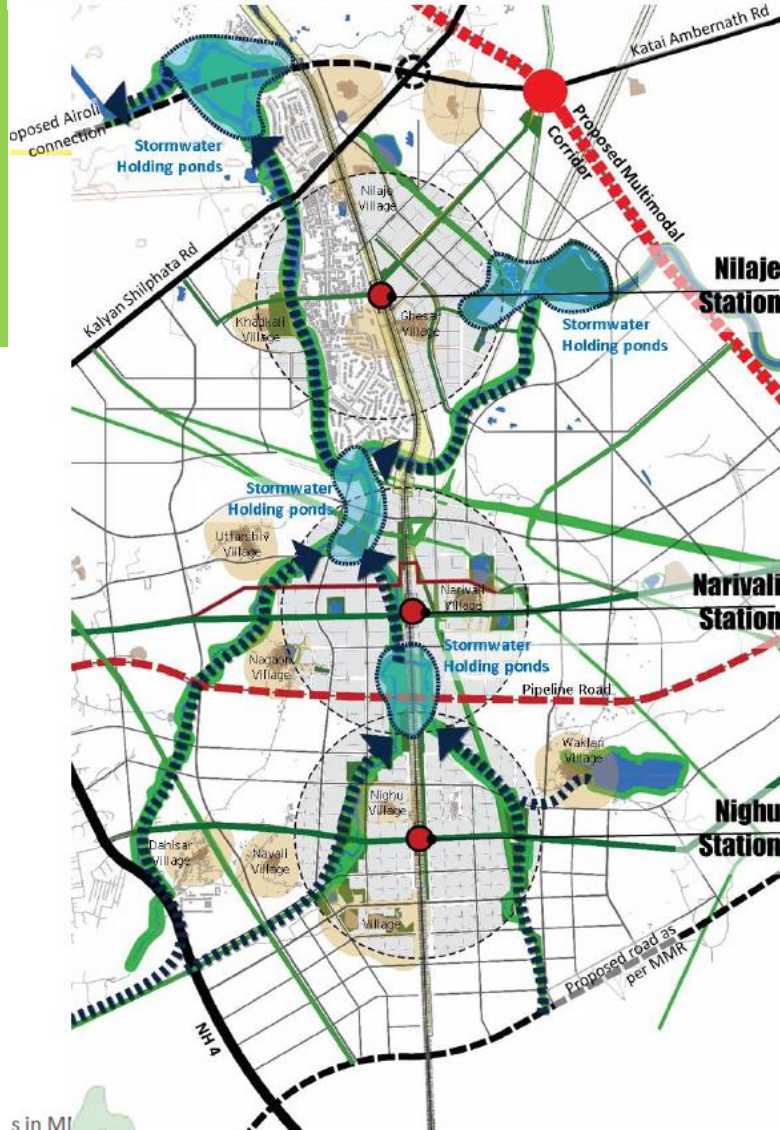


Map showing blue-green connection



FACILITATING IMPLEMENTATION OF TOD – CASE STUDIES FOR REPLICATION

CONTEXT SETTING

What is TOD?

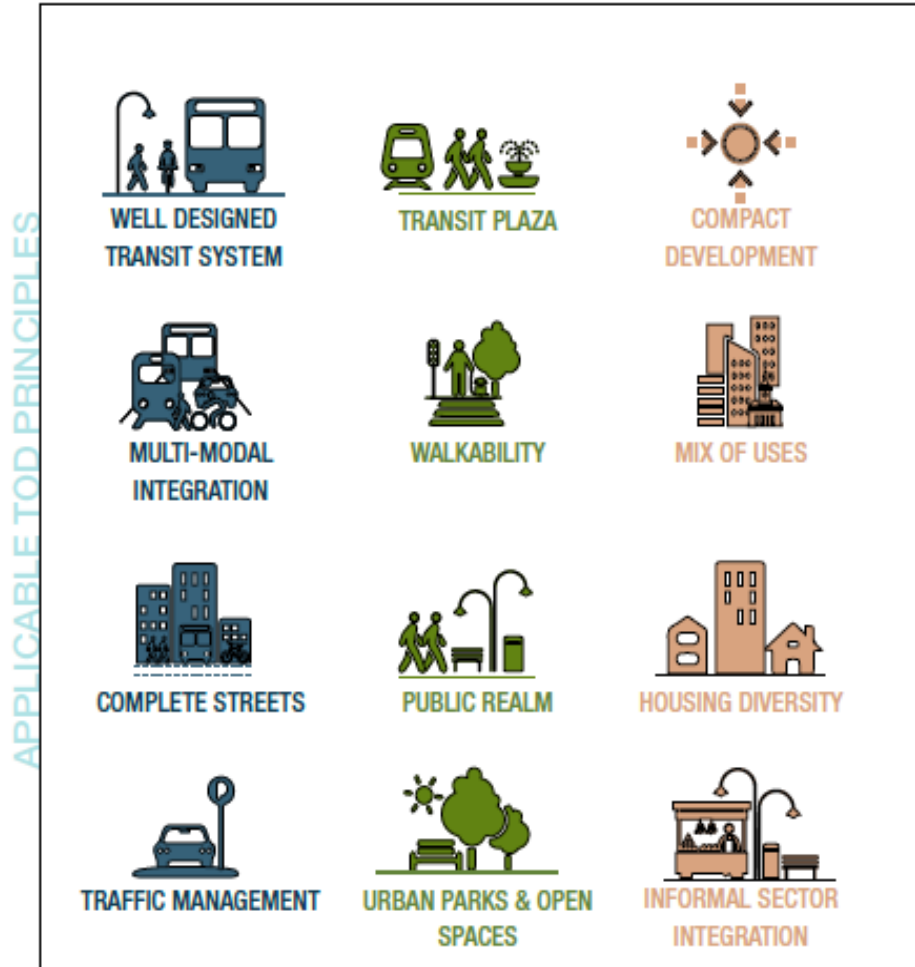
- » High density near a station?
- » Development of a plot of land near a station?
- » Land value capture?

Thinking TOD across planning scales in India



- » Drilling down the details can realize an **inclusive, livable and vibrant urban area**.
- » Neighborhood and street levels – on which urban regeneration normally planned, often through creating and improving public spaces.

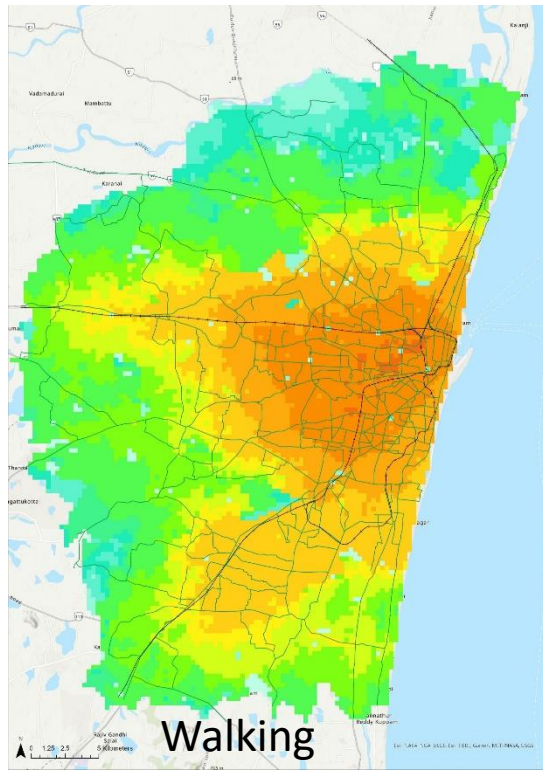
What is TOD?



Source: World Bank TOD Community of Practice

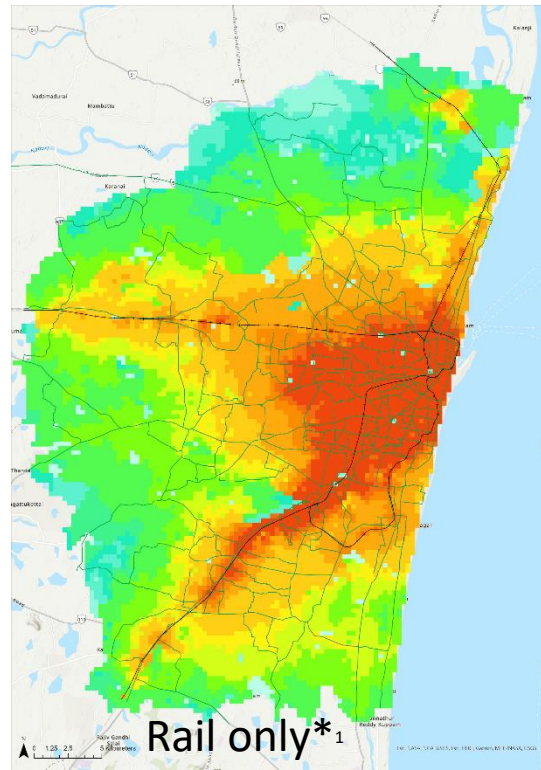
A **planning and design strategy** that focuses on creating urban development patterns which facilitate the use of public transit, walking and cycling as primary modes of transport and which support vibrant and diverse and livable communities.

This is achieved by concentrating urban densities, communities, and activities within a 5-10 minute walking distance from mass rapid transit stations, developing quality urban space and providing convenient and efficient access to a diverse mix of land uses.



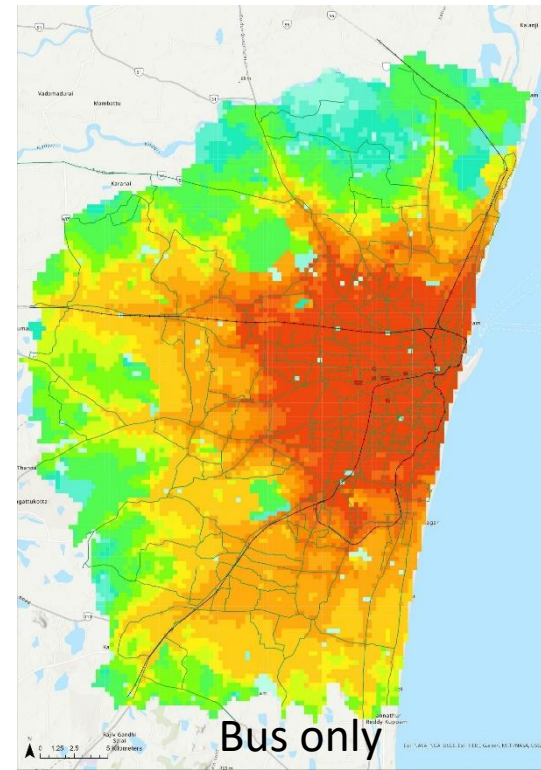
Walking

8%



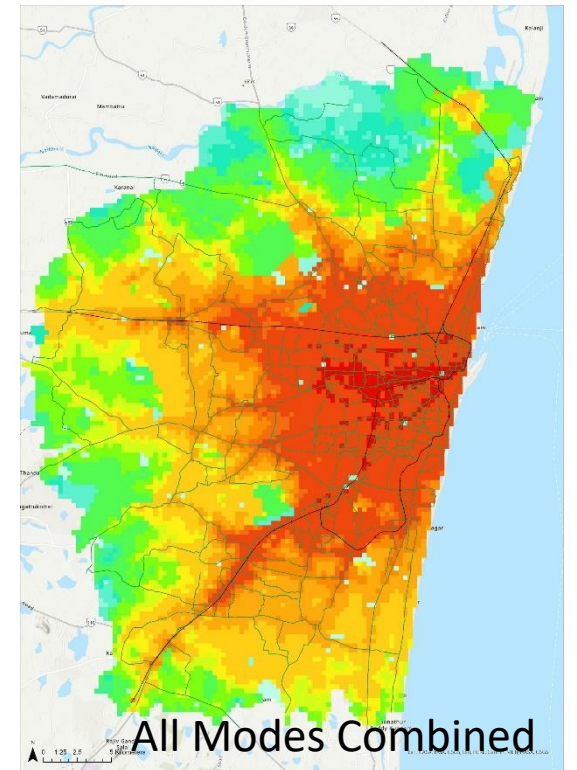
Rail only*₁

17%



Bus only

25%



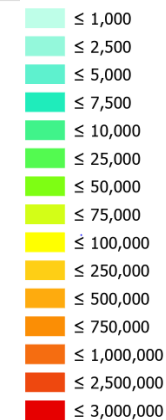
All Modes Combined

30%

Cities as Labor Markets Accessibility by Mode

Total number of jobs

Total jobs accessible in 60 minutes*₂



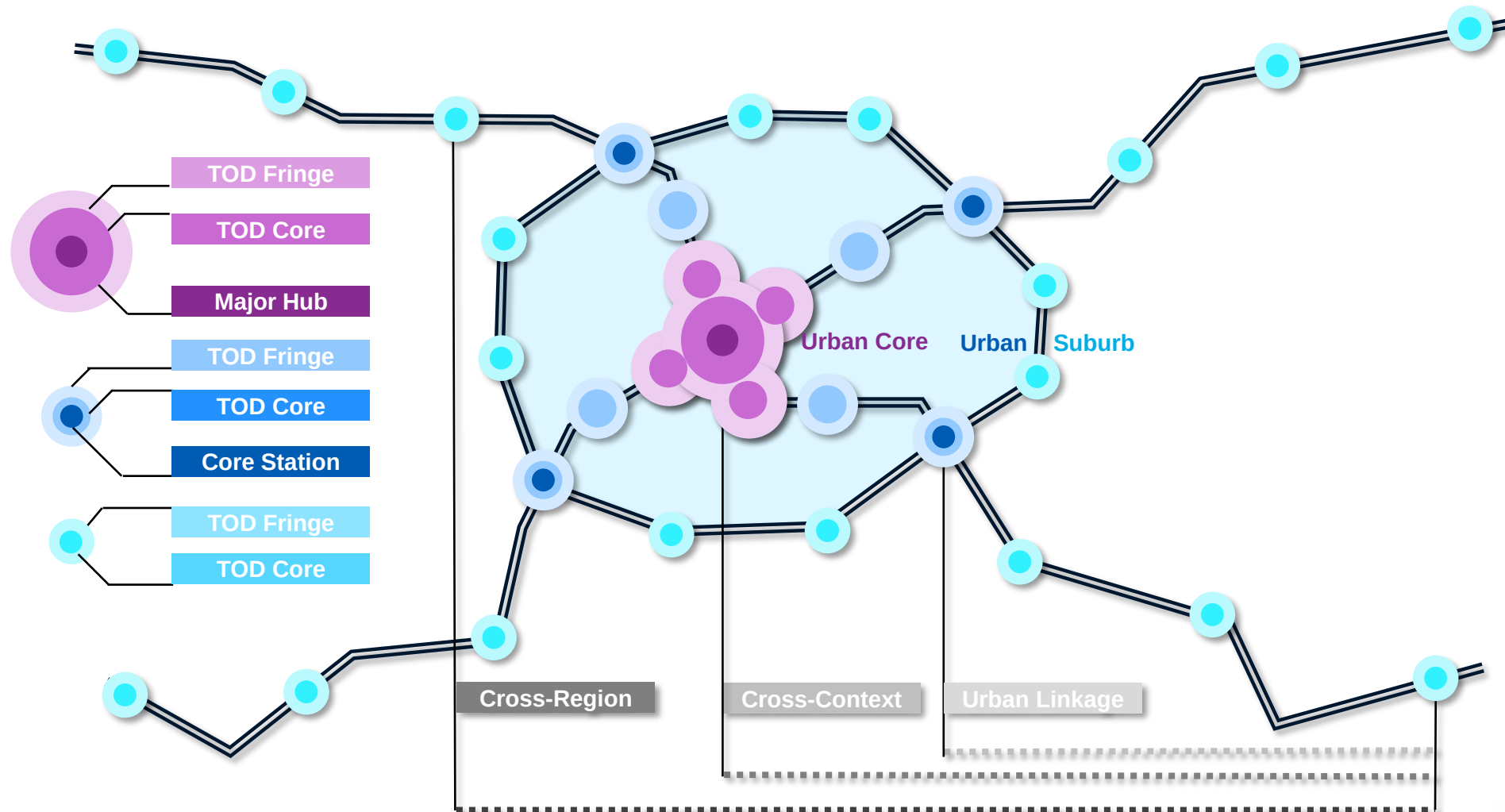
Accessibility to jobs through a multimodal strategy is **76%** higher than one that relied solely on rail, and **17%** higher than only looking into the bus network.

*₁Suburban & Metro

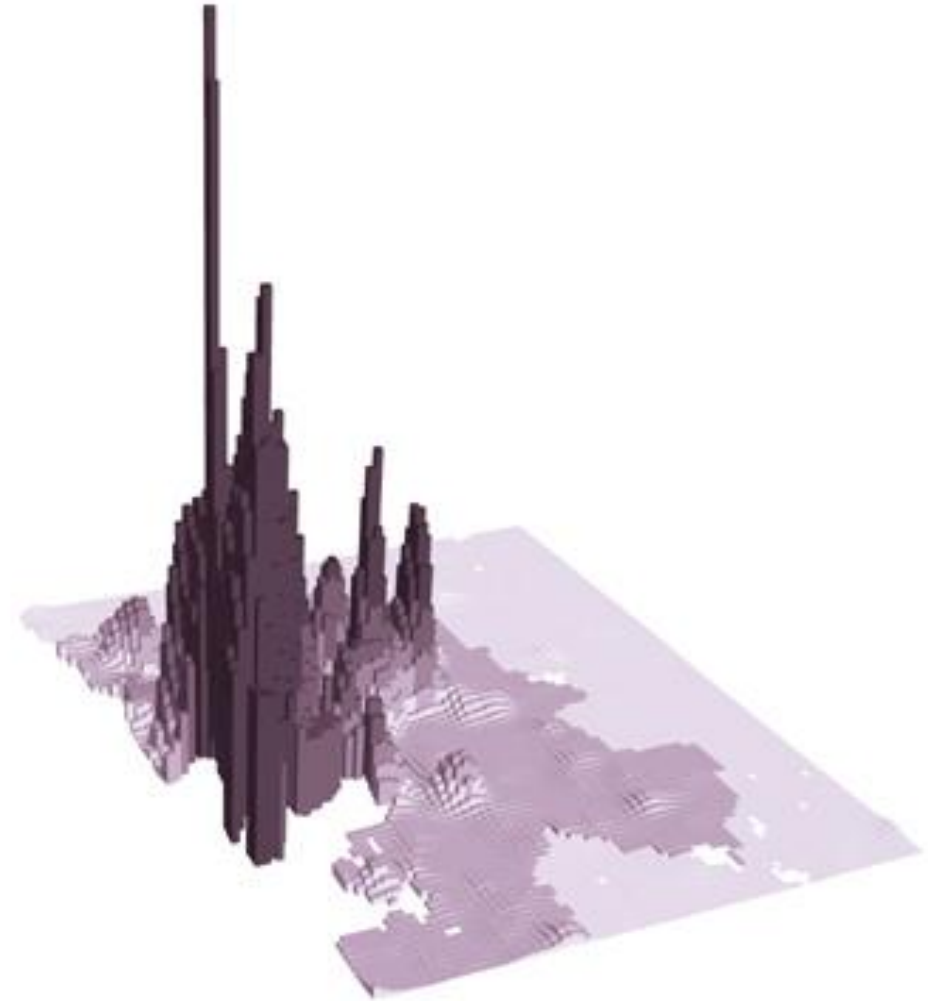
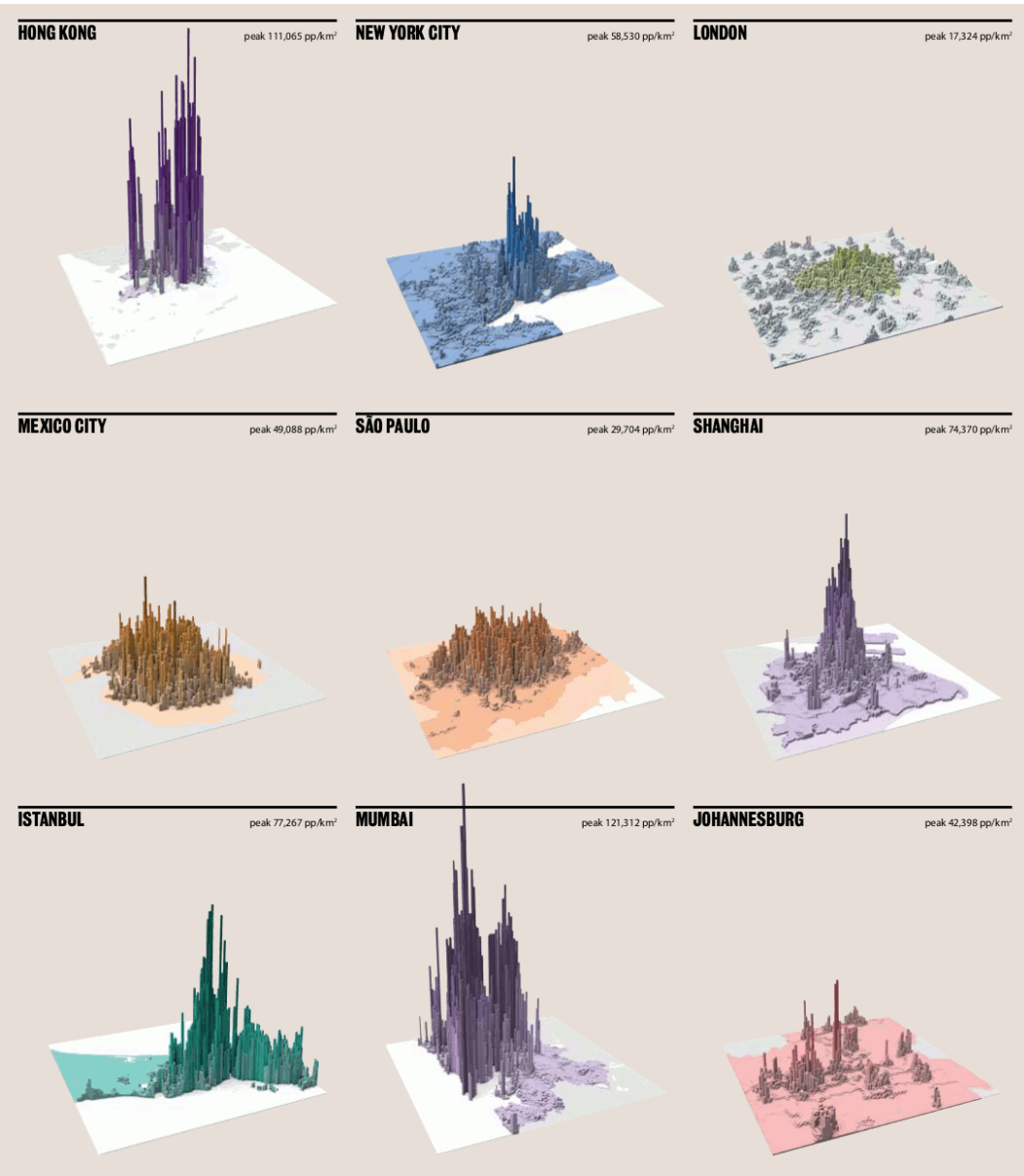
*₂For better comparability the scales for all maps showing the same indicator are the same.

Where to Invest? Non-uniform value distribution in TOD Context

Urban structure based on public transport corridors creates various investment opportunities

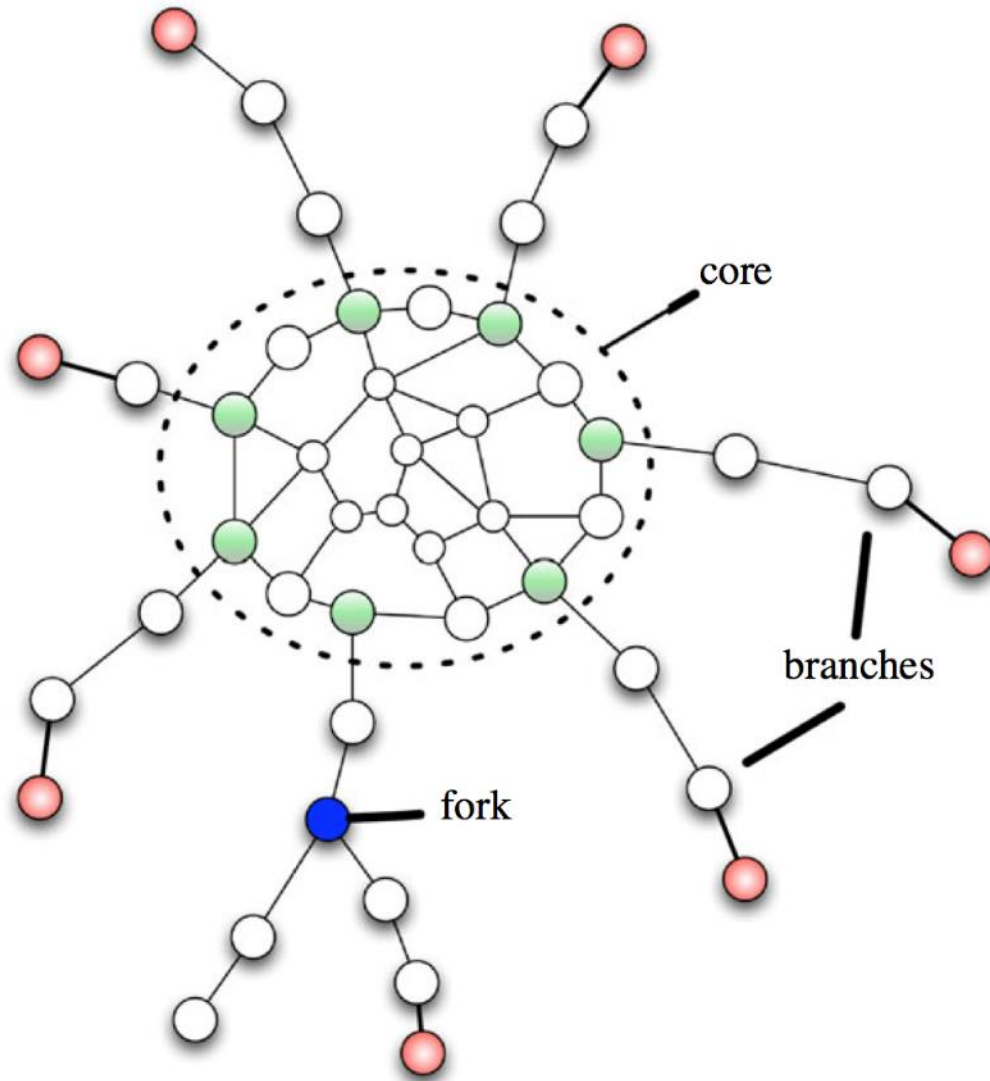


The Spiky Urban Economy of Global Cities Influences Accessibility

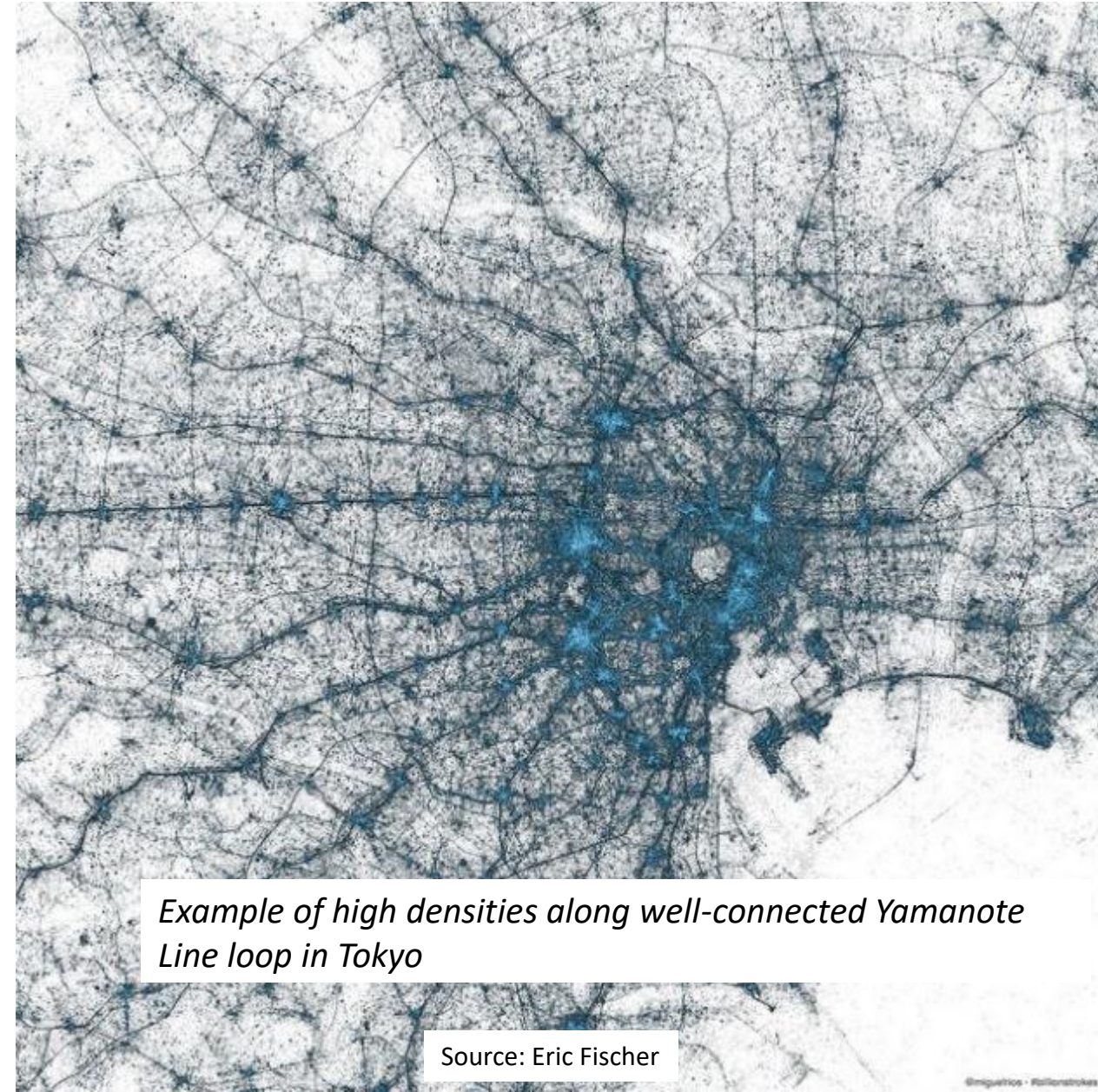


Source: LSE/Urban Morphology Institute

Subway networks converge towards a characteristic structure with a dense and interconnected core/branches



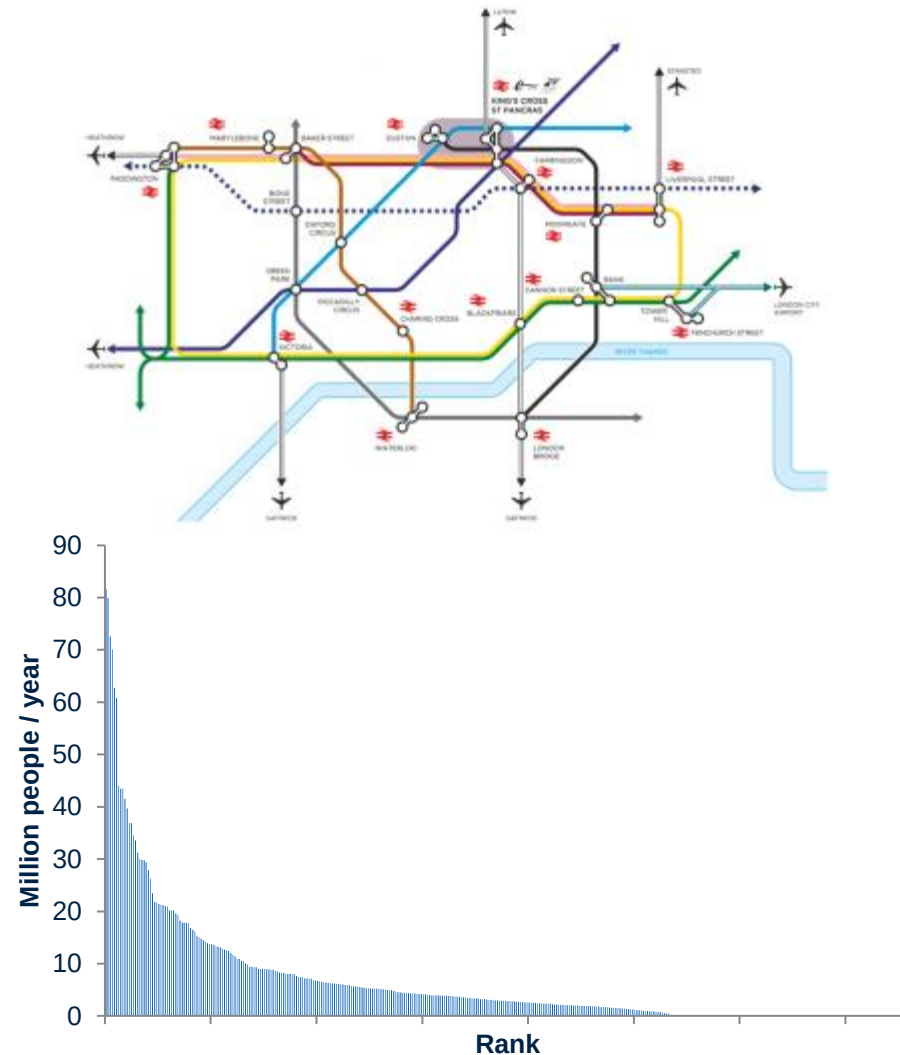
Source: QuantUrb, CASA



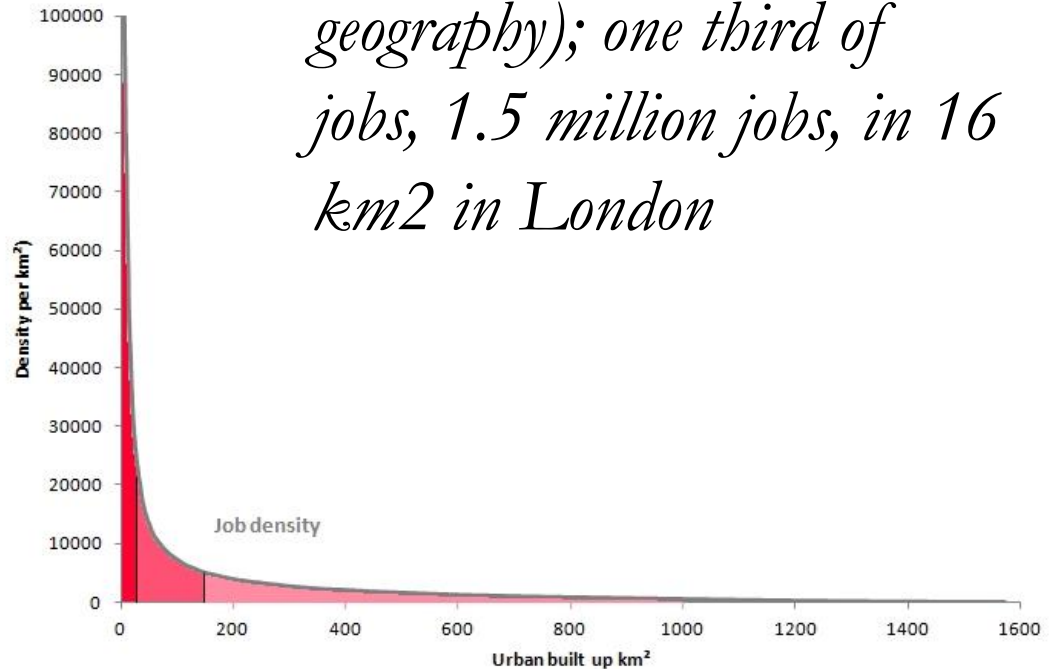
Example of high densities along well-connected Yamanote Line loop in Tokyo

Source: Eric Fischer

Inverse power laws for job, population and connectivity prevalent in cities: example of London



London's Jobs hierarchy exponent minus 1, (minus 0.7 for population like in systems of cities in economic geography); one third of jobs, 1.5 million jobs, in 16 km² in London



UNDERSTANDING WHERE, WHEN AND HOW ECONOMIC VALUE CAN BE CREATED REQUIRES A TYPOLOGY. THREE VALUES UNDERPIN SUCH A TYPOLOGY:



NODE VALUE

Importance of a station in the public transit network derived from its passenger traffic volume, inter-modality, and centrality within the network.



PLACE VALUE

Urban quality and diversity of a place and its attractiveness to residents in terms of amenities, facilities and local accessibility to daily needs created by mixed land use patterns and urban design.



MARKET POTENTIAL VALUE

Unrealized market value of station areas considering major drivers of demand such as resident and job densities, accessibility by transit and land market dynamics.

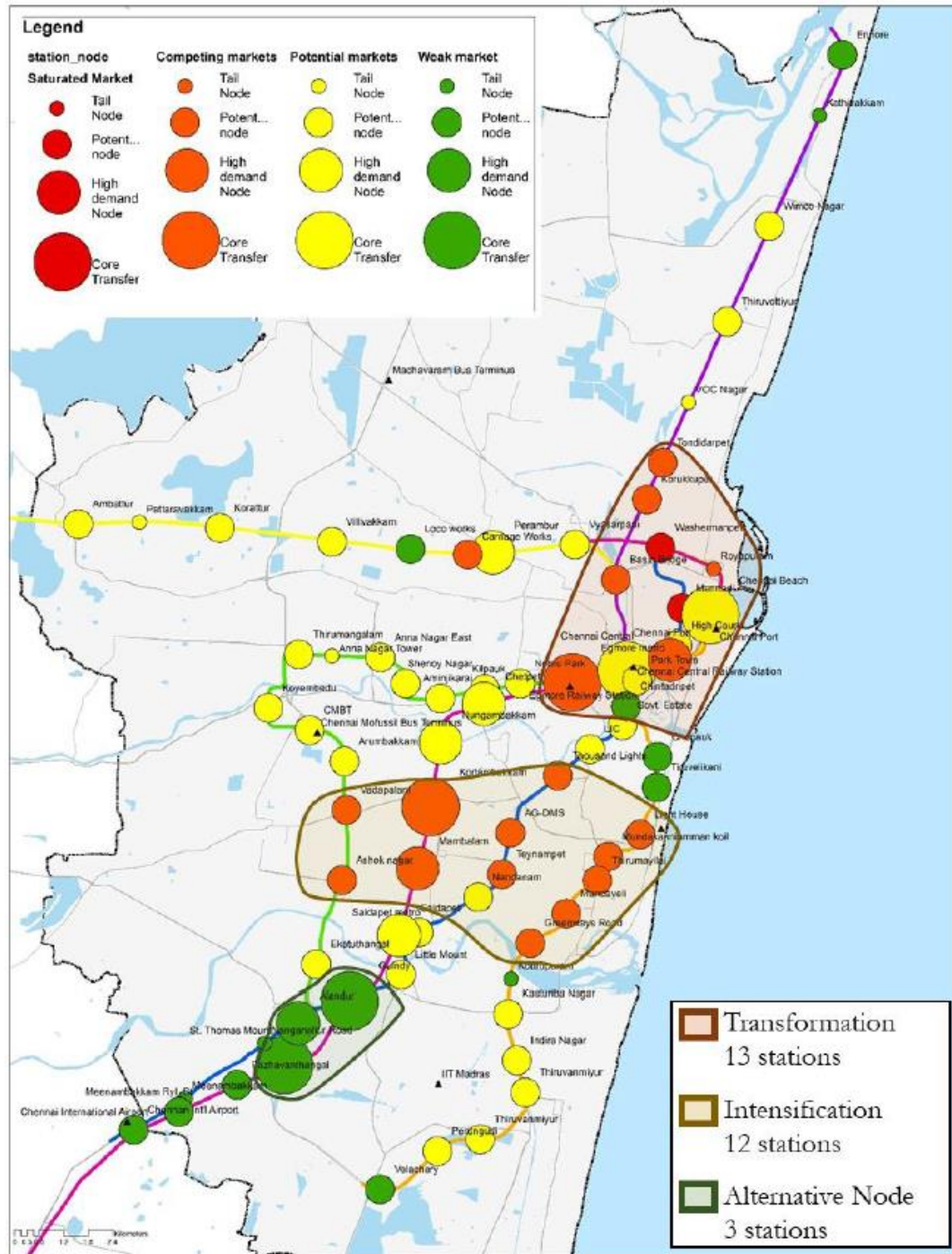


Figure 17 Types of development strategies

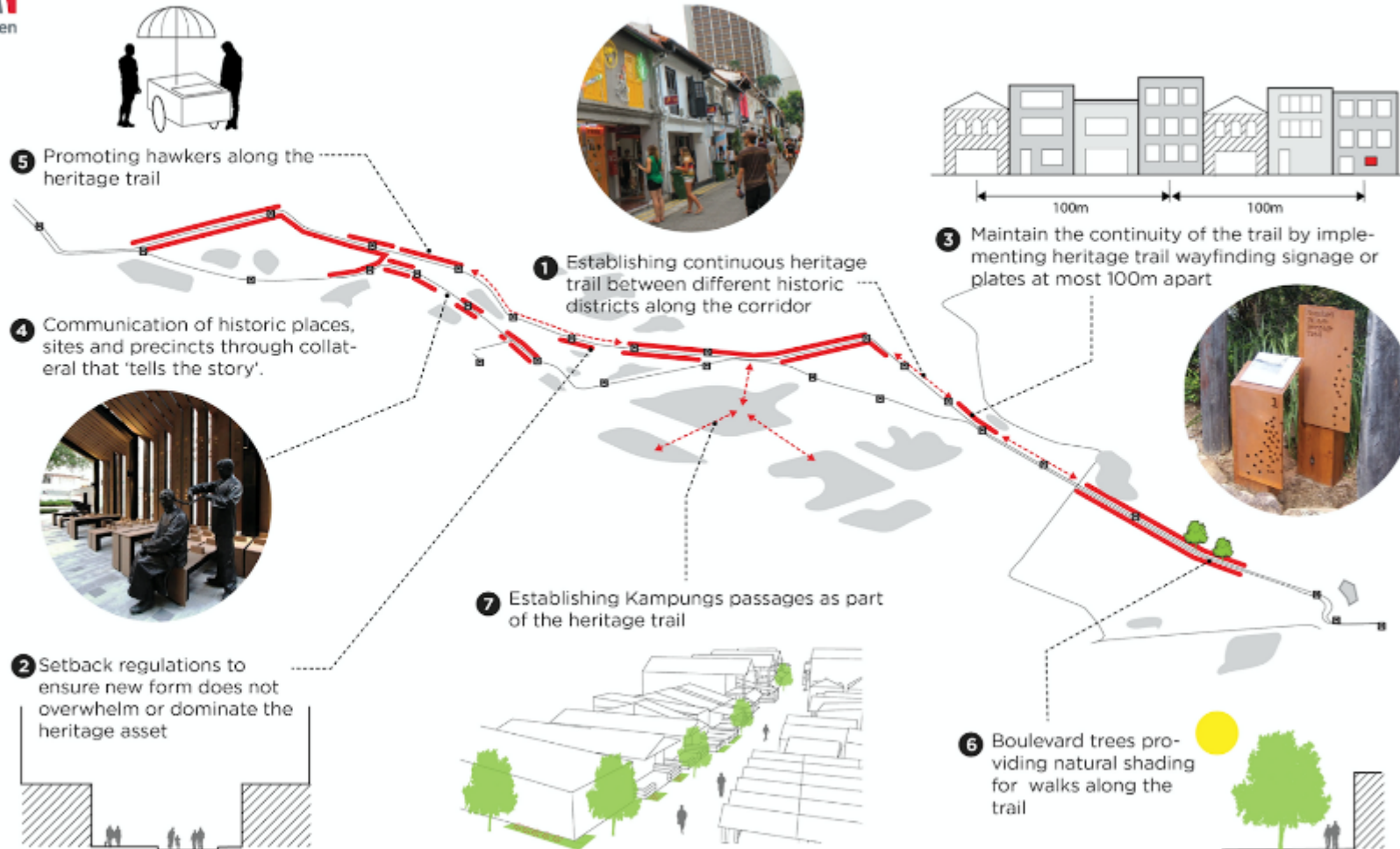
Applications at a metropolitan scale enables a coherent vision for the city and the different station areas aligned with city goals.

Source: Operationalizing the 3V Framework Case of Chennai by Navnit Sourirajan and Dr. Rutul Joshi

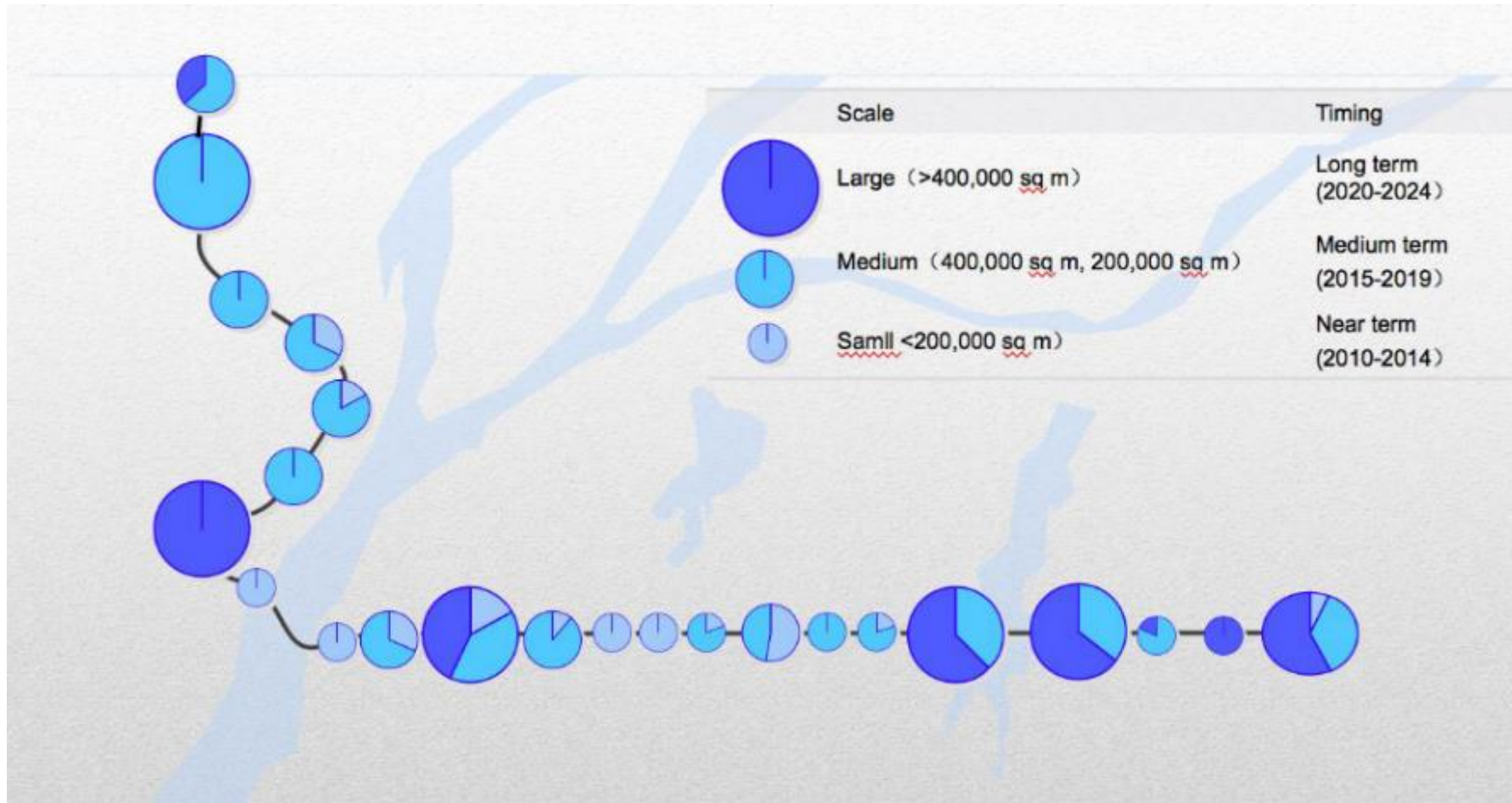
Envisioning Transit Corridors: An Example from Indonesia



City Form Lab



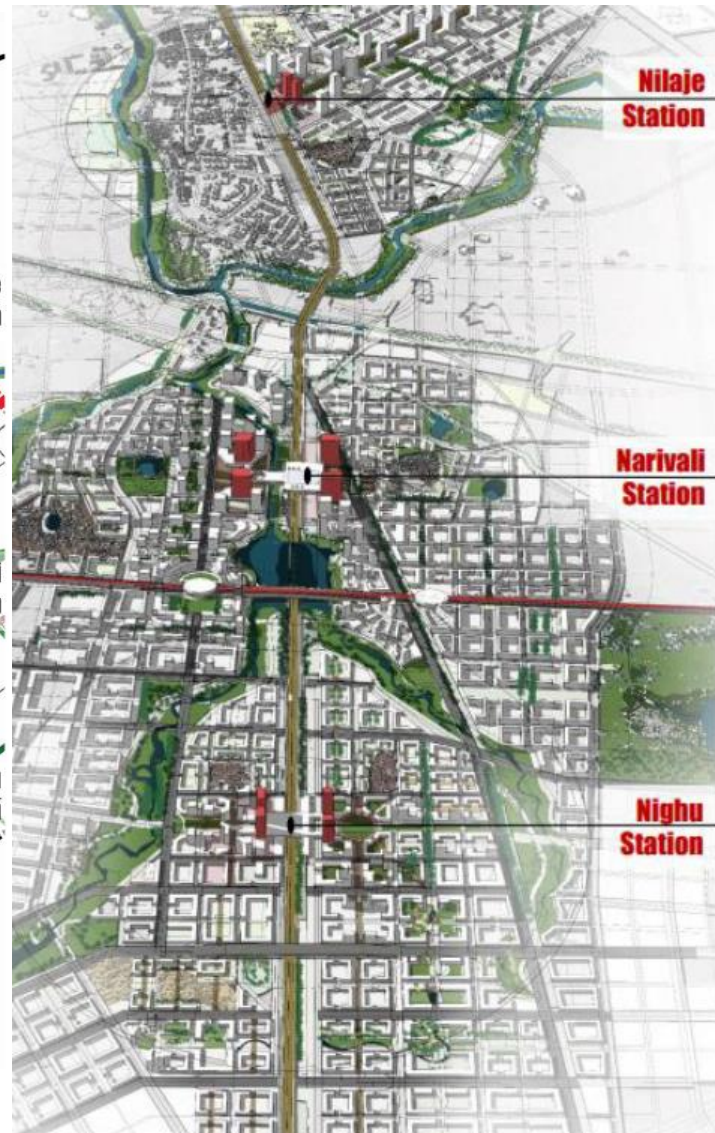
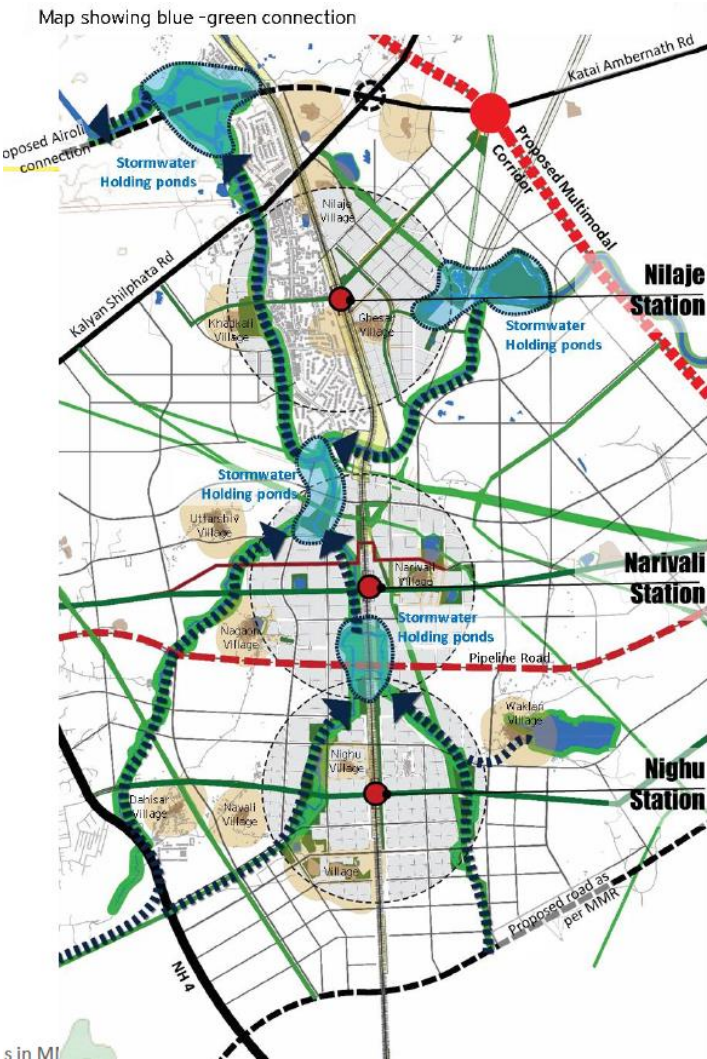
Transforming through TOD-Nanchang: scale and sequence



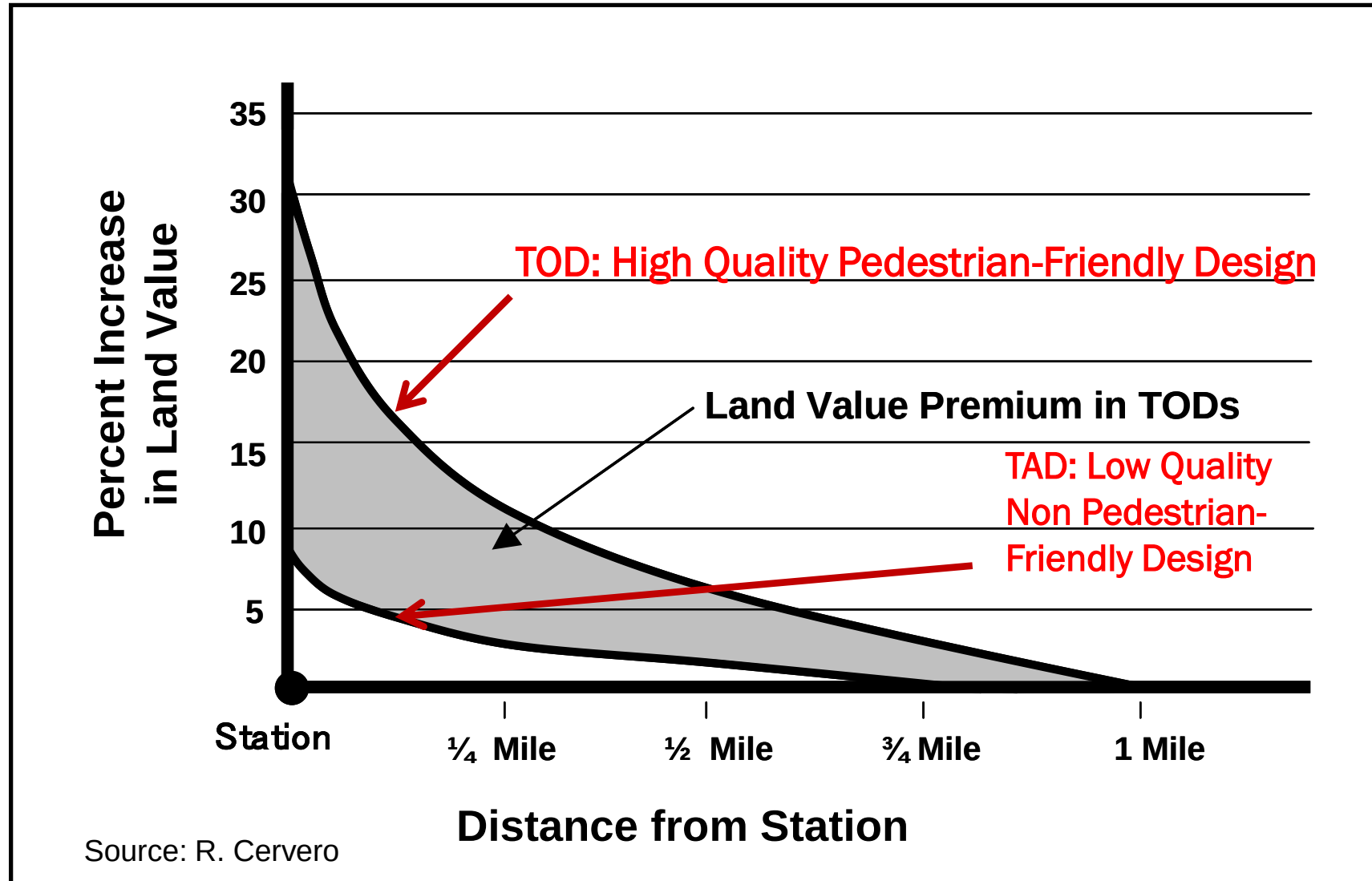
» Metro Group adopted phased strategy for TOD along Line #1, starting from stations in downtown and move on to the suburbs.

» As of 2016, estimated profits from TOD will cover 15-20% of the total construction costs of Line #1 and #2.

Rethinking the corridor : Mumbai

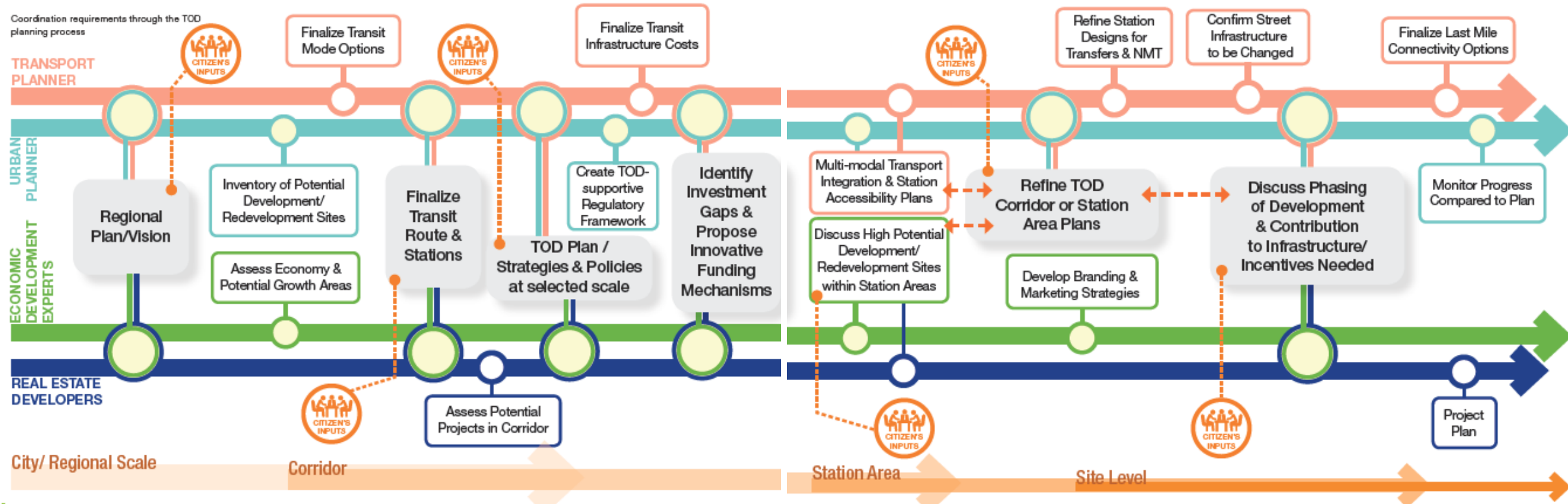


Urban Design's Impact on Value Creation: Beyond Just Transit-Adjacent Development



TOD takes time and cooperation

KNOWLEDGE PRODUCTS



TOD KNOWLEDGE PRODUCTS

OVERVIEW



TOD Framework

1 Overview

The Overview chapter introduces the Knowledge Products and the principles, barriers and existing resources related to transit-oriented development that will act as the foundation for the tools provided. This overview will also introduce the five steps of TOD and tools for each.

2



Assess

The Assess chapter provides an overview of the steps required to examine a city's preparedness for undertaking TOD initiatives, including defining scale and scope of the planning of the area and identifying stakeholders for undertaking TOD projects.

3



Enable

The Enable chapter provides the steps necessary to create an enabling environment for implementing successful TODs, prior to embarking on detailed TOD planning initiatives.

4



Plan + Design

The Plan + Design chapter contains a series of detailed planning principles and design components to formulate TOD plans at various scales of intervention [city, corridor, station area and site scales].

5



Finance

The Finance chapter provides an overview of the financing tools that can be used by a city to achieve the TOD planning policies, projects and initiatives identified in the previous steps.

6



Implement

Implementation provides an overview of the tasks and sub-tasks required to implement TOD plans, including the institutional framework and supportive public policies.