

Land use planning

BROOK ABEBE

LANDUSE PLANNING

WHAT?

a systematic assessment of land and water potential, alternatives for land use and economic and social conditions in order to select and adopt the best land use options. Its purpose is to select and put into practice those land uses that will best meet the needs of the people while safeguarding resources for the future.



LAND-USE PLANNING

ADDIS ABABA



National Population: 90 mill.
Urban Population: 18mill. (20%)

Rate of population growth: 3.8%
national: 2 % Addis Ababa

LAND-USE PLANNING

ADDIS ABABA



By 2025, Addis Ababa provide a safe and livable environment to their people

‘middle income Category’

Africa’s diplomatic capital and world class city.

LAND-USE PLANNING

ADDIS ABABA

Land is a scarce

population growth, pollution, erosion and desertification, effects of climate change, urbanization

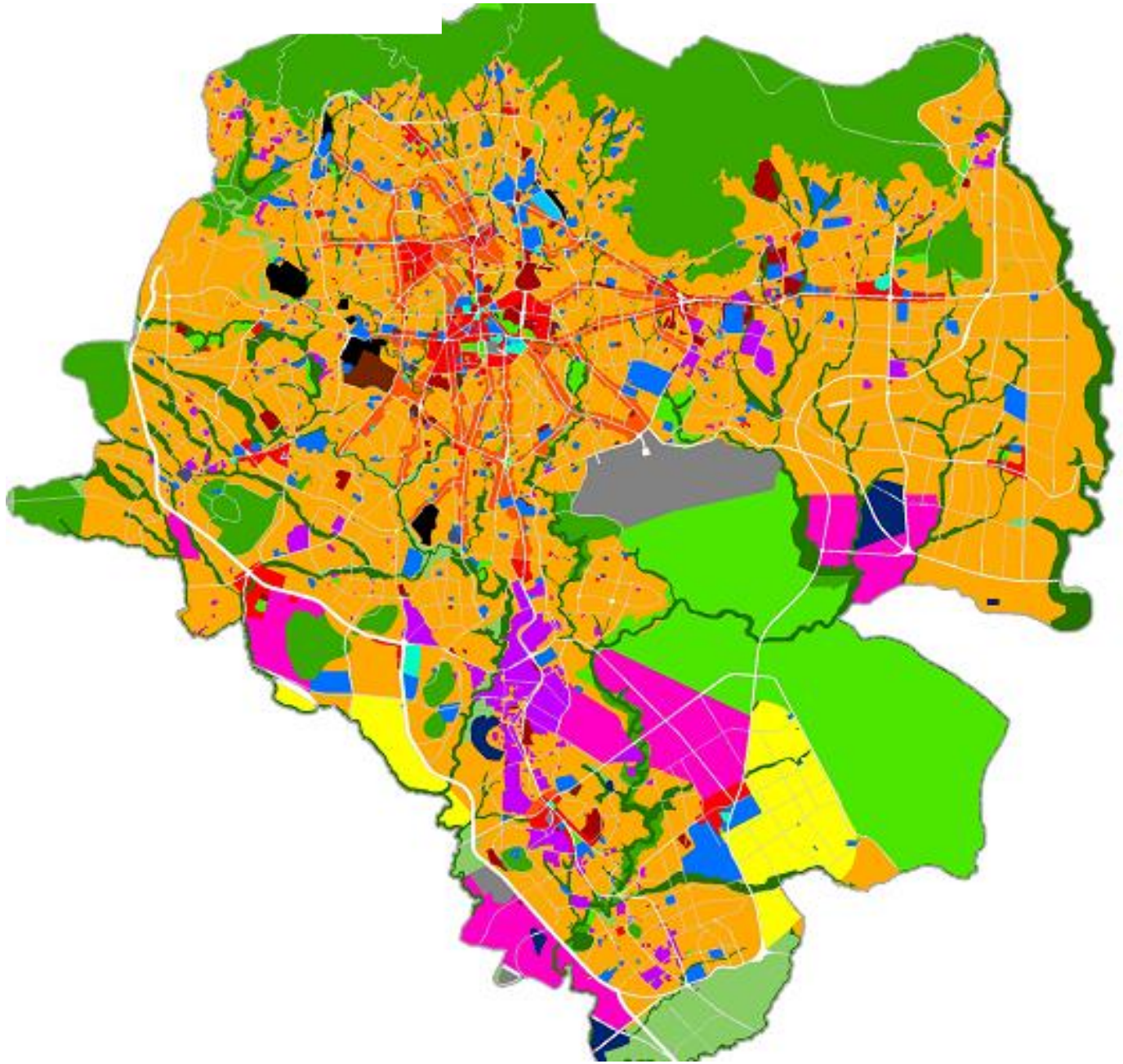
compete to achieve food security, economic growth, energy supply



LAND-USE PLANNING

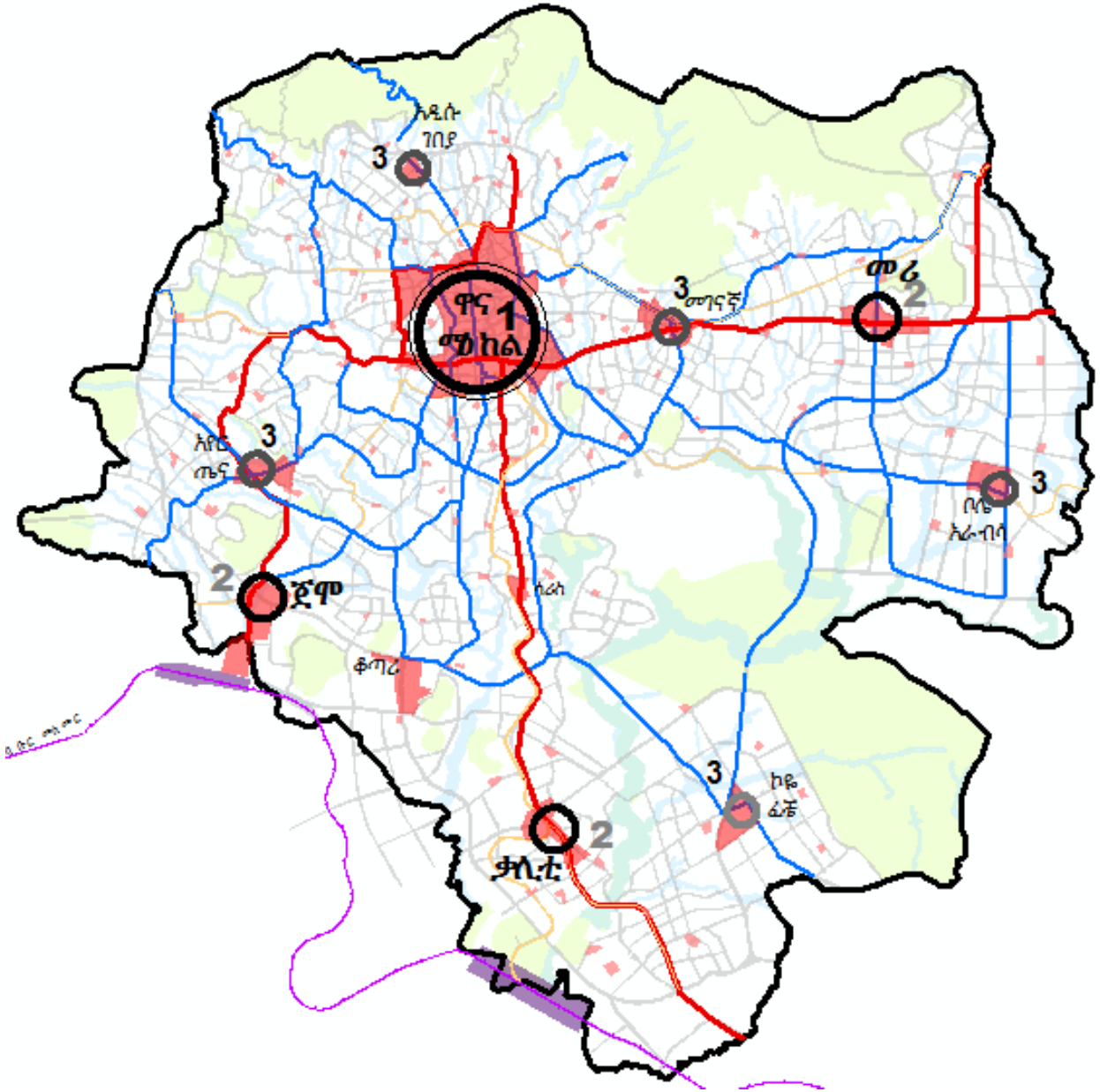
ADDIS ABABA STRUCTURE PLAN

Major Land Use	Area/ha	Percentage(%)
Administration	551.26	1.06
Commerce and Business	762.02	1.47
Environment	15595.65	29.99
Historical Building and Site	18.87	0.04
Manufacturing & Storage	3120.78	6.00
Mixed Residence	22003.82	42.32
Municipal Service	614.17	1.18
Religious Institution	368.69	0.71
Social Service	1457.33	2.80
Special Project	756.94	1.46
Special Use	330.55	0.64
Sport Field	19.18	0.04
Street network	3680.16	7.08
Transport	1153.24	2.22
Urban Agriculture	948.15	1.82
Utility and Infrastructure	565.91	1.09
Utility and Infrastructure	53.28	0.10
Total	**52000.00**	**100**



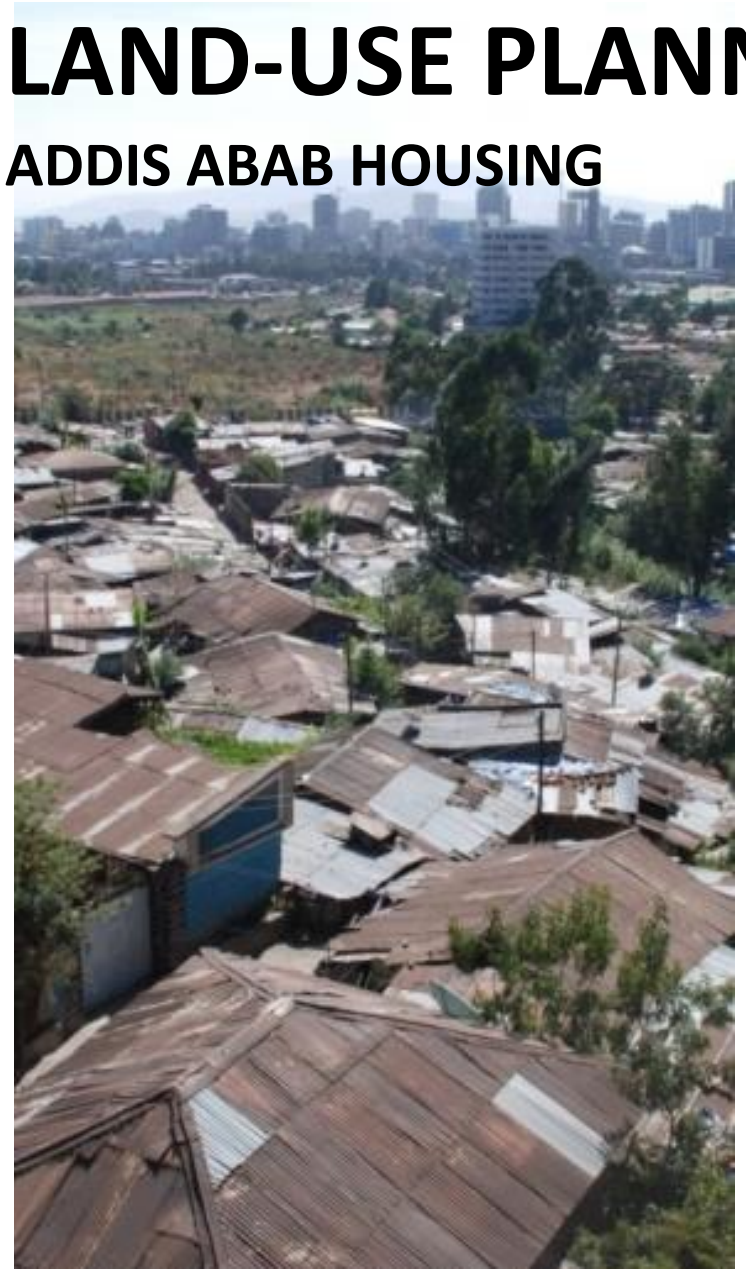
LAND-USE PLANNING

ADDIS ABABA CENTRALITY



LAND-USE PLANNING

ADDIS ABAB HOUSING







LAND-USE PLANNING

ADDIS ABABA HOUSING

emergence of squatter settlements

High building standards of the legal houses

Control issues on open spaces and informal settlements

high housing rents

Lack of trained professional and Institutional capacity



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TRANSPORT AND ROAD NETWORK PLANNING

TRANSPORT AND ROAD NETWORK PLANNING

ADDIS ABABA

VISION OF THE STUDY“
Proposing an integrated transport and street network plan for the city



preparation gaps

planning was carried as a car oriented instead of pedestrians

streets are not comfortably organized and planted to encourage cyclist and pedestrian

no established road design, management systems
implementation gaps

no clear road construction prioritization mechanism,

road maintenance not covering all types and less attention to pedestrian walkway



Goals

Increase road density coverage from 18% to 30%

Increase the share of non motorized transport

Hierarchically organized streets meeting mobility and other infrastructure services needs

OBJECTIVES

planning for heavy vehicle, dangerous goods routes, public transport routes, pedestrian and bicycle routes;

Comfortable and accessible street for elderly and disabled people



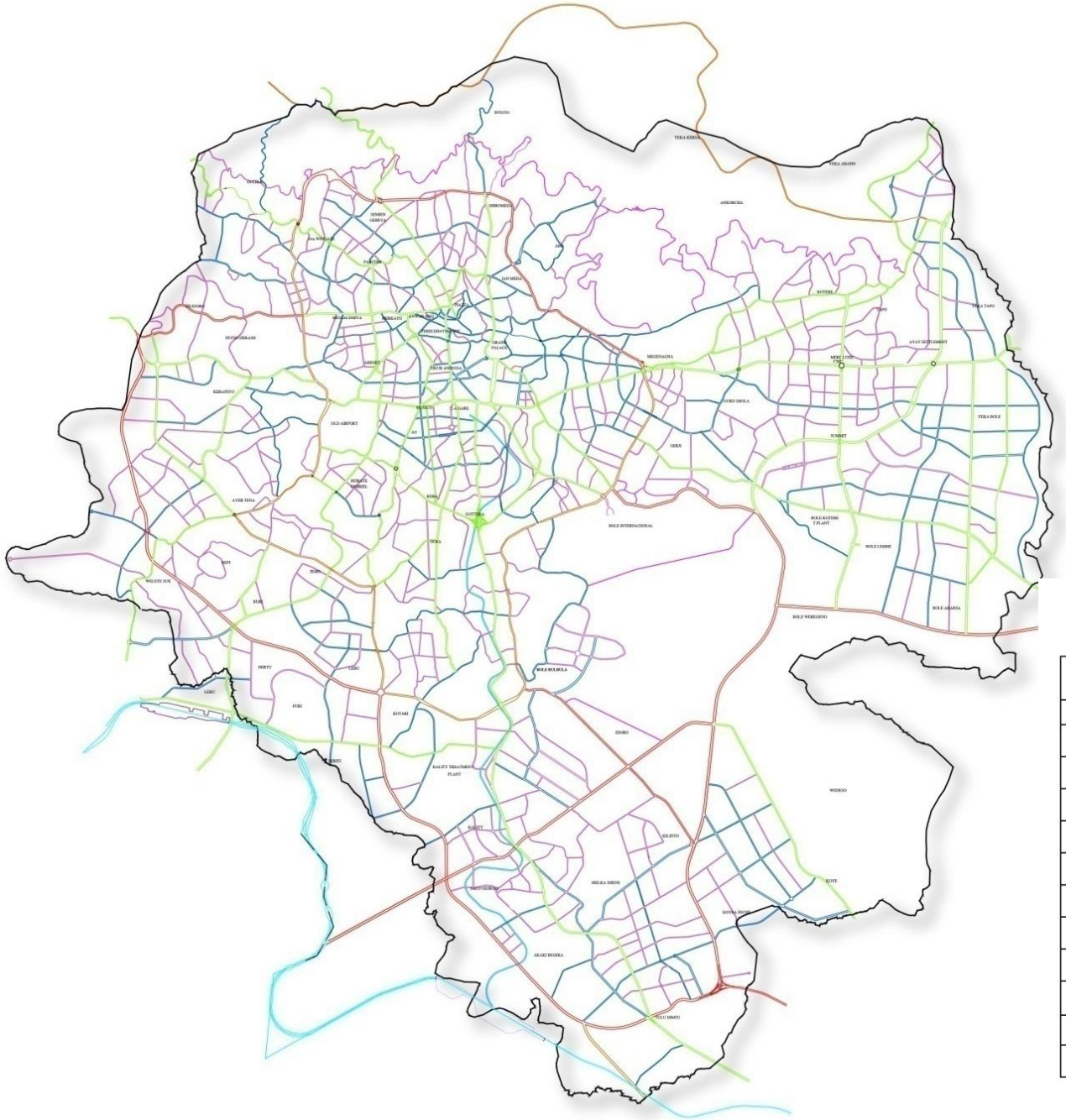
"Addis flood" by magnusfranklin is licensed under CC BY-NC 2.0

TYPE OF STREETS;

PAS: linking different city centers, regional linkage public transport task, express road

SAS: local areas to main arterial roads, connections for through traffic between arterial roads, access to public transport,

CS: trip end access with the specific area, direct access to properties, access to public transport pedestrian movements, local cycle movements

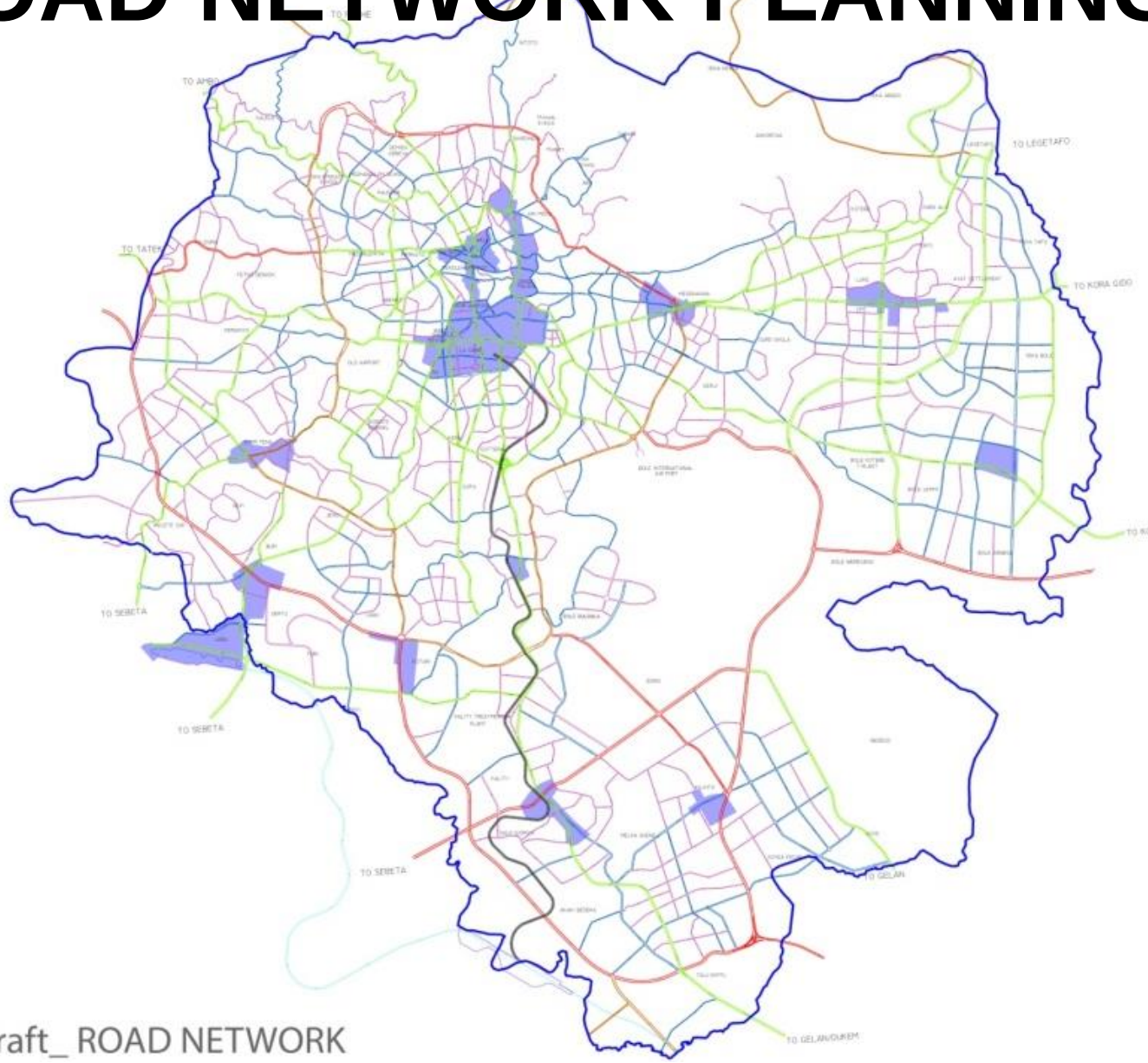


STREET INTERSECTIONS

	INTERSECTION TYPES	VEHICULAR JUNCTIONS	PEDESTRIAN CROSSINGS	Min. SPACING (Between two successive intersections)
1	**Express way/Express way**	Grade separation	Grade separation only overpass or underpass	2 km
2	**Express way/Boulevard**	Grade separation	Grade separation only overpass or underpass	500-1000 meters
3	**Boulevard/Boulevard**	Signals roundabout	Grade separated or signal controlled	500-1000 meters
4	**Boulevard/Sub arterial**	Signals roundabout	signal controlled	500-1000 meters
5	**Sub arterial/collector**	Uncontrolled, T-junction or roundabout	signal controlled	300 meters
6	**Collector/local**	Uncontrolled	signal controlled	

TRANSPORT AND ROAD NETWORK PLANNING

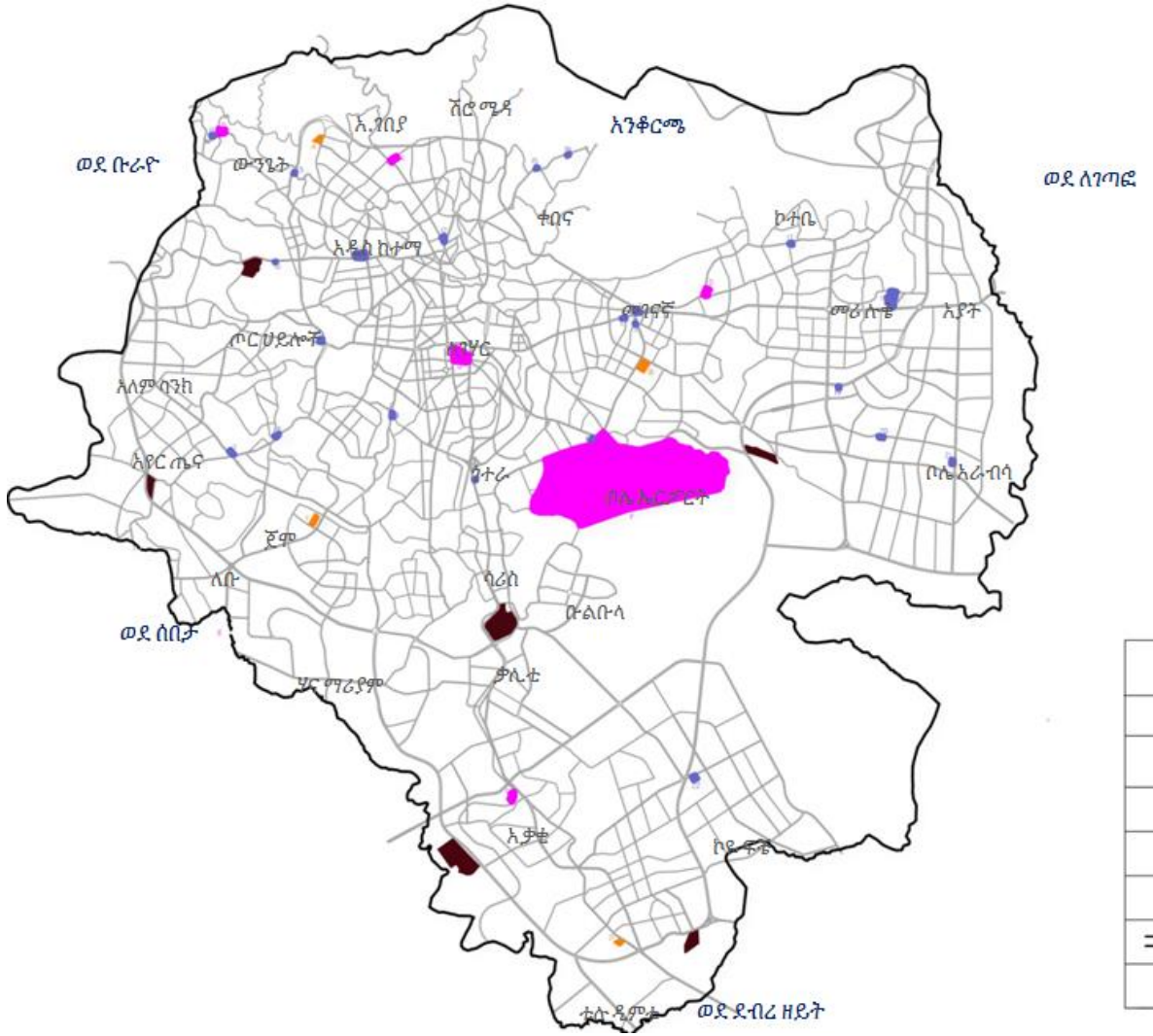
ADDIS ABABA CITY TRANSPORT HUB



Three level transport hub

TRANSPORT AND ROAD NETWORK PLANNING

ADDIS ABABA FREIGHT TERMINALS



TERMINALS LEGEND	
	INTER - CITY TERMINAL
	INTRA - CITY TERMINAL
	BUS - DEPOT
	FREIGT-TERMINAL
	BOUNDARY

Three level transport hub

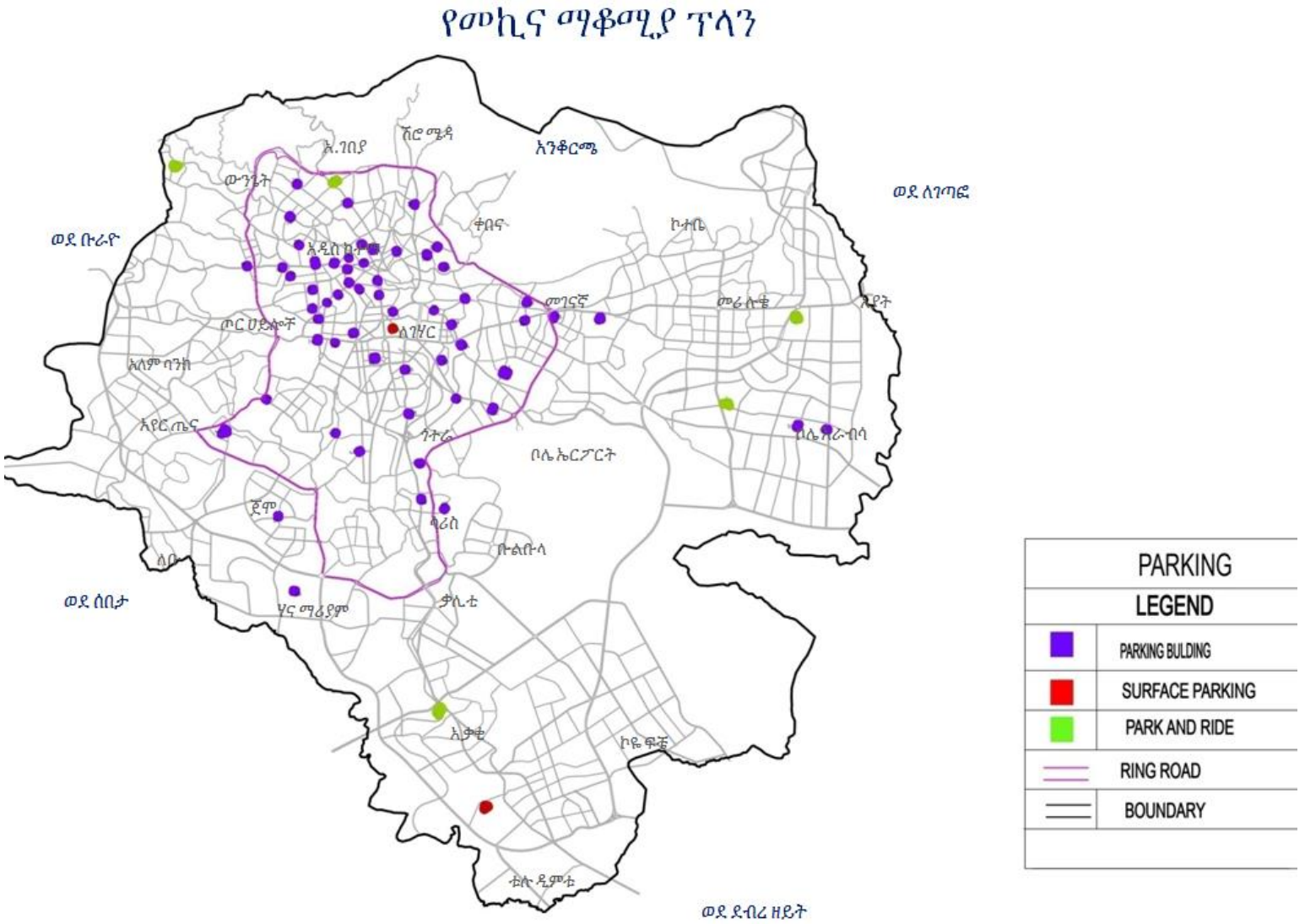
TRANSPORT AND ROAD NETWORK PLANNING

ADDIS ABABA PARKING

Classifying the Parking Service in to 4 major types.

(8 Park and ride) on city outlets,

(60 parking buildings)



Anbessa city bus

Number of routes = **112**

Number of Passenger per day = **374433**

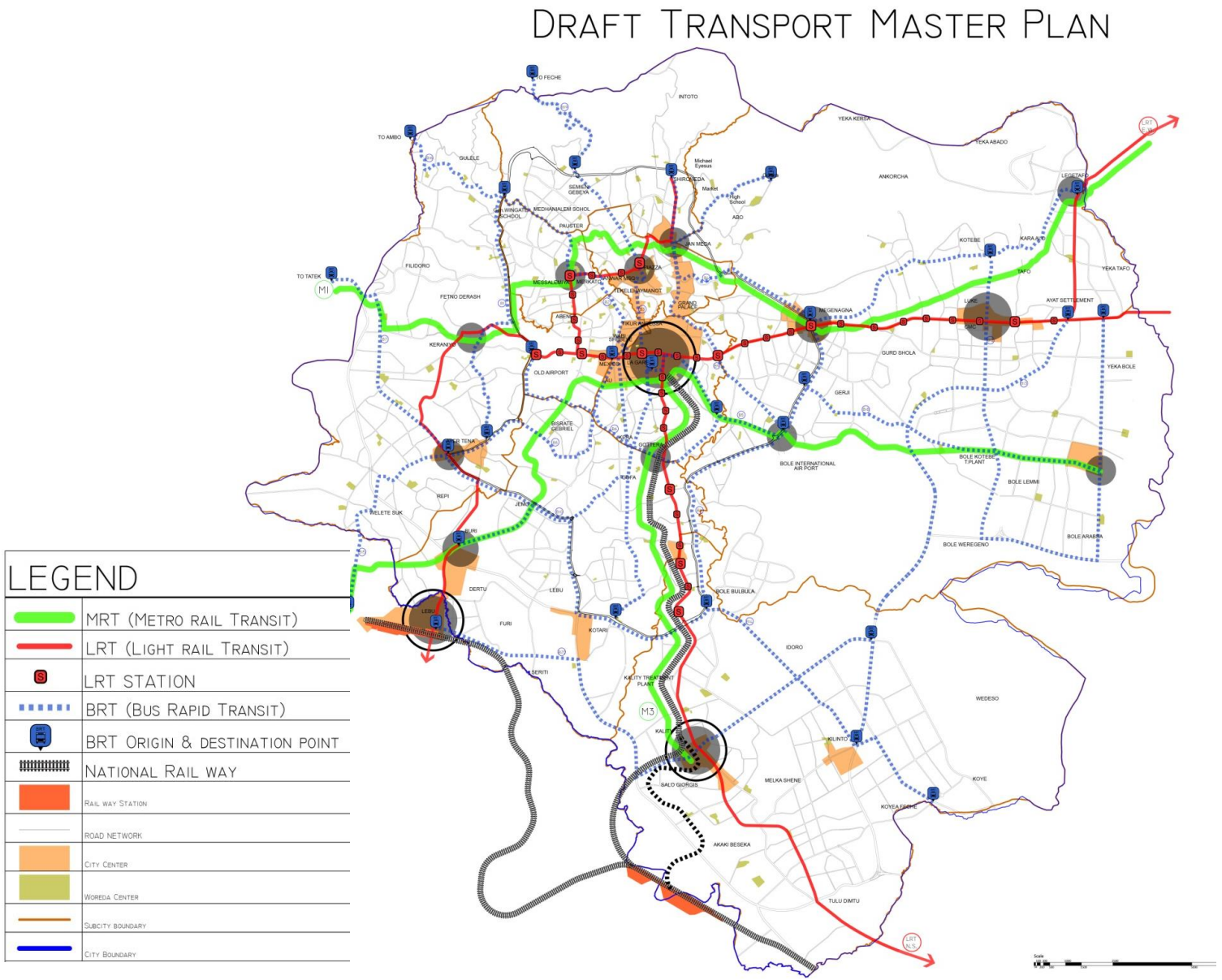
MINI BUS

9200 Mini bus taxis

1.4 mill passengers

15 BRT lines are proposed on the major corridors, the ongoing LRT line future extension is also allocated.

Cycle lane

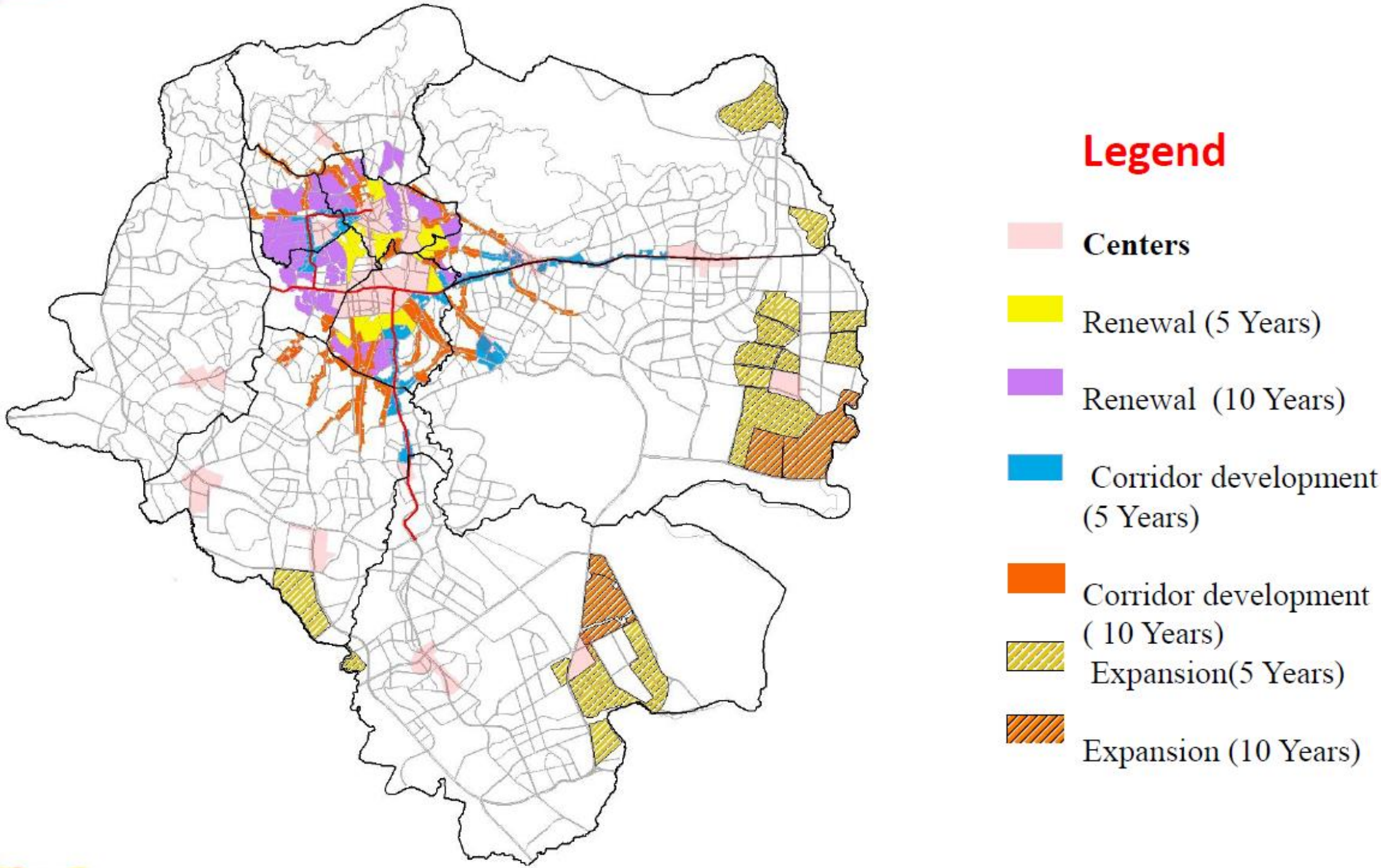


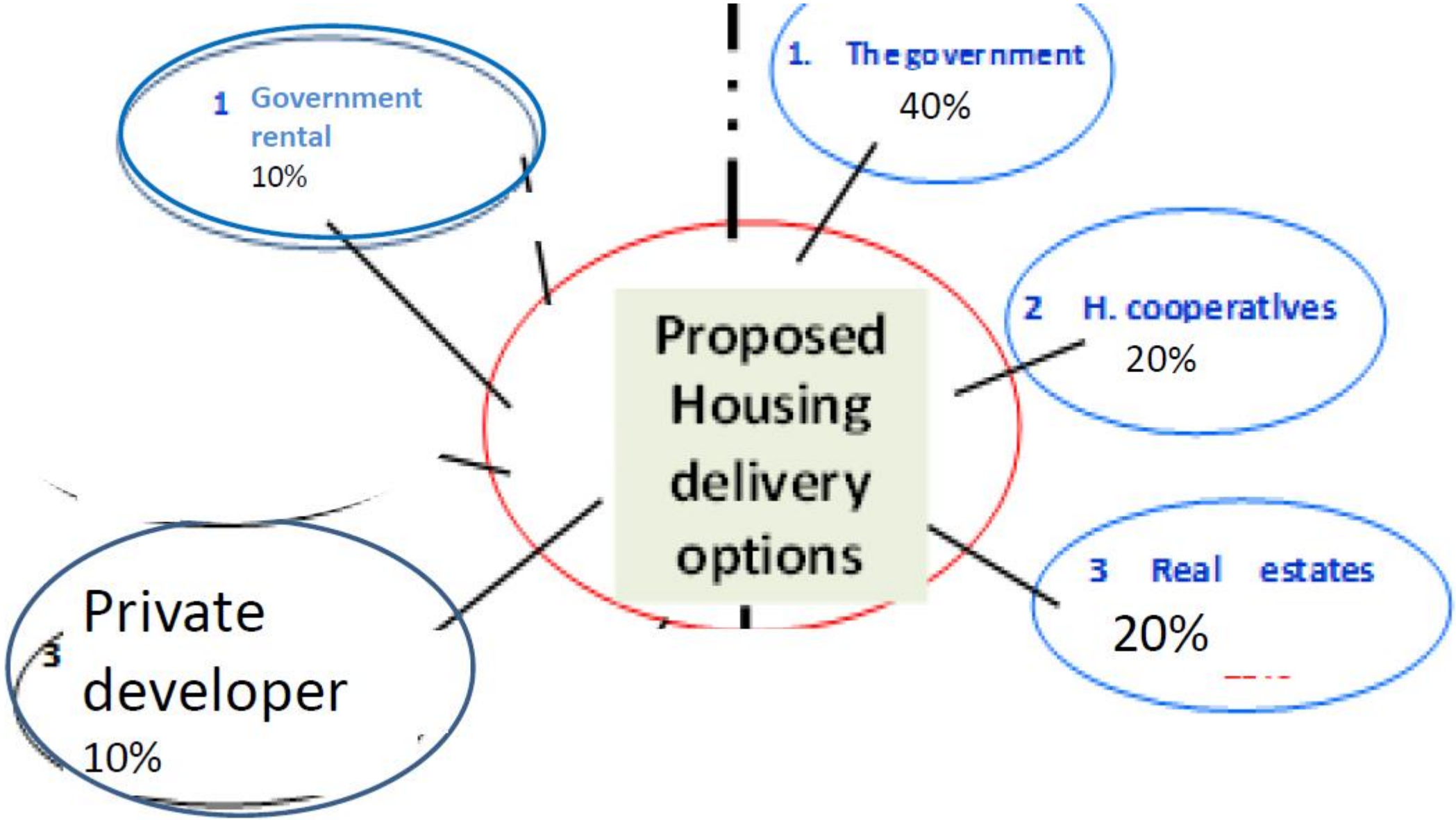


HOUSING

Vision for Addis Ababa

“To provide housing options that cater to the needs of the residents and enhance Addis Ababa’s identity as the where the poor and the rich live together”.


Legend
Centers
Renewal (5 Years)
Renewal (10 Years)
Corridor development (5 Years)
Corridor development (10 Years)
Expansion(5 Years)
Expansion (10 Years)


1 Government rental 10%
1. The government 40%
Proposed Housing delivery options
2 H. cooperatives 20%
3 Real estates 20%
3 Private developer 10%

HOUSING

ADDIS ABABA

Compensation of relocation housing and /or plot will be given as much as possible within the development site or in 1km radius.

Along BRT and LRT lines bringing high density development (60 % residential).

In the city centers (40 % residential).



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PROJECTIONS

$F_t = Pe^{rt}$

- (F_t) is the number of people at a future date
- (P) is equal to the present population.
- (e) which is the natural logarithm base of 2.71828
- (r) represents the rate of increase divided by 100
- (t) represents the time period.