

An aerial photograph of a city, likely Cairo, showing a wide river (Nile) with several bridges. The city is densely built up with many buildings, and there are some green spaces and parks visible. The text is overlaid on the image.

# **URBAN GREENWAYS: An Approach to Planning Sustainable Cities**

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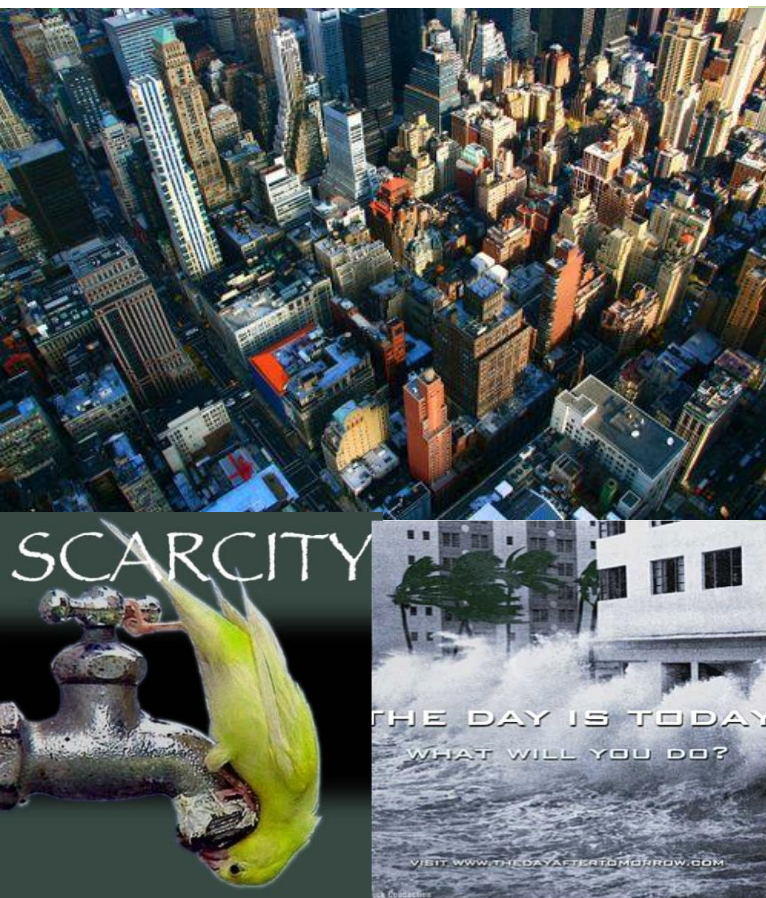
- **Urban Challenges**
  - Ills of urbanization
  - Towards sustainable cities
- **Greenways: A Tool for Sustainable Urban Solutions**
  - Greenway characteristics
  - Typology of greenways
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  - Greenway Planning - some guiding principles
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# Urban Challenges

# Urban Challenges



- Cities are facing major challenges:
  - Rapid urbanization;
  - Climate change;
  - Scarcity of natural resources;
  - Shrinking public budgets.



- Unsustainable urban environments



# Ills of Urbanization



- Population overload
  - Destruction of natural habitats
  - Pressure on critical resources:
    - Land
    - Air
    - Water
    - Infrastructure
    - Material resources & fossil fuels
  - Poor environ. Conditions
- Congestion / H. density
  - Concrete jungles
  - Rivers incased in concrete beds
  - Loss of public open space
  - Fragmented & uneven distribution of green space
  - Pollution
  - Streets govern development
  - Limited accessibility & inefficient servicing distances
  - Loss of human scale
  - Negative impact on physical & psychological health
  - Poor quality of life

# Towards Sustainable Cities

(EEA, 1995)

## OUR DREAM

- Minimize consumption of space & natural resources
- Effectively manage urban flows & growth
- Protect the health of urban population
- Ensure equal access to resources & services
- Maintain cultural & social diversity
- Support biodiversity

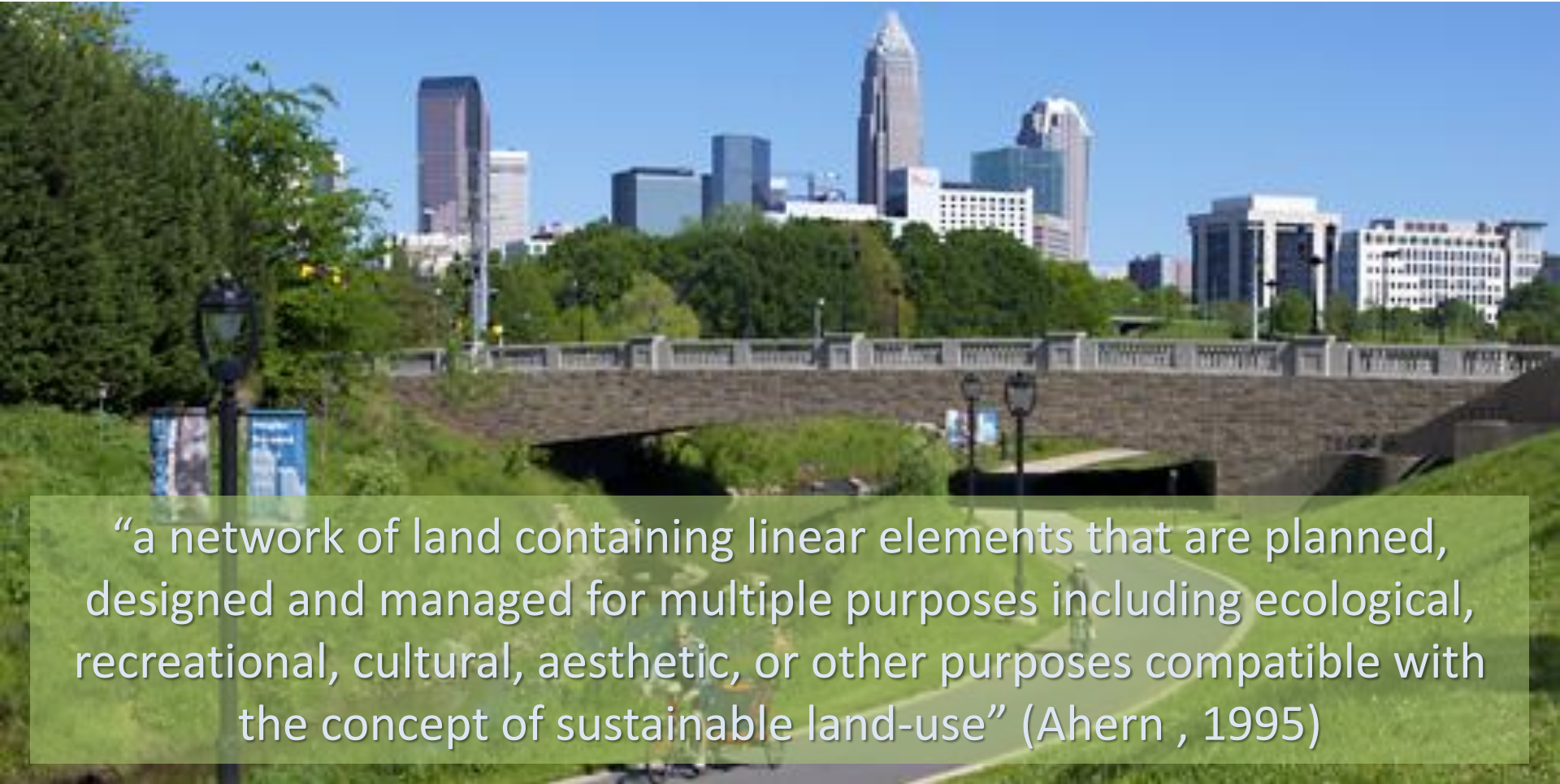


# Greenways

## A Tool for Sustainable Urban Solutions



# What is a Greenway?



“a network of land containing linear elements that are planned, designed and managed for multiple purposes including ecological, recreational, cultural, aesthetic, or other purposes compatible with the concept of sustainable land-use” (Ahern , 1995)



# Greenway Characteristics



- Composed of **linear corridors** connecting fragmented **open space** elements / sites
- Connects people and places
- Serve a specific role, function or benefit
- Support ecological functions & are sustainable

***An interconnected web of open spaces (nodes) & linear connecting corridors (links) that afford communities positive health & economic benefits while providing opportunities for recreation & non-motorized transportation***

# Typology of Greenways



- Recreational Greenways
  - Go along a very long line
  - Pass thru natural & recreational resources of scenic value
  - At local, urban, rural, regional, national & international scale
- Natural/Ecological Greenways
  - Support wildlife, migrating species, biodiversity, natural hiking





# Typology of Greenways

- Historic & Scenic Greenways
  - Attract tourists, provide economical, educational & visual benefits
  - Link cultural & historic resources
  - Supply permanent seasonal accommodation
- Controlling Greenways
  - Control urban development
- Comprehensive Greenways
  - Link different forms of open space at urban / regional scales



# Why Greenways?



- Environmental benefits
  - Enhance air quality
  - Sustain native species & biodiversity
  - Offset & mitigate ills of urbanization
  - Preserve scenic landscapes, historic & cultural resources
  - Shape growth patterns
  - Soften urban edges
  - Link open space
  - Enhance quality of life
- Education benefits
  - Opportunities for awareness & education



# Why Greenways?



- Aesthetic benefits
  - Increase aesthetic quality
  - Provide identity & sense of place
- Recreation & transportation benefits
  - Access to parks, natural & cultural sites
  - For leisure, recreation, non-motorized transport
  - Safe routes for pedestrian commuting & cyclists
- Social & health benefits
  - Link people to community resources
  - Access to the outdoors
- Economic benefits
  - A catalyst for urban, econ. & com. development

# Planning Greenways: Guiding Principles (Searns, 2002)

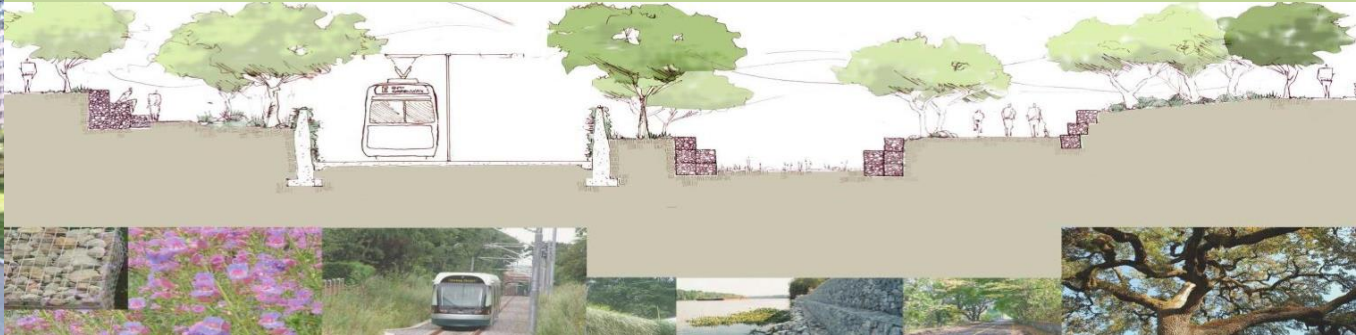


- Link places of interest
- Are readily accessible
- Preserve natural & cultural resources
- Preserve scenic views & vistas
- Mitigate adverse environmental impacts
- Promote interpretive educational opportunities
- Avoid user conflict
- Are sustainable & affordable to maintain



# Planning Greenways: Guiding Principles (Searns, 2002)

- Offer choice & variety of experiences
- Serve multiple objectives
- Are safe & secure
- Incorporate an integrated system of rest areas
- Have minimal negative impact on environment
- Incorporate way-finding & signage system



# From Vision to Reality - Successful Implementation Tips

(Searns, 2002)



- Adopt shared vision & action plan
- Engage & seek community support
- Commit local authorities & com. leadership
- Adopt schemes that are inclusive & consistent w/ sustainability objectives
- Secure land, rights of way & permits
- Secure funding sources
- Phase development & include pilot projects
- Adopt quality mngmt & maint. programs





# Exemplars



# East Coast Greenway





# NYC Greenway Network

## Schematic Greenway Plan:



# New Cairo Greenway Network





# El Rawda Greenway Network





# Metropolitan Cairo Greenway Network

## Giza City Greenway Network















# The INSTITUTE

Centre of Urban Excellence

# The Institute



*A “Centre of Urban Excellence”  
and formal body for generating, documenting  
and disseminating knowledge for better  
cities.*

*The Institute is envisioned as:  
**a world class knowledge bank and  
think tank for planning excellence**  
empowering individuals, organizations and  
institutions to achieve better human  
settlements.*



# Mission

*To enrich the knowledge base and develop the capacity of individuals, organizations and institutions responsible for, or partaking in, the shaping and development of human settlements.*



# Objectives



- *strengthening cross-border collaboration*
- *upholding professional excellence*
- *advancing sustainable planning*
- *increasing awareness of major development trends*
- *promoting best practices*  
all while serving as an  
**“Urban Think Tank”**  
disseminating knowledge for better cities.



# Core Functions

- *Designing and delivering capacity building and continuing education programs*
- *Conducting research and promoting knowledge transfer*
- *Offering advice and short term consultancy services*



# Thematic Areas



*Offers services and processes across multiple thematic areas including:*

- Sustainable Planning & Design***
- Hazard Mitigation & Disaster Risk Management***
- Livable Cities & Community Planning***
- Mobility***
- Urban Management***
- Urban Regeneration***
- Green Infrastructure and Real Estate.***

*affording participants sound planning, best practices and effective implementation methods.*



A photograph of a woman with sunglasses and a blue top lying on her back on a lush green lawn. A bicycle wheel with a white rim and blue spokes is positioned next to her. The background is a soft-focus green field.

**Thank You**