

Georgetown City Image



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Georgetown City Image



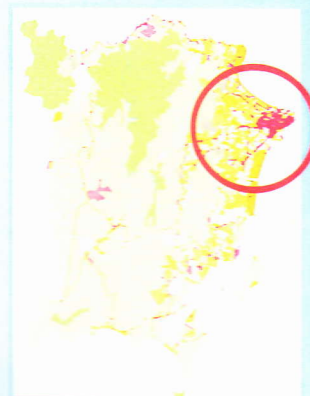
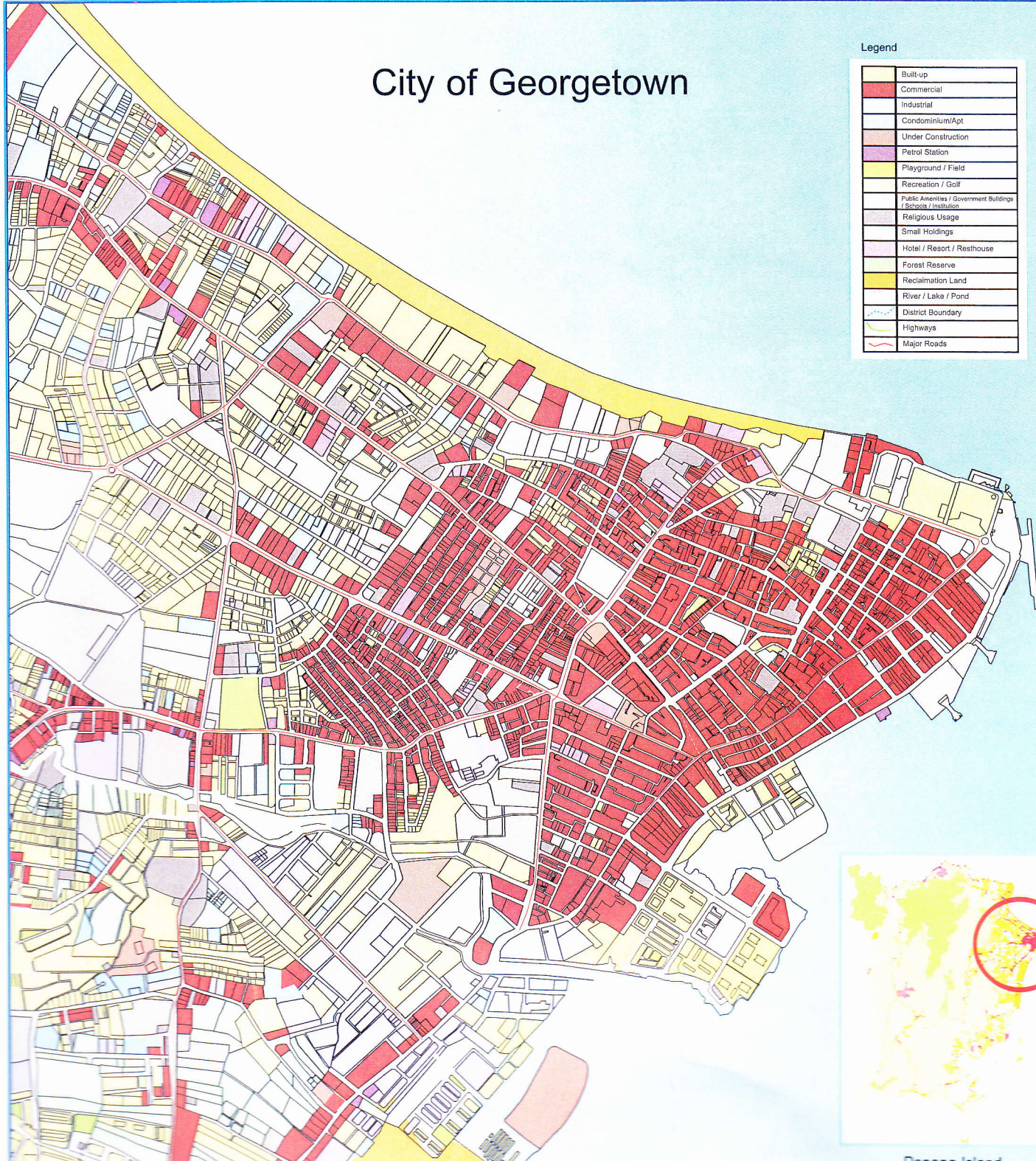
DEPARTMENT OF TOWN AND COUNTRY PLANNING
PENINSULAR MALAYSIA

Ministry of Housing and Local Government, Malaysia

City of Georgetown

Legend

	Built-up
	Commercial
	Industrial
	Condominium/Apt
	Under Construction
	Petrol Station
	Playground / Field
	Recreation / Golf
	Public Amenities / Government Buildings / Schools / Institution
	Religious Usage
	Small Holdings
	Hotel / Resort / Resthouse
	Forest Reserve
	Reclamation Land
	River / Lake / Pond
	District Boundary
	Highways
	Major Roads



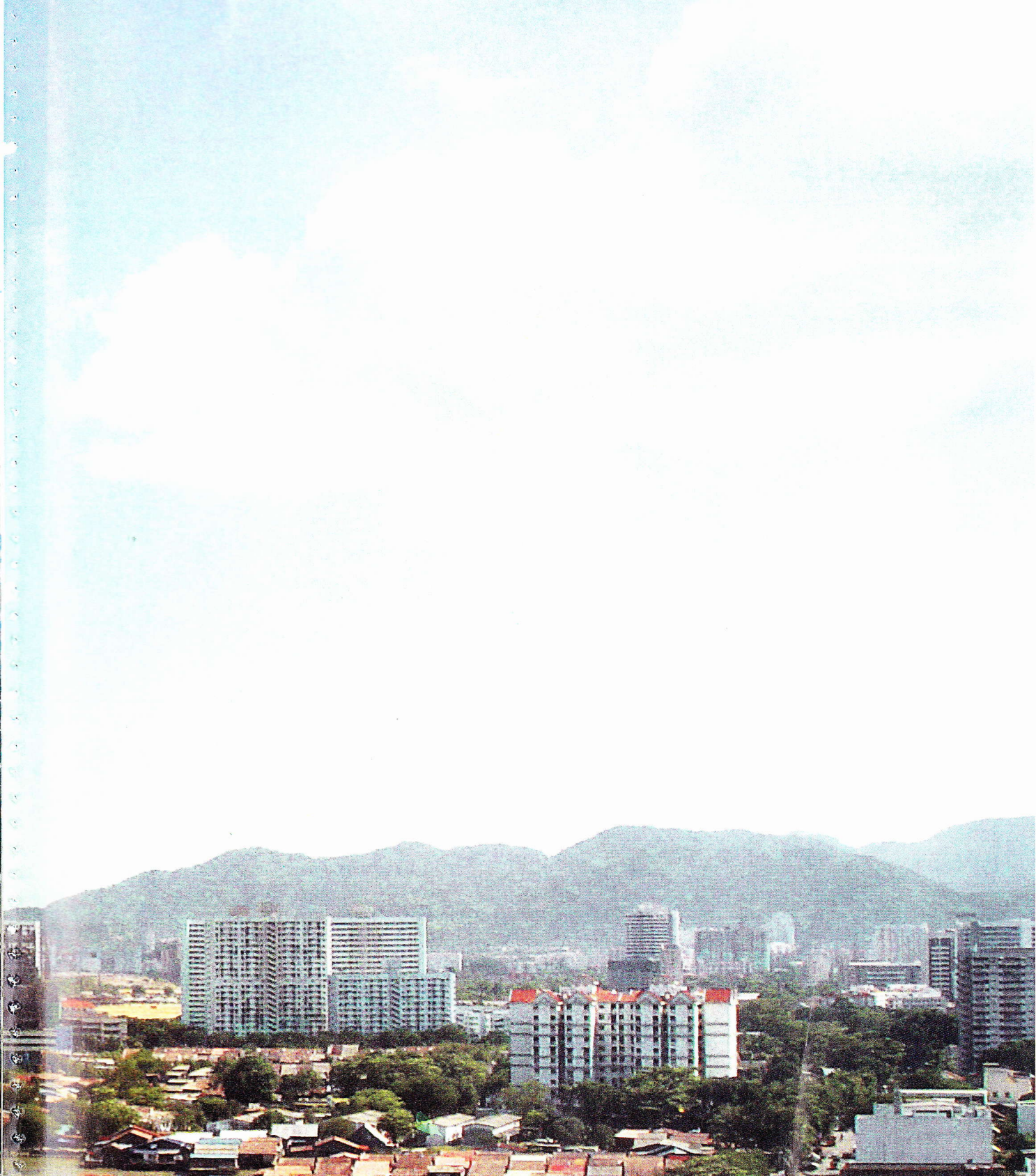
Georgetown - A city of lights with KOMTAR as a beacon of progress.



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GEORGETOWN CITY IMAGE

"Sustainable Approaches to Town Planning"

Foreword

As the nation steps into the new millennium, one city in particular stands out. The city of Georgetown, which is located in the State of Penang, is a living embodiment of rich heritage amidst an urban environment. Progressing towards a fully developed city, Georgetown is a manifestation of the fusion of heritage conservation, ecological management and urban redevelopment, further refining the uniqueness of a city that aims to meet future needs and demands. Georgetown is one of the most liveable cities in Asia and has risen to become one of the best cities in Malaysia. Accelerating economic growth has deemed this city its name, the Pearl of the Orient. This has attracted both local and foreign investors who have further economically augmented and diversified the city.

As a country with Islam as the official religion, each development is planned and implemented to assure the integration of ethnic values towards developing a civil society and adherence to sustainable development principles. The Total Planning and Development Guidelines form the backbone of sustainable town planning for Georgetown and other emerging cities in Malaysia. The Vision 2020, development plans, sustainable development strategies, laws and acts have provided a significant portion in the formation of a global capital city - a city of e-commerce, k-economy,

rich cultural and social diversity, and progressive development. In the last three decades, the city fabric has evolved with the addition of various physical element developments. The current image of Georgetown clearly reflects its great success in its progressive participation towards realising Vision 2020. Georgetown, is, a city that is adaptable, resilient and conducive for the growth of its economy and society.

This publication portrays some of the major elements that shape the image of Georgetown. Beginning with an introduction to the city, the scene is set with preceding chapters which places an emphasis on key elements of the city. Supported by strong guiding principles and plans, proper city planning has helped heighten and redefine the image of the city. The Federal Department of Town and Country Planning has laid the groundwork to ensure that the cities in Malaysia remain as sustainable entities that would ensure the aspirations of a developed nation are accomplished through the implementation of Total Planning and Development Guidelines, which are the nucleus of all planning. Gratitude and appreciation is extended to all parties that are making these philosophies into reality, a continuous effort from everyone.

The Image of Georgetown



Introduction

The city image of Georgetown represents a symbiosis of the past and future. Layers of history can be peeled away by discerning the different structural images of the city. The basis of the city lies in the adoption of the Total Planning and Development Principles which is also the catalyst of other planning activities. The city of Georgetown, which acts as the State capital of Penang is governed at the local level by a Municipal Council.

With a current population of 400,000 and a variety of physical structures, Georgetown is a culturally diverse city. Although the city has been in existence before specific sets of policies, guidelines and doctrines came into being, the city is representative of city planning ideals. The image that Georgetown portrays is of a cityscape blended with the natural environment. As with other cities in Malaysia, the basic underlying principle of planning embodies the philosophy of a fundamentally balanced relationship between Man and his Creator, Man and his fellow Man, and Man and Environment, which form the basis of Malaysia's Total Planning and Development Guidelines.

Planning for Georgetown incorporates these principles in shaping the image of Georgetown. Each component is evident throughout the city landscape.

Peaceful

A city is a human habitat that supports the social, economical and personal needs of its residents. It allows a relatively uninterrupted environment. The image of peace is intertwined with the element of safety as the two are mutually exclusive.

An environment such as this stimulates business development and cultural growth. Thus, the planning of Georgetown has always emphasised the elements of safety, equitability and health. In fact, the city is designed from a human point of view enabling its residents to interact with its urban and natural environments efficiently. Access to the city is designed to facilitate accessibility and enhance these interactions.

In terms of security, the provision of infrastructure and services are well arranged to provide comfort and safety for residents. The prevention of crime is a basic criterion and thus, pursued vigorously through the placement of public services and activities. Local neighbourhood watches are an ideal example of how a peaceful social element is part of the Malaysian city matrix.

Preventive and mitigating steps are undertaken to ensure that the natural occurrences of flooding and soil erosion, and additionally, man-made threats such as pollution and crime, are not part of the city image. Additionally, threats of pollution are either eliminated or contained within a specified site. A peaceful city embraces beneficial elements while shying away from components which pose a danger to the residents in particular and the city in general.





Friendly

Interaction among people plays an important role in the shaping of a liveable city. Due to Georgetown's cultural diversity, it is easy to see how its residents move around in large social groups. Thus, it is the city's aim to instil the spirit of good neighbourliness among its residents through proper land-use, especially in the planning of residential areas. With the design and placements of social facilities and public places take this relationship into account.

Due to the high number of tourists to the city, social interaction is heightened and need to be incorporated in the planning of the city itself. Thus, the design and placement of Georgetown's public facilities are built to facilitate interaction between locals and visitors. Apart from that, the city's facilities also cater to groups with special needs such as children, senior citizens and the physically disabled, making Georgetown a truly people-friendly city. With a balanced development of modern infrastructure and lush greenery, Georgetown exudes warmth and acceptance.



Knowledge

Because the Creator has bestowed upon man the capacity to learn, we have the duty to maximize acquisition of knowledge in order to establish the foundation of a civilized society. Georgetown is a well-planned and developed city as well as a centre of learning. Based on this concept, the neighbourhood unit is modelled after institutions of higher learning as the centre of information. Education centres, schools and libraries form some of the physical manifestations of knowledge and as a focal point in the city design. The Fikrah Garden or places that are used to upgrade the knowledge of urban residents are greatly emphasised in this concept. The quest for knowledge has to be achieved through education in order to build the foundation of a civilised society. In addition, knowledge as the cornerstone of a city would result in enormous benefits to every aspect of human existence. A city with knowledge is a city well-equipped to overcome problems through proper planning, consultations and accurate information. This is the ultimate goal of the city's concept of knowledge.



The University Sains Malaysia's facilities are not only used by its own students but open to all.





Cleanliness and Beauty

Beauty and cleanliness are two noble values that are enshrined in all cultural and social systems. In striving to become a progressive city, Georgetown recognises the importance of these values and, in fact, incorporates them into its public amenities and services. However, these values cannot be realised without a sense of civic consciousness in the residents. Thus, residents are encouraged to practice good hygiene to ensure cleanliness of the city. The proper design and construction of buildings, transportation systems and industries also place importance on the element of cleanliness. The public too are encouraged to utilise the amenities that exist in the city to encourage a healthy lifestyle.



Georgetown is also blessed with lush greenery due to landscaping measures which maintain the surrounding green areas. The many open areas, public parks and green lungs around the city not only balance the urban landscape but also become venues for outdoor recreational activities. The adoption of this value endows the city with a multi-fold return that is derived from the beautiful landscapes and gardens, enhanced aesthetic values and an overall positive health of the city.

Prosperous

A prosperous city allows its residents to enjoy the benefits of sustainable periods of growth development. Social impacts especially due to economic downturns is lessened and the opportunity to achieve social and economic advancement are available.

To maintain its prosperity, the city recognises the importance of its natural resources. While Georgetown strives to develop, it also recognises the importance of proper use and management of its natural resources. A city with prosperity would progress towards integrated development, which in turn would mould the citizens towards a progressive way of life, respecting the rights of others and upholding the principles of justice.





Active

An active city supports the needs of visitors and residents on a continuous basis. From day to night, facilities for accommodation, healthcare and entertainment are readily available. Besides that, the city also caters to the needs of the business and industrial workforce with long operating hours. Roadways are well-lit to ensure the safety of users at all times, and streets and buildings are decorated with lights to create a lively atmosphere. An active city also caters to the health needs of its residents. This is in line with the promotion of a healthy society. Traditional and modern health and fitness centres are easily found within the city. Sports complexes that cater to various indoor and outdoor sports are strategically located within the city and the suburbs. Open areas are converted to public parks and gardens which provide adequate recreational facilities. Hospitals and clinics offer state-of-the-art medical technology to provide advanced healthcare facilities and services to the public, healthcare is increasingly becoming an aspect of Georgetown's attraction. This is in line with the objective of building a productive, strong and healthy nation.



Multicultural

Georgetown is home to a myriad of culture and ethnicity that have co-existed for generations. As such, a great level of tolerance and understanding has been established in the residents' ideals and aspirations. Unity is the key factor in binding the different people of Georgetown and is manifested in the architecture and planning of the town itself. Places of worship of different faiths that exist side by side are common sights in Georgetown. The celebration of the town's cultural differences are embraced and showcased through the various colourful festivals that adorn the city's streets every year. The planning and development of the city also incorporate the diverse cultural elements within the choice of facilities, placement and designs. Certainly, the city takes great pride in such cultural and racial diversity that have survived for centuries. Hence, planning and development of the city is balanced with equal respect for each culture to maintain a peaceful and harmonious existence.





Natural and man-made environments blend seamlessly into a functional, beautiful and safe urban environment .



Conservation

Conservation of heritage landscapes and natural environment is an important aspect of the planning and development of the city. These environment functions as a source of balance between development and cultural values which add value to its residents' lifestyle. A well conserved environment offers a knowledge of how the past shaped the present. As the oldest urban settlement in Malaysia, Georgetown demands great responsibility in the care and maintenance of its diverse natural environment. As the city grows, its natural environment is maintained and conserved as an important element within the city matrix. In the city, built sites often go through periods of refurbishment and renovation in order to constantly adapt their use to modern demands. Sustainable development requires that these important sites do not become idle but are utilised for the benefit of the city.

Laws and regulations to this effect are available, providing clear directions to the city's growth. Knowing the potentials and limits of our natural and built environment is crucial within the context of planning and development. Thus, pristine areas are conserved for the benefit of residents. This symbiotic relationship between man and the environment has to be balanced to ensure the well-being of residents.

THEMES OF THE CITY - GEORGETOWN



Introduction

Physical planning and development is based on unique or specific themes that contribute towards achieving the ideals of Vision 2020. Themes can be based on natural or man-made features and characteristics that are prominent or identifiable within a city. In Georgetown, health and conservation are important aspects of the city which are carried throughout most of the respective themes. The city being situated between green landscapes and the sea, has strived to maintain an image as a healthy city. Indeed with such natural surroundings, these are important aspects of the city that are sometimes overlooked.



Vision City

The vision city is the ideal Malaysian city which would act as a catalyst towards achieving Vision 2020. Vision 2020 requires the country and its cities to be fully developed by the year 2020. The vision encompasses the development of infrastructure and society as well as the creation of a caring society with the acquisition of scientific and technological expertise.

The city is geared to become a world class technology hub that will provide various types of facilities; education, transportation and healthcare services. Combined efforts between the Federal, State and public institutions are gearing their efforts with transforming the heritage enclaves of Georgetown as a heritage protection zone for Malaysia and the world.

Infrastructure and utilities such as water and electricity supply, irrigation and roads are well provided despite land constraints. The planning of an efficient transportation network is further enhanced to decrease congestion. Educational and health facilities are excellent while sustainable use and management of the coasts are underlined. The city's emphasis on its three unique resources which are its people, culture and natural resources helps Georgetown in realising the aims of Vision 2020.

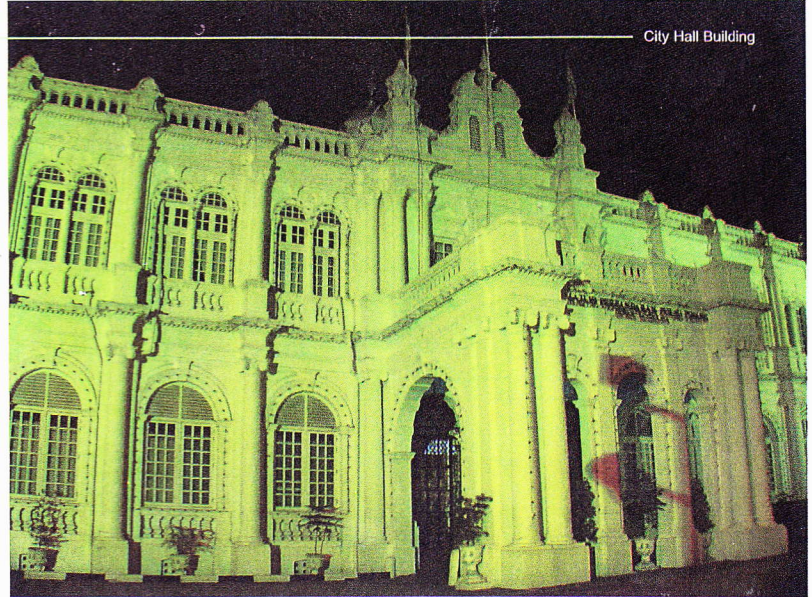




The facilities below are some elements that instil a sense of pride and motivate the citizens of Georgetown to aspire towards the vision that has been set down for the country as a whole. These landmarks play a local and national role in characteristics of sovereignty and administration. They are the bedrock of a Vision City. Having a strong administration supported by sufficient facilities are the hallmark of a Vision City. Administration facilities follow a certain hierarchy that encompasses the facilities below.

City Hall

The City Hall is a beacon of the city's development and growth. The building that is situated in the administrative node has been in use since the 1880's. Georgetown is designated as the State capital of Penang and the centre of local administration. The City Hall is a symbol of the authority vested in the city. Management of the environs and meeting the needs of the city represent the role of City Hall. Good governance is reflected not only by the image of City Hall, but also by their responsibilities and actions.



Seri Mutiara

The Seri Mutiara is the official residence of his Excellency, the Governor of Penang. Since Penang does not have a Sultan, the Governor upholds the sovereignty in the city and state. A symbol of state sovereignty, the Governor presides over functions of state importance. Each capital city in the country has the placement of this institution at sites that are able to portray prestige, strength and power. The landscaping surrounding the site together with the aura that permeates from the Seri Mutiara provides for a sense of continuity and leadership.





Penang High Court

Penang High Court

Laws and regulations are upheld in order to maintain an orderly and civilised society. Through the provision of a High Court, law and order is maintained. As a major city, Georgetown has one leg of the highest legal circuit in the country. The site has been used continuously as a court since 1809. Through the application of laws and rights by the High Court, the city and the country as a whole would have a significant symbol of fairness and equality.

State Mosque

Islam is a major religion in this country. This is reflected by its' official status within the national context. The state mosque is situated in state capitols throughout the country. This enables the city and it's residents to have a living institution that upholds their beliefs, culture and heritage. The state mosque in Georgetown completes the hierarchy of heritage mosques and other religious institutions in the city.



Recreational City

Open space, recreation and landscape are important aspects that need to be given emphasis in development efforts for the residents' well being. Recreational development within Georgetown's coastal areas can be found in various places. However, the more popular ones are the esplanades located within the city centre like the Gurney Drive and the Padang Kota Lama promenades.



Pedestrian walkways along Gurney Drive are wide and paved for the comfort of pedestrians. Matured Casuarina and yellow flamed trees line the esplanade and visually enhances its surroundings.



The Gurney Drive is a popular two-kilometre long esplanade that stretches along the north-eastern coast of Georgetown. Street furniture and such as benches and potted plants are provided along the pedestrian walkway that sandwich the asphalt surface road. Matured casuarina and yellow flame trees provide shelter from the afternoon sun and contributing



to a cooler microclimate for the comfort of pedestrians. Street lighting is sufficiently provided to ensure the safety of visitors at night. Gurney Drive also plays host to interesting local festivals such as Buddhism's Loy Krathong and Taoism's Nine Emperor Gods Festival. In the background is a mixture of upmarket residential and hotel development, built facing the sea to make full use of the scenic beachfront view and the cool sea breeze. Conserved bungalows provide a stunning contrast when set against the background of high-rise residential and hotel towers.



Located towards the east of Gurney Drive is another popular promenade - the Padang Kota Lama, or the City Hall Esplanade. Elements of hard and soft landscape were carefully blended to provide a promenade that is both beautiful and practical. In the background, opposite the seaside of the promenade is the City Hall. Built in the 1880s, this stately colonial building incorporates British Palladian architecture featuring magnificent Corinthian columns and large windows. Successfully conserved, the building now serves as the office of the Penang Island Municipal Council and provides a picturesque backdrop to the area. Adjacent to the Fort is Taman Kota Lama - a public park regularly visited by local families. The park, which oversees the sea and featuring children playground and a mature landscape, is a perfect place for picnic and light recreational activities.



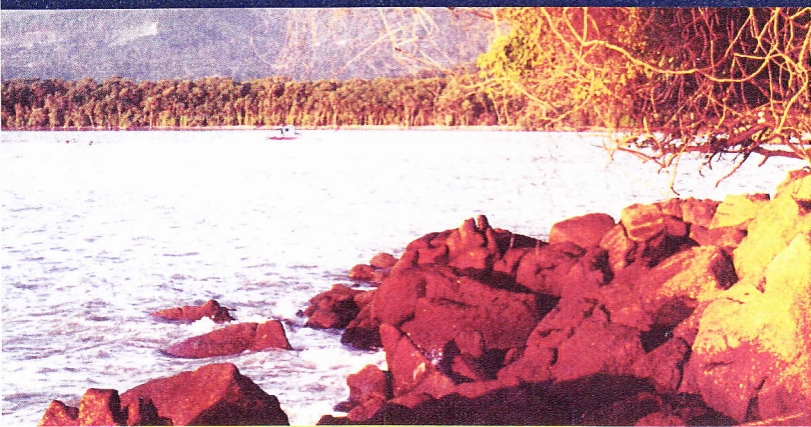
Urban Parks

Providing much-needed space for public recreation, urban parks also create public awareness and educate people on the importance of environmental conservation. At the same time, some of these parks have turned out to be successful tourist attractions. Urban parks also function as green lungs and contribute towards the microclimate of an area.

The Air Hitam Recreation Park is an example of the island's urban park which offers both recreational space as well as environmental education. The 100-hectare Forest Recreation Park is home to countless species of plants, insects and small animals. It also features a network of footpaths and flowing streams for the enjoyment of visitors. A forestry museum is also located within the park area. Constructed from various species of wood and other forest produce, the museum houses a large collection of forest produce from all over the country.

Georgetown has numerous parks which range from state to neighbourhood parks. These spaces are planned and developed as recreational areas for residents to carry out leisure activities. They function as green lungs and additionally are also equipped with facilities like footpaths, rest huts, children's playgrounds, picnic sites, and archery. Areas such as these include the Teluk Kumbar Forest Recreation Park and the Youth Park.





Recreational Forests

The rapid industrialisation and development of other economic sectors have brought intense pressure on undeveloped land, including tracts of natural forests. Nevertheless, the continued existence of natural forests on the island as water catchment area is vital. Hence, utmost attention is given by the State Government on efforts to conserve the natural forests of the island. The Penang State Forestry Department has planned and developed forested areas on the island for recreational purposes. Various types of facilities are also provided for visitors. Some of the recreational forests are the Teluk Bahang Recreational Forest, the Pantai Keracut Recreational Forest and the Sungai Tukun Recreational Forest.



Near the city, the main tracts of natural forests can be found on Penang Hill which is the collective term referring to a cluster of peaks such as Strawberry Hill, Western Hill and Bukit Bendera. The highest peak is Western Hill, which rises to 817 meters. Covered with primary and secondary forests, the hills are rich in biodiversity. Receiving a high mean annual rainfall of about 3,126 mm per annum, Penang Hill is also the source of four main river systems that drain the central part of the Penang Island. Combine this with the largely untouched forest cover, Penang Hill is the main water catchment area that supplies the city. Presently, the hill catchment area supplies 30% of the total volume of water supplied to the State water authority - the Pulau Pinang Water Supply Board.

Visitors can reach the hilltop via a funicular railway from a station at Hill Railway Road. Completed in 1923, the line rises 737 meters. The 30-minute ride will take visitors from the base of the hill to the summit through jungles carpeted with lush vegetation inhabited by troops of long-tailed macaques. Alternatively, visitors may want to use a jungle track, which begins at Waterfall Road adjacent to the Botanical Garden.







In addition to natural forests, recreational forests also play significant roles in promoting environmental education and sustainability of the island's resources. One such forest is the popular Botanical Garden. Located off the Waterfall Road, the 30 hectares of beautifully landscaped valley is also commonly known as the Waterfall Garden due to the location of a secluded waterfall flowing through the undulating terrain. Created in 1884 by the first superintendent, Charles Curtis, the garden is the only gazetted botanical garden in Malaysia. The well-planned landscaping design of the garden remains relatively unchanged until today.



Landscapes & Gardens

Georgetown is renowned for its tree-lined roads. Scotland Road, Residency Road, and Macalister Road are fine examples of roads where the street landscape is decorated with well-maintained mature trees. Trees of all sizes and heights are utilised in an integrated design for all parks and landscaping (in accordance with the National Landscape Guidelines 1997). Road shoulders and medians have been meticulously maintained to act as a buffer and balance the harsh hard landscape of the roads. Landscaping beautifies the city and efforts to increase landscaping together with maintaining current landscapes adopt Federal and Local guidelines in their application.





Located close to Georgetown, yet secluded from the hustle and bustle of the city, the Botanical Garden serves as the city's green lung. Today, it is a prime recreational spot not only for city dwellers, but also for many of the island's residents. Accordingly, facilities are provided to cater the recreational needs of the visitors. In addition to the vast array of vegetation, three loop roads are provided for joggers and strollers. Today, the Botanical Garden is also a place for research and education. With over 300 species of flora within its beautifully landscaped ground, the garden caters for both scientific research as well as school environmental education programmes.



Cultural City

The residents of Georgetown trace their roots to the inner areas of the city. While most of them share common beginnings, they also display a rainbow of cultural and spiritual legacy. In fact, the term - the "Penang Way of Life" was specially coined to reflect the culmination of colourful customs and traditions due to each race's rich cultural contributions.

Georgetown is a city that tolerates and encourages different religious practices and beliefs. The freedom of religion is the cornerstone of the city's multicultural strength. Many heritage sites bear testimony to this. The Jalan Pitt area serves as the best example. As one walks along the street, one will encounter the Kapitan Kling mosque, the Sri Mariamman Hindu temple, the Kuan Yin temple worship and the Anglican St. George's church. All these four famous places of worship symbolise Georgetown's spiritual heritage. They also indicate the fostering of closer ties among the people of many races and cultures who have lived together for generations. Currently, newer places of worship are developed within residential areas which also function as community centres, in addition to religious functions.

Culture in Georgetown also takes the form of performances and the arts. Supplementing the rich heritage of the city, the local council formed the Penang State Cultural Council, whose task is to oversee the development and administration of cultural events throughout the city and the state. There is a mixture of private, public and institutional facilities that cater to cultural events. These facilities offer a contrast to the built heritage of the city by showcasing the human heritage.



Sri Pinang Hall

The Hall sits on what was formerly the Edinburgh House. Further enhancing the Hall, it is situated within one of the Heritage nodes of Georgetown, the Lebu Light area. It can accommodate around 2,000 people and usage of the facility is complimentary for state arts



State Museum

The State Museum was originally the site of the Penang Free School before it moved to its present site in 1927. The building was built in two parts, in 1896 and 1906, as funds only allowed the completion of one half at a time. During World War II, the eastern half was destroyed, leaving only the western wing as it is today. The museum was founded in 1965 and in 1998 it underwent major renovation works. The museum is considered one of the finest state museums in the country.



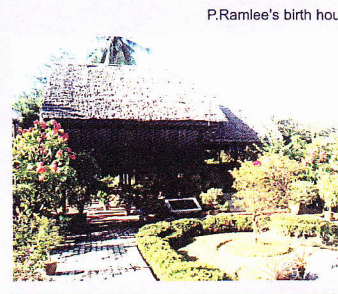
Universiti Sains Malaysia Cultural Hall

As a facility specifically for students and generally for the public, the University has a hall for cultural and artistic performances. It is part of educating and exposing students and the public to local cultural aspects such as dance and music.



P. Ramlee Auditorium

Culture plays an important part in the development of a city. The state has taken initiatives to develop this area of human activity by establishing their own cultural and arts department. One of the facilities that this department provides is an auditorium bearing the name of one of Penang's most famous thespian sons, the late Tan Sri P. Ramlee. The auditorium is open to cultural, art and entertainment performances.



P. Ramlee's birth house



Business City

Tracing its history, it can be said that Georgetown remains true to its role as centre of trade and commerce. As a historically important coastal city, the city planners succeeded in creating a symbiosis of the old and new. Rural paths that were crossed by travellers and traders of the past are still being used by today's businessmen and holidaymakers. The inner areas of the city are constantly being upgraded with many modern conveniences and services while retaining its rustic charm. Industry, especially high-tech, is the main goods of trade that functions as the lifeblood of commerce. Georgetown serves as the marshalling point of these goods that also cater to a worldwide market. Banking, shipping and freight are some of the services that the city provides.

Commerce, trade, finance, insurance and higher-order services are critical sectors that have augmented growth and that have further diversified the economy to help establish the city firmly as a regional centre. Currently, commerce and trade, as well as the finance and insurance industries are in the midst of improvement by the State to meet international standards to attract both local and global demands and needs. Just as some administrative departments make heritage buildings as their centre of operations, so have many commercial enterprises. Their occupancy has certainly given these old and often forgotten buildings a new lease of life.



Commercial premises in the Georgetown inner city

- Ⓐ Komtar
- Ⓑ Padang Kota Lama
- Ⓒ Ferry



Penang Development Corporation Building



The city supports a myriad of business, from hawkers to world class organisations



KOMTAR

KOMTAR is the largest commercial centre in the city. It is named Kompleks Tun Abdul Razak (KOMTAR) in honour of the second Prime Minister of Malaysia, the late Tun Abdul Razak bin Hussein. At its time of completion in 1985, it was the largest urban redevelopment project. A 65-storey urban centre overshadowing the heart of Georgetown with a breathtaking view of the city, KOMTAR also contains theatres, squash courts and a geodesic dome which serves as a multi-purpose hall. Today, KOMTAR is recognised as a landmark of Georgetown and Penang, and has proven itself to be a successful city landmark. About 5,500 people for work in the complex daily, including 1,800 civil workers serving the State Government and allied services.



Exterior shopping arcade at KOMTAR.



Interior shopping arcade.



Industrial Development and Free Trade Zones

The industrial area represents the work place where some of the urban residents earn their livelihood. Industrial areas are carefully planned and integrated with other related developments such as housing, urban and commercial centres and open spaces as well as recreation areas. In Georgetown and generally Penang, the growth of the industrial sector, especially the manufacturing division, is one of the success stories of the state's economic development. It has transformed the state economy from one that was largely agriculture-based in the 1970s into an industrialised one. In the year 2000, the manufacturing industry contributed over 45% of the state's economy.

Industrial development in the state is carefully planned to minimise detrimental effects of such activity on the human environment. As a result, most factories operate within the designated industrial area known as an industrial estate, industrial park and free trade zone. The Penang Development Corporation (PDC) develops and markets these sites.

On the island, the main industrial development is the Bayan Lepas Industrial Park and Bayan Lepas Free Trade Zone. As of the year 2000, Bayan Lepas Industrial Park consists of more than 117 factories within an area of 110 hectares. The total number of employment in the area stands at 25,000, with the total number of jobs created in PDC industrial areas being close to 200,000.

Covering an area of 238 hectares, the Bayan Lepas Free Trade Zone is made up of 83 factories that generates over 60,000 jobs. The electronics and electrical industries are the biggest employers with close to 100,000 workers employed in approximately 170 factories. Despite their close location to the shoreline, the presence of this industrial development does not interfere with the use and enjoyment of the shoreline. Dominated by high-tech industries, the impacts of the industrial area on its surrounding environment is minimised due to the low pollution generated by these 'clean' industries. Additionally, a well-landscaped coastal highway functions as a buffer zone between the industrial area and shoreline. This coastal highway also ensures the industries are easily accessible by heavy vehicles transporting goods and materials to and from the Penang Port or the Penang Bridge.





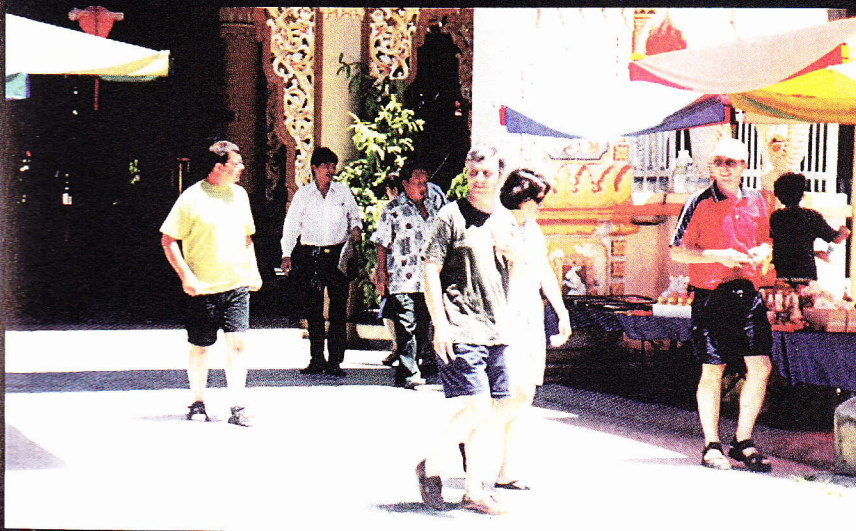
Petro-chemical Industry



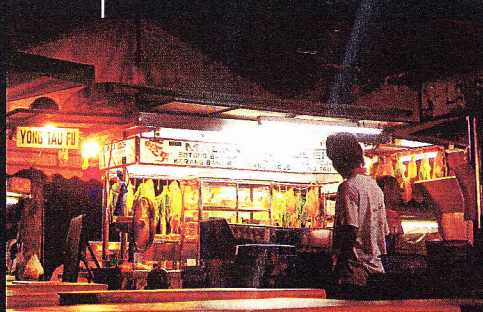
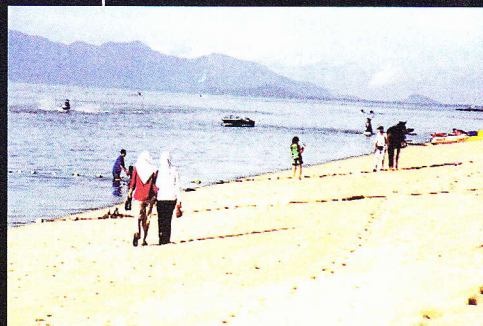


Tourism City

Urban tourism augments the popularity of cultural heritage sites by linking them to the natural attractions of the city. As with most other aspects of the city, tourist sites are well-connected. Transportation networks are smooth-flowing, enabling the visitor to gain easy access. Supporting services supplement tourist attractions. Increase in business travellers have helped increase and improve public facilities. Convention and exhibition facilities are currently upgraded. This has been formulated into the Meetings Incentives Conventions and Exhibitions strategy.



To the west of Georgetown lies pristine tropical beaches. The Tanjung Bungah, Batu Feringgi and Telok Bahang beaches, which make up Penang's northern coastline, are famous for their sandy beaches. The seemingly endless stretches of beaches, interspersed with coves enclosed by hill dipterocarp forests are popular among the locals and visitors. This is also where major tourism development takes place. Hotel development that supplements tourism activities has seen an increase in the usage of information communication technology tools such as high speed internet. More services would be made available to transient residents to Georgetown.



Education City



The educational institutions are strategically located within the city. They are also close to public facilities. Even with scarcity of land, many institutions manage to have an open space or field for sporting and social events. Georgetown has extensive educational facilities for all levels of education. The public and private education sectors complement each other by offering more courses and increasing student intake. Hence, education is top priority for the people of Georgetown.

The Penang Free School, established in 1816, is the oldest English school in South East Asia. Government schools range from primary, secondary, technical, vocational and boarding schools. Tertiary education is provided by the Government with the establishment of the Universiti Sains Malaysia, the premier science university in the country. Incidentally, this university has the most established town and country planning department in the country. There are numerous private schools catering to education from the primary all the way through professional courses. The Bukit Jambul residential area is currently being developed as an educational township. In a nutshell, Georgetown is self-sufficient in terms of education.



Penang State Library



The Universiti Sains Malaysia is one of the most progressive universities set amidst a lush green environment.



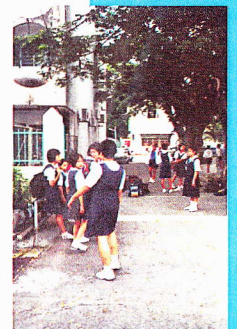
Birds eye view of the university campus



Public schools



Private education is becoming more relevant in the city as an alternative to public institutions



Healthcare City



Island Hospital



Reflexology Centre

As part of the city's vision, the Penang State Government has now added a new dimension to the health development policy of the State. Currently, there are extensive health facilities with modern government polyclinics, hospitals and maternity homes, and health centres made easily available. The public sector complements these efforts with modern hospitals and facilities. Medical education is also emphasised with the establishment of a private medical college in 1996. In an effort to diversify the economy, medical tourism is slowly being accepted and promoted. Private hospitals are aggressively pursuing this economic segment by including in-house marketing departments. Foreign visitors enjoy wellness programmes in addition to curative visits. Traditional forms of therapy like reflexology and acupuncture are also easily available in the city centre.



Public health clinic



Hospital Pulau Pinang





The Red Crescent is a Non-Government Organisation that is active as a support to formal institutions.

Sports City



Recreational and athletic sports are an important stitch in the city's social fabric. The city, where most of the State's athletes train, has produced numerous athletes of international calibre. Domestically, the State is a top achiever often surpassing athletic efforts and results of much bigger States. The success of sports is due primarily to the fact that there is a multitude of sporting options available in the city. One of the aims of sports is to encourage a healthy lifestyle for all levels of the society. The city offers a microcosm of Malaysia's natural environment to train in. The hills offer highland areas, the sea offers the coastal perspective of the country and the city offers Malaysia's world-class sporting facilities.



There are a few international level sporting events that take place in Georgetown. Such events are normally held in areas that take advantage of the natural and man-made elements of the island. The Penang Bridge Run is the most prestigious event held annually. The run utilises the Penang Bridge as a route of the marathon. It is an ingenious use of facilities and has even been adapted by the Second Link to Singapore. The International Dragon Boat Race is another annual event that utilises water bodies on the island like the Telok Bahang Dam. With such high-profile events, there is constant encouragement to its residents to take up a healthy and sporty lifestyle. In addition to organising events, the local government has taken



Penang International Sports Arena (PISA)

PISA is an international class multi-purpose sports complex developed on 25 acres of land in Bayan Baru. The complex is equipped with an indoor stadium, an aquatic centre with an Olympic size swimming pool and a multi-storey car park. It also serves as a grand venue for banquets, exhibitions, conferences and concerts.



Balik Pulau Sports Complex

The Balik Pulau Sports Complex is one of the main facilities for sports and social development. Built on a 12.9 acre site to meet the needs of a rapidly developing town, the complex offers a range of facilities including a multi-purpose hall with a capacity of 2,000, 4 sepak takraw courts, and secretariat room, meeting rooms, an audio visual room, and a stage, changing rooms, prayer rooms and adequate car parks.

Heritage City

Georgetown is rich in heritage both in terms of architecture and culture. Colonisation has left behind buildings of western classicism, some with Islamic influence. Influence from ancient civilisations as far as China and India can also be seen in the many temples located amidst modern architectures all over the city.

Georgetown has an extensive heritage environment of shop houses, villas and mansions. Today, it contains the largest collection of 19th and 20th century buildings in Southeast Asia. The uniqueness of Georgetown lies in the preservation of historic communities and living traditions. The rich architectural heritage of Georgetown is a viable resource for the city. As one of the oldest trading centres in Malaysia, Georgetown has retained many of its unique historical landscape. Although the economic activities of the island have evolved, the city continues to uphold its distinctiveness. Businesses have continuously adapted to modern demands, yet the city is preserved in its rich heritage, forming a fusion of the traditional and the modern.

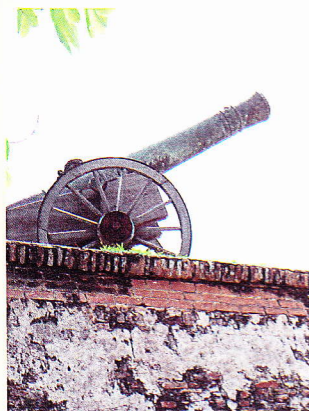




Fort Cornwallis

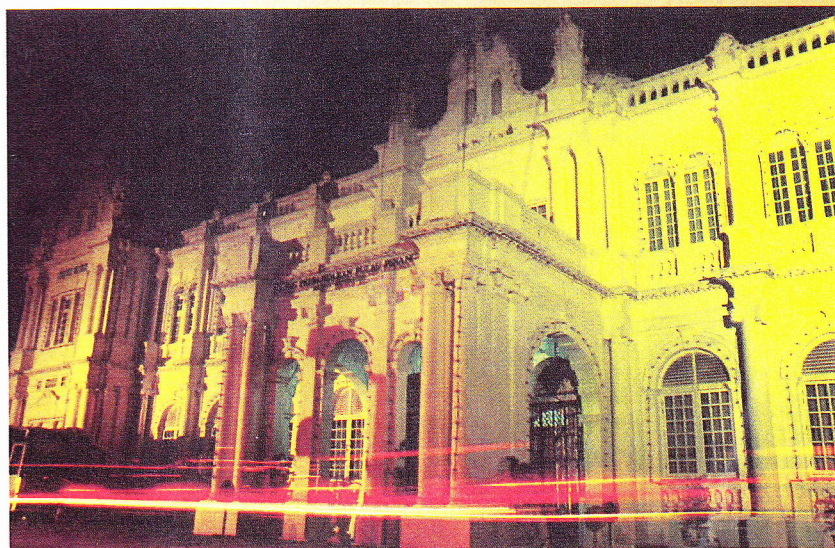
Fort Cornwallis stands at the very tip of the cape of Georgetown. Today, it is a privately-managed cultural venue. The ramparts overlook

the harbour in the North Channel and the port activities which extend along the eastern waterfront. At the northwestern point of the fort is a Dutch cannon from 1603, called the Seri Rambai.



City Hall

Although most of the city council offices have moved to KOMTAR, the city hall is still used as the Council Chamber where the city council members convene. It still houses some services such as the licensing and city services office. It is situated next to the Town Hall and formed the early administration node for the city.



Kapitan Keling Mosque

Lying within one of the largest religious designated lands (wakaf) in the city, the mosque has been an important community centre within the historic core. The mosque serves the urban community as a place of worship, spiritual well-being and place for contemplation. It shows not only the effect of religion can have upon a city but also what different cultural elements within a specific religion can accomplish.



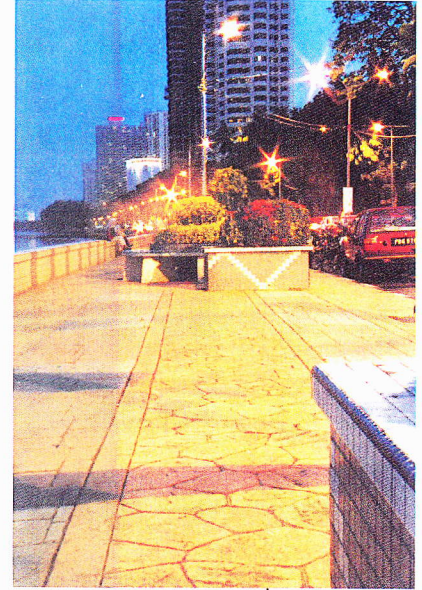
The City Landscape



Functioning as an administrative capital and commercial hub, Georgetown's skyline has become a symbol of Penang's achievement. The gateway to the city is the 14 kilometre long Penang Bridge which was completed in 1985. The bridge has become a symbol of the progress and strides that the city and the state of Penang has achieved. The bridge was a giant leap that was undertaken by the state to further enhance the progressive development of the city.

Today, the city of Georgetown has evolved from rows of shop houses and mansions to a city of skyscrapers. Modern high-rise office towers such as the Menara UMNO and KOMTAR dot the city's skyline and symbolise a thriving and bustling modern-day metropolis. Mature trees line the main roads of Georgetown. These trees function as buffer zones to minimise traffic pollution and enhances the city's landscape. Mass tourism has resulted in the mushrooming of hotels, both in the city and along the coasts. The attraction of beautiful sandy beaches and the luring warmth of the tropical sun have beckoned the growth of coastal areas that are now occupied by hotels and condominiums. Yet Georgetown still houses a plethora of landmarks from as early as the 18th century, many of which has significant historical and cultural importance and now symbolise the rich heritage of the city.

The city skyline is growing rapidly and forms one of the most impressive in the region. Yet, it conforms to the high living standards of residents. With proper designing and execution of holistic strategies, Georgetown will further cultivate its economic achievements and simultaneously enhance the quality of life in a vibrant island city.



The Birth of a City

Over the last two centuries, Georgetown has experienced a wealth of historical events that renders the island unique in its architecture, physical development and land-use patterns. Beginning as an important trading centre in the 18th century, Penang served as a port to harbour, replenish and repair ships carrying valuable merchandise between India and China. Recognising Penang's strategic location, the British formally took possession of Penang Island in 1786 after lengthy negotiations with the Sultan of Kedah.

The city was formed and planned by Sir Francis Light under the auspice of the British Government in the late 1700s. His son, William Light did the same for the Australian city of Adelaide in 1836. Adelaide and Penang are in fact twin cities due to this close historical connection. The city was laid down in a framework style from Lebuhr Light to Lebuhr Chulia. For the next one and a half centuries, the island flourished under British rule, as part of the Straits Settlements and later as part of Malaya. In time, Georgetown became an important immigration port for Chinese immigrants from South China and indentured Indian labourers from South India who sought a better life.

Present day Lebuhr Light



With the advent of the Second World War in 1941, Penang, and then Malaya, fell under Japanese occupation, which lasted for three years before the British took over again in 1945. When Malaya achieved independence in 1957, Malaysia was formed and in 1962, Penang became one of its states, made up of two separate physical entities - Penang Island and Province Wellesley.

Even then, basic town planning and development of Georgetown were practiced as early as the 18th century. Streets such as Lebuhr Armenian and Lebuhr Chulia have since undergone complex transformations in terms of their residents and businesses. Yet, their unique landscape dominates the city image and reveals the island's colourful past.

As Georgetown marches towards the formation of a developed city, the historical characteristics that shaped the current image of the city are not forgotten. The British colonisation led to an increased British settlement on the island. Colonial administration buildings began to mushroom as early as the 18th century, many of which still stand proudly today. Among some of the more prominent historical sites are the Fort Cornwallis and the Clock Tower located near Port Swettenham.

The establishment of Indian and Chinese settlements have also left significant sites that are located within the heart of the city. Mansions owned by various Chinese clans are now given facelifts to accentuate the physical appeal of these 200-year old heritage sites. Many of them are located along streets within the inner city zone. Similarly, Jalan Kapitan Kling still serves as historically important trading venues for jewellery and other precious stones from India. Today, the unique culture of trade in fine jewellery remains as one of the biggest tourist attractions in Georgetown and expectedly occupies the same premises as it did a century ago.



Lebuhr Pantai, 1932

Government Building, 1925

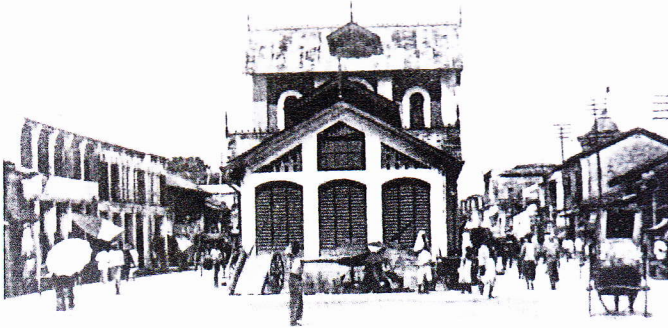


Lebuhr Light, 1932



Architectural History

PittStreet, 1932



Penang Free School, 1973



Ethnic Influences

The built heritage in Georgetown describes a historical and culturally rich city. Various influences can be seen in the present architecture. The story of the city can be traced back to its roots as a trading post with South Indian and South Chinese influences evident in the designs of shop houses and residences. Malay influence can be seen most in residential areas, with the house being built on stilts, in order provide to natural ventilation during the day and to save it during floods.

Most of the buildings that remain in Georgetown are designed after shophouses which are commonly two storey buildings, with the lower floor as the working space and the upper floor as the residential space. The front portion of the second storey juts out over the pavement, creating a covered walkway known as a five-foot way or 'kaki-lima'. While there is additional space reserved for pedestrians, most current terraced-style shops have a 'kaki-lima' in front of their shops. This Chinese-inspired design is seen in its greatest concentration outside China in Georgetown. The city is also a showcase for temple designs.



The old facade of Georgetown is still relatively intact and has evolved to



Residential and commercial dwellings of the inner city maintain their architectural style despite the pressure of modernisation



Georgetown has the region's largest pool of pre-war buildings and a relatively intact historic centre.



Bayan Baru Market and Community Hall Complex



Western Influences

Commercial and civic buildings incorporate Western architecture. The design is most suitable with the current urban landscape of the city. This balances the design architecture of ethnically influenced structures within the city which are used for social and cultural purposes. The North East region of the city or the Tanjung has the most concentration of Western-influenced buildings. From areas surround Fort Cornwallis to Lebuah Chulia, office buildings provide space for financial institutions, distribution and trade companies.



Modern Architecture

There is a tendency to go for styles that are at a tangent from past architectural designs. New structures take into account modern technologies and requirements and then adapt their structures around them. Turn of the century building fit in with contemporary designs within the country. From Straits Eclectic style through to the Post Independence style is in abundance within the core of the city. Akin to following concentric circles, more modern styles appear towards the outer growth rings.

The United Malay National Organisation (UMNO) building is a focus on the emergence of a distinctive style of architecture that is the city's own. Identifiable and unique structures are used as landmarks and often places of public congregation. Integrated multi-storey development is also emerging in the city. The Bukit Jambul complex houses a multi-use structure. This adaptive and economical use of land eases some pressures faced by the city.



Georgetown Today



Adaptive reuse of previously rent controlled premises places an emphasis on services supporting tourist and urban requirements. Shop lots within the core of the city are redesigned internally to meet current requirements. The demand of retail and industry places an emphasis on infrastructure that meets k-economy standards. Pedestrian pathways have been restored in some parts of the city. It is expected that Georgetown will be pedestrian-friendly.

The empirical evidence of structures exposed to vehicular pollution point towards a more environmentally friendly mode of transportation. Traffic congestion is alleviated through the periodic road upgrading exercises. Population pressure is increasing road usage. The residential areas within the city are dominated by high-rise apartments due to land constraints. Georgetown is preparing itself for the future by increasing public



Prima Tanjung Business Centre

Georgetown has the potential to be a model of a sustainable city that is planned holistically. Georgetown would have to integrate itself more with services geared towards industry, tourism and transportation. Towards achieving a developed city status, Georgetown would be in an enviable position of introducing development ideals that would be invaluable to the nation.



Urbanization of Malaysia





As the city grows, elements that are outdated or are unsuitable with modern demands are upgraded and enhanced. The city's image and amenities are two areas that are being regenerated, along with neighbourhoods. Regeneration is meant to be comprehensive and is integrated with plans and actions to alleviate urbanisation problems. On the micro level, urban design elements within the city are one way to regenerate the city's overall image. Improved designs of public amenities cater to the elderly and the handicapped. Large scale regeneration is being carried out. Specific areas of the city are being developed as nodes to centralise activities such as business and heritage planning. Regeneration of the city is an ongoing process which incorporates Malaysia's cultural and natural heritage.

Urban Design

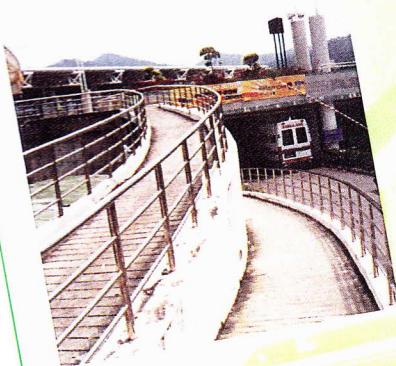
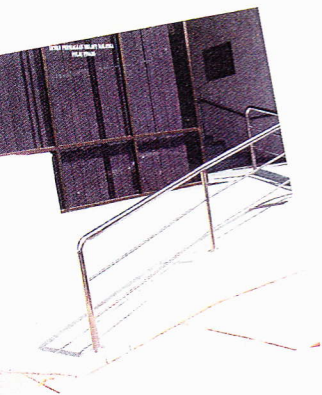
Planning of an urban centre incorporates and utilises its natural topography to create a beautiful urban environment. This is possible through holistic land-use planning and activities that do not affect its natural environment. Urban design of the city should reflect the local socio-culture, local physical features and natural surrounding. The design should also be flexible to meet current and future requirements of the various urban centre activities. Conservation and preservation of areas and buildings of heritage, civil and historical value is maintained and thus, enhances the image of an urban centre.



Part of the ideals of a caring society is incorporating urban elements that provide safety, comfort and beauty for the residents and visitors. People-friendly amenities are undergoing design modifications to meet standards that are suitable for the elderly, children and handicapped. Green landscapes are included in most urban designs where possible. With proper urban design, residents and visitors are able to have a high level of mobility increased coupled with a sense of serenity and peace.







Landscaping

Walkways



Street Furniture

Business / Commerce Centre

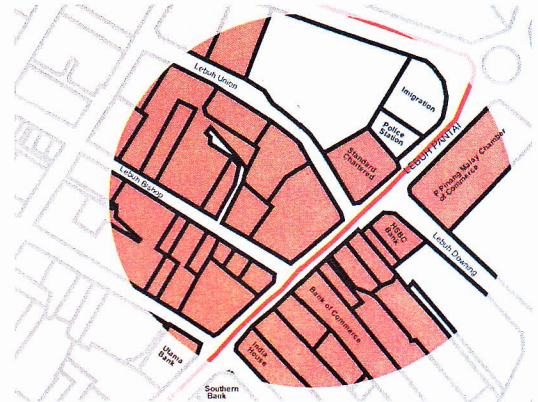
Lebuh Pantai / Lebuh Bishop Node

The Lebuh Pantai/Lebuh Bishop node is the banking and commercial area of the city. The Bank Negara is situated along this node and provides easy access to nearby financial institutions. Buildings that are architectural heritage are being used and outfitted with modern commercial needs. Infrastructure in this node is of major importance due to the time-sensitive significance of the institutions situated here.



The structures in this node give off an aura of solidity and perseverance, ideal for their purpose

Lebuh Pantai (Beach St.) was the first road in Georgetown to be tarred (1894) and many improvements in amenities were first tried out in Lebuh Pantai.



The road was gradually widened as the early buildings were replaced in the late 19th century with large and prestigious commercial developments.

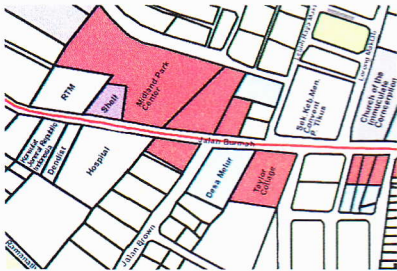


Northern Lebuh Pantai is the financial centre of Georgetown with a rich collection of highly individualistic commercial buildings designed by famous architects in the latest styles of their time.



Pulau Tikus Node

Demand for retail space in the city has led to the development of this node which caters to the commercial development of Georgetown. This node provides access to the city centre and is the gateway to the city's beaches. This node is flourishing as a vibrant business district alongside high-quality condominiums, which provide luxury accommodations.

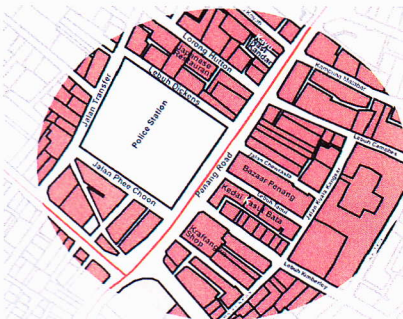


Today, Pulau Tikus is part of the Georgetown conurbation.



Jalan Penang Arterial Node

Cutting through the trading and retail sections of the city, the Jalan Penang Arterial node is one of the main access points to the centre of the city. Shophouses dominate this node. This node is also pedestrian-friendly. The council has begun upgrading works which would enhance the landscape of the area.

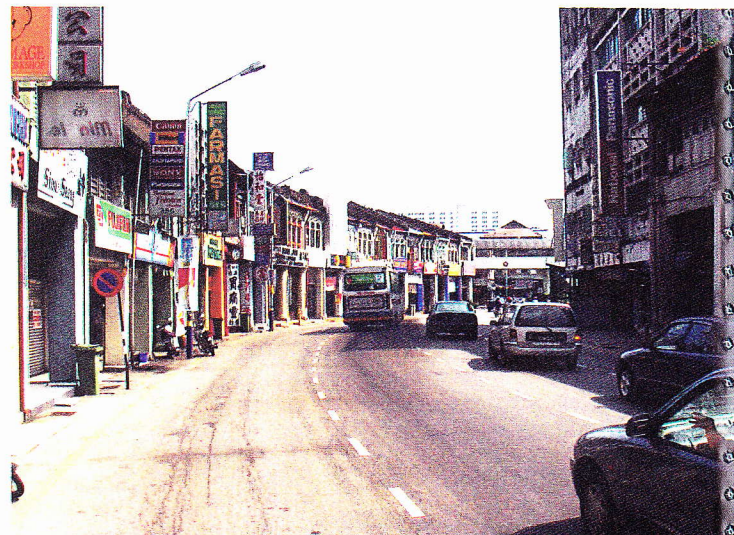


Today, in a super accomplishment traffic planning, Jalan Penang (Penang Road) has been carefully dissected to change traffic flow to and from all directions.

Heritage Centres



These alleyways are synonymous with the heritage of the city. Adaptive reuse and refurbishment provide for a more sustainable inner city





Penang Road, 1932

Past and Present Use

The turn of the 20th century brought a boom in trade for Georgetown which was the centre of export for two commodities found in the British Straits settlements in the Malaya Peninsula - rubber and tin. Along Georgetown's oldest roads such as Lebuah Pantai, tin and rubber trading have long become extinct and are replaced by modern businesses. Such is the same for many of the old trading businesses that once occupied colonial buildings in Georgetown.

In the last five decades, Georgetown has witnessed the evolution of trades and businesses within the same physical colonial structures. This unique blend of East

and West, old and new leaves the island with valuable architectural heritage. Amidst the preservation of heritage colonial buildings and the demands from tourism, most of Georgetown's old streets and buildings are restored with friendly street furniture, better traffic management and spacious pedestrian walkways.



Chulia Street, 1932

Lebuh Light Node

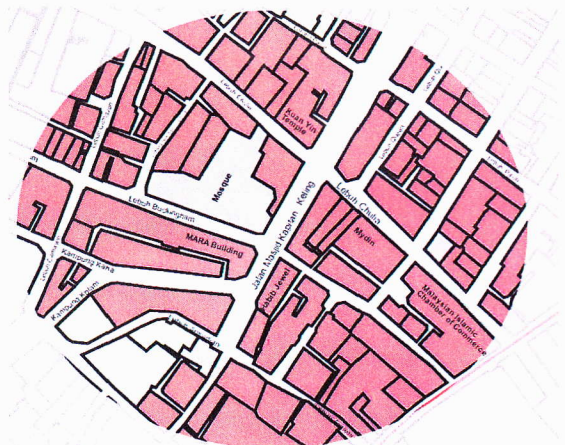
Among the historically important sites located along Lebuh Light are the High Court and Fort Cornwallis. Lebuh Light is also the protocol road for the city. The cultural and administrative heart of the city lies within this node. The high importance of the node makes the whole area a landmark.





Jalan Masjid Kapitan Kling Node

This area is religiously important to the city. Three main places of worship are situated within this node. The closeness and unity of the Georgetown community radiates from the core of the city.



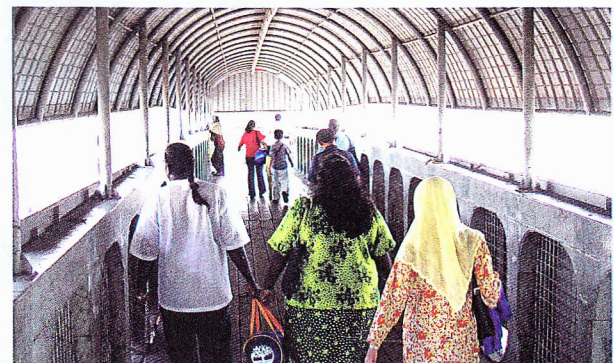
Urban Links

Accessibility is a key characteristic of the city. It is one of the few cities in Malaysia where it can be accessed by land, sea and air. Within Georgetown, points of activity such as commercial zones, residential zones and recreation zones are relatively near. A positive outcome to users of public transportation has been the service provided by the Local Council in the form of a gratis bus transport loop. Connecting all major inner-city points, this is indeed a positive effort to promote accessibility at all levels. Being a compact urban area, a mode of mass transit is needed to alleviate the effects of private car ownership. Land scarcity and other setbacks are not an issue as the same issues were resolved by Kuala Lumpur when building its mass transit system. There is a distinct need for an alternative form of transportation to safeguard the natural and built environment of the city.



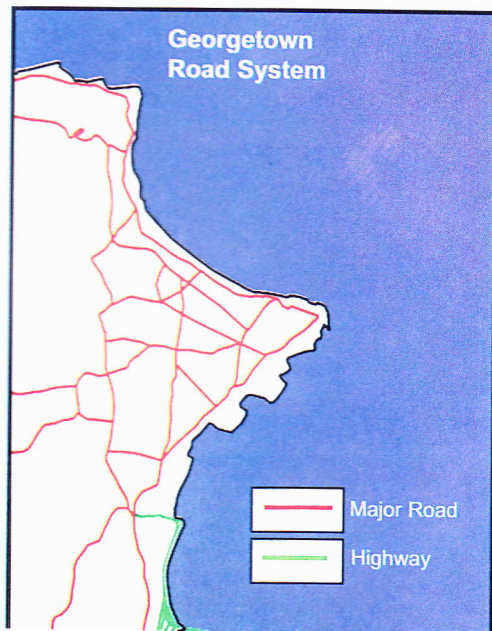


Two of the more prominent infrastructures along the coastal area of Georgetown are the Penang Port and the impressive Penang Bridge. The Penang Port, originally known as Port Swettenham, is located at the eastern-most tip of the city and is closest to the mainland. It is the island's centre of shipping activities and also houses the terminal for ferries that ply the North Straits of Penang between the island and the mainland. Once an eight strong fleet that ran day and night, the ferry services today remain the main access to the island for those on foot. A fifteen-minute ride will take passengers from the mainland to the island amidst the breathtaking view of the open sea, ships and the sprawling Georgetown shoreline. There are park and ride facilities available. It integrates bus, ferry and taxi services. This facility is available at the ferry terminal in Georgetown and on the mainland, which are part of the few transport terminals in the city. The other major transport terminal is at the KOMTAR where public buses ply their routes to all parts of the city and the island.





One of the major junctions of the city which is located next to KOMTAR.





Well designed pedestrian crossings support the pedestrian network of the city



The construction of the Penang Bridge has greatly complemented the existing ferry services to Georgetown. The bridge, which took three and a half years to complete and costing RM800 million, was officiated in September 1985. Stretching fourteen kilometres, it was once the third longest bridge in the world. The bridge is designed to withstand earthquakes of up to 7.5 on Richter scale and features a 225-metre high middle span to allow ships to pass. Linking Seberang Perai on the mainland and Gelugor on the island, the bridge has proved to be a successful alternative gateway to the island despite its relatively recent operation. The bridge serves as one of the main highway access points into the city. There are more highways being planned to connect major parts of the city with the rest of the island through highways that border the coastline.



Formation of the City Centre

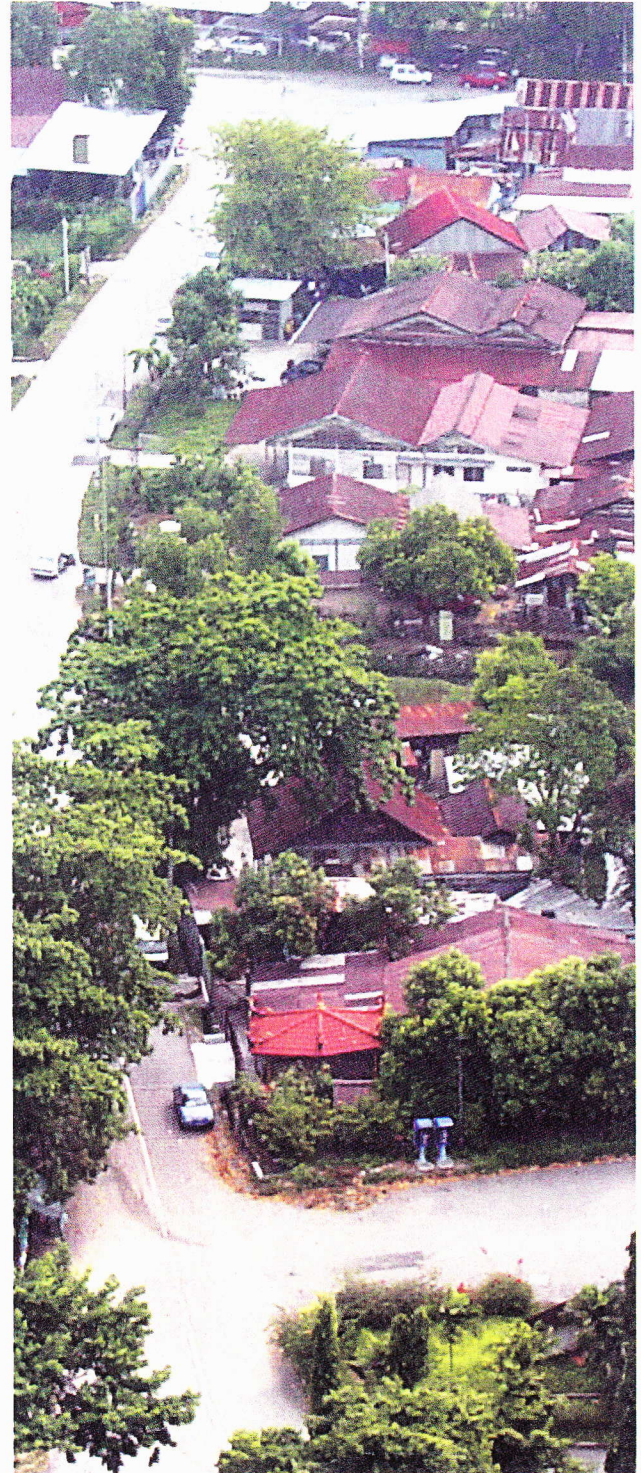
The urban centre represents the mode for learning, economy and civilisation of a country, state or district. It is also the place for social development where the public interacts through shopping, learning, and working whilst obtaining government services. Currently, there are approximately 600,000 people living on Penang Island with about 400,000 occupying the North East District, where Georgetown is located, and the eastern part of the island. Complete urban facilities enable different community levels to live and integrate. In fact, these facilities, private or public, exist within a larger hierarchy of support facilities, which act as a complete and systematic unit. Nevertheless, health, education and housing remain as the primary facilities that support families in the area.





Traditional Villages

In the pursuit for wealth and progress, some parts of the city's environment remain uniquely traditional as seen in villages and agriculture land. Towards the south of the city, one can find the famous Kampung Seronok (Village of Enjoyment). Named by an English engineer who happened to observe the merry-making of the village folks following the end of Japanese occupation, the village provides a refreshing environment in comparison to hectic city life. There, one can witness traditional houses constructed from timber and surrounded by lush fruit trees and flowery gardens. Even paddy fields are retained and worked on by villagers themselves.



Mixed Residential



There have been various additions of new residential townships such as the Bandar Bayan Baru, which was developed by the Penang Development Corporation (PDC). Smaller mixed residential developments are located at Bandar Ayer Hitam, Tanjung Bunga, Pulau Tikus and Gelugor.

In tandem with its drive towards industrial development, housing and new township development programmes were initiated to upgrade rural and less developed areas like Balik Pulau and Bayan Baru. Developed in the mid 1970s, the Bayan Baru township is a fast expanding satellite town. Residents here enjoy a plethora of community programs, organised by the Residents' Association and other community organisations supported by the State Government. Venturing further into the township concept, various facilities were offered to the town's population to provide a complete residential package.

Retail shoplots, shopping complexes, departmental stores, hotels and a medical centre are among the well-planned facilities provided by the State Government at another township, the Batu Kawan township, in line with its strategy of rural industrialisation and rural urbanisation. Townships and neighbourhoods are centred around neighbourhood centres which encompass open spaces, business and hawker centres as well as social facilities. These centres are easily accessible and meet the needs of the residents. It provides adequate space for recreation and sport facilities, thus ensuring a healthy and active lifestyle.





High-Rise Living

High-rise living is becoming the norm. Scarcity of land coupled with the increase in population has resulted in a higher demand for stratified living. This has led to a boom in apartment, condominium and flat-type residential developments. Both the public and private sector have incorporated this demand when planning and developing new housing areas. Facilities and amenities such as car parks, recreation and accessibility are considered in the design and provision of such structures.

Radiating from the city centre, condominiums and apartments dominate the island with increasing construction of high-rise structure occupying the coastal

neighbourhood. Beachfront houses like Miami Bay and international acclaimed hotels occupy most of the coastal areas from Tanjung Bunga to Telok Bahang, while high-density condominiums and apartments are located nearer to the foothills and offer an impressive ocean front view. Scarcity of land on the island and the

higher value of coastal land have increased the cost of living on the island.



Affordable Housing

Affordable residential housing areas are also provided by the State Government to meet the housing needs of the island's population, predominantly for those between the low and medium income groups. This is part of Georgetown's housing and urban renewal programme. Among the PDC housing areas are Kedah Road, Macalister, Sungai Pinang, Bukit Jambul, Bayan Baru and Batu Kawan. Insofar as urban renewal is concerned, KOMTAR for instance, has changed the outlook of Georgetown, making it a city of modern

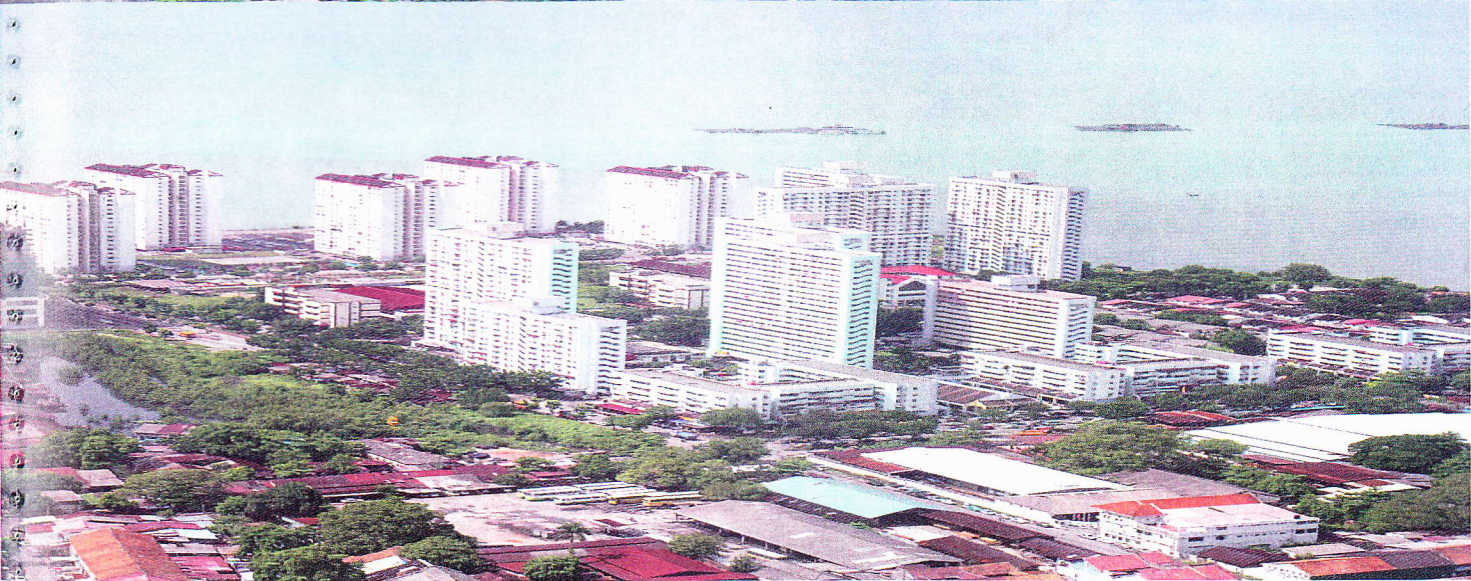
times, and a centre for commercial development in the northern region.

A holistic approach is adopted by the State Government in its housing and urbanisation program to provide better living standards. This program encompasses the construction of affordable housing facilities, the provision of commercial space, basic civic and social amenities and facilities for recreation and leisure. Community centres with a wide spectrum of mode amenities are also developed to cater the needs of the community, hence, enhancing racial, cultural and social integration. Industrial workers are also provided housing facilities close to industrial areas.



Macallum public housing scheme.

Open areas are extremely important to complement



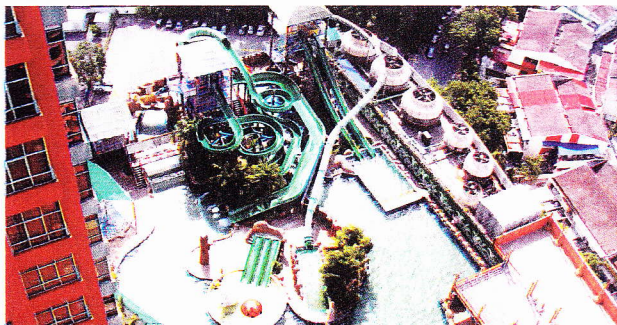
Sustainable Develop

Federal Department of Town and Country Planning

Operating under the Ministry of Housing and Local Government, the Federal Town and Country Planning Department is the overall planning agency responsible for the proper planning of the use, development and conservation of land throughout the nation. The State authority assumes responsibility for the planning of land use and the development of land within the State. To facilitate this, development is guided by the State Structure Plan. It provides the instrument which proper land use planning is achieved for the physical spatial harmony of the State.

Building Management

Cultural heritage in the form of pre-war buildings and high-rise structures offer a stark contrast of building management in the city. Plans are laid out and implemented by the local council to ensure that the cultural heritage is cared for by outlining various guidelines and restrictions towards those buildings. Adaptive reuse and upgrading of infrastructure of pre-war buildings are increasingly being carried out in order for the buildings to remain relevant in a modern society. In some cases, there are also incentives given out by the local government in maintaining cultural heritage buildings. The high-rise structures on the other hand are as complex as pre-war structures due to the amenities and facilities that are the norm for such structures. Support facilities and services such as landscaping, vehicle parking and sanitation are incorporated into the overall management of buildings within the city.





Urban Ecology Management

The relationship between man and the environment is ecologically linked. In town planning and development, environmental ecology is taken into consideration to minimise degradation to the environment. Thus, environmental management is a major guiding principle adopted by the State and the city in its effort to build a dynamic, progressive and resilient city. Thus, improvement in the quality of life in Georgetown has corresponded well with the environmental management principle through the provision of basic infrastructure such as utilities and telecommunications. This also provides a gateway for the city to meet the demands of global needs without compromising its local resources.



Proper environmental management is also the cornerstone of sustainable development. To maintain the equilibrium between the environment and the need for progress and development, holistic strategies will have to be in place to ensure the appropriate incorporation of land-use policies, natural resources management, nature conservation and economic development. Government and non-government organisations are actively engaged in these issues to achieve a sustainable city. Such integrated ways of management will strive to minimise development pressures and land-use conflicts.



The challenge for the city today and the future is land scarcity which has placed certain constraints on land development. Because land-use patterns have been historically established, careful planning and stricter monitoring and evaluation will have to be exercised to minimise further conflicts in land-use. In the near future, Georgetown will be further challenged with efforts to overcome land scarcity and the restructuring of land-use. As such, planning and development will demand more considerable efforts.

Hillside Development

The environment of Georgetown consists of undulating landscape dominated by steep topography with a series of hills and flat plains. The highest peak on the island is located at Penang Hill while Georgetown stands on the lowest lying area of the island. Despite rapid urbanisation on almost all of the island plain, the forested hilly areas remain relatively untouched and thus, retain their natural ecological functions as habitats for wildlife and water catchment areas. This is not surprising given the strong commitment the State Government has displayed towards environmental conservation. Nevertheless, pressures to develop the land for residential and commercial purposes have shifted the construction of buildings from the lowland to the hillsides. In order to practice sustainable development, we need to have proper planning and development as well as the proper enforcement of strict guidelines.

Conservation Act 1990 and the Town and Country Planning (Amendment Act 2001) Act A1129. Meeting this needs are parts of the Land Conservation Act of 1990 which restrict development at; hill areas of geological interest, hill areas of historical value, areas which have been gazetted as water catchment areas and areas which have been gazetted as permanent forest reserves. This is to ensure development does not encroach into green areas. Hence, the prevention of flood, landslide and water pollution is integrated into every aspect of hillside development. In addition, mitigation measures are also required during the implementation of any development project.





Low and high rise buildings provide not only housing but commercial, educational and recreational facilities.





Coastal Development



Georgetown has the good fortune of being situated on a tropical island. The coastline of Georgetown is dotted with numerous beaches. Indeed the city is synonymous with its breathtaking views of the sea. Realising the value of such an asset, the city was quick to promote and implement development along its coastal areas in order to enhance its beautiful beaches and accommodate the needs of local communities and visitors alike.

Coastal development of the city is concentrated in the north, south and east of the island. These parts of the island are also popular tourist spots. Hence, emphasis on well-planned mixed development is crucial to ensure that the needs of the people are met. A well-planned coastal development project will ensure that the needs of the residents are met without compromising the island's natural coastal areas. This is achieved through the proper protection of coastal ecosystems and the maintenance of safe and clean beaches.

Coastal development comes in various forms, ranging from ultra-modern industrial estates to traditional fishing villages. Nevertheless, the coastal environment is also a popular tourist attraction, which has resulted in the development of tourist-friendly facilities and accommodation. Other forms of coastal development include infrastructure, recreational and residential development.



Pollution Management

Air and water are non-renewable resources, and once polluted, recovery and rehabilitation is very challenging. Pollution and development, unfortunately, often go hand-in-hand. The challenge is to control and safely deal with pollution, as the city progresses. The Environmental Quality Act 1974 is the primary legislative instrument which addresses the generic issue of pollution. Sewerage is one of the major sources of pollution in the city, therefore wastewater treatment and management is a major effort.

There are three biological wastewater treatment plants that treat the sewage wastes from the residential areas in the vicinity of Georgetown and two more sites on the outskirts of the city. In addition to treating sewage wastes, education campaigns aimed at keeping drainage and irrigation clean and clear of debris are conducted frequently. Air pollution from industry is decreasing due to the emphasis on clean industries being approved. Low polluting industries such as the high-technology industries are being targeted as the new industrial generators.





Solid Waste Management

Solid wastes from city dwellers demand careful management, and the final destination of the waste generated requires proper planning and design. As more and more waste is generated with the increasing population and activities of the growing metropolis, the existing system of managing solid waste is being reviewed, from the aspect of disposal sites and pollution reduction. Waste minimisation and reduction at source will be the best option. The culture and practice of the 3R's - Recycling, Reuse and Reduction is timely and is being adopted by the city. Education of recycling is not only carried out at the local level but at the national level. The Ministry of Housing and Local Government in conjunction with the Federal Department of Environment are carrying out intense education campaigns for people from all walks of life.





City Transportation System Management

The transportation system is one of the main components in any city. It aims to fulfil several objectives, which includes facilitating accessibility to places of worship, work and recreation. It also opens up opportunities for social interaction and strengthens unity among residents, increases economic activities and provides employment opportunities.

Traffic has increased by leaps and bounds due to the increase in disposable income of residents and influx of visitors. Upgrading of roads is one of the attempts by the city to deal with this issue, as is the construction of a new highway linking major points in the North East District. Further attempts to reduce traffic congestion and increase mobility has been made by shifting government (local and federal) administrative offices out of the city into new growth areas such as Bayan Lepas or off the island entirely. These are short-term measures at best. Long-term approaches to traffic management such as a light rail system, alternatives to diesel buses, central electronic traffic systems and organised vehicle parking areas are required.



Pedestrian Management

The inner city has historically been a city where all points are connected by pedestrian walkways. Shophouses have special areas in their fronts for pedestrians, 'kaki-lima' has been a part of the design of shophouses in the city since the formation of terraced shophouses. This is further augmented by modern style paved pedestrian walkways and overhead bridges. Safety and comfort are the goals of any pedestrian management system. Bicycle lanes increase accessibility and provide safety and comfort. Introduction of facilities such as ramps, safe crossing zones, textured paths are all examples of how Georgetown accommodates pedestrians. Along the Jalan Penang Arterial Node, which is the nucleus of future pedestrian malls in the city, upgrading works are being completed with the introduction of wider pedestrian walkways.



Heritage Planning and Development

Many of the pre-and post-colonial buildings in the city have received extensive facelifts to showcase its historical and cultural legacy. As a show of pride in the uniqueness of the city image, Government and administrative offices, and other businesses have chosen these heritage buildings as their official centres of administration.

Surrounding these colonial buildings, meticulous and proper landscaping enhances the aesthetics of the built environment whilst creating harmony with nature. Landscaped gardens, fountains, sculptures, decorative street lightings, textured pedestrian walkways, hidden car parks, recreational parks and lakes are some of the powerful integrating elements used to provide the city with a dynamic environment.

In essence, the total planning and development of the city revolve around proper heritage planning and development. Currently, the city image speaks a thousand words and through strong advocacy by various parties, Georgetown has withstood the test of time through the preservation of its culturally diverse physical structures. Businesses and other various economic activities have simultaneously adapted to protect Georgetown's rich cultural heritage through the enforcement and implementation of proper heritage planning and development during the construction of physical structures.





Administration structures take advantage of heritage buildings in order to portray an aura of splendour.



Adaptive reuse and conservation of pre-war commercial lots provide a continuous image of the urban form.



Immigration Department



Light Street Convent

Social Facilities

The residents of the city enjoy additional benefits living in an urban environment. Some of these include good access to welfare organisations, be they government or private initiatives, preventive and curative healthcare, and fire and crime prevention services. The city provides for these services in order to achieve the ideals of a caring society. Social programmes and activities are also included in the provision of social facilities to strengthen the family institution, reinforce friendships, enhance the spirit of neighbourliness and act as an agent for development of the local community. New technologies are being incorporated into the structure of social services, modernising the methods of operation. Constant upgrading in line with the pace of development is an important part of the supply of these services.

Balai Polis Jelutong



Public Safety

Roads are kept clean and maintained to reduce the number of accidents. Public safety campaigns are carried out from time to time targeting road safety, pedestrian safety and healthcare issues. These educational campaigns are seen as a positive preventive step. The fire brigade, being under the Ministry of Housing and Local Government, is a required service in any Local Plan. The fire brigade service has their basic operations supplemented by a hazardous waste management wing and a specialised search and rescue wing.



Fire stations suitably designed to blend in with the neighbourhood





St. George's Church

Places of Worship

Malaysia, being an Islamic country, provides places of worship for this purpose. Additionally with a multicultural country, the needs of non Muslims are not neglected and facilities to practise other faiths in the form of temples and churches are planned for. The mosque and other places of worship function as a civic, administrative, education and strategic centre for a civil society and as a base to strengthen solidarity and unity among the communities. Places of worship also function as a place for meeting or discussion and as an institution of national development. Provision of this facility is not only meant for worship but embraces a wider scope and in line with government's effort to achieve Vision 2020 towards the formation of a civil society without sacrificing high moral values.



Kuan Yin Temple



Sri Mariamman Temple

Philosophies and Plans

The Northern and Southern Channels that separates the city from the mainland is still the major accessway into the city in addition to a breathtaking background to the urban image.



The Philosophy behind the TPD Doctrine

With the establishment of the Committee of Assessors in 1801, Georgetown marked the epitome of early town and country planning. From the modern to the traditional, Georgetown is a kaleidoscope of development. Through proper town and country planning, various aspects of the city have been maintained. This is derived from the necessity to maintain a balanced and sustainable city that amalgamates Georgetown's distinctive elements - its society, environment, economy and spirit, elements that form a progressive city.

Today, these distinctive elements have merged with structure plans and policies to bring to fruition a city image of unblemished quality. The physical development of Georgetown has flourished under the guiding principle of the Total Planning and Development Doctrine which thrusts upon the integration of spiritual values within the sphere of planning and development. These spiritual values take the form of three main relationships which form the basis of the Malaysian society.





Relationship between Man and the Creator

Due consideration and respect to the Creator must be maintained and incorporated into any human undertaking. In addition, the continuous cultivation and strengthening belief of man and his Creator must be upheld within the context of development. Hence, the planning principles embrace this strong relationship to the highest degree and transform it to the physical elements that shape a city.

Relationship between Man and Man

Man and society forms the driving force behind every development that takes place. Development evolved from the needs of man as an individual to man as a social being to complement his existence. Individuals living in communal spaces form societies that are moulded to form communities. This will eventually form the basis of a city. A city, thus, provides meaningful existence to its citizens through the fostering of interaction among individuals from all levels of society.

Relationship between Man and the Environment

The environment is not owned but merely borrowed from future generations. As the current caretakers of this priceless resource, man has the responsibility to maintain, preserve and enhance his surroundings. Structures are built according to acceptable guidelines and incorporated into the environment of a particular area. Proper assessment and evaluation are conducted to ensure a holistic approach to any form of development. Hence, a physical structure signifies the beginning of total planning and development.

Concepts

The Total Planning and Development Doctrine is translated and implemented through five characteristics which in turn benefits the residents and cities.





Comprehensiveness

All values; moral, spiritual, physical or material have to be addressed. Non-functional if segregated or individualized, these values are essential to ensure the sustainability and well-being of all planning and development achievements.

Man as the Focus of Development

It is important to strike a balance between people's basic needs and nature's capacity of sustaining them. As such, policies need to be formulated and activities planned and developed accordingly to maintain a healthy environment for citizens. Formulation of policies together with planning and development activities will have to embrace the needs, attitudes and aspirations of people within the boundaries of the environment.

Multi-Dimensional Activities

Within the sphere of proper planning and development, every aspect of the way of living and its related activities will have to be taken into serious consideration. Through such holistic planning and development coupled with the provision of equitable solutions, a fair development model will materialise.

Quantitative and Qualitative Change

Quantitative and qualitative changes are results of development. Well balanced planning and development will result in changes that represent man's appreciation of to the Creator.

Equitable Utilisation and Distribution of Resources

This doctrine emphasises optimum and wise usage of resources in preventing wastage. Based on the concepts of justice and equality, man is provided with an equitable distribution of all available natural resources.





State and National Policies

In efforts to diversify State's economy, the city has poised itself to become a world-class technology hub that will provide various types of facilities, training, and healthcare services. Similarly, the rich heritage of the city is preserved to uphold the city's rich historical values. Considerable efforts are directed in promoting the Georgetown Inner City as a heritage protection zone. The State government and non-government organisations is actively advocating for the listing of Georgetown under UNESCO's World Heritage Site.

At the national level, a National Physical Plan is formulated towards the achievement of sustainable development. The plan is long-term and indicates broad Government outlines needed for the physical development of the country. The Plan is reviewed every five years and in tandem with the review of the National Five Year Development Plans. Built on the foundations of socio-economic needs of the country, the Plan also provides a framework for the revision and implementation of local development plans.

Among other policies that are taken into account within the scope of planning and development are:

Vision 2020

The Vision 2020 was specially formulated to guide the nation towards a developed status by the year 2020. Development is not limited to only economic advancement; this Vision also takes into account all aspects of life including social justice, quality of life, and political stability with special emphasis on positive social and spiritual values. The local and national administration gears their social and land use policies towards achieving the objectives of the vision.

National Development Policy (NDP)

The objectives of the National Development Policy (NDP), among others, are to create a just and united society apart from maintaining social stability and effective economic management. This is aimed for the provision of a suitable growth environment equipped with equitable distribution of resources. The NDP also emphasises the eradication of poverty and the restructuring of society to rectify any social and economic imbalances among races. Another essential aspect of the NDP is in the moulding of a society with positive social and spiritual values as well as inculcating national pride in each citizen.

The Five-Year Malaysia Plan

The Five Year Malaysia Plan is formulated to continuously maintain the balanced development concept as mentioned within the NDP. The Plan (2001-2005) also pays serious attention to strategies in the generation of rapid and continuous economic growth while maintaining a fair distribution of wealth among the citizenry as well as between urban and rural populations. This equitable distribution must also balance the conservation of the environment and natural resources. Under this plan, sustainable development is stressed upon as the 8th covenant that emphasises on ideals that are discussed visually within these pages.

Further Information

There are numerous guidelines and plans which relates to each element of city planning such as zoning, siting and standards. These can be obtained from the Research and Development Division, Federal Department of Town and Country Planning. They provide a more in depth look at minute aspects of town and country planning. Some of the major references for this book are:

1. Total Planning and Development Guidelines, Second Edition, JPBD 2001.
2. Georgetown Structure Plan
3. Bukit Bendera Structure Plan

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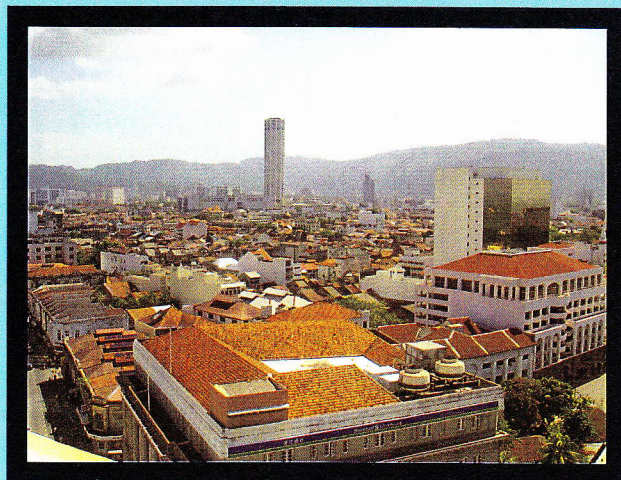
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