



GENERAL SUMMARY FOR PUBLIC

ULAANBAATAR 2020 MASTER PLAN AND DEVELOPMENT APPROACHES FOR 2030



A NOTE ON THIS SUMMARY

This summary provides an introduction to the Master Plan 2030. The Master Plan 2030 comprises 4 volumes and includes considerable technical and background information. This summary is intended to outline the key strategies and directions set out in the Master

Plan 2030 for the general public. Further, an Implementation Plan for the Master Plan 2030 is currently under development and will provide further information on the methods and policies to realize the Master Plan 2030 by the responsible agencies.

Maps used in this summary are simplified versions of maps in the Master Plan 2030 and were prepared by architects and designers at the Urban Planning, Architecture and Design Institute of Ulaanbaatar City. The complete versions of maps can be found at: <http://www.mpa.ub.gov.mn/index.php/neelttei-medeelel/et/1007-2020-2030.html>.



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**MONGOLIAN STATE GREAT KHURAL RESOLUTION
OFFICIAL DOCUMENT APPROVAL FOR
ULAANBAATAR 2020 COMPREHENSIVE PLAN AND
DEVELOPMENT APPROACH FOR 2030**

(Unofficial Translation)

To be approved by State Great Khural based on clause 5.1.5 of section 5, the law of urban development:

1. According to the official document approval for Ulaanbaatar 2020 Comprehensive plan and Development approach for 2030, the document is approved with related appendix.
2. According to the official document approval for Ulaanbaatar 2020 Comprehensive plan and Development approach for 2030, the following steps are to be implemented by the Government of Mongolia (obliged to N. Altankhuyag):
 - Development approach implementation plan for Ulaanbaatar 2020 Comprehensive plan and Development approach for 2030 is to be implemented in first half of the second quarter, 2013 and sector development project is to be implemented in 2013, respectively.
 - Proposed legislation for Ulaanbaatar city regional development is to be completed and presented in regular sessions of State Great Khural, in autumn 2013.
 - In the framework of to maintaining regional sustainable development for reducing decentralization of population in Ulaanbaatar, the policy and vision to develop aimag, soum and villages is to be established and to be presented in regular sessions, autumn of State Great Khural.
 - In the framework of Ulaanbaatar 2020 Comprehensive plan and Development approach for 2030, financial resource for the official document implementation, which is 25.5 trillion, is to be covered in annual state budget, economic policy and public development policy and in order to maintain rest of the financial resource, to make amendment in the relevant legislations and to complete the process in regular session of the spring, 2013.
 - Ulaanbaatar 2020 Comprehensive plan and Development approach for 2030 official document shall be maintained for the implementation and achievement is to be presented once in 2 years in State Great Khural.
3. The effectiveness control of the resolution is to be maintained by Economic Standing Committee (B.Garamgaibaatar)

State Great Khural Chairman

Z. Enkhbold

The Master Plan 2030 was approved through this resolution by the State Great Khural. This means that the Master Plan 2030 is an official document of the State Great Khural and is to be used to guide the future development and planning of Ulaanbaatar. The Government is

responsible for the implementation of the Master Plan 2030, including introducing legislation, developing new policies and regulations, funding key projects and facilitating private sector development in accordance with the Master Plan 2030.

VISION AND PRIORITIES

The City of Ulaanbaatar has an important role as the capital of Mongolia. The Master Plan sets out a clear aim of how Ulaanbaatar will be developed in accordance with an overall vision:

- Ulaanbaatar will be **THE CAPITAL** city of Mongolia that
- respects the **NOMADIC HERITAGE** which has endured many centuries,
- values its **PEOPLE,**
- embraces its **GEOGRAPHICAL CHARACTERISTICS,**
- is **ENVIRONMENTALLY FRIENDLY,**
- has industries and an economy that are **Globally Competitive, and Technologically Advanced, and**
- is **A SMART CITY** with a unique Mongolian character.

In order to realize this VISION, the Plan defines the following six priorities. These priorities guide policies and projects proposed in the Master Plan 2030.

Priority 1:

Ulaanbaatar will be **a safe, healthy, and green city** that is resilient to climate change.

Priority 2:

Ulaanbaatar will provide a **livable environment** for its residents through appropriate land use planning, infrastructure, and housing.

Priority 3:

Ulaanbaatar will be **a city with good governance and a developed legal environment** that serves the general public and private sector.

Priority 4:

Ulaanbaatar will encourage the further development of **settlements, towns and satellite cities** outside the city center.

Priority 5:

Ulaanbaatar will be **one of Asia's tourist destination cities.**

Priority 6:

Ulaanbaatar will have an internationally competitive business center and be **developed as a world-standard capital city.**



GENERAL STRATEGIES OF THE MASTER PLAN

The following seven general strategies are proposed to guide implementation of the Master Plan. The general strategies are the methods the City proposes to achieve a better future for Ulaanbaatar as proposed in the 2030 vision:

- Mitigate the centralized settlements by administrative units restructuring.
- Improve the City's administration of the planning system by introducing land-use zoning codes.
- Improve and extend the road and public transport network.
- Improve the existing condition of the socio-economic infrastructure.
- Re-develop ger areas in stages incorporating new apartment complexes and continued development of apartment areas.
- Improve the basic infrastructure such as utilities and telecommunications.
- Establish sustainable environmental management.

ULAANBAATAR REGION

Ulaanbaatar Capital Region comprises Ulaanbaatar City and a number of regional towns. The population of Ulaanbaatar Capital Region has grown substantially in recent years as a result of migration of people from other aimags within Mongolia, significantly increasing the proportion of the Mongolian population residing in Ulaanbaatar. This trend is projected to continue, by 2030 the capital region population will reach 1,763,000 and form 50.3% of the projected population of Mongolia. While growth has been previously focused in Ulaanbaatar City and it will be directed to developing the towns and satellite cities around Ulaanbaatar City through a policy of equal development of Ulaanbaatar and satellite towns.

GROWTH MANAGEMENT

An urban growth boundary will be used to help achieve a compact Ulaanbaatar City while targeted growth will be supported beyond the city boundary in the expansion of existing towns and development of new 'satellite' cities within the Capital Region. By 2030 with the implementation of the Master Plan, the population of satellite cities and small towns are projected to quadruple and reach 363,000 people. With the continued growth of the Capital Region the development of a coordinated transport and freight network will be critical to the efficient movement of people and goods through and within the region.

ULAANBAATAR REGION POPULATION PROJECTIONS (in thousands)

№		Projected population			
		2020	%	2030	%
1	Ulaanbaatar city	1235,5	80,5	1400	79.4
2	Other towns and satellite cities	298,5	19,4	363	20.6
Total population		1534,0	100	1763	100

Ten regional towns and 3 satellite cities will be developed within the Capital Region. The development of the satellite cities and regional towns will focus on the building local industry and agriculture while also providing a pleasant environment to live and work. Each town and city will have a specialized agricultural, manufacturing, industrial or logistics focus, for ex-

ample Jargalant Village will specialize in agriculture and horticulture and Emeelt - Argalant will be a major logistics and goods storage and distribution center.

Baganuur, Bagakhangai and Aerocity will be developed as satellite cities. The cities will be connected to the regional transport and freight network and will be major logistics and distri-

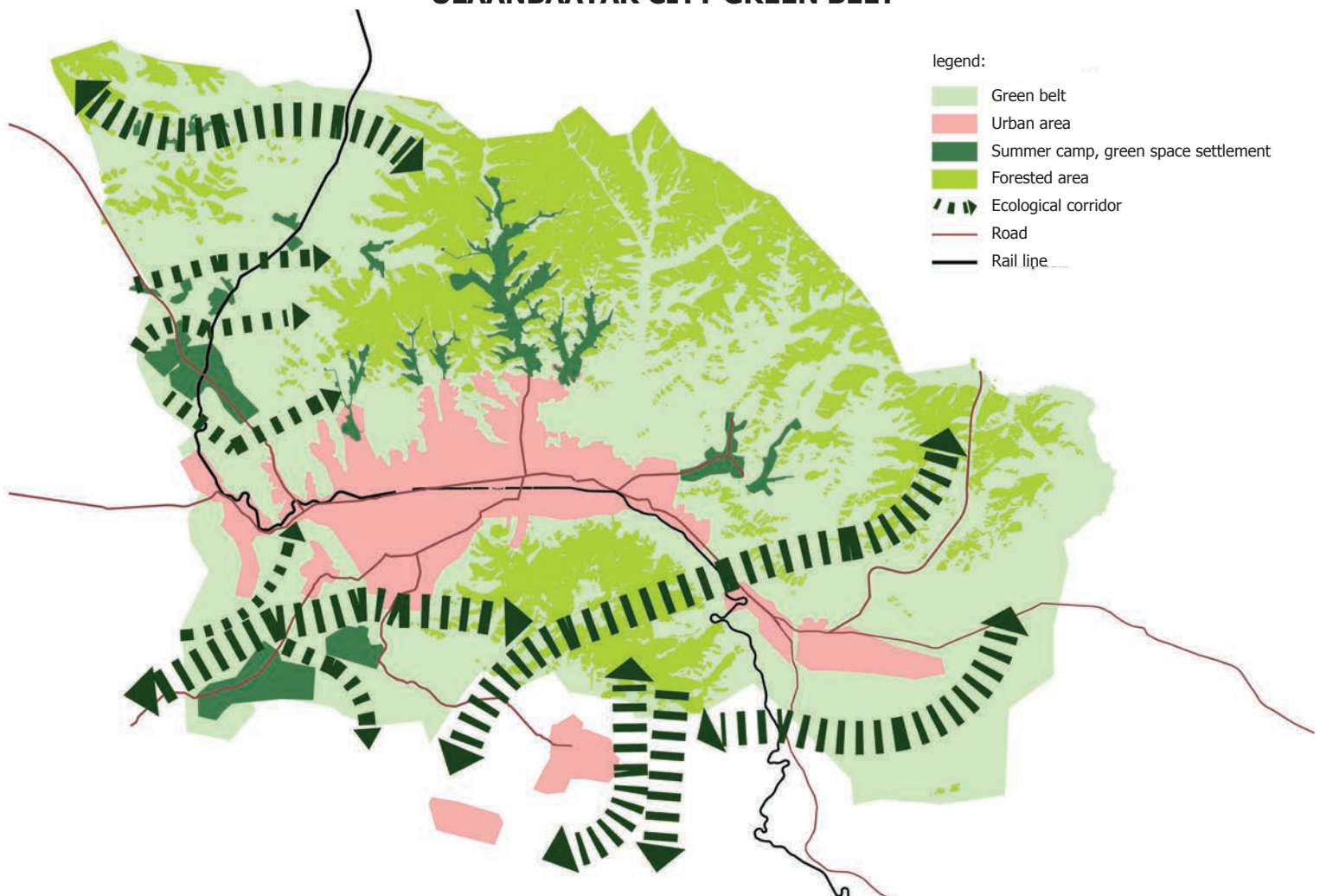
bution centers. In addition, Aerocity will be associated with the new international air terminal to be built in Khushigtiin Khundii.

ULAANBAATAR CITY GREEN BELT

A green belt will be introduced around the edges of Ulaanbaatar City to contain the size of the city and limit development in high flood risk areas, areas in the city's drinking water catchment and the Bogd Khan restricted area. The green belt will be divided into areas for

agricultural uses, rural communities, summer camp areas, natural preservation areas, recreation and tourism activities, water resource protection and forest preservation. The green belt will also include existing strictly restricted areas including Bogd Khan, Gorkhi-Terelj and parts of the Tuul River and its tributaries. It will allow the city to provide public green space for tourism and recreation. The green belt will also function as an urban growth boundary for the City of Ulaanbaatar.

ULAANBAATAR CITY GREEN BELT

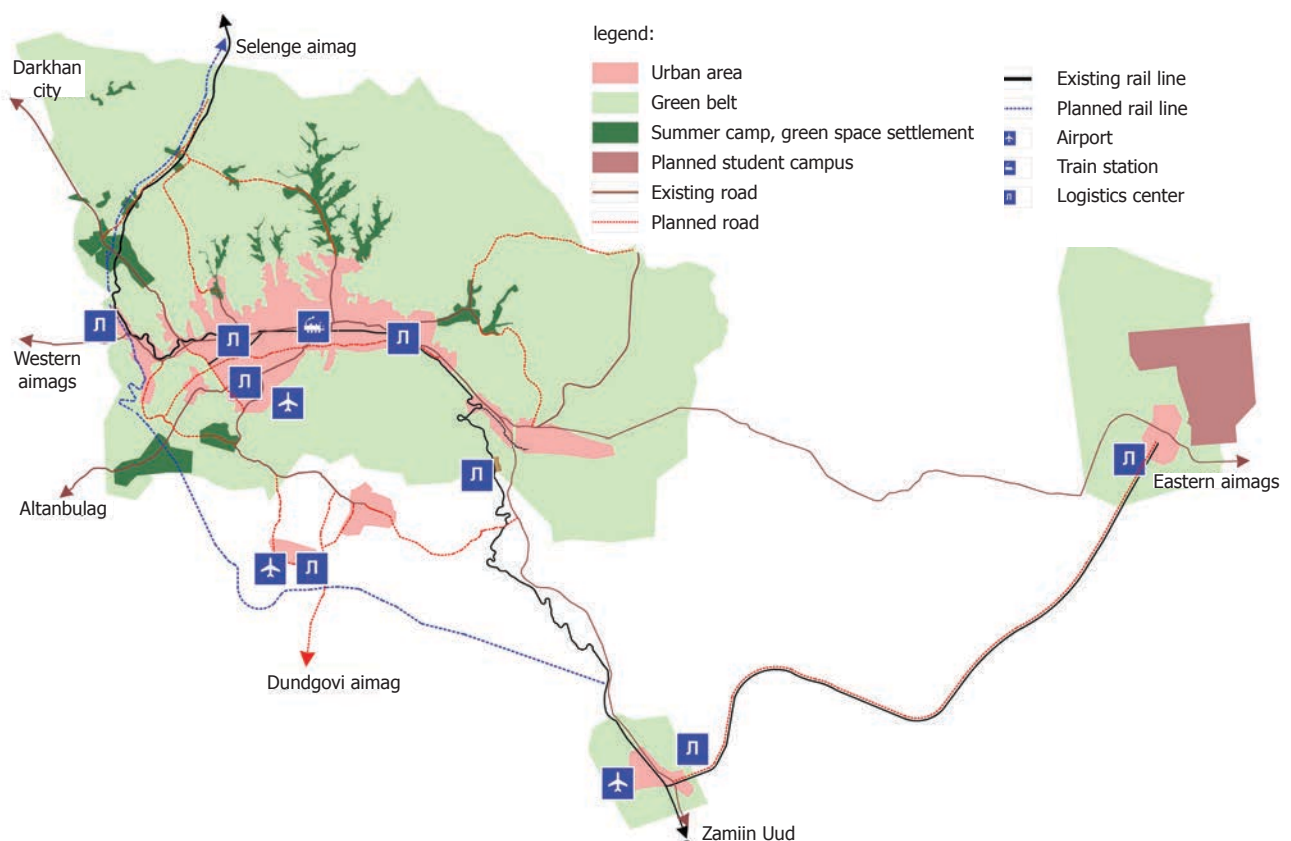


REGIONAL TRANSPORT

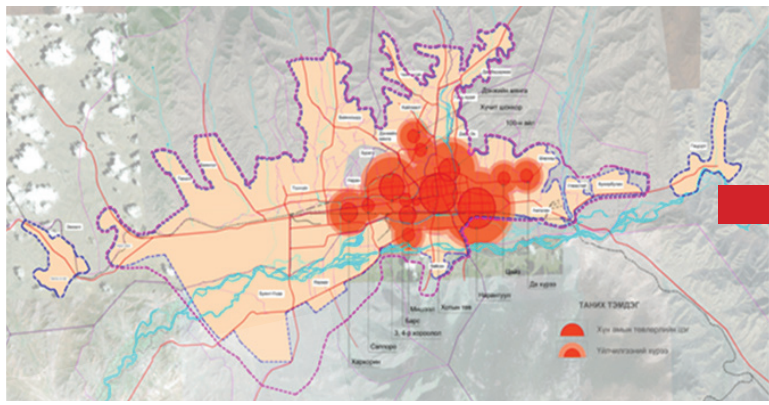
A reliable and integrated road, rail and air transport network is important for connecting Ulaanbaatar with a global economy. The integrated transport network will provide connections within the Capital Region and to the aimags and international neighbors. A number of specific projects will improve the regional transport network:

- A new 170km rail line is planned to go around the Ulaanbaatar without going through downtown,. It connects Mandal Station (Batsumber soum, Töv province) with Bagahangai Station, and run through the southern part of the Bogd Khan Mountains and Zuunmod city.
- Townships and satellite cities around UB will be connected by improved road network and the Asian Highway 3 will go through south side of the Bogdhan Mountains as well to connect to the new international airport.
- In order to increase the goods transportation capacity and to mitigate environmental impacts, the townships and cities that are connected to the rail network will be leveraged to establish 4 logistic centers outside of the City of Ulaanbaatar. The 4 logistics centers are:
 - o Emeelt-Argalant – located in the west of UB;
 - o Nalaikh – located in the east of UB;
 - o Bagahangai – located in the southwest of UB and will be used for explosives and hazardous chemicals storage facilities and terminals;
 - o Aero City – located in the south of UB and the Chinggis Khaan airport will become a small scale air cargo center.

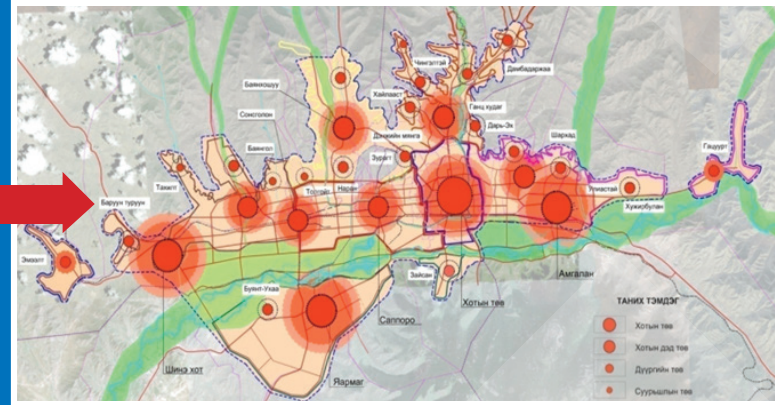
REGIONAL TRANSPORT NETWORK



ULAANBAATAR CITY STRUCTURE



Existing condition of Ulaanbaatar



Proposed decentralization of Ulaanbaatar by 2030

Currently, Ulaanbaatar has a single city center with activities and services largely found in a one centralized area. This contributes to congestion, pollution and a general inefficiency. The Ulaanbaatar 2030 Plan proposes to address

these challenges by promoting a multi-centric city model with decentralized government services, businesses, banking services. The locations of the new city centers are shown in below pictures.

The main purpose of these newly proposed centers and sub-centers is to align the current city district administrative units with a more socio-economic infrastructure and efficient city structure. The hierarchy of the planned centers includes the following levels:

City centers: Current city center and New Yarmag city center will be the central business districts (CBD) that will include national government agencies, international organizations, public organizations, as well as service industry and businesses.

Sub-city centers: New City, Songolon, Gurvaljin, Bayankhoshuu, Selbe, Amgalan are the six new proposed district level centers (city

sub-centers). These district centers will encompass district level government services, retail centers, as well as apartment complexes.

District centers: Each khoroolol (neighborhood) will be divided into a planning unit and will have a public center that consists of neighborhood administration buildings, public event venues, small retail centers, banks, hospitals and schools.

Community centers: These local community centers will provide everyday services such as grocery stores, cultural and social activities all within short walking distance of residential areas.

LAND USE ZONING

A new city land use zoning system will be introduced in Ulaanbaatar. The zoning system will cover all land in Ulaanbaatar City and includes 7 zones: residential, commercial, industrial, open space, mixed use, engineering infrastructure and special purpose. The City zoning will be the primary method of managing and controlling new development in Ulaanbaatar.

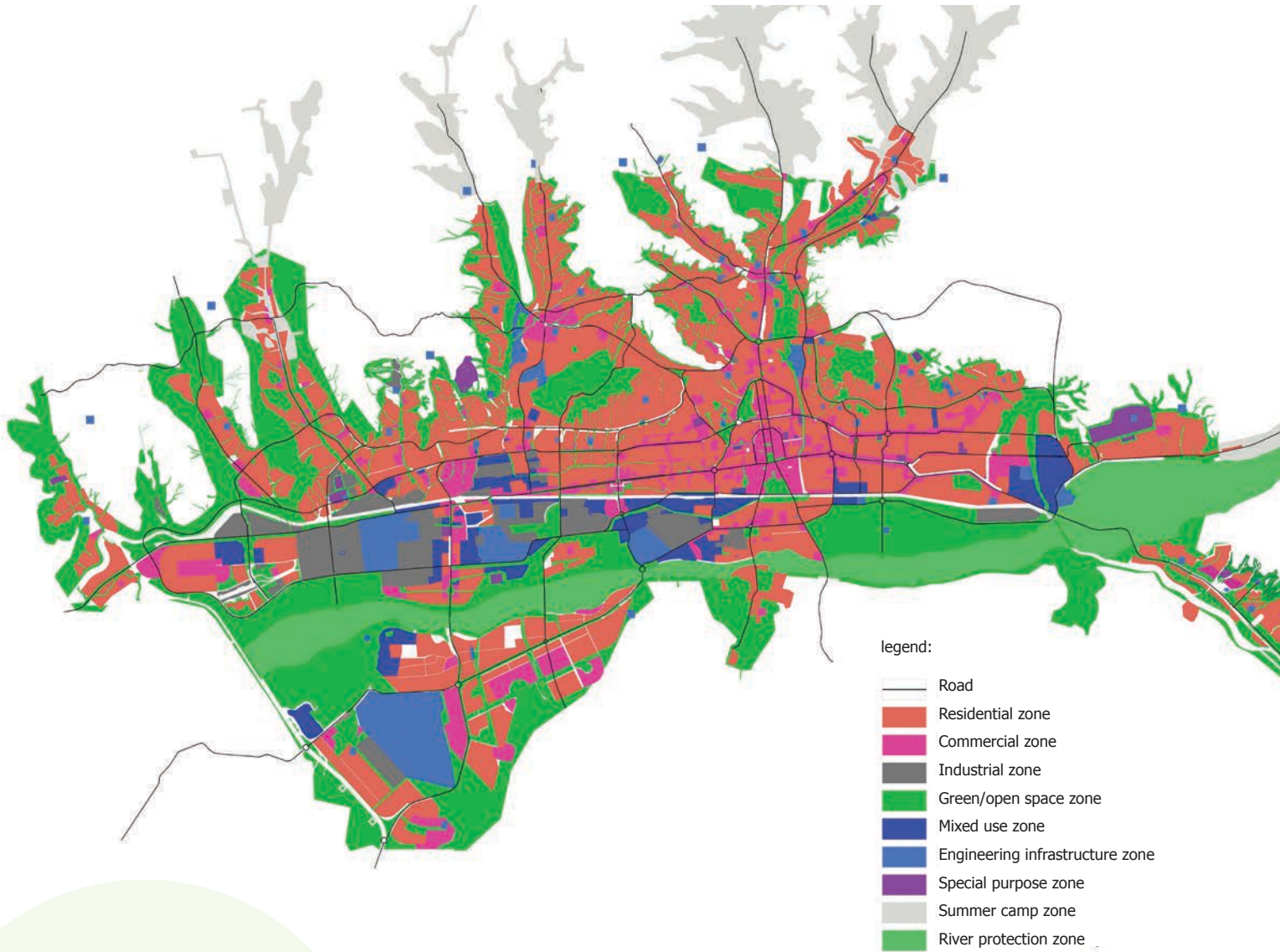
What is land use zoning?

Land use zoning is a regulation system of classifying land to control the development and use allowed in an area. Land use zoning is a common international urban planning tool. Land use zoning identifies permitted developments and uses within defined areas and is identified on a spatially on a plan. Land use zones have specific requirements that anyone using or residing on land, is required to follow.

Current urban planning issues in Ulaanbaatar to be resolved through land use zoning:

- Lack of the existing systematic city structure, organization, and boundaries in Ulaanbaatar is limited;
- Unplanned expansion of the city;
- Protecting public open space;
- Setting and reinforcing development and land use standards is challenging without a specific zoning system;
- To enable historic preservation;
- To establish system of land use, control and management.

LAND USE ZONING



Zones	Purpose
Residential	This zone is primarily for residential activities in a safe and livable environment. This zone includes many different types of housing, including low and high density housing. Other land uses negatively impacting the amenity of residential areas are not permitted in this zone.
Commercial	This zone is for commercial activities such as retail and service businesses to create centers for economic activity.
Industrial	This zone is for industrial activities and is located away from sensitive land uses like housing.
Green/Open Space	This zone includes the City's green areas such as parks and boulevards. Open spaces include areas for recreation, ecological conservation and to provide city residents with opportunities to view and enjoy nature.
Mixed Use	This zone is that allows a range of compatible land uses that do not cause nuisance to one another.
Engineering Infrastructure	This zone is for areas designated for existing and planned future engineering infrastructure facilities and networks.
Special Purpose	This zone encompasses uses that have unique requirements and include emergency management, military bases, solid waste facilities and cemeteries.

TRANSPORT

The transport network in Ulaanbaatar City includes the road infrastructure, public transport system, freight network and traffic management system. The development of the transport network will be coordinated with the growth of the city and land use development.

ROAD NETWORK

The proposed city centers and sub-centers are proposed to mitigate traffic congestion and redistribute the traffic evenly throughout the city. The centers and sub-centers will be connected through a network of major roads including 9 north-south corridors, 6 east-west corridors and 4 ring roads. Existing roads will be upgraded. In total Ulaanbaatar will have 1605.7 km of roads, including 1204 km of newly constructed roads. The city road network will be connected to the international highway network via the new Asian Highway 3.

TRAFFIC MANAGEMENT

Traffic management in Ulaanbaatar will be improved through the decentralization of the city and increased public transport services and the use technology systems to manage traffic. In addition there will be improved traffic regulation, limits on car use and improved car parking management.

PUBLIC TRANSPORT

Public transport is a crucial part of any urban economy. UB is aiming to establish an efficient mass transit system using bus rapid transit (BRT). The BRT system will have designated lanes for buses (not allowing any regular vehicle access) to ensure it is a fast and reliable high capacity system. The BRT system will be supported by the following public transport improvements including:

Upgrade the public transportation fleet and plan new routes

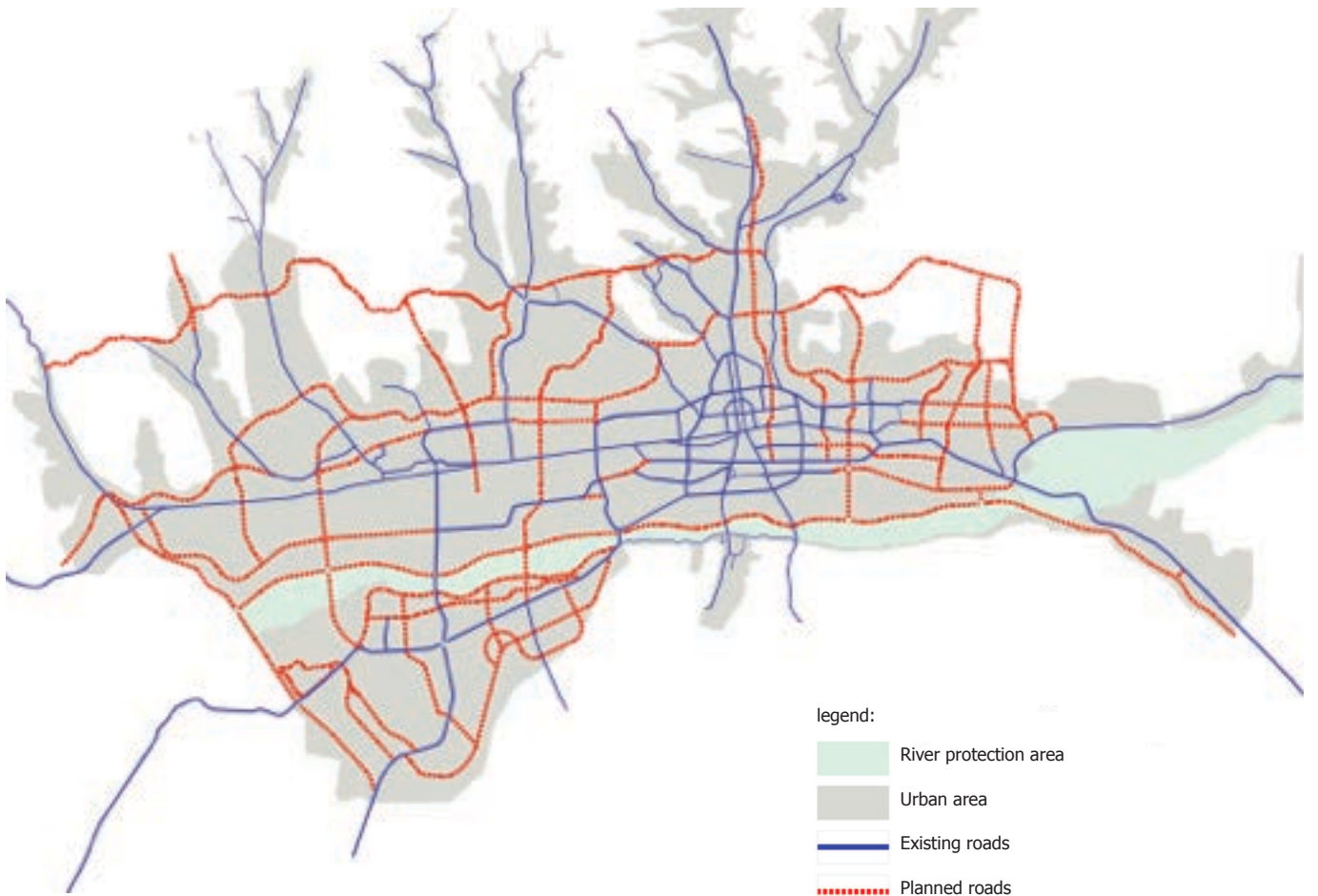
Implement state-of-the-art technology in the public transport system

Provide a multi-modal public transportation system that allows passengers to reach their destinations in shorter commute time; and

Improve traffic management by expanding the road network, giving public transit the right-of-way and reducing the overlap of the bus routes.



STREET AND ROAD NETWORK



SOCIAL INFRASTRUCTURE



The Master Plan 2030 proposes three main aims for economic growth for Ulaanbaatar, through an increased focus on manufacturing to increase GDP per capita by 3.5 times from 2010 to 2030 and increase employment by 2.3 times and integrating the local workforce with planned development areas. Sufficient social infrastructure, including schools, kindergartens, hospitals, cultural venues and community centers will be built to meet the City's demand.

There will be sufficient school facilities to meet the demand for the projected number of school aged children by 2030, by building new schools that will provide a total capacity of 344,612 students.

Kindergartens for 172,306 children will be built by 2030. This will ensure a sufficient number of kindergartens is provided to meet the needs of all kindergarten aged children.

There will be hospitals built to meet the projected capacity of 13,806 beds by 2020 and 15,868 beds by 2030.

№	Items	Measuring Units	Existing	Planned	
			2010	2020	2030
1	Schools (secondary)	Seats	179,693	306,811	344,612
2	Kindergartens	Children	46,552	153,405	172,306
3	Hospitals	Beds	1,776	13,806	15,868

№	Items	Measuring Units	Planned	
			2020	2030
1	Cinema	Seats	8,955	10,890
2	Museums	Area (m ²)	8,955	10,890
3	Cultural palace	Seats	17,910	21,780
4	Sports complexes	Area (m ²)	23,880	29,040

HOUSING

Ulaanbaatar's apartment areas accommodate a large proportion of the city's residents in medium to high density apartment buildings. By 2030, Ulaanbaatar is projected to have 388,900 households and 70.1% of all households will live in apartments. 32 khoroolol (neighborhoods) are to be built as apartment complexes in Ulaanbaatar. Each khoroolol will have planned

social infrastructure such as schools, and hospitals, as well as parks and grocery stores. Vehicle parking facilities will be built within the khoroolol as needed. There will be two types of residential khoroolols: high rise developments that are connected to the city utility grid and low rise developments that are connected to smaller local utility grids.

ADDITIONAL INFORMATION

More detailed information on housing plans and proposals can be obtained from the Master Planning Agency of the Capital City. The Agency also provides information about Ulaanbaatar buildings, urban planning, and signage.

Website: www.mpa.ub.gov.mn

Tel: +976-11-320561

Fax: + 976-11-321808

Indicators	2010			2020			2030		
	Household	Population	%	Household	Population	%	Household	Population	%
Total households	266457	1051564	100.0	333900	1235500	100.0	388900	1400000	100.0
Total housing	116067	438650	41.7	195300	722600	58.5	272700	981600	70.1
New apartments	-	-	-	79233	283950	23.0	77900	259000	18.5
Total households living in apartment	116067	438650	41.7	195300	722600	58.5	280249	980872	70.1

Administrative planning units

The Master Plan 2030 divides the city into 47 khoroolols (neighborhoods) as administrative planning units. The 47 khoroolols include 22 residential apartment khoroolols, 10 public service khoroolols, 10 redeveloped ger khoroolols, and 5 industrial khoroolols.

GER AREA REDEVELOPMENT

Over recent decades the informal settlements on the fringe of the city have become the ger areas and a substantial part of the city accommodating more than 60% of the city's residents. The fast and unplanned growth of the ger areas has resulted in many issues includ-

ing inadequate urban public services and infrastructure, poor quality construction, air pollution and a range of environmental issues. The redevelopment of the ger areas aims to address these issues by increasing densities in the inner areas and controlling further expansion in the outer areas of the city.

Central Area

This area can be connected to the city utility grid. The redevelopment process will consider public participation. High rise and midrise apartments will be constructed.

Middle Area

Residential neighborhoods within this area will have self-sustaining utilities or partially connected to the city utility grid. The buildings will be mid-to-low rise apartments.

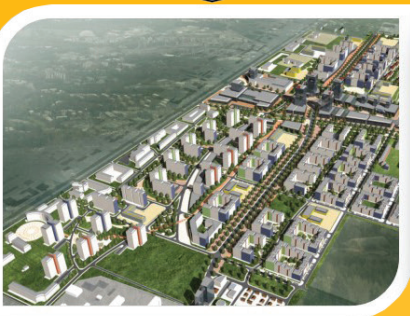
Fringe Area

The redevelopment in this area is proposing to build low rise development, including private houses with self-sustaining utilities.

Central ger area



High to mid-rise apartment area



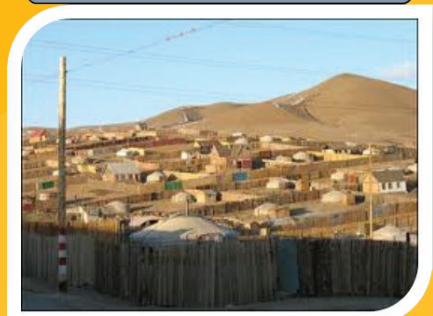
Midtier ger area



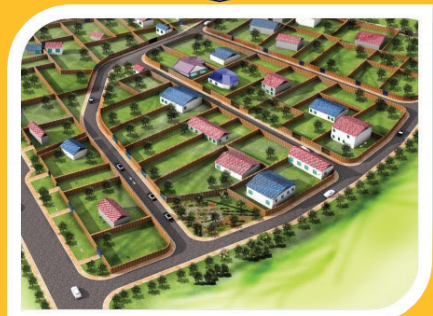
Mid to low-rise apartment area



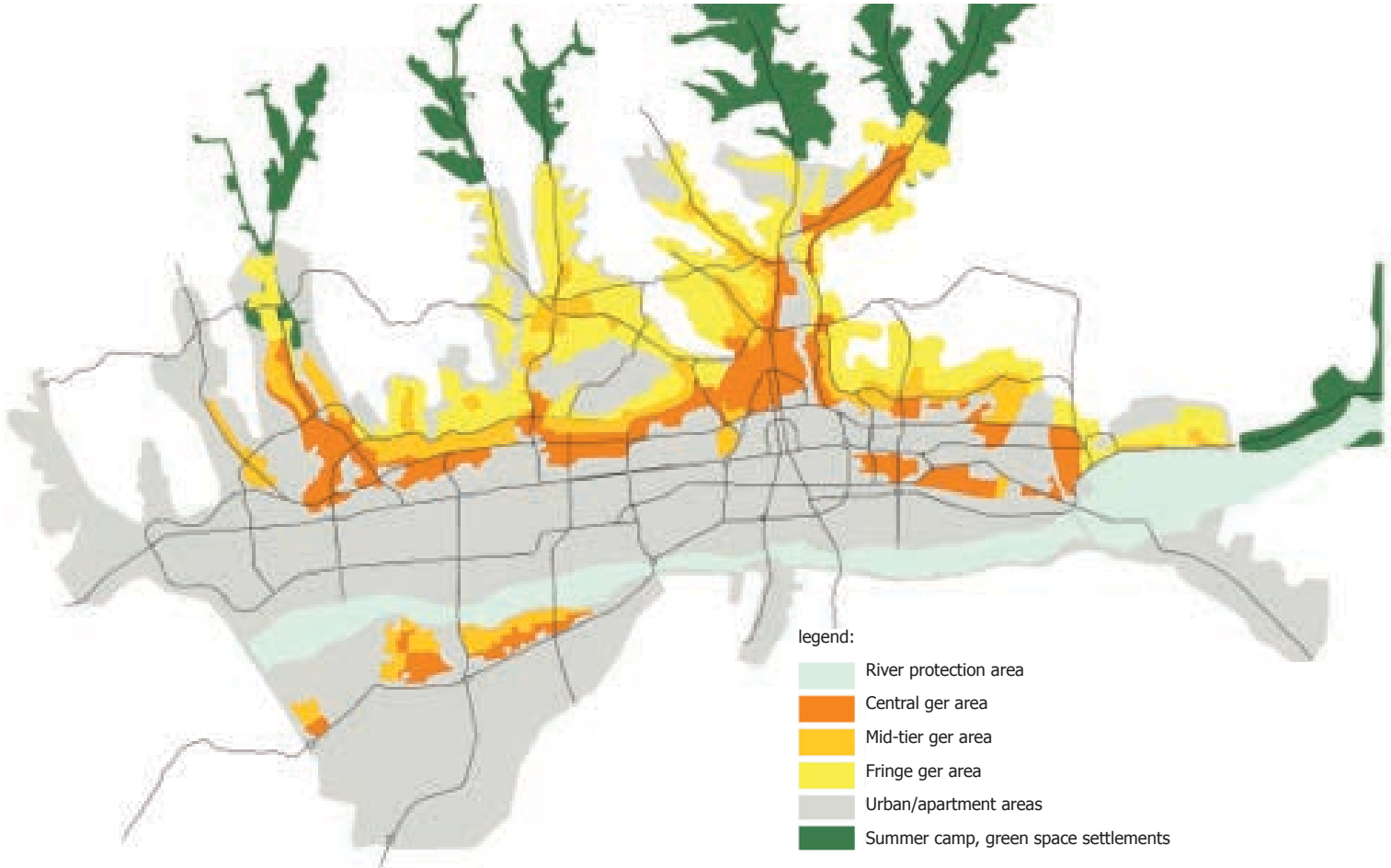
Fringe ger area



Improved ger area



GER AREAS REDEVELOPMENT



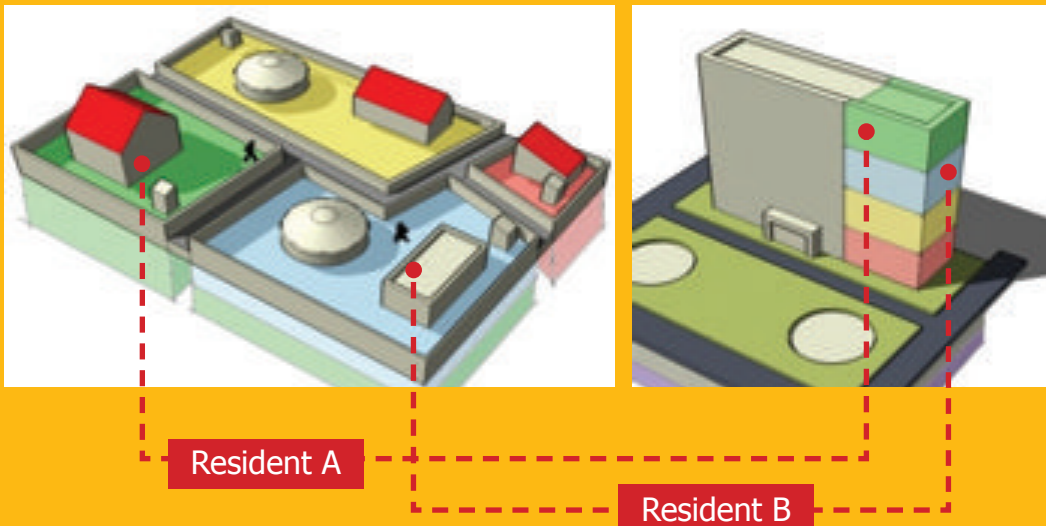
REDEVELOPMENT

Public participation is an important part of the redevelopment of the ger areas. This process is regulated by the "Ger Areas Redevelopment Process Ordinance" approved by the City Council. The Ger Areas Development Authority is responsible for coordination of the redevelopment project.

For more information:

ger.ub.gov.mn
mpa.ub.gov.mn

Example of the ger redevelopment process where ger area residents exchange their land for an apartment in the redevelopment



INFRASTRUCTURE

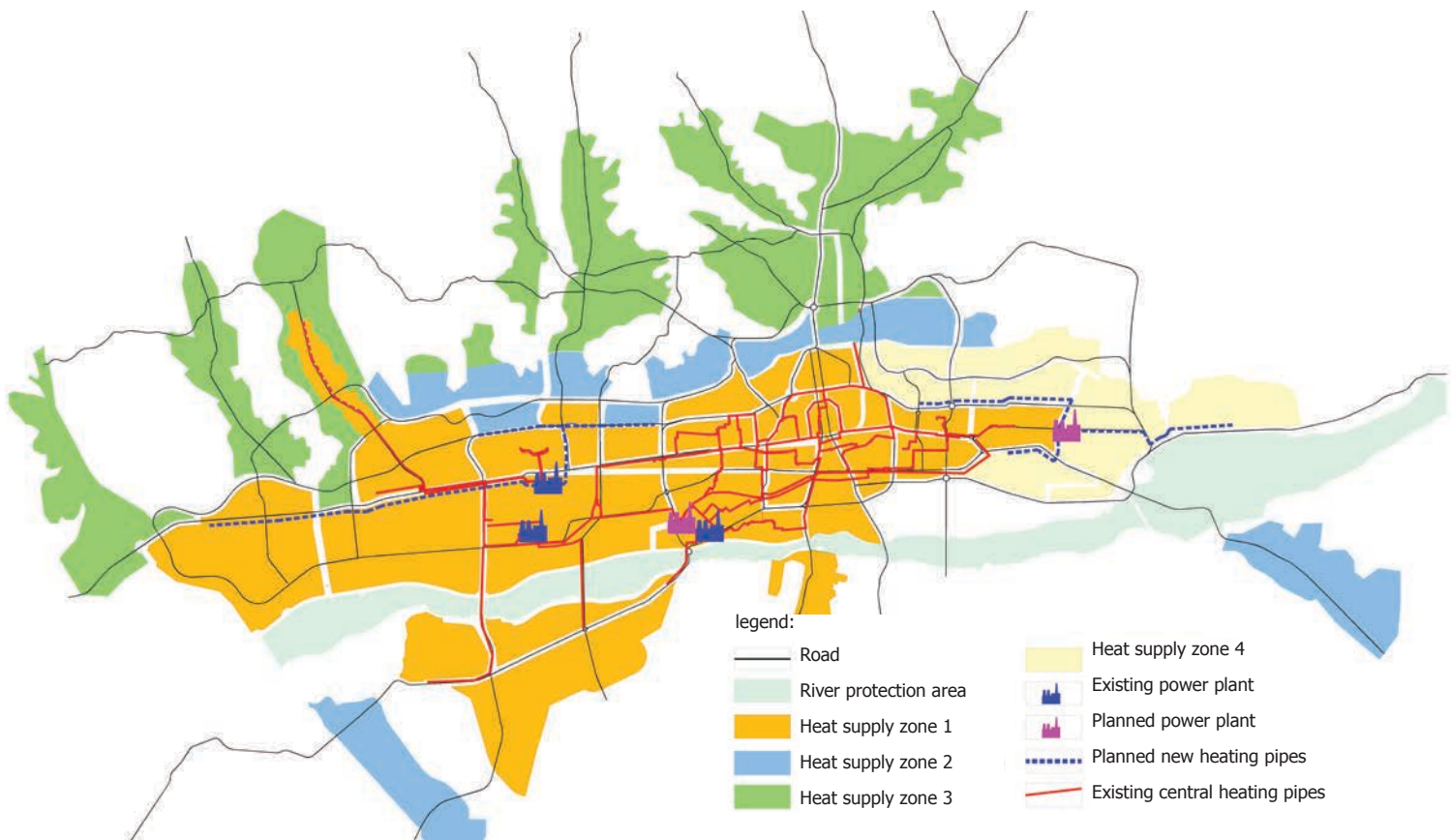
The projected increase in population by 2030 will result in increased demand on the existing the electricity, heat, potable water, and sewage system. The following strategies and projects are proposed to address the increased demand.

HEATING

The provision of heating infrastructure will be provided through the central heating system, a partially central system or a combination of both systems. Based on projected population and development, Ulaanbaatar is divided into the following four supply areas.

1. Zone 1 – Centrally supplied
2. Zone 2 – Heat only Boilers
3. Zone 3 – Heat only Boilers, independently supplied
4. Zone 4 – Centrally supplied, Heat only Boilers

HEATING SUPPLY



TELECOMMUNICATION

A state-of-the-art, high-speed fiber optic network that allows transmission of multiple channel information will be constructed in Ulaanbaatar. Whereas, relatively remote areas will be served by cellular service to meet communication requirements.

FLOOD MANAGEMENT

Flood control areas will be identified in Ulaanbaatar and flood control infrastructure to store and redirect flood waters will be constructed where required. The Mayor's Office of Ulaanbaatar City will be responsible for the implementation of flood control and planning, and the Ulaanbaatar Public Service Consortium will be responsible for maintenance.

POTABLE WATER AND WASTE WATER

The long term future and viability of Ulaanbaatar is dependent on the availability of scarce water resources. Therefore, the protection and security of water resources is a key priority.

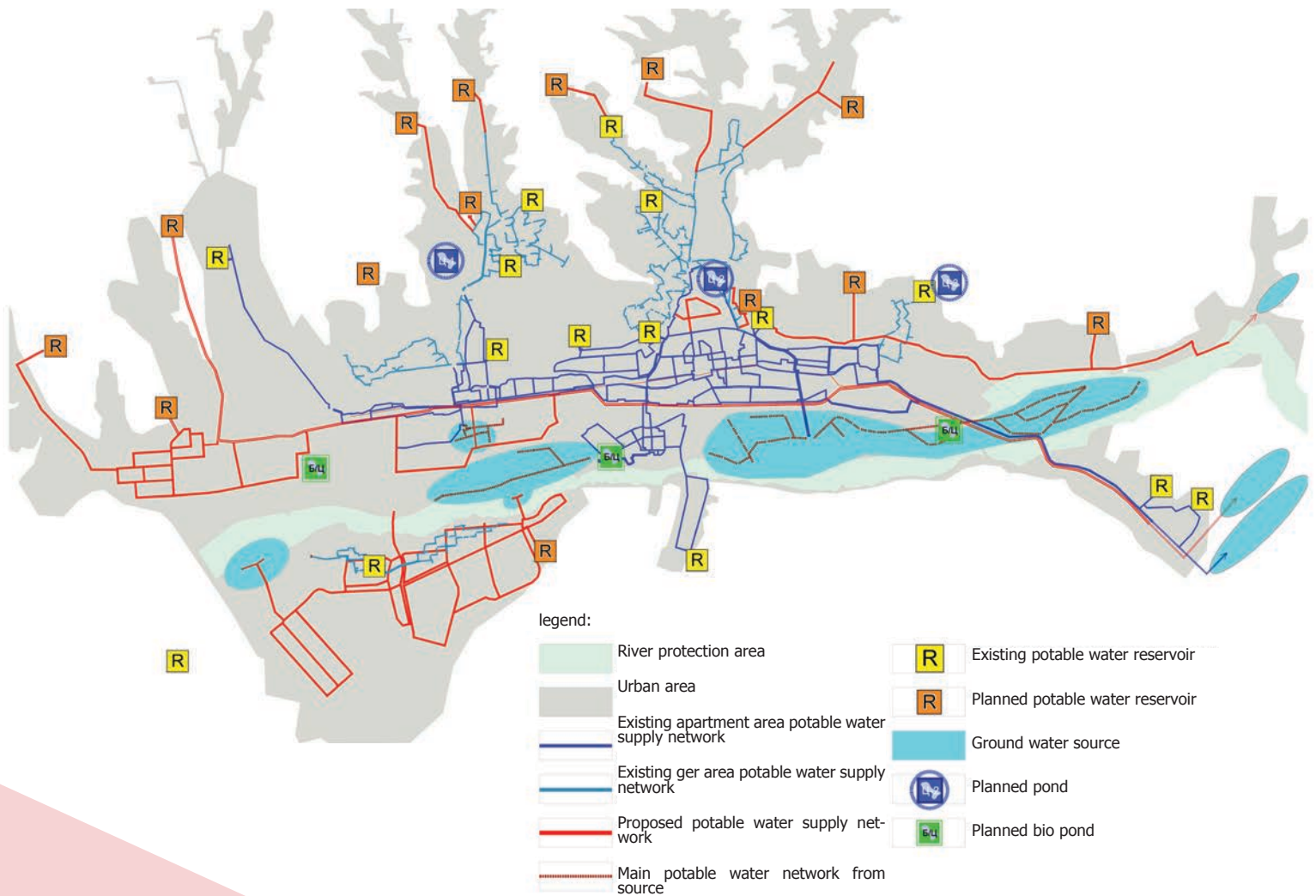
Due to limited natural water resources, the City is reliant on 2 water sources for drinking water: groundwater aquifers and river water. Treated grey water is also used for industrial purposes. New infrastructure will be constructed to provide Ulaanbaatar with water from these sources.

In regards to waste water treatment, existing facilities have limited capacity to meeting future demand. The existing plant will be improved using state-of-the-art technologies and additional waste water treatment plants will be established to meet demand.

ELECTRICITY

The current central electricity supply will be expanded by the proposed Power Plant 5, Ulaanbaatar hydro-power plant, and wind farm located in Sergelen soum, Töv province. With the additional electricity produced by the new projects, there will be sufficient electricity enough to supply Ulaanbaatar by 2030. The total electricity produced on the central grid will be 1850 megawatt by 2030.

WATER SUPPLY AND NETWORK



ENVIRONMENT

An eco-city is a city that does not create negative impact on the natural environment, can be passed on to the next generation, and has a great quality of life. This can be achieved only when government and public work in partnership.

- Designate rivers as special protection areas and renew the existing protection area boundaries
- Create green areas to buffer residential areas from other uses and areas
- Increase the size of special protected areas
- Discourage the use of raw coal
- Improve air, soil, and water quality monitoring
- Encourage the implementation of waste water treatment technology
- Implement river enhancement projects
- Improve the forest preservation management and monitoring system
- Limit the exploration and mining activities within and around the city



PARKS AND OPEN SPACE

Ulaanbaatar is proposing to establish waterfront open space along Ulaanbaatar's major three rivers (Tuul River, Selbe River and Uliastai River) and smaller streams. The open space will provide connected parks and green space within the city for residents and tourists. More than 30 parks on 3780.4 hectares of land will be built by 2030. By 2030 the city will have 30.3 square meters of open space per resident and 12% (4236.1 hectares) of the city will be open space.

BENEFITS OF PARKS

The benefits of parks and open space include providing shade and reducing city temperatures during summer and help to mitigate wind and snowstorms during other seasons. Open space also contributes to reducing air and noise pollution, providing a natural balance with the built environment and providing an attractive environment.



PROPOSED PUBLIC GREEN AND OPEN SPACE



FURTHER INFORMATION ON THE MASTER PLAN

For further information on the Master Plan 2030 contact the Master Planning Agency of the Capital City.

Website: www.mpa.ub.gov.mn

Khangarid Tower Level 11 and 13, Chingeltei District 1, Ulaanbaatar 15160, Mongolia

Telephone: +976-11-320461; Fax: +976-11-321808

The Master Plan 2030 is available online from the following website:

<http://mpa.ub.gov.mn/index.php/neelttei-medeel/et/1007-2020-2030.html>

Further information on the Master Plan 2030 can also be obtained from the Open Government Hotline 11-11 Center

Telephone: 1111 Website: www.11-11.mn

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