

# **Block 4: Managing Urban Transport Infrastructures**

## **5. Broader challenges and new opportunities**

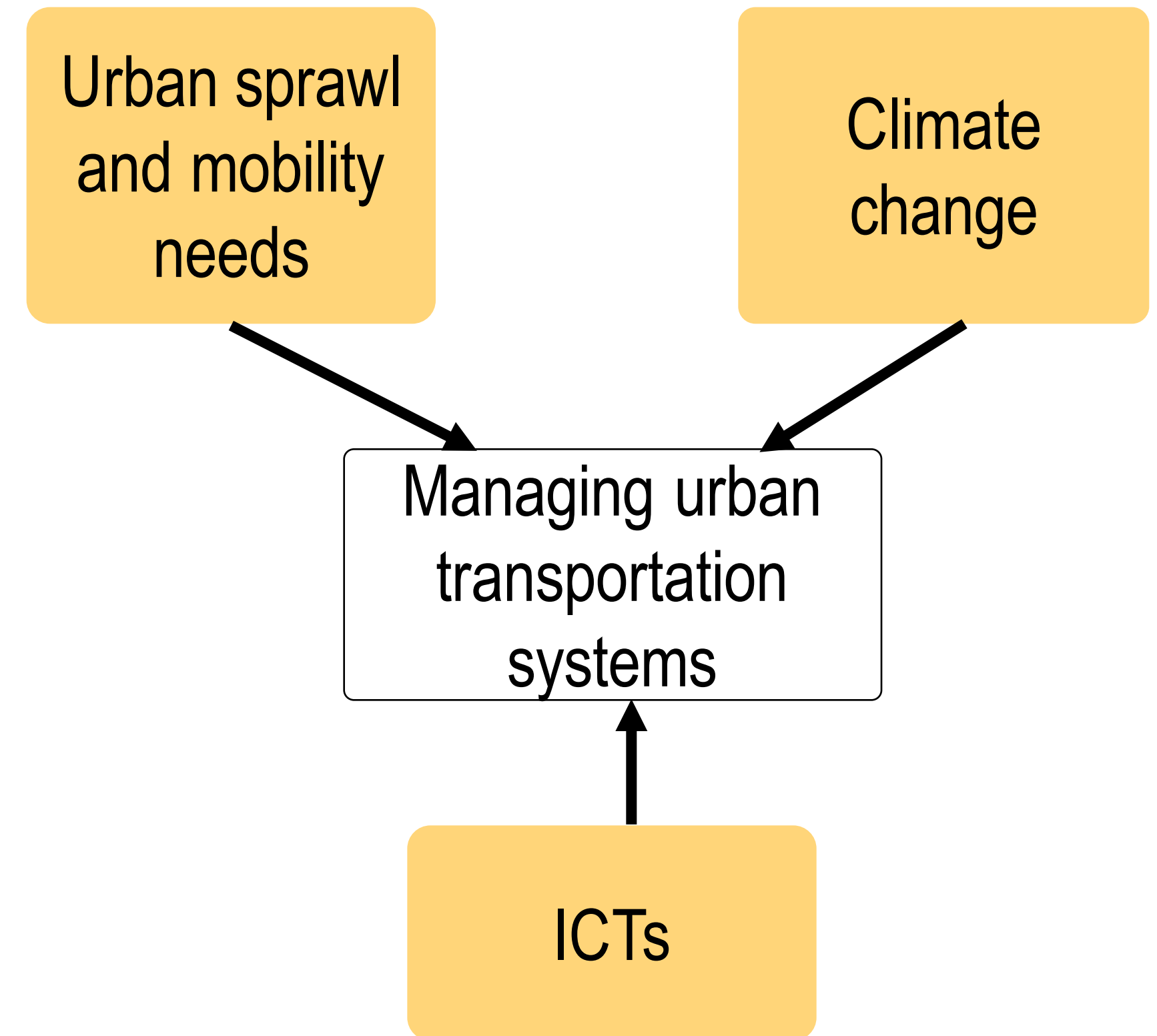
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# Session overview

Challenges and opportunities to managing urban transportation systems arise from three different angles:

- Urban sprawl and mobility needs
- Environmental challenges, especially climate change
- The Information and Communication Technologies (ICTs)

Each of these will affect the urban transportation systems will have to be managed in the future



# Urban sprawl and mobility needs

- Mobility has become a key driver of urban sprawl
- Inversely, mobility needs increase as a result of urban sprawl
- In India, for example, the number of motorized vehicles on city streets is growing at an annual rate of more than 20% (Pan, 2011; Tiwari 2011)
- In Mexico, two new cars enter into circulation for each born child (Jirón, 2011)

Urban sprawl and related growing mobility needs are the main challenge of urban transportation managers in the years to come

# Addressing the challenge

The main challenge for urban transportation managers will be to resist investing into urban road infrastructures and put ever more cars in the streets to the point of traffic collapse

Rather, urban transportation managers will:

- Integrated transport and housing planning
- Increase the share of public transport:
  - incentivize the use of public transport (more efficiency, more attractiveness)
  - disincentivize the use of private cars

# Environmental challenges

The environmental challenges – emissions and overall pollution reduction – will only exacerbate the pressure on urban transportation managers to develop public transport, make it more attractive and discourage car usage

In addition:

- Also the public transport modes will have to become less polluting, for example by phasing in electric vehicles and cleaner technologies
- Soft mobility – dedicated bicycle lanes, public bicycle offerings, dedicated pedestrian ways – will have to be developed

The ICTs have a unique potential to address two of the big challenges urban transportation managers have to face:

- Discouraging car usage:
  - mobility-pricing can incentivize better mobility behaviors
  - generating the investments needed to develop and/or subsidize public transport
- Making public transport more attractive:
  - Improves intermodality
    - integrated planning
    - integrated ticketing
  - New services, such as sharing (bicycles, cars, rides)