# Seminar Series #4 Collective Impact in Transportation Systems

(175th TAOYAKA Program Seminar)

Date: July 5 (Mon), 2021 Time: 18:00 - 19:00 (JST) Place: online (zoom) Language: English

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### 18:00-19:00 Invited talk:

# Integrated, data-driven urban design and agent-based mobility simulation

#### By Dr. Pieter J. Fourie (National Institute for Environmental Studies)

Abstract: Urban planning and design is an expensive, intricate process requiring coordination across many disciplines. It is risky, resulting in buildings and infrastructure costing millions to construct and maintain, both in terms of dollars and hours consumed and tons of CO2 produced. Planners need to produce a complex, interwoven dynamic system; deciding not only where and when to put static elements like buildings, gutters, sidewalks and roads, but also to make educated inferences about the numbers and kinds of people and goods the system will produce and attract, the means of connection between them and the rules to govern it all. Urban planning aims to synthesise and integrate many competing requirements but suffers from the five 'i's that are its ruin: influence, inertia, illiteracy, inconsistency and interference1.Influence, interference and illiteracy respectively represent external pressures: money, power and public backlash from lack of transparency, understanding and participation. What remains are endogenous threats: the inertia of disciplinary silos and slow adoption of new technologies, and inconsistency of, e.g. zoning decisions or suitability of infrastructure for emerging modes of mobility. Urban planning is path-dependent. Making the right decisions early in the process will have a profound impact on its outcome: as the plan passes through more hands, it becomes harder and more expensive to change and re-iterate earlier steps. But those early decision-makers frequently have very little decision support and are instead forced to rely on experience, intuition and rules-ofthumb.

No registration is needed. Please directly join the seminar from: https://zoom.us/j/97092866556?pwd=NjBTU0E1N1hPYXpOQVg2R1MwT2dtUT09

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