Urban Regeneration: The Case of Penang, Malaysia
Putting Policy into Practice

11 April 2012
by Hamdan Abdul Majeed

Agenda

- Setting the Context:
  Importance of Cities in the Global Context & Malaysia’s Response to the Urban Challenge

- Penang as a Case Study:
  Challenges, Opportunities and a New Development Model

- Putting Policy into Practice:
  Urban regeneration in a World Heritage Site via a public grants programme
At the start of the 21st century, our cities are experiencing unprecedented transformations.
CITIES WITH MORE THAN 1 MILLION INHabitANTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>80</td>
</tr>
<tr>
<td>2000</td>
<td>345</td>
</tr>
<tr>
<td>2025</td>
<td>++++</td>
</tr>
</tbody>
</table>

At the start of the 21st century, our cities are experiencing unprecedented transformations.
Cities are Engines of Economic Growth

In 1800, only 3% of people lived in cities
In 1950, only 30% of the world was urban
By 2030, 60% of people will live in cities

Triumph of the City: Recent advances in economic geography have re-positioned the city at the center of the debate on economic growth

- Spatial factors – location, agglomeration economies, specialization – drive economic growth
- Talent is a key factor in the post-industrial economy; talent today is globally mobile; he/she chooses the city before the job
Economic activity is highly concentrated in key cities in each region

High income regions are economically dense

Malaysia’s Response to the Urban Challenge
“Competition is no longer only between nations but also between cities. For Malaysia to move into a higher income economy, we must exploit higher returns by adopting strategies to build density, develop clusters and specialize in high value sectors.”

Dato’ Sri Mohd Najib Tun Haji Abdul Razak, Prime Minister of Malaysia

“...leveraging on cities to accelerate economic growth will be an important strategy during the Tenth Plan”

“Building vibrant and attractive living spaces. Influencing the form and character of living spaces to make them attractive places to live, work and play”

“...[C]ities the nucleus of urban agglomeration, have three times the productivity of rural areas worldwide. For these reasons, cities and especially world class cities, generate much more denser “cones” of economic activity than other areas..”

In the 10th Malaysia Plan, cities have been identified as the most important engines of future growth and by 2020, more than 70% of Malaysians will live in urban areas. Cities will face greater pressures from an explosion of population; they will need to be better managed; citizens will face the challenges of living in dense, multicultural cities

Key urban conurbations to be developed including Kuala Lumpur, Johor Bahru, George Town, Kuantan and Kota Kinabalu.
Growth will be concentrated in urban conurbations

10MP has identified strategies that will focus on building density, developing clusters and specialization in high value sectors

KL, JB and George Town Conurbation already account for more than 50% of Malaysia GDP

Urban GDP Contribution in Malaysia (by State)

<table>
<thead>
<tr>
<th>Geographic clusters</th>
<th>2010 Urban GDP contribution USD '000, Nominal</th>
<th>2020 Urban GDP contribution USD '000, Nominal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuala Lumpur2</td>
<td>74,778</td>
<td>210,155</td>
</tr>
<tr>
<td>Johor</td>
<td>9,372</td>
<td>27,483</td>
</tr>
<tr>
<td>Penang</td>
<td>8,871</td>
<td>27,058</td>
</tr>
<tr>
<td>Kuching, Sarawak</td>
<td>7,170</td>
<td>16,537</td>
</tr>
<tr>
<td>Ipoh, Perak</td>
<td>5,728</td>
<td>14,497</td>
</tr>
<tr>
<td>Seremban, Negri</td>
<td>5,373</td>
<td>15,013</td>
</tr>
<tr>
<td>Kuantan, Pahang</td>
<td>3,290</td>
<td>7,194</td>
</tr>
<tr>
<td>Kota Kinabalu, Sabah</td>
<td>2,908</td>
<td>6,559</td>
</tr>
<tr>
<td>Sandakan, Sabah</td>
<td>2,443</td>
<td>5,110</td>
</tr>
<tr>
<td>Alor Setar, Kedah</td>
<td>2,384</td>
<td>7,175</td>
</tr>
<tr>
<td>Kuala Terengganu</td>
<td>2,038</td>
<td>5,367</td>
</tr>
<tr>
<td>Kota Bahru, Kelantan</td>
<td>869</td>
<td>2,308</td>
</tr>
<tr>
<td>Perlis</td>
<td>447</td>
<td>950</td>
</tr>
</tbody>
</table>

1 Population for KL includes PT Kuala Lumpur, Klang, Petaling Jaya, Subang Jaya, Ampang Jaya, Shah Alam, Cheras and Kepong
2 International range reflects cities with comparable populations
3 City GDP grown at historical state GDP growth rates
SOURCE: World Gazetteer, Department of Statistics Malaysia, Team analysis
10MP has identified strategies that will focus on building density, developing clusters and specialization in high value sectors.

### Geographic clusters

<table>
<thead>
<tr>
<th>Geographic clusters</th>
<th>2010 Urban GDP contribution (USD'000, Nominal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuala Lumpur</td>
<td>74,778</td>
</tr>
<tr>
<td>Johor</td>
<td>9,372</td>
</tr>
<tr>
<td>Penang</td>
<td>8,871</td>
</tr>
<tr>
<td>Kuching, Sarawak</td>
<td>7,170</td>
</tr>
<tr>
<td>Ipoh, Perak</td>
<td>5,726</td>
</tr>
<tr>
<td>Seremban, Negri</td>
<td>5,373</td>
</tr>
<tr>
<td>Kuantan, Pahang</td>
<td>3,290</td>
</tr>
<tr>
<td>Kota Kinabalu, Sabah</td>
<td>2,908</td>
</tr>
<tr>
<td>Sandakan, Sabah</td>
<td>2,443</td>
</tr>
<tr>
<td>Alor Setar, Kedah</td>
<td>2,384</td>
</tr>
<tr>
<td>Kuala Terengganu</td>
<td>2,038</td>
</tr>
<tr>
<td>Kota Bahru, Kelantan</td>
<td>669</td>
</tr>
<tr>
<td>Perlis</td>
<td>447</td>
</tr>
</tbody>
</table>

### Penang as a Case Study

[Image of Penang as a Case Study]
The Northern Corridor Economic Region (NCER)

The NCER encompasses 21 districts within 4 States: Penang, Kedah, Perlis & Northern Perak. The total area is 2.4 million ha, covering a total population of 4.29 million people.

Highlights of the Region:

- 20.1% of total Malaysia GDP: RM52.67 billion¹ / RM262 billion ('05 real GDP in '87 prices)
- 7.28% of Malaysia's land area: 2.4 mil ha² out of 33.0 mil ha
- 16.1% of Malaysia's population: 4.29 million³ out of 26.64 mil in 2005
- 64% of Malaysia's paddy growing regions⁵
- 30% of total tourists to Malaysia in 2005 (total tourist arrivals: 16.4 million)⁶
- 21% of Malaysia's manufacturing investments (total Malaysia's approved manufacturing investments, 1996-2005: RM269.5 billion)¹

Source:
¹ Pg. 32 of Third Industrial Master Plan, Total State figures for Perak
² National Physical Plan 2005, Perak State Economic Planning Unit
³ State / District Data Bank, Department of Statistics, 2006
⁵ Pg. 201 of State / District Data Bank, Department of Statistics, 2005
⁶ Ninth Malaysia Plan
The Penang Metropolitan Region (George Town Conurbation)

- Three States, 12 District and 10 PBTs
- George Town and Butterworth as the primary centre, supported by secondary nodes
- Approximately 2.5 million residents, with 1 million more by 2020

**GDP Contribution of Malaysia’s First and Second Tier Cities (RM Billion), 2010**

<table>
<thead>
<tr>
<th>City</th>
<th>GDP (RM Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KL (K. Lumpur)</td>
<td>77.389</td>
</tr>
<tr>
<td>Penang</td>
<td>49.510</td>
</tr>
<tr>
<td>Johor Bahru</td>
<td>31.000</td>
</tr>
<tr>
<td>P. Island</td>
<td>30.000</td>
</tr>
</tbody>
</table>

Penang’s story has been the story of change

a. The Fort
b. Hospital
c. Superintendent's house
   (Francis Light’s house)
d. Swamp
e. Portuguese Church
f. Christians Place
g. Brick Buildings for shops

1. Light Street
2. Union Street
3. Bishop Street
4. Church Street
5. China Street
6. Market Street
7. Chulia Street
8. Penang Street
9. King Street
10. Queen Street
11. Pitt Street

Footnote: Map of George Town based on Captain H.K. Stephens’ 1820 drawing.
Transforming forest covered lands into highly urbanized landforms

100 Years of Urban Transformation (1900 – 2000)

1900 1960 2000
Penang is the 3rd engine of growth and major destination for FDI and tourism in Malaysia

- Penang is a major hub for tech-based manufacturing
- It accounts for 46% of Malaysia's total electronic exports
- 33% of MedTech (both MNCs and local companies) are located in Penang
“We came here for low cost labour... we stayed for talent.”
The firms have been expanding their operations in numbers, sophistication and diversity of activity.

The MNCs in Penang are evolving and moving up to do higher value added activity.

Four of the world’s biggest Electronic Manufacturing Services (EMS) companies are located in Penang:

- **Agilent Technologies** conducts R&D, supply chain management & global shared services in Penang facility which account for more than 60% of its turnover.
- **MOTOROLA** (Penang) is the world’s largest facility for the R&D + manufacturing of 2-way communication devices (> 50% of market share)
- **OSRAM** new Wafer Fab in Bayan Lepas to produce 50% of the group’s LED and its Asia R&D Hub is in Penang
- **Jabil, Flextronics, PLEXUS**
More than 1/3 of all Malaysian patents filed is from Penang, primarily from the electronics industry.

Malaysian Patents by Region of Inventor, 1976-2006

The electronics industry in Penang has also spawned a whole host of Malaysian companies since the 90s.
Emerging cluster of medical devices/diagnostics players in Penang and products are mainly for export markets.

- Trends in electronics players progressing to life sciences/biotechnology area. Examples of the existing companies operating in Penang with such interests are:
  - **Agilent Technologies**: Instrumentation, data systems and compliance services designed to meet the requirements of the GMP/GLP-regulated lab.
  - Programmable Logic Devices with optimized IP cores, hard and soft microprocessors, design software, and development kits for medical equipment manufacturers.
  - Provides design, manufacturing and logistics solutions to medical device and equipment companies.

Penang remains an attractive tourism destination and emerging medical tourism hub

- George Town is a UNESCO World Heritage Site (alongside other global sites like Venice, Borobudur, Angkor Wat and Hoi An)
- Penang is Malaysia’s culinary capital (world renowned food haven)
- Penang is the third most popular destination (13% of Malaysia's total foreign tourists)
- A Melting Pot of Food, Beaches, Heritage, Culture & Religion
Penang’s immediate competitors have made the quantum leap though we started at par or ahead of the rest.

### GDP Per Capita (PPP)

<table>
<thead>
<tr>
<th></th>
<th>Penang</th>
<th>Singapore</th>
<th>Hong Kong</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>18,730</td>
<td>50,299</td>
<td>42,231</td>
<td>30,100</td>
</tr>
</tbody>
</table>

Source: World Bank

Competition is intensifying with the emergence of new growth cities like Hanoi, Chennai, Bangalore, Shenzen.

*Jumping The Curve*
Towards a Global 21st Century City

**PENANG is at a crossroads...**
Penang has the potential to make the leap and be on par with the likes of Singapore, Hong Kong and Taiwan.
The economic structure of Penang has evolved rapidly over the past four decades.

Trading (1786-1969)
- Agriculture and resourced based – supported hinterland
- Regional trading, services and knowledge hub.
- Cosmopolitan and culturally-diverse city
- Dynamic secondary city with its distinct identity and economy
- Rise of nation states and removal of the free port status in the late 60’s set in motion the decline of Penang as a trading hub.

Manufacturing (1970-2008)
- Rise of a new economic phenomenon – off-shoring and the FTZ’s.
- Industrial development with an E&E focus
- Rapid economic growth:
  - GDP CAGR 11%, per capita 40% higher than national average (PPP terms of USD18,000).
  - Global technology hub – 50% of microprocessors produced in Penang.

Knowledge/Innovation (2009 - )

Manufacturing, centered on electronics, has driven the growth of Penang since the 1970s.

Trading (1786-1969)
- Agriculture and resourced based – supported hinterland
- Regional trading, services and knowledge hub.
- Cosmopolitan and culturally-diverse city
- Dynamic secondary city with its distinct identity and economy
- Rise of nation states and removal of the free port status in the late 60’s set in motion the decline of Penang as a trading hub.

- Rise of a new economic phenomenon – off-shoring and the FTZ’s.
- Industrial development with an E&E focus
- Rapid economic growth:
  - GDP CAGR 11%, per capita 40% higher than national average (PPP terms of USD18,000).
  - Global technology hub – 50% of microprocessors produced in Penang.

Manufacturing ++ (2001 - )
- Firms shifting into high-mix low volume manufacturing
- A proliferation of global responsibilities involving design, total logistics, HR & finance etc.
- An exponential increase in the hiring of graduates as opposed to unskilled workers
- The mushrooming of local entrepreneur-led technology-based companies
- Stiff competition for high volume low cost manufacturing from China & Vietnam
Penang needs to improve liveability to retain local talent and to attract global talent to make it a place of choice to live in.

- Human scale development
- Cultural sensitivity
- Adequate knowledge institutions to support the economy moving up in value.

**PENANG: Sticky Space**

- Congenial Environment
  - Clean air, water
  - Low crime rate
- Art & Leisure Opportunities
  - Cultural spaces
  - Avenues for entertainment
  - Interesting public realm
- Affordable Cost of Living
  - Access to all segments of society
- Quality Knowledge Centres
  - Integrity in Planning
- Good Public Transport
  - Ease & access to public transport
  - Avoid traffic congestion

It’s not too late to redefine the underlying spatial development and urban form to become liveable.
BUT, Penang faces challenges on the ground

March 09, 2010 – Fast tracking Penang into a big ghetto

March 8, 2010 – Penang a concrete jungle

March 21, 2010 – Pedestrians in Penang are ‘completely neglected’, says urban planning expert

April 25, 2010 – Life’s no longer a beach in Penang

June 17, 2009 – Guan Eng: Penang has lost many of it’s talents

Challenge for Penang: Inner City Decline
Challenge for Penang:
Environmental Degradation

Challenge for Penang:
Lack of Planning Control & Development

Development without traffic planning
Challenge for Penang: Traffic Congestion

Comparison between number of registered motor vehicles and population in Penang (1998 – 2007)

- Private car registrations increased by an average of 9% each year for the last 15 years (double the rate for motorcycles). If this rate keeps up, the number of cars will double every 8 years.
- Several studies and cooperative efforts 10 years ago identified growing problems and proposed solutions (still no Transport Master Plan).
- Commute times increasing.

Challenge for Penang: Urban Areas Getting Hotter

- Late afternoon temperature (°C)
### Challenge for Penang: Mean Temperature Rising

#### Mean Temperature in Bayan Lepas, Penang (1951 - 2009)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>°C</td>
<td>26.0</td>
<td>26.5</td>
<td>27.0</td>
<td>27.5</td>
<td>28.0</td>
<td>28.5</td>
<td>29.0</td>
<td>26.0</td>
<td>26.5</td>
<td>27.0</td>
<td>27.5</td>
<td>28.0</td>
</tr>
</tbody>
</table>

### Challenge for Penang: River Pollution

#### Table: Water Quality Index (WQI) of Rivers in Penang

<table>
<thead>
<tr>
<th>STATE</th>
<th>RIVER BASIN</th>
<th>RIVER</th>
<th>NO. OF STATIONS</th>
<th>WQI 2008</th>
<th>WQI 2009</th>
<th>CLASS</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEDAH</td>
<td>MERBOK</td>
<td>KOROK</td>
<td>1</td>
<td>57</td>
<td>45</td>
<td>IV</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PETANI</td>
<td>1</td>
<td>53</td>
<td>56</td>
<td>III</td>
<td>P</td>
</tr>
</tbody>
</table>

| P.PINANG | PINANG | DONANG | 3              | 48       | 51       | IV    | P        |
|          | JELUTONG | 1     | 38               | 39       | IV       | P        |
|          | JURU     | ARA    | 1              | 58       | 40       | IV    | P        |
|          | RAMBAI   | 2     | 55               | 53       | III      | P        |

| PERAI | AIR MEHINTAS | 1 | 40 | 50 | IV | P |
|       | KEREH     | 2 | 50 | 57 | III | P |
|       | SELUANG   | 1 | 54 | 56 | III | P |

| P.PINANG | JAWI | CHEMPEDAK | 1 | 43 | 44 | IV | P |
|          | JAWI | 1 | 67 | 62 | III | P |
|          | TENGAH | 1 | 48 | 38 | IV | P |

| PERAK | PERAK | SELUANG | 1 | 59 | 62 | III | P |
|       | SEPETANG | LIDIN  | 1 | 85 | 58 | III | P |
Challenge for Penang: Marine Water Quality

Challenge for Penang: Unsustainable Water and Solid Waste Trends

Water consumption

<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Average (LCD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penang</td>
<td>291</td>
</tr>
<tr>
<td>Rest of Malaysia</td>
<td>188</td>
</tr>
<tr>
<td>South East Queensland</td>
<td>163</td>
</tr>
<tr>
<td>Singapore</td>
<td>154</td>
</tr>
<tr>
<td>France</td>
<td>150</td>
</tr>
<tr>
<td>Germany</td>
<td>127</td>
</tr>
<tr>
<td>Estonia</td>
<td>100</td>
</tr>
</tbody>
</table>

Water consumption and Solid waste per capita is nearly twice higher the Singapore
• Flight of talent from Penang.

• Declining growth of high-value tourism.

• Declining quality of life

**High opportunity cost:** The decay of Penang’s natural endowment is happening at a time when the ‘liveability of cities’ has become a key factor in the competitive advantage of nations.

**PENANG**

The Regional Opportunity

- **Penang as the centre of the Northern Region.** The economic activity brings the region together.

- **Penang as the centre of IMT-GT.** Good connectivity can bring activity into the region, thus enhancing itself and the region as a whole.

- **Penang as the centre for the Bay of Bengal.** Can act as the urban centre for the Bay of Bengal region.

Penang has the potential to be the heart of one of the fastest growing regions with access to a large hinterland for resources, human capital, technology and markets.
For Penang, this requires its cities, people and economy to develop together.

**CITIES**

- Agglomeration and increasing returns to scale
- Liveability

**ECONOMY**

**PEOPLE**

**Talent**

Liveable and efficient cities attracts and retain talent and this bring capital together to build the economy.

Penang’s three drivers of growth is not in sync

- **Economy**
  - Rise of regional competitors in manufacturing
  - Increasing costs of production (land and labour)
  - Penang need to reinvent itself and find a new competitive edge

- **People**
  - Increasingly dispersed and disconnected population
  - Few professionals relative to Penang’s size and function
  - Lack of amenities and spatial connectivity

- **Cities**
  - Urban sprawl and lack development control
  - City core is hollowing out and facing urban decay
  - Congestion and inefficiency

Penang needs to synchronize its three drivers of growth based on a city-centric development strategy
The 10MP identifies the form and character of living spaces to make them attractive places to live, work and play.

A city that retains its rich cultural heritage, urban form and diversity.

We need to have a different way of imagining the city that is built on ideas of sustainability.
A city that celebrates its past: Penang has an impressive history as an intellectual, trading and logistics hub – making it the natural focus for the implementation of the NCER.

**Penang is a well established hub for education**
Penang Free School, the oldest in Asia and East of Suez. St Xavier’s Institution (founded 1825); Methodist Boys’ School, Penang (founded 1891); Convent Light Street, the first girls’ school in the region. Sek. Keb Gelugor in Penang founded in 1826 is the first Malay school to be established in Malaysia. Al-Mashoor Madrasah (1913) key Muslim institution in SEA. Chung Hwa Confucian School (founded 1904) is one of the oldest formal Chinese Schools in Malaysia; Phor Tay High School (founded 1940) is the first Buddhism’s school in Malaysia. Chung Ling High School, (1917).

**Banking Hub** - The oldest bank in Malaysia, Standard Chartered Bank in 1875. The Hongkong and Shanghai Banking Corporation (HSBC) in 1885. The ABN AMRO Bank in 1888.

**Peranakan Cina mansion**

**Famous Penangites**
Tunku Abdul Rahman, Nordin Ar-rawi, DS Abdullah Ahmad Badawi, Anwar Ibrahim, Anwar Fazal, Jimmy Choo, Nicol David, Dr. Wu Lien Teh, P Ramlee, Alleycats, Loh Boon Siew, Lillian Too, Hj Yusof Rawa Eusoofee Abdulkader, TS Desa Patchi, TS Ani Arope

**St George’s Anglican Church**
(1816) the oldest Anglican Church in South East Asia.

**Established Urban Centre**
Being one of the earliest, most established urban centres in Malaysia. Penang became the first British outpost in the then Malaya and South East Asia in 1786.

**Judiciary** - The court system in the Federation had its origin in the 1807 charter known as the First Charter of Justice whereby the British East India Company obtained from the British Crown the right to establish a permanent Court of Judicature in the settlement of Penang.

**Military Presence**
On 12 September 1875 the British occupied Penang fulfilling their threat to the Chinese, a consequence of the Chinese rebellion in 1872.

**Food Capital of Malaysia**
World Renowned “hawker food” is sold and eaten by the street feature strongly in noodles and fresh seafood. Best Street Food in Asia by TIME magazine in 2004.

**Penang Free School**
The oldest school in Asia and East of Suez.

**Pivotal Role in Asian History**
In Penang, Dr. Sun Yat Sen plotted the 1911 Chinese Revolution to overthrow the Qing dynasty in China and where he raised funds from the pro-Republican Chinese immigrants in Penang. The Penang Philomathic Union which Dr. Sun founded in 1908 now houses the Dr. Sun Yat-Sen Museum.

**Penang Philomathic Union**

**Racial Tolerance**
In Penang, the Chinese, Indians and Malays live in relative harmony.

**Penang St. John’s Institution**
The oldest English medium school in Malaya.

**St George’s Anglican Church**
The oldest church in Southeast Asia.

**Peranakan Cina mansion**

**Peranakan Cina mansion**

**Masjid Kapitan Keling**
(1796) the oldest mosque in Malaysia.

**Established Urban Centre**
Being one of the earliest, most established urban centres in Malaysia. Penang became the first British outpost in the then Malaya and South East Asia in 1786.

**Judiciary** - The court system in the Federation had its origin in the 1807 charter known as the First Charter of Justice whereby the British East India Company obtained from the British Crown the right to establish a permanent Court of Judicature in the settlement of Penang.

**Military Presence**
On 12 September 1875 the British occupied Penang fulfilling their threat to the Chinese, a consequence of the Chinese rebellion in 1872.

**Penang Free School**
The oldest school in Asia and East of Suez.

**St George’s Anglican Church**
The oldest church in Southeast Asia.

**Peranakan Cina mansion**

**Masjid Kapitan Keling**
(1796) the oldest mosque in Malaysia.

**Established Urban Centre**
Being one of the earliest, most established urban centres in Malaysia. Penang became the first British outpost in the then Malaya and South East Asia in 1786.

**Judiciary** - The court system in the Federation had its origin in the 1807 charter known as the First Charter of Justice whereby the British East India Company obtained from the British Crown the right to establish a permanent Court of Judicature in the settlement of Penang.

**Military Presence**
On 12 September 1875 the British occupied Penang fulfilling their threat to the Chinese, a consequence of the Chinese rebellion in 1872.

**Penang Free School**
The oldest school in Asia and East of Suez.

**Penang St. John’s Institution**
The oldest English medium school in Malaya.

**St George’s Anglican Church**
The oldest church in Southeast Asia.

**Peranakan Cina mansion**

**Masjid Kapitan Keling**
(1796) the oldest mosque in Malaysia.
A city that can attract Penang’s diaspora and retain its cosmopolitan identity in a world shaped by competition for talent

PROFESSIONALS
EXECUTIVES
STUDENTS
VEEJAYS
CHAMPIONS
ENGINEERS
MUSICIANS
ARCHITECTS
MUSICIANS
PHOTOGRAPHERS
CREATIVE CLASS
DANCERS
CHEFS
ENTREPRENEURS
ARTISTS
STUDENTS
DOCTORS
PHOTOGRAPHERS
DESIGNERS
ENGINEERS

A city that promotes new ideas for improving urban mobility for everyone

“Transport defines the form of a city.”
The Economist, May 2007
A city with a place for small businesses, spaces for children and marginalized

More civic spaces for the marginalized to indulge in healthy activities...

Value-Based Approach vs Physical Planning Approach

Sustainable, Liveable City

Inclusive Respectful Vibrant & Creative Excellence Driven

Penang Hub + Home Welcoming Intimate Surprising Non-Conformist Young & Pro-active
Penang ver 2.0 requires a value driven spatial development model to anchor the city centric strategy for the talent driven economy.

Key Words / Values in defining the future:

- Liveable
- Sustainable
- Human Scale
- Diverse
- Boutique
- Seamlessness
- Beauty
- Inclusive
- Accessible
- Secure

Initiatives to Support the City-Centric Strategy

Positioning Penang
- Strategy for reinventing the George Town Conurbation
- Key enabling factors and policy levers needed for Penang to avoid the Middle Income Trap

Sustainable Penang Initiative 2
- Community level; people’s initiative
- Building consensus on a sustainable liveable Penang

George Town Transformation Programme
- Micro level implementation; demonstrative & catalytic projects
- Transform George Town into a model 21st century city and a ‘sticky space’ to retain and attract talent

Transforming Penang into an International City State, which is...

Location of choice for investors
- + Destination of choice for visitors
- + Habitat of choice for talent, desiring sustainable living

Sticky Space
Major upgrade to the urban infrastructure is on the way to strengthen the competitiveness of the region. (>RM20b)

Adopting a New Development Framework

<table>
<thead>
<tr>
<th>Goal</th>
<th>Existing Model</th>
<th>New Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition from low to middle income</td>
<td>Transition from middle to high income</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic Framework</th>
<th>Diversified</th>
<th>Specialised and agglomerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods production</td>
<td></td>
<td>Ideas production</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry Framework</th>
<th>Global FDI</th>
<th>Local talent and innovation</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Spatial Framework</th>
<th>Dispersed</th>
<th>Concentrated and clustered</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Planning Framework</th>
<th>Supporting development</th>
<th>Influencing development</th>
</tr>
</thead>
</table>
Based on the new development framework, there is a need to consider the network city model in Penang region.

**Challenge**

- Loss of regional competitiveness due to increasing competition and declining amenity.
- Rapid growth resulting in increasing labour and land costs.
- Poorly coordinated regional planning resulting in ad hoc, dispersed development flowing on to declining connectivity and amenity.
- Insufficient skilled labour due to declining amenity and opportunity.

**Solution**

- Transition to New Economic Model (K-Economy).
- Coordinated, integrated spatial planning framework.
- Improved amenity and connectivity.
- Network City Model.

**Network City Planning as The Preferred Model**

- Best suited to deliver **concentrated development**
- Supports notion of **specialised functional nodes**
- Delivers **best opportunities for improved connectivity** (e.g. TOD)
- Offers **highest amenity return on investment** (by concentrating enhancements)
- Can **minimise land development pressures** on valuable agricultural land
- Allows for a **new city core**
- Can best support SMEs and **economies of agglomeration**
The Penang Project

A carbon neutral metropolis

Projects
- Batu Kawan EcoCity
- Penang Logistics Hub
- Penang Grand Sentral
- Penang Innovation Park
- George Town 21

Connections
- Penang Ecoboulevard
- The Blue Connection
- The Green Line
from **Policy**... to **Practice**

Urban regeneration in a World Heritage Site through a public grants programme
George Town Grants Programme

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>CORE PRINCIPLES</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Kick-start the regeneration of George Town</td>
<td>• Catalyst</td>
<td>• Fund Size: RM 20 million</td>
</tr>
<tr>
<td>• Build on the momentum of the civil society and private sector initiatives</td>
<td>• Partnership</td>
<td>• Project Size: RM 20,000 to RM 2 million</td>
</tr>
<tr>
<td>• Capacity building and capability development for the protection and development of the living heritage, culture and architecture</td>
<td>• Developmental</td>
<td>• Duration: 24 months</td>
</tr>
<tr>
<td>• Encourage a sustainable livable environment</td>
<td>• Inclusive</td>
<td>• Grant Type:</td>
</tr>
<tr>
<td></td>
<td>• Sustainable</td>
<td>• Project &amp; Booster Grants</td>
</tr>
<tr>
<td></td>
<td>• Creativity &amp; Innovation</td>
<td>• Matching Grants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Repayable Grants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Technical Assistance &amp; Capacity Building Grants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A culturally vibrant &amp; sustainable city,</td>
</tr>
<tr>
<td>• Endangered trades, services and communities taken off the endangered list</td>
</tr>
<tr>
<td>• A community aware of its history and heritage</td>
</tr>
<tr>
<td>• Resilient small businesses that evolved with the WHS</td>
</tr>
<tr>
<td>• George Town’s OUVs enhanced</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6 KEY THRUSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mobility &amp; Connectivity</td>
</tr>
<tr>
<td>• Social &amp; Cultural Communities</td>
</tr>
<tr>
<td>• Economy &amp; Services</td>
</tr>
<tr>
<td>• Environment &amp; Sustainability</td>
</tr>
<tr>
<td>• Safety &amp; Quality of Life</td>
</tr>
<tr>
<td>• Learning &amp; Knowledge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 KEY AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Physical/Public Realm</td>
</tr>
<tr>
<td>• Social Capital &amp; Capability</td>
</tr>
<tr>
<td>• Knowledge</td>
</tr>
</tbody>
</table>
Malaysia’s First Public Grants Programme for Urban Regeneration

Catalyst

120 projects in 24 months

Principles of the George Town Grants Programme

The operating principles of the programme are to:

• Develop community-level strategies and implement programmes that enhances George Town’s OUVs over time.

• Gather lessons from community-level experience and initiate the sharing of successful strategies and innovations among stakeholders.

• Build partnerships and networks of stakeholders to support and strengthen the community, particularly promoting sustainable development.

• Ensure that conservation and sustainable development strategies and projects that protect the WHS are understood and practised by communities and other key stakeholders

• Stimulate public-private partnerships especially in heritage-related projects

• Provide incentives to property owners to adopt heritage conservation as a way of life
Grants Management - Process

1. Outreach: origination of application
2. Applications: short-listing by management
3. Technical Advisory Panel
4. Board of Directors decision

- Complete
- TC Monitoring report & Grantee submits final report & Final disbursement
- Grantee submits mid-term report & TC Assessment & Second disbursement
- First Disbursement & start of Monitoring

**George Town Land Use Survey**
- in-person survey collected data on every business, residence, association, government agency, hotel and education institute within the George Town WHS (covering 260ha)

**George Town Conurbation Study**
- provides the spatial framework with planning, design and development recommendations designed to support the transition of the regional economy and improve quality of life
Developmental:
Rejuvenating the Waterfront
Adaptive Re-Use: of waterfront properties

Medicinal Hall:
Retaining traditional trades in new context
Inclusive

AFFORDABLE HOUSING SCHEME
Student Housing

Apprenticeship Programme for Endangered Trades & Celebrating “Living Heritage”
Sustainable:
Greening the city’s “Shared Spaces”

Carnarvon Street Pilot Greening Project
Creativity & Innovation:
Aspirational & Practical Solutions

Building Partnerships:
Business Improvement District Scheme (BIDS)
Asia’s first Business Improvement District Scheme

STAKEHOLDERS
- IVORY GROUP (PENANG TIMES SQUARE)
- SOGO GROUP (GAMA)
- PDC (KOMTAR & PHASE 5)
- BELLEVUE GROUP (1ST AVENUE)
- HENG LEE GROUP (RESTORED SHOPHouses)
- TRADERS HOTEL
- PRANGIN MALL
- CITITEL
- PLENTITUDE
- MRPP

NOTE: Participation of Plenitude and Penang Tech Centre (PTC) is to be incorporated in the BIDS proposal.
Georgetown BIDS Public Engagement

Several Public Engagement were held and as much challenges have been identified.

THE PUBLIC WANTS REGENERATION OF THE BIDS SITE

“to create a multitude of events for both day and night activities catering to the local youth population, the elderly as well as serving to draw tourists to the site”

Business Improvement District (BIDs)
ENHANCEMENT TO PEDESTRIAN CONNECTIVITY

Little India Improvement District (LIID)
Activities and Events held at the Space in 2011

- Sept 2010  Public Survey during Ramadhan
- Oct 2010  Public Survey during Deepavalli
- May 2011  Portraits of Penang: Little India launch
- May 2011  Tagore Celebration
- May 2011  Visit by Cynthia Nikitin from Project for Public Spaces, New York
- June 2011  Biographical Dictionary workshop
- July 2011  George Town Festival – Specific Events/Sites
- Sept 2011  Penang and the Indian Ocean Conference
Working Partners

- Malaysian Federal Government Agencies
- Khazanah Nasional Berhad
- Penang State Government
- Majlis Perbandaran Pulau Pinang
- Aga Khan Trust for Culture
- World Bank
- Jabatan Perancangan Bandar dan Desa
- Majlis Agama Islam Negeri Pulau Pinang
- UNESCO

<table>
<thead>
<tr>
<th>THE GTGP AT A GLANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>77:</strong> Number of buildings restored or in the process of restoration</td>
</tr>
<tr>
<td><strong>70%:</strong> Increase in property value</td>
</tr>
<tr>
<td><strong>20:</strong> Number of swiftlet houses restored</td>
</tr>
<tr>
<td><strong>1,400:</strong> The number of people who attend Think City's capacity building programmes</td>
</tr>
<tr>
<td><strong>RM6:</strong> Co-investment for every RM1 GTGP Grant allocation</td>
</tr>
<tr>
<td><strong>1.4mil:</strong> Cumulative audience from media impact</td>
</tr>
</tbody>
</table>

5 – number of cultural interpretation centres
40% - the number of community-led initiatives
“It’s about time Southeast Asia offered business an alternative to choking, congested capitals. But hope now flickers. George Town...is stepping out of the shadows.”


ECA Ranks Penang as #8 most liveable city in Asia

Closing Thoughts

• Competition is between cities – capital, technology and talent; only thing that is not tradeble its geography, identity and environment

• Liveability is key in the competition for talent and economic growth in the 21st century.

• The ability to keep & attract the right people is the strategic advantage for the 21st century city….

• Malaysia is responding to this challenge in its 10MP, NPP2, ETP

• However it has be to be a plan led approach as opposed to a market based solution
Lessons Learnt

- Urban regeneration initiatives (such as grants) are more sustainable economically through a public-private partnership approach.
- Collaboration is key particularly in a multi-cultural multi-stakeholder environment.
- Grants as an incentive programme has a role in urban regeneration.
- Requires hand holding and consultation from design to implementation.
- Provide innovative ideas and solutions that are conceptualized and shared with the site-specific stakeholders.
- Requires Innovation that brings about sustainable change.
- Not only multicultural but intercultural.
- Capacity-building for the stakeholders is critical to induce ownership of the initiative/site to the relevant stakeholders.

Penang
Your Hub
Your Home
to live, work, learn and play.
Closing thoughts: Economics of geography suggests that high density localities will be best placed to attract new firms and exploit economies of scale.

- The world is being shaped by competition between cities, and no longer between nations
- **People now choose the city where they want to live; before they chose the job they wanted**
- Efficient and liveable cities are the keys to successful national development
- Agglomeration permits scale economies and generates higher incomes
- Agglomeration will only happen in globally and locally networked cities

**Rapid urbanization requires cities to be made liveable and sustainable to optimize the potential of cities as the engines of economic growth**

**Closing Thoughts**

- If urbanization is not managed it will not yield the desired results:
  - Congestion
  - Poverty & underdevelopment
  - Crime & Safety
  - Cleanliness
  - Economic Opportunity
  - Accessibility
  - Inclusive
  - Sustainable
• This requires:
  – Institution
  – Spatial autonomy
  – Monitoring
  – Local level accountability
  – Innovative solutions
  – Sustainability is in built
  – Not multicultural but intercultural
  – Spatially blind policies particularly in relation to social infrastructure
  – Incentive to enable urban regeneration and not only urban expansion
  – Higher standards and better designs

A new paradigm on city making

<table>
<thead>
<tr>
<th>Elements</th>
<th>Current Approach</th>
<th>New Emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Design</td>
<td>Making the city physically attractive.</td>
<td>Making well-being, quality of life and liveability the core of any urban project.</td>
</tr>
<tr>
<td></td>
<td>Real estate development driven city-making.</td>
<td>Developments are guided by public interest principles, including aesthetics.</td>
</tr>
<tr>
<td></td>
<td>Planning physical projects.</td>
<td>Planning communities and neighbourhoods.</td>
</tr>
<tr>
<td></td>
<td>Development is by type of land use; residential, commercial and industrial.</td>
<td>Mixed uses are predominant to encourage living, working and leisure activities within the same compact area.</td>
</tr>
<tr>
<td>Transport</td>
<td>Transportation network are designed to move vehicles via roads and highways.</td>
<td>Transportation networks are designed to move people, with a focus on public transport as the primary spine, supported by a pedestrian-friendly street network.</td>
</tr>
<tr>
<td></td>
<td>Movement is seen to be a transportation network and traffic engineering issue.</td>
<td>Mobility, accessibility and seamless connectivity are the desired outcomes.</td>
</tr>
<tr>
<td>Environmental, activities and culture</td>
<td>Environment and natural resources are free goods.</td>
<td>Urban projects account for the environmental cost of development.</td>
</tr>
<tr>
<td></td>
<td>Emphasis on providing urban infrastructure and services.</td>
<td>Beyond infrastructure and services, culture is an asset and drives a city’s distinctiveness.</td>
</tr>
<tr>
<td></td>
<td>Waste is disposed.</td>
<td>Waste is a resource to be recycled and reused for example via waste-to-energy initiatives.</td>
</tr>
<tr>
<td>Governance</td>
<td>Planning and provision of infrastructure is predominantly a central/federal role.</td>
<td>Greater collaboration and cooperation with local authorities to incorporate frontline input into planning and decision making.</td>
</tr>
<tr>
<td></td>
<td>Limited civil participation and consultation.</td>
<td>Consultative and bottom-up approach to planning and design with the voice of citizens and businesses forming an important input.</td>
</tr>
</tbody>
</table>
City as a Living Space
- Public health, safety & security
- Mobility & accessibility
- Open spaces and private space
- Inner city regeneration / renewal
- Affordable Housing

City as a Transaction Hub
- Economic Revitalization
- Regional / international hub
- Creativity & Innovation
- Connectivity & Logistics
- Microenterprise / corporate social entrepreneurship

City as a Cultural Hub
- Cultural & Civic Facilities
- Living Heritage & Endangered Trades
- Entertainment & Culture
- Cultural Diversity
- Creative Industries

City as a Knowledge Hub
- Repository of Knowledge
- Learning & Living
- Libraries & Museum
- Living History & Culture
- Research, Innovation & Development Centres

City as a Civic & Democratic Space
- Urban Governance & Popular Participation
- Social Inclusion & Sense of Community
- Poverty
- Cultural Diversity
- Access to Public Facilities

City as a Sustainable Space
- Greening, urban form and planning
- Parks & Gardens
- Waste Management
- Walkable & Cyclable
- Ecological sustainability
- Carbon footprint & energy

A city that combines most of these characteristics is likely to have a high “Liveability” index