

Yangon's Urban Development Master Plan & Priority Projects



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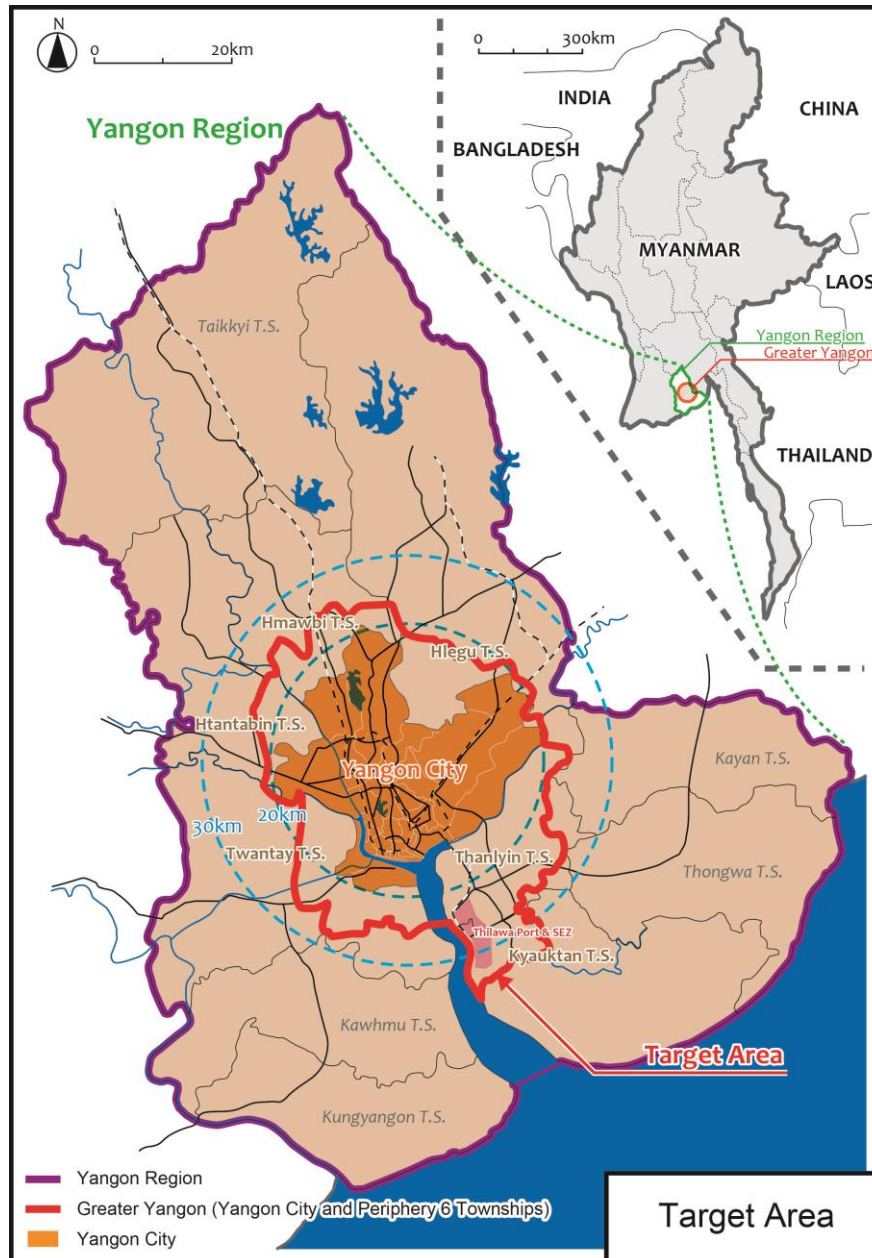
20-3-2018



Contents

- Administrative Boundary of Yangon;
- Master Plan of Yangon
 - Urban Development Structure Plan;
 - Priority Projects;
- Supporting Projects to Yangon Vision 2040;

Administrative Boundary of Yangon



- Yangon City
Area (794km²),
Population (5.74mil.)
- Greater Yangon
Area (1,500km²)
Population (6.4mil.)
- Yangon Region
Area (10,170km²),
Population (7.4mil.)

Population based on 2014 census

Schematic Structure

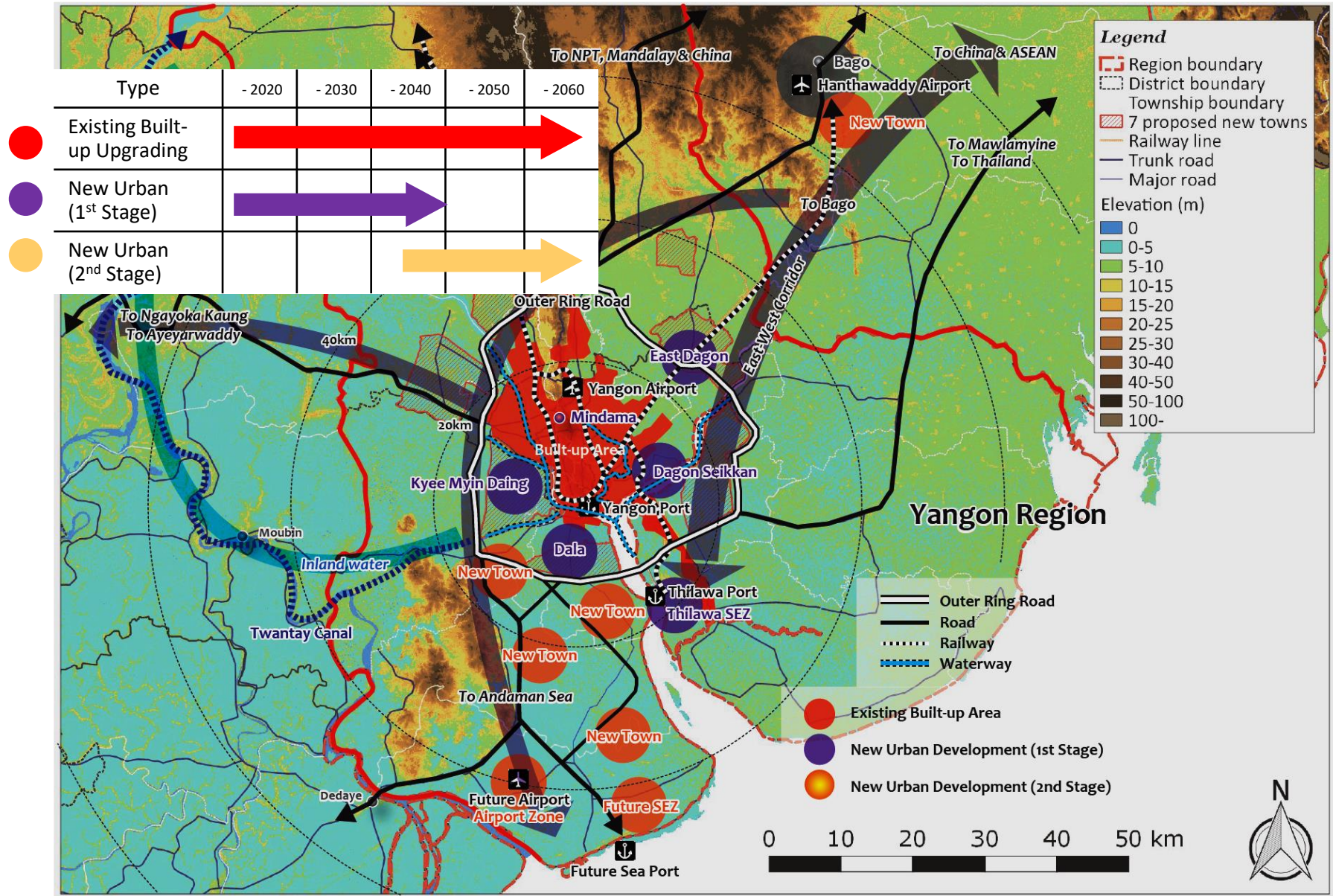
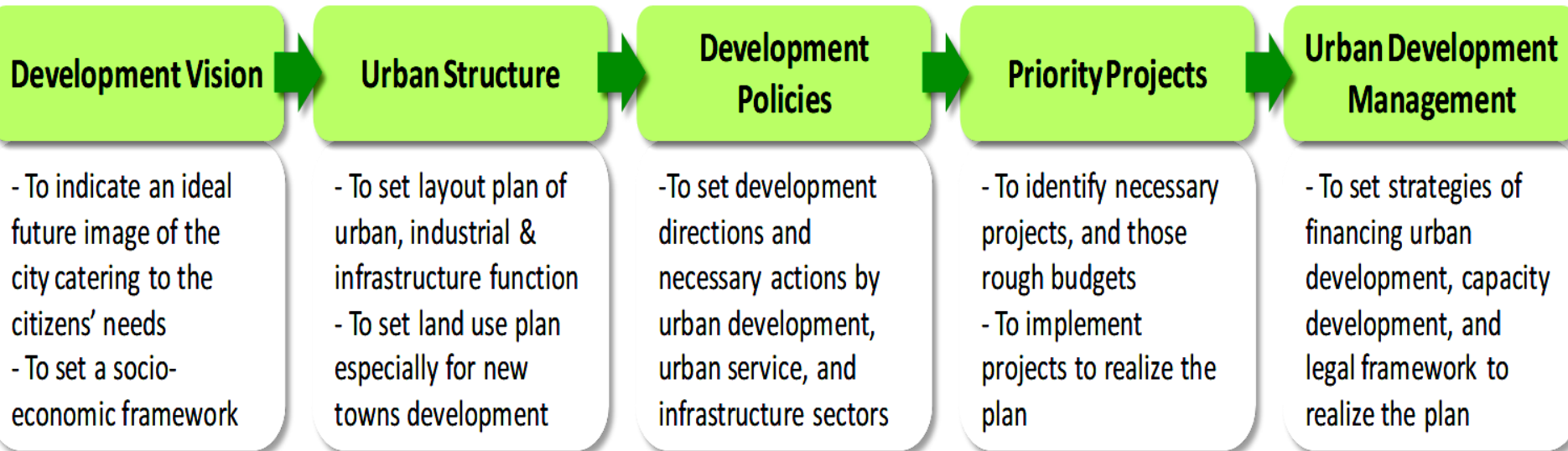


Figure: Revised Schematic Structure by JICA & YCDC, 2016

Planning Framework

Main Items



Development Vision

Urban Structure of Greater Yangon, 2012

“Sub-center with Green Isle System”

1 second CBD, 4 Sub-center,
7 New Town

Urban Structure of Greater Yangon, 2016

“Sub-center with Green Isle System”

1 second CBD, 5 Sub-center,
3 New Town



To be an International HUB City

International Gateway
Economical Development
Employment Opportunity
Center of Nation Growth Center
Non-traditional Industry

To be a Comfortable City

High Living Standard Health-care
Rich Green MultiEthnic
Knowledge Heritage & Culture
Education Disaster Risk Reduction

Yangon 2040

The Peaceful and Beloved Yangon
- A City of Green and Gold -

To be a Well-Managed Infrastructure City

Transportation and Road Railway
Water Supply Port and Logistics
Sewerage and Drainage
Solid Waste Management
Telecommunication Electricity

To be a City of Good-Governance

Sustainability Law and Rule
Housing System Good Governance
Systematic Land-use Leader of Nation
Development & Building Control

International Logistics HUB City

- International Port (River & Sea)
- Inland Water Transport
- Development Corridor
- SEZ and Industrial Development

Knowledge & Comfortable City

- Research & Development (R&D)
- Heritages, Culture & History
- Living Environment & Housing
- Rich Green and Garden

Yangon Future Vision

Attractive International Port & Logistics HUB
- A City of Blue, Green and Gold -

Well-Managed Infrastructure City

- Integrated Public Transport
- Infrastructure Development
- Disaster Risk Management
- Social Service and Health Care

Good-Governance City

- Rule of Law
- Land Use & Zoning Regulations
- Urban Financial & Taxation
- Institutional & Human Capacity

Urban Structure

Key Approaches

1. Compact

Urban expansion shall be basically limited inside of the outer ring road

2. Decentralization

Urban center function shall be dispersed to outer areas

3. Three Growth Axis

Three axis along trunk roads and railways shall be strengthened.

4. Three New Cities

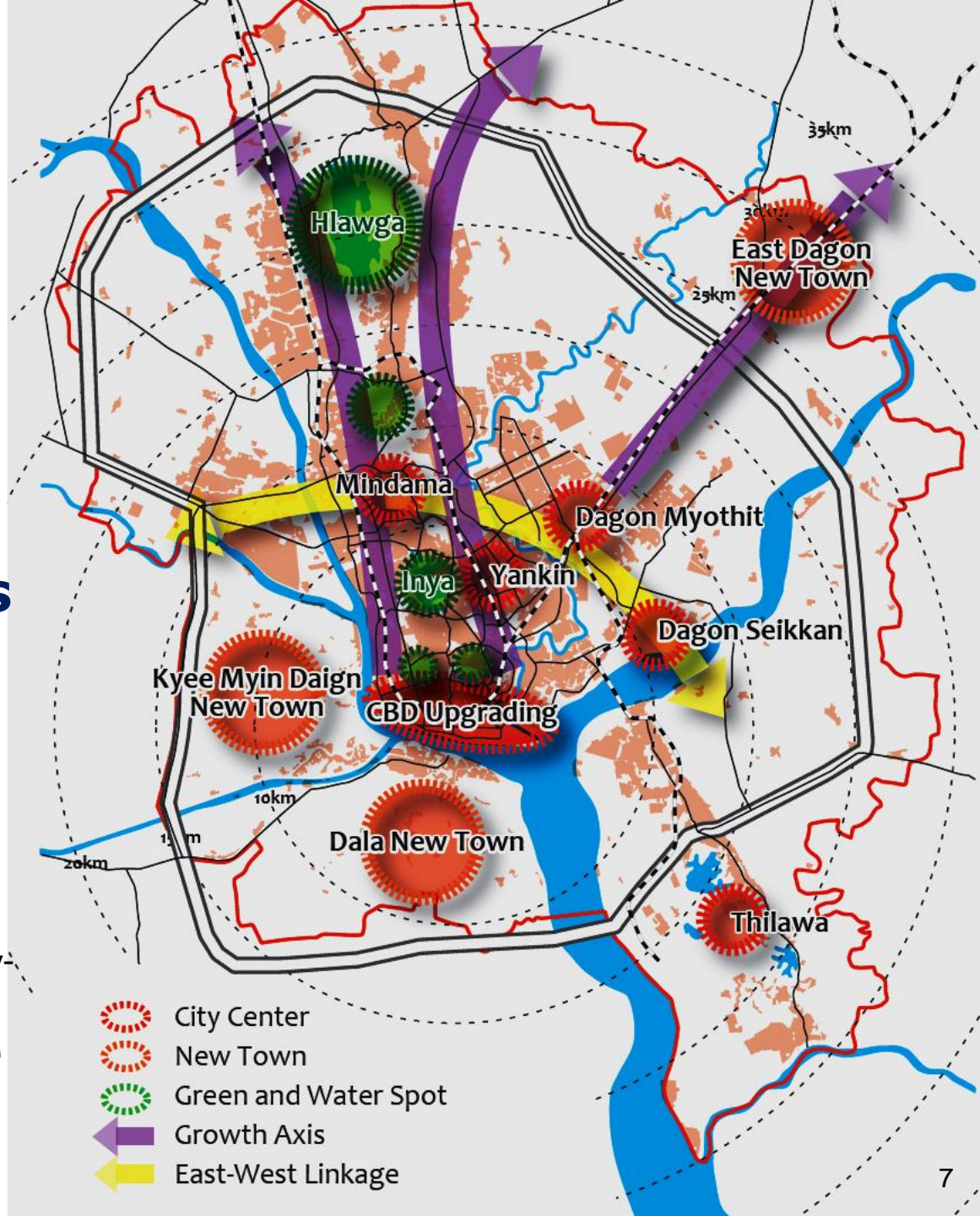
Three new towns of suburb shall be developed with large-scale.

5. CBD Renovation

Current CBD shall be renovated as more pedestrian, cultural ecologically-friendly.

6. Transport Linkage

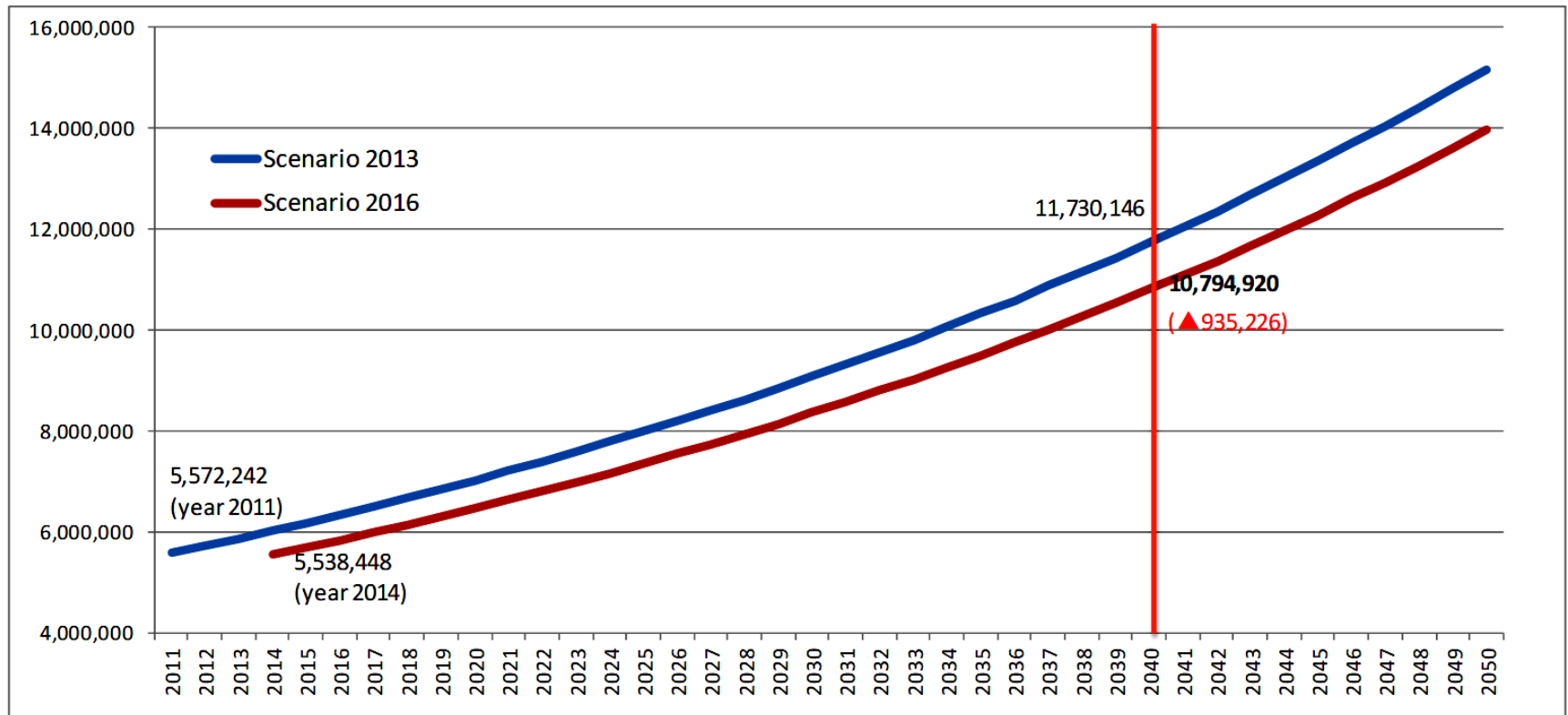
Bus, railway, waterway and other public way shall be improved.



Urban Structure

Future Population

1. Baseline population is 5,746,414 (National Census in 2014)
2. Applying **2.60%** of annual growth rate, the population of 2040 will be **10,794,920**
3. New built-up areas shall be allocated to accommodate **5.2 million** (increase population by 2040) in total.





Population Forecast toward 2040







Urban Structure

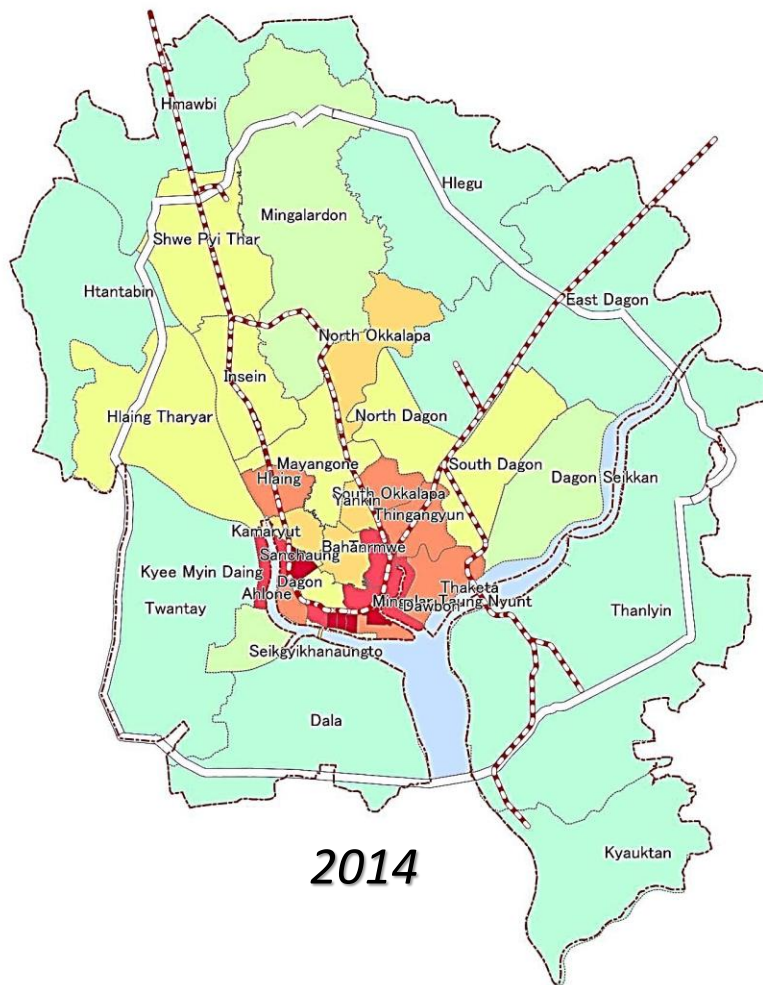
Population Density

Legend

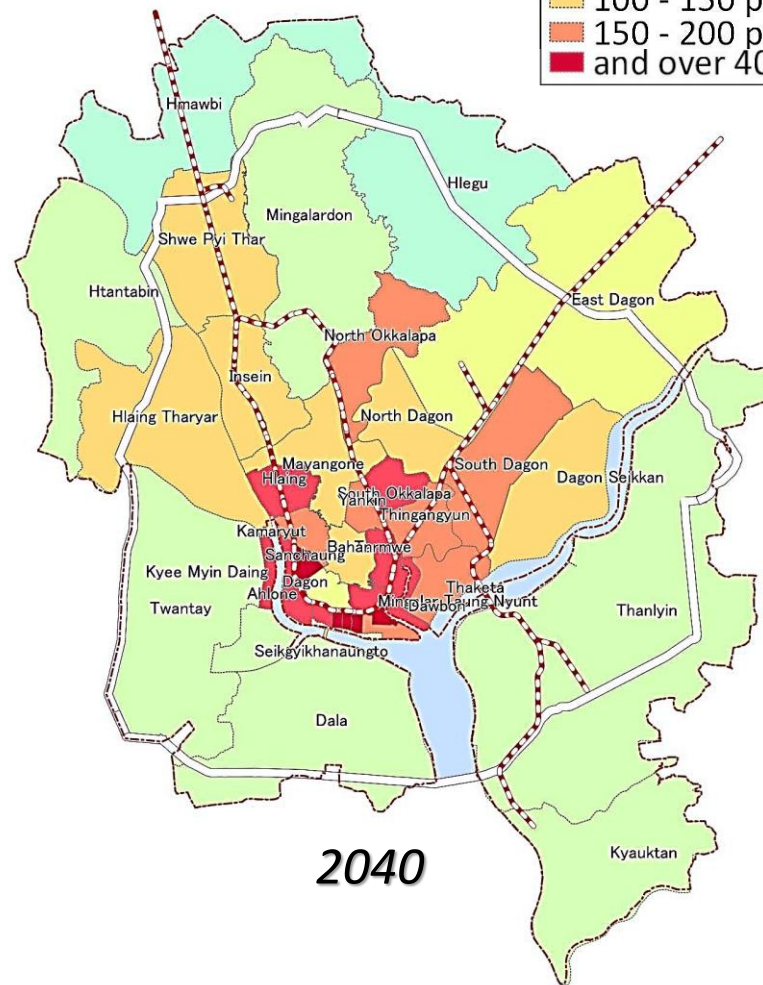
-  project boundary
-  Railway line
-  Outer ring road

Population Density

-  under 20 people/ha
-  20 - 50 people/ha
-  50 - 100 people/ha
-  100 - 150 people/ha
-  150 - 200 people/ha
-  and over 400 people/ha



2014



2040

Population Density by Township

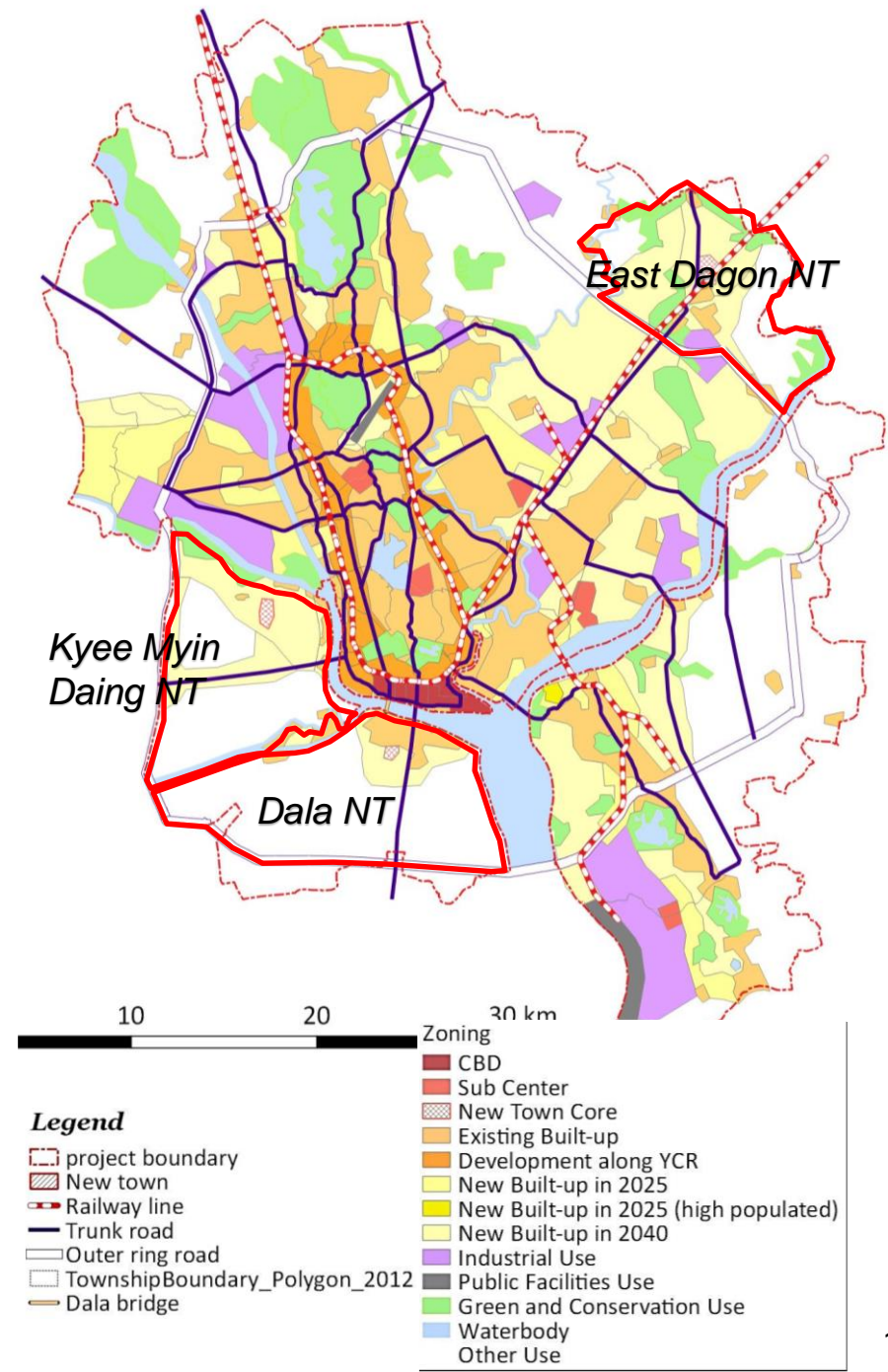
Urban Structure

More detailed planning on 3 suburb new towns will be conducted. The points of consideration are shown as below:

1. Linkage to public transportation (e.g. MRT, BRT)
2. Consideration of Land Suitability
 - Assessment of flooding risk in low-lying area
 - Necessity of additional land development cost to avoid flooding

New Urban Development

- ❖ Sub-centers
- ❖ New Towns
- ❖ Railway Stations
- ❖ Industrial Zones



Sub-center Development

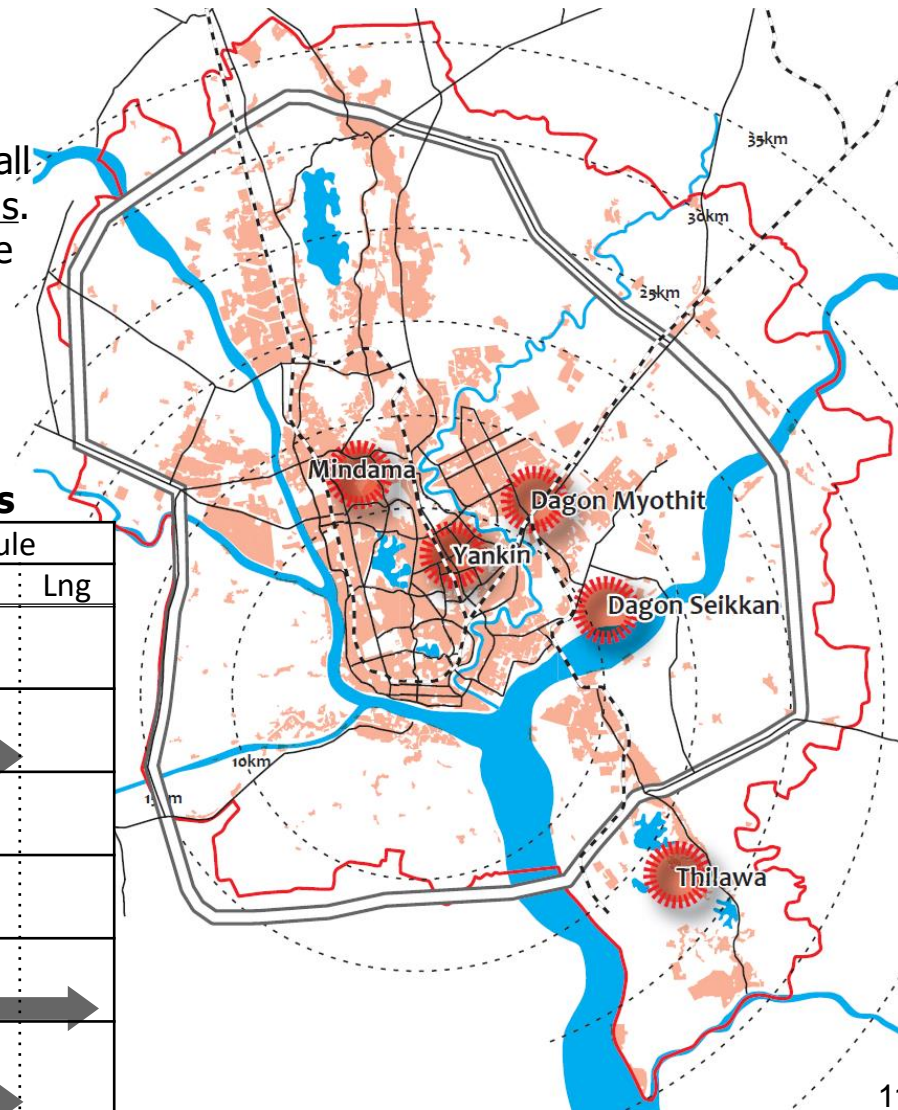
Policy

1. To promote decentralization, five sub-centers are designed around 10km distance from the exiting CBD.
2. To accelerate economic activities, commercial and business function shall be accumulated in public-owned lands.
3. To stimulate people's attention for the future, advanced and well-designed urban facilities shall be introduced.

Spec

Total Site Area: **360ha** (900acre)
 Total Floor Area: **1,350ha** (3,375acre)
 No. of Estimated Labors: **270 thousands**

Name	Township	Net Area	Schedule		
			Sht	Mid	Lng
Mindama Secondary CBD	Mayangon	20 ha (50 acre)	→		
Mindama Secondary CBD	Insein	60 ha (150 acre)		→	
Yankin Sub-center	Yankin	80 ha (200 acre)	→		
Thilawa SEZ Sub-center	Thanlyin	40 ha (100 acre)	→		
Thikawa SEZ Sub-center	Kyauktan	80 ha (200 acre)			→
Dagon Myothit Sub-center	North Dagon	40 ha (100 acre)		→	
Dagon Seikkan Sub-center	Dagon Seikkan	40 ha (100 acre)		→	



Sub-center Development

Mindama

200 acre



Characterized function

- Trade center
- Banking
- Administration

Thilawa

300 acre



- R&D
- Logistics
- IT software

Yankin

200 acre



- Commercial
- Tourism center
- Offices

Myothit

100 acre



- Hotel complex
- Sports & leisure
- R&D

Seikkan

100 acre



- Amusement
- Inland port
- Business



Futakotamagawa RISE Redevelopment Project



Kashiwanoha Smart City

New Town Development

Policy

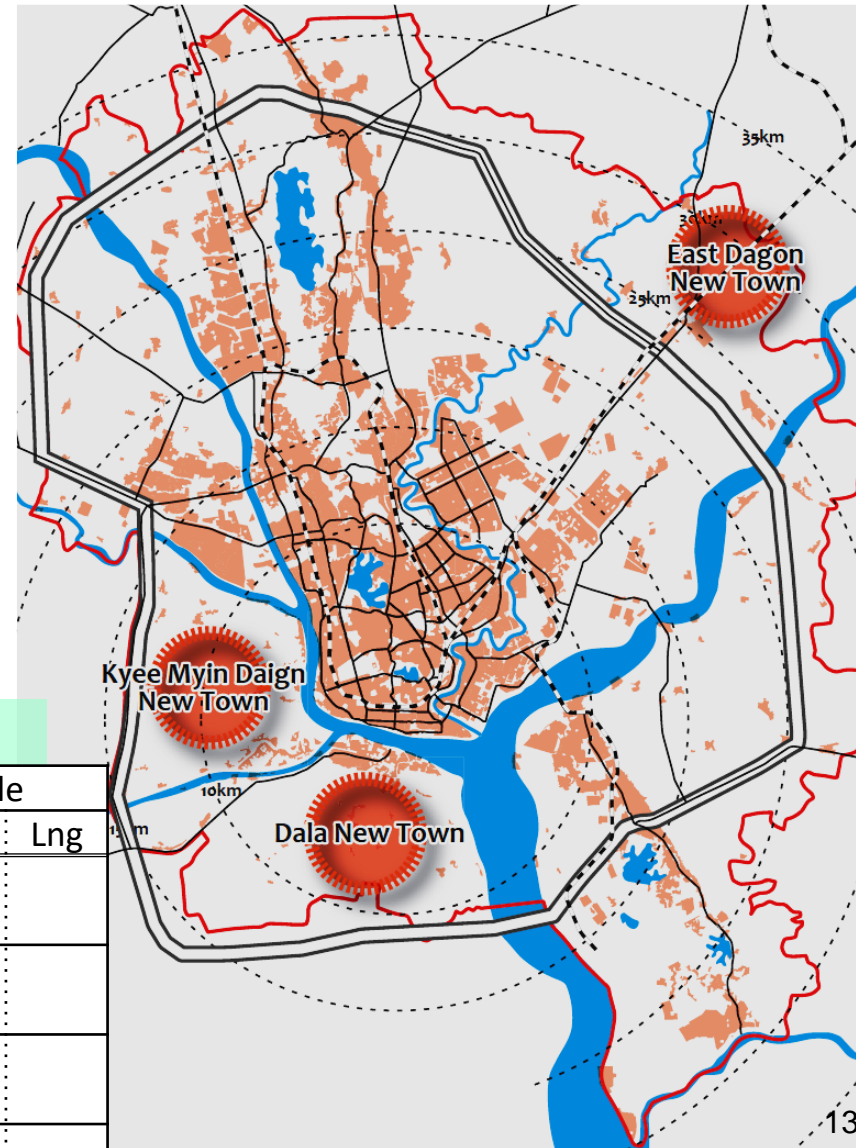
1. To accommodate an amount of more population, 4 remote areas having a plenty of unused lands and farmlands are designed as new cities.
2. To be independence from exiting built-up, urban function for stand-alone shall be provided in close connection with work place and residence.
3. Rich green and water in the urban area shall be designed and provided.

Area Spec

Total Site Area: **9,400ha** (23,000acre)
No. of Estimated Population: **1 million**

New Town Core

Total Site Area: **250ha** (625acre)
Total Floor Area: **680ha** (1,700acre)
No. of Estimated Labors: **136 thousands**



Name	Township Location	Net Area	Schedule		
			Sht	Mid	Lng
Kyee Myin Daing New Town Core	Twantay	50 ha (125 acre)	➔		
Kyee Myin Daing New Town Core	Kyee Myin Daing	50 ha (125 acre)	➔		
Dagon East New Town Core	East Dagon	100 ha (250 acre)	➔		
Dala New Town Core	Dala	50 ha (125 acre)		➔	

New Town Development

Kyee Myine Daing

Whole area: 9,000 acre
Core area: 250 acre

Characterized function

- Stand-alone satellite city
- Education city (university)

East Dagon

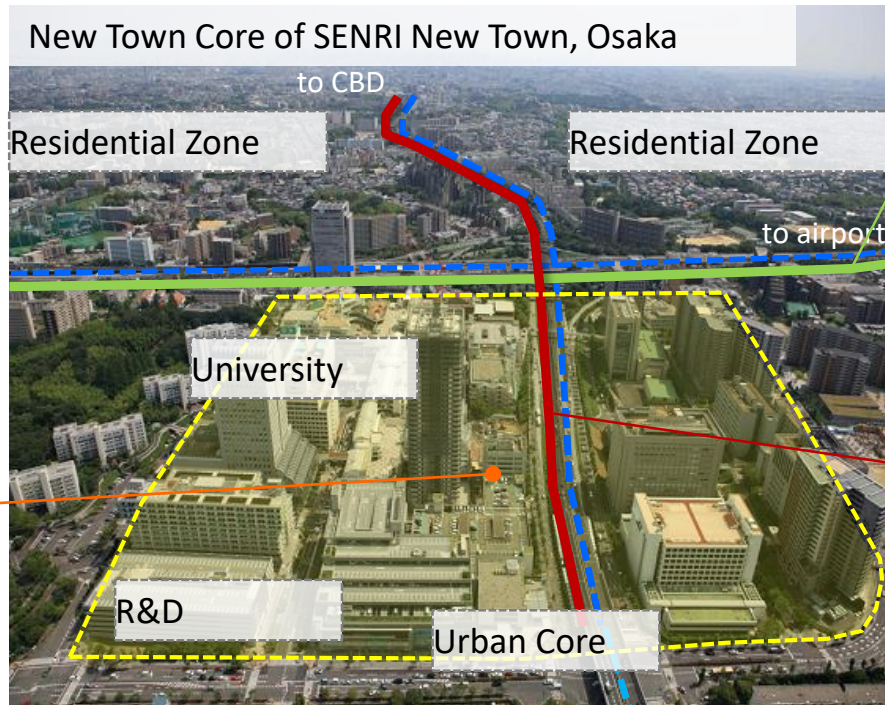
Whole area: 9,500 acre
Core area: 250 acre

- Stand-alone satellite city
- Research city (R&D)

Dala

Whole area: 4,000 acre
Core area: 125 acre

- Commuter city connected with CBD



Core Area: 25ha(65 acre) 14



Bus terminal accessing from/to surrounding residential areas

Railway Station Area Development

Policy

1. To function railway well and increase ridership, 7 railway station areas of YCR are designed for commercial/ business and transit node.
2. To promote transit oriented development (TOD) coming from surrounding areas by feeder, multi-modal function shall be provided in the areas.

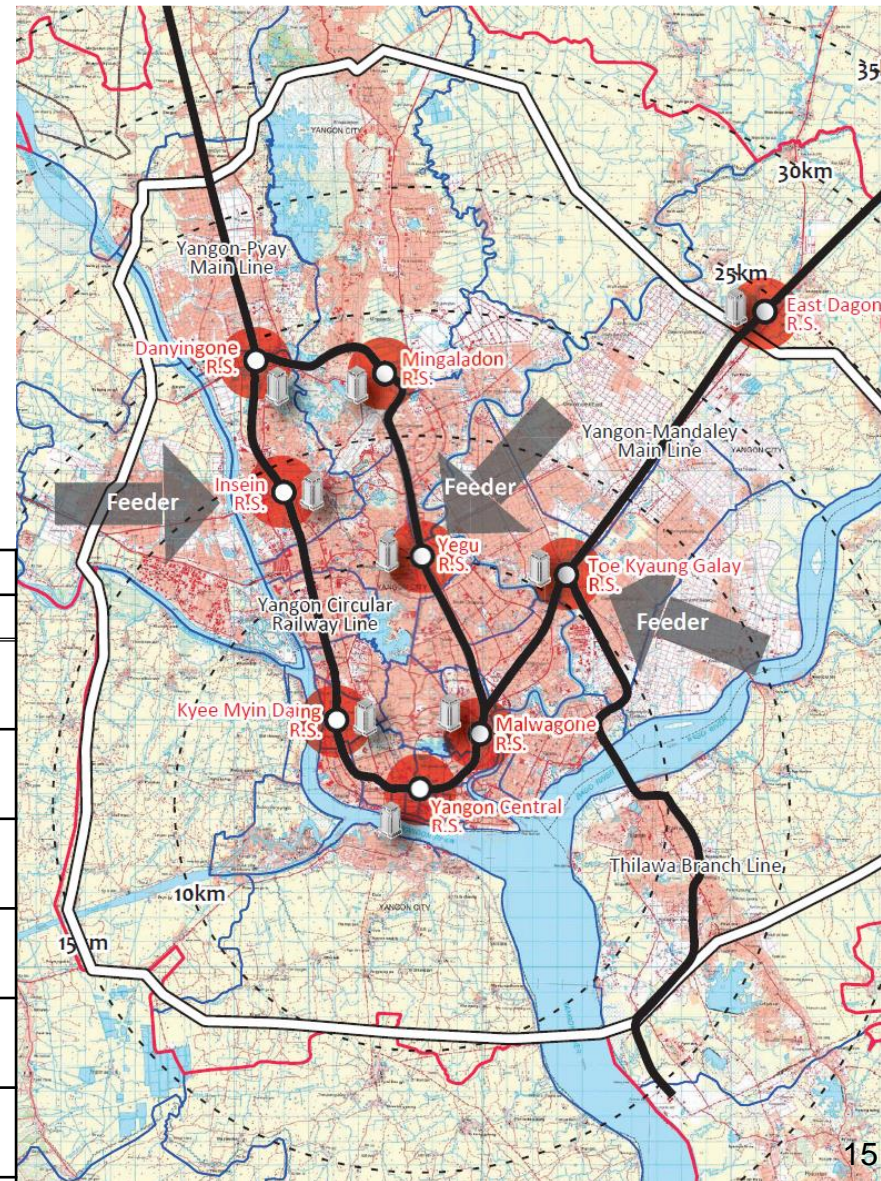
Spec

Total Site Area: **150ha** (375acre)

Total Floor Area: **500ha** (1,248acre)

No. of Estimated Workers: **100 thousands**

Name	Township	Net Area	Schedule		
			Sht	Mid	Lng
Yangon Central R.S.	Mingalar Taung Nynt	15 ha (38 acre)	→		
Kyee Myin Daing R.S.	Kyee Myin Daing	5 ha (13 acre)		→	
Malwagone R.S.	Mingalar Taung Nynt	40ha (100 acre)		→	
Insein R.S.	Insein	20 ha (50 acre)	→		
Yegu R.S.	Mayangon	10 ha (25 acre)	→		
Mingaladon R.S.	Mingaladon	50 ha (125 acre)		→	
Danyingone R.S.	Insein	10ha (25 acre)		→	



Railway Station Area Development

Yangon Central

40 acre

Characterized function

- Emblem station of the nation
- Gateway of CBD

Kyee Myin Daing

25 acre

- Commercial and business function accumulated station

Insein Yegu

75 acre

- Transit node station from surrounding areas

Danyingone Mingaladon Malwagon

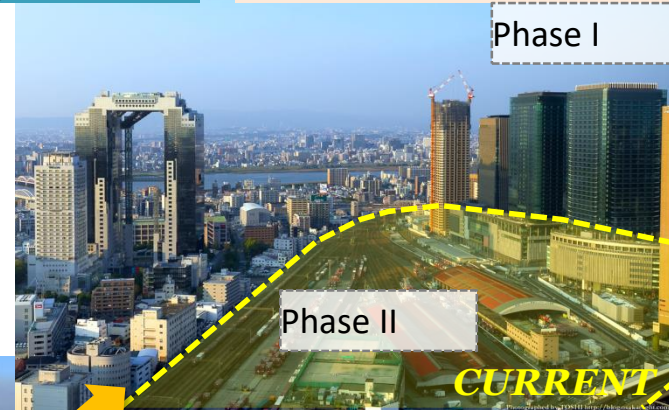
250 acre

- Intercity terminal station

Yangon Central Railway Station



Phase I



Phase II



Area: 24ha(60 acre)
Previous land use:
 Marshal yard
 Land Use: Office,
 Commercial etc.

Umeda North Area Re-development Project

Industrial & Logistics Development

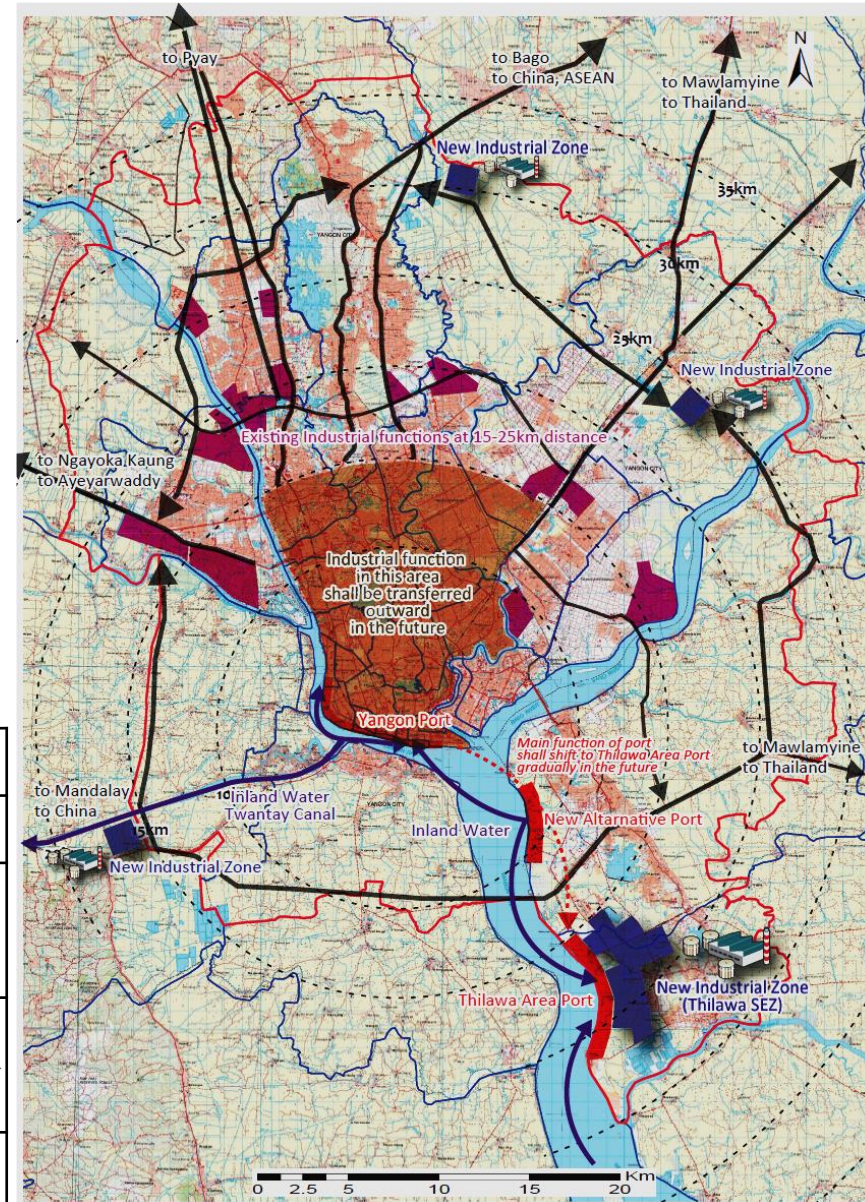
Policy

- Existing industrial zones shall be improved with advanced technologies, especially at Hlaing Thar Yar IZ and Shwe Pyi Thar IZ.
- To accommodate more factories and labors of secondary sectors, development of 3 new IZs is proposed along the outer ring road.
- By transferring logistics function of Yangon port to others, center area shall be free from logistics vehicles and industrial function.

Spec

Total Site Area: **8,400ha** (21,000acre)
 No. of Estimated Labors: **609 thousands***
**80% of whole labors in secondary sector*

Name	Net Area	Labor Pop	Schedule		
			Sht	Mid	Lng
Existing Industrial Zones	5,100ha	315,000	→		
Thilawa SEZ	2,400ha	218,000	→		
3 New Industrial Zones (East Dagon, Twantay, & Hlegu)	900ha	76,000			→

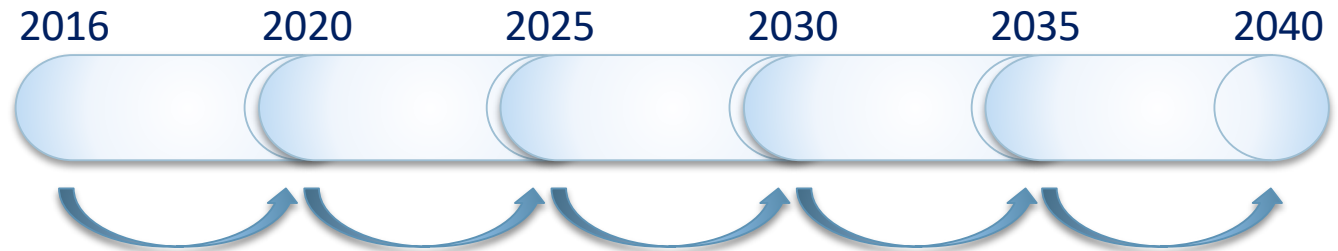


Priority Projects

Basic Concept

To achieve the development vision and realize the urban structure proposed in the SUDP, **41 priority projects**, which are focal actions to be **commenced by 2020** are selected.

It is recommendable that the priority projects are to be planned, reviewed and updated **every five years**.



Key Project shall be planned every 5 years

Priority Projects

Summarized Information

From urban development management sector, **25 projects** consisting of 1) **prioritized area development**, 2) **CBD regeneration**, and 3) **capacity development**, are proposed.

From infrastructure development sector, **16 projects**, which are not only improvement of the existing infrastructure, but also strengthening of disaster resilience, are proposed.

Sector	Estimated Cost
Urban development management	885 mil USD
Sub-center and other prioritized development	30 mil USD
CBD regeneration	790 mil USD
Capacity development related	65 mil USD
Infrastructure development	1,280 mil USD
Infrastructure improvement	1,280 mil USD
Strengthening of disaster resilience	Under estimation
<i>TOTAL</i>	<i>2,165 mil USD</i>

Urban Development Management

Sub-center Development

PP-01. Mindama Secondary CBD Development Project

PP-02. Yankin Sub-center Development Project

PP-03. Thilawa SEZ Sub-center Development Project

New Town Development

PP-04. Kyee Myin Daing New Town Development Project

Key Station Development

PP-05. Yangon Central Railway Station Area Development Project

PP-06. Feeder Stations Area Development Project

Industrial Zone Development

PP-07. Thilawa SEZ Class-B Development Project

PP-08. Existing Industrial Zone Upgrade Project



Urban Development Management

CBD Central Spine Project (1)

PP-09. Sule Pagoda and Environs Project

PP-10. Bank Street Project

CBD Central Spine Project (2)

PP-11. Kannar Road Project

PP-12. Waterfront Project (CBD)

CBD Development

PP-13. Multi-modal Facility Development Project

PP-14. Car Parking Supply Project

PP-15. Governmental Lands Redevelopment Project

CBD Transportation

PP-16. Road Pricing and Parking System Establishment Project

PP-17. Bus System Improvement Project

PP-18. Car Parking under City Parks Project



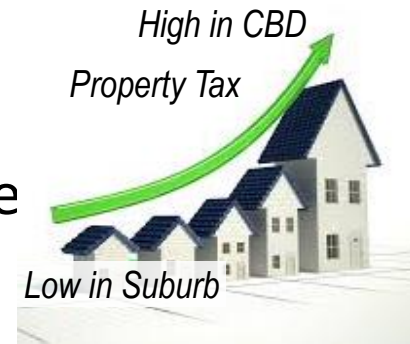
Urban Development Management

Housing & Cityscape

PP-19. Financing Low-cost Urban Housing Program

PP-20. Yangon Heritage Strategy Implementation Project

PP-21. New Parks Construction Project



Social Service

PP-22. Barrier-free for Persons with disabilities (PwDs) Project

PP-23. Education System Strengthening Project

PP-24. Urban Poor Assistance Project

Capacity Development

PP-25. Capacity Development Project for Urban Development and Management in Greater Yangon



Infrastructure Development

Water Supply

PP-26. Kokkowa WTP and transmission/distribution pipes

Construction (already pledged)

PP-27. Zone 1 (inner area) distribution pipe network Renewal (already plugged)

PP-28. Zone 9 (Hlaing Thar Yar) distribution pipe network Renewal

Sewerage

PP-29. CBD Sewerage System Improvement (C1 + W1)

PP-30. Sewerage Management Capacity Improvement



Drainage & Flood

PP-31. CBD Rainwater Drainage Improvement

PP-32. Integrated Flood Management Capacity Development

PP-33. Mitigation of Inundation in Emergency Area



Infrastructure Development

Solid Waste

PP-34. Collection Equipment Supply for Solid Waste Management

PP-35. Existing Final Disposal Sites Improvement

PP-36. Waste to Energy Promotion

PP-37. Hazardous Waste Management Improvement

PP-38. Improving Solid Waste Management Technical Cooperation



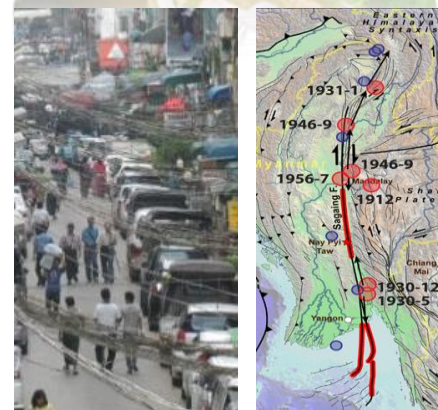
Electricity

PP-39. Existing Substations Upgrading



Earthquake

PP-40. Seismic Capacity Improvement



Fire

PP-41. Fire Safety Improvement



Supporting Projects to Vision 2040

- Yangon Mapping Project (JICA-ODA);
- Aerial True Ortho photo Image Production (YCDC Own Budget);
- Zoning Plan-Urban Districts Resolution under Paris-Yangon City to City coopération Program (Pilot area: Hlaing township);
- Aerial Planning Management Project (MLIT) (Pilot area: Yankin Township);
- Urban Development Management Project in Yangon (JICA - TCP);

Yangon Mapping Project

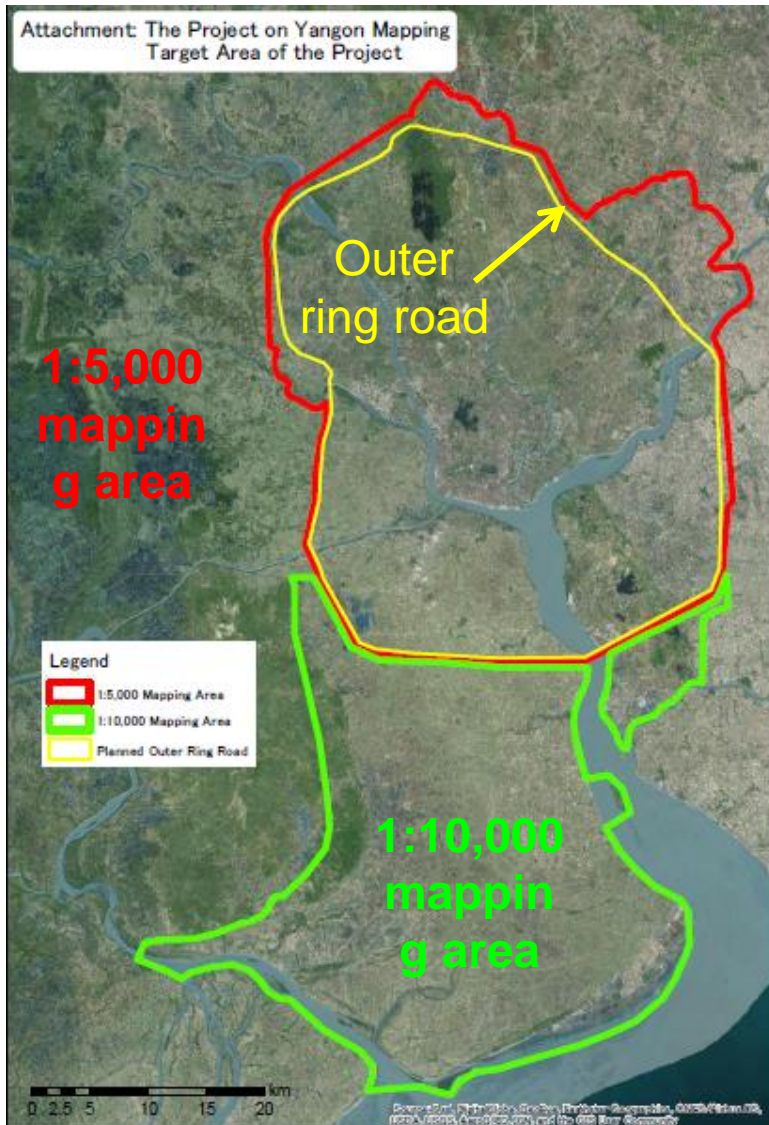
2017 Dec. – 2019 April

- To implement the vision 2040, it's necessary to build basic map data infrastructure for infrastructural development plans in Yangon.
- Development Projects and Investments are growing faster in Yangon Region.
- In order to speed up making the detailed design of these projects, precise topographic data are required.

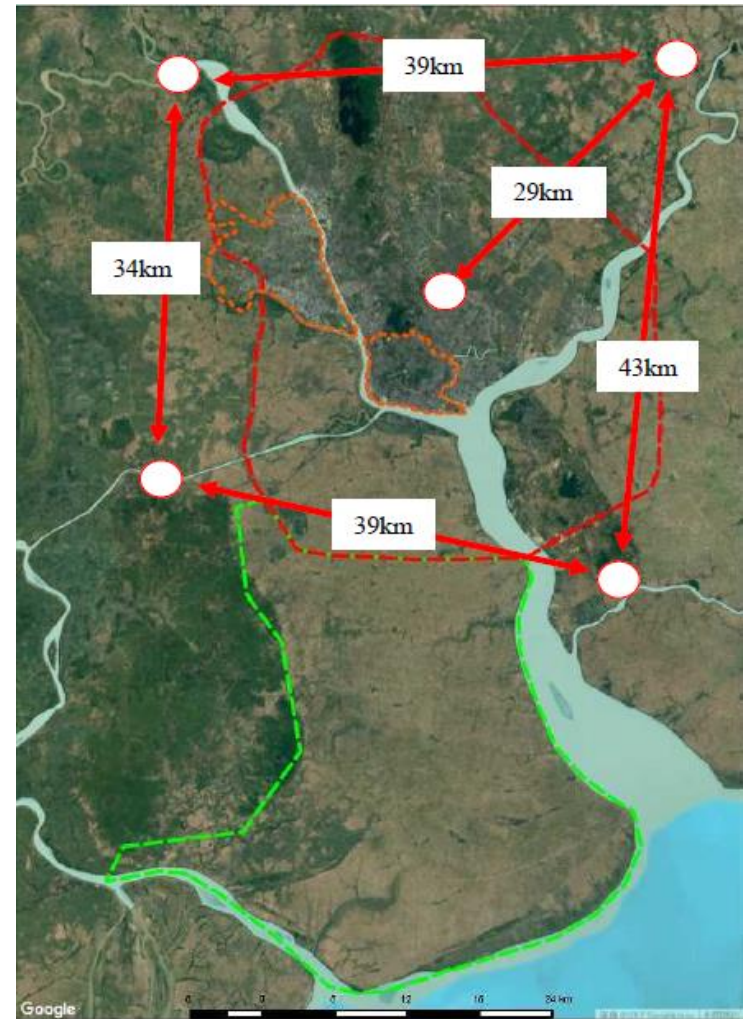
Objectives of the Project

- To produce Orthophoto, Digital Topographic Data and 3D Building Model data at a scale of 1:5,000 in the outer ring road covering YCDC Area (1,500km²).
- To produce Orthophoto, Digital Topographic Data at a scale of 1:10,000 in the south west suburb of Yangon City (1,100km²).
- To support establishment of the Continuously Operating Reference Stations (CORS) in Yangon Area.

Mapping Area






Distribution plan of CORS



Aerial True Ortho photo Image Production

- Many Land Management related departments in Yangon Region
- To correct the ground and survey block map gap within Yangon Region
- Correct land plot data is necessary for Development Control/Land use regulation



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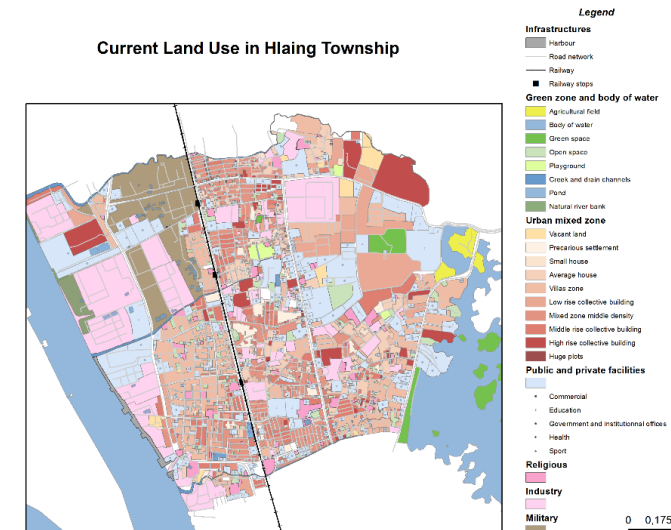
Yangon-Paris City to City Cooperation

Zoning Plan

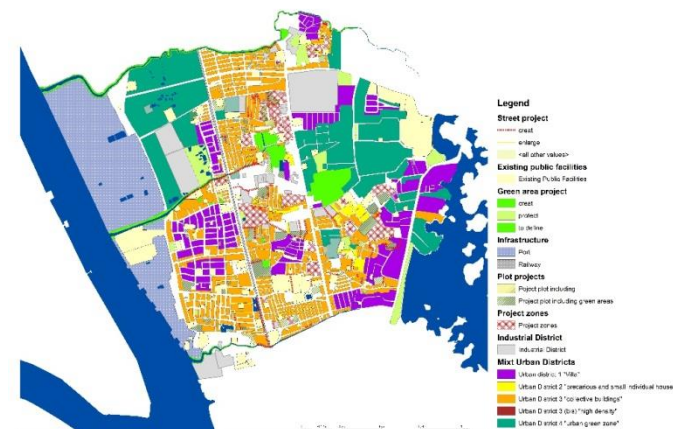
(Pilot area: Hlaing Township)

2017 May. 2018 June.

- To have a good understanding of the real city's transformations that will serve as a basis for the urban regulation
- To create and implement a technical tool that could form a digital data base(using GIS) for the urban regulation
- Urban Districts Resolution



Project of Zoning map



Aerial Planning Management Project (MLIT)

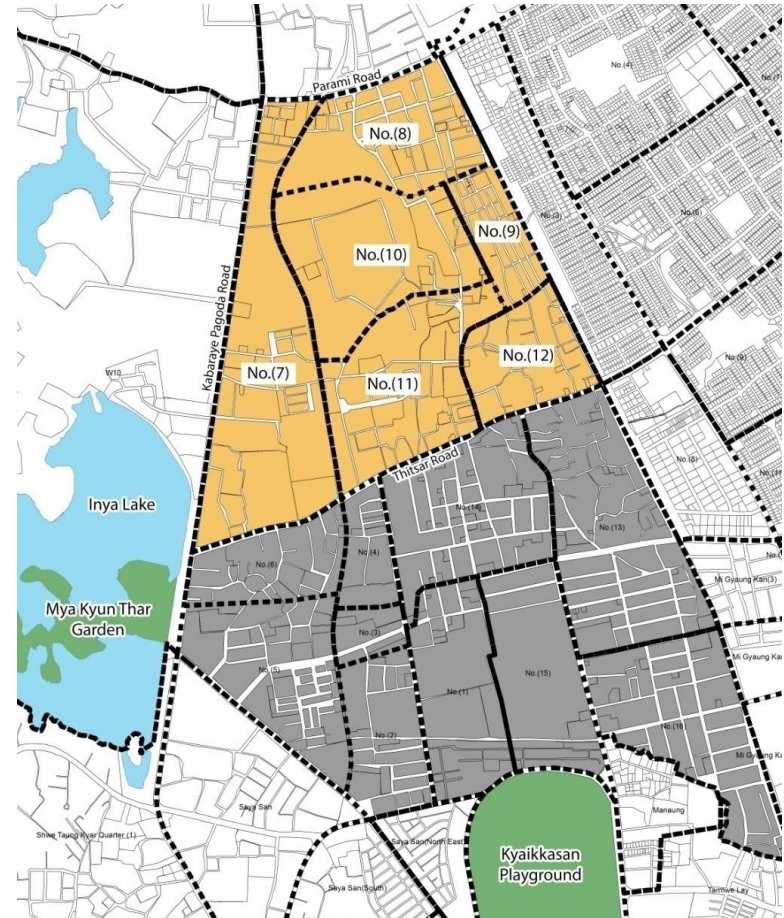
(Pilot area: Yankin Township)

2017 Dec. 2018 Feb.

- Sub Center by Master Plan
- At the heart of City
- Potential Development Area
- Availability of Land resources
- TOD (3 Railway Stations)

Vision

A well mix development with adequate public access and good transport connection



The Project for Urban Development Management in Yangon

(pp.25)

2018 March - 2020

- To Improve Capacity of Development management by YRG/YCDC
- To boost Zoning regulation in Yangon
- To encourage Efficient Development Permission System
- To formulate development policy and land use plan in priority areas

Thank You For Your Kind Attention

