

The “Urban Nexus”

**For efficient, effective, customizable and resilient urban projects
and investments**

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What is the Urban Nexus?

A project design and management approach:

- The Urban Nexus focuses on identifying and developing opportunities to **achieve multiple urban policy objectives through single investments, projects, or programmes.**
 - This ‘elegance’ is achieved by re-integrating activities, services, and functions across departments, programs, infrastructure systems, jurisdictions, zones, institutions, and disciplines.
 - The result is increased productivity: **more optimized use of the city’s resources**— human, financial, built assets, and natural resources.

Why URBAN Nexus?

- To control complexities and chaos of cities, modern urbanism divided and dis-integrated them into parts
 - failure to recognize opportunities based on interconnectedness
 - NEED to(RE)-INTEGRATE the city

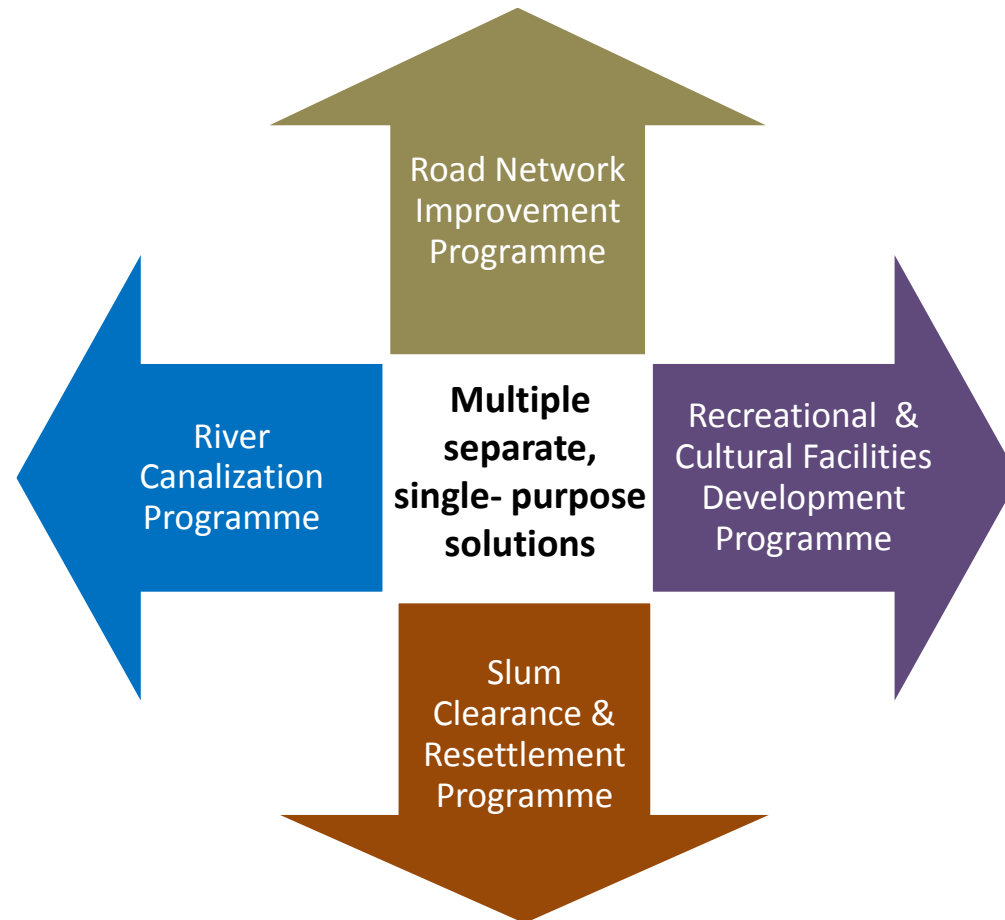
Example: Curitiba

A city with typical challenges:

- Bi-annual floods (city situated in flood plain between two rivers)
- Growing informal settlements of poor migrants in high risk areas
- Congested and underdeveloped road system – poorly regulated bus operators and growing number of private automobiles
- Few public amenities, parks, recreational and cultural facilities
 - natural habitats being destroyed.

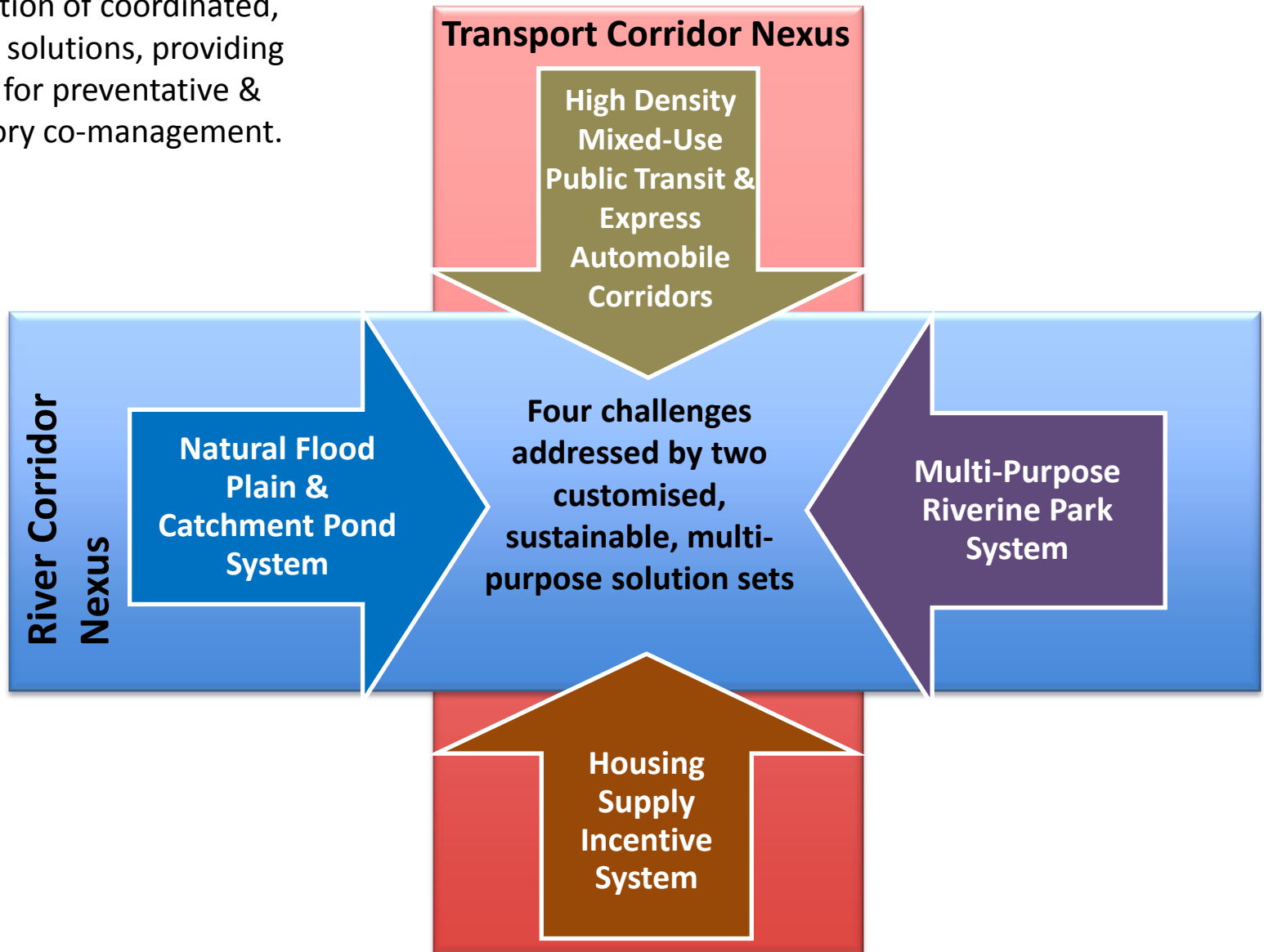
Conventional Urban Management Approach

Application of established, technically distinct solutions through administratively distinct units



The Nexus Approach to Urban Management

Customisation of coordinated, integrated solutions, providing incentives for preventative & participatory co-management.



The URBAN NEXUS Approach

Urban Nexus focuses on identifying and developing opportunities to optimize resource-use and achieve multiple urban policy objectives through single investments, projects, or programmes.

NEXUS OBJECTIVE

Increase the efficiency, effectiveness, responsiveness and resilience of urban projects and investments.

NEXUS OPPORTUNITIES

Re-integrate across:

1. Systems & Resources
2. Scales
3. Services & Facilities
4. Institutions
5. Social Behaviours

NEXUS INNOVATION AREAS

1. Design & Technology
2. Law & Policy
3. Delivery Models
4. Institutions
5. Communications & User Behaviours

NEXUS INNOVATION PROCESS

1. Identify
2. Innovate
3. Design & Deliver
4. Capacitate & Communicate
5. Up-scale

STRATEGY QUESTIONS FOR STAKEHOLDERS

What improvements in organisational and resource productivity are targeted? How will we measure 'nexus' success?

What productivity enhancing synergies and benefits that can be gained by re-integrating two or more operations or systems?

What innovations, measures and reforms are required to enable the nexus opportunities?

What process can be used to accelerate preparation, testing, and scaling of nexus solutions?

Level and Scales of NEXUS OPPORTUNITIES

Urban Nexus measures can (re)-integrate across:

1. Systems & Resources

E.g. using waste from one sector as a resource for in others, treating sludge and waste-water for fertilizer and grey water for agricultural irrigation, or landfill redevelopment to control GHG emissions and exploit gas-to-electricity and include on-site conservation measures to improve biodiversity (the Marianhill landfill in Durban, South Africa).

2. Services & Facilities

E.g. using public facilities such as schools for other services such as or energy production; or integrating services such as waste management with social inclusion, mobility and poverty reduction measures.

3. Institutional and managerial “silos”

E.g. Hannover merged municipal departments for Environment and Economic Affairs; or “nexus” Task Forces to bring actors together around common integrated projects

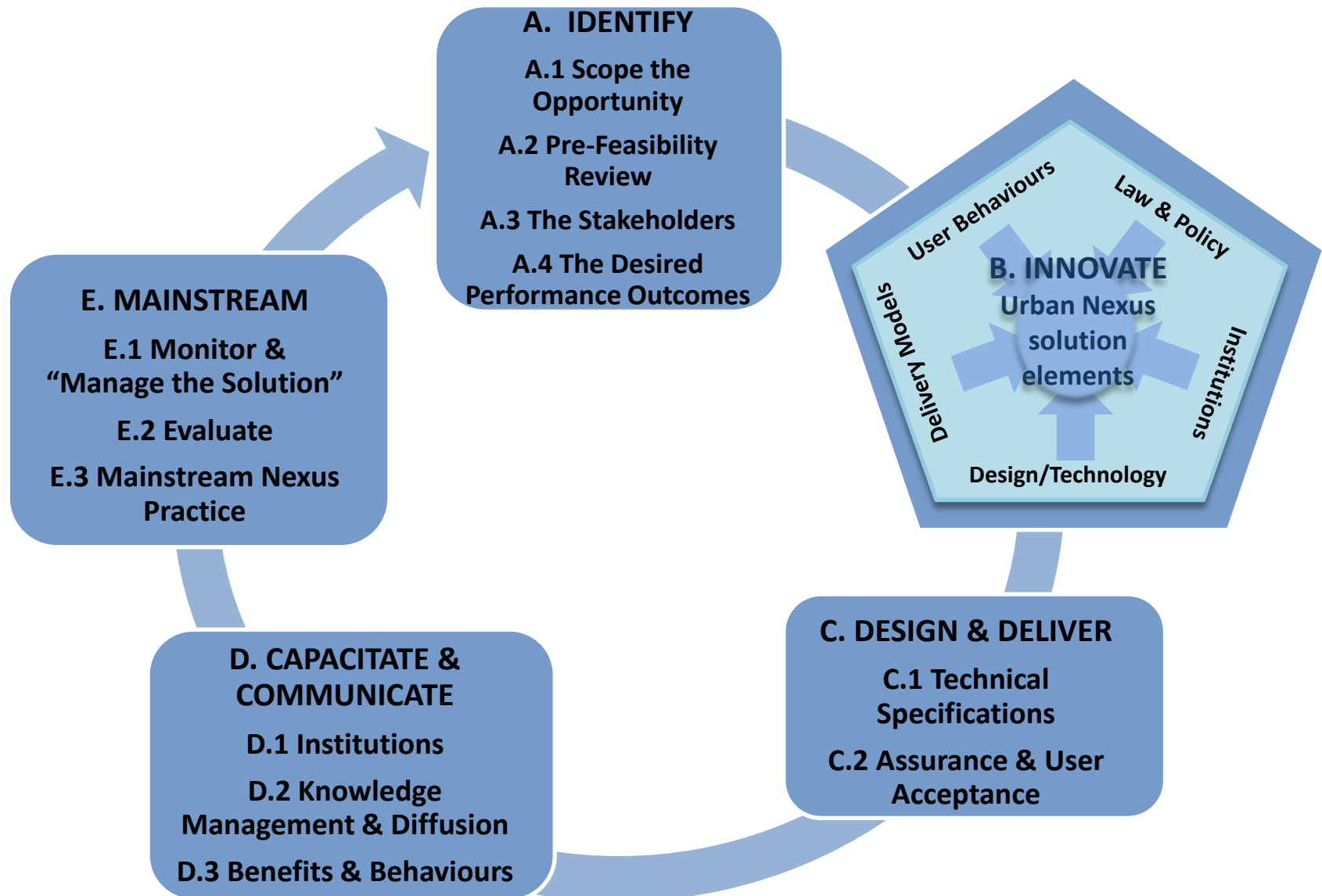
4. Social Behaviors

E.g. activities and communications to change social behaviors and attitudes

5. Scales of the city’s build environments and infrastructures

E.g. integrated approaches to service different scales, such as individual facilities, neighbourhoods, specialized districts like central business and cultural districts, places of regional-global connectivity such as airport and port districts, and city-wide and regional mobility corridors.

The Urban Nexus Project Cycle and Innovation Process



Thank you for your attention!

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Urban Research Unit

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