

Environmental Activity Nodes



ENVIRONMENTAL EDUCATION



MARKETPLACE FOR LOCAL PRODUCTS



WATER CLEANSING + URBAN DESIGN

**Case Studies**  
*Xochimilco Ecological Park*, Mexico City, Mexico  
*The Living Water Garden*, Chengdu, China  
*Shipyards Park*, Zhongshan, China

**Key Features**

- Environmental Learning Center
- Fish Ponds "Exhibit"
- Marketplaces for local products
- Ecological design and native vegetation
- Water management as an educational and aesthetic attraction

**Principles**

- Allow water to guide urban design
- Build economic assets through environmental protection
- Link to research institutions

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There is a need to build environmental awareness among residents while building a new image for Foshan. Through creation of environmental demonstration projects, research and education facilities, and preservation of cultural heritage, Foshan would increase environmental awareness and create unique recreational experiences. By capitalizing on the proposed progressive water management approaches as an attraction, Some features that could be incorporated into the site: fish ponds, environmental learning center, marketplaces for local products such as ceramics or flowers. Some examples where water has been used to stimulate environmental education and identity are : The Living Water Garden in Chendu China,



### Goals

- Reduce air pollution
- Decrease congestion
- Reduce accidents
- Increase quality of life by enhancing public realm
- Facilitate access for all

### To achieve these goals, some possible guiding principles:

- Create seamless connections between north and south
- Plan for multi-modal use
- Maximize use of available land
- Balance short-term growth and long-term sustainability goals

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Alleviate modal conflict

Encourage non-vehicular transportation

公共交通
Public Transit

**1. Identifying Land Uses & Corridors**

**2. Cost-Benefit Analysis of Different Modes**

Mode	Cost / km (\$million)	Planning & Const. time
Subway	55 – 207	3 – 30 years
Light Rail	5 – 20	4 – 5 years
BRT	1 – 10	1 – 1.5 years
Bus Only	Cost of road	Flexible

**3. Case Studies**

- Bogota and Curitiba
- Kunming and Taipei

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Map showing activity nodes and proposed transit corridors - creating north south connections, we want feedback

Densities required - minimum of 100 people/hectare adjacent to transit corridors

Stops are ideas for key stops

1)

Key destinations and access nodes - 3 activity centers

Mass transit corridor Identification of key destinations and access nodes

Identification of appropriate mass transit corridor for North-South connections

Identification of regular transit corridors

Three centers of activity

Port

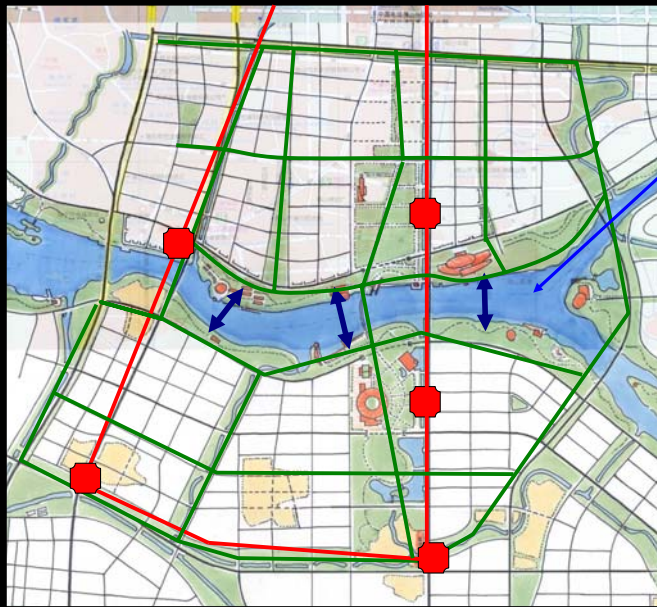
**2) Cost-Benefit Analysis of Different Modes**

- Rough Capital Costs
- Estimated Operations and Maintenance Costs
- Capacity
- Relative Environmental Impact
- Required Density
- Equity

Orange Dots: Rail Station, Main Regional Bus Station, Subway Stops, Proposed Important Access Nodes

## 互联模式

## Intermodal connections



Providing equitable access to the waterfront, parks, commercial areas and jobs via different modes

### Modes

- Transit
- Water taxi / ferry
- Pedestrian & bike
- Taxis and private car

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## Intermodal connections

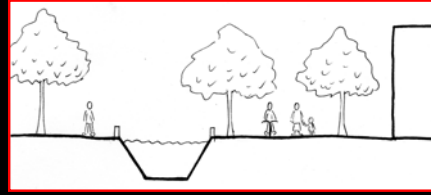
- To and across river
- To the stadium
- To parks
- Through neighborhoods
- To regional connections

## 街道与公园交通

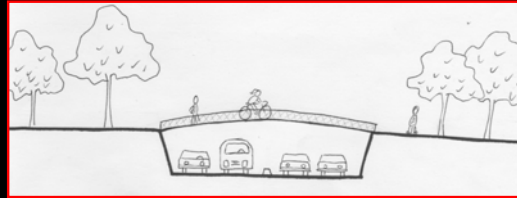
## Intermodal Streets and Parks



Parks and canals as pedestrian & bicycle network



Transportation through parks: Sunken roads, shuttle buses



Arterial Street with Bus Rapid Transit lanes



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Goals: Safe streets for all traffic participants

Park network as pedestrian/bike paths

Equitable access to parks

Cases

Parks & canals: Numerous in Amsterdam, Brugge, but also in Japan

Sunken roads through parks: Central Park vs. Golden Gate Park (where roads divide park and disturb park experience)

Other park transportation: Golden Gate Park (road closures for recreation & free shuttle within park)

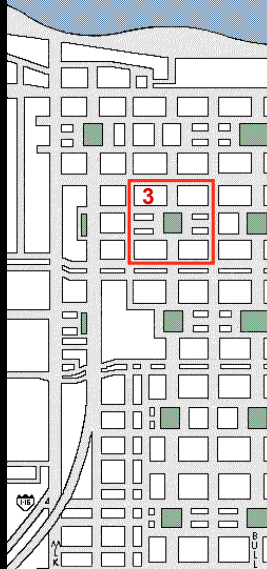
Bus Rapid Transit Corridor: Bogota, Curitiba

## 街道

## Street hierarchy



Macau 1996



Savannah, GA  
(USA)

### Macau:

- (1) traditional organic streets; and,
- (2) an efficient grid pattern.

Criteria for new streets:  
efficient, scalable,  
redundant, and pleasant

### Savannah, GA (USA):

- (3) Grid follows criteria,  
allowing integration of  
water features and  
existing villages

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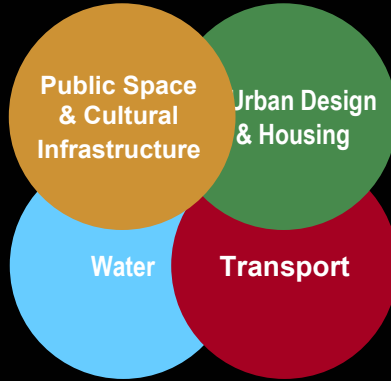
This creates opportunities for water features, bike lanes, and pedestrian areas while also meeting the criteria for new plans

**Constructing networks ...**

Transport, water, public space and cultural amenities, connecting neighborhoods, commercial areas, and other recreational areas

**Building on a Rich History and Heritage ...**

As reflected in public space, cultural amenities, water, housing and neighborhoods



**Distinguishing Identity and Image...**

Aesthetic improvements, in water and public spaces, environmental leadership, cultural amenities, distinctive neighborhoods, high quality of life

**Valuable Economic Opportunities...**

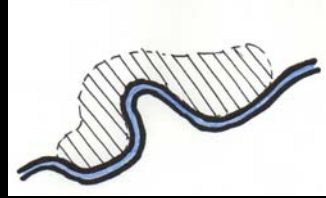
Cultural economy and tourism, environmental education and industry, reprogrammed villages

## 主题

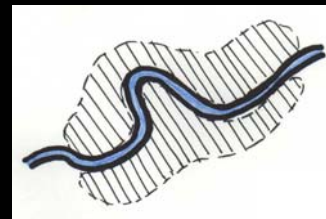
## Emerging Themes

- Evolution of relationship w/river and waterfront
  - Waterfront as vital element of modern city's urban expression
  - From city *near* the river to city *on* the river
  - Changing use of river
  - River as civic treasure
  - River as means to promote public well-being
- New identity as a “modern river city”
- Integrating old center and new center
- Importance of quality of life as attractor

Foshan Today -  
River is the Edge of the city



Foshan in the Future -  
River is the Heart of the city



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Source: Sasaki Associates, Shanghai Plan

Do we want to list those or just talk about them?

A Modern River City

Model for “sustainable city”

Foshan as efficient city

FOSHAN as a bedroom/backyard community



## 下一阶段学习计划

## Next Steps for Class

- Incorporate feedback and additional research conducted from the current visit
- Examine and refine case studies for selected strategies
- Develop potential scenarios that implement selected strategies
- Final product: suggestions for how to incorporate solutions to some of the above concerns in the larger framework set out by Sasaki

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Final product: NOT a comprehensive plan



谢谢各位  
**THANK YOU**

Is this work useful for you?

Are these recommendations feasible?

What are we missing?

What other things are you considering?

Have we missed any key challenges or the big picture?