World Bank team which would ensure it is realistic and unit cost estimates are reasonable based on industry and global experiences gathered in some jurisdictions that have undertaken similar operations and also cross check the same with the local market. Also, budget execution reporting through quarterly IFRs will be routinely monitored by IDA with variations in unit costs tracked to ensure major deviations are followed up and investigated. The Budget Office will also monitor	No	L

			budgeted activities to ensure effective use of budgets		
5	**Accounting** Government Accounting System not yet installed at the Unit. Use of manual accounting system not generating reliable, accurate and timely accounting information for project appropriate decision making acceptable to the World Bank.	H	PFMU will use a customised accounting system. The Financial Procedures Manual was revised to take into account peculiar design of the project. The World Bank's team will provide support to relevant project staff at PFMU	No	S
6	**Internal Control (IC)** Project funds not being used for intended purposes because of inadequate internal control by management and lack of control measures pertaining to soft expenditures and usage of executive override. This may give rise to non-compliance with internal control procedures.	S	Adequate IC over the disbursement and accountability of funds for eligible expenditures will be further strengthened by the adoption of an enhanced accountability framework for the project and internal audit oversight on the project at PFMU will be instituted. The internal auditors will be required to generate periodic internal audit reports which should be shared with relevant stakeholders including the World Bank. The internal controls have also been documented in the FM manual for the Project. Internal and external auditors would be expected to clearly identify and report any cases of breach of internal control procedures by the project management.	No	M
7	**Fund Flow** Possible delays in processing withdrawal applications leading to problems in honoring payments to third parties. Submission of Withdrawal Applications delayed.	S	The PFMU will be responsible for preparing and submitting withdrawal applications, and acceptable service standards for settlement of bills will be established. IDA funds will be disbursed through the US$-denominated DA to be opened by the PFMU Simplified flow of funds arrangements are included in the Project Implementation Manual (PIM).	No	M
8	**Financial Reporting** Delays in the preparation and submission of un-audited IFRs and/or unreliable IFRs submitted.	M	IFRs shall be submitted to the World Bank within 45 days after end of each calendar quarter. The content of the IFR will include Sources and Uses of Funds, Uses of Funds by Category, bank accounts reconciliation and a schedule of amounts drawn.	No	L
M9	**Auditing** Delays in the submission of audit reports and the timeliness of management follow up on audit issues.	S	The audit ToR will be agreed and a qualified and acceptable auditor appointed with relevant input of Audit Service Sierra-Leone. Continuous satisfactory performance of auditors will be basis for continuous engagement. The audit would be done in accordance with International Standards on Auditing and, International Public-Sector Accounting Standards. The audited financial statement is expected to be submitted to the World Bank not later than six months after the	No	M

			end of each fiscal year. The ToR for the external auditors has to be cleared by the World Bank. The World Bank will liaise closely with implementing agencies to ensure that management takes corrective actions on identified weaknesses.		
OVERALL RISK RATING		H			S

H —High, S — Substantial, M — Moderate and L — Low.

38. A summary of the key findings of the FM assessment as well as the FM arrangements under the project as conducted is presented as hereunder.

39. **Planning and Budgeting.** The respective entities' AWPB will be prepared and approved based on the policy guidelines and strategy planning as laid-out in the PIM, and consistent with the provisions of the GBAA 2005.This budget will be activity based and in line with the cost tables of the project. The AWPB is expected to be prepared in a participatory way and will be approved before each new financial year begins. The financial part will be monitored during project implementation using unaudited IFRs. PFMU will ensure timely preparation, review, consolidation, and approval of the annual work program.

40. **Accounting Policies, System and Procedures.** The PFMU will set up and maintain books of accounts specifically for this Project. Books of accounts will include a main cash book, and ledgers, fixed asset registers, and contracts register. The PFMU will use a customized FM system (TOM2PRO) and will ensure that codes for the transactions are adequately reflected in its books.

41. The accounting systems will contain: (a) a chart of accounts and a coding system capable of capturing transactions classified by project components and IDA disbursement categories; (b) use of the cash or modified cash method of accounting; (c) a double entry accounting system; and (d) the production of annual financial statements and quarterly unaudited IFRs in a format acceptable to IDA.

42. An accounting policies and procedures manual will be prepared to include the project financial transactions procedures at each of the implementing agencies. The Manual will contain the necessary internal controls including internal checks and segregation of duties.

43. **Internal Audit and Control.** The Internal Audit Unit of MoFED will carry out periodic internal audit reviews of activities carried out in the implementation of the Project and share copies of their report with the World Bank.

44. Segregation of duties, and full compliance with the provisions of the PIM, especially as pertaining to internal control aspects, will remain a key ingredient in the implementation of the expenditure processing activities at the PFMU and the executing agencies during the life of the project.

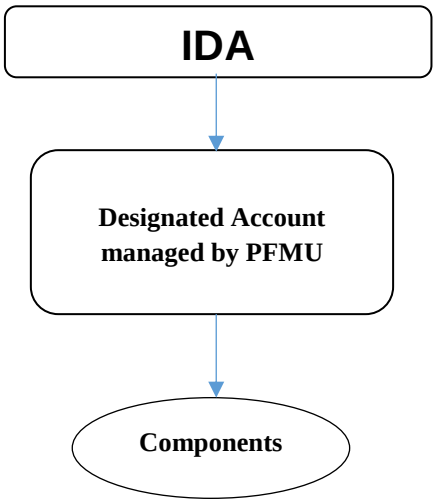
45. **Governance and Anti-Corruption.** The World Bank's Anti-Corruption Guidelines[42] apply to this operation. Sections of these guidelines, especially those relating conflict of interest, procurement and contract administration monitoring procedures, procedures undertaken for replenishing the DA and use of the Project's asset shall be provided as an annex to the Project's Financial Procedures Manual. Additional mitigation measures will include advocating good governance,

[42] *"Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants",* dated October 15, 2006 and revised in January 2011, and as of July 1, 2016.

close monitoring and spot checks by the internal audit units of the implementing entities, as well as enhanced social responsibility by the GoSL and implementing entities.

46. **Flow of Funds.** The flow of funds will be as indicated in figure 2A.1:

Figure 2A.1. Flow of funds in the IRUMP



47. *DAs*. To facilitate funds flow to the GoSL, a segregated DAs will be opened in US Dollars at a commercial bank acceptable to the World Bank and managed by PFMU. The DA will cater to the implementation requirements for all the components.

48. **Disbursement Arrangements.** The Report - based disbursement method will be used as a basis for the withdrawal of credit and grant proceeds. The project provides for the use of 'advances, reimbursements, direct payment, and special commitments' as applicable disbursement methods, and these will be specified in the disbursement letter.

49. Supporting documentation will be retained by the implementing agencies for review by the IDA missions and external auditors.

Table 2A.2 - Eligible expenditures

Category	Amount of the Financing Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, and consulting services[43] Training and Operating Costs for the Project	32,000,000	100%
(2) Emergency Expenditures under Part 5 of the Project	0	n/a
(3) Resettlement Compensation	1,444,000	100%

(4) Refund of Preparation Advance	722,000	Amount payable pursuant to Section 2.07 (a) of the General Conditions
(5) Unallocated	1,934,000	n/a
TOTAL AMOUNT	36,100,000	

50. **Financial Reporting Arrangements.** PFMU will be responsible for the preparation and submission of quarterly Interim Financial Reports for the project, to be submitted within 45 days after the end of the quarter to which they relate. It will also be responsible for the preparation of the annual financial statements for the fiscal period to which they relate and having them audited. The information in these reports will be clearly linked with the chart of accounts for the Project.

51. The following quarterly IFRs and annual Financial Report will be produced:

(a) A statement of sources and uses of funds for the reported quarter and cumulative period from project inception, reconciled to opening and closing bank balances.
(b) A statement of uses of funds (expenditures) by project activity/component and expenditure category, comparing actual expenditures against budget, with explanations for significant variances for both the quarter and cumulative period.

52. The Financing Agreement will require the submission of audited financial statements to the World Bank within six months after the end of each financial year. These Financial Statements will comprise:

(a) a Statement of Sources and Uses of Funds/Cash Receipts and Payments, which recognizes all cash receipts, cash payments, and cash balances controlled by the project entities and separately identifies payments by third parties on behalf of the project entities;
(b) a Statement of Affairs/Balance Sheet as at the end of the financial year, showing all the assets and liabilities of the Project;
(c) The Accounting Policies Adopted and Explanatory Notes. The explanatory notes should be presented in a systematic manner with items on the Statement of Cash Receipts and Payments being cross-referenced to any related information in the notes. Examples of this information include a summary of fixed assets by category of assets and a summary of Withdrawal Schedule, listing individual withdrawal applications; and
(d) A Management Assertion that IDA funds have been expended in accordance with the intended purposes as specified in the relevant World Bank legal agreement.

Indicative formats of these statements will be developed in accordance with fiduciary requirements and agreed with the Country Financial Management Specialist.

53. **External Audit.** The Audit Service Sierra Leone (ASSL) is by law responsible for the audit of all government finances and projects. However, in view of the prevailing capacity constraints, it is likely that the ASSL could outsource such service to a private firm of auditors with qualifications and experience acceptable to the IDA

54. PFMU will be responsible for preparing the project financial statements on which the auditor will issue a single opinion covering project accounts, the usage of statement of expenditures, and the management of DAs. In addition, a management letter outlining any internal control weaknesses will also be issued by the external auditor together with the audit report.

55. The annual financial statements should be prepared in accordance with International Public-Sector Accounting Standards (which inter alia include the application of the cash basis of recognition of transactions) and will be audited in

accordance with International Standard on Auditing and submitted to the World Bank within 6 months after the end of each fiscal year.

56. The project financial statements will be audited annually in accordance with International Standard on Auditing (ISA) by independent auditors based on ToRs acceptable to IDA as above annotated. The auditors should be appointed prior to the first audits period to allow the auditors able to submit the audit report within the due date. The audited financial statements will be submitted to IDA within six months after the end of each fiscal year. The cost of the audit will be financed from the project proceeds.

57. **Fraud and Corruption.** Inefficient service delivery due to poor governance practices and weak PFM environment is an inherent issue. Possibility of circumventing the internal control system such as colluding practices, bribes, abuse of administrative positions, mis-procurement among other considerations are critical risks that may arise. Other internal control incidences that may expose the project to fraud and corruption include but not limited to (a) late submission of supporting documents; (b) poor filing and records; (c) lack of work plans and or budget discipline; (d) unauthorized commitment to suppliers, and (e) bypassing budget and expenses vetting procedures. The project shall mitigate these potential fraud and corruption related risks through (i) strengthened project monitoring ii) specific aspects on corruption auditing will be included in the ToRs for the external audit; (iii) targeted FM Procedures and internal control mechanisms across the project activities shall be detailed in the project implementation manual; (iv) strong FM staffing arrangements; (v) periodic FM supervisions; and (vi) IFRs reviews and monitoring.

58. **Implementation Support Plan.** As the overall FM risk rating of the project is substantial, implementation support of project FM will be performed at least twice a year. The implementation support of the project will closely monitor the FM aspects, and will include but not be limited to operation of DAs, evaluation the quality of budgets, project financial monitoring and management reviews of financial reports, quality of IFRs, relevancy of the FM Manual within the PIM, internal controls, work and document flow and quality of financial records, and follow up of audit and mission findings. The review will also conduct random reviews of the statements of expenditures, compliance with covenants. Based on implementation support result, the risk will be re-assessed, and the frequency of supervision recalibrated.

59. Measures to mitigate the late / non-submission of reports has been agreed upon during the appraisal stage.

60. **Financial Management Action Plan**

Table 2A.3. Agreed Action Plan

	Action	Date due by	By Whom
i.	Preparation of the PIM incorporating the FM policies and procedures	Done by negotiations	PFMU
ii.	Input of the relevant project codes into the accounting software.	Not later than one month after project effectiveness	PFMU
iii.	Agree on IFR format and audit ToRs	Done by Negotiations	PFMU
iv.	Recruit the external auditor	Not later than six months after project effectiveness	PFMU

61. **Conclusion.** The conclusion of the assessment is that the FM systems of the PFMU meet the World Bank's minimum requirements for the administration of projects funds under World Bank Policy and Procedure for IPF. The overall FM residual risk of the Project is **'substantial'**.

Procurement

62. Procurement under the proposed project will be carried out in accordance with the World Bank's (a) "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated July 2016 and revised in November 2017 and August 2018; (b) "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" dated July 1, 2016; and (c) other provisions stipulated in the Financing Agreements.

63. **Implementation Arrangements**: Procurement under this project will be carried out by the PFMU under the MoF. The GoSL has established a single fiduciary management unit, the PFMU under the MoF, to manage all World Bank-financed projects. A highly qualified and experienced head of the procurement department will be hired, and experienced team leaders will be recruited. Procurement staff currently handling PFMU procurement have a reasonable track record of implementing World Bank-funded projects.

64. The procuring entity, as well as bidders and service providers (suppliers, contractors and consultants) must observe the highest standards of ethics during the procurement and execution of contracts financed under the project, in accordance with Sections I and II of the Procurement Regulations.

65. **Preparation of the PPSD:** As part of project preparation, the Borrower has prepared a Project Procurement Strategy for Development (PPSD), which describes how procurement activities will support project operations for the achievement of project development objectives and deliver Value for Money (VfM). The procurement strategy will be linked to the project implementation strategy to ensure proper sequencing of activities. The PPSD considers institutional arrangements for procurement; roles and responsibilities; thresholds, procurement methods, prior review, and the requirements for carrying out procurement. It also includes a detailed assessment and description of the Project Implementation Unit's (PIU) capacity for carrying out procurement and managing contract implementation, within an acceptable governance structure and accountability framework. Other issues to be considered include the behaviors, trends and capabilities of the market (market analysis) to respond to the Procurement Plan.

66. **Procurement Planning**: A Procurement Plan, which is the output of the PPSD and outlines the procurement procedures to be used to plan and monitors implementation of investment activities, has been prepared and agreed upon by the World Bank and GoSL. The Procurement Plan for the project was prepared, detailing the activities to be carried out during the first 18 months and reflecting actual project implementation needs.

67. **Use of Country Systems**: For procurements involving National Procurement Procedures below the defined thresholds, national procurement systems may be used as defined by the PPSD. The project activities will also require strong technical capability to prepare proper technical specifications to avert the lack of, or inadequate, market response. This capability or a plan to enhance it will be described in the procurement strategy. An open competitive approach to the market will be the World Bank's preferred approach: it provides all eligible bidders/proposers with timely and equal opportunity to provide the required goods or services.

68. **Procurement Management Risk Assessment:** The procurement management risk assessment found that even though current staff in the PFMU is conducting procurement in World Bank-funded projects, (a) the capacity of the existing pool of staff remains low despite several training and capacity-building workshops conducted by the World Bank; (b) there are substantial delays in internal approvals of procurement decisions because the technical teams are in different project

implementing ministries and agencies while the procurement team is in the PFMU; (c) there is limited knowledge of the World Bank's Procurement Regulations and use of the World Bank's Systematic Tracking of Exchanges in Procurement (STEP); (d) the implementing agency that will manage technical aspects of the project has never managed any World Bank-funded project; (e) there is a need to establish the recordkeeping system; (f) the procurement process is experiencing inefficiencies and delays; (g) there is insufficient competition in procurement; and (h) the grievance redress system is weak. The procurement management risk for this project is rated **High**; after mitigation it is expected to decrease to **Substantial**. To address the identified risks and weaknesses, mitigation measures have been discussed and agreed with the respective PIUs, as shown in the table below and the PPSD's recommendation that will be submitted by the GoSL and approved by the World Bank.

69. **Procurement Post Reviews (PPRs) and Independent Post Reviews (IPRs) by the World Bank**: Based on the assessed agency implementation risk for procurement, which is high, the World Bank will carry out annual PPRs or IPRs for all contracts if the approved Procurement Plan has not been subject to prior review by the World Bank, using a sample of 20 percent. Based on the ongoing assessment of risk and the success of implemented risk mitigation measures, the sample size will be reduced as risk mitigation measures are successfully implemented. Note that, based on risk rating, the sample sizes for the PPRs or IPRs are as follows: five percent for Low Risk rating, 10 percent for Moderate Risk rating, 15 percent for Substantial Risk rating, and 20 percent for High Risk rating.

Table 2A.4. Project Procurement Risk Factors and Mitigation Measures

Risk Factor	Mitigation Measure
Capacity building of procurement staff	• Attend training on WB procurement procedures. • Regular supervision, support and monitoring.
Substantial delays in internal approvals of procurement decisions	• Conduct regular meetings to identify delays and their causes, and provide solutions. • Technical and procurement teams to work together regardless of the structures and chain of command in different ministries and agencies.
Limited knowledge of the World Bank's Procurement Regulations and use of STEP	• Conduct routine procurement clinics on new WB procurement procedures. • Hands-on support to the team on the use of STEP.
Recordkeeping and documentation	• The implementing agency will establish and maintain all procurement records duly catalogued and indexed to facilitate easy access to information.
Inefficiencies and delays in the procurement process	• Regular monitoring through the Procurement Plan in STEP.
Insufficient competition in procurement	• Aggregation of smaller contract packages whenever feasible. • Raising awareness in the private sector on bidding for public tenders.
Weak grievance redress system	• Disclosure of grievance complaint redress procedure. • Bi-annual report of all complaints received, and actions taken.
Fraud and corruption risks (including collusion and outside interference) in contracting process	• Disclosure of Procurement Plan. • Disclosure of contract awards. • Creating awareness on effects of fraud and corruption. • Regular reviews such as PPR, internal audit, external audit, etc.

Table2A.5. Procurement Action Plan

Action	Date due by	Responsible
1. Preparation of PPSD: the consultant who prepared the PPSD was recruited and the client has finalized the PPSD and obtained World Bank's approval.	Immediately (Done)	Borrower/WB
2. Completion and clearing of PPSD.	Negotiations (Done)	PIU/PFMU/WB

Action	Date due by	Responsible
3. Designate procurement focal staff in PFMU.	Immediately (Done)	Borrower
4. Train designated Procurement Officers and PIU staff in World Procurement Regulations for Borrowers.	Three months after effectiveness	WB
5. Strengthen capacity in the use of STEP tools, which are being used to manage all procurement transactions and related documentation.	Continuous hands-on support after PFMU staff have been trained.	WB
6. Develop a PIM to include procurement procedures and implementation arrangements for the project along with the standard and sample documents to be used.	Negotiations (Done)	PFMU/PIU
7. Develop records and contract management systems to ensure efficient and effective contract management.	Three months after effectiveness and continuous monitoring	PFMU/PIU

Environmental and Social (including safeguards)

Environment

70. The project is categorized as Environmental Assessment Category B. The potential environmental impacts are expected to be short term and localized and can be managed through the implementation of mitigation measures. The environmental policies applicable to the project are OP/BP 4.01 on Environmental Assessment and OP/BP 4.11 on Physical Cultural Resources. The Client has prepared an ESMF, which has been finalized and disclosed before appraisal. The ESMF has been prepared in order to provide a framework for addressing environmental safeguards concerns that may arise during the implementation of project activities but are not known at project preparation. In fulfillment of the requirements of OP/BP 4.11, a chance-find procedure has been included as part of the ESMF[44].

71. Under Component 1, the Client has identified the Kissy Ferry Terminal intersection, Wilkinson to Regent Road intersection, Lumley Regent Road intersection/Juba axis, Lumley roundabout, Lumley terminal and transit market as areas where civil works will occur in order to achieve project objectives. As a result of these interventions, the Government has prepared and disclosed the ESHIA and ESMP in accordance with SL EPA requirements and OP/BP 4.01. The ESHIA preparation was in close coordination with the designs to ensure that the potential environmental footprint of the physical works is identified and mitigation measures are incorporated in bidding documents.

72. **The project's environmental impacts** are mainly related to health and safety in the broader sense. More specifically for the Lumley terminal and market, solid and liquid waste management are a concern because of the Lumley creek that drains the area. The Client will take measures to ensure that the stream's flow remains unimpeded during the construction and operation of the market and terminal. The area is also being used as an informal solid-waste dump site. However, the FCC has indicated that the area will be evacuated before the commencement of the project and a comprehensive waste management plan will be prepared and implemented as part of the ESMP. The site inspection also revealed that the area for the market is marshland and there will be a need to fill the area with boulders or other suitable borrow material to be informed by the design engineers' geological studies. The Client will also provide an assessment of the borrow pits, including a reinstatement plan, and ensure that all required permits are obtained before the borrow pits are opened for use by the project.

[44] ESMF was public disclosure in country and World Bank Info Shop on March 28, 2019 and ESIA and ESMP on April 2, 2019

73. **In accordance with SL EPA regulations,** the Borrower has commenced the registration process of the project's physical works. The SL EPA has oversight responsibility for ensuring compliance with its regulations and guidelines. The client is currently relying on a counterpart agency, the SLRA, for environmental safeguards support. However, the client will need to seek a long-term plan for the project implementation phase in order to support the borrowing agency's limited capacity in terms of environmental safeguards, and to begin to build internal capacity for environmental safeguards management.

Social

74. The project activities under Component 1, such as improvements to and rehabilitation of road infrastructure and the development of the transport terminal and market, will result in the involuntary resettlement of current users. As a result, the project triggers the World Bank policy on involuntary resettlement (OP 4.12). A RPF was prepared, consulted and publicly disclosed in-country and on the World Bank's website prior to appraisal. The RPF provides guidelines for the preparation of a RAP throughout the project life cycle to manage social risks and impacts resulting from implementation of project activities that are likely to result in resettlement[45]. A RAP was prepared and disclosed for implementation ahead of the development of selected activities, including the Lumley transit terminal and adjoining new market, provision of access roads to the terminal, and redesign of the Congo Cross Road roundabout to enhance transport mobility. The resettlement funds will need to happen prior to the commencement of civil works. IDA financing will cover the resettlement cost detailed in the RAP. Further resettlement cost will be funded by Government's counterpart funding.

75. **The project will support the development of an effective stakeholder consultation strategy** and the establishment of a GRM at the community and project levels to facilitate timely recording of grievances and resolution of concerns during project implementation. Grievance Redress Committees will be established to facilitate the resolution of grievances at the respective project impact sites. World Bank project safeguard specialists will support this activity and provide needed guidance and training as required.

76. **Borrower capacity for safeguards Implementation is low.** MoTA and its project implementation unit, the TIDU, have taken the initiative to address the limited capacity for and experience with safeguards requirements for World Bank-funded projects. A preliminary assessment showed that the capacity and knowledge to comply with the World Bank's safeguards requirements were low. In recognition of this, MoTA has recruited a social safeguards officer, who, together with the support from SLRA has undertaken its environmental due diligence. By the time of project effectiveness, TIDU will be required to have a full complement of safeguards officers who will be responsible for environmental and social safeguards during project implementation. The project takes into account the national requirements for environmental and social regulations and will therefore comply with SL EPA's permitting regulations. The SL EPA was set up by the Environmental Protection Agency Act of 2008 with functions to ensure compliance with any stated environmental, social and health impact assessment procedures in the planning and execution of development projects, including compliance. The SL EPA has been supporting World Bank-funded projects in Sierra Leone and has the necessary knowledge of and experience with safeguards requirements. Thus, the project will benefit from the capacity level in this national institution to develop robust mitigation measures proportionate to the risk and impacts of the activities to be undertaken under Component 1 of the project. The World Bank's safeguards specialists will provide support and guidance to ensure that the project undertakes due diligence on environmental and social development risks and impacts throughout the project life cycle.

Monitoring and Evaluation

[45] RPF was public disclosure in country and World Bank Info Shop on March 28, 2019 and RAP on April 2, 2019.

77. A result framework has been developed and will provide the basis for monitoring and evaluating the project to ensure that investments are on track. The project includes a comprehensive M&E component based on qualitative and quantitative performance indicators for each sub-component. These include transport, social, environmental, and capacity-development indicators.

78. The TSG will conduct transport and social impact monitoring on a regular basis. A number of studies were conducted as part of preparation. These will be continued during implementation to monitor the impact of project investments. The specific output of the studies is the identification of attributes of an improvement in urban mobility, focused on accountability, affordability, accessibility, availability and viability.

79. Public oversight of the project will be ensured by crowd sourcing, smartphone applications, and web tools to better respond to network conditions and public transport service. In addition, a civic engagement platform will be established to improve public participation.

Citizen Engagement

80. The project has supported and will continue to support citizen engagement activities, including: (a) a participatory design approach for investments; (b) proactive participation of local university students in data collection and analysis for the project; (c) deployment of a citizen engagement plan that systemizes two-way communication with citizens, including the use of geolocation technologies to obtain feedback for specific targeted groups about the project in a cost-effective manner, in areas such as quality of public transport, road safety, and safety for women. All the above combined with consultative processes to ensure inclusion of vulnerable groups that cannot access potentially to such technology; (d) developing detailed procedures for grievance redress, including the pinpointing of grievance redress roles and responsibilities among government officials, creating a mechanism for providing feedback on complainants, and monitoring the status of grievance resolutions. The project GRM will be trained to be able to manage GBV project-related cases; and (e) development of a public relations/communication campaign to inform stakeholders about road-space management and road safety, among other (Component 3). The results framework contains the following citizen engagement indicators that reflect these efforts: “Transit terminal and market design including recommendations from citizens’ consultation” and “Grievances responded and/or resolved within the stipulated service standards.”

81. A participatory design approach has been and will be employed to seek citizens’ inputs into the works designs for the various interventions. Careful attention has been paid to seeking inputs from PWD and women’s groups. Project conceptualization and design included an extensive consultative process among government, traders’ and transport unions, and other stakeholders. Socioeconomic surveys and focus group discussions were also conducted to determine capacity requirements, demand for market spaces, types of goods for sale, and operational challenges. Consultations with transport operators informed the space requirements and allocations for the various types of transport modes at the terminal. In general, the interactions helped to determine auxiliary facilities that should be incorporated or existing important facilities to be replicated in the design of the transit market and terminal. Ongoing engagement throughout project implementation until closure is considered essential to the project’s success. Therefore, the project will include measures for citizen engagement at the institutional and local levels. At the institutional level, the project’s Steering Committee draws local representatives from the transport union and market women’s association, including the relevant government ministries and agencies that will have direct responsibilities for strategic planning and advice in project implementation.

82. Furthermore, the project has promoted collaboration among local academic institutions and the Directorate of Science, Technology and Innovation for project design. First, the project involved Sierra Leone’s only engineering

university, FBC, in data collection on poda-poda, SLRTC and ferry routes. The students participated in survey training, mapped the routes, and generated the first map of public transport in Greater Freetown (see Annex 2), which has been used to define project investments. The same group of students also mapped road infrastructure with recurring flooding during the rainy season, using the World Bank-developed RoadLab application. The project is planning to organize a "hackathon" in collaboration with the Innovation Directorate, to use the public transport data collected by FBC students and other big data to define technological solutions (apps) by local developers that can be used to solve local issues in project areas.

Figure 2A.2. Map of public transport routes generated by FBC students

83. To enhance project monitoring, transparency, and social accountability, the project will use and further develop earlier initiatives undertaken under IDA-funded projects. Phone-based applications are already being used by agencies in low-capacity regions to monitor work sites and receive citizens' feedback and grievances. The project will incorporate these mechanisms and provide training on different aspects of filing, receiving, and responding effectively to stakeholders and ensuring long-term viability of the measures.

84. The project will support the establishment of a GRM at community and project levels with different entry points to initiate complaints, and procedures for confidential reporting with safe and ethical considerations for documenting cases (see section on Social Safeguards, Gender and GRM for further details).

Annex 3: Summary of Project Procurement Strategy for Development

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. Procurement under this project will be carried out in accordance with the "Procurement Regulations for IPF Borrowers;" "Procurement in IPF; Goods, Works, Non-Consulting Services and Consulting Services published July 2016, revised November 2017 and August 2018;" as well as the guidelines on preventing and combating fraud and corruption in projects financed by IBRD loans and IDA credits and grants, dated October 15, 2006, and revised in January 2011 and as of July 1, 2016; and the National Public Procurement Act of 2016 for tenders that will approach the national market.

2. World Bank Standard Procurement Documents shall be used in international competitive bidding (ICB), whereas the National Procurement Documents acceptable to the World Bank shall be used in national competitive bidding and restricted tenders where applicable.

Summary of Proposed Procurement Activities

3. The bulk of the procurement activities already identified under this project will be for construction and rehabilitation works amounting to an estimated US$14,500,000. Estimates were obtained from the ITP_ Integrated and Resilient Urban Mobility Project (IRUMP) Diagnostics Transport Study. The remaining activities are related to improvement of transport services; roads and drainage improvements; strengthening the ministry's and departments' capacity to develop a long-term vision and regulatory framework to support effective management of the urban transport system; the design of investments to improve urban transport in project-specific areas; and diagnostic studies and institutional reforms in public transport, road-space management and road safety. The specific details of these activities will be determined at project effectiveness, and the PPSD will be updated accordingly. It is expected that these will be of relatively low value and not complex in nature.

Overview of Country, Borrower and Marketplace

4. The downward spiral of the economy and the foreign currency exchange rate will have an impact on procurement. Cost estimates at project preparation may turn out to be significantly higher at the time of project implementation due to exchange-rate volatility and the increasing cost of goods and services.

5. The Government is taking significant strides to curb corruption and improve overall governance structures. Ongoing initiatives and reforms are aimed at eliminating weaknesses and vulnerabilities in the system.

6. The identified bottlenecks in the operating environment (economic and governance) could prove to be major threats to the project's successful implementation. The specific procurement-related risks are analyzed in this PPSD and mitigation actions are proposed.

Client Capability and PIU Assessment

7. The risks associated with TIDU's lack of necessary skills and experience in urban transport planning and management will be mitigated by extensive capacity building and support from the World Bank task team.

8. There is a need for hands-on support to the PFMU, considering that it was only recently established and will require guidance on the World Bank's new Procurement Regulations, as well as training and capacity building on general procurement principles and practices.

9. There is need for effective coordination between TIDU, which manages the project's technical aspects, and the PFMU, which manages the project's fiduciary aspects. A lack of coordination could lead to delays, miscommunication and dispute between the parties.

Market Research and Analysis

10. Suppliers are generally more responsive to projects funded by multilateral organizations, as opposed to those that are government funded. Payment delays have been a longstanding issue for suppliers in undertaking government-funded contracts. Over time, this has led many suppliers' unwillingness to participate in bidding processes.

11. The location and complexity of the works contract often determine the extent to which suppliers take an interest in the bidding process. Contracts implemented in the provinces require additional resources for material mobilization, labor supply and monitoring. This is deemed unattractive, especially by suppliers operating on a much smaller scale and lacking the required resources.

12. Complex contracts requiring advanced technology, machinery and skills are also often unattractive to local suppliers who lack an existing fleet or resources that could support such contracts.

13. The procurement activities of this project are for non-complex construction works that have minimal requirements for complex equipment mobilization and are more labor intensive. This is backed by the fact that it is a World Bank-funded project. Therefore, eliminating suppliers' concerns over payment delays makes the procurement potentially more attractive to these suppliers. It is anticipated that a good number of local suppliers will take an interest in bidding for the contracts and will seek opportunities for expanding their businesses. For these reasons, potential suppliers in the market sector for the project's procurement activities are placed in the "Development" quadrant of the supplier preferencing chart.

Procurement Risk Analysis

14. The project procurement risk assessment identifies numerous weaknesses and risk factors, both internal and external. The procurement risks are considered to be "High" prior to mitigation measures. The risks will be reduced to a residual rating of "Substantial" upon consideration of the successful implementation of mitigation measures.

Table 3A.1. Actions agreed to mitigate risks

Ref No.	Risk Description	Source of Risk	Description of Mitigation	Risk Owner
1	Exchange rate volatility potentially affecting the pricing of goods and services.	External	Payment terms, including currency of transaction and exchange rates to be clearly communicated in RFB and incorporated in the contract.	PFMU
2	Governance issues such as corruption, excessive bureaucracy, compliance with the World Bank's governance and social standards for procurement.	External/ Internal	Adherence to implementation arrangements and guidelines for procurement and social standards.	MOTA, PFMU

3	Difficulty in coordination between Technical and Fiduciary Management teams	Internal	Developed a PIM that contains a detailed strategy for working with technical teams on procurement requirements	PFMU
4	Supplier relationship management challenges due to project interactions with various stakeholders in different government institutions and the project coordination unit	Internal	Clear and unambiguous reporting guidelines to be written into contract and effective contract management.	PFMU
5	Weak internal controls (recordkeeping, operational efficiency, compliance with policies, regulations and laws).	Internal	Developed a procurement manual within the PIM, that describes procedures for internal controls.	PFMU
6	Lack of procurement monitoring and contract management systems.	Internal	Establish a procurement monitoring and contract management system and put in place a contract register	PFMU
7	Inadequate complaint-handling mechanism.	Internal	Create a complaint review system in line with the National Public Procurement Act.	PFMU

Procurement Objectives

15. The procurement objectives are aligned with the PDO, the market analysis and the identified procurement risk. The overarching goal is that they support the delivery of the PDO and contribute toward the achievement of VfM.

- Selection of suitable suppliers and contractors through a fair, open and competitive process for successful implementation of the activities in the project's three components.
- Effective procurement monitoring and contract management to ensure that activities are undertaken in accordance with established timelines and prompt the flagging of resolution of delays and bottlenecks in the system.
- Formulation of internal control systems to guide procurement processes and procedures.
- Effective coordination among procurement and technical teams to prevent delays, miscommunication and misunderstanding of requirements.

Table 3A.2. Summary of PPSD to inform the World Bank's preparation of the PAD

Ref No.	Contract Title and Description	Category	Estimated Cost (US$)	Risk Rating	World Bank Oversight	Procurement Approach	Selection Method	Evaluation Method
1	Lumley Circle, Juba Road rehabilitation project	Works	8.913,335	M	Post Review	Open National	Requests for Bids (RFB)	Lowest Evaluated Cost
2	Congo Cross, Bai-Bureh Kissy, Guard Street, City Center rehabilitation projects	Works	4,082,912	M	Post Review	Open National	Requests for Bids (RFB)	Lowest Evaluated Cost
3	Goods							
4	Consultancy Services for Capacity Building and Studies							

Annex 4: Climate Resilience in Western Area Urban Transport

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. Western Area stands out both for a recent high-impact disaster and low levels of development. With a life expectancy of 51 years and an average of three years' schooling, Sierra Leone ranks 179th out of the 188 countries assessed in the Human Development Index.[46] In August 2017, a high-magnitude landslide struck the Freetown Peninsula, followed by mudslides and flooding. The events impacted 6,000 people, with 1,100 declared dead or missing. Direct impacts to the transportation infrastructure amounted to losses of US$1 million, including the destruction of eight pedestrian bridges, two road bridges, and 5.5 kilometers of roadways. The economic and human impacts of this connectivity loss easily exceed initial loss estimates.[47]

2. In order to understand network vulnerability, a topological model of the road network was built in the Freetown peninsula, where 13,624 nodes represent road intersections and 16,279 links represent road transects that run between the nodes.[48] The network's structure under typical conditions is then assessed to gain an overview of the system's operational capacity. Network centrality metrics are used to identify critical nodes for Western Area's road network connectivity, and then to estimate serviceability and calculate vulnerability. Using GIS data, we define high-hazard areas to estimate disruption risk and subsequent road-supply consequences. High-risk nodes are then removed from the road network to simulate disruption where, for example, landslides compromised a series of intersections and rendered them impassible, and network centrality is recalculated under the disrupted conditions to project changes in the network's serviceability. Using the proposed intervention under this project, we identified the sites among those project intervention locations that are in need of greater redundancy or hardening, allowing for reconstruction efforts to be focused on reducing the risk of natural hazard disruption to the road network supply.

Identifying high hazard areas with mainstream environmental GIS data

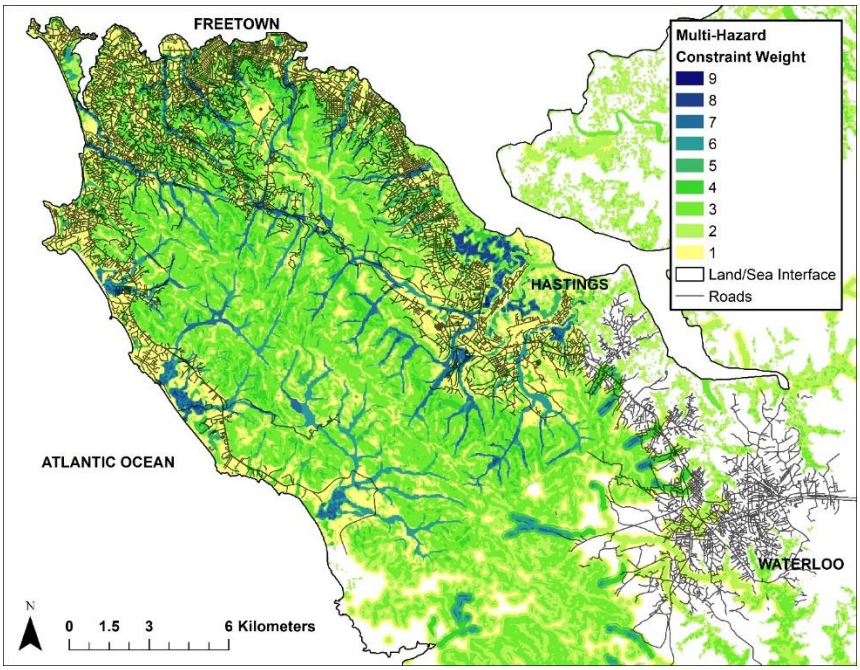
3. In order to determine those areas where natural disaster occurrence was likely, we used open-sourced environmental GIS data such as the United States Geological Survey's coarse-grain (30-meter resolution) Digital Elevation Model (DEM) and Freetown's hydrographic information provided by the World Bank to build our hazard models. We developed five hazard layers commonly considered: river flooding, landslides, mudslides, sea-level rise, and tsunami flooding.

4. For the river-flooding hazard levels, the hydrographic GIS was used and Euclidean buffered zones of 100 and 200 meters (328 and 656 feet) around the river polylines were defined as being of higher and lower likelihood, respectively, of flooding. For the landslide hazard levels, we calculated Euclidean buffered zones of 100 and 200 meters around slope polygons with degrees varying between 20 and 40,[49] which provides us with higher and lower likelihoods, respectively, of landslide events. To define the mudslide hazard levels, we first identified intersections of river flooding and landslide hazard to determine mudslide initiation zones. Second, we applied 100-meter buffers for higher likelihood (328 feet) and 200-meter buffers for lower likelihood (658 feet) around river polylines extending up to one km downstream from

[46] United Nations Development Programme. *Human Development Report 2016: Human Development for Everyone*. UN, 2017.
[47] World Bank Group. *Sierra Leone Rapid Damage and Loss Assessment of August 14th, 2017 Landslides and Floods in the Western Area*. World Bank, 2017.
[48] Lleras-Echeverri, G., and M. Sanchez-Silva. Vulnerability Analysis of Highway Networks, Methodology and Case Study. *Proceedings of the Institution of Civil Engineers*, Vol. Transport 147, No. 4, 2001, pp. 223–236.
[49] Highland, L. M., and P. Bobrowsky. *The Landslide Handbook - A Guide to Understanding Landslides*. US Geological Survey, Reston, VA, 2008

mudslide initiation zones. For the identification of sea-level rise and tsunami flooding hazard areas, inland surfaces adjacent to the coastline equal or inferior to two and five meters (6.56 and 16.4 feet), respectively, were assessed as low flooding hazard likelihood. Finally, we combined the different hazard likelihood weights into one multi-hazard constraint layer that resulted in nine levels of hazard likelihood (depicted in Figure 4A.1).

Figure 4A.1: Multi-hazard constraint map for Freetown's Peninsula illustrating the convergence of the ratings for river flooding, landslides, mudslides, sea-level rise and tsunami flooding likelihood and extent



Measuring risk through the interaction of topological centrality and multi-hazard assessment

5. Our subject of study, or exposed element, is the road network in the Freetown peninsula. The road intersection and transects between centrality (BC)[50] quantify the node's or link's importance to the network's overall connectivity. The network element's vulnerability or BC relates to the consequences of disruption in case of a hazard occurrence$c(D)$.

Considering the above, disaster risk R is here represented by the following conceptual formula:

$$R = l(D) \times c(D)$$

6. Considering that we are looking at the potential for loss from disruption or damage to the road work infrastructure, we are using network centrality metrics to assess vulnerability, gauging systemic consequences or loss.[51] Network science allows for measuring the significance of individual elements in terms of connectivity within the overall network. Therefore, our risk calculations assess how the disruption or damage of a street crossing might impact the street supply system in the overall network developed to serve the Freetown peninsula. The risk classification thresholds are based on quartiles for BC and for hazard ratings. As our BC values for the Freetown peninsula road network nodes range

[50] Freeman, L. C. A Set of Measures of Centrality Based on Betweenness. *Sociometry*, Vol. 40, No. 1, 1977, p. 35. https://doi.org/10.2307/3033543
[51] Zhang, X., E. Miller-Hooks, and K. Denny. Assessing the Role of Network Topology in Transportation Network Resilience. *Journal of Transport Geography*, Vol. 46, 2015, pp. 35–45. https://doi.org/10.1016/j.jtrangeo.2015.05.006

from 0 to 0.4, Low $c(D)$class corresponds to 0.000180–0.001424; Moderate $c(D)$ class corresponds to 0.001425–0.007268; and High $c(D)$class corresponds to 0.007269–0.400221 values. Our multi-hazard classes constraint weights range from 1 to 9, where Low $l(D)$corresponds to areas with 1–3 hazard constraint weights; Moderate $l(D)$corresponds to areas with 4–6 hazard constraint weights; and High $l(D)$class corresponds to areas with 7–9 hazard constraint weights.

Road disruption simulations in high risk areas and consequential changes in centrality

7. High-High risk nodes were removed to simulate where specific natural hazard types have the highest likelihood of disabling a road intersection with the highest impact on the overall connectivity. Figure 4A.2 identifies five simulations of high-high risk node elimination. Simulations 1 and 3 show road disruption scenarios in high-hazard mudslide areas overlapping the arterial Bai Bureh Road in Hastings coastal town and in Wellington suburb, respectively. Simulation 2 shows a disruption in the high-hazard landslide area crossing the inland arterial highway of Youyi, between Regent and Bathurst villages. Simulation 4 tests the road network cut off due to both river and sea-level-rise flooding hazards in Freetown's CBD near Bambara Spring and Nicol Brook River. Simulation 5 eliminates road intersections surrounding the Peninsular Highway in high-hazard mudslide areas in Lumley suburb, mimicking the 2017 disaster impact on the road network in that region. While single nodes that coincide with those identified in the risk matrices are readily identifiable, eliminating only one key node has a relatively small effect on a system. To account for this and model the likely extent of a hazard-specific road disruption, neighboring nodes classified as high-high risk from the same hazard typology were eliminated as a group.

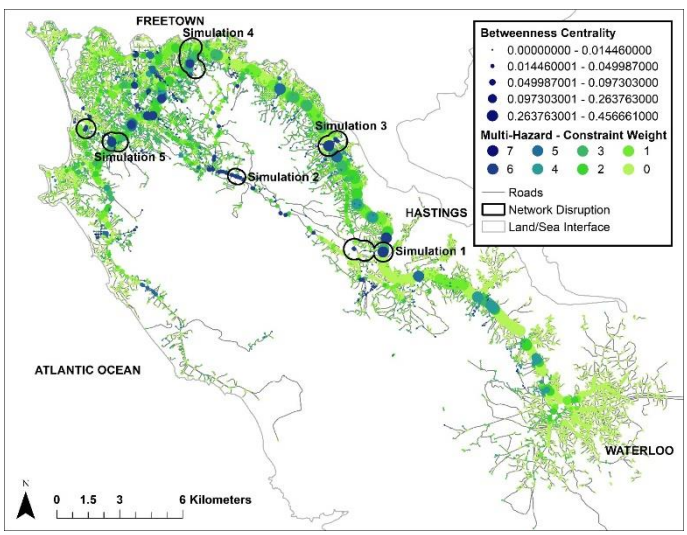


Figure 4A.2. Road disruption simulation locations based on high hazard or high l (D) node elimination

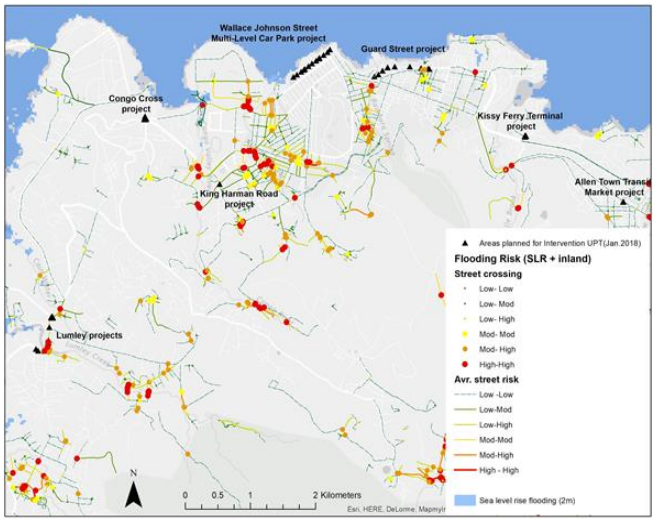


Figure 4A.3. Road disruption simulation locations based on high hazard or high l (D) node elimination

Centrality variations from disruption simulations on potential transportation intervention sites in Western Area

8. We represented these intervention sites as nodes within the transportation network model. We have assessed the centrality of each node in relation to the overall network serviceability both as it operates daily and as it will operate under five specific disruption simulations based on our risk assessment. This is the first step to further investigate targeted policy and design recommendations that could be incorporated into these projects' production plans and tangibly improve

the system's resilience. Understanding which hazard types are most dominant in certain areas is the first step toward investing in appropriate design and planning strategies.

9. The results (Figure 4A.3) show that most of the nodes and links targeted for the transportation interventions planned under the project do not fall under high-risk categories, except for the transportation projects located at the Lumley Market. The road intersections here fall under high-moderate risk of landslides and mudslides and high-high risk of river and sea-level-rise flooding. This area is one of the regions that are under reconstruction and recovery from the 2017 flooding and mudslide impacts.

10. While more of the infrastructure projects were not categorized under high-high risk for flooding, landslides or mudslides, it is important to take into consideration their connection with nodes that are under high-high risk. Figure 4A.4 illustrates how the disruption of high-high risk nodes tested through Simulations 1 through 5 could impact the road network by changes in centrality, specifically by examining their effects on the centrality of IRUMP sites.

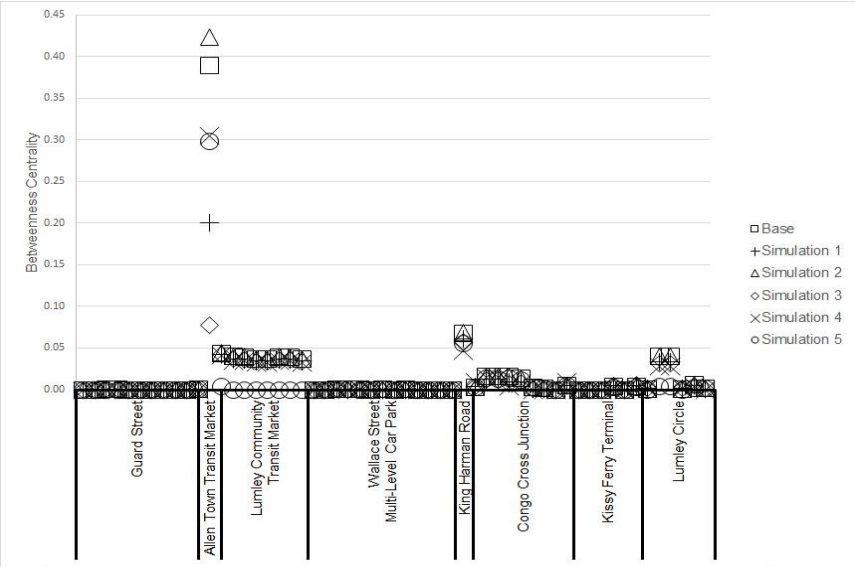


Figure 4A.4. Centrality Variations measured after High Hazard Disruption Simulations 1-5 of Road Intersections Targeted for Transportation Interventions

12. The most significant changes in centrality are predicted for one specific node at the Allen Town Transit Market intersection. Because this intersection is a central node under normal circumstances, nearly all disaster simulations result in a centrality decrease here. The decrease ranges from approximately 0.08 to 0.31, indicating loss of connectivity importance in case of disruption from Simulations 1, 3, 4, and 5. However, Simulation 2, which disables the inland Youyi highway, results in a centrality gain of nearly 0.05, indicating an increase in importance of this intersection in case of landslide-related interruptions between Regent and Bathurst villages. Smaller centrality losses of approximately 0.04 are predicted for the road intersection improvement at Lumley in reference to Simulation 5 only. Once again, as Simulation 5 projects hazard occurrence that impacts the Lumley project intersections themselves, variations are limited. All other targeted nodes for projected urban transportation interventions exhibited negligible centrality variation to the five simulations. This is likely due to the fact that these nodes are located at the periphery of the network and therefore already have low centrality.

13. Table 4A.1 presents preliminary design suggestions for the potential transportation intervention sites. These suggestions are based on our hazard-specific risk assessments, the changes in the nodes' centrality in the overall network, and changes in centrality measured specifically at the targeted intervention sites following the five disruption simulations. The suggested design incorporations derive from transportation planning literature for increasing disaster resilience and are here focused on safeguarding network connectivity in the face of near- and long-term weather hazards.

Table 4A.1. IRUMP interventions' design considerations for climate-change resilience

Intervention sites	Risk summary	Design suggestion	Relation to project component
Lumley Projects (Circle and Transit Terminal interventions)	In high-high risk areas for flooding and moderate-high risk areas for mudslides. A major terminal point for intercity buses. Because it is on the western edge of the network, elimination results in the network are being fully split into two subnetworks. A major poda-poda (private minibus) and taxi route terminus with adjacent market.	Consider ensuring redundant paths nearby. Consider physically hardening against mudslides and flooding.	Climate adaption enhancement included in Component 2.1.
Congo Cross Junction intervention	Only low landslide risk, no gain in centrality after disaster simulations	Continue as planned	Climate adaption enhancement included in Component 2.1.
Kissy Ferry Terminal Junction intervention	Bai Bureh Road, as the main connector between Freetown, Waterloo and the remainder of Sierra Leone, is particularly susceptible to large increases in BC given the disruption simulations from high mudslide risk.	Consider hardening and redundancy measures.	Climate adaption enhancement included in Component 2.1.

14. These project areas are considered here as priority locations for flood, landslide and mudslide hardening and/or alternative adaptation methods that will reinforce the road network supply capacity and reduce risk for users. Some examples of hardening techniques include creating or improving rainfall drainage infrastructure, increasing design rainfall generation to lower frequency events (e.g., 10-year rainfall return period to 50-year rainfall event); increasing safety factors for slope stability and increasing concrete strength; and building strategic flood and mudslide protective walls. For alternate adaptation methods known as "soft measures," some examples include guaranteeing redundancy of high-risk transects, incorporating maintenance and operational systems that are sensitive to risk and can be used to increase awareness in the community through road signal and early warning systems.

Annex 5: Mitigating and Responding to Sexual Exploitation and Abuse

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. **The project's approach to mitigate the risk of SEA and to respond promptly and adequately to SEA cases related to the project is based on current knowledge of this complex issue.** The project has assessed the risk of gender-based violence (GBV), including SEA, during project preparation, and the proposed approach is based on the assessment as well as global experiences and lessons from past projects. The approach will continue to evolve as the team learns from experiences while implementing the project, as well as from emerging global best practices.

Risk Assessment

2. **Sierra Leone has enacted laws to prevent and prosecute violence against women and girls. However, the actual implementation and enforcement of the law are yet to be fully accomplished.** The Mid-Term Evaluation of the National Gender Strategic Plan (2010–2013) pointed out that many of the Family Support Units (FSU, Police Department in charge of GBV and Child Abuse) do not proceed to prosecute their cases due to different reasons including delays in securing medical reports and hearing dates. As a result, many survivors and their families opt to "compromise" these cases and settle for a monetary consideration to abandon the criminal cases against the perpetrator, with insufficient health care or psycho-social responses. The existing national law governing child protection procedures is the Child Rights Act of 2017. Sierra Leone has also ratified international conventions such as the Convention on the Rights of the Child and the African Charter on the Rights and Welfare of the Child. Although official legislation is in place, traditional practices and the authority of tribal chiefs continue to play a significant role in day-to-day governance of village life and the protection of children. To ensure enforcement of the laws and improve the protection of children, NGOs such as Plan International have engaged with the Ministry of Social Welfare, Gender and Children's Affairs (MSWGCA), the media, and school authorities for communities to access training on topics such as child safeguarding, community-based child protection mechanisms, and child rights programming. The concern for this issue has been recognized by the nation's President who issued a declaration of SEA as a national emergency and stated that all hospitals and medical centers should provide care free of charge to any SEA survivor.

3. **GBV, including SEA, affects women and girls in Sierra Leone**. The Demographic and Health Survey data (DHS 2013) shows that nearly 40 percent of 15-to-19-year-old adolescents surveyed said that they are survivors of physical violence, 28.7 percent said are survivors of sexual or physical violence in the last 12 months, and 5.1 percent said they have suffered some form of sexual violence in the previous 12 months. 23.9 percent of women living in Western Area have experienced sexual or physical violence. Given the existence of stigma and underreporting, there is a likelihood that the actual incidence of these forms of abuse is higher than reported. Moreover, data show the existence of gender social norms that condone GBV, with 24.7 percent of women surveyed in the DHS pointing to at least one reason that makes it acceptable for a husband to beat his wife. Although these figures are high, they are below regional averages.

4. **Locally, urban areas in Sierra Leone present a higher incidence of sexual violence.** Freetown (Western Area Urban, DHS 2013) ranks third among the most vulnerable districts in the country in this indicator and second if one only considers the past 12 months. The situation is similar with regard to physical violence. Even if an urban environment is more suitable to absorb labor influx, given the extremely vulnerable situation of women in Freetown and the lack of employment opportunities in the city, local hiring and the moderate-income increase could exacerbate the risk already present in the area.

5. **Most of the survivors of physical or sexual violence sought help within the community (own family, partner's family, friend or neighbor), making it less common to access the formal channel and favoring "compromised cases."** Only five percent of the total survivors seek assistance from police, doctors or medical personnel, a lawyer or a social work organization. International organizations have acknowledged the efforts of the FSUs and the MSWGCA in increasing awareness of these issues, but there is still a disconnect between the survivors and the formal channels that need to be addressed. Many respondents also reported difficulties in implementing and enforcing these legal provisions, and in ensuring that citizens invoke their rights. Moreover, according to the National Referral Protocol on GBV, one of the main challenges to the protection of women's and children's rights is the attitude taken by paramount chiefs and traditional authorities who have in many instances turned a blind eye or provided other support to alleged perpetrators of violence against women and children.

6. **Formal channels are not functioning efficiently, and medical examination services are scarce.** Rainbo Initiative[52] is the only organization present in Freetown with available facilities for free medical examination and treatment of illnesses and injuries caused by assault. This NGO also has experience working with children's rights and SEA. One example of the judicial system's low level of effectiveness is reflected in the statistics for 2016 provided by this local NGO. From all the cases it has reported, 55 percent of them have been coded as GBV and registered in court, but only two percent have been successfully prosecuted. In the first quarter of 2017, none of them had been successfully prosecuted. Most of the cases are reported by the FSU and a very low share from the community groups it has trained, evidencing the ineffective intervention of the community groups handling GBV and SEA cases as an entry point.

7. **Results from consultations with women traders showcased harassment and extortion as risks.** Initial consultations with women traders indicated that violence against women and children is present in the area. Women traders acknowledge cases of child molestation, and harassment by police and city council officials. They are regularly asked to pay bribes to avoid the confiscation of their goods. Because they are selling on the street in spaces specifically dedicated for traders, they are frequently subject to extortion. Further consultations with NGOs and other stakeholders revealed the widespread presence of these practices.

8. **The impact of labor influx is assessed as medium in the GBV Risk Assessment Tool based on the number of workers and absorption capacity.** The investments will result in low influx of skilled and non-local/international workers, and the absorption capacity will be relatively high. The highly urbanized location of the civil works reduces the marginal impact of each worker on the population.

9. **However, the abovementioned gender norms and other contributing drivers increase women's and girls' vulnerability to the labor influx expected under the project**. As stated in the International Finance Corporation's (IFC) Handbook to Address Project-induced Migration, evidence shows that in-migration is associated with negative environmental, social and economic impacts that often lead to deterioration in the social context in which the project's host communities reside and the project is operating. Because they are far from home and need to socialize, influx populations may hasten the introduction and/or increased expression of vices such as prostitution, gambling, alcoholism, and drug use, which can have significant negative social impacts and consequences. The handbook also identifies risks related to a rise in the "four Ms": men, money, movement (influx), and mixing (that is, the interaction between high and low disease-prevalence groups).

10. **The GBV Risk Assessment Tool rated the overall risk as low. However, based on several additional risk factors identified, the project risk rating will be moderate.** Additional risks are present in the project area, such as the proximity

[52] *Rainbo Initiative Statistics on GBV cases prosecution.*

to tourist locations, the presence of prostitution in the area, the significantly high share of minor-headed households, and high levels of marriage. The project area is easy to monitor in terms of SEA and sexual harassment (SH) across the full span of the project. Female and male workers are not expected to work in close proximity, and Western Area is not among the country's poorest regions. The project recognizes that the risk assessment tool is merely indicative and a starting point for analysis. Thus, given the higher prevalence of violence in Western Area compared to national averages and the project's local focus, the GBV risk assessment tool has considered the local conditions for further analysis. For instance, issues related to GBV and GBV-related concerns have arisen in the community engagement discussions, and the construction areas will be close to a school and other pedestrian access that women and girls use for their daily activities.

Mitigation Measures

11. **Most of the laborers hired for construction are expected to be local, potentially reducing labor influx-related SEA risks**. The bidding documents will include specific requirements to minimize the use of expatriate workers and encourage local hiring. This will also be encouraged in the ESMP. This will be an easy endeavor because the project will take place in an urban area where workers with the skill set needed can be easily found.

12. **The project will undertake several activities to mitigate SEA risks stemming from project activities.** These include: (a) contractual obligations to reduce SEA risks due to labor influx; (b) strengthening the GRM to effectively handle SEA complaints through collaboration with NGOs with the expertise to address cases of SEA; (c) an enhanced multi-sectoral coordination and monitoring mechanism; and (d) capacity building of the implementing agency and community awareness-raising activities to implement these SEA mitigation measures in an effective manner.

Defining Contractual Obligations

13. **The project will introduce contractual obligations in the construction contracts to reduce SEA risks.** Specific measures will include: (a) briefing prospective contractors on Environmental, Social, and Occupational Health and Safety Standards and on SEA-related requirements during pre-bid meetings; (b) incorporating requirements in the bidding documents for contractors to develop a GBV Action Plan, including an Accountability and Response Framework; (c) incorporating requirements in bidding documents to minimize the use of expatriate workers; (c) requiring that contractors and consulting firms submit CoC with their bids; (d) based on the project's needs, the World Bank's Standard Procurement Documents and the implementing agency's policies and goals, defining the requirements to be included in the bidding documents for CoC that address GBV; and (f) clearly establishing how adequate GBV costs will be paid for in the contract, as well as worker training on SEA, HIV/AIDS mitigation, and CoC obligations.

Designing the GRM

14. **The proposed project will put in place a GRM to gather and refer SEA-related grievances.** The project will have a robust approach to the GRM by providing survivors with different entry points to report, including an NGO service provider with strong capacity to respond to GBV. Because the GBV risk assessment leads to a moderate risk scenario, a separate GRM is not required. However, if as a result of the GBV Sierra Leone Portfolio Review, the Social Development team considers it appropriate to have a separate GRM, the team has identified partners that can ethically manage a GBV GRM. The potential entry points for SEA survivors have been identified in the ESMP, which will potentially include local leaders trusted by women, social workers in the community, representatives of implementing agencies, contractors, supervisors, and the resettlement committee, all of whom will be trained to comply with a survivor-centered approach for adult survivors and the child's best-interest standard for minors. The presence of minor-headed households and

children is significant; therefore, additional training specifically on the child's best-interest standard for minors will be provided to the implementing agency. The project has identified potential entry points with the capacity to respond to child abuse, taking into account the best interest of the child (e.g., Rainbo). Trusted community members, whom potential SEA survivors will have the confidence to approach after an analysis of existing care-seeking behaviors, should be part of the GRM process, and they should receive proper training in a survivor-centered approach. Their role with respect to referral of GBV cases and explanation of GRM benefits is essential. However, the referral mechanisms should ensure that SEA-related cases occurring within project boundaries are not compromised by local leaders or community groups, and that confidentiality and empathetic listening are guaranteed. The existing GRM will be enhanced with inputs from the mapping of services already prepared by the implementing agency. The different entry points for survivors of SEA will be defined in the ESMP, as well as the referral pathway already defined by the GoSL in its National Referral Protocol on GBV, in addition to the GRM.

15. **The project has identified Rainbo Initiative as a potential partner to enhance the GRM and to adequately and promptly address any potential grievances from survivors of SEA.** The NGO will train GRM operators to effectively receive SEA cases related to the project, and the cases will be recorded to ensure confidentiality throughout the process. Other service providers will also be trained in the availability of the GRM, so that they can refer survivors of SEA in the project area. The project will strengthen the GRM as one of the entry points for complaints, including SEA, by adopting information and communication technology (ICT) that, with the consent of the survivor and while still protecting the complainant's confidentiality, immediately reports the existence of the complaint to the Government and to the World Bank. In cases where the perpetrator is linked to project activities, the contractor will take appropriate actions in accordance with the CoC signed by the person. However, this will not preclude prosecuting the perpetrator in accordance with Sierra Leone's existing laws.

Capacity Building, Community Dialogue and Awareness Raising

16. **The institutional capacity-building component will provide support for improved management of project implementation and supervision, social and environmental safeguards, identification and mitigation of gender disparities, and citizen engagement.** The project, in partnership with the GBV NGO, will launch activities and learning modules to increase awareness within the PIU and ensure its ability to address SEA and properly design a project-level GRM and sensitive protocols with strong mechanisms for reporting, including a feedback system for timely response to complaints.

17. **Although the initial GBV risk assessment resulted in a low-risk scenario, issues and concerns related to GBV have arisen in community engagement discussions and the project risk was considered moderate.** For this reason, community dialogue and awareness raising will be carried out in the communities and within the market area to ensure that people potentially affected by the project identify the different entry points to the referral pathway if they are victims of SEA (including specifications about the role of the GRM). This community dialogue and awareness raising will be carried out by the partner NGO, considering previous similar successful experiences in the city. Further consultations are taking place to better determine the needs and strategy for community dialogue and awareness raising, and will be detailed in the ESMP. Awareness campaigns, trainings, dissemination activities about the different entry points, among other activities, will ensure the sustainability of the actions taken and will prepare the community to address cases properly in the future, after project completion.

Monitoring and Multi-Sectoral Coordination

18. **The implementing agency will monitor the fulfilment of SEA-related obligations by the contractors throughout**

the contract term. The agency will also play a relevant role in monitoring the provisions to mitigate and respond to SEA by reporting compliance with the CoCs, training for contractors, and awareness raising for the community carried out by the NGO. The ESMP will define the required resources to be allocated by the contractor and the implementing agency to ensure full compliance with SEA-related obligations outlined in the bidding documents. The supervision consultant's social specialist will also monitor whether the SEA provisions are in place and working accordingly. A social specialist with GBV experience will be hired by the implementing agency and regular training will be provided. Moreover, several women will be selected from the market to participate in GBV training and play a more relevant role as focal points in the market facility to ensure the long-term sustainability of the project.

19. **With the survivor's agreement, the partner NGO will support reporting to the GRM, implementing and executing agencies any SEA case stemming from the project (e.g., contractors, workers).** The NGO will also monitor whether provisions to mitigate and respond to SEA are in place and functioning, including: (a) monitoring whether a Response Protocol is in place and properly applied for registering complaints, survivor referrals, and resolution of complaints; (b) ensuring that the different entry points for survivors of SEA are coordinated, and that survivors' confidentiality is maintained at every stage; and (c) drafting of CoCs and their signing by contractors, workers, and consultants. In case the survivor informs or chooses to have the NGO inform that the perpetrator is project related, upon her request the NGO will support the survivor in submitting the report to the GRM, which will inform the PIU and the World Bank.

20. **The project will develop a grievance registration system as one of the entry points for SEA complaints.** The complaints registered in this system will be managed by a dedicated trained administrator to receive reports on SEA with strict confidentiality and, if the survivor approves, liaise with the NGO to receive proper care. The contracted NGO will evaluate the efficacy of the GRM (and compliance with a survivor-centered approach) as an entry-point for SEA cases and recommend, if needed, the creation of a differentiated GRM hosted by Rainbo Initiative. This decision will be also influenced by the recommendations from the Social Development team finalizing the GBV Sierra Leone Portfolio Review. This local NGO is a recognized institution among communities in Western Area and the only provider with comprehensive service for survivors.

21. **The project will learn from the experience of the different organizations working in Sierra Leone to prevent, mitigate and respond to GBV and SEA cases, including government, multilateral and development partners, and civil society**. For the design and implementation of activities related to SEA, the project will actively coordinate with development partners that have ongoing, longstanding experience on this matter in Sierra Leone, such as UN Women, IRC or Irish Aid. The project has been informed by the experience of the National Action Plan on GBV and other NGO strategies to raise awareness on GBV, including SEA, and which could also be used to inform about the project's reporting mechanisms.

22. **The implementing agency has appointed a gender focal point for coordinating activities linked to SEA mitigation.** This person will lead the mitigation of SEA risks from the implementation agency side. The focal point will also be in constant communication with the project liaison committees.

Annex 6: Gender

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. Gender equality in Sierra Leone has improved in some respects during the past few years. The Registration of Customary Marriage and Divorce Act introduces the legal minimum age of marriage at 18, the consent of both spouses is required, and the woman's rights to own and dispose of property during the marriage and in case of divorce and death of the husband are guaranteed. The Devolution of Estates/Intestate Succession Act prohibits discrimination between male and female children and states that husband and wife now are entitled to inherit property from each other. This act also contains legal provisions to improve women's access to acquiring loans, owning property and starting businesses. Legal provisions on GBV have also been created, specifically on Domestic Violence and Sexual Abuse.

Closing gender gaps

2. **Most of the country's working-age population is in the labor force, and women participate almost as much as men. However, gender gaps persist in terms of income and type of jobs.** Of the working population, the differences between men and women are small (65.7 percent participation among men; 64.7 percent participation among women). Women are much less likely than men to be in wage employment (4.5 percent among women vs. 15.5 percent among men). Gender gaps in earnings are stark: holding other characteristics constant, men earn three times as much as women in wage employment, double in non-farm self-employment (80,000Le vs. 140,000Le), and nearly double in agricultural self-employment.[53] There are significant gender gaps in land and business ownership. Women own smaller plots of land (8.3 acres vs. 11.1 acres) and most of the land is in men's hands (67.8 percent). **The likelihood of working in a formal job, whether in wage employment or non-agricultural self-employment is greater among men than women and increases with educational attainment.**

3. **The lower level of education, credit constraints, and the lack of fixed location affect the potential growth of women's enterprises.** Women's enterprises are less likely to be hired for formal jobs. Women-owned microenterprises, or "Income Generating for Survival Microenterprises," have an average of 1.6 workers while men tend to own slightly larger firms (1.9 employees). The gender gap is also present in the formality rates for non-farm self-employment where women are less likely to be formally employed (eight percent vs. 21 percent).

4. **Girls' school attendance rates are like those of boys,[54] even slightly higher for some ages. Nevertheless, the attendance rates for girls drop dramatically from age 14 years onward.** The gender gap in Freetown's population with no education is nearly 10 percentage points (17.1 for men; 27.2 for women). Women with more than secondary education account only for 7.6 percent while men represent 10.6 percent in Freetown. The percentage of women who cannot read at all in Freetown is 34.3 percent, more than doubling men's rate. Human capital is a strong predictor of entrepreneurial activity, but women still have lower measures of human capital. Among older generations, the gender gap in years of schooling is significant. Primary education enrollment rates are close but in other measures of human capital such as literacy, financial literacy and management skills, gaps persist in many countries. Increasing women's education, skills, and experience will further enhance their opportunities for financial access.

[53] Findings from the Labor Force Survey Sierra Leone 2014. World Bank. Available: *https://bit.ly/2U6bdjv*
[54] Sierra Leone Demographic and Health Survey 2013.

5. **Several health issues disproportionately or exclusively affect women (abortion complications, anemia, eclampsia, hemorrhage, obstructed labor, and postpartum infections).**[55] Figures on prenatal care attendance, health facility delivery, and assistance during delivery have improved significantly from 2008 to 2013, mainly births delivered in a health facility (97 percent of women received prenatal care from a skilled provider, compared to 87 percent in 2008; 54 percent delivered in a health facility, compared to 25 percent in 2008; 60 percent were assisted by a skilled provider during the delivery, compared to 42 percent in 2008). Nearly half of women in Freetown identified obtaining money for treatment as the main problem in accessing health care, and 10.8 percent pointed to long distance as the main problem.

6. As part of project preparation, several challenges were identified for women to access public transportation in the Public Transport Service Study conducted by the project, which included questions to analyze differences in women's and men's mobility patterns and barriers; showcasing that the current informal sector structurally can constrain women's mobility by enabling different barriers that women face to their mobility. A public transport user survey revealed that 18 percent of women surveyed have experienced sexual harassment in public transport (30 percent in the case of informal minibuses and 4 percent in formalized buses) and 50 percent of interviewees indicated physical violence as the main barrier to access public transport services. The current informal system challenges the possibility of institutionalizing measures for enhancing women's safety, for instance, having a mechanism to report or train transport operators given the inexistence of a Bus Management System. Besides the situation of sexual harassment, transport services and infrastructure are not designed to respond either to women's mobility patterns linked with the economy of care (eg. traveling with children, bags, in a multimodal way). Lack of sidewalks restricts women's mobility, as they mainly walk. This is also a developmental issue, as a study of ILO showcased that access to unsafe transport can restrict women's participation in the economy by 16.5 percent.

7. **The difficulty of accessing credit is one of the major obstacles for women to improve their businesses.** Only 15 percent of Sierra Leoneans have access to traditional financial services. This is due in part to banking sector weaknesses but also to an array of other factors. According to the National Study on Women's Access to Financing in Sierra Leone,[56] the significant differences in women entrepreneurs' ability to access financial services lead to fewer economic opportunities for women. The likelihood of working in a formal job, whether in wage employment or non-agricultural self-employment, is greater among men than among women and increases with educational attainment. The results from the Global Findex[57] show significant differences between men and women regarding financial inclusion. For example, while 25 percent of men have an account, only 15 percent of women have one. Men have greater ability to save money to start, operate or expand their businesses (18 percent vs. 16 percent for women) and also to obtain credit (53 percent of men have borrowed money in the past year while only 45 percent of women were able to do so). The lack of collateral, formal education, and women's business characteristics and regulation determine their inability to access formal financing resources and to be enrolled in the formal sector. When the use of alternative platforms such as mobile money is considered, the prevalence for men is also higher: 14 percent of men have mobile money accounts while only nine percent of women have them. As mentioned in the Lessons Learned section, they normally use two channels of funding: (i) participation in informal schemes, and (ii) micro-finance Institutions.

8. During surveys and focus group discussions, women market traders alleged difficult working conditions and harassment. The market traders identified elements that would make the market more attractive, such as if it provided them with security, running water, toilets and child-care. During project preparation consultations, women traders who

[55] U.S. Agency for International Development.
[56] National Study on Women's Access to Financing in Sierra Leone. Available: *https://bit.ly/2XigFlg.*
[57] Global Findex Database 2017. Available: *https://globalfindex.worldbank.org/.*

will be affected by the project mentioned several factors that limit their ability to reach their full potential, such as lack of collateral and formal education, regulations for accessing credit, and—most remarkably—harassment and extortion.

Figure 6A.1. Framework for closing gender gaps

9. **The project will contribute toward closing the abovementioned gender gaps with the following activities:**

i. **The project will contribute to women's modal shift from informal services to formalized ones, which include gender responsive measures to address their mobility barriers.** For this purpose, the project will institutionalize measures to address these barriers in the Bus Regulation Management of Component 1. The project will pilot in the selected corridors solutions to minimize sexual harassment in public transport, by enhancing awareness and response, trainings for operators to respond appropriately to sexual harassment in public transport, enhancing reporting mechanisms and requesting a CoC, which expects to reduce even more the percentage of harassment in formalize buses. The design of new buses will integrate requirements/characteristics to respond to women's mobility patterns, for instance in terms of needs when traveling with children or with products for the market; whilst women will also benefit from potential interventions such as integrated ticketing, given their multimodal travel.

ii. **Providing a safe space for women in the new market facility, with infrastructure and services planned to address women's and men's differentiated needs through anti-GBV environmental designs (e.g., lighting, openness), new services such as gender-differentiated bathrooms, a child-care facility as possible, and the definition of a mechanism to report cases of violence against women and girls.** Most of street traders present in the construction area are women with no fixed location to sell their products. This situation limits their ability to grow and improve their businesses and exacerbates the vulnerabilities of this group who are mainly young women who bring their babies or young children to the market area. To the extent possible, the project will try to include child-care facilities within the market in collaboration with the municipality to contribute toward addressing one of the main barriers that women face to be part of the market activities.

iii. **Enhancing financial inclusion, literacy and business skills for women traders located in the market by providing access to tools and new technologies.** The project aims to facilitate the utilization of a platform aimed at providing financial stability through the use of blockchain technology, in order to improve the financial inclusion of female and male traders located in the project's market, and to close the gender gap in mobile money penetration by:

- Providing smartphones to traders so they can transform (with the assistance of an agent who will also be provided) their cash into mobile money. By doing this, they will feel safer because they do not have to carry cash and they can also access savings options or cash out the mobile money if they need it.
- Enhancing access to mobile money, which has been shown in other countries, such as Kenya, to be successful in contributing toward closing the gender gap by addressing the barriers to accessing formal financial services and facilitating transactions by linking money in an account to a phone number and thus facilitating transactions between users. However, it is still too early to have sufficient evidence of the extent to which mobile money will contribute toward closing the gender gap through the use of mobile technology. Therefore, there is a need to have a piecemeal, tailored approach and to start with a low-scale pilot.
- Designing a customized application, considering the levels of literacy in general and financial literacy specifically.
- Providing training for the traders to use the devices, the mobile money platform and the different options offered by the platform.

The project recognizes that some risks may emerge from this activity, such an increase in intimate-partner violence due to the empowerment of women working in the market. To prevent the negative potential effects and ensure the long-term sustainability of actions taken, several training and awareness campaigns will be designed, and specific work with men and boys and community dialogue will be conducted to reduce the risk of violence against women and girls, in collaboration with Rainbo.

iv. **Improving the business and entrepreneurship education of the new traders established in the market, with specific modules targeted to women's knowledge gaps: for instance, on negotiation skills, accounting, business strategies, supply and revenue management, and basic knowledge of finance.** There are clear gender disparities in educational attainment: a greater percentage of men than women complete primary school or lower- or upper-secondary school. More than 60 percent of women never went to school and only a small fraction of them have completed upper-secondary or tertiary education, while nearly 50 percent of men have completed at least primary education. When primary education is considered in Sierra Leone, only 32 percent of women can read and write. This percentage increases to 52.4 percent for men. Other experiences in developing countries have shown that there is still a prevalence of gender gaps in critical skills to run successful businesses.[58][59] Despite major progress in education for women over the years, they often still lack vocational and technical skills as well as work experience to enable them to run large businesses. Women are also reported to be less likely to have access to ICT, which plays a significant role in the highly integrated global market. Enhancing women's entrepreneurship education and financial literacy will also contribute to enhance their economic empowerment.

[58] Voices of Liberian Women Entrepreneurs: Available: *https://bit.ly/2GHDmu3*
[59] Women Entrepreneurs in Indonesia. Available: *https://bit.ly/2SoWRJp*

Annex 7: Economic Analysis

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. The economic evaluation includes all interventions proposed under Sub-component 2.1. Quantities of all work items have been estimated from the design drawings. The estimated quantities were then written as bills of quantities in accordance with the Standard Method of Measurement of Civil Engineering Works (CESMM3). Local cost information was based on unit rates from recently tendered road contracts in Sierra Leone, costs of major resources such as bitumen, fuel, reinforcing steel, cement, etc. The unit rates were then applied to the bills of quantities to provide the cost estimate, which is estimated at US$14,426,971.

Table 7A.1. Grand Summary

Item	Description	Amount (US$)
1	Access Roads to Transit Terminal	1,700,974
2	Kissy Ferry Intersection	1,150,310
3	Congo Cross Intersection	1,034,081
4	Lumley Area Network	3,655,839
5	Transit Market and Terminal Facilities	3,681,152
6	Subsoil Drainage and Associated Works	1,058,444
7	Storm Drainage	834,625
	Subtotal	13,115,429
	10% Added for Contingency	1,311,543
Total		**14,426,971**

2. The economic analysis for the investments was based on the determination of an incremental analysis of the difference in costs and benefits between a “without-project” scenario and a “with-project” scenario, both over a specific time horizon of 25 years. The economic, social and environmental direct and indirect impacts of the improvements in the project’s area of influence were assessed to capture these perspectives of transport and travel, safety, employment, basic social services, and environment.

3. Among these impacts, attempts are made to quantify the benefits in monetary terms. These are the direct benefits that will accrue to beneficiaries:

4. **Travel time saved by people:** The value of time saved by a person who travels in the course of his or her normal employment is considered to be equal to the salary he or she is paid. Thus, if as a result of road improvement some time is saved in these trips, the value of this time is equal to the aggregate salaries of those involved for the time period in question.

5. **Reduction in Road Accidents.** Besides the human suffering generally associated with road accidents, there is economic loss in the form of vehicle and property damage, medical costs, loss of productivity of injured persons, and in the case of commercial vehicles, loss of earnings. As such, accident reduction is clearly an economic benefit. Existing accident characteristics were employed to estimate the likely accident reductions. Damage to vehicles and property, as well as medical costs, and the value of life in the case of fatalities were included in the analysis.

6. **Benefits from Employment.** These were estimated as benefits to residents as a result of labor services during and after project implementation activities. The project-related activities in which direct benefits were assessed are civil or

construction works executed during the period. The post-project activities in which benefits were assessed are the maintenance works to be carried out during the lifetime of project investment.

7. **Benefits from reduction of carbon emissions.** The Guidance Note on the shadow price of carbon in economic analysis was adopted and used in the benefits estimation of reduction in carbon emissions. To achieve the Paris Agreement on keeping temperature rise below two degrees, the World Bank's Shadow Price of Carbon Guidance Note[60] recommends the use of a low and high estimate of the carbon price starting at US$40 and US$80, respectively.

8. The project cost contains two main components: capital cost and maintenance cost. All financial costs were converted into economic costs to address distortions in prices due to market imperfections by applying a Standard Conversion Factor (SCF) of 0.85, which is generally used for the economic evaluation of public investments in developing countries.

9. Other key assumptions considered in the economic analysis are presented below:

- Discount rate for public investments is 12 percent.
- Horizon time for analysis is 25 years.
- Traffic growth rate is 2.5 percent per year.
- Population growth rate for Freetown is 4 percent.
- Financial costs were converted into economic costs by applying an SCF of 0.85.
- Value of Time (VoT) is US$0.55 per hour (based on 50 percent wage rate, https://bit.ly/2NqpNzT). Wage rates based on GDP per head and 50 percent uplift for Freetown's "urban" factor and freight drivers assumed a double wage rate (Integrated Transport Planning (ITP), Diagnostic Study Final Report, 2018).
- Average daily earning for each trader is estimated to be US$191.68 from the market surveys (refer to Section 6.2.5).
- Value of Life Sierra Leone is US$57,365 (based on Value of Life UK, adjusted by the ratio of GDP between UK and Sierra Leone and raised to 2018 values).
- Value of Serious Injury Sierra Leone is US$7,971 (based on UK values adjusted by the ratio of GDP between UK and Sierra Leone and raised to 2018 values).
- Value of Slight Injury Sierra Leone is US$584 (based on UK values, adjusted by the ratio of GDP between UK and Sierra Leone and raised to 2018 values). The "social cost of carbon" WB policy requires the use of two scenarios: US$40/ton and US$80/ton with a 2.25 percent increase each year. The lower value has been used in the calculations to be conservative.

10. The outputs of the economic appraisal produce the following economic viability indicators:

Table 7A.2. Economic analysis indicators

	With-Project Scenario
Net Present Value (NPV)	US$82,749,986.92
Benefit–Cost Ratio (BCR)	3.69
Economic Internal Rate of Return (EIRR)	78.17%

[60] http://documents.worldbank.org/curated/en/621721519940107694/Guidance-note-on-shadow-price-of-carbon-in-economic-analysis

11. The improvements case shows an NPV greater than zero, a BCR greater than 1.0, and an EIRR greater than the recommended discount rate of 12 percent. As a result, the project intervention is expected to yield positive economic returns and can be confirmed to be economically viable.

12. The results of the Sensitivity Analyses reveal that the various project indicators are not highly sensitive to either increases in project costs or reductions in project benefits. More specifically, the project is more sensitive to reductions in benefits than to increases in costs. The analyses reveal that while a 20 percent increase in cost results in an EIRR of 64.66 percent, a reduction of benefits by 20 percent results in an EIRR of 61.95 percent. A combination of either scenario or an increase in project cost and a reduction in project benefits by the same margin of 20 percent makes the planned investments still worthwhile with an EIRR of 51.09 percent, which is higher than the threshold of 12 percent.

13. In terms of GHG emissions (CO_2 equivalent) calculations, the project interventions are expected to reduce the emissions from a cumulative number of passenger cars over 25 years from 65,000 tons (without-project scenario) to 55,000 tons (with-project scenario) thanks to travel-time saving, avoided congestion, and efficient travel speeds. Therefore, the gross GHG emissions with project will be 55,000 tons, while the net savings of GHG emissions will be 10,000 tons.

14. The fleet renewal scheme proposed under Component 1 will have significant implications in terms of reducing GHG emissions. The proper calculation will require a large-scale data-collection campaign because there is no previous study on vehicle fleet composition. Component 1 includes in its activities a detailed study to inform the fleet renewal scheme. Despite this limitation, the team has roughly estimated GHG emissions. The team used the results of a recent detailed study in Abidjan, Côte d'Ivoire, to inform this calculation. Estimated numbers of vehicles (accounting for taxis and minibuses) suggest that Freetown's numbers (17,000) are about half of Abidjan's (40,000), while the vehicle fleet and modal share are consistent across the two cities. Therefore, the team used a conversion factor of 0.42 to translate the results from Abidjan to Freetown. The renewal scheme scenarios chosen for the calculation estimate a 50 percent renewal of both taxis and poda-podas in 25 years (approximately 400 vehicles per year).

15. The total GHG emissions saving from Component 1 and Component 2 are estimated in 99,000 tons (10,000 tons from component 1 and 89,000 tons from component 2).

Table 7A.3. GHG annual and total emissions

Tons	*Annual*	*Over 25 years*
Gross GHG (without)	322,000	14,888,000
Gross GHG (with) - medium	319,000	14,789,000
Saving	3,000	99,000

16. The SPC calculation uses low (US$40/ton) and high (US$80/ton) values. It uses results from GHG calculations and a discount rate of 12 percent. Total benefits from GHG reductions are shown below:

Table 7A.4. NPV from GHG reduction

	NPV (US$)
Low	-720,000
High	-1,440,000

Annex 8: Spatial Prioritization Framework

COUNTRY: Sierra Leone
Integrated and Resilient Urban Mobility Project

1. The project has built a region-wide spatial analysis to prioritize mobility services (Component 1) and infrastructure (Component 2) in the Western Area and enhance accessibility, inclusion and resilience. This prioritized framework will be used to screen the long-list of investments defined previously by the Government and included in the latest Integrated Mobility Plan for Freetown. The definition of the longlist will be enlarged after close collaboration and coordination with ongoing and planned development projects in the Western Area (tourism, health, education, urban development, etc.) to maximize synergy across sectors.

2. A network criticality analysis will be conducted to identify which corridors of the urban transport network are most critical to access economic hubs. This analysis, based on a previous model by Briceño-Garmendia et al. 2016, will systematically estimate additional travel times to access economic hubs once the specific corridor is removed from the network. The additional travel time will be used as the amount to rank each corridor in terms of its importance for accessing economic opportunities. All data needed for the analysis are already available.

3. The prioritization framework integrates the following criteria, detailed below, to assess broader benefits for economic and social development and shared prosperity: (a) actual and potential access to economic opportunities (jobs, access to key sectors for economic diversification such as tourism, port); (b) access to social opportunities (education, health); (c) climate-related impacts (floods and landslides, based on the Multi-Hazard and Risk Assessment); and (d) socioeconomic data, including data on poverty, gender and disabilities. The accessibility analysis assesses those people actually benefiting from the identified climate resilience interventions and prioritize those interventions that benefit excluded groups (for instance, low-income residents, women, and PWD).

(i) actual and potential access to economic opportunities (jobs, access to key sectors for economic diversification such as agro-processing, fisheries, tourism, port).

Figure 7A.1. Transport services and economic hubs

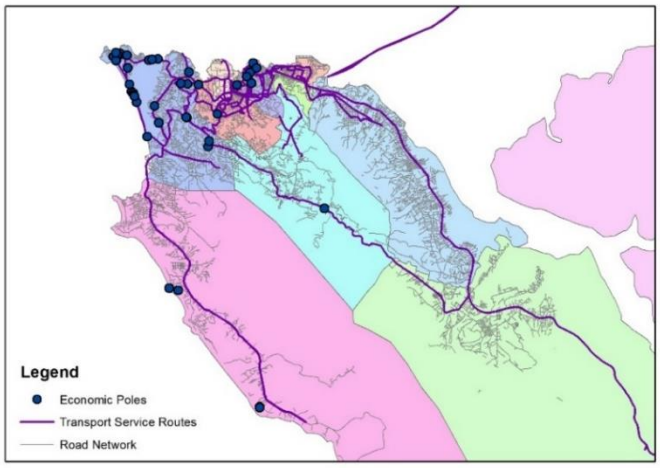
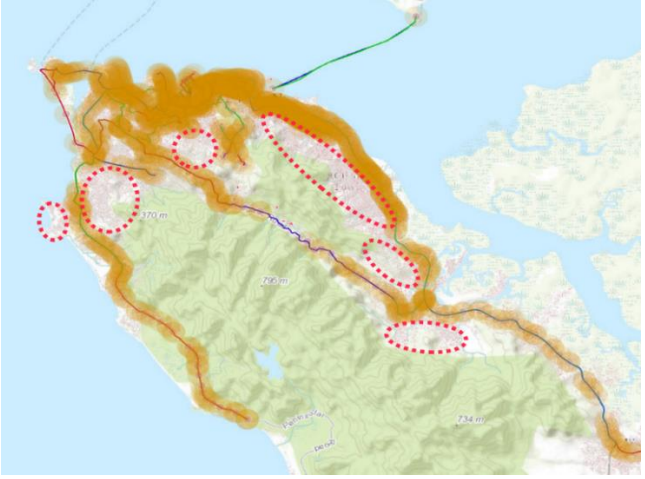


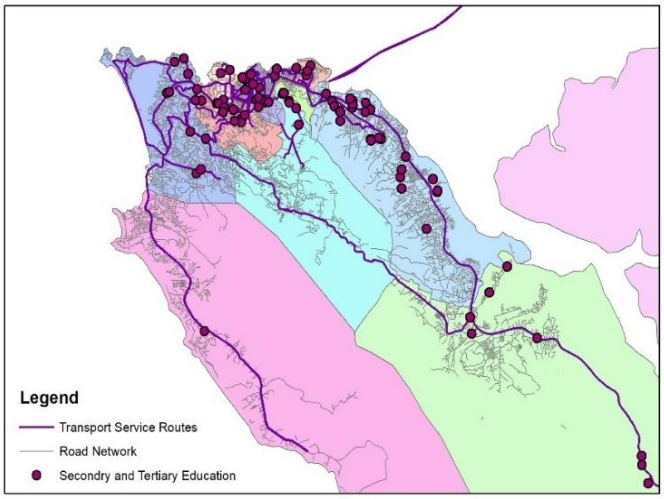
Figure 7A.2. Areas without access to public transport



(ii) Access to social opportunities (i.e., education, health);

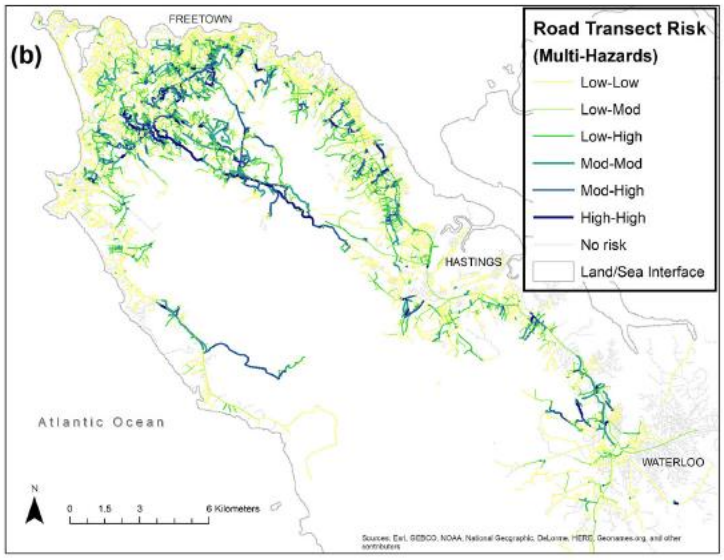
4. In order to estimate access to social opportunities, a travel-time analysis will be developed, using the data on transport services. Pockets of populations with low access (or high travel times) to social opportunities (such as secondary and tertiary education) will be ranked as a high priority for investment under the project. The travel time to social opportunities will be used as the metric to rank priority for this criterion. All data needed for the analysis are already available.

Figure 7A.3: Transport Services and Social Services



(iii) Climate-related impacts (floods and landslides, based on the Multi-Hazard and Risk Assessment)

Figure 7A.4: Road Network and Multi-Hazard Assessment



5. The results from the climate-resilience analysis described in Annex 4 will be used as inputs for this criterion. These include a Multi-Hazard Risk Assessment, including floods, landslides, coastal flooding and sea-level rise. The priority will use the described methodology, ranking the High-High link as highest priority. The results of the analysis are already available.

(iv) Socioeconomic data, including data on poverty, gender and disabilities

6. Socio-demographic data will be used as the fourth priority. Data on income level, disabilities or gender will be used to identify which of the corridors would directly benefit the largest number of the most vulnerable demographics. The number of people in these vulnerable groups will be used as the metric to rank this criterion.

7. A geo-spatial multi-criteria decision analysis will be used to prioritize the corridors for intervention under Component 1 and Component 2. Each of the four criteria described above will be assigned a weight, based on stakeholder participation workshops. These weights will be used to determine the overall ranking of prioritization.

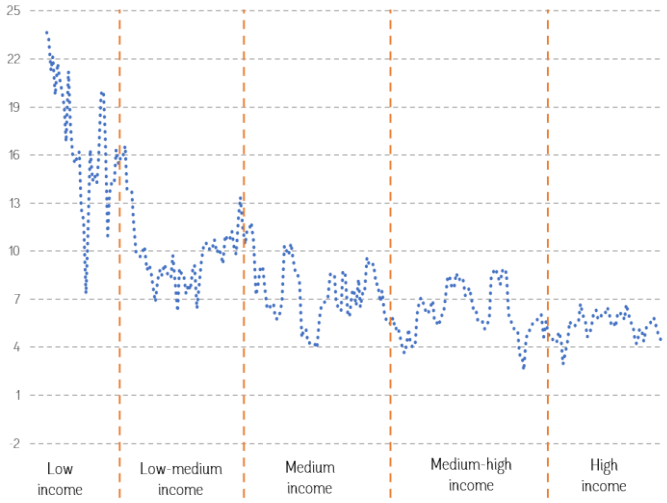


Figure 7A.5. % transport expenditure vs. food expenditure for poda-poda users in Freetown (by income group)
Source: Sierra Leone Household Survey 2011