

Complexity and Urban Systems

ESD.83 In Class Discussion

Lecture 7

Outline of the articles:

Innes & Booher – *Metropolitan Development as a Complex System*

- Issues: institutional, political and economic context is complex and fragmented
- Approach: complexity theory as a framework for developing toward a complex, self-organizing, adaptive, and sustainable system
- Solution: system indicators, consensus building, new approach to leadership

Cascetta – *Governance of Urban Mobility*

- Concept: internally complex system vs external systems and their interactions
- Approach: modeling and simulation, planning and decision making, integrated policies

Discussion Outline:

Concept:

Approach an urban system or a transportation system as a complex system, or is it too complicated? Where are the boundaries? What are the components and characteristics identified for such a complex system?

Approach:

What are the right approaches and methods to use? If we have a way to approach big issues like climate change as a complex system, should we also be able to have one for urban/transportation systems?

Solution:

No matter what solutions we may find, are they even feasible to implement? What are the major obstacles?

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