Tantangan dan Konsep Perencanaan Kota dan Wilayah di Indonesia

Perspektif Teknologi dan Infrastruktur

Murshal Manaf
Prodi Perencanaan Wilayah dan Kota
Universitas Bosowa

TANTANGAN DAYA SAING GLOBAL INDONESIA TAHUN 2016-2017

Indeks Daya Saing Global Indonesia (GCI)

Tahun	Ranking
2010 – 2011	44
2011 – 2012	46
2012 - 2013	50
2013 - 2014	38
2014 - 2015	**34**
2015 - 2016	**37**
2016 - 2017	**41**

Indeks Daya Saing Infrastruktur Indonesia

Tahun	Ranking
2010 – 2011	90
2011 – 2012	82
2012 - 2013	92
2013 - 2014	82
2014 - 2015	**72**
2015 - 2016	**62**
2016 - 2017	**60**

Sumber: BPIW Kementrian PUPR, Bandung 2017

The 12 Pillars of Competitiveness

GCI 2016-2017 Rankings

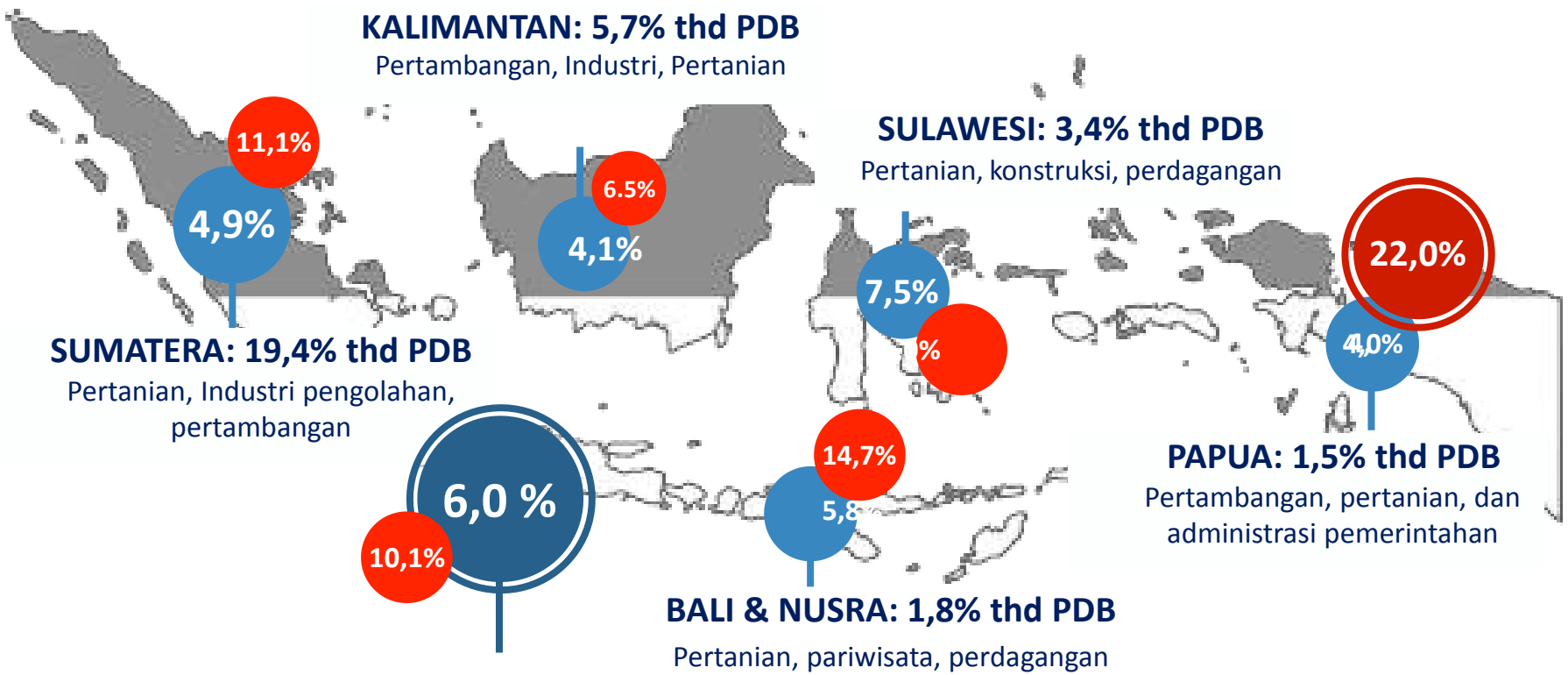
Singapore **2** Thailand **34** Philippines **57**

Malaysia **25** Indonesia **41** Vietnam **60**

	Indonesia	Singapura	Malaysia	Thailand	Vietnam	Filipina
Keseluruhan Infrastruktur	80	2	19	72	85	112
Jalan	75	2	20	60	89	106
Rel Kereta Api	39	5	15	77	52	89
Pelabuhan	75	2	17	65	77	113
Transportasi Udara	62	1	20	42	86	116

Sumber: The Global Competitiveness Report 2016-2017 (World Economic Forums)

Meski Ekonomi Tumbuh Tinggi
DISPARITAS ANTAR DAERAH MASIH LEBAR



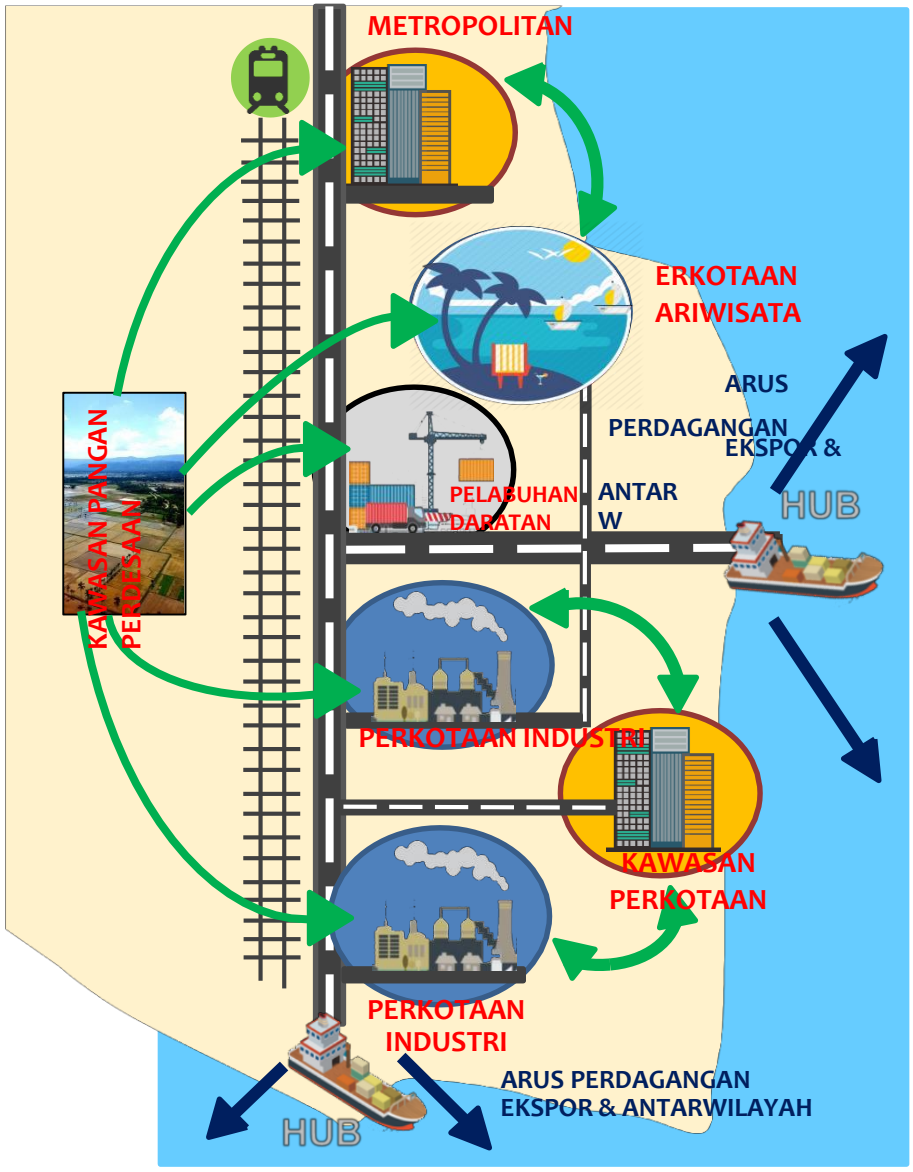
Pertumbuhan PDRB, rata-rata 2006-2015, YoY
Sumber: BPS

Tingkat Kemiskinan Daerah, per September 2016
Sumber: BPS

	NASIONAL
Pertumbuhan Ekonomi (2016)	5,18 % (triwulan II, yoy)
Tingkat Kemiskinan (Maret 2015)	11,22 %
Tingkat Pengangguran (Feb 2015)	5,81 %

Sumber: BPIW Kementrian PUPR, Bandung 2017

KONSEP WILAYAH PENGEMBANGAN STRATEGIS (WPS)



Pembangunan infrastruktur INDONESIA difokuskan pada

35 Wilayah Pengembangan Strategis (WPS)

yang mencakup 97 kawasan strategis, untuk meningkatkan daya saing dan mengurangi disparitas antar wilayah

Esensi:

1. *pengembangan wilayah terpadu dengan "market driven".*
2. *daya dukung dan daya tampung lingkungan*
3. *memfokuskan pengembangan infrastruktur menuju wilayah strategis*
4. *mendukung percepatan pertumbuhan kawasan-kawasan pertumbuhan di WPS*
5. *mengurangi disparitas antar kawasan di dalam WPS.*

Untuk itu diperlukan:

- **Keterpaduan Perencanaan** antara Infrastruktur dengan pengembangan kawasan strategis dalam WPS.
- **Sinkronisasi Program** antar infrastruktur (Fungsi, Lokasi, Waktu, Besaran, dan Dana).
- **Koordinasi dan Sinkronisasi Pelaksanaan**

Sumber: BPIW Kementrian PUPR, Bandung 2017

KOTA SEBAGAI MESIN PERTUMBUHAN WILAYAH PENGEMBANGAN STRATEGIS (WPS)

Jalan Tol
Jalan Arteri Primer
Jalan Kolektor Primer
Jalan Lokal Primer
Rel Kereta Api

Kota Sedang/Kecil (KSK)
Desa

Kawasan Pariwisata
Kawasan Industri

Bandar Udara
Pelabuhan Laut
Pelabuhan Perikanan

Terminal Bus
Stasiun Kereta Api

Sumber: BPIW Kementrian PUPR, Bandung 2017

PEMBANGUNAN INFRASTRUKTUR PUPR DIFOKUSKAN DI 35 WPS

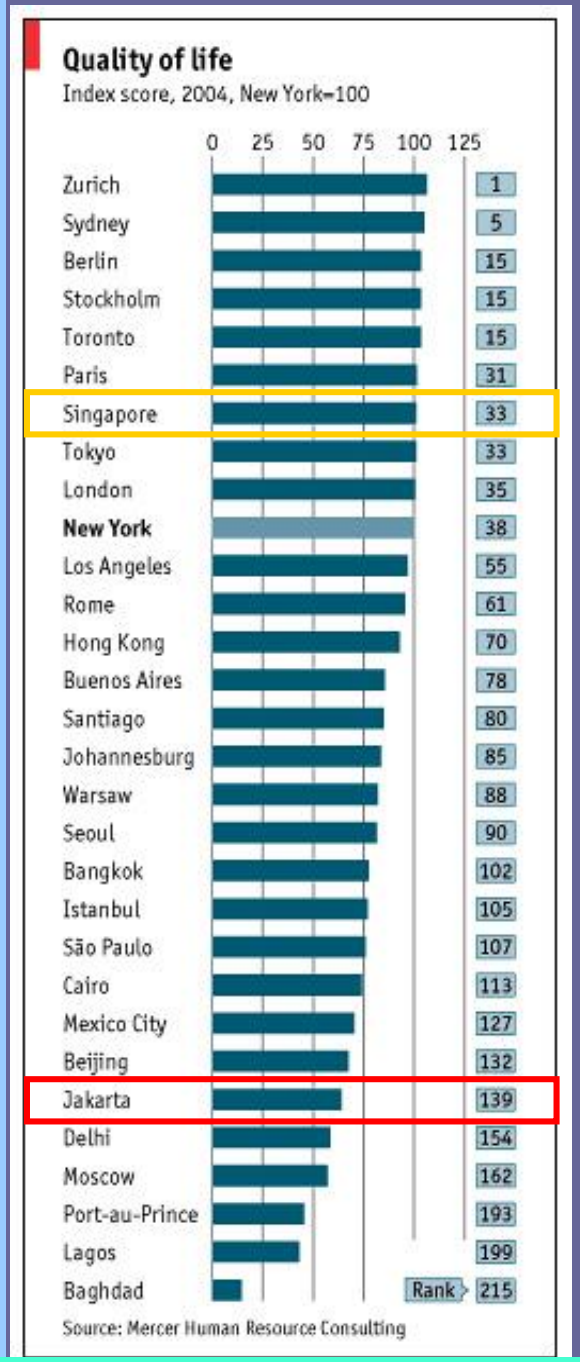
35 Wilayah

Pengembangan Strategis (WPS)

WPS sebagai basis perencanaan dan pemrograman infrastruktur PUPR secara terpadu untuk mengurangi kesenjangan antar-wilayah dan meningkatkan daya saing

Sumber: BPIW Kementrian PUPR, Bandung 2017

Cities are competing to be more attractive for investment & place for living



Indicators:

Political stability,
Personal freedom,
Air pollution
The quality of healthcare,
Schools,
Restaurants
Theatres

Etc. (total 39 factor)

Jakarta is ranked no. 139 of 215

Challenges Ahead for the Cities

PASAR TUNGGAL INDONESIA-CHINA 2003
PASAR TUNGGAL ASEAN 2015

Kesiapan Indonesia :

1. Pasar bebas dgn basis produksi tunggal
2. Menciptakan kebebasan arus barang, jasa, investasi dan tenaga kerja

Tantangannya Indonesia :

1. Bagaimana mengawasi barang impor
2. Melindungi perdagangan yg tdk adil
3. Penyulundupan dan aturan manipulatif
4. Infrastruktur dan biaya logistik (16% dr total biaya produksi)

Posisi/Daya Saing Indonesia (Global Competitiveness Report 2011-2012):

1. Peringkat 46 (2011) → : 50 dari 144 negara (2012)
2. Singapura : 2 → : 2
3. Malaysia : 21 → : 25
4. Brunei : 28 → : 28
5. Thailand : 21 → : 38

Challenges Ahead for the Cities

DAYA SAING INDONESIA → ASEAN

Meningkatkan Daya Saing Indonesia → 7 cabang industri:

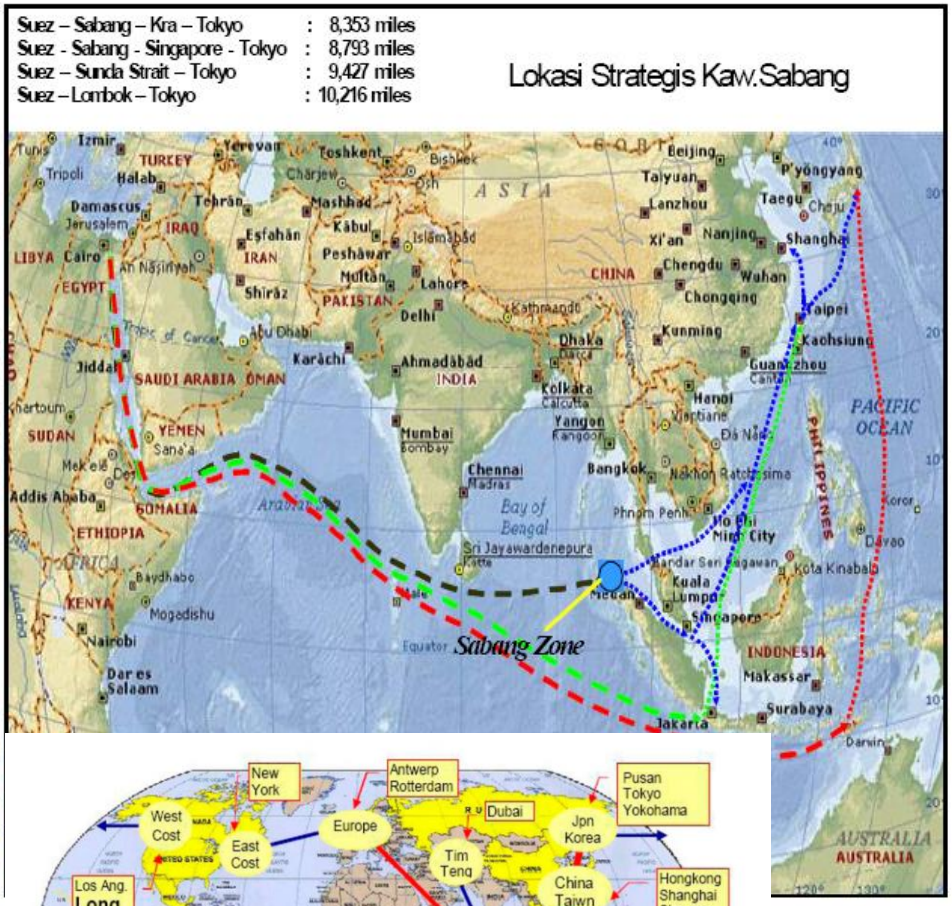
- Otomotif, Elektronik, Semen
- Pakaian jadi, alas kaki,
- Makanan dan minuman, mebel

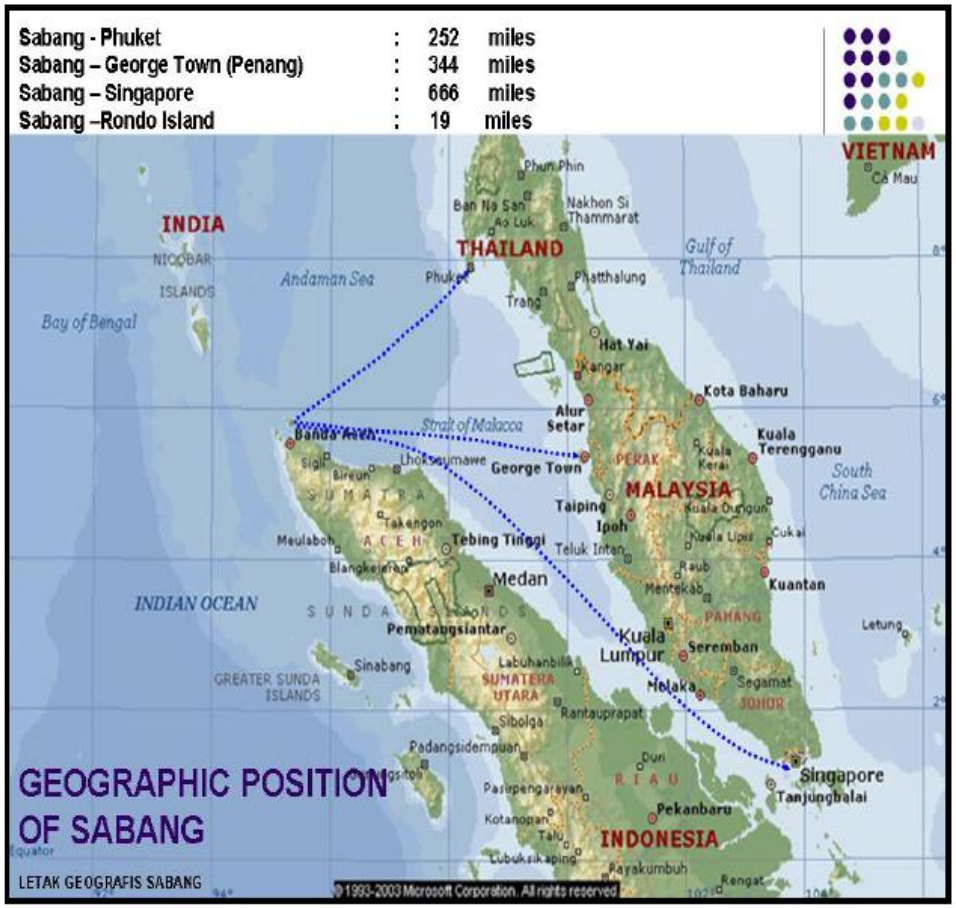
Indeks Kinerja Logistik (World Bank, 2012) :

1. Indonesia : 59 dari 155 negara
2. Singapura : 1 (Kaw. ASEAN)
3. Malaysia : 29 (Kaw. ASEAN)
4. Thailand : 38 (Kaw. ASEAN)
5. Filipina : 52 (Kaw. ASEAN)
6. Vietnam : 53 (Kaw. ASEAN)

POSISI STRATEGIS_ KAWASAN PBPB SABANG

Di segi tiga emas perdagangan Eropa-Asia (50.000 kapal/7-8 kapal/jam melintasi Selat Malaka-Sabang).





Posisi PBPB Sabang sgt menguntungkan → persimpangan pelayaran dan perdagangan dunia → jalur Trans-Pacific dan Europe-Asia.

2020 : 40% lalulintas kontainer Asia **(320 juta TEUs) melalui perairan Indonesia.**

POSISI SABANG DALAM KONSTELASI DUNIA

Kompetisi Pelabuhan (ekonomi dan pelabuhan)

Tabel 2.7
Twenty Largest Asian Container Ports

Rank		Port	Country	2001 TEU	2002 TEU	2003 TEU	Percentage growth 2002-2003
World	Asia						
1	1	Hong Kong	China	17 900	19 144	20 450	6.82
2	2	Singapore	Singapore	15 520	16 941	18 100	6.84
3	3	Shanghai	China	6 330	8 612	11 370	32.03
4	4	Shenzhen	China	5 079	7 614	10 650	39.87
5	3	Busan	Republic of Korea	8 073	9 453	10 368	9.68
6	6	Kaoshiung	Taiwan Province of China	7 540	8 493	8 844	4.13
11	7	Dubai	United Arab Emirates	3 502	4 194	5 152	22.84
12	8	Port Kelang	Malaysia	3 760	4 533	4 840	6.77
14	9	Qingdao	China	2 639	3 410	4 230	24.05
16	10	T. Pelepas	Malaysia	2 049	2 669	3 487	30.65
17	11	Tokyo	Japan	2 750	3 028	3 314	9.45
19	12	Laem Chab	Thailand	2 367	2 749	3 180	15.65
21	13	Tianjin	China	2 011	2 408	3 020	25.42
22	15	Ningbo	China	1 213	1 859	2 772	49.11
23	14	Guangzhou	China	1 628	2 173	2 760	27.01
24	16	Jakarta	Indonesia	2 222	2 398	2 758	15.01
26	17	Manila	Philipines	2 296	2 462	2 561	4.02
28	18	Yokohama	Japan	2 304	2 365	2 503	5.84
29	19	Xianten	China	1 295	1 754	2 330	32.84
30	20	J. Nehru Port	India	1 462	1 946	2 269	16.60

Source: Cargo System, August 2004, Dyna Liner, May 2004, Ministry of Communication of the People's Republic of China, Company websites/

Note: Singapore includes PSA Corp and Jurong port. Shenzhen include Chiwan, Shekou, and Yantian

Trend pertumbuhan Container Ports di Singapore, Malaysia relatif tumbuh kurang signifikan → dibanding ports Indonesia

INTEGRASI DAN OPTIMALISASI PENATAAN RUANG

Kesiapan Indonesia :

1. Efesiensi ruang dan optimalisasi potensi kawasan prospektus → konfigurasi ruang : pengolahan SDM, SDA, IT & Tech, Produk Modal sosial dan modal individu
2. Iklim investasi, kompetitif biaya produksi, perijinan, dan infrastruktur, mobilisasi dan logistik arus barang, jasa, investasi dan tenaga kerja
3. Strategi jejaring global dan penguatan ekonomi lokal
4. Implementasi rencana struktur ruang dan pola pemanfaatan ruang kaw. fungsional dan integrasi pengendalian ruang

1

Analysis of Current City Planning

What happened to Indonesian cities?

2

Challenges Ahead for the Cities

Understand the forces that influence/has impact to cities?

3

Recent Issues in City Planning

Learn from cases/practice how to respond to these issues

What happened to Indonesian Cities?

Problems/Constraints

- **Not strong vision/objective**
  - Narrow view of planning : detached from global issues.
  - Loosing the opportunities & potential
  - Lack of entrepreneurship & marketing
- **Short term solution, unsustainable practice & non-coherent planning**
  - Patching up work/*'gali lubang tutup lubang'*
  - Short term view &: Energy (pollution), transportation (congestion), environment (climate change), Social & economic (economic disparity, jobless, social unrest)
- **Weak Process: Lack of Enforcement, Transparency & Democracy**
  - Good planning, but difficult to implement: Corruption & lack of enforcement
  - Good vision, but not for everyone : public participation, transparency
  - Good action, but slow process : bureaucracy

- Absence of Mass Rapid Transport Strategy
- Dependence to automobile
- No vehicle ownership control
- Pollution, congestion
- 40% of productive time in Jakarta is spent on the road

Uneven development

1

Analysis of Current City Planning

What happened to Indonesian cities?

2

Challenges Ahead for the Cities

Understand the forces that influence/has impact to cities?

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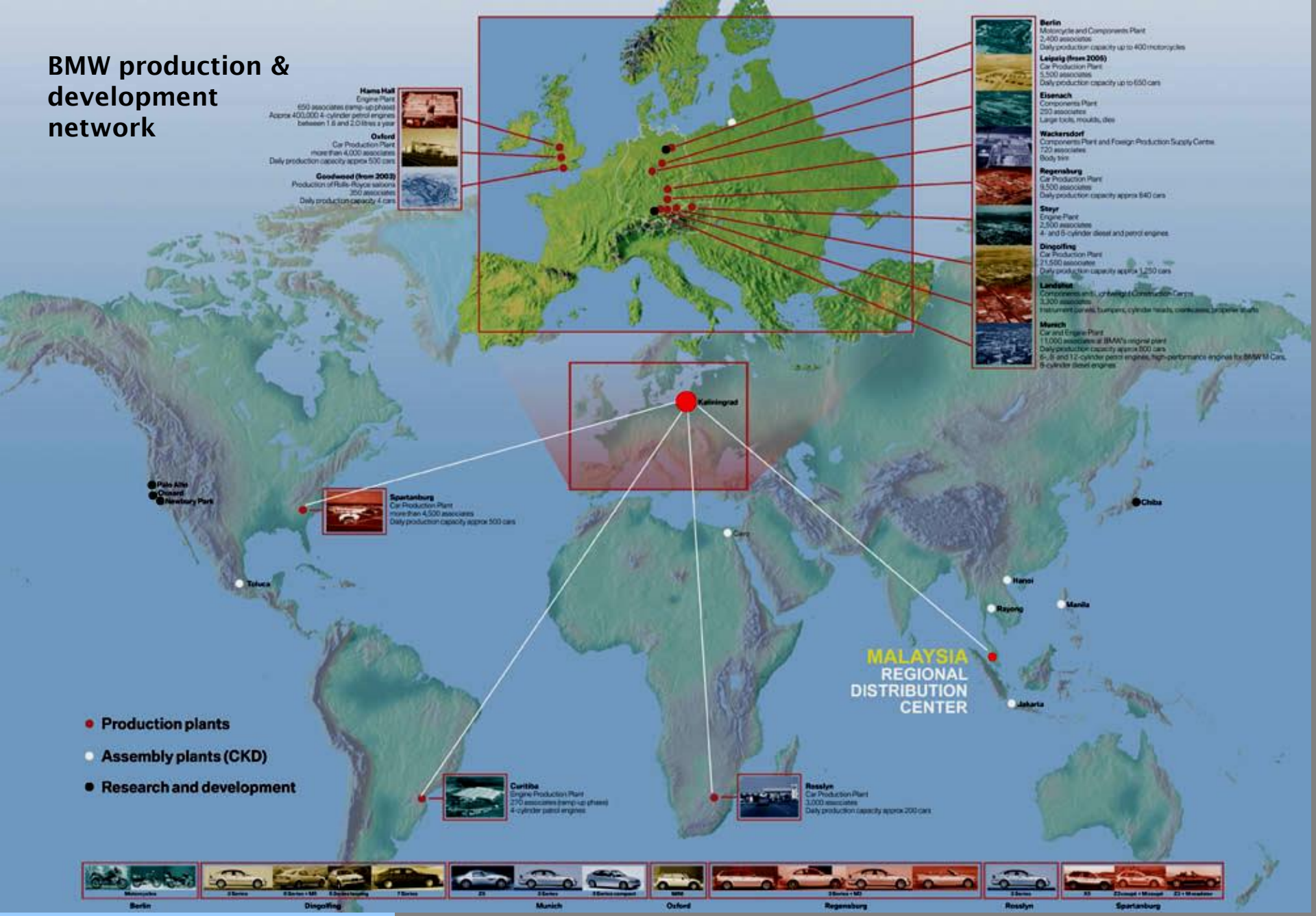
Recent Issues in City Planning

Learn from cases/practice how to respond to these issues

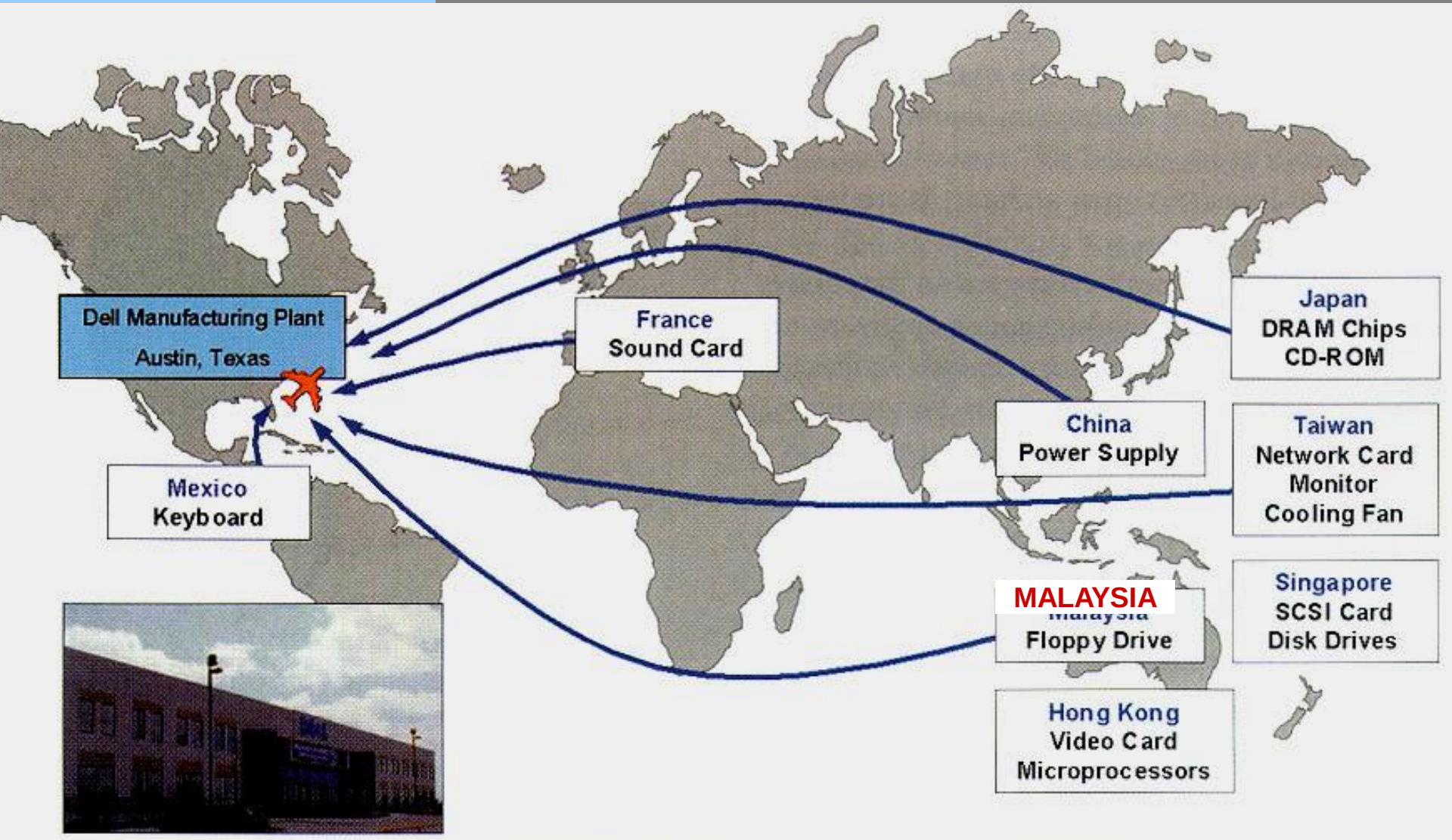
Challenges Ahead for the Cities

- **Globalization**
  - Flexible Accumulation & Movement of asset & investment, Global Restructuring of Financial Market
  - Changes in Production/Distribution-Supply Chain,
  - Emergence of IT, Space and Time Compression
  - Global Community – cross culture influence and global identity/branding

BMW production & development network



Dell Computer's Global Supply Chain



ource: AMB Investment Management, Inc.

Challenges Ahead for the Cities

- **Urbanization**
  - more than 50% globally, live in urban
  - pressure on urban poor and environment
  - edge/satellite cities, creating traffic & urban expansion
- **Global Warming & Energy Deficiency**
  - Continuous use and dependence to non-renewable energy
  - Rising price of oil worldwide & energy crisis
  - Pollution and global heating, rise of sea level
- **Decentralization**
  - More power/authority/flexibility to regulate and plan the cities
  - But, with significant decrease of state/central government budget
  - Readiness of local government

3

Recent Issues in City Planning

1. Strategic Positioning of Cities
2. Convergence & Integration of Distribution & Transportation Industry
3. Sustainable & Environmentally Responsive Development
4. Transit Oriented Development
5. City's Character & Sense of Place

Recent Issues in City Planning

1. Strategic positioning of Cities

- Clearer vision and long term objective
- Cities' respond and positioning to globalization & decentralization: capture investment & flow of capital
- Cities striving to be 'Sustainable Global Cities'
- Various scale consideration: from local to district, city, regions and beyond

Global City

1

Strong Core Identity

2

Clear Development Vision

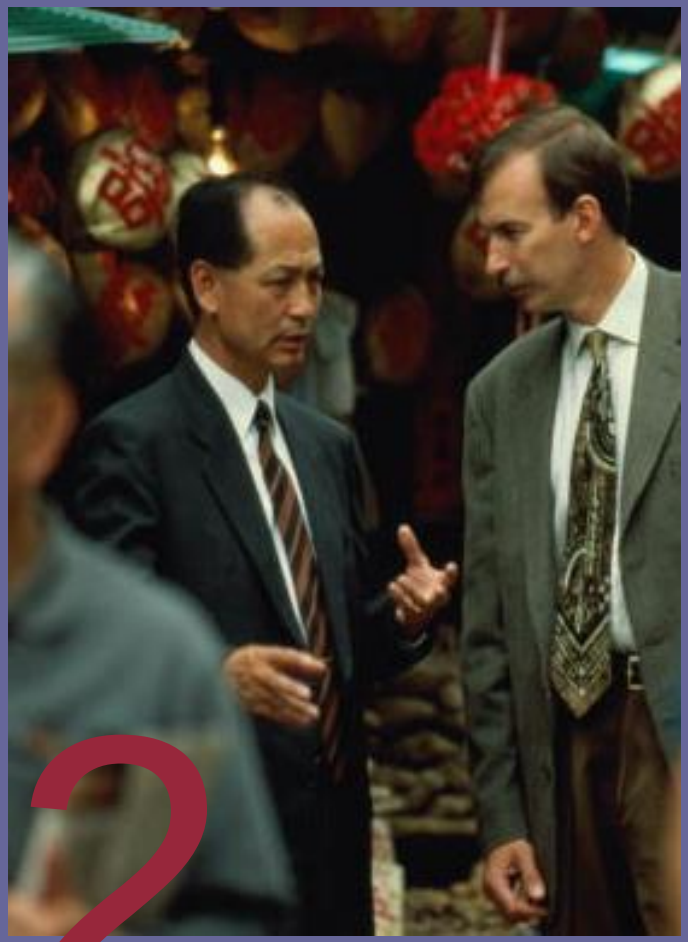
3

Creative marketing

Sustainable City

1

Vibrant Economy



2

Cultural & Social Equality

3

Environmentally Balance

Strategic positioning of Cities

BARCELONA

WAS : ranked 16th before the Olympic Games of 1992

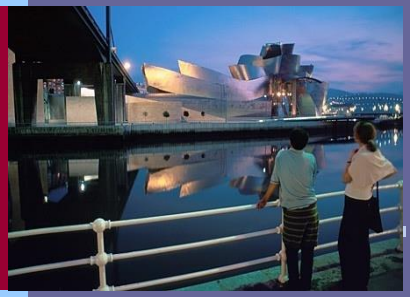
NOW : ranked 3rd most popular tourist destination in Europe, 1999

MANCHESTER

Visitorship increase 9 %
$ 6.4 billion economy

BILBAO

Architecture Tourism – Civic Pride
Guggenheim Museum Bilbao has attracted 6.3 million visitors Since its opening in 1997.
The museum was ..
by 79% of visitors as their reason for visiting bilbao



NEW YORK

Voted city with best Nightlife

LONDON

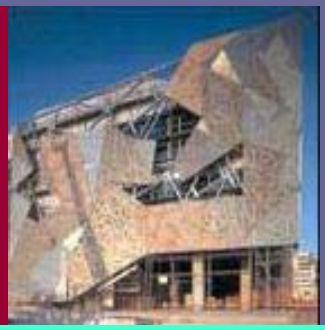
London's cultural & creative sector generates $ 89.9 b in revenue providing more than 500,000 jobs

SHANGHAI

9,1 % GDP Growth

MELBOURNE

Best City to live in



SYDNEY

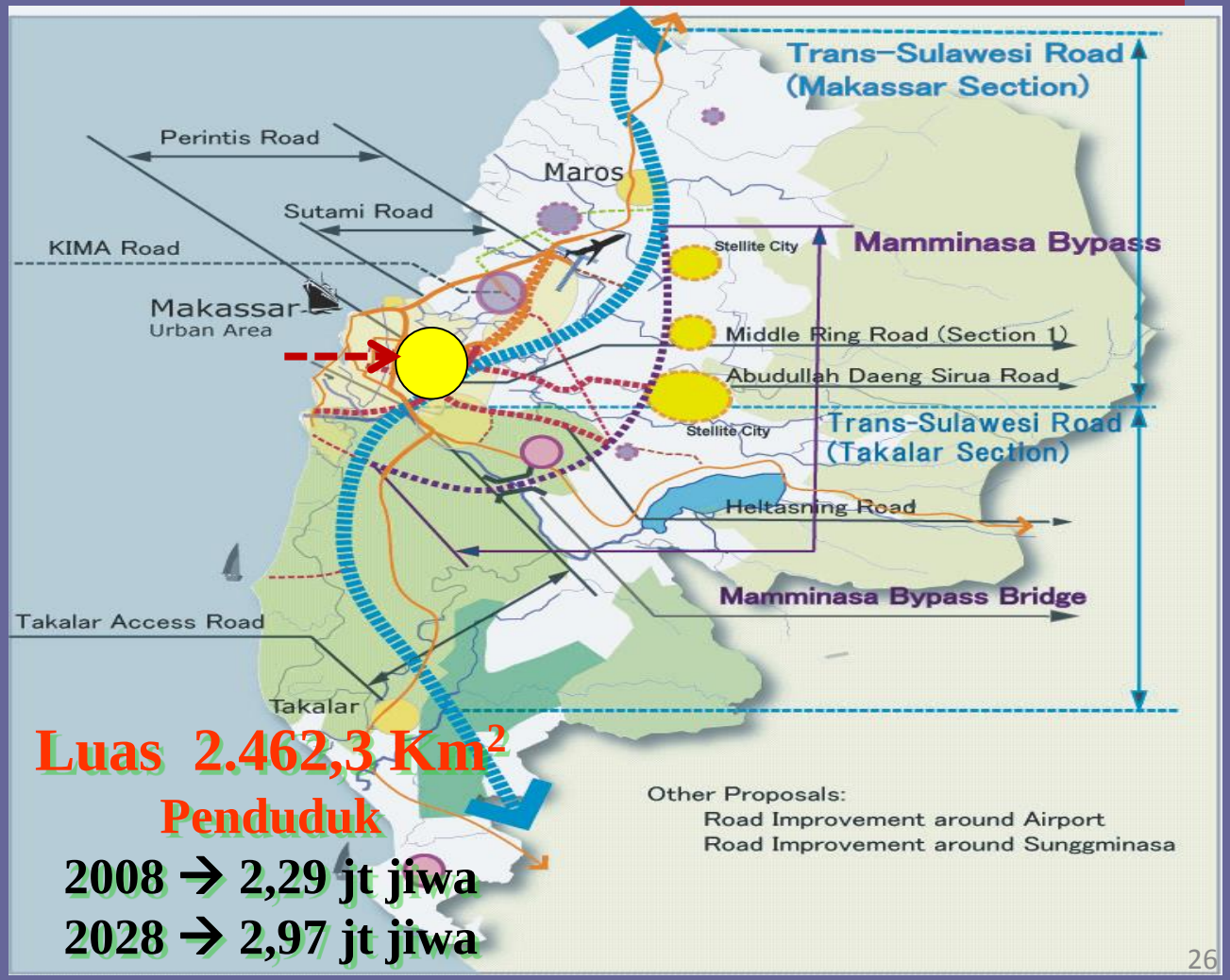
11 % visitorship growth 1998-2002

Case Study:

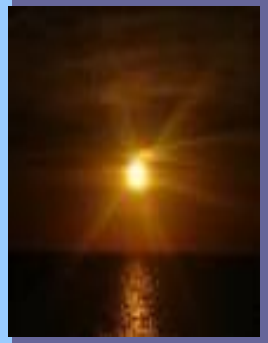
KSN Mamminasata 2017

- Secara umum masih sesuai RTR
- Sedikit deviasi Pola Ruang
- Rencana struktur ruang sebagian sdh terlaksana (middle road, KA, pelabuhan dll)
- Belum : Jl. Bypass, terminal perkotaan kota baru & barang regional

STRUKTUR RUANG MAMMINASATA



Case Study:
Makassar Vision Plan



Makassar Vision Plan
20...? - 20...?

?...

Case Study:
Makassar Vision Plan

Role of City Planning Report

Peran Dokumen Perencanaan Kota

- Perangkat Kendali
- Media Investasi

Case Study:
Makassar Vision Plan

Investment Oriented

7 reasons to invest in Singapore/Hongkong

1

Unrivalled Location

2

Low taxes

3

World-class infrastructure

4

Rule of law & Clean Government

5

World's freest economy & Free flow of Information

6

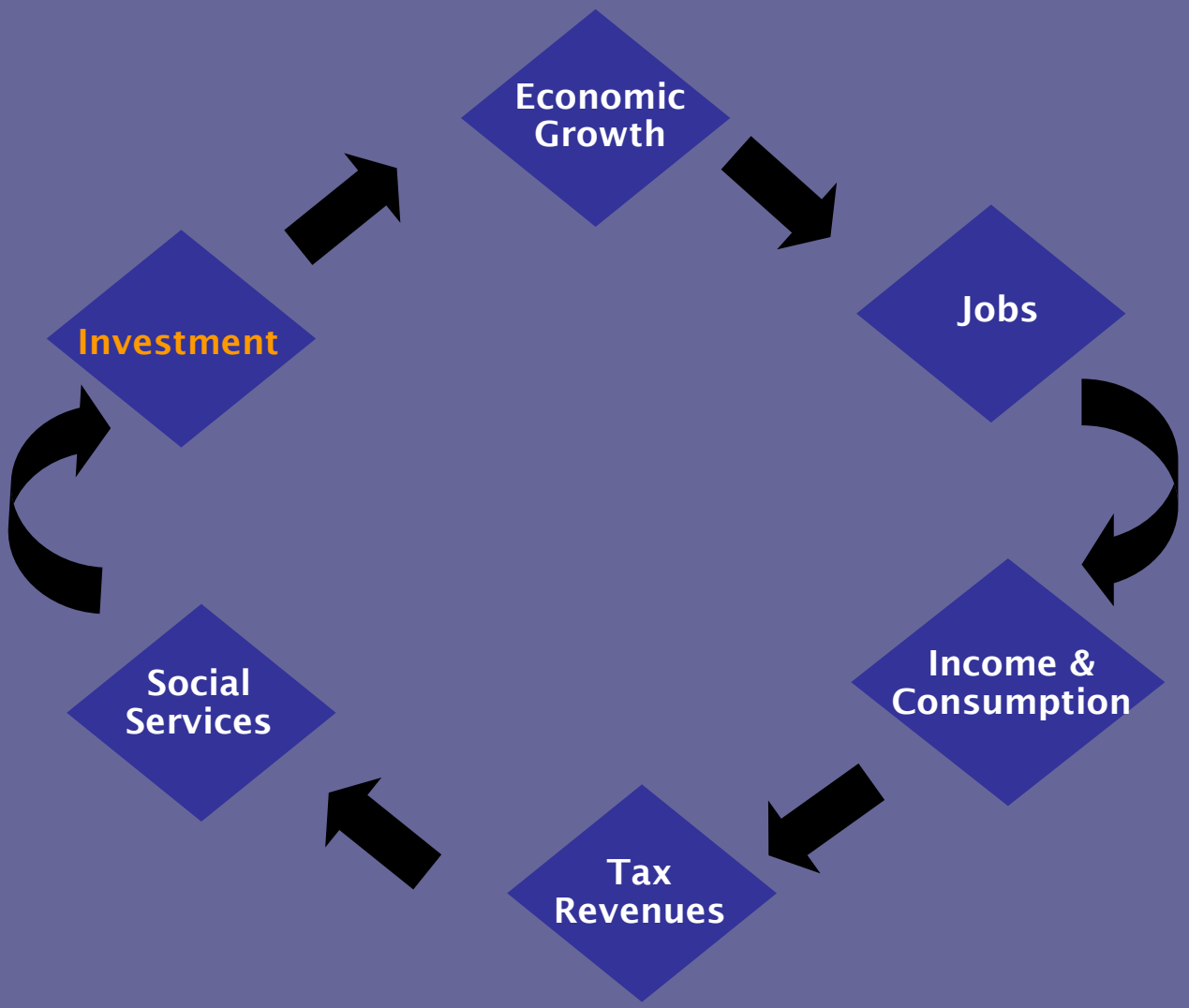
Skilled Workforce

7

International Lifesty

Case Study:
Makassar Vision Plan

Economic Development Cycle



Case Study:
Makassar Vision Plan

International Businesses/investors donors

Academic Community

NGOs

Business Community

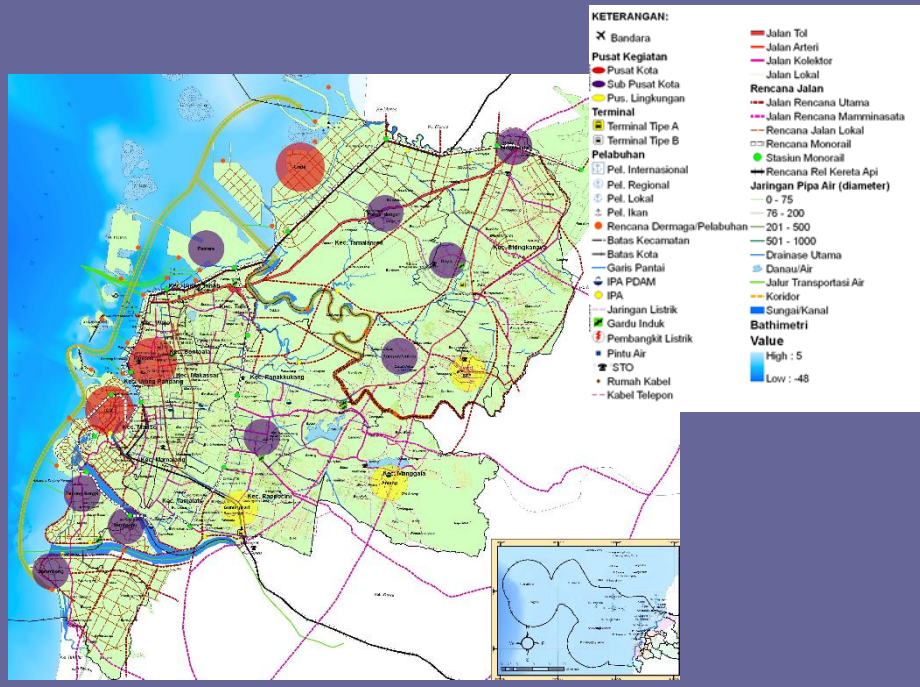
Local Government Bureaus

Others

N

G

O

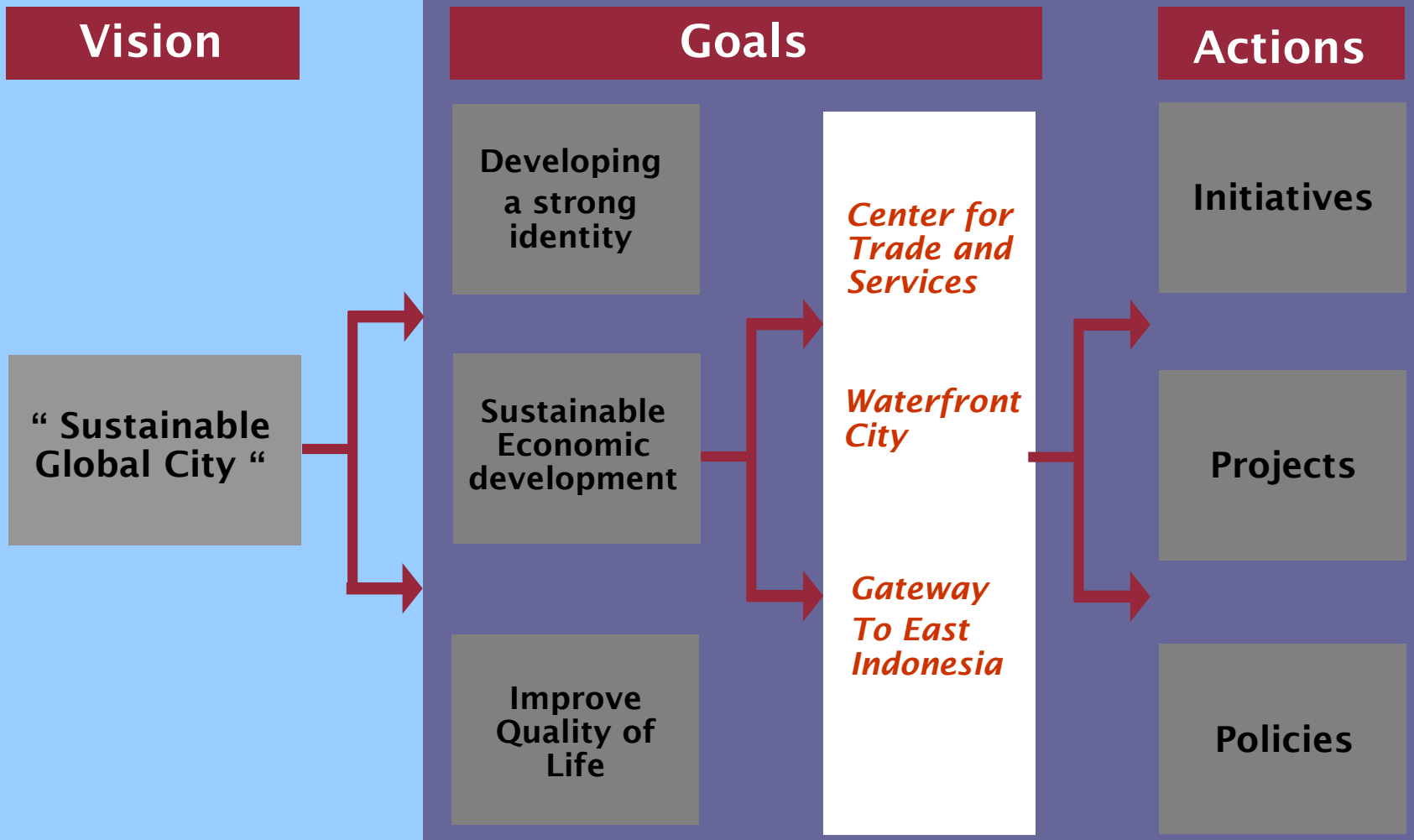


Government of Makassar reviews

City Council of Makassar reviews

Approved Vision Plan for Makassar

Case Study:
Makassar Vision Plan



Recent Issues in Spatial Planning Practice

2. Convergence and Integration of Transportation & Distribution Industry (integrasi & penyatuan)

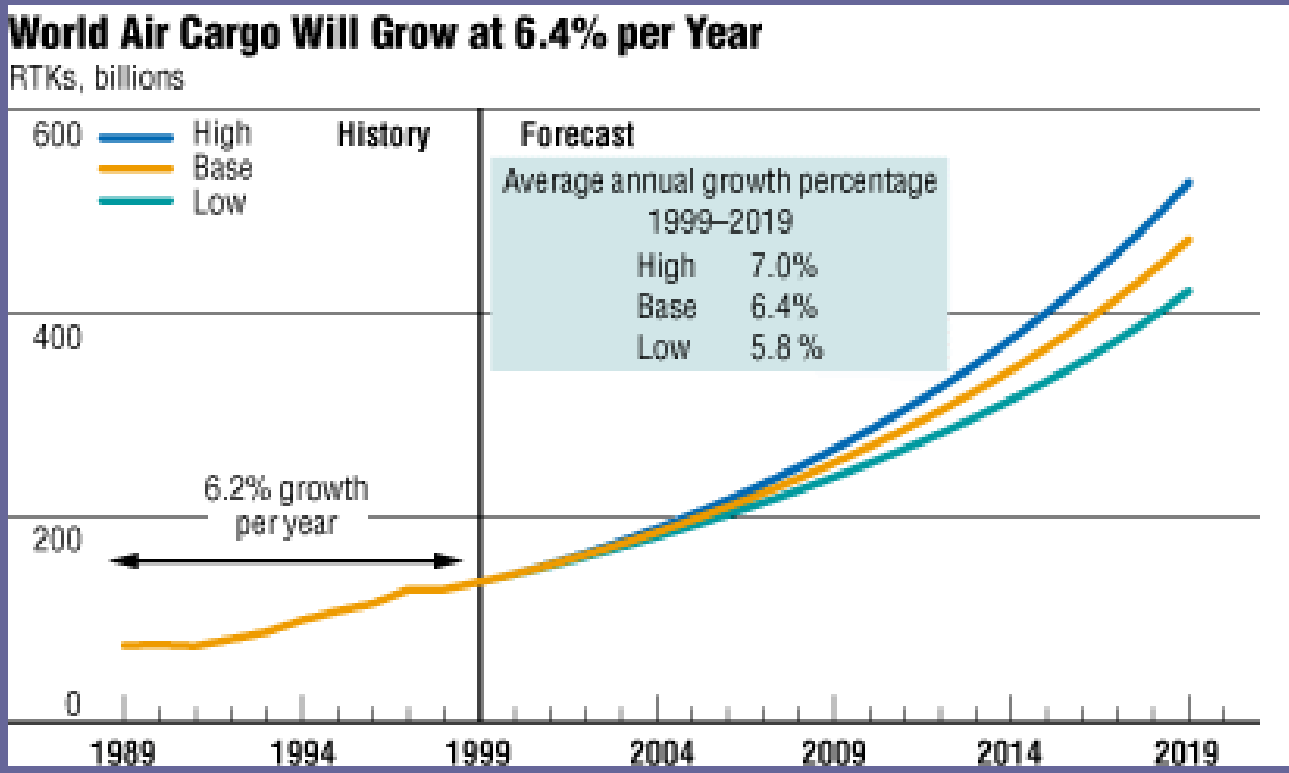
- Capturing the emerging trends of global transportation & distribution industry (menangkap peluang)
- Integration of modes of transport, infrastructure and transportation facilities (integrasi modal-split)
- City's/Country's respond to the trend in strategic spatial & infrastructure planning (respon jakstra TARU).

Case Study:

Cargo Industries & Integrators

- Cargo traffic will be stimulated by devt of global e-commerce & manufacturing trends
- Freight tonne-km will grow more rapidly than passenger traffic
- World airborne cargo will grow at 6.4%/yr during next 20 yrs
- Greatest air freight market growth expected in Asia, increasing from 41% (1999) - 52% (2019) in work market share

AIR CARGO BOOM



- **80% of goods manufactured around the world will be transported across borders by year 2020**
  (Source: Aviation Oct 2000)
- **US$ 27.7 billion market share for cargo & integrator industries in US alone**

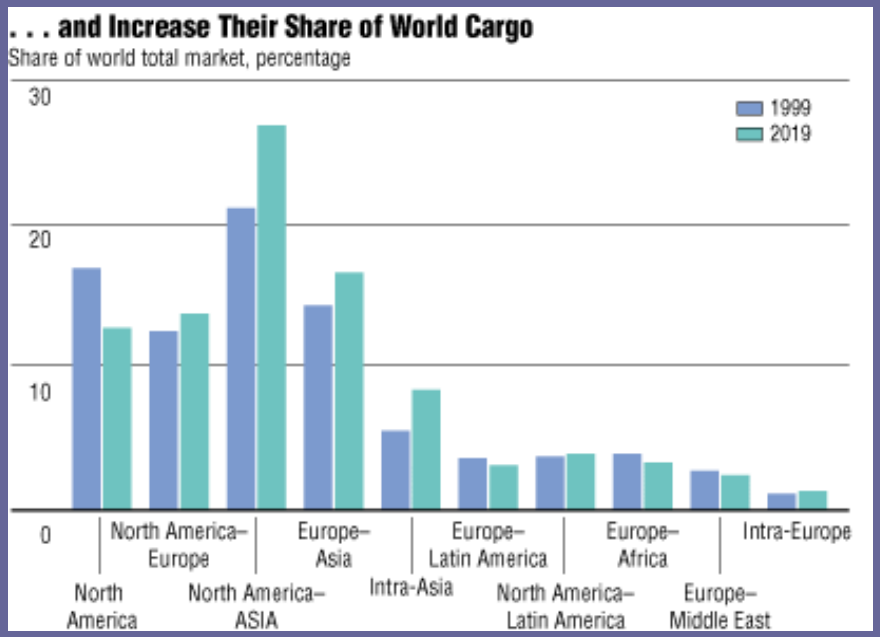
Case Study:

Cargo Industries & Integrators

- **Intra-Asia growth expected highest at 8.6% during 1999-2019 period**
- Asian market will increase from 41% to 52% of world cargo share
- E-commerce needs about 2,000 flights a day within the USA & the world (prediction)
- Asian countries needs to prepare the infrastructure & services to capture a share of future cargo market

POTENTIAL FOR ASIA & MALAYSIA

(SOURCE: BOEING 2001)



Case Study:

Cargo Industries & Integrators

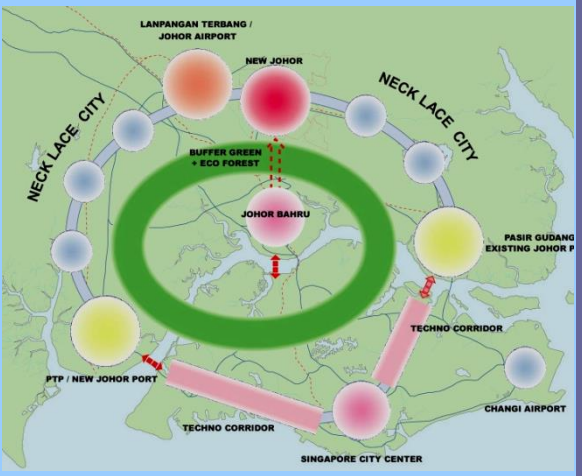
- **Hub-and-spoke Distribution Model**
  - Global network consist of international hubs – U.S., Europe & Asian regions

- **Clustering of Hubs**
  - International hubs (within U.S.) are clustered:-
    - Within short distance to U.S. population & businesses
    - Easy interstate access
    - location – in non-major cities & non-major international airports

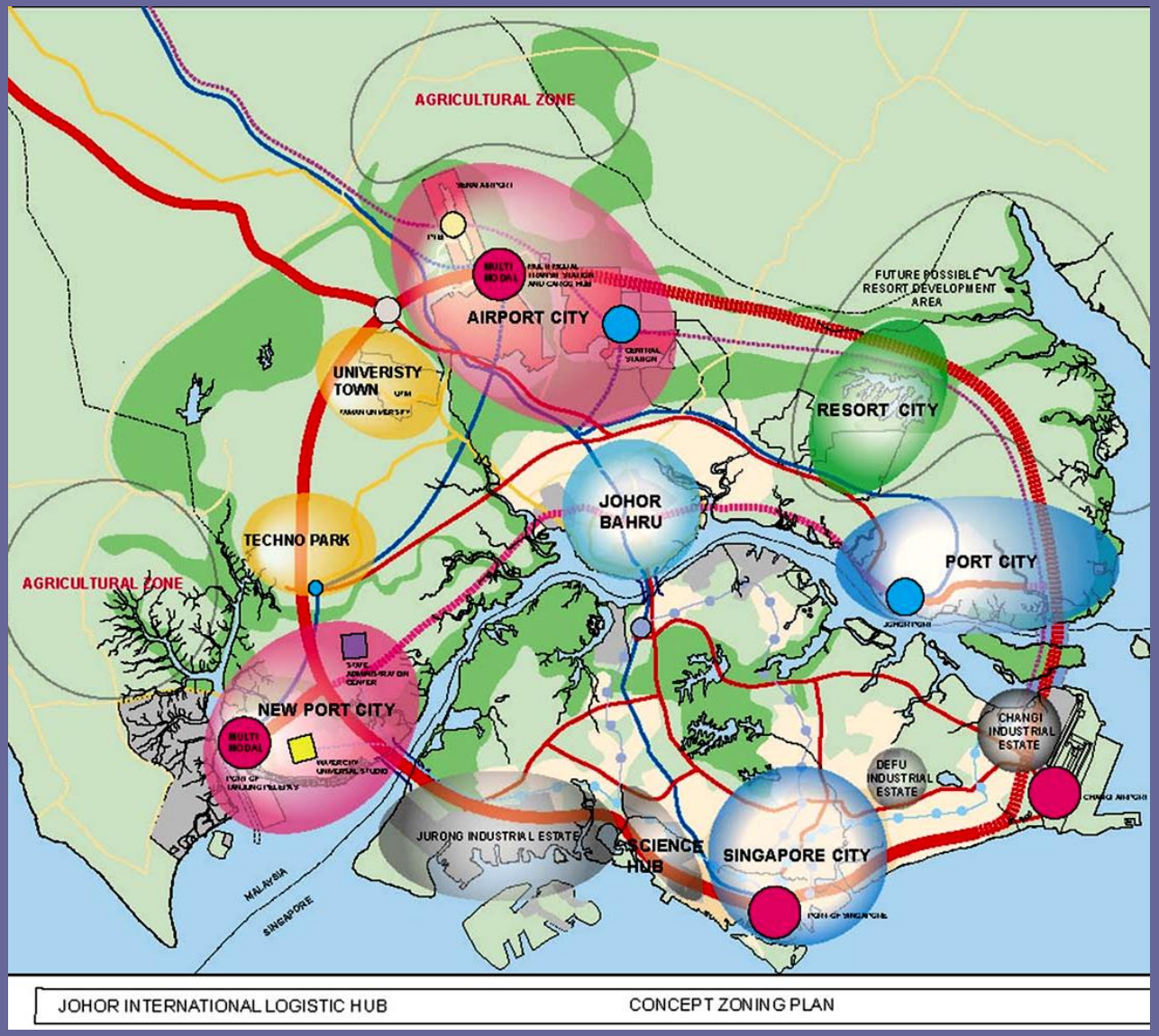
Case Study:

Cargo Industries & Integrators

Singapore & Johor Integration



Johor-Singapore Transportation & Distribution Hub



Case Study:

Cargo Industries & Integrators

China

China Economic & Techno Zone integrated with Transportation

ETDZ =
Economic and
Technological
Development Zone

FTZ =
Free Trade Zone

SEZ / ETDZ =
Special Economic Zone
and Economic and
Technological
Development Zone

FTZ / ETDZ =
Free Trade Zone and
Economic and
Technological
Development Zone

SEZ / FTZ =
Special Economic Zone
and
Free Trade Zone

- ETDZ
- FTZ
- SEZ / ETDZ
- FTZ / ETDZ
- SEZ / FTZ

Recent Issues in Spatial Planning Practice

3. Sustainable & Environmentally Responsive Development

- Environmental assessment & standard reinforcement : Use of Technology & GIS
- 'Green Development' Planning Standard
- Use of alternative energy: renewable non pollutant
- Recycle and regeneration

PETER H. DIAMANDIS AND STEVEN KOTLER,

(**Abundance: The Future Is Better Than You Think,** 2012) :

kemajuan teknologi secara eksponensial "6D of Exponential Growth", yaitu:

1. Digitalization (Transformasi Analog ke Digital)
2. Deception (pertumbuhan eksponensialnya → “knee of the curve”.)
3. Disruption (Fase transisi menuju 3/4D terakhir)
4. Dematerialization (semua produk kehilangan wadah fisik untuk ditransfer di “Cloud” alias awan digital tak bertepi.
5. Demonetization (Di dalam “awan digital” tempat menyimpan segala hal itu hampir semua biaya jadi turun drastis. Buku, musik, film, ilmu, informasi, komunikasi, dll tiba2 jadi membludak volumenya, dan makin lama makin murah harganya)
6. Democratization (Berkelimpahan/berbiaya minimal →“Abundance”→“Free Economy” dan “Sharing Economy”.

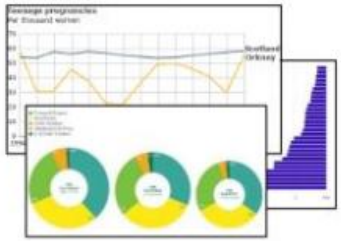
The benefits of GIS in spatial and infrastructure planning:

- Layers of related information as bases
- Overlaid for composite suitability analysis
- Identify Ecological Sensitivity Map
- Analytical tool for design and planning judgment

The benefits of GIS in spatial and infrastructure planning:

Contoh Dalam Penyusunan Rencana Tata Ruang Wilayah (RTRW)

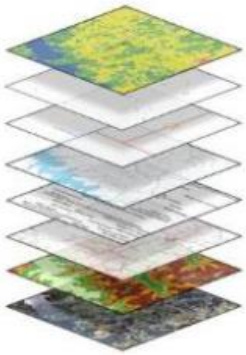
Data Sektoral



Analisis Statistik

Data Geospasial

1. Peta Rupabumi (RBI) atau Peta Topografi
2. Citra satelit
3. Peta Tutupan Lahan
4. Peta Batas Wilayah Administrasi
5. Peta Batas Kawasan Hutan
6. Peta Bencana
7. Peta Potensi SDA



Analisis Spasial

Rencana Tata Ruang Wilayah (RTRW)

Data geospasial berupa peta diperlukan sebagai data dasar dalam penyusunan RTRW

Dinamika Spasial dari aspek-aspek sosial, ekonomi dan lingkungan juga perlu dianalisa untuk menjadi masukan dalam penataan ruang

Case Study:

Environmentally Conscious Planning

Green Communities

Terramor at Ladera Ranch

- Incorporates Green Building Technologies
- Homes Sited & Designed for Optimal Solar Orientation
- Riverine Low-Flow Biological Treatment System
- Integrated / Accessible Parks, Trails and Open Space
- Pedestrian-Friendly Streetscapes

Case Study:

Environmentally Conscious Planning

Regeneration, Revitalization & Recycle

- ***Economic Regeneration***: From poor district to a prosperous one
- ***Environmental Regeneration***: From brownfield to an ecological corridor
- ***Urban & Social Regeneration***: From Olympic sport ground to community

Case Study:
Environmentally Conscious Planning
(sadar lingkungan)

During Olympic Plan

Post Olympic Plan

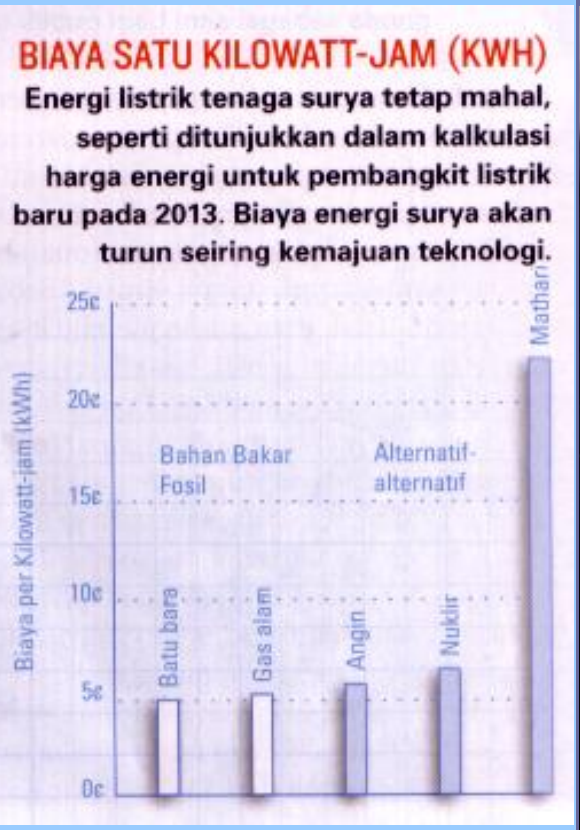
LOWER LEA VALEY
Regeneration :

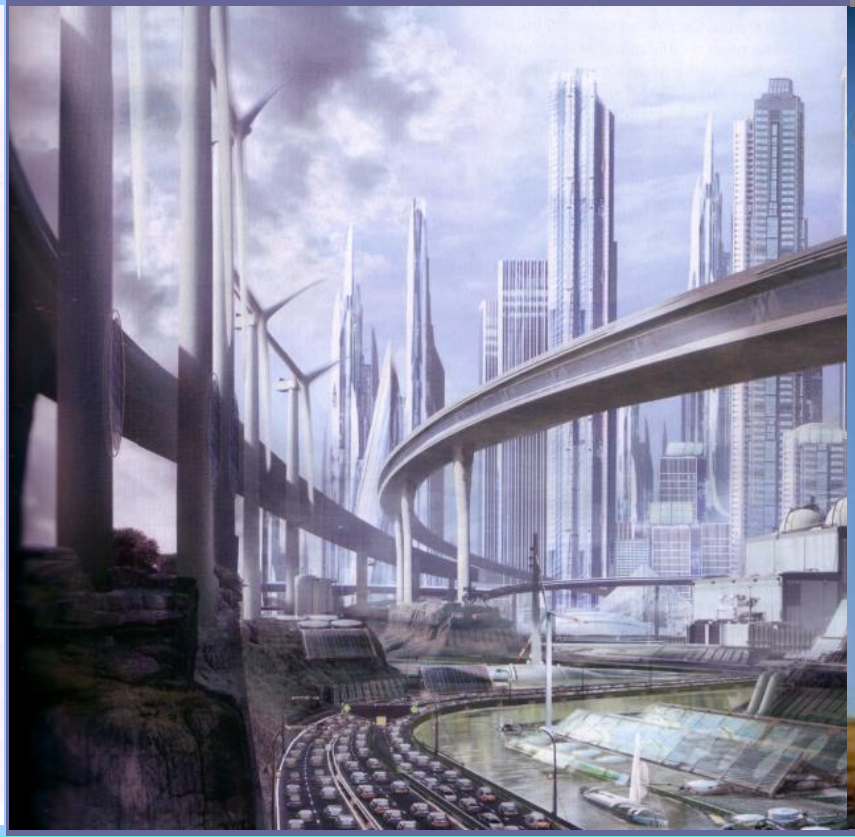
- ***Economic Regeneration***: From poor district to a prosperous one
- ***Environmental Regeneration***: From brownfield to an ecological corridor
- ***Urban & Social Regeneration***: From Olympic sport ground to community

Recent Issues in Spatial Planning Practice

Alternative to Energy

- Wind
- Nuclear
- Solar Radiation – Solar cell





Case Study:

Environmentally Conscious Planning

Sun Orientation Control in China

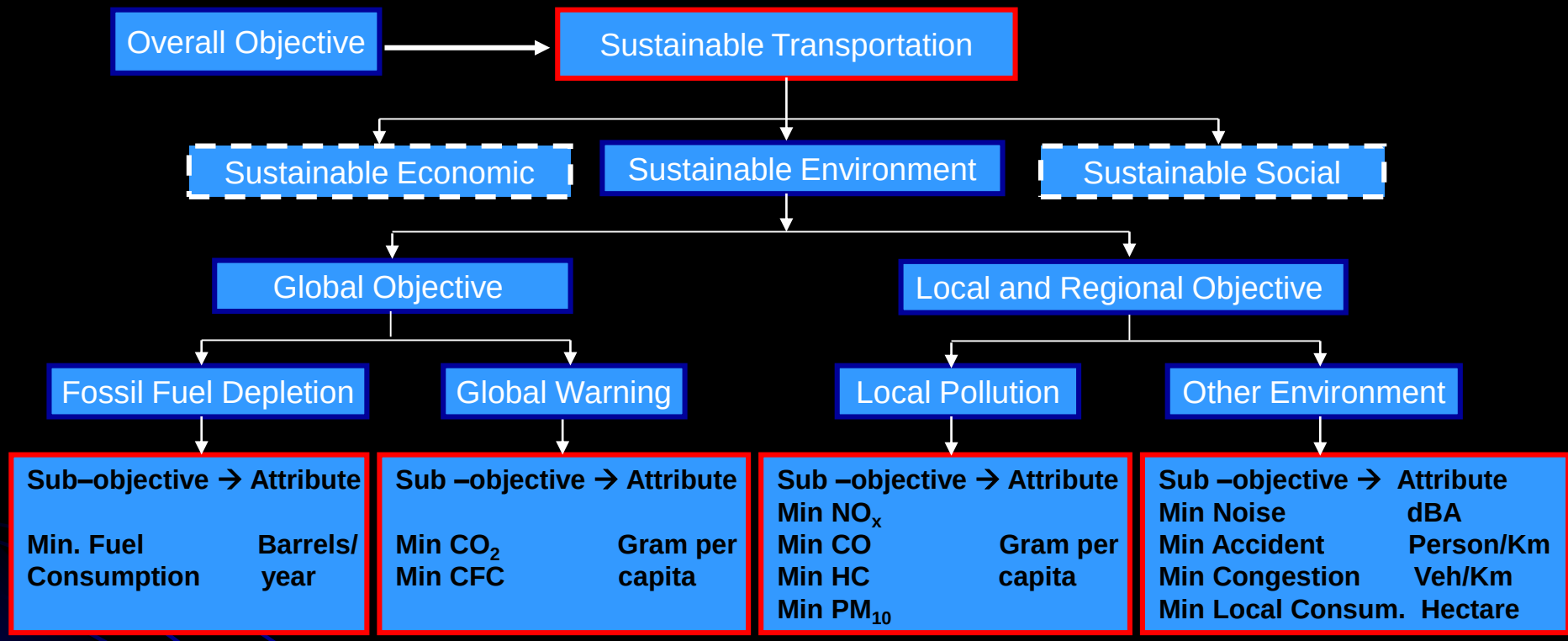
- Strict North-South orientation for housing to optimize heat gain during winter
- Usage of photo-voltaic & solar cell at roof as back up energy source

Recent Issues in Spatial Planning Practice

4. Transit Oriented Development

- Mass rapid transportation as relief for urban congestion and main accessibility mode for city
- Edge cities or Satellite cities bases on mass transportation corridor.
- Land Use Mix that Reduces Auto Travel and Facilitates Transit
- Compact development that is walkable and allow other mode of transport, i.e. bicycle

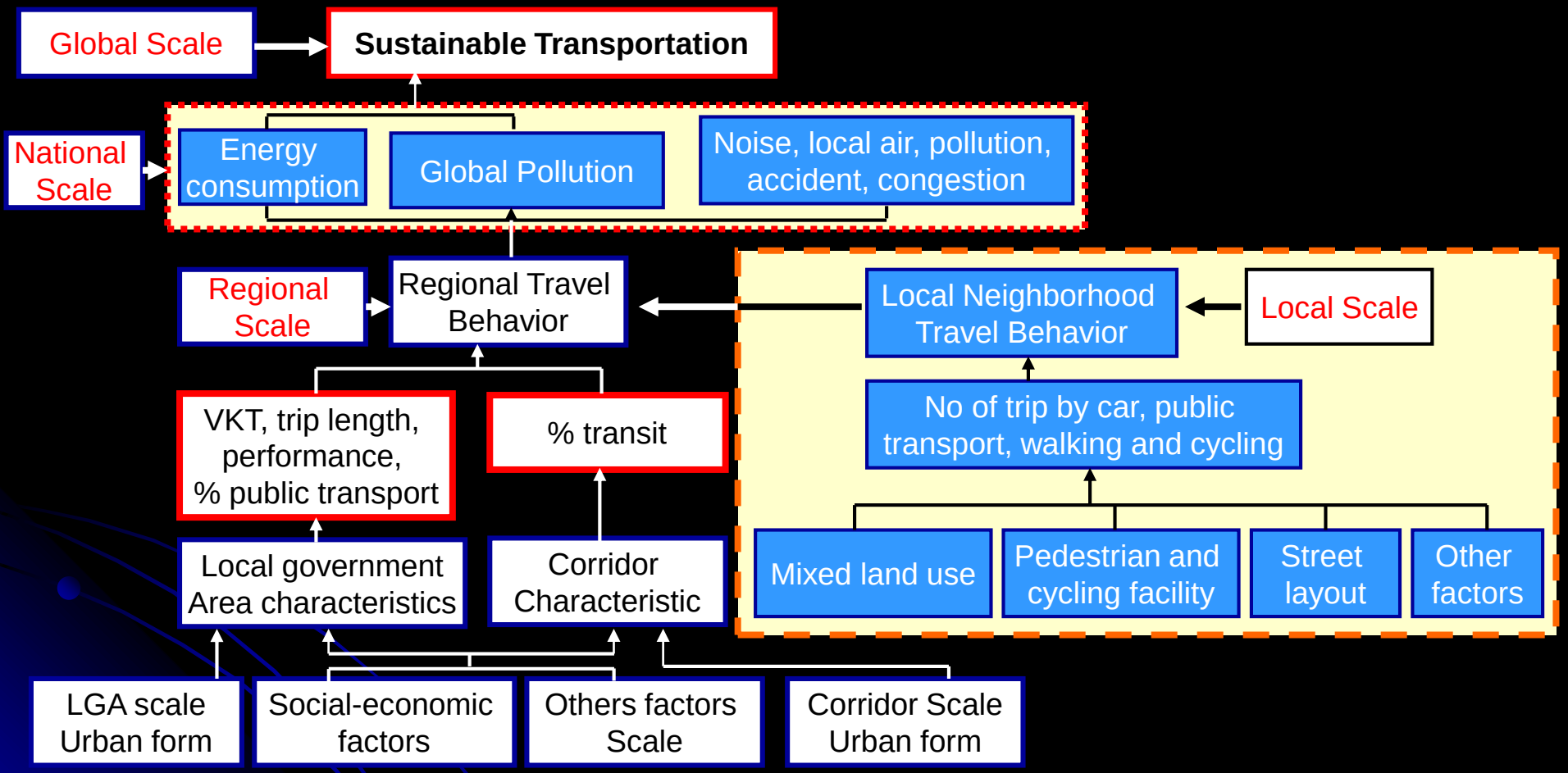
Fig. 2. Hierarchical diagram for sustainable transportation based on literature



CO: Carbon monoxide; NOx: Nitrogen oxida; CO2: Carbon dioxide; HC: Hydrocarbon; PM: Zat berbahaya

- Tiga isu besar dalam tujuan sustainable transport: sustain lingk, efisiensi ekonomi, keadilan sosial.
- Sustain lingk dimulai dr skala global, regional dan lokal dan harus sama tujuannya
- Perbedaan pentingnya adl: kebijakan lokal mempengaruhi tujuan lokal dan tidak berhubungan dgn tujuan global Tujuan global berisi dua sub tujuan, al: pengurangan kehabisan minyak (min. penggunaan minyak, barell/thn (perbaikan teknologi) dan minimisasi polusi (CO_2, CFC)
- Tujuan lokal dan regionalnya: minimisasi NOx, CO, VOC, PM10; gram/kapita), kebisingan, kecelakaan, kmacetan

Fig. 3. Urban form and sustainable transportation based on literature reviewed



Hubungan bentuk kota dengan sustain transportation:

1. Bentuk kota → alat kontrol → sustain transport: memahami bentuk kota → mempengaruhi pola perjalanan (penggunaan energi dan emisi buangan transportasi).
2. Solusi regional ← solusi lokal (unik & berbeda) ← perilaku individu (pola perjalanan)

Solusi bentuk kota : disain mix land use, keseimbangan lebih rumah-kerja, desain pedestrian dan layout jalan

Case Study:

Environmentally Conscious Planning

Transit Oriented Development : Curitiba

- Successful model from Developing Countries
- Significant reduction of car usage
- Dedicated busway line and special design of bus stops

Case Study:

Environmentally Conscious Planning

Transit Oriented Development : Singapore

- Very conscious planning from beginning
- Model: High density housing development & commercial core around MRT stops
- Allow ample of green as the result

Recent Issues in Spatial Planning Practice

5. City's Character and Sense of Place

- Finding character & identity in the past: ***preservation & conservation***, as strategy to tourism & district revitalization
- Return the public realm to the people: transform infrastructure nightmare into ***green & public urban space***
- Create city's ***architectural landmark*** as identity. As part of tourism strategy
- ***Mixed use*** district allowing live-work and play.

Case Study:
Character & Place

Singapore Historic District

- Character & Identity for District
- Become tourism destination > generate income for city

Praktik Terbaik dan Studi Kasus

Distrik Bersejarah Singapura menggunakan bangunan bersejarah seperti museum, perpustakaan, kantor LSM, cabang bank, tempat ibadah, hotel mewah, restoran dan butik. Distrik ini sangat popular bagi turis maupun orang lokal.

Best Practices and Case Studies

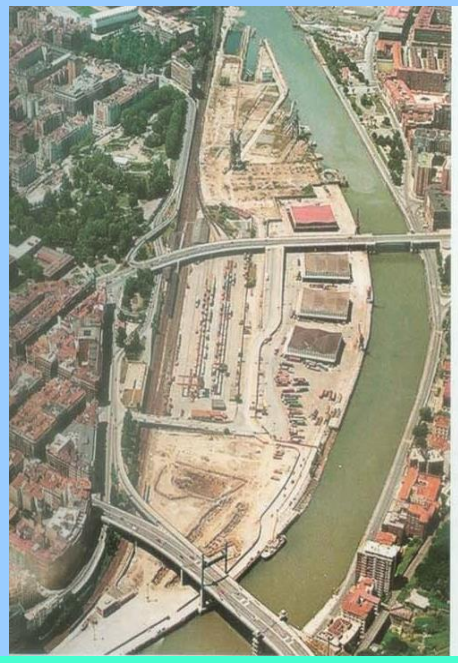
The Historic District of Singapore has utilized historic buildings as museums, libraries, NGO offices, bank branches, religious halls, luxury hotels, upper end restaurants and boutique shops. This district is very popular with tourists as well as locals.

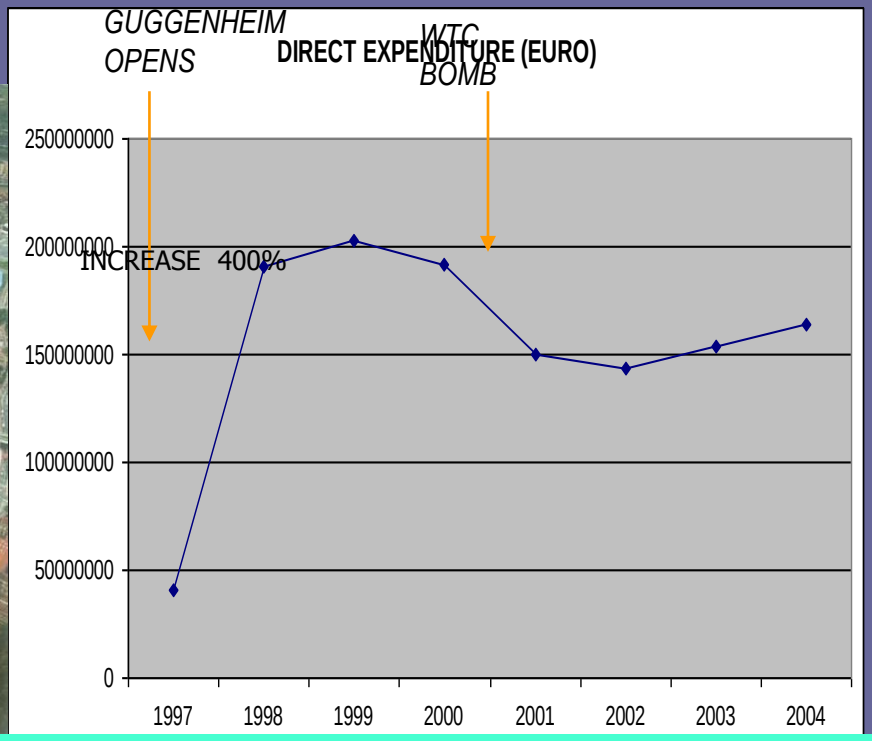
Case Study:
Character & Place

Guggenheim, Bilbao

- 'Bilbao effect' – single architecture as tourism destination
- From unknown & troubled city into a 'must see destination'

- 6 of 7 visitors (82%) = from outside the Basque
- 1 of 2 visitors (46%) = foreigner
- From October 1997 – 2000 has 3.6 million visitors.
- 83 percent came only to see the museum





CONCLUSION

City and regional planning need to recognize it's weaknesses & strengths

City and regional need to put the planning into the global perspective and proactively respond to the issues/challenge

City and regional planning respond to investment opportunities:

- Strong Visions & Positioning of city
- Capitalize on Convergence & Integration of Distribution & Transportation Industry

City striving to be Sustainable Global City (kerja keras):

- Adopt & implement Sustainable & Environmentally Responsive Development
- Planning & Development oriented to Mass Transit System
- Build Character & Sense of Place & Vibrancy to City (semangat)

THANK YOU

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biodata

Murshal Manaf

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- Struktural Unibos: Dekan Fak. Teknik 2001
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- Mengampu Mk: Studio Perencanaan Wilayah dan Kota, Perencanaan Transportasi, dan Filsafat Ilmu PWK
- Praktisi & Narasumber: Kebijakan Pembangunan; Perencanaan Transportasi; Perencanaan Wilayah dan Kota