

5.0 URBANISATION FRAMEWORK IN MALAYSIA

CHAPTER 5.0

URBANISATION FRAMEWORK IN MALAYSIA

Urban expansion needs to be properly planned in line with changing technology and global challenges. This is to ensure that cities continue to maximise their contribution towards national economic growth. Uncontrolled urban expansion has resulted in urban sprawl where prime agriculture and environmentally sensitive areas have been encroached upon and developed.

The National Physical Plan 3 (NPP3) has identified six (6) conurbations in Malaysia, namely -

- i. National Conurbation (Federal Territory Kuala Lumpur, Federal Administrative Centre Putrajaya and parts of Selangor including the districts of Klang, Petaling, Gombak, Hulu Langat, Kuala Langat and Sepang);
- ii. Southern Conurbation (around Johore Bahru including Iskandar Puteri, Senai, Kulai, Skudai, Pasir Gudang, Tanjung Pelepas, Pontian, Kota Tinggi, Desaru and Pengerang);
- iii. Northern Conurbation (Penang Island and parts of Seberang Perai);
- iv. Eastern Conurbation (around Kuantan - Pekan - Gambang);
- v. Kota Kinabalu Conurbation (around Kota Kinabalu City, Tuaran, Putatan and Papar); and
- vi. Kuching Conurbation (around Kuching City).

12 Development Promotion Zones (DPZ) in Peninsular Malaysia, one (1) in Federal Territory of Labuan and four (4) in Sabah are urban agglomeration areas with potential economic linkages to grow rapidly and provide focus on population and economic growth for the state.

- **A centre that has strong economic, social and administrative linkages;**
- **Has a population exceeding 10,000 people and is a centre of employment; and**
- **Has comprehensive urban facilities and progressive.**

There are 37 Catalyst Centres in Peninsular Malaysia and Federal Territory of Labuan and 10 in Sabah. Catalyst Centres are medium and small urban centres that have strategic locations to drive surrounding urban development to become hubs with specific functions. Catalyst Centres are those outside of urban conurbations and DPZ, and have vital functions to develop the local economy.

To ensure that urban centres are managed well, the NUP2 has been formulated to assist all local authorities to better management within their administrative boundaries.

5.1 Definition of Urban

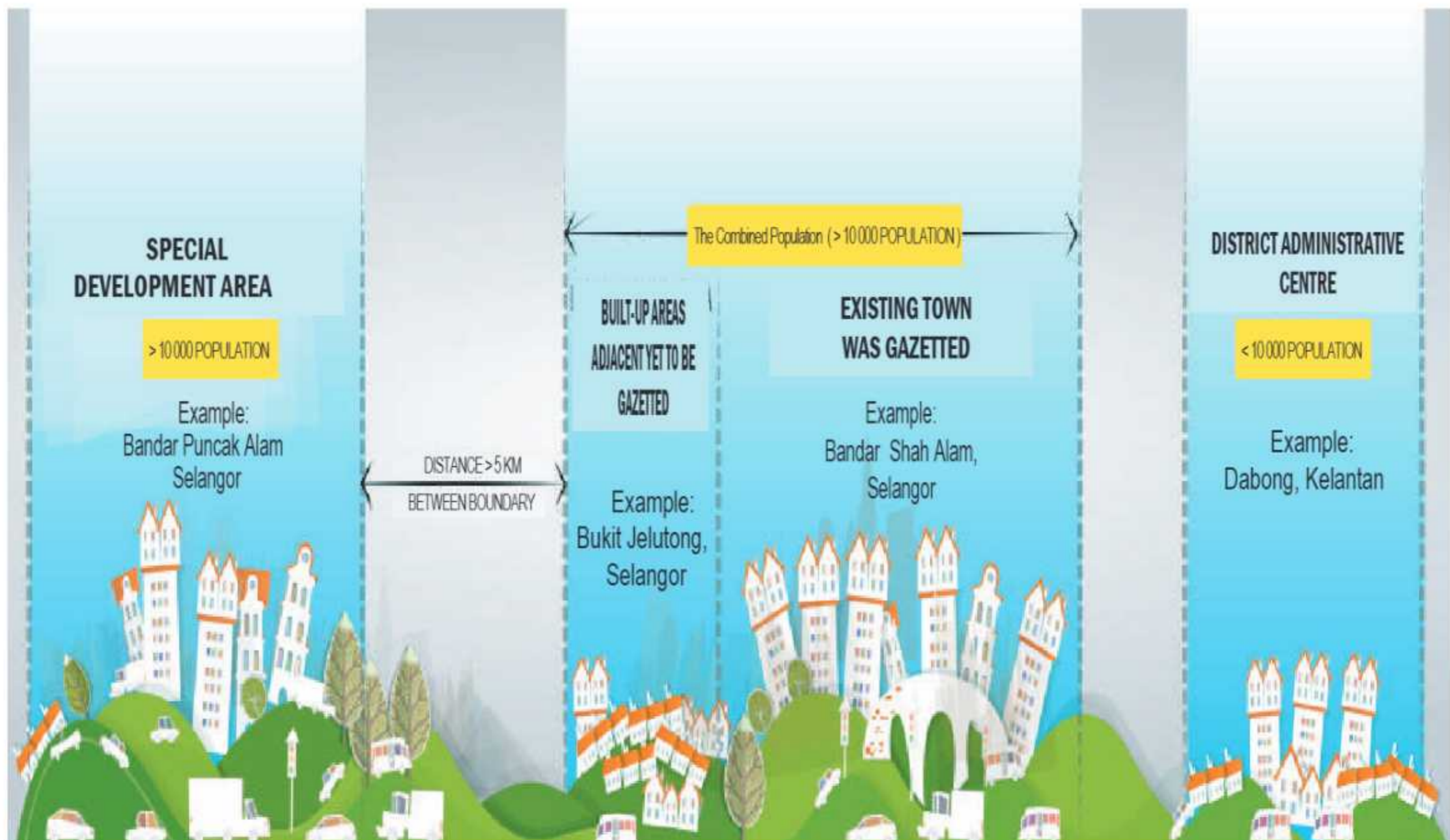
The definition of “Urban” is -

Gazetted and built-up areas adjacent thereto and the combination of these two areas have a population of at least 10,000 people; or *special development areas; or district administrative centre (DAC) with less than 10,000 population and in which at least 60% of its population aged 15 years and above are involved in activities other than agriculture.

*Special Development Areas:

“An area that is recognised but not gazetted and separated more than five (5)km from any gazetted or built-up area. It should have a population exceeding 10,000 people with more than 60% of its population aged 15 years and above involved in activities other than agriculture”.

Figure 5.1: Illustration of Urban Definition



5.2 Definition of Urban Growth Limits

Determination of urban growth limits is vital towards addressing urban sprawl resulting in the inefficient use of resources. Urban growth limits will assist the local planning authority to identify areas for development and areas for protection.

Urban boundaries are pertinent to facilitate in the management of urban areas. It is therefore suggested that all local plans adopt and apply the definition and criteria of defining urban boundaries as proposed in the NUP2. For urban areas listed in the Urban Profile Study (KPB, 2009) and KPB2 (2013), the State Government will need to gazette the urban boundaries as determined herein.

There are two (2) concepts to the urban growth limits, namely, the Urban Growth Boundary (UGB) and the Urban Containment Boundary (UCB).

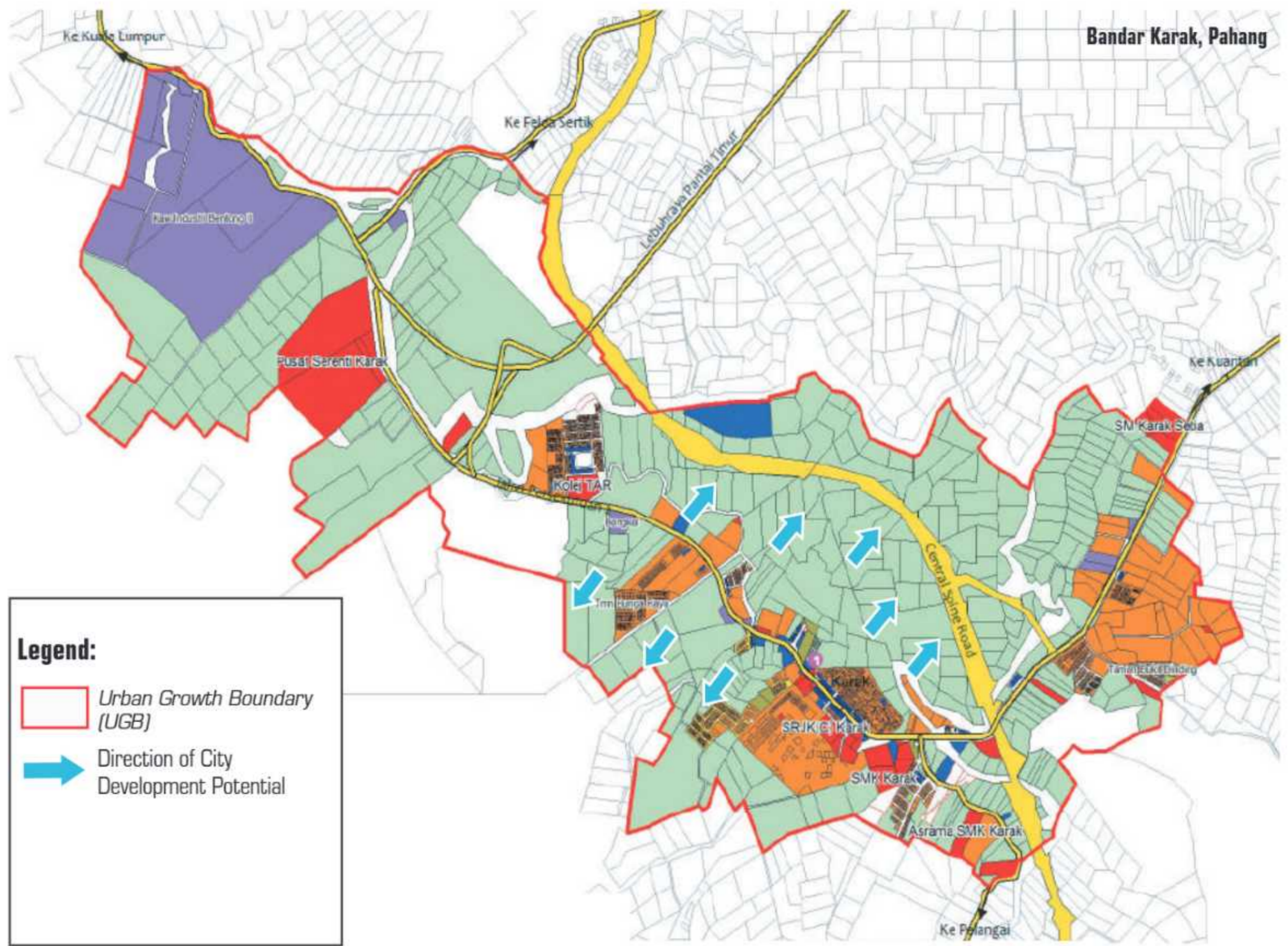
5.2.1 Urban Growth Boundary (UGB)

- The Urban Growth Boundary (UGB) of an urban area as determined by its development plan;
- UGB is depicted as a line around an existing urban area that acts to differentiate between areas that can be developed or otherwise;
- The UGB shall encompass an area larger than the current development area in order to allow for more economically competitive centres, especially for medium and smaller towns.



Bandar Batu Pahat, Johor

Figure 5.2: Example of UGB



Source: Urban Profile Study Negeri Pahang, 2013



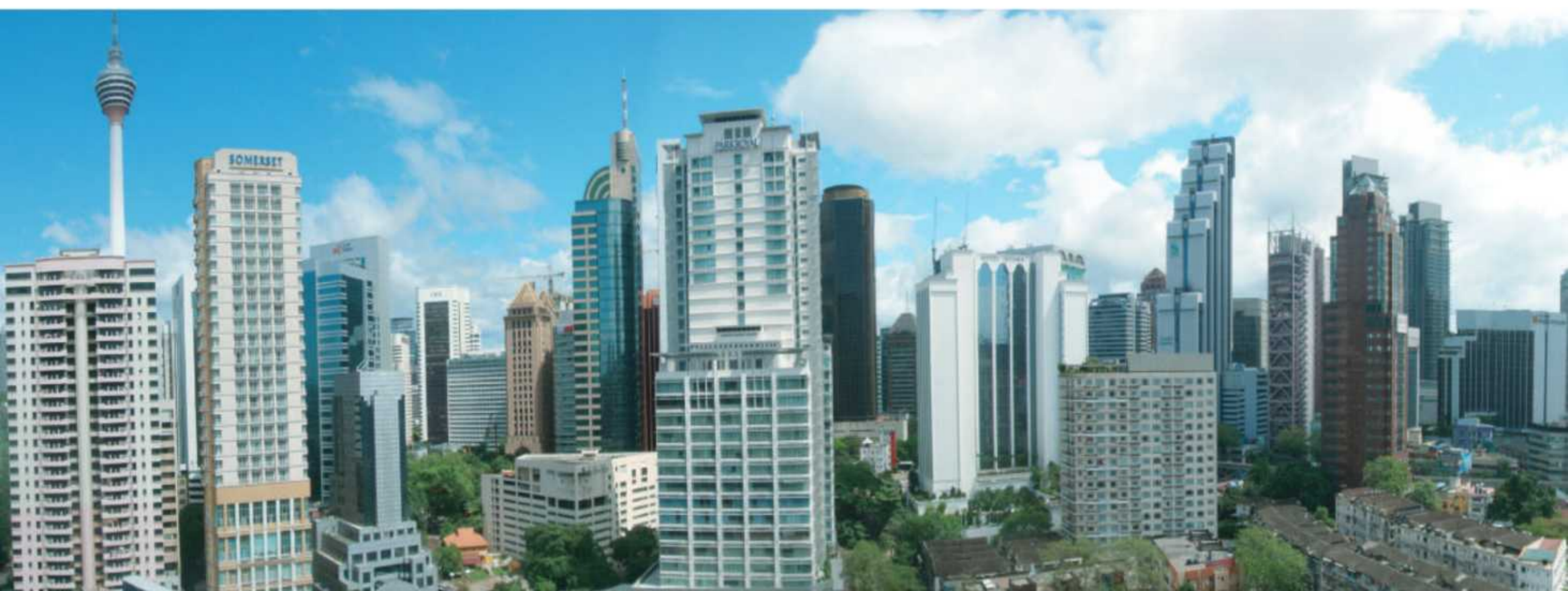
Sekolah Kebangsaan Karak, Pahang



Masjid Jamek Karak, Pahang

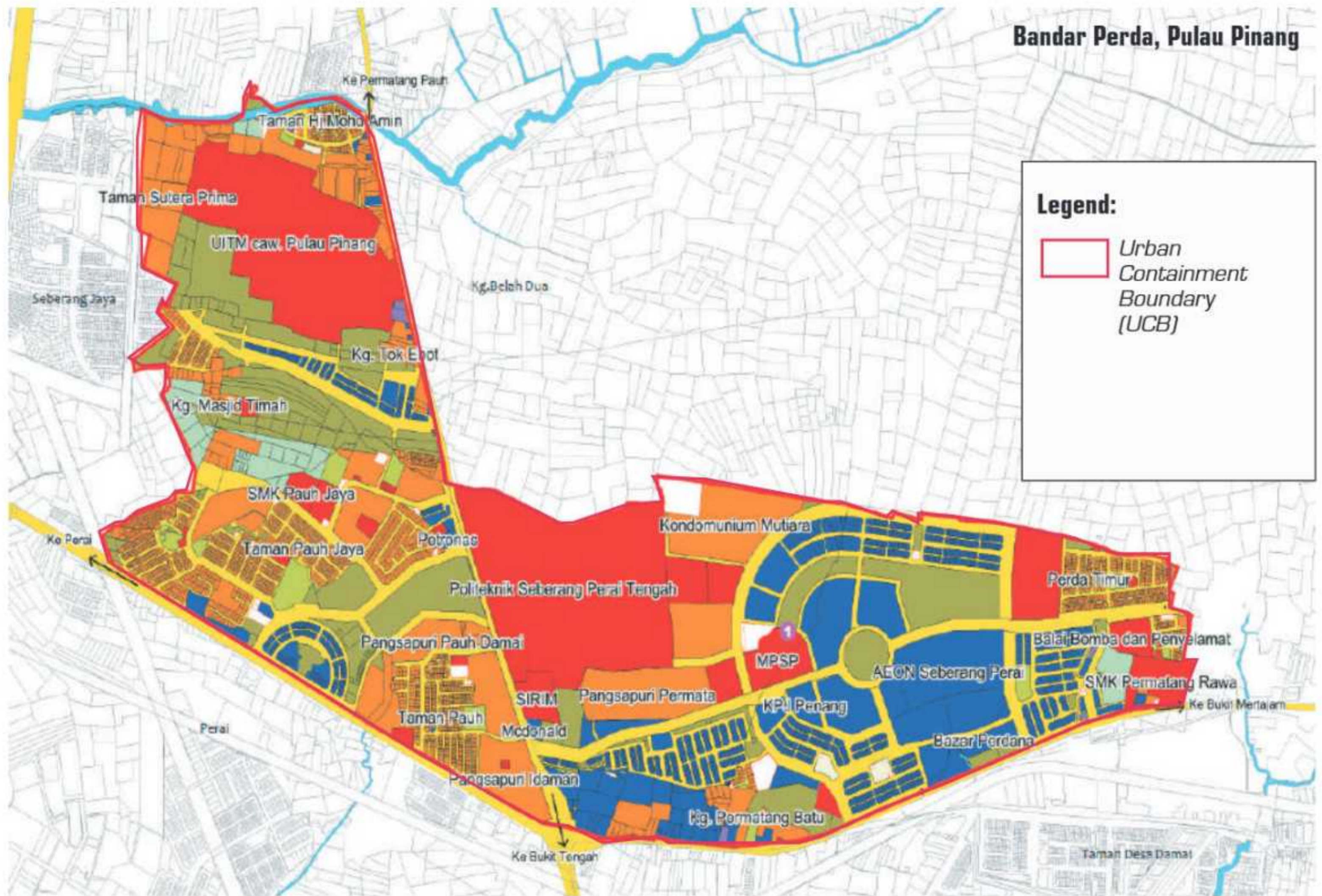
5.2.2 Urban Containment Boundary (UCB)

- UCB is the line around an existing urban area to limit its expansion;
- UCB assists local authorities to meet with the following planning objectives -
 - a. Increase the feasibility and growth of public transportation through concentrated development;
 - b. Encourage mixed development;
 - c. Maximise use of existing infrastructure and minimise costs for new infrastructure;
 - d. Revitalize the city centre;
 - e. Preserve the working land base (agriculture, forests, rural areas, land and other resources); and
 - f. Determine future development areas.
- To be applied to conurbations which have expanded inefficiently and encroached into prime agricultural lands and environmentally sensitive areas.
- UCB shall also be applied to special development areas that have resulted from land speculation and have yet to be gazetted.
- UCB is applied as a boundary to existing developed areas to curb further sprawl and inefficient growth.



The Scenery Around The Kuala Lumpur City Centre

Figure 5.3: Example of UCB



Source: Urban Profile Study Negeri Pulau Pinang, 2013



Malaysia Fire and Rescue Station, Perda, Pulau Pinang



District Police Headquarters, Seberang Perai Tengah

5.3 Criteria to Determine Urban Boundary

Determining urban boundaries is pertinent to ensure urban centres of Malaysia are regulated and can grow efficiently. Urban boundaries may help in reducing sprawl which has negative impacts on the environment. UCB and UGB shall be identified in all State Structure Plans and District Local Plans as provided for under the Town and Country Planning Act 1976 (Act 172).

The following are the 11 criteria for determining an urban boundary:

Table 5.1: 11 Criteria for Demarcation of Urban Boundary

NUM.	CRITERIA	NOTE
1.	Existing Administrative Boundary of the City	To ensure that UGB and UCB do not create problems to administering existing centres
2.	Population Size	≥ 10,000 population/ District Administrative Centre
3.	Geography (Example: Topography, Geography and etc)	River, hills/ mountain can be the boundary for UGB / UCB
4.	Environment (Example: ESAs, Forest Reserves, Water Bodies and etc.)	Environmentally sensitive areas ought to be outside of UGB/ UCB boundaries, especially when these are already outside of existing town boundary
5.	Built-up Area	To be included within the UGB/ UCB boundary. Built-up areas outside of the gazetted town areas should be included in the UGB/ UCB depending on intensity and where suitable
6.	Brownfield Sites/ Empty lands	If these are within existing town boundaries, they ought to be included and developed
7.	Committed Developments	Should be included within the UGB/ UCB as these will become part of the built-up areas
8.	Lot Boundary	The boundary should follow plot/ property boundaries so as to be fair to the owners
9.	Main Road Alignment	Should be considered as the boundary wherever suitable, just like rivers
10.	Area of Potential in Terms of Economic and Social	Should be included for future development
11.	Potential Area to be Develop in the Development Plans	Part or all of the potential areas can be included in the UGB/ UCB areas

Figure 5.4: Example of Limit Urban Growth Boundary

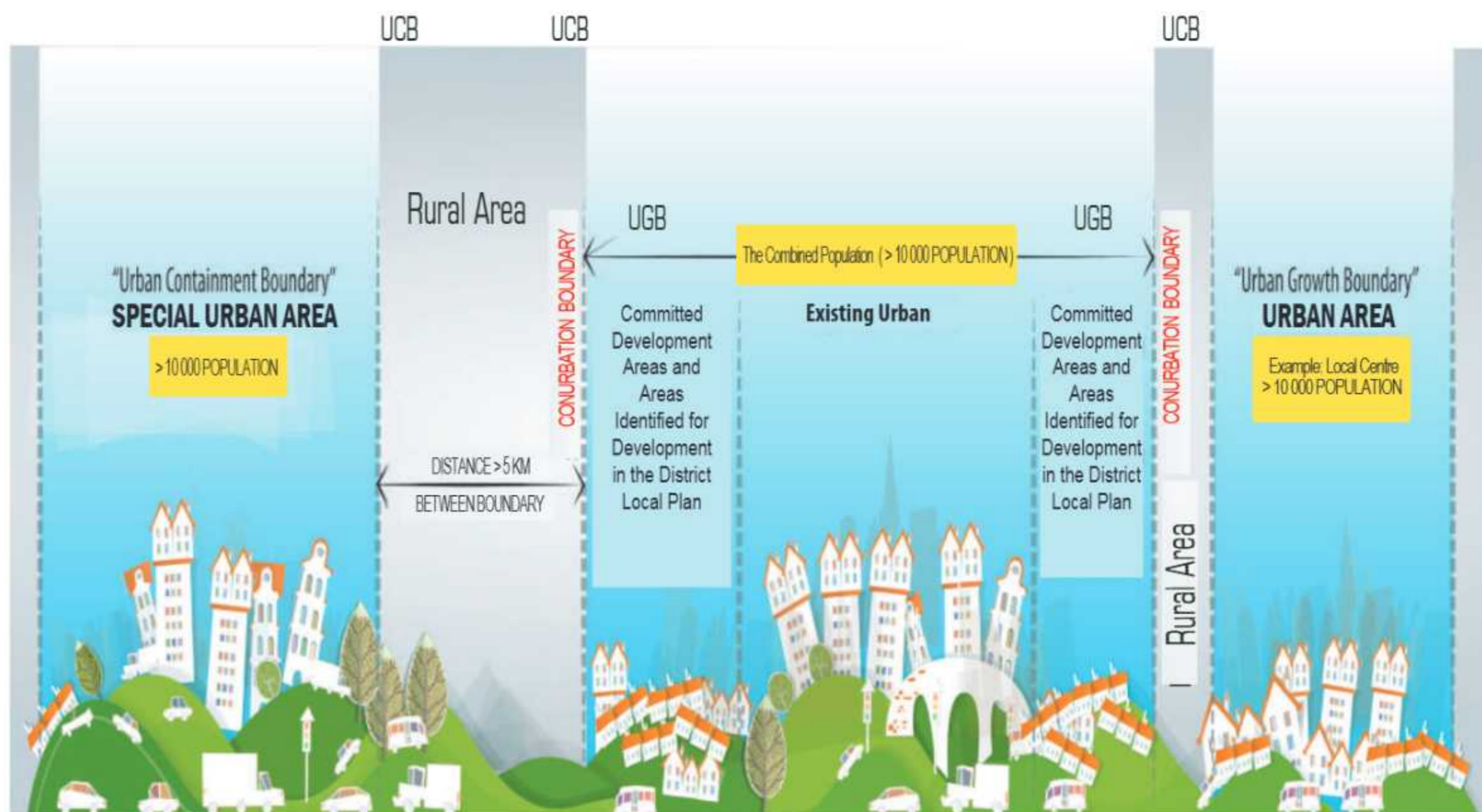
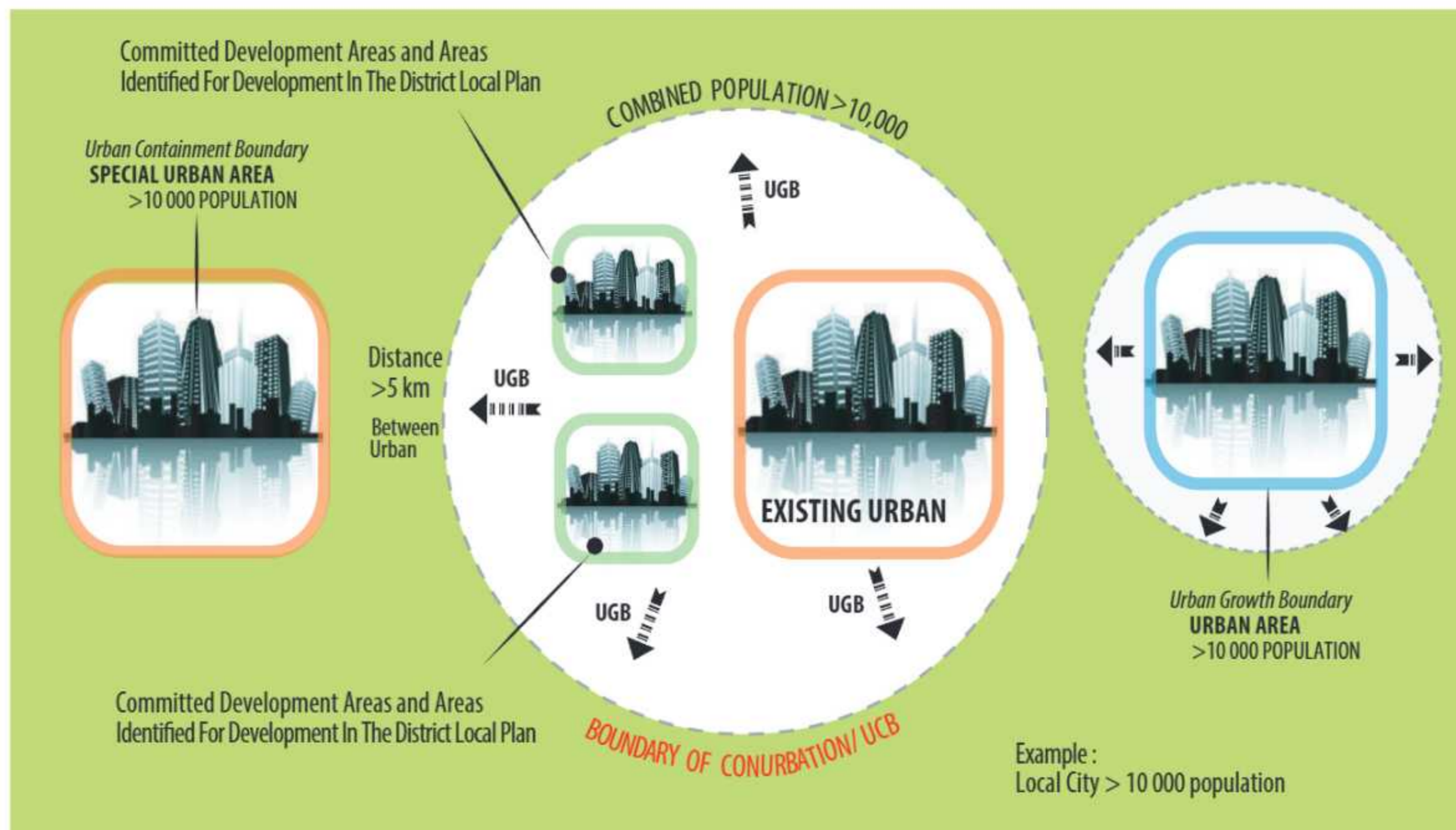


Figure 5.5: Example of Urban Growth Boundary (UGB) and Urban Containment Boundary (UCB)



Rural Areas

5.4 Urban Hierarchy

The NUP2 has identified 283 urban centres in Peninsular Malaysia (Figure 5.6) and five (5) centres in the Federal Territory of Labuan (Figure 5.7). These centres are categorised into five hierarchy based on the projected population by 2025 as shown in Table 5.2.

Each of the 288 centres in Peninsular Malaysia and the Federal Territory of Labuan has a main general function. This refers to the basic function of providing retail, housing, education, health, transportation, social and recreation services to the local population.

The physical and economic growth of these centres are generally led by the growth in commerce and trade.

URBAN HIERARCHY
SECOND NATIONAL URBANISATION POLICY



Bandaraya Johor Bahru, Johor



Lumut, Perak



Wilayah Persekutuan Putrajaya

Table 5.2: Classification and Definition of Urban Hierarchy

NUM	HIERARCHY	DEFINITION	POPULATION SIZE
1	Global City	<p>A Global City is one which has a vital role in the global economic system. It would have all or a major part of the 13 criteria as set out in the Global City NUP2 as follows -</p> <ol style="list-style-type: none"> 1. A wide array of international financial services especially in insurance, property, banking, accounting and marketing; 2. Has regional headquarters of many multi-national companies; 3. Has the financial headquarters, stock market and main financial institutions; 4. Dominate the regional trade and economic activities; 5. Centre of manufacturing with availability of a port; 6. The location/ centre for decision making that affects the country and the world; 7. Centre for new ideas, innovation in trade, commerce, culture and politics; 8. Centre for media and global communications network; 9. National influence that gives impact at international levels; 10. A high percentage of workers in the information and services sector; 11. Prestigious educational institutes including well known universities, presence of international students and research opportunities; 12. Multi-functional infrastructure offering legal, finance, medical and entertainment services; and 13. International air and sea connectivity. 	>3.5 Million (The whole conurbation)
2	Regional Centre	Regional centres are state capitals that have economic and administrative influences beyond the regional and national boundaries. They have economic influence over the region far beyond that of other state capitals. They also have the criteria of Global Cities such as 1, 2,4,5,7,9,10,11,12 and 13.	>1.5 - 3.5 Million (The whole conurbation)
3	State Capital	State capitals are capitals of every state that are not in the category of the Global City and Regional Centre. The main function is as the state's main administrative centre as well as the main economic centre of each state.	No minimum size
4	Main Centre	Main centres are other centres that have significant economic roles in a state. The minimum population size is 100,000.	>100,000
5	Local Centre	Centres that provide commercial or administrative services in areas that are smaller than main centres. District administration centres with less than 10,000 population are also included in this hierarchy.	10,000 - 100,000 and District Administrative Centre (if less than 10,000)

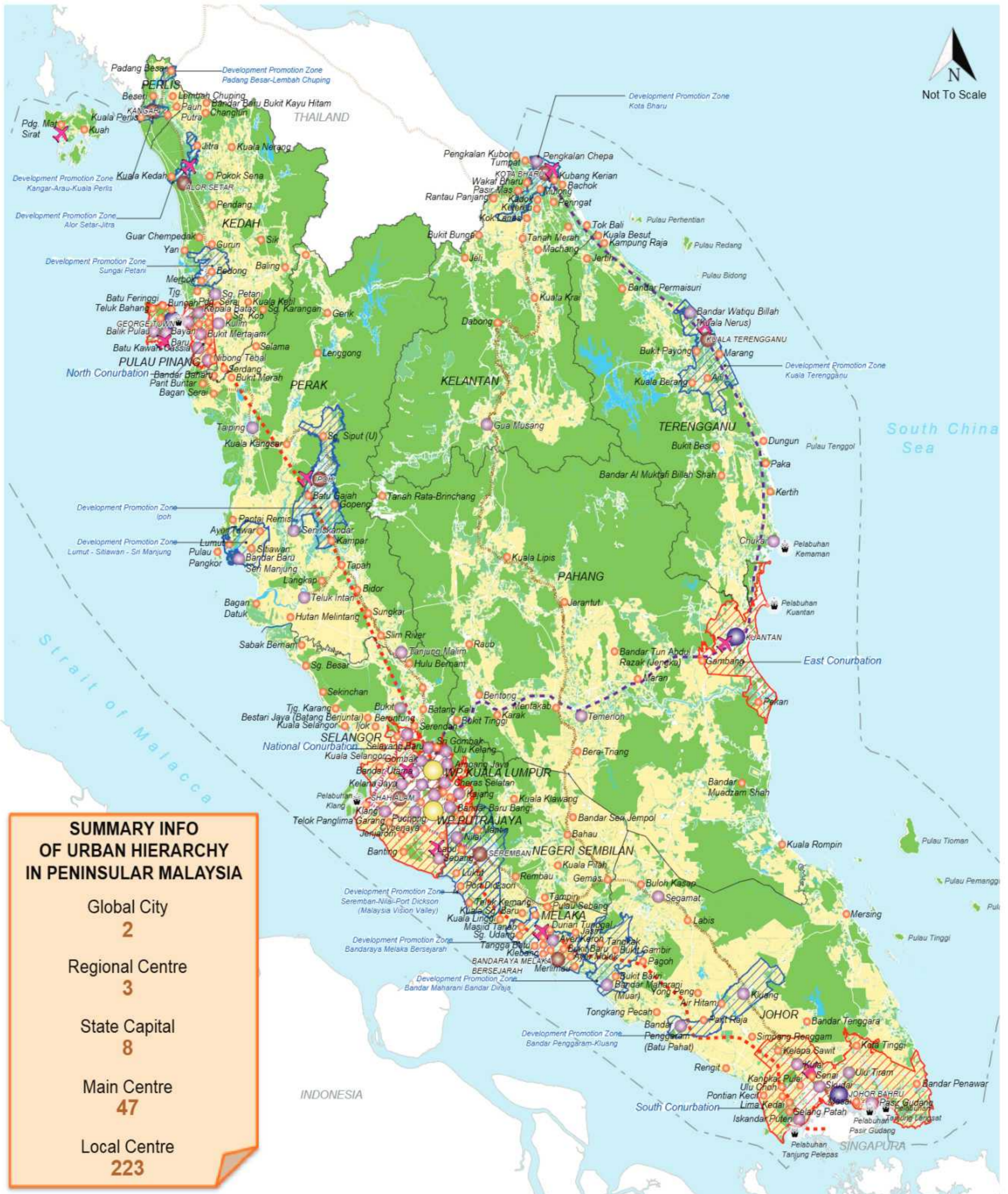


Figure 5.6: Urban Hierarchy Plan of Peninsular Malaysia

LEGEND:

URBAN HIERARCHY

- Global City
- Regional Centre
- State Capital
- Main Centre
- Local Centre

GROWTH AREA

- Conurbation
- Development Promotion Zone (DPZ)

LAND USE

- Existing Built-Up Areas
- Ecology Asset and Paddy Areas
- Main Commodity Plantations
- Other Agriculture Areas
- Water Bodies

TRANSPORTATION

- ✈ Airport
- ⚓ Ports
- Main Roads
- - - Double Tracking Route
- ⋯ Railway Line Port Klang - Serendah
- - - - - Proposed High Speed Railway Line
- ⋯⋯ Proposed Railway Line Tumpat - Klang Valley
- - - - - International Boundary

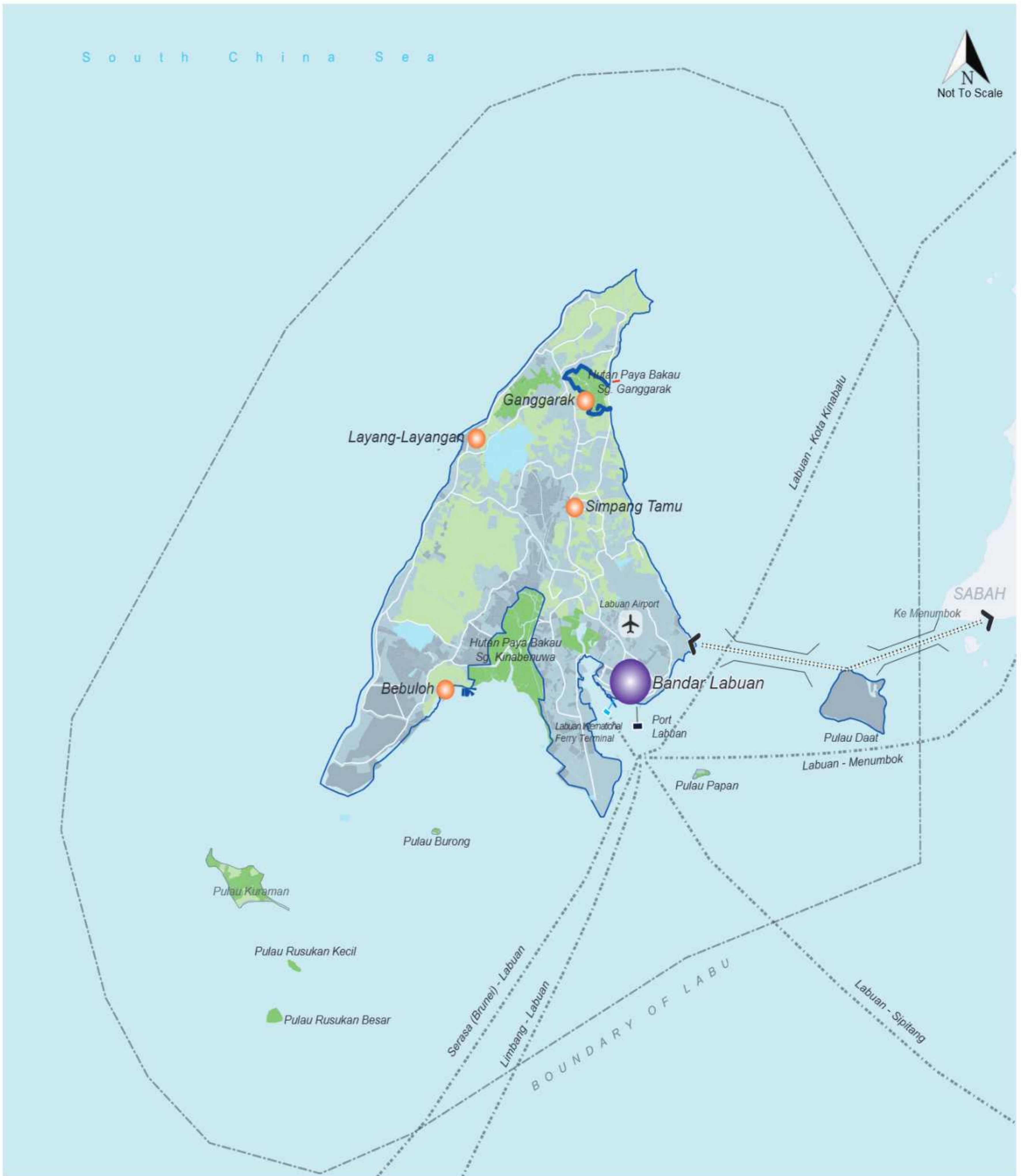


Figure 5.7: Urban Hierarchy Plan of Federal Territory of Labuan

LEGEND:		SUMMARY INFO OF URBAN HIERARCHY FEDERAL TERRITORY LABUAN	
URBAN HIERARCHY			
	Regional Centre	Regional Centre	
	Local Centre	1	
GROWTH AREA		Local Centre	
	Development Promotion Zone (DPZ)	4	
	Existing Built-Up Areas		
	Future Built-Up Areas		
CONSERVATION & PRESERVATION AREA			
	Forest		
	Water Bodies		
AGRICULTURE AREA			
	Commodity Plantation		
OTHERS			
	Ports		
	Terminal		
	Airport		
	Main Roads		
	Proposed Bridges		
	Ferry Route		
	Boundary of Federal Territory Labuan		

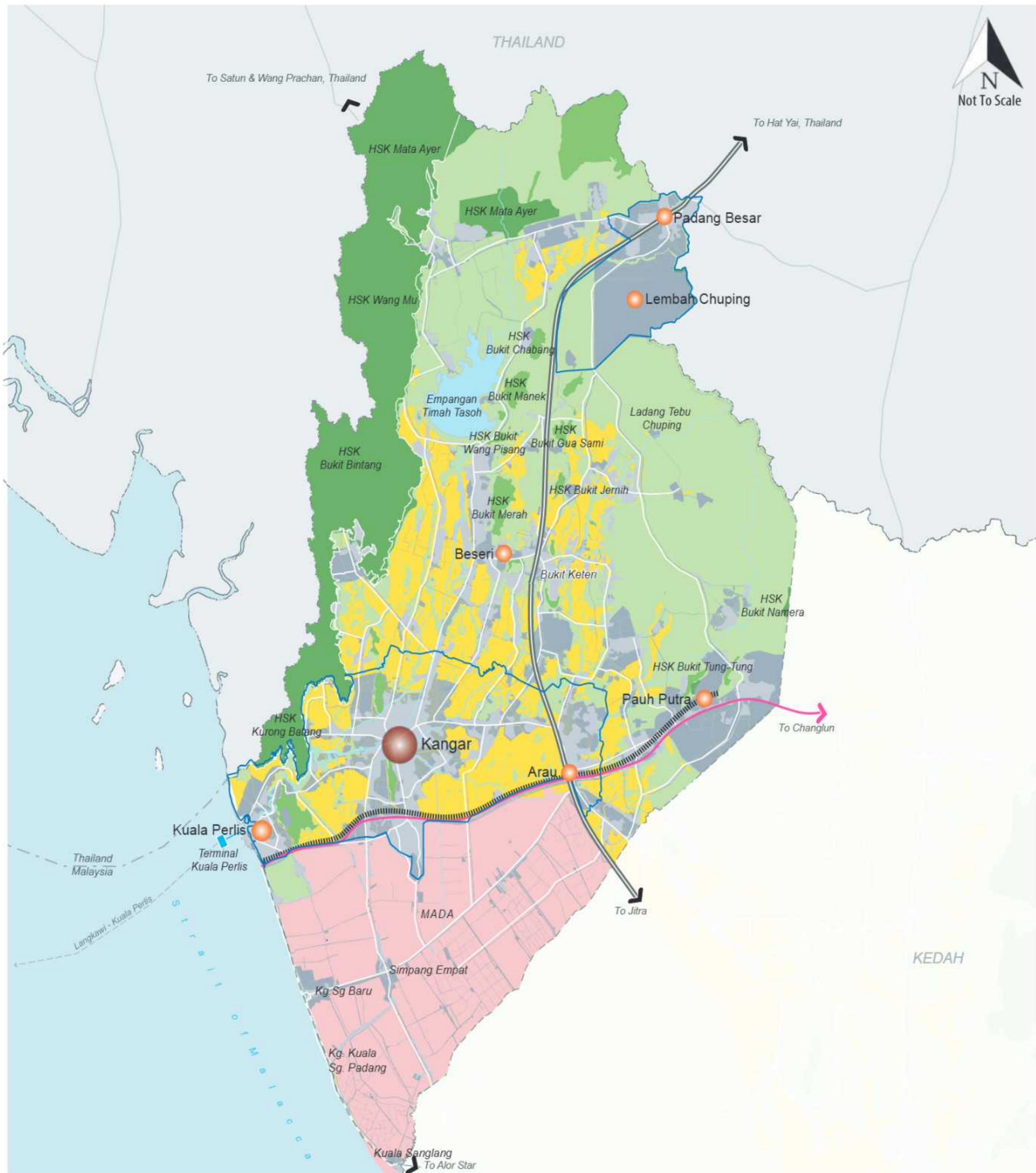


Figure 5.8: Urban Hierarchy Plan of Perlis

LEGEND:

URBAN HIERARCHY

- State Capital
- Local Centre

GROWTH AREAS

- Development Promotion Zone (DPZ)
- Existing Built-Up Areas
- Future Built-Up Areas
- National Transit Development Hub & Corridor (Existing)

CONSERVATION & PRESERVATION AREAS

- Permanent Forest Reserve & Sanctuary
- Forest
- Water Bodies

AGRICULTURE AREAS

- National Granary Area
- National Non-Granary Area
- Comodity Plantations

OTHERS

- Terminal
- Main Roads
- Existing Highway
- Ferry Route

SUMMARY INFO ON URBAN HIERARCHY PERLIS

- State Capital
1
- Local Centre
6

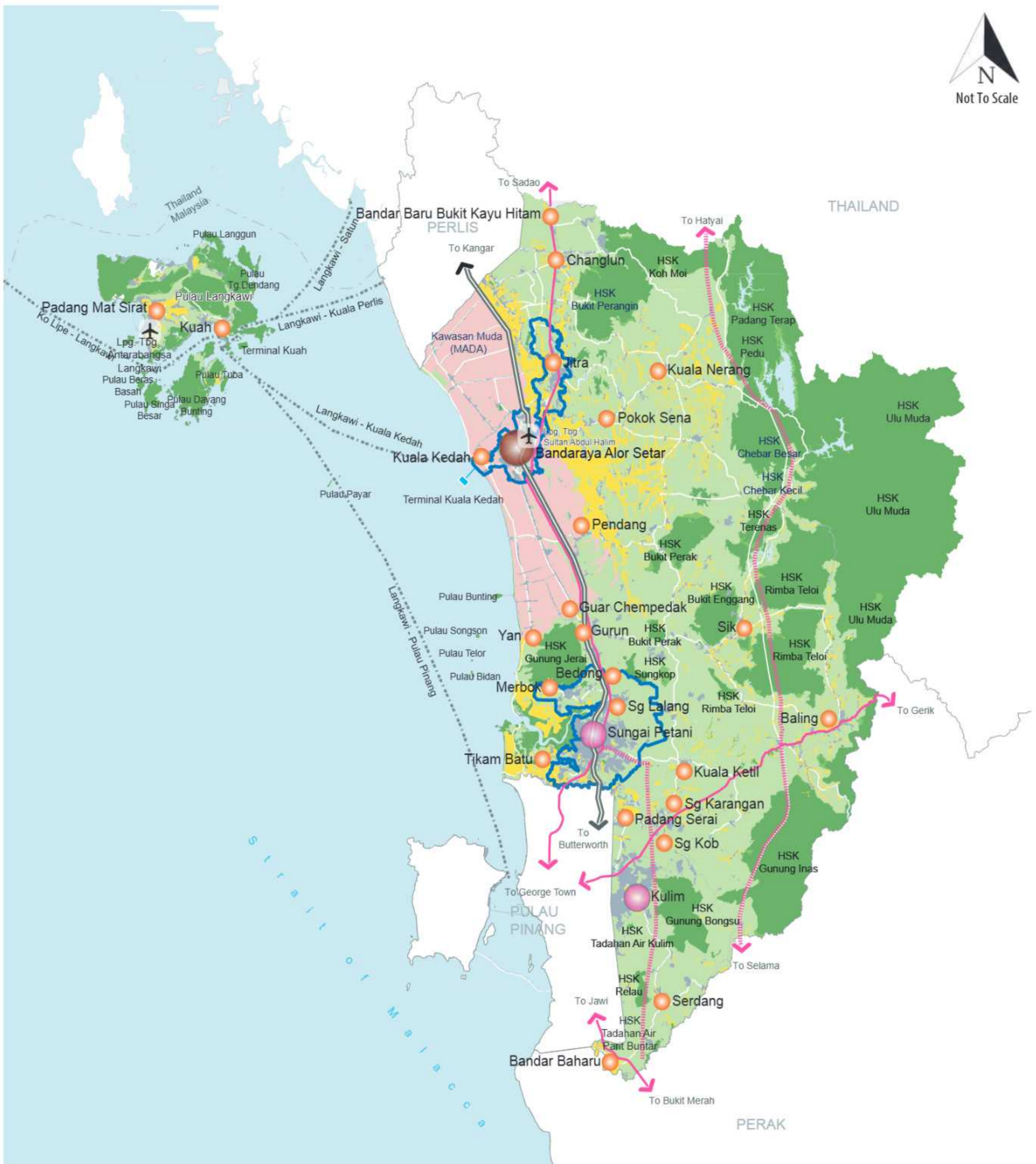


Figure 5.9: Urban Hierarchy Plan of Kedah

LEGEND:		OTHERS	
URBAN HIERARCHY		Terminal	SUMMARY INFO ON URBAN HIERARCHY KEDAH
State Capital	Main Centre	Airport	
Local Centre		Main Roads	
		Existing Highway	
GROWTH AREAS		Proposed Road	State Capital 1
Development Promotion Zone (DPZ)		Ferry Route	Main Centre 2
Existing Built-Up Areas			Local Centre 24
Future Built-Up Areas			
National Transit Development Hub & Corridor (Existing)			
CONSERVATION & PRESERVATION AREAS			
Permanent Forest Reserve & Sanctuary			
Forest			
Water Bodies			
AGRICULTURE AREAS			
National Granary Areas			
National Non-Granary Area			
Comodity Plantations			



Figure 5.10: Urban Hierarchy Plan of Pulau Pinang

LEGEND:

<p>URBAN HIERARCHY</p> <ul style="list-style-type: none"> ● Regional Centre ● Main Centre ● Local Centre <p>AGRICULTURE AREAS</p> <ul style="list-style-type: none"> National Granary Area National Non-Granary Area Comodity Plantations 	<p>GROWTH AREAS</p> <ul style="list-style-type: none"> Conurbation Existing Built-Up Areas Future Built-Up Areas National Transit Development Hub & Corridor (Existing) National Transit Development Hub & Corridor (Proposed) State Transit Development Hub & Corridor 	<p>CONSERVATION & PRESRVATION AREAS</p> <ul style="list-style-type: none"> Permanent Forest Reserve & Sanctuary Forest Water Bodies <p>Others</p> <ul style="list-style-type: none"> ⚓ Ports ✈ Airport ~ Existing Main Road ~ Proposed Tunnel on ⋯ Existing Highway ⋯ Ferry Route 	<p>SUMMARY INFO ON URBAN HIERARCHY PULAU PINANG</p> <ul style="list-style-type: none"> Regional Centre 1 Main Centre 7 Local Centre 31
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Figure 5.11: Urban Hierarchy Plan of Perak

LEGEND:

URBAN HIERARCHY

- State Capital
- Main Centre
- Local Centre

GROWTH AREAS

- Development Promotion Zone (DPZ)
- Existing Built-Up Areas
- National Transit Development Hub & Corridor (Existing)
- National Transit Development Hub & Corridor (Proposed)
- State Transit Development Hub & Corridor

CONSERVATION & PRESERVATION AREAS

- Permanent Forest Reserve & Sanctuary
- Forest
- Water Bodies

AGRICULTURE AREAS

- National Granary Areas
- National Non-Granary Area
- Comodity Plantation

OTHERS

- ✓ Terminal
- ✈ Passenger Jetty
- ✈ Airport
- Main Roads
- ~ Existing Highway
- - - Proposed Highway

SUMMARY INFO ON URBAN HIERARCHY PERAK

State Capital
1
Main Centre
5
Local Centre
24

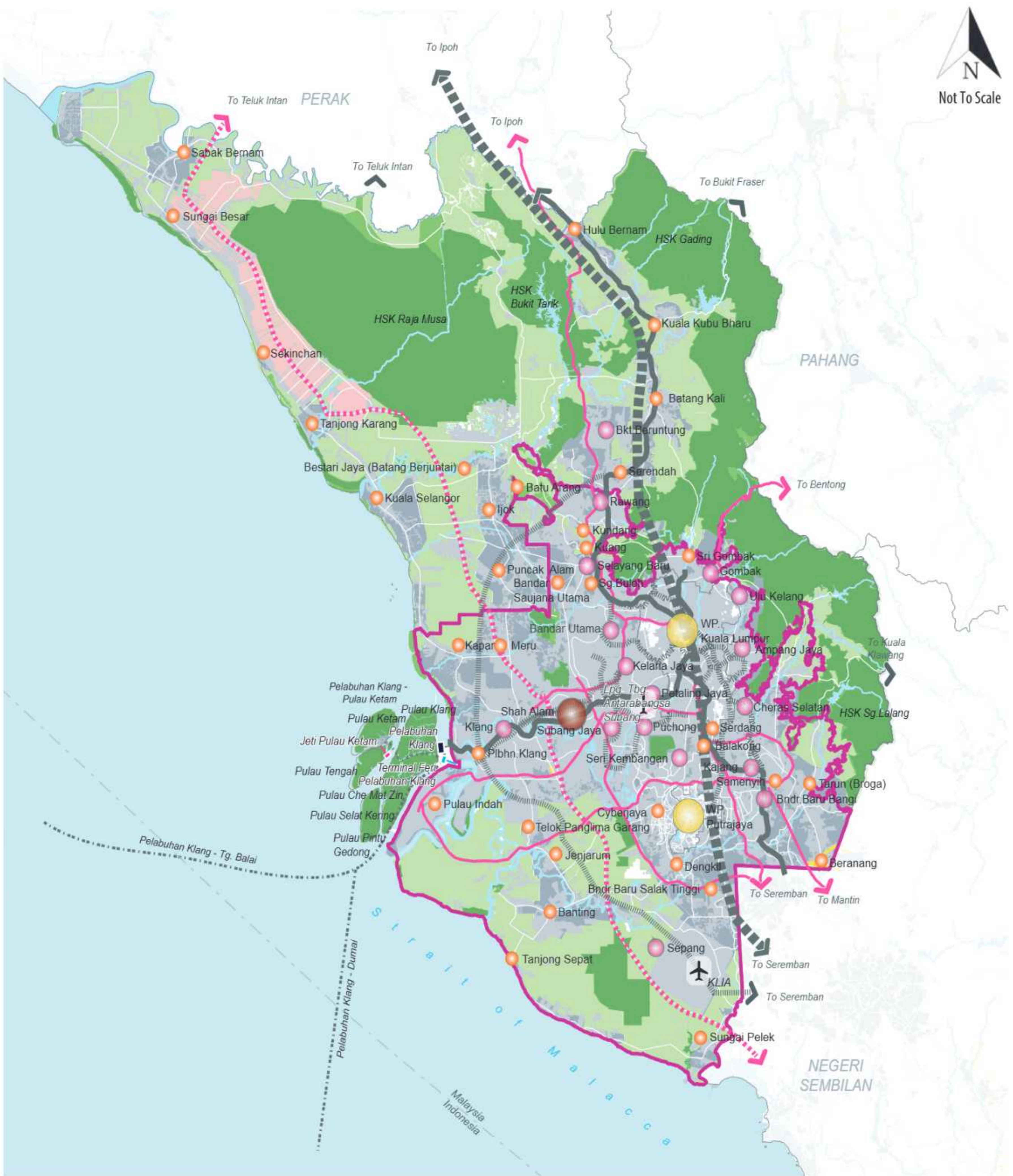


Figure 5.12: Urban Hierarchy Plan of Selangor

LEGEND:		SUMMARY INFO ON URBAN HIERARCHY SELANGOR	
URBAN HIERARCHY	GROWTH AREAS	AGRICULTURE AREAS	State Capital 1 Main Centre 17 Local Centre 35
<ul style="list-style-type: none"> Global City State Capital Main Centre Local Centre 	<ul style="list-style-type: none"> Conurbation Existing Build-Up Areas Proposed Built-Up Areas National Transit Development Hub & Corridor (Existing) National Transit Development Hub & Corridor (Proposed) State Transit Development Hub & Corridor 	<ul style="list-style-type: none"> National Granary Areas National Non-Granary Area Comodity Plantations 	
CONSERVATION & PRESERVATION AREAS		OTHERS	
<ul style="list-style-type: none"> Permanent Forest Reserve & Sanctuary Forest Water Bodies 		<ul style="list-style-type: none"> Ports Terminal Passenger Jetty Airport Main Roads Existing Highway Proposed Highway Ferry Route 	



Figure 5.13: Urban Hierarchy Plan of Negeri Sembilan





Figure 5.14 Urban Hierarchy Plan of Melaka





Figure 5.15: Urban Hierarchy Plan of Johor





Figure 5.16: Urban Hierarchy Plan of Pahang

LEGEND:

URBAN HIERARCHY

- Regional Centre
- Main Centre
- Local Centre

CONSERVATION & PRESERVATION AREAS

- Permanent Forest Reserve & Sanctuary
- Forest
- Water Bodies

GROWTH AREAS

- Conurbation
- Existing Built-Up Areas
- National Transit Development Hub & Corridor (Existing)
- National Transit Development Hub & Corridor (Proposed)

AGRICULTURE AREAS

- National Granary Areas
- National Non-Granary Area
- Comodity Plantations

OTHERS

- Ports
- Airport
- Main Roads
- Existing Highway
- Proposed Highway
- Proposed Road
- Ferry Route

SUMMARY INFO ON URBAN HIERARCHY PAHANG

- Regional Centre
1
- Main Centre
1
- Local Centre
15

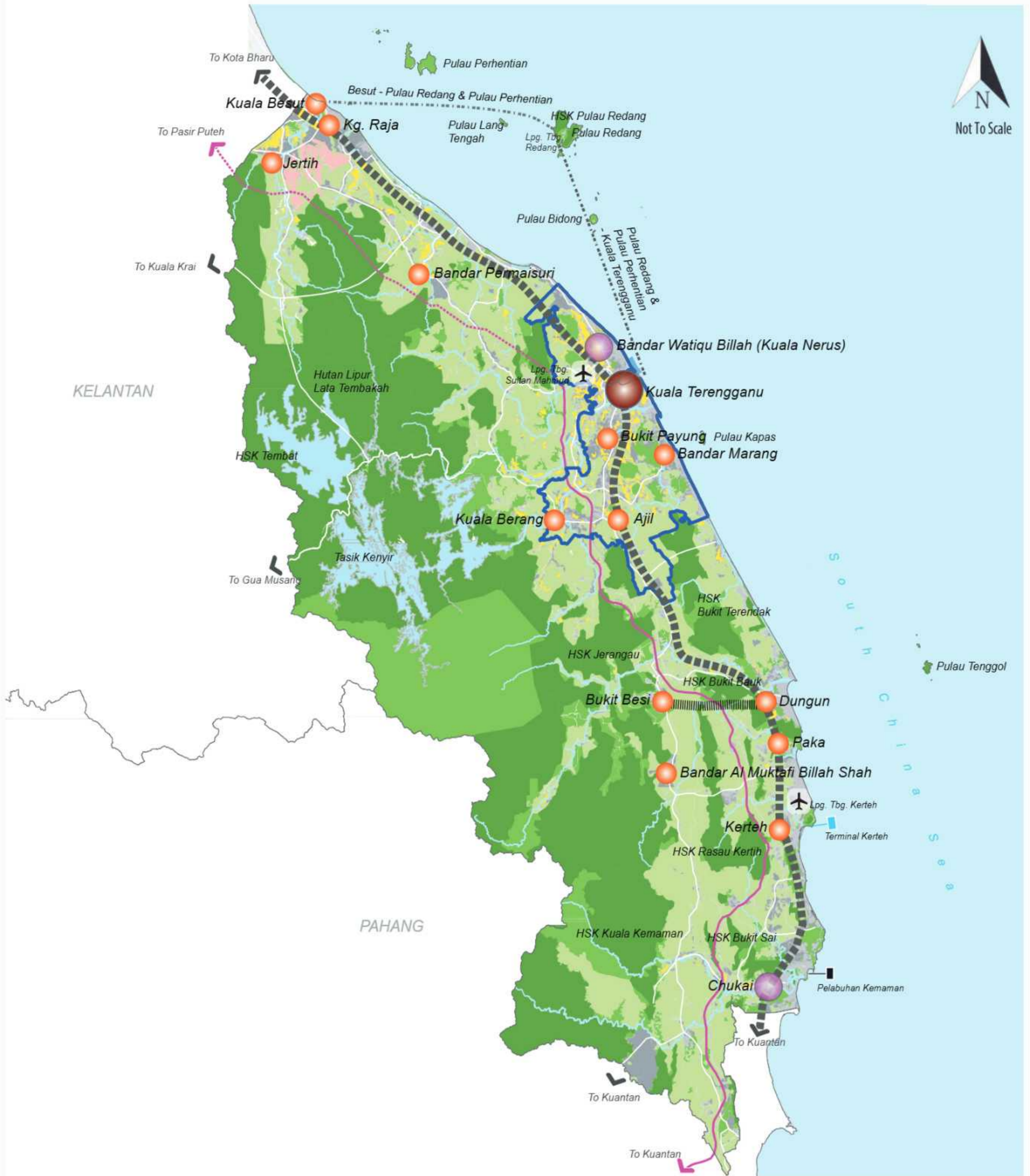


Figure 5.17: Urban Hierarchy Plan of Terengganu

LEGEND:

<p>URBAN HIERARCHY</p> <ul style="list-style-type: none"> ● State Capital ● Main Centre ● Local Centre <p>CONSERVATION & PRESERVATION AREAS</p> <ul style="list-style-type: none"> ■ Permanent Forest Reserve & Sanctuary ■ Forest ■ Water Bodies 	<p>GROWTH AREAS</p> <ul style="list-style-type: none"> Development Promotion Zones (DPZ) Existing Built-Up Areas Future Built-Up Areas National Transit Development Hub & Corridor (Proposed) State Transit Development Hub & Corridor 	<p>AGRICULTURE AREAS</p> <ul style="list-style-type: none"> National Granary Area National Non-Granary Area Comodity Plantations <p>OTHERS</p> <ul style="list-style-type: none"> ■ Ports ■ Terminal ✈ Airport — Main Roads — Existing Highway — Proposed Highway — Ferry Route 	<p>SUMMARY INFO ON URBAN HIERARCHY TERENGGANU</p> <p>State Capital 1</p> <p>Main Centre 2</p> <p>Local Centre 13</p>
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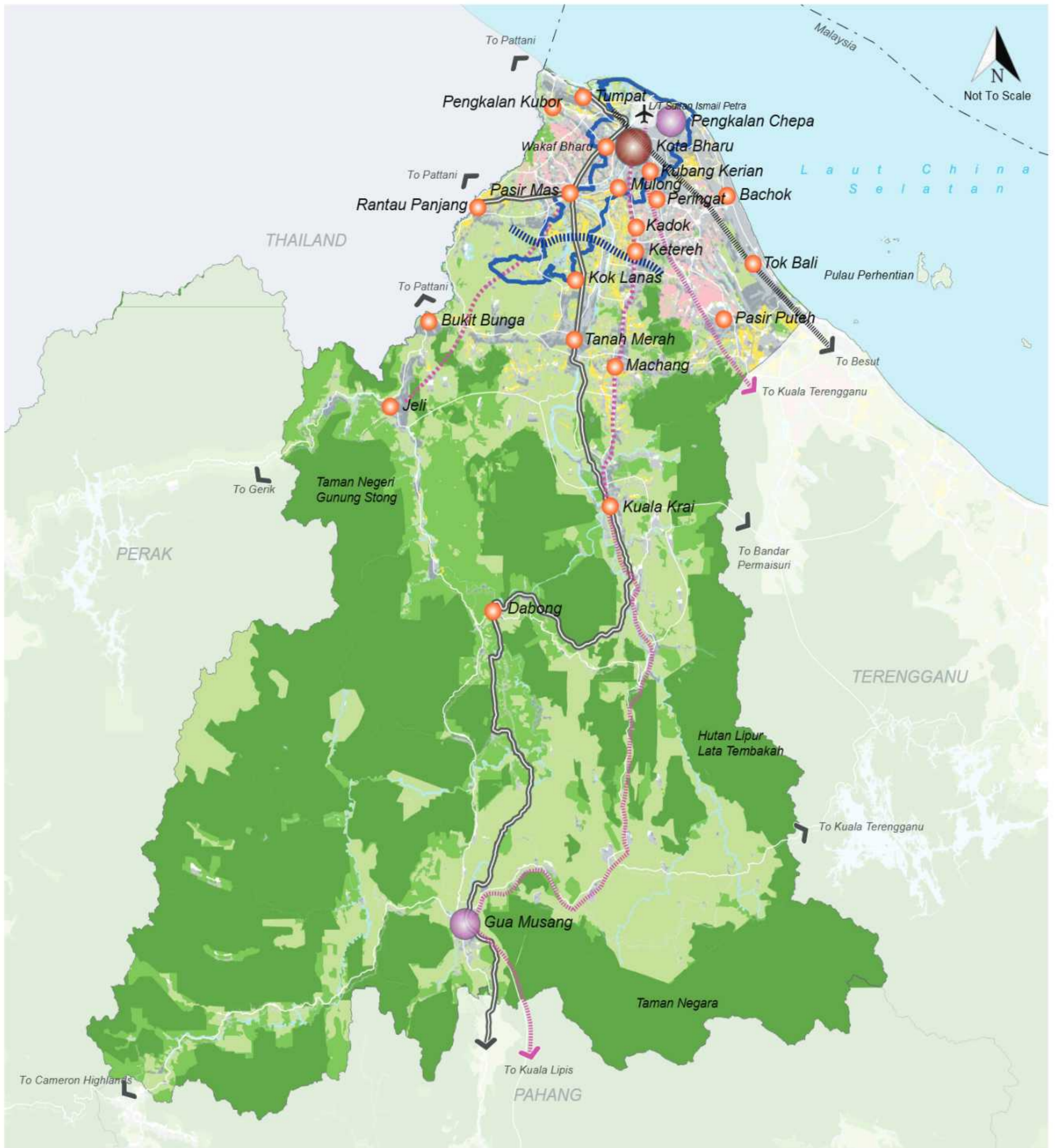


Figure 5.18: Urban Hierarchy Plan State of Kelantan



5.5 Urban Functions and Special Features

Cities and towns with special functions and features shall be developed based on their own potential and distinctive characteristics (Refer Appendix 2). There are three (3) actions that shall be implemented by the state/ local authority -

- i. Identify the centres with special functions and features such as -
 - a. Boundary Towns;
 - b. Tourist Towns;
 - Coastal Towns;
 - Highland Towns;
 - Nature Based/ Ecotourism Towns;
 - Historical/ Heritage Towns;
 - Royal Towns.
 - c. Special Role Centre;
 - Aeropolis Town;
 - Military Towns;
 - High Technology/ ICT Towns
 - d. Special Industrial Towns;
 - e. Port City; and
 - f. Education Towns
- ii. Economic development of these special feature towns shall be based on their characteristics and provision of supporting facilities; and
- iii. Plan and preserve land use zones to retain the special features.



Royal Town, Kuala Kangsar