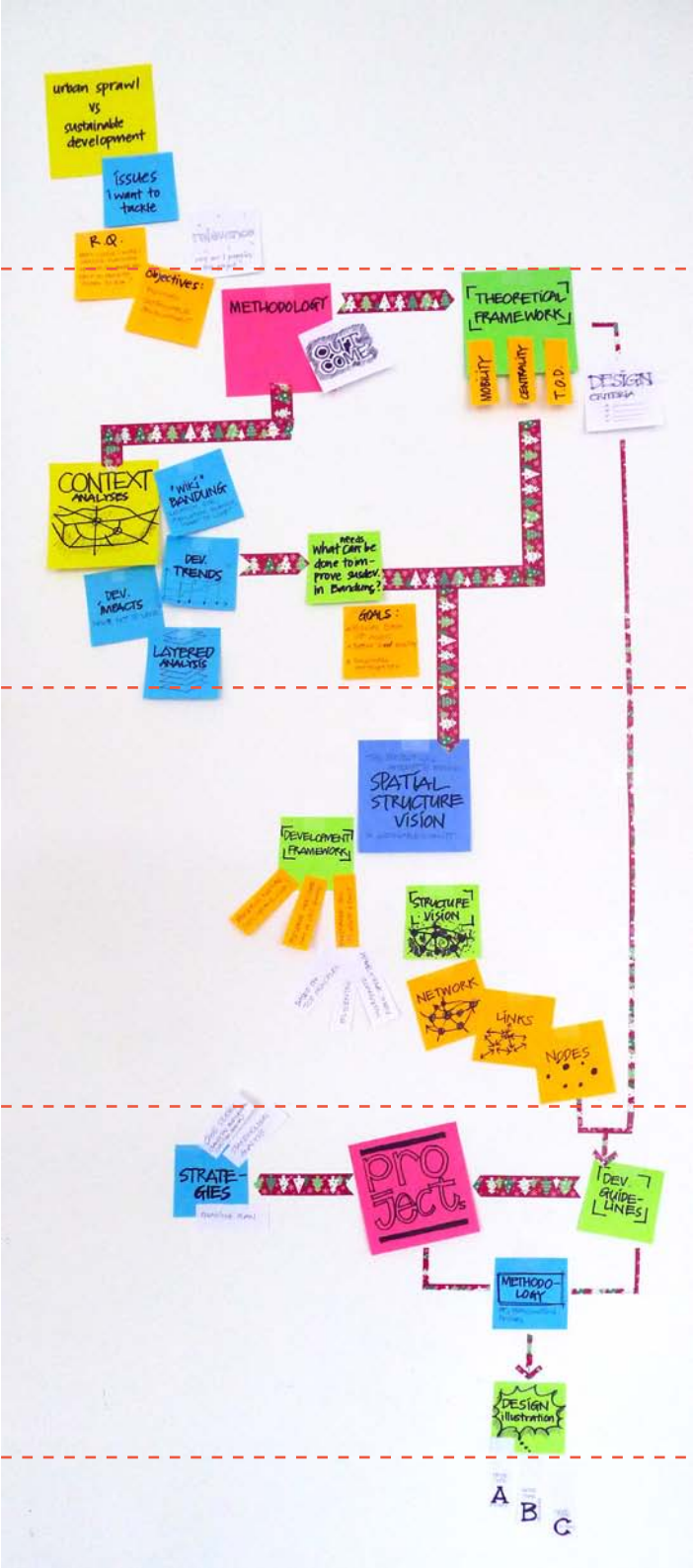


Implementation Strategies  
For Mobility Based Development  
In Bandung City, Indonesia





PROBLEM DEFINITION

P1

ANALYSES

P2

DEVELOPMENT STRATEGIES

P3

DESIGN EXERCISE

P4





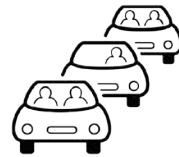




sprawling development



suburban



congestion



time-consuming



air pollution



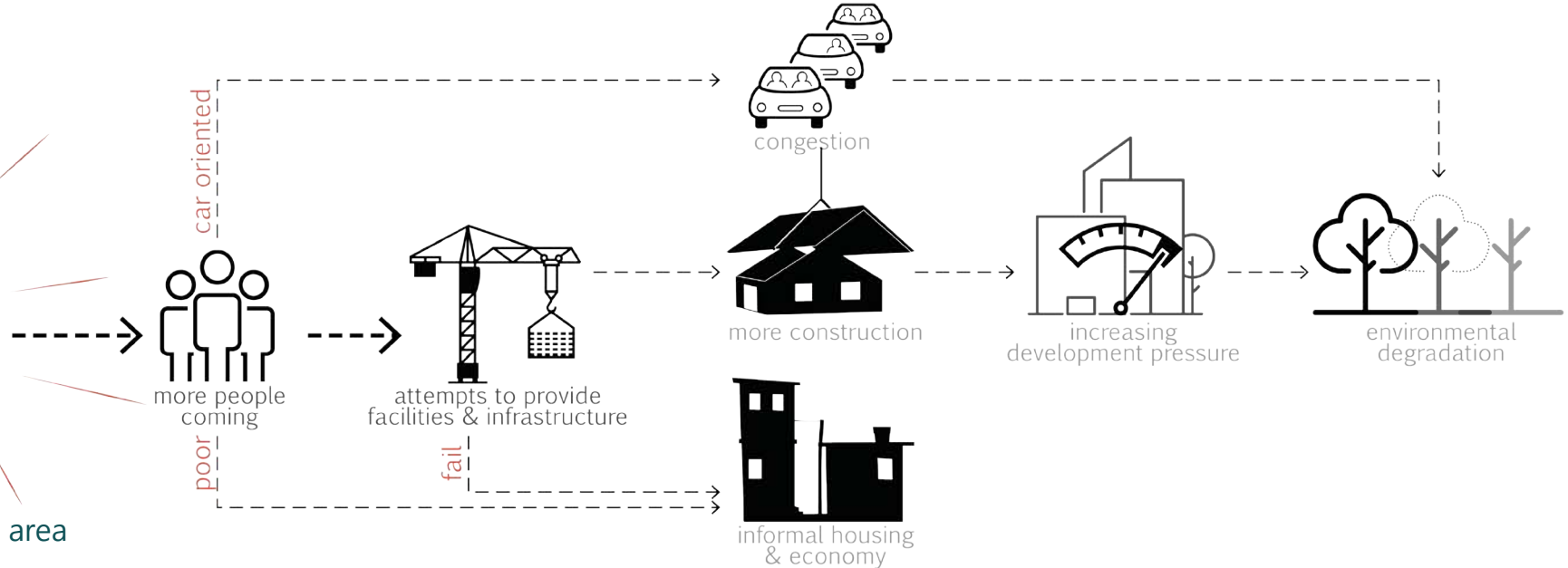
city center

happens between city centre  
and sub-urban area



attractive  
city center

happens within city centre area



**WHAT DOES URBAN  
SPRAWL DO?**









Author, 2011



<http://forum.detik.com/picture.php?albumid=1180&pictureid=5908>



<http://www.beritaaktual.com/wp-content/uploads/2014/10/bandung.jpg>



[https://aprikuma.files.wordpress.com/2012/03/img\\_1157.jpg](https://aprikuma.files.wordpress.com/2012/03/img_1157.jpg)





<http://baju3500.com/wp-content/uploads/2014/03/Grosir-Pasar-Baru-Bandung.jpg>



[http://cdn-2.tstatic.net/tribunnews/foto/images/preview/20130914\\_pembangunan-rumah-mewah-di-kawasan-dago\\_2522133](http://cdn-2.tstatic.net/tribunnews/foto/images/preview/20130914_pembangunan-rumah-mewah-di-kawasan-dago_2522133)

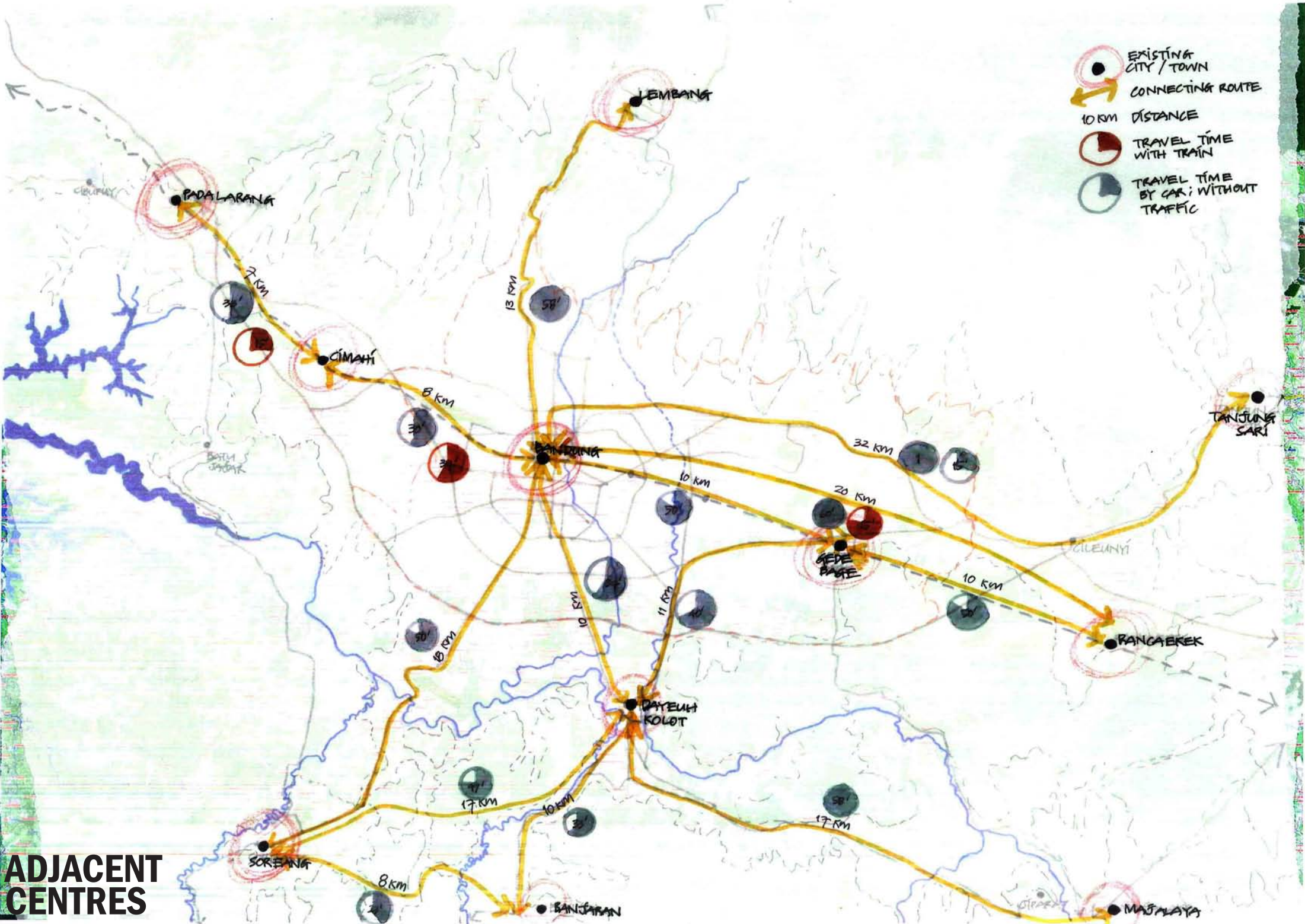


<http://static.panoramio.com/photos/large/29491225.jpg>

<http://sp.beritasatu.com/media/images/original/20140303100107118.jpg>



- EXISTING CITY / TOWN
- CONNECTING ROUTE
- 10 KM DISTANCE
- TRAVEL TIME WITH TRAIN
- TRAVEL TIME BY CAR; WITHOUT TRAFFIC

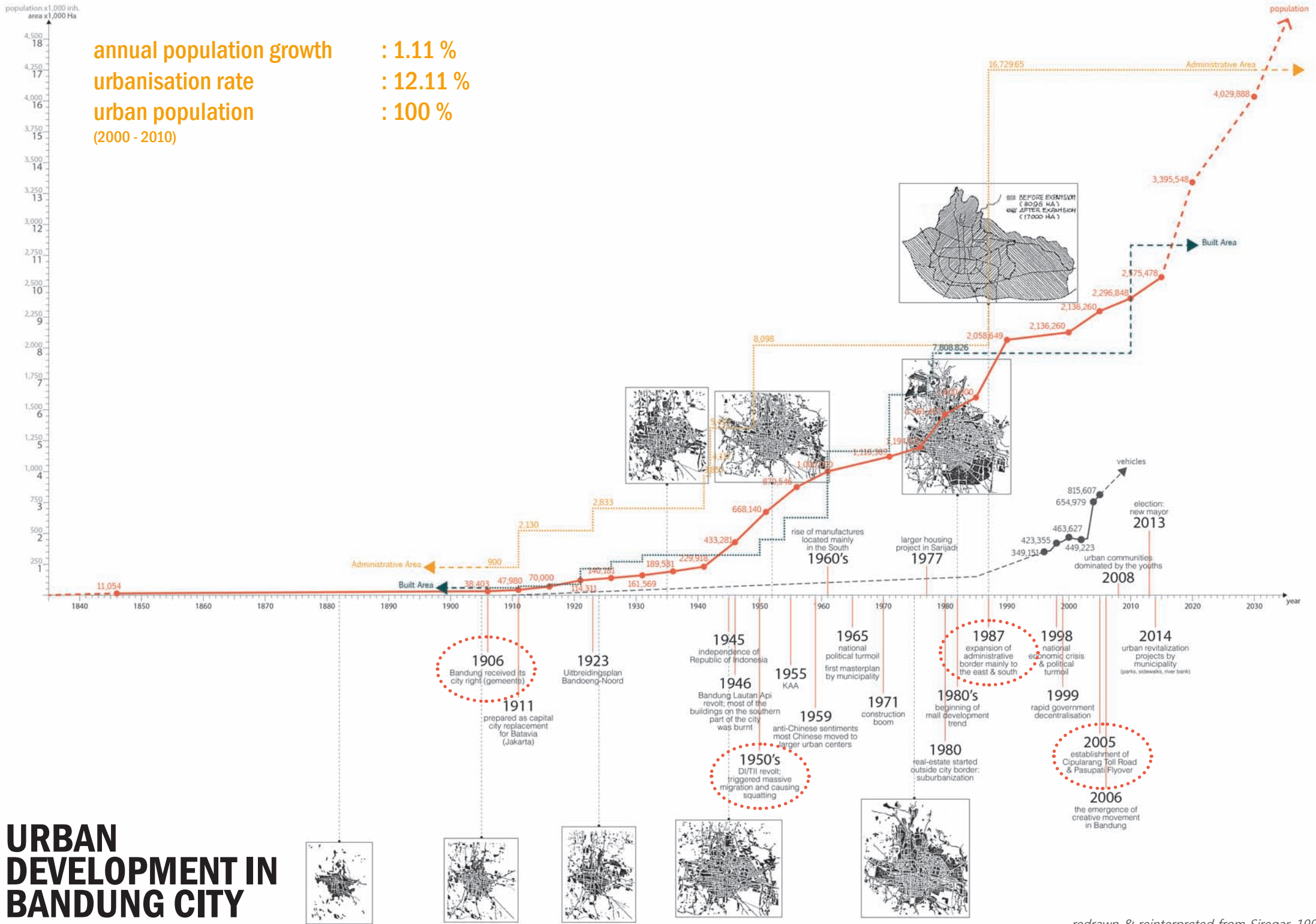


ADJACENT CENTRES



population x1,000 inh.  
area x1,000 Ha

annual population growth : 1.11 %  
urbanisation rate : 12.11 %  
urban population : 100 %  
(2000 - 2010)





built environment  
concentration of  
population  
housing cluster

built environment  
concentration of  
population  
housing cluster

higher education  
offices  
industries  
commercial  
'horeca'

higher education  
offices  
industries  
commercial  
'horeca'

highway  
railway  
streets  
stations  
terminals  
accessibility

highway  
railway  
streets  
stations  
terminals  
accessibility

governance units  
administrative border  
planning units

governance units  
administrative border  
planning units

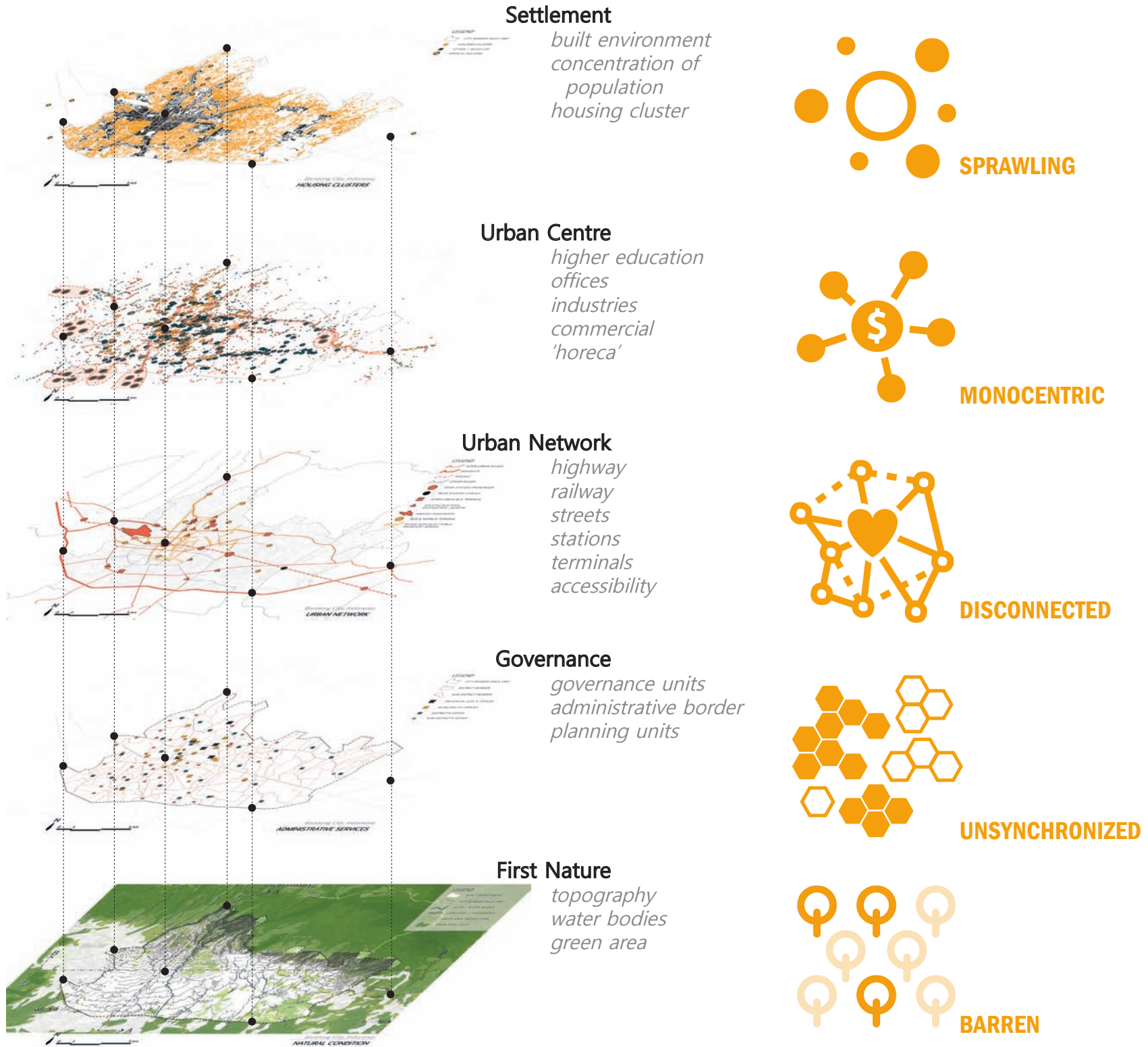
topography  
water bodies  
green area

topography  
water bodies  
green area

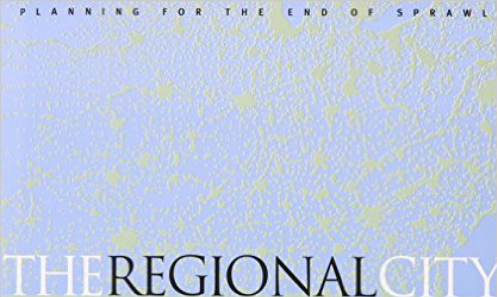
## LAYERED ANALYSIS



LAYERED  
ANALYSIS



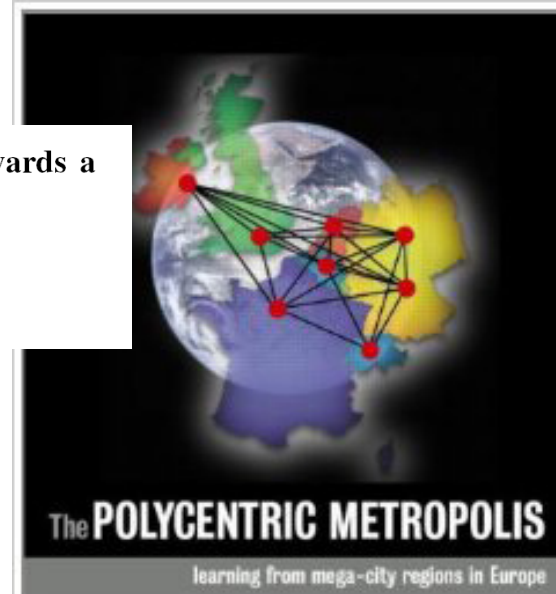




## The Polycentric Urban Region: Towards a Research Agenda

Robert C. Kloosterman and Sako Musterd

*[Paper received in final form, October 2000]*



Urban Studies, Vol. 38, No. 4, 657-677, 2001



## A Changing Demographic Regime and Evolving Polycentric Urban Regions: Consequences for the Size, Composition and Distribution of City Populations

A. G. Champion

*[Paper received in final form, October 2000]*

Regional Studies, Vol. 43/6, pp. 803-817, July 2009



## Looking Backward, Looking Forward: The City Region of the Mid-21st Century

PETER HALL

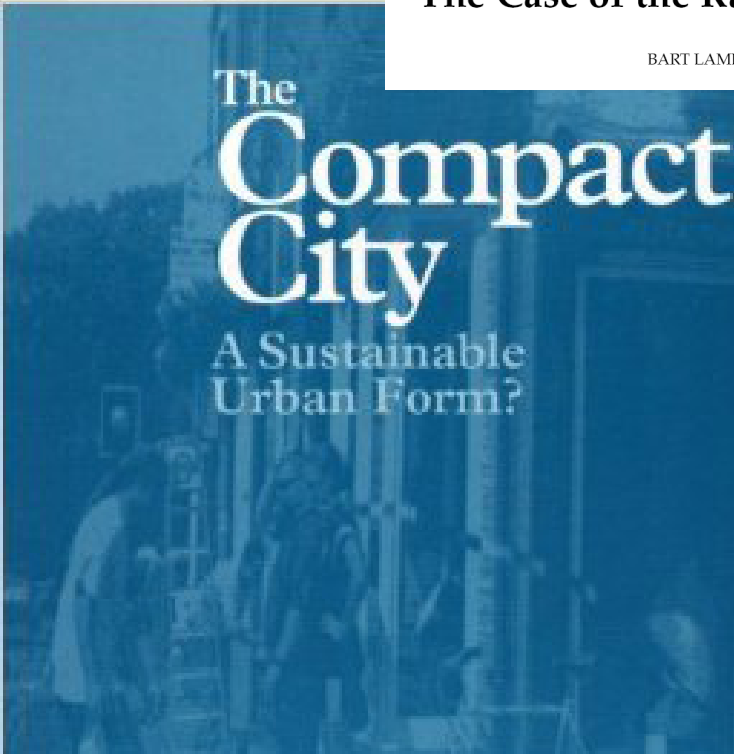
University College London – The Bartlett School of Planning, University College London, Fourth Floor, Waters House, 22 Gordon Street, London WC1H 0QB, UK. Email: p.hall@ucl.ac.uk

*(Received May 2007; in revised form February 2009)*

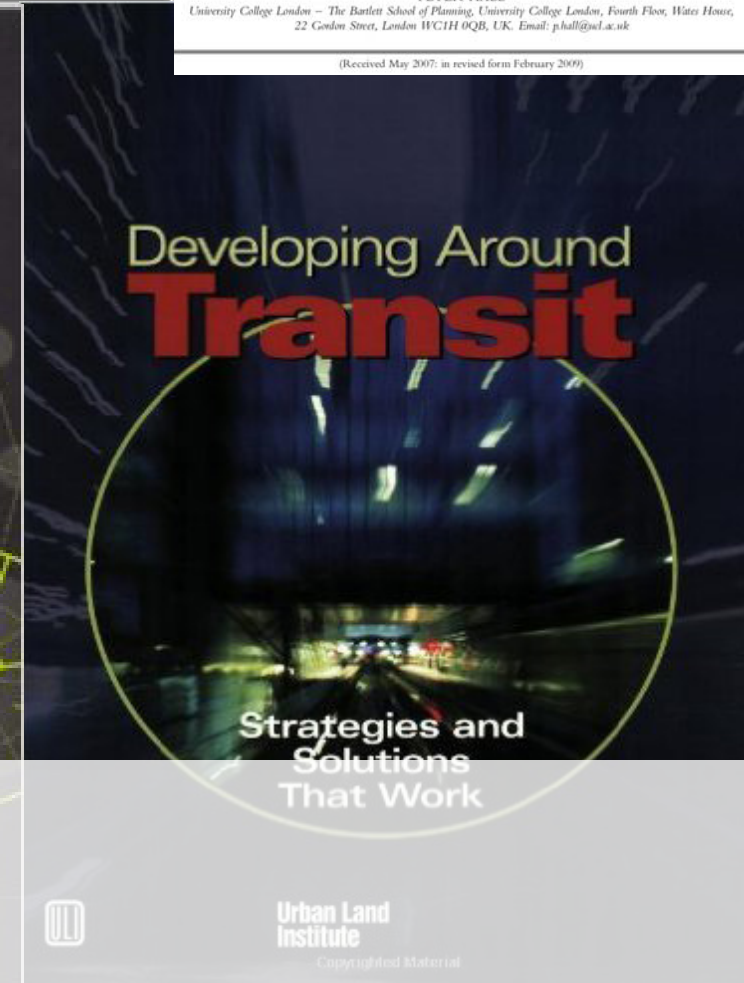
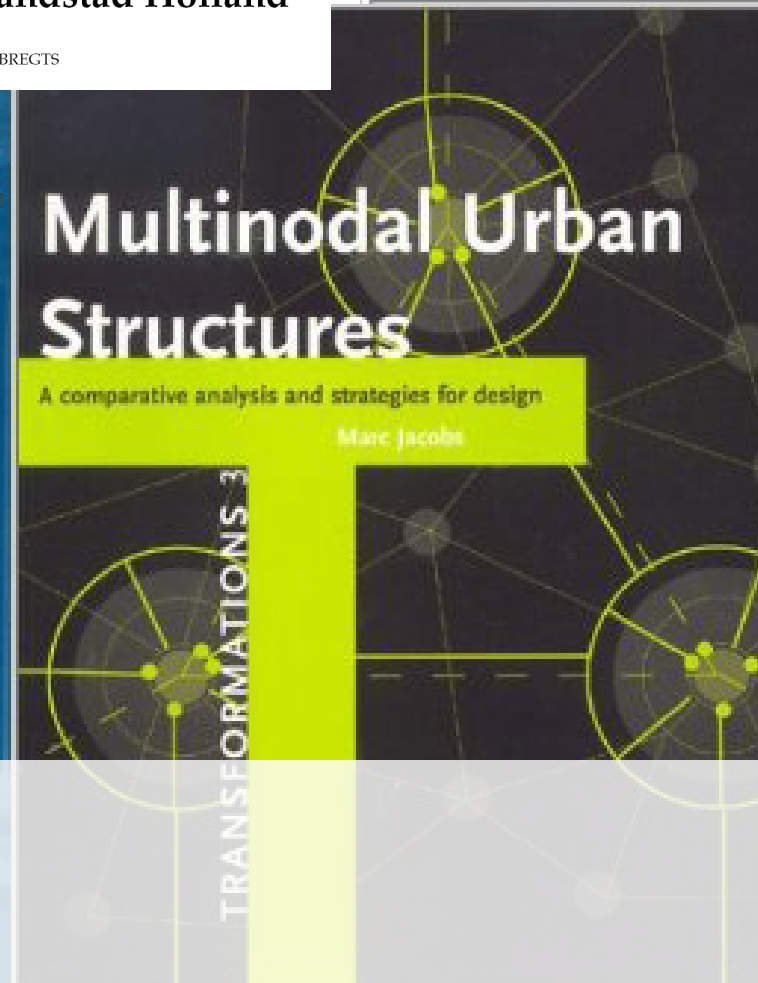
PETER CALTHORPE  
WILLIAM FULTON  
FOREWORD BY ROBERT FI

## Polycentrism: Boon or Barrier to Metropolitan Competitiveness? The Case of the Randstad Holland

BART LAMBREGTS



Edited by  
Mike Jenks  
Elizabeth Burton  
Katie Williams



Urban Land  
Institute

Copyrighted Material






A word cloud of urban planning and development terms. The words are arranged in a roughly circular pattern, with varying font sizes and colors. The most prominent words are 'mixed-use' in large black font, 'specialization' in large teal font, and 'partnership' in large orange font. Other words include 'vision' in red, 'density', 'connectivity', 'transit access', 'collaboration', 'bus', 'build a place', 'part of daily urban system', 'engage corporate attention', 'promote walking & cycling', 'scale-dependent', 'get the parking right', and 'scale-dependent'.

bus  
collaboration  
connectivity  
density  
mixed-use  
partnership  
build a place  
transit access  
specialization  
vision  
part of daily urban system  
engage corporate attention  
promote walking & cycling  
get the parking right  
scale-dependent

**KEYWORDS**





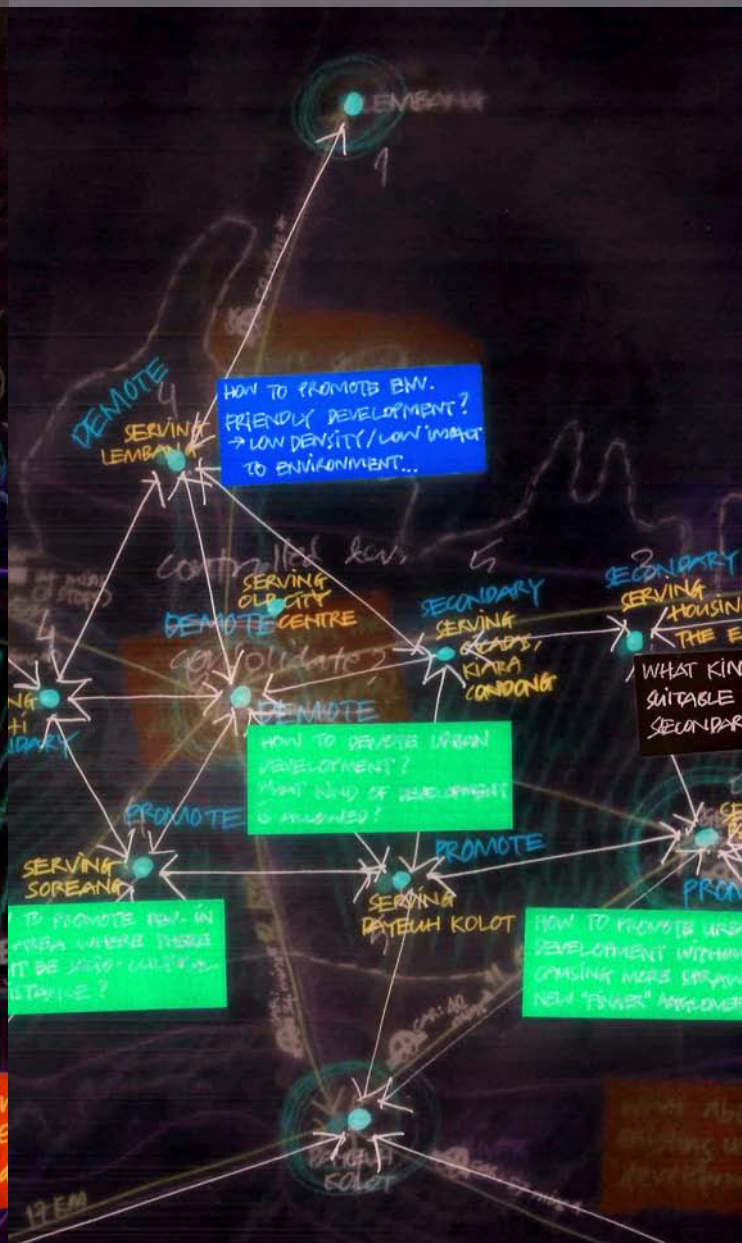
**in 2040,**  
**Bandung can thrive from**  
**the variety of urban centres,**  
**ease of access,**  
**and better environment quality.**



## development framework



## structure vision



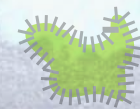
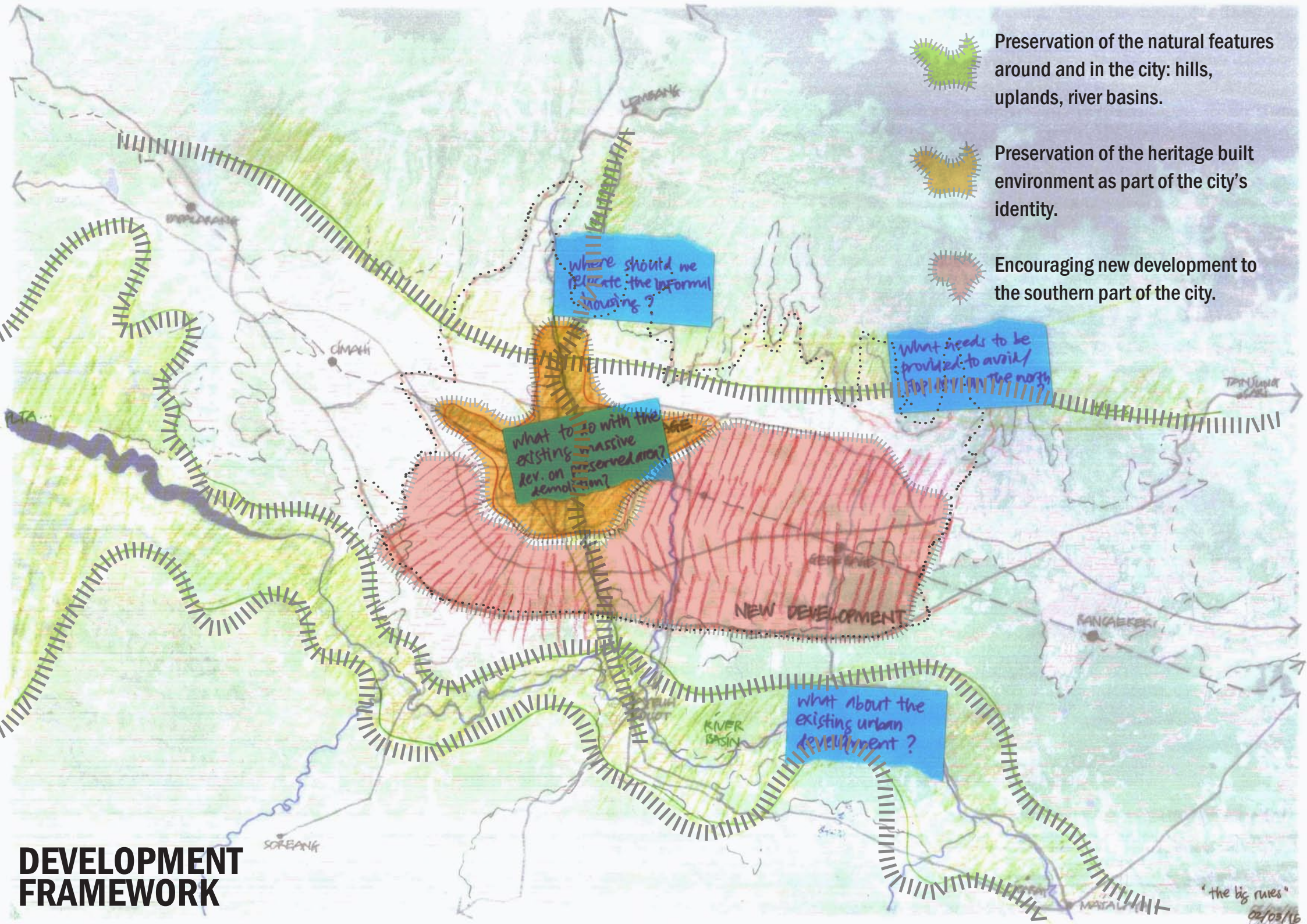
## conceptual design



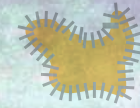




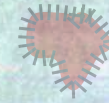




Preservation of the natural features around and in the city: hills, uplands, river basins.



Preservation of the heritage built environment as part of the city's identity.








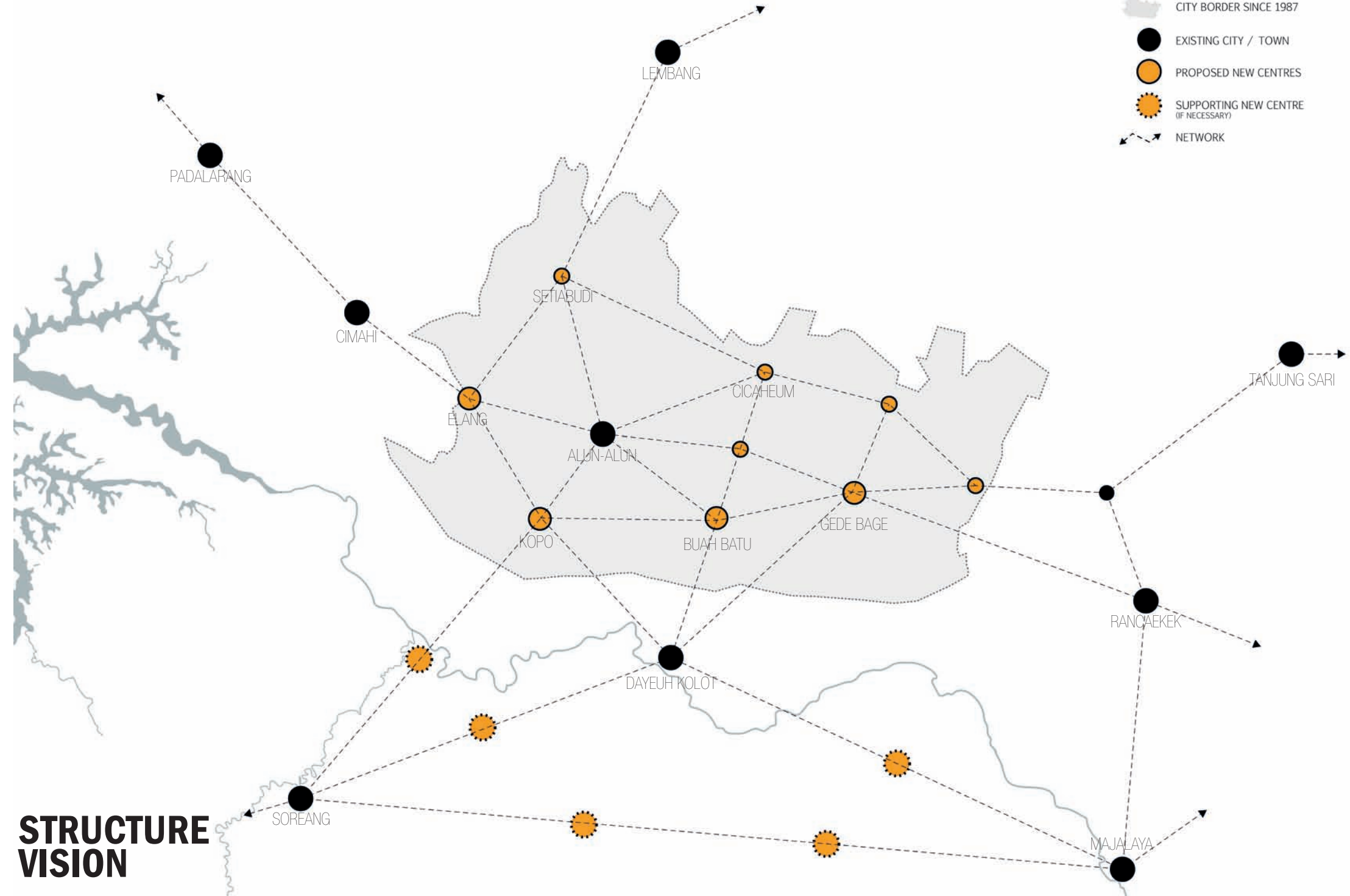
Encouraging new development to the southern part of the city.

# DEVELOPMENT FRAMEWORK



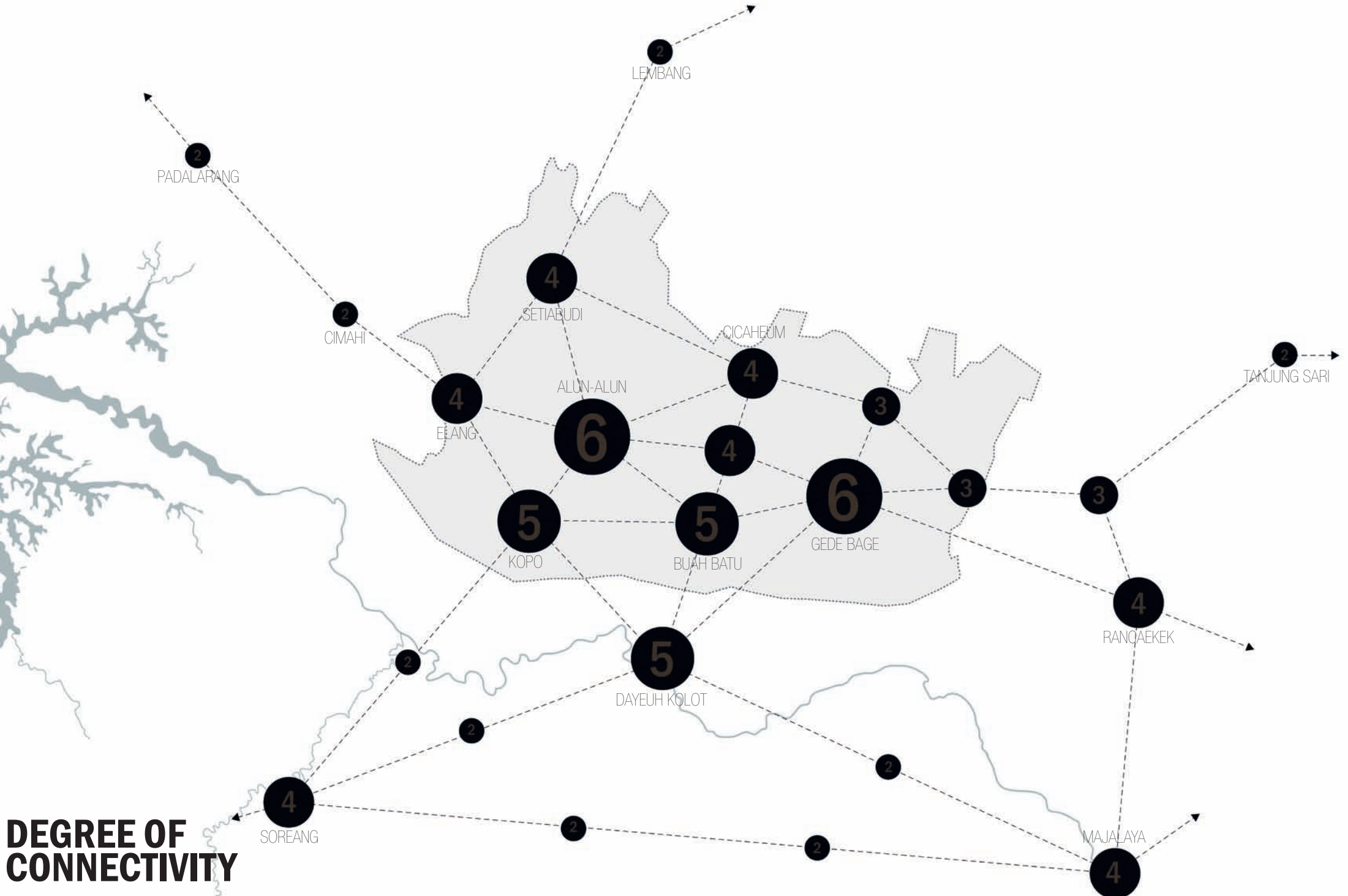
## LEGEND

-  CITY BORDER SINCE 1987
-  EXISTING CITY / TOWN
-  PROPOSED NEW CENTRES
-  SUPPORTING NEW CENTRE (IF NECESSARY)
-  NETWORK



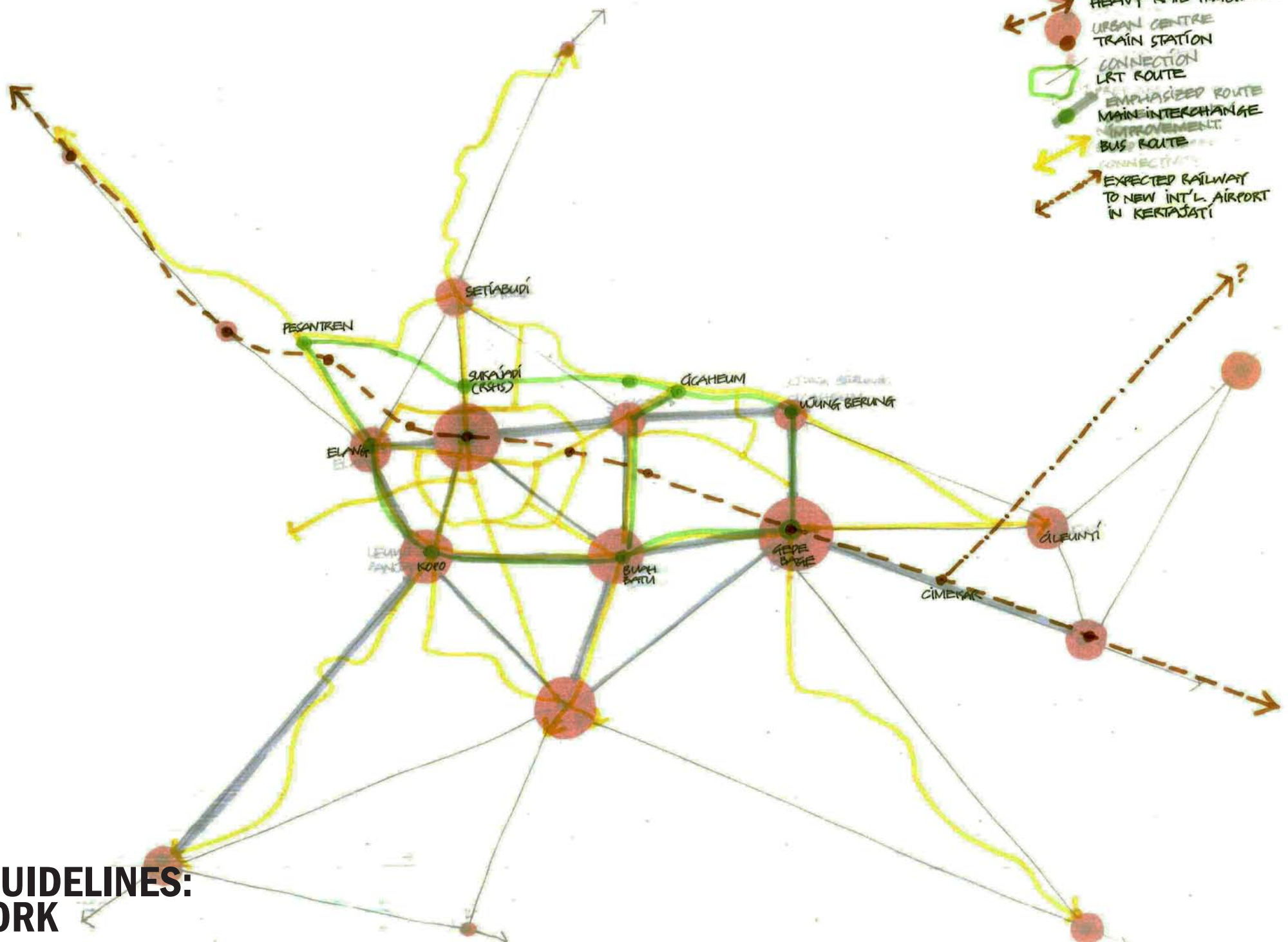


# DEGREE OF CONNECTIVITY





- EXISTING CITY CENTRE :
- HEAVY RAIL TRACK :
- URBAN CENTRE :
- TRAIN STATION :
- CONNECTION :
- LRT ROUTE :
- EMPHASIZED ROUTE :
- MAIN INTERCHANGE :
- IMPROVEMENT :
- BUS ROUTE :
- CONNECTIVITY :
- EXPECTED RAILWAY TO NEW INT'L AIRPORT IN KERTAJATI :

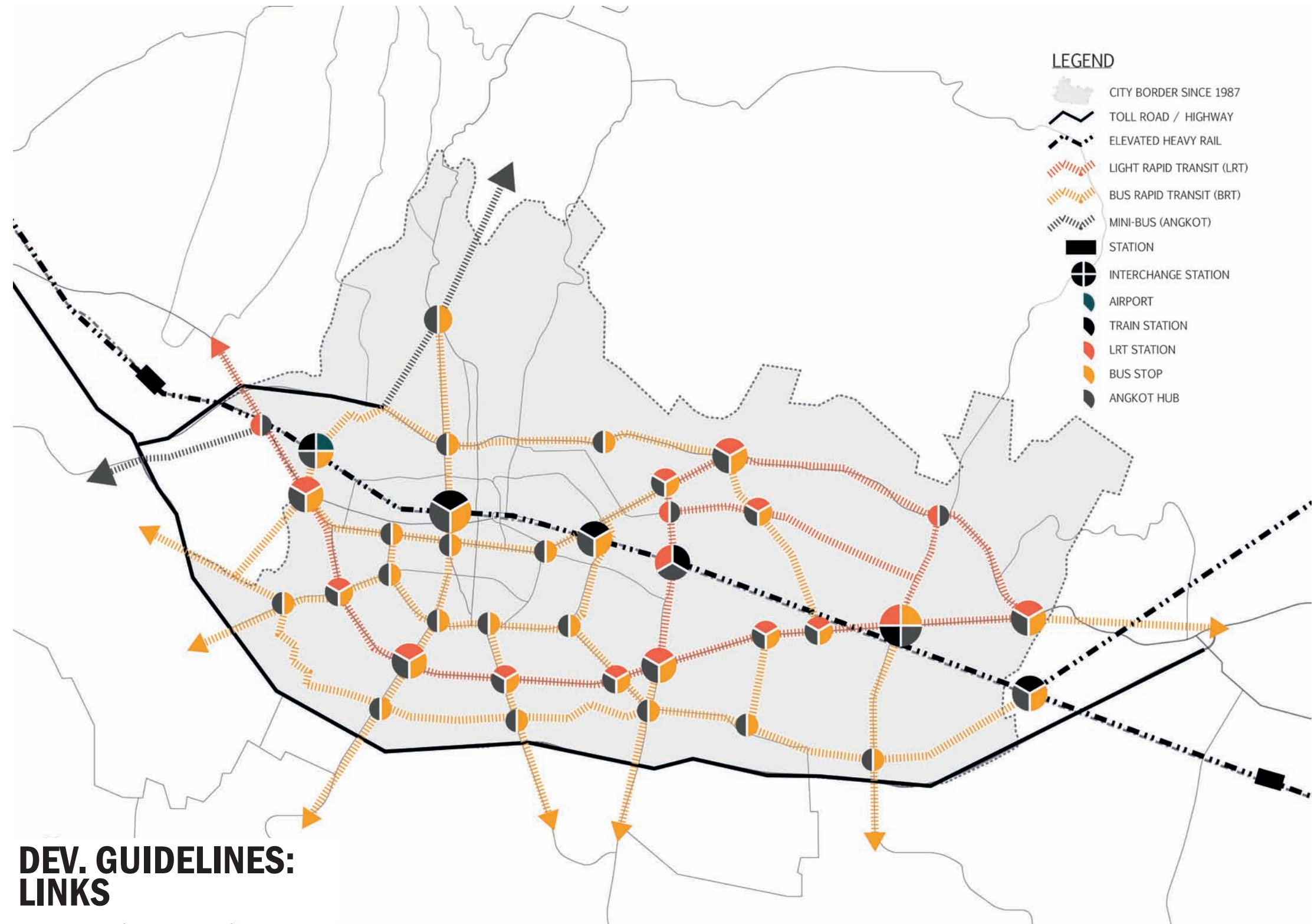


**DEV. GUIDELINES:  
NETWORK**



## LEGEND

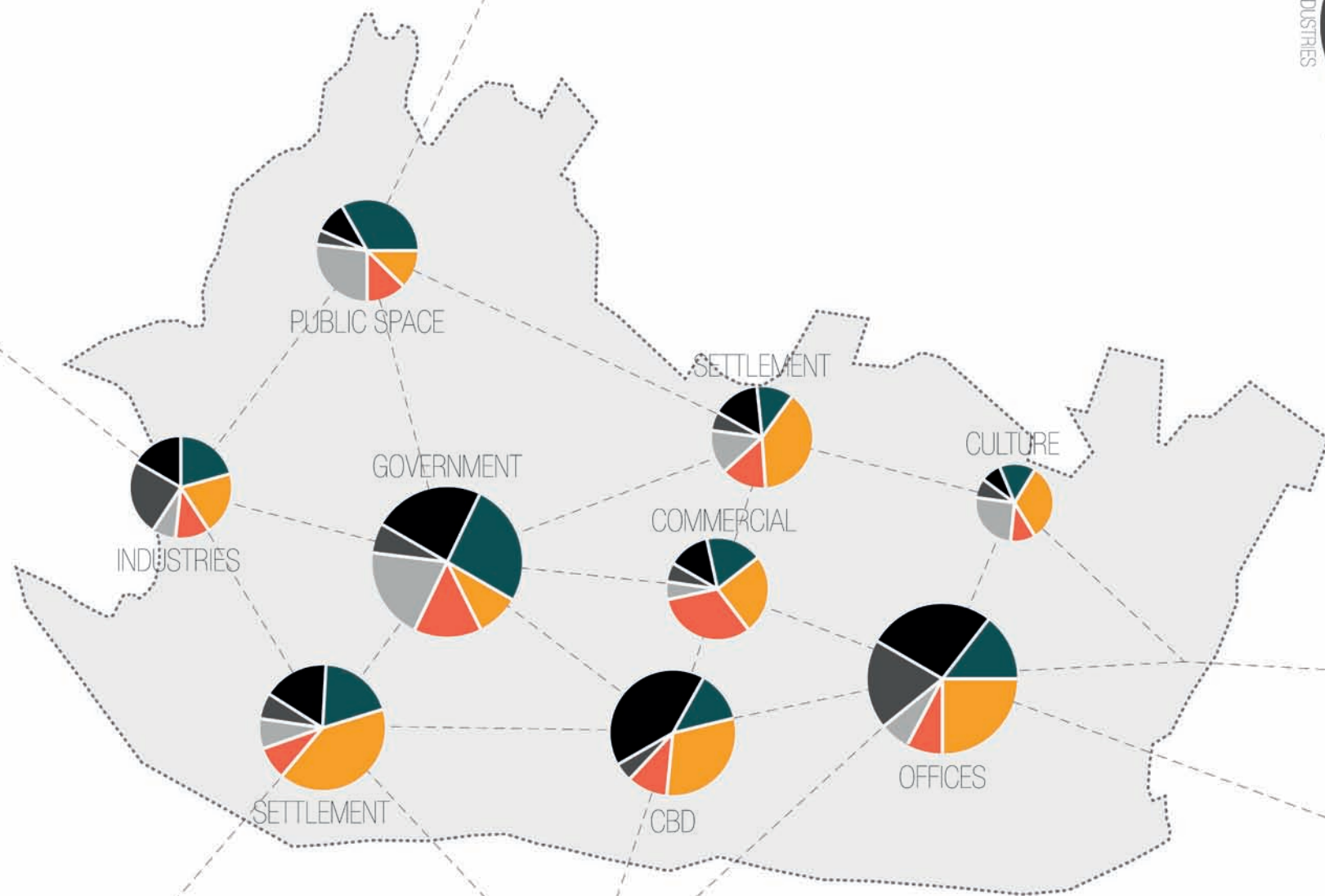
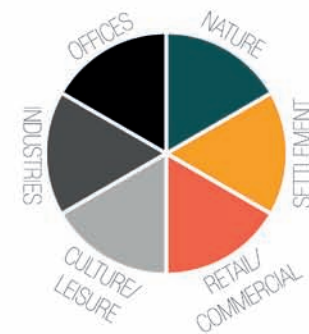
- CITY BORDER SINCE 1987
- TOLL ROAD / HIGHWAY
- ELEVATED HEAVY RAIL
- LIGHT RAPID TRANSIT (LRT)
- BUS RAPID TRANSIT (BRT)
- MINI-BUS (ANGKOT)
- STATION
- INTERCHANGE STATION
- AIRPORT
- TRAIN STATION
- LRT STATION
- BUS STOP
- ANGKOT HUB



DEV. GUIDELINES:  
LINKS



## LEGEND



DEV. GUIDELINES:  
NODES





# IMPLEMENTATION STRATEGIES



## GEDE BAGE CBD AREA

- TRANSIT NODE
- MIXED-USE
- "HIGH-TECH VALLEY"

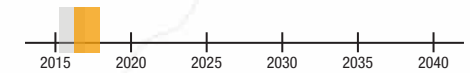


**TRIGGER PROJECT**



## SOUTH-RING INFRASTRUCTURE

- BRT
- LRT
- NETWORK DENSIFICATION



**KEY PROJECT (1)**





## NORTH-RING INFRASTRUCTURE

- BRT NETWORK
- LRT NETWORK
- "ANGKOT" CONSOLIDATION



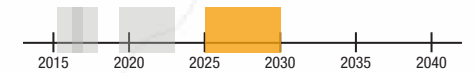
## KEY PROJECT (2)





## KAA COMMEMMORATION

- ALUN-ALUN REVITALIZATION
- CRITICAL RECONSTRUCTION OF CITY CENTRE



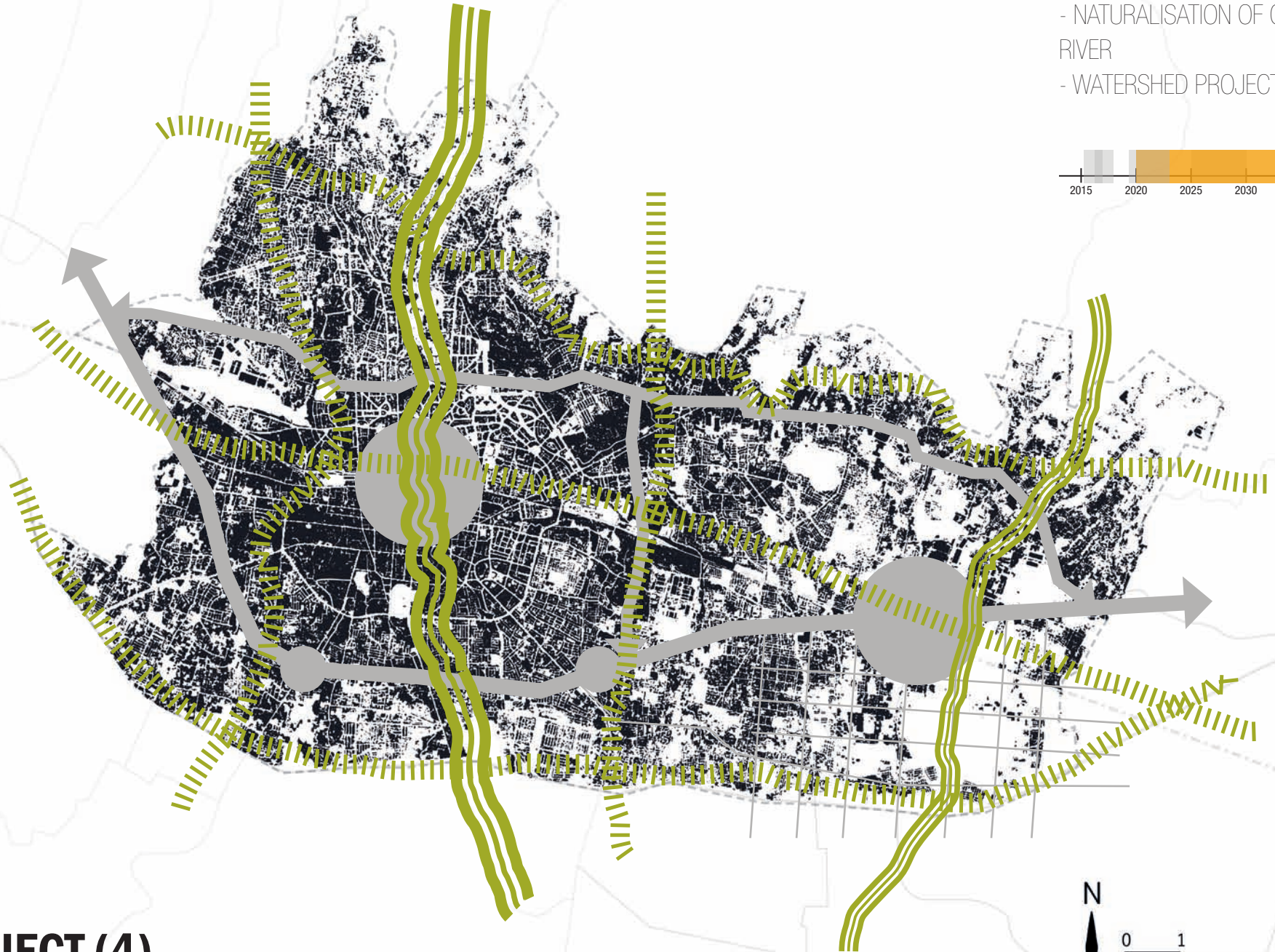
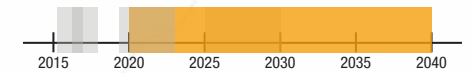
## KEY PROJECT (3)





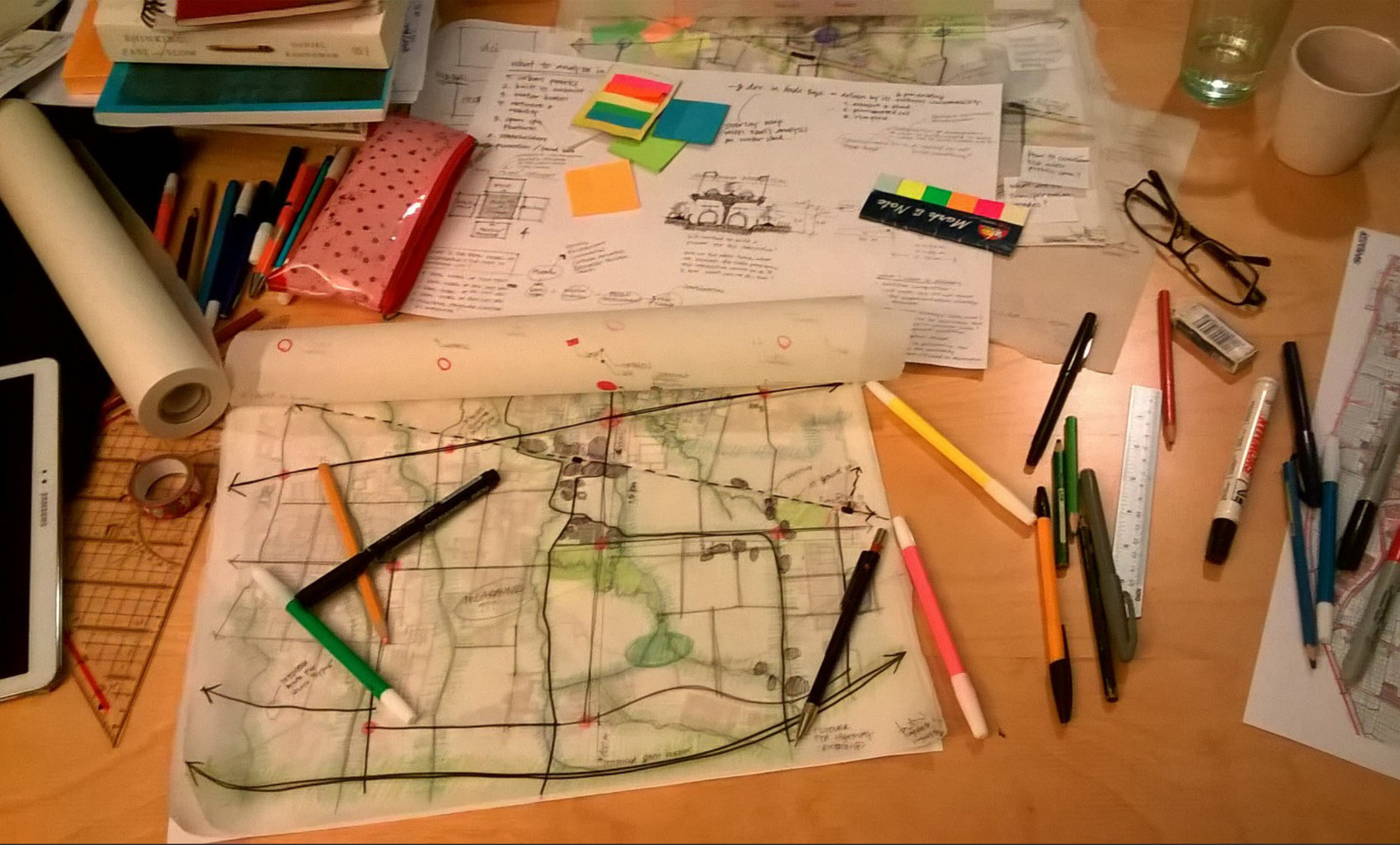
## GREEN-BLUE NETWORK

- NATURALISATION OF CIKAPUNDUNG RIVER
- WATERSHED PROJECT



**KEY PROJECT (4)**







## GEDE BAGE CBD AREA

- TRANSIT NODE
- MIXED-USE
- "HIGH-TECH VALLEY"



**TRIGGER PROJECT**





GEDE BAGE INTERSECTION  
PROJECT LOCATION

This is a detailed map of the Gege Bage area. The map features a dense network of roads, with major thoroughfares highlighted in red and secondary roads in green. A prominent blue line, likely representing a river or canal, winds through the center of the map. Several key locations are marked with black dots and labeled in orange callout boxes. The labels include 'GEDE BAGE INTERSECTION PROJECT LOCATION' at the top center, 'GEDE BAGE FREIGHT STATION' in the upper middle, 'GEDE BAGE PRIMARY MARKET' at the top right, 'GEDE BAGE ANGKOT TERMINAL' just below the primary market, 'CIMEKAR INACTIVE STATION' on the right side, and 'STADIUM BANDUNG LAUTAN API' at the bottom right. The bottom left corner of the image contains the text 'GEDE BAGE AREA' in large, bold, black letters.

GEDE BAGE  
PRIMARY MARKET

GEDE BAGE  
ANGKOT TERMINAL

GEDE BAGE  
FREIGHT STATION

CIMEKAR  
INACTIVE STATION

STADIUM  
BANDUNG LAUTAN API

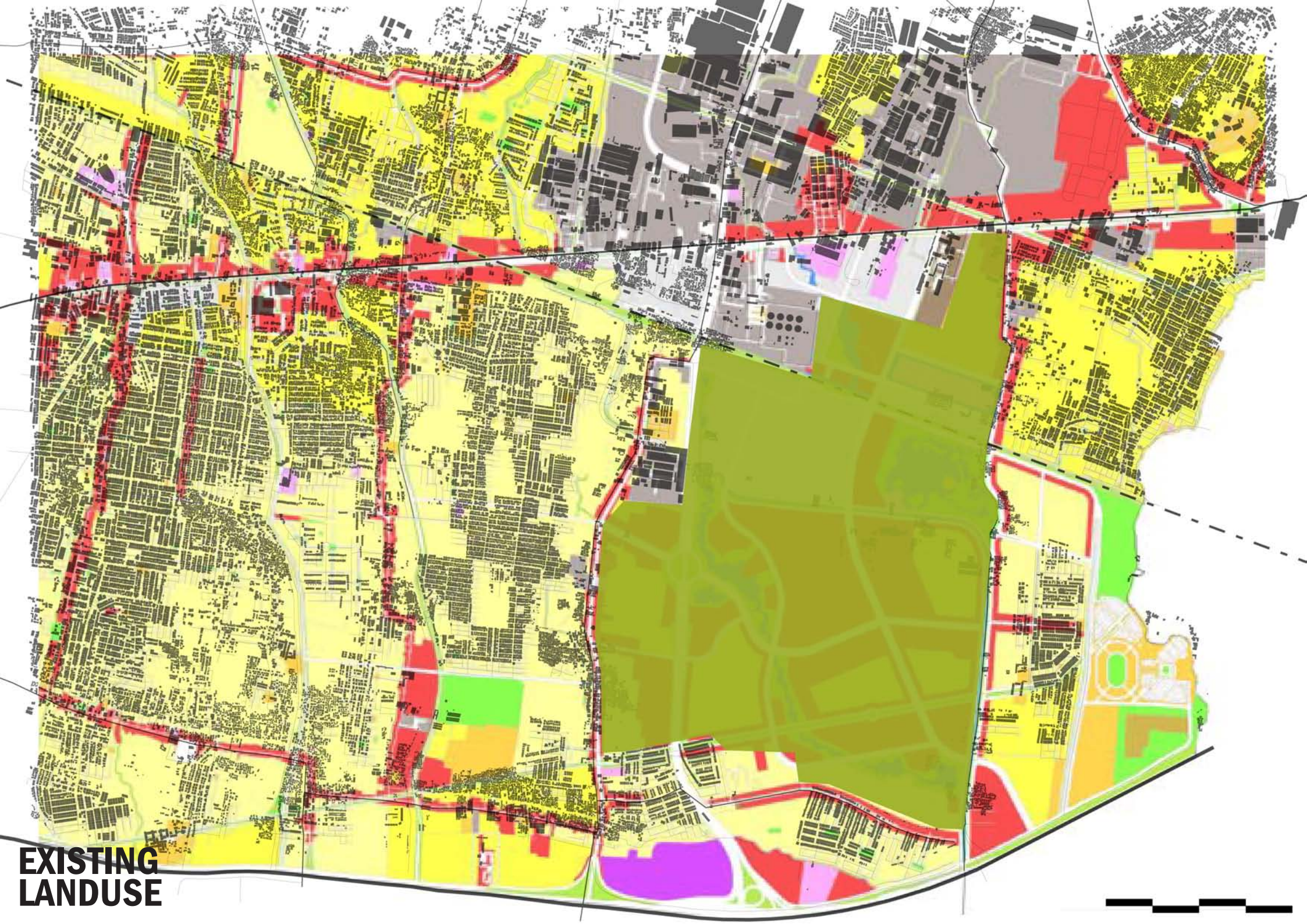
**GEDE BAGE  
AREA**





**EXISTING  
CONDITION**

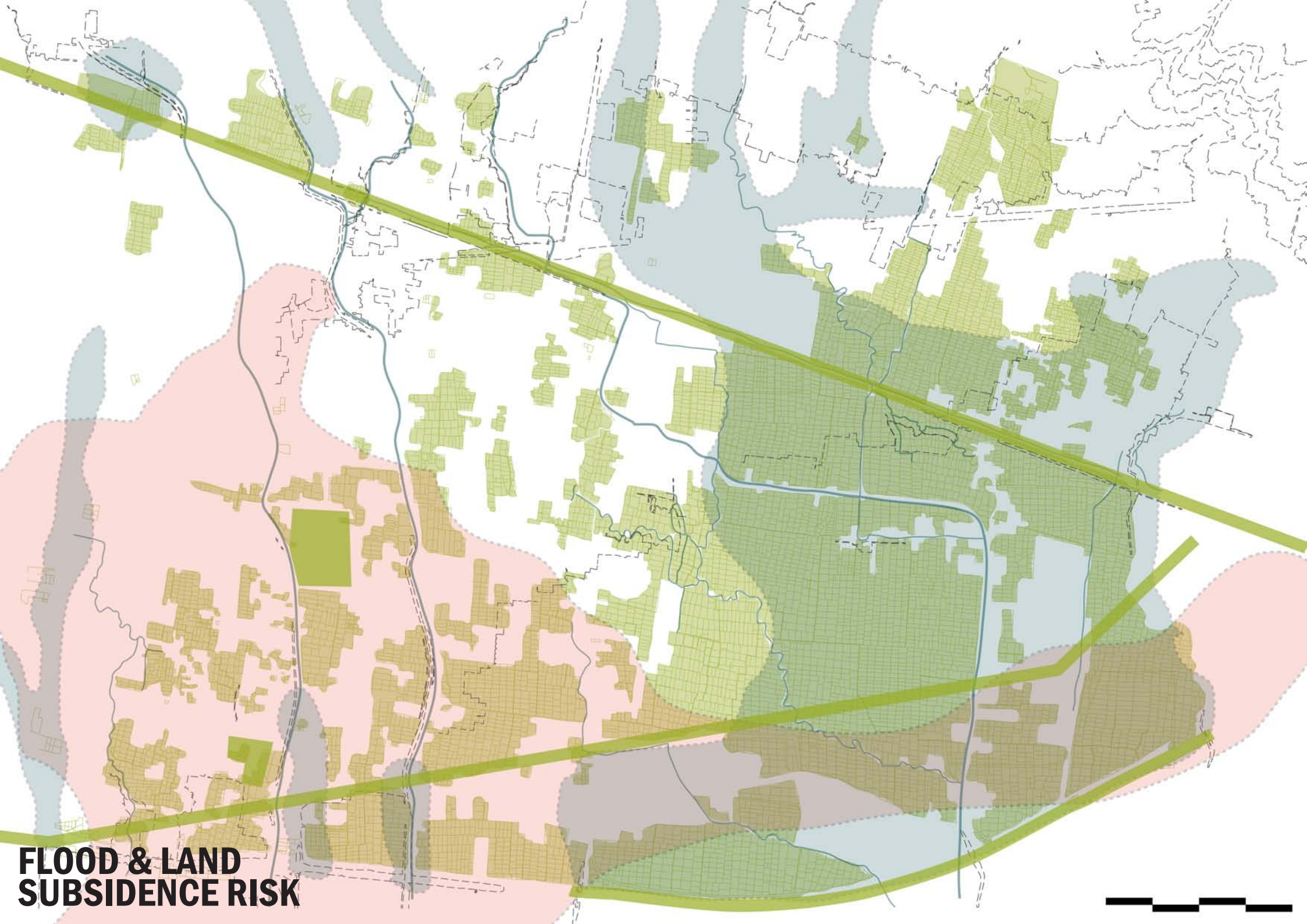




**EXISTING  
LANDUSE**



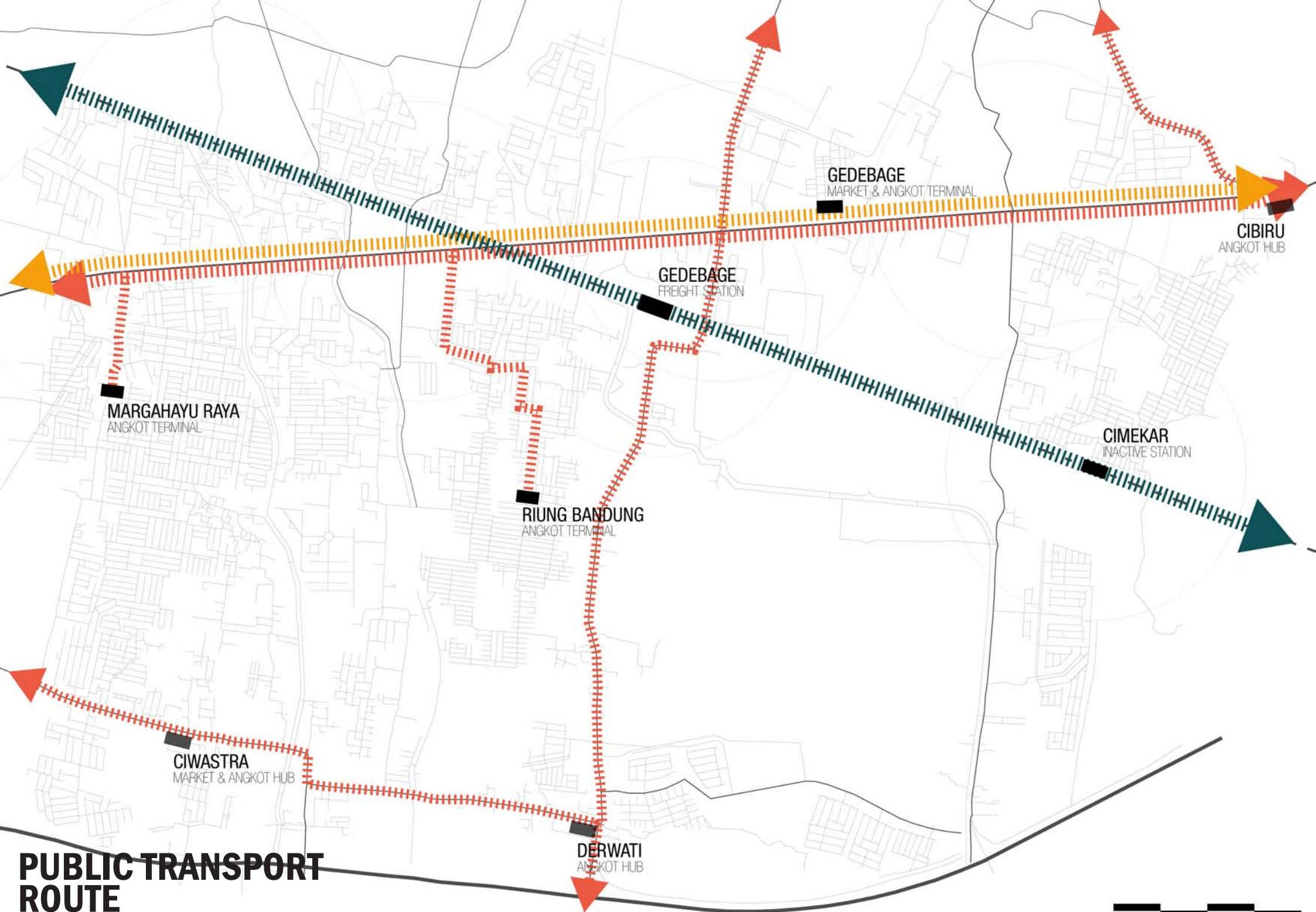




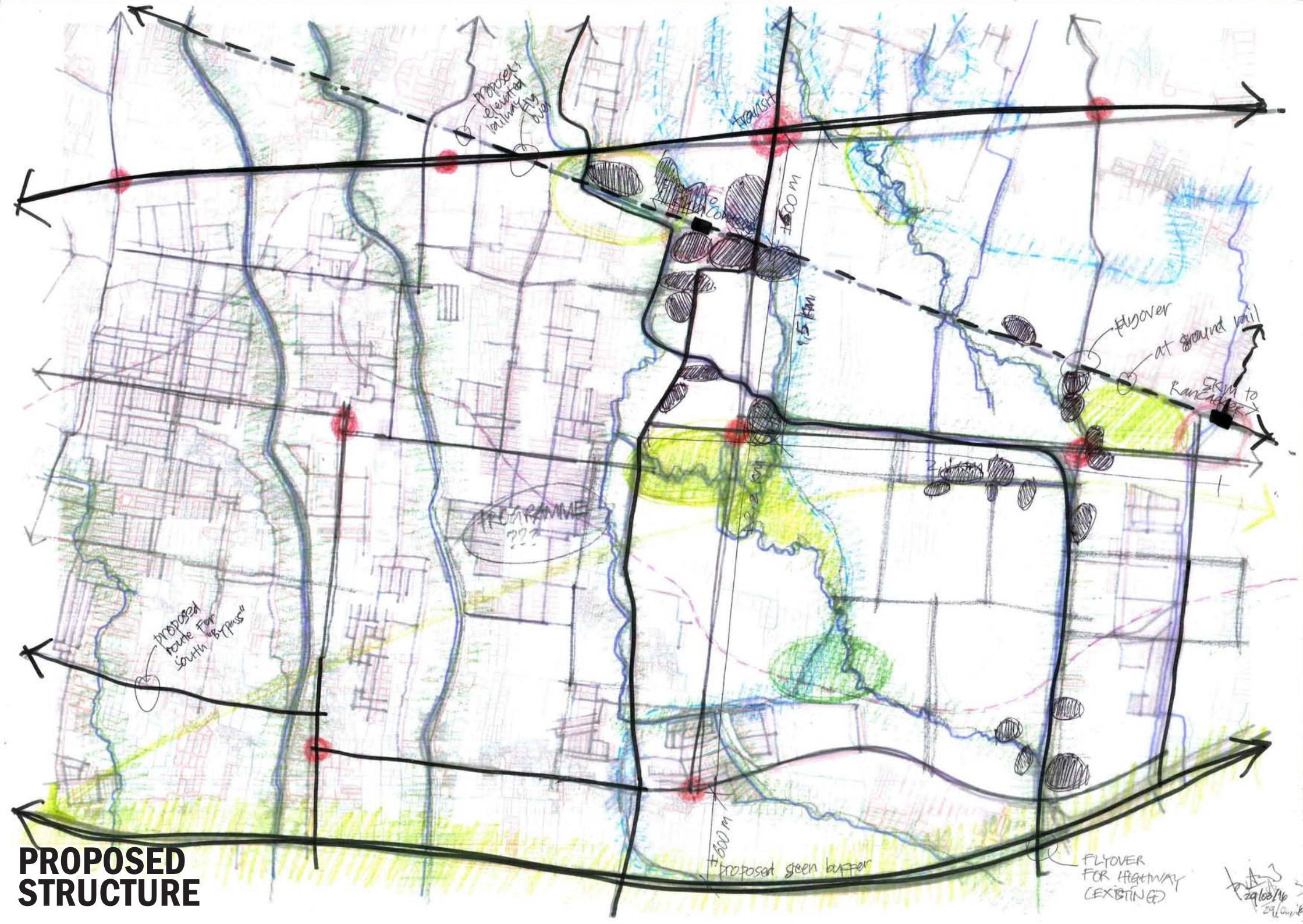
**FLOOD & LAND  
SUBSIDENCE RISK**



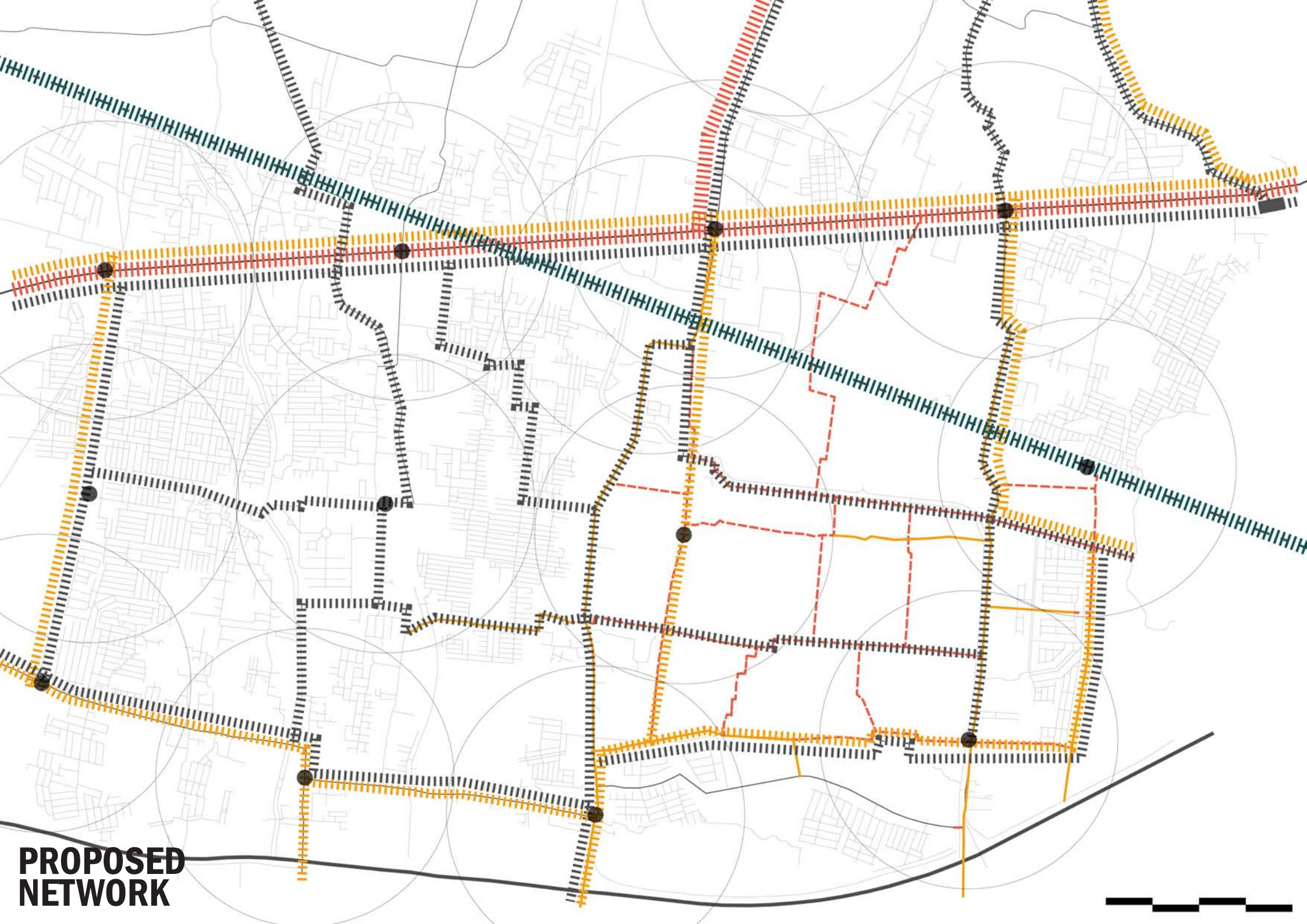












**PROPOSED  
NETWORK**

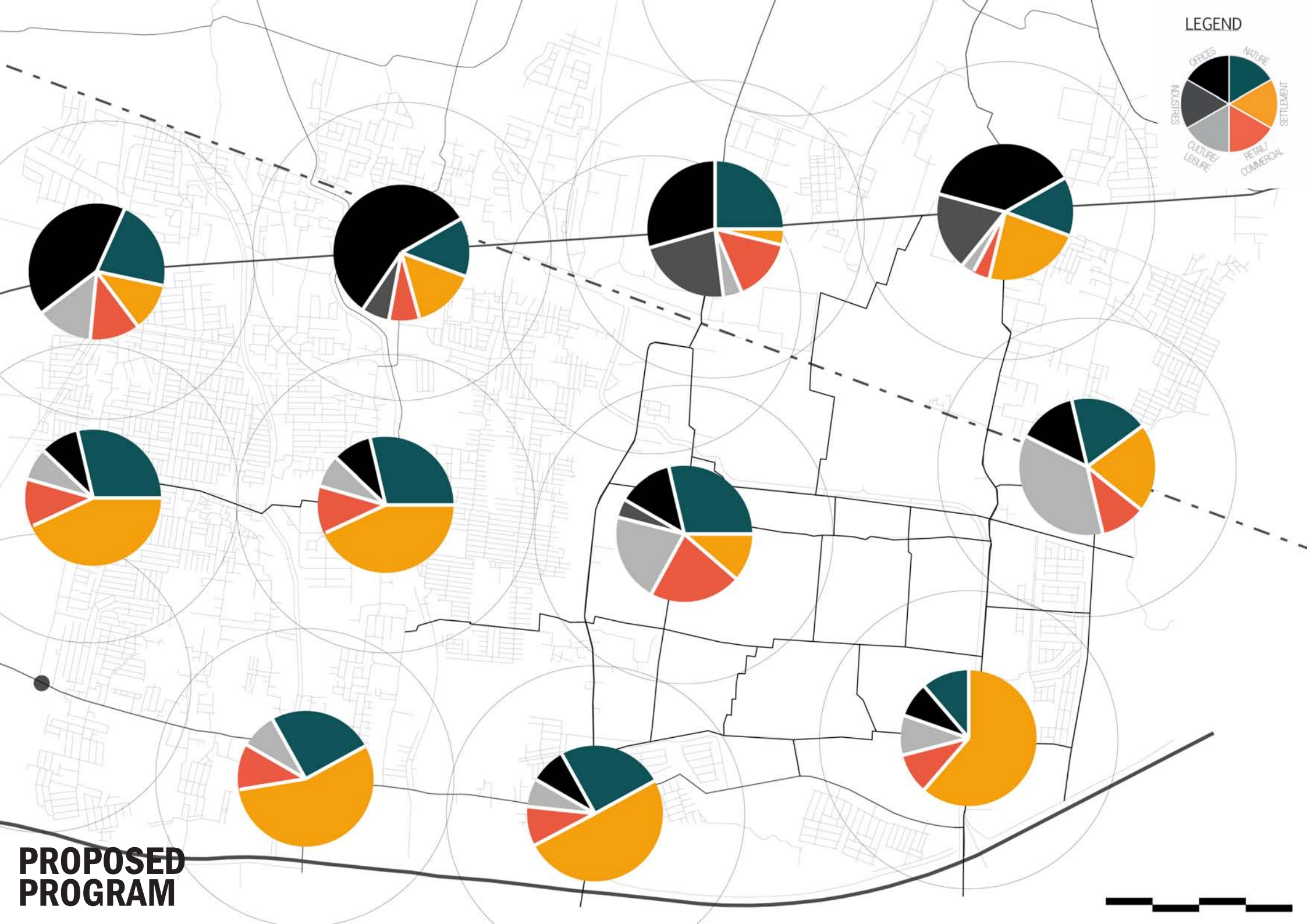




LEGEND



**PROPOSED  
PROGRAM**













**GEDE BAGE  
INTERSECTION**







**EXISTING  
CONDITION**



# LEGEND

- MAIN AVENUE
- SMALLER ROADS
- HEAVY RAIL
- INDUSTRIES
- OFFICES & SERVICE
- SETTLEMENT
- RETAILS
- VACANT (RICE FIELD)



N

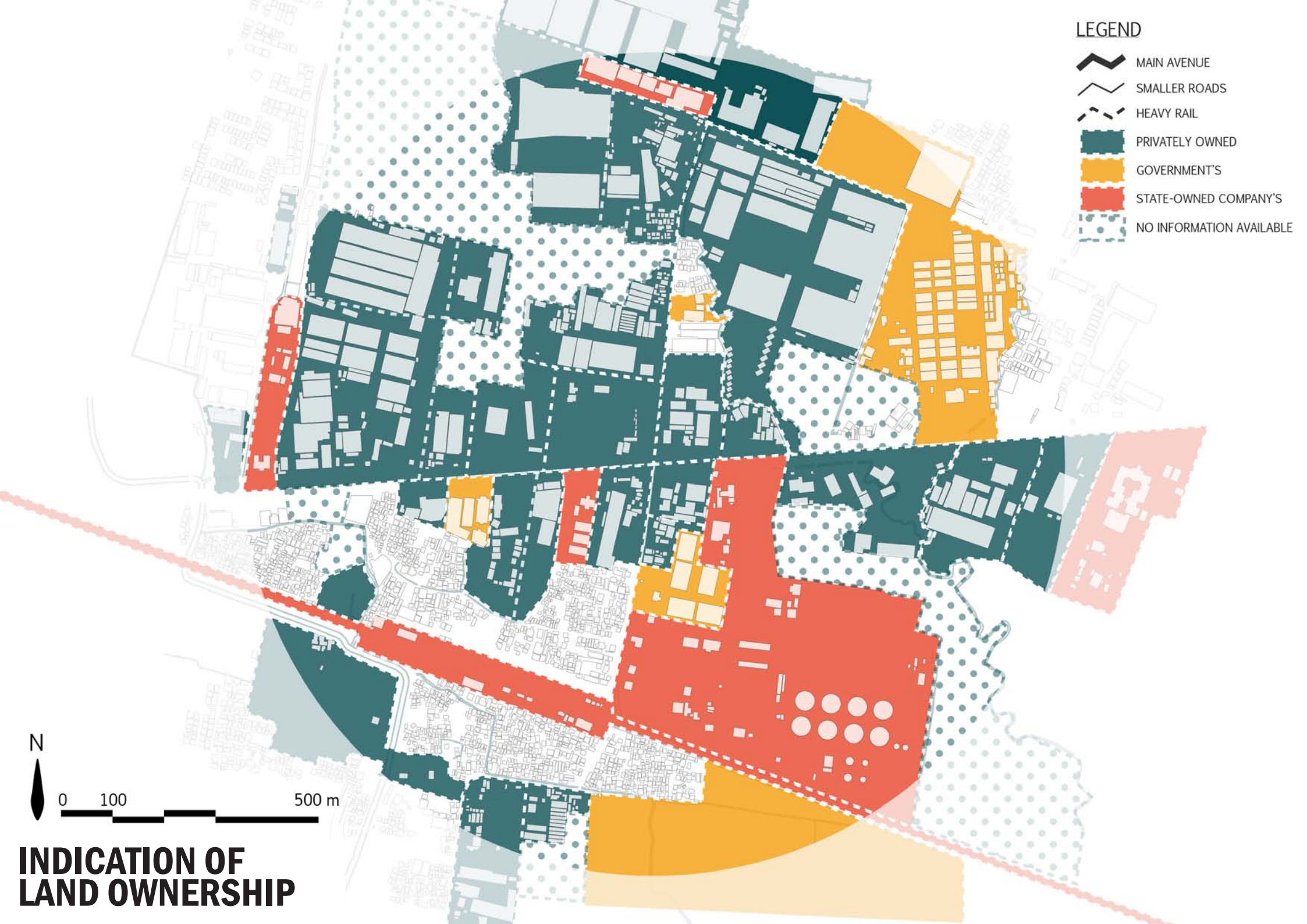
0 100 500 m

EXISTING  
LAND-USE



# LEGEND

- MAIN AVENUE
- SMALLER ROADS
- HEAVY RAIL
- PRIVATELY OWNED
- GOVERNMENT'S
- STATE-OWNED COMPANY'S
- NO INFORMATION AVAILABLE

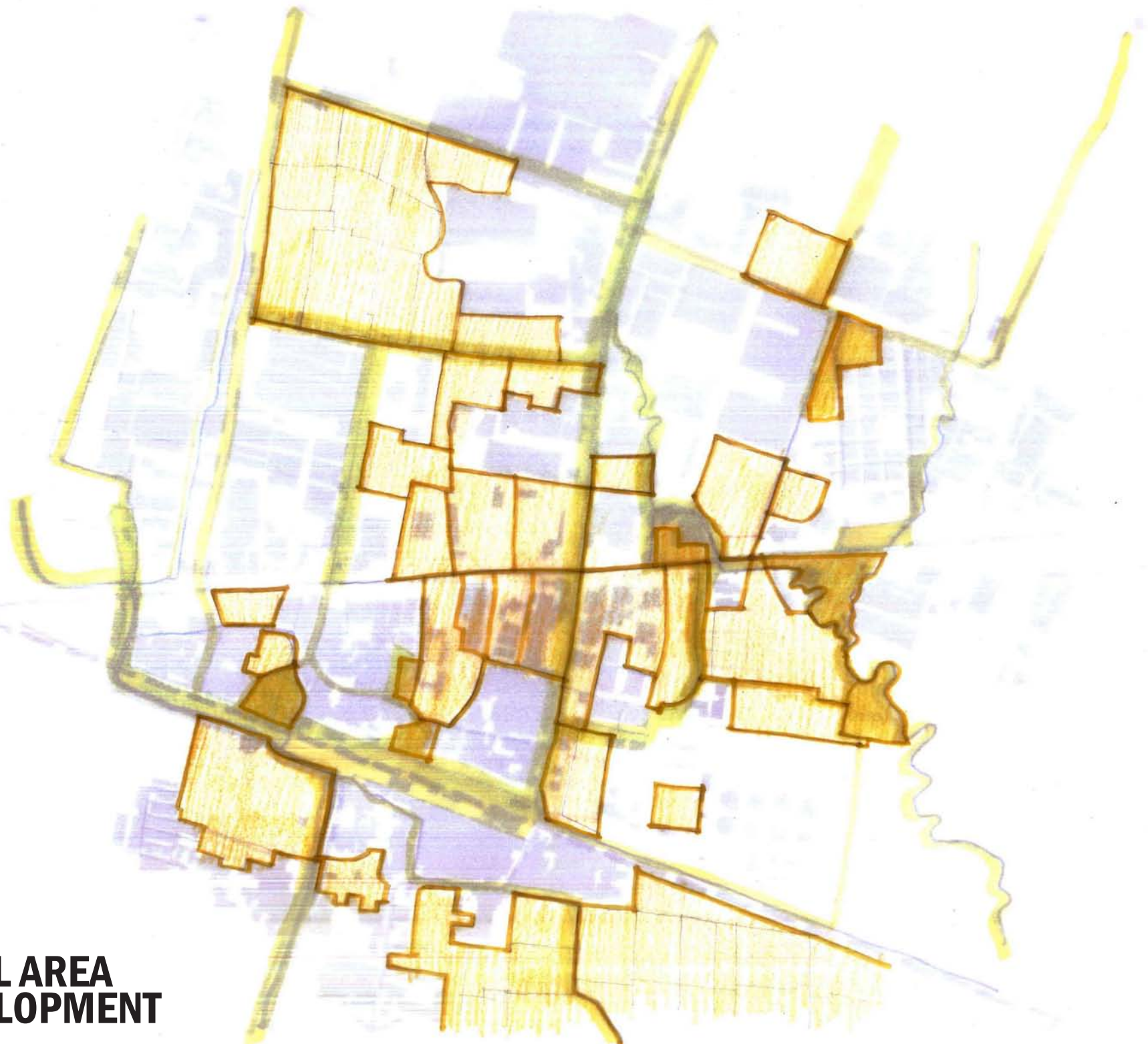


N

0 100 500 m

INDICATION OF  
LAND OWNERSHIP



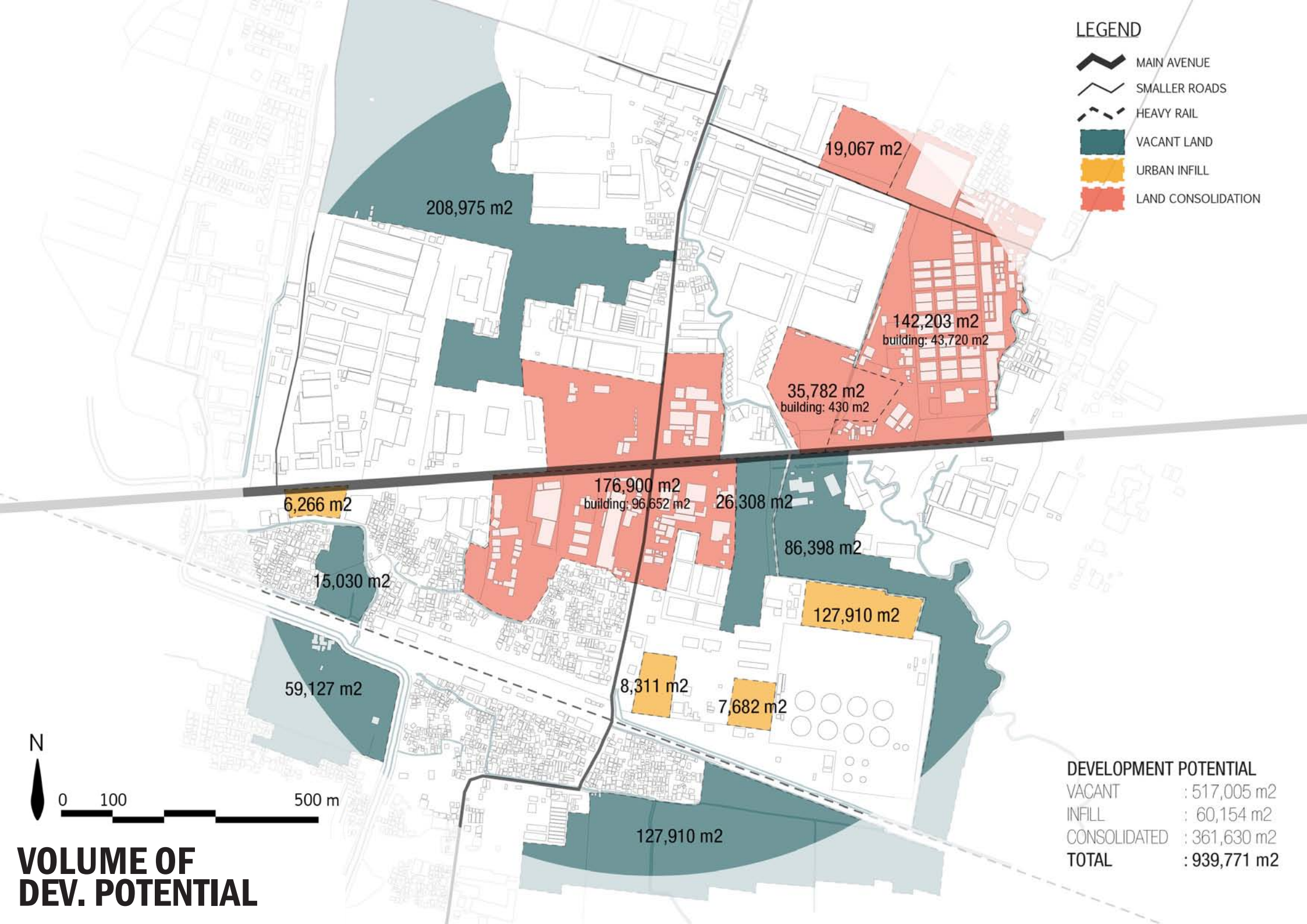


**POTENTIAL AREA  
FOR DEVELOPMENT**



# LEGEND

- MAIN AVENUE
- SMALLER ROADS
- HEAVY RAIL
- VACANT LAND
- URBAN INFILL
- LAND CONSOLIDATION

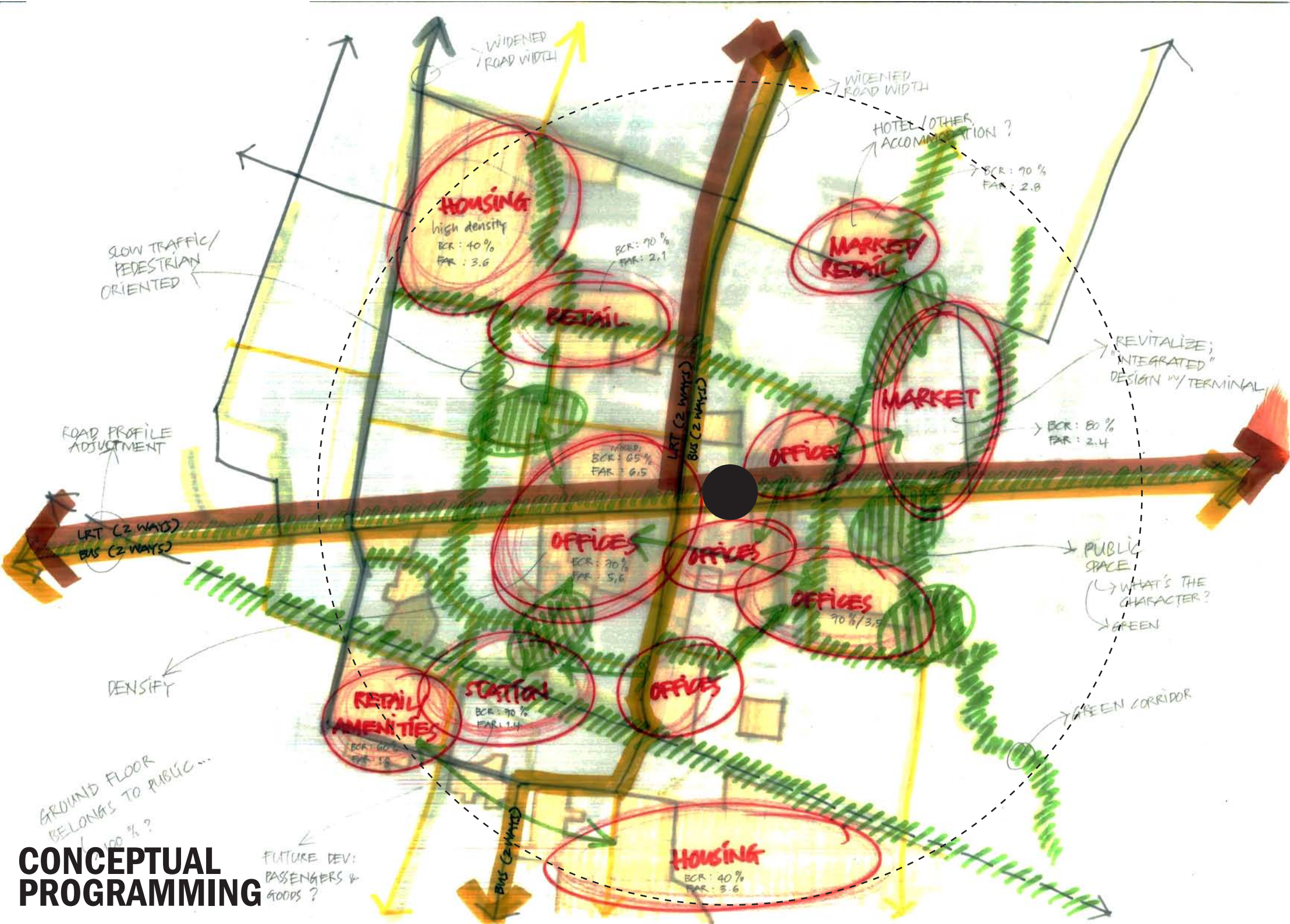


## DEVELOPMENT POTENTIAL

VACANT	: 517,005 m <sup>2</sup>
INFILL	: 60,154 m <sup>2</sup>
CONSOLIDATED	: 361,630 m <sup>2</sup>
<b>TOTAL</b>	<b>: 939,771 m<sup>2</sup></b>

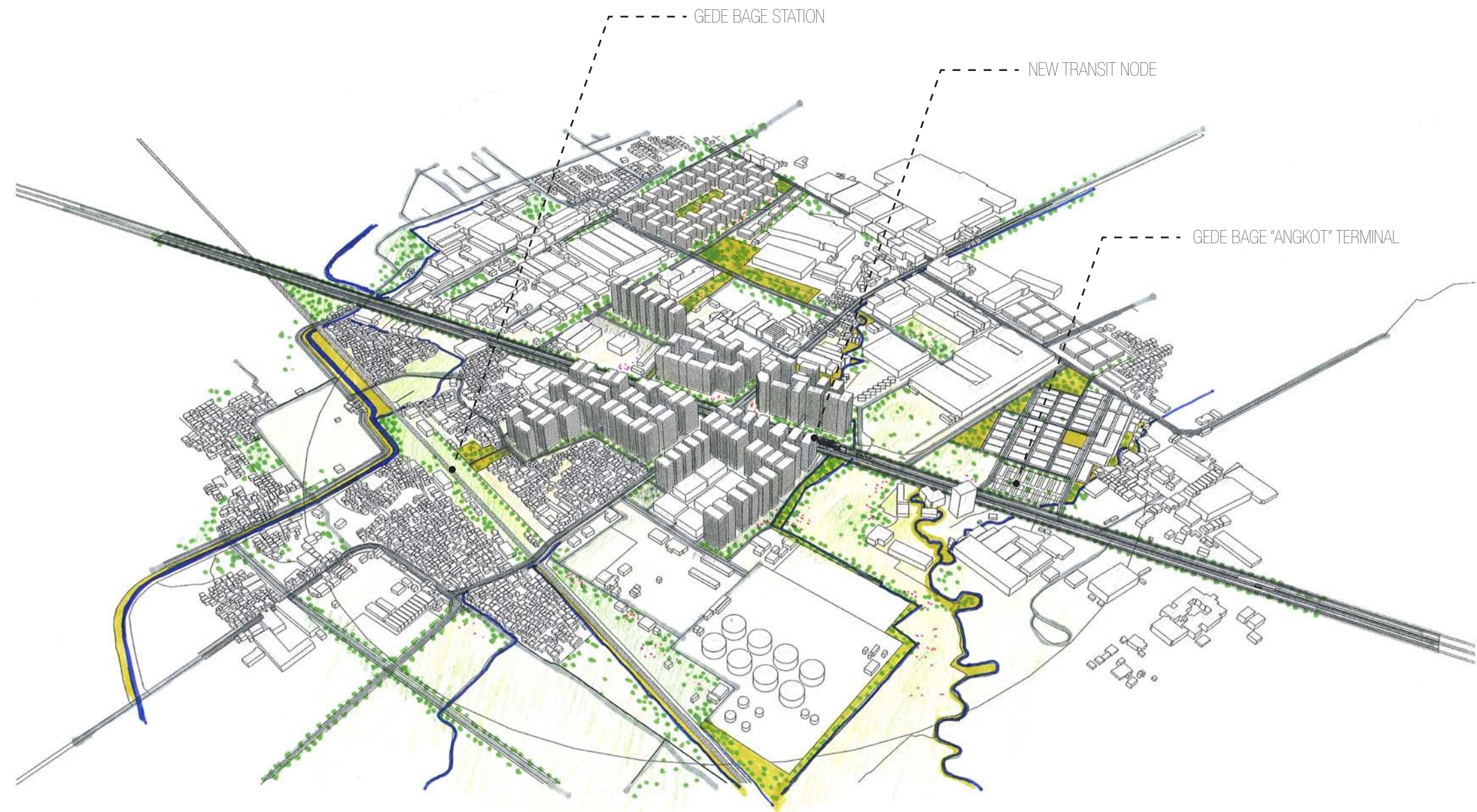
**VOLUME OF  
DEV. POTENTIAL**





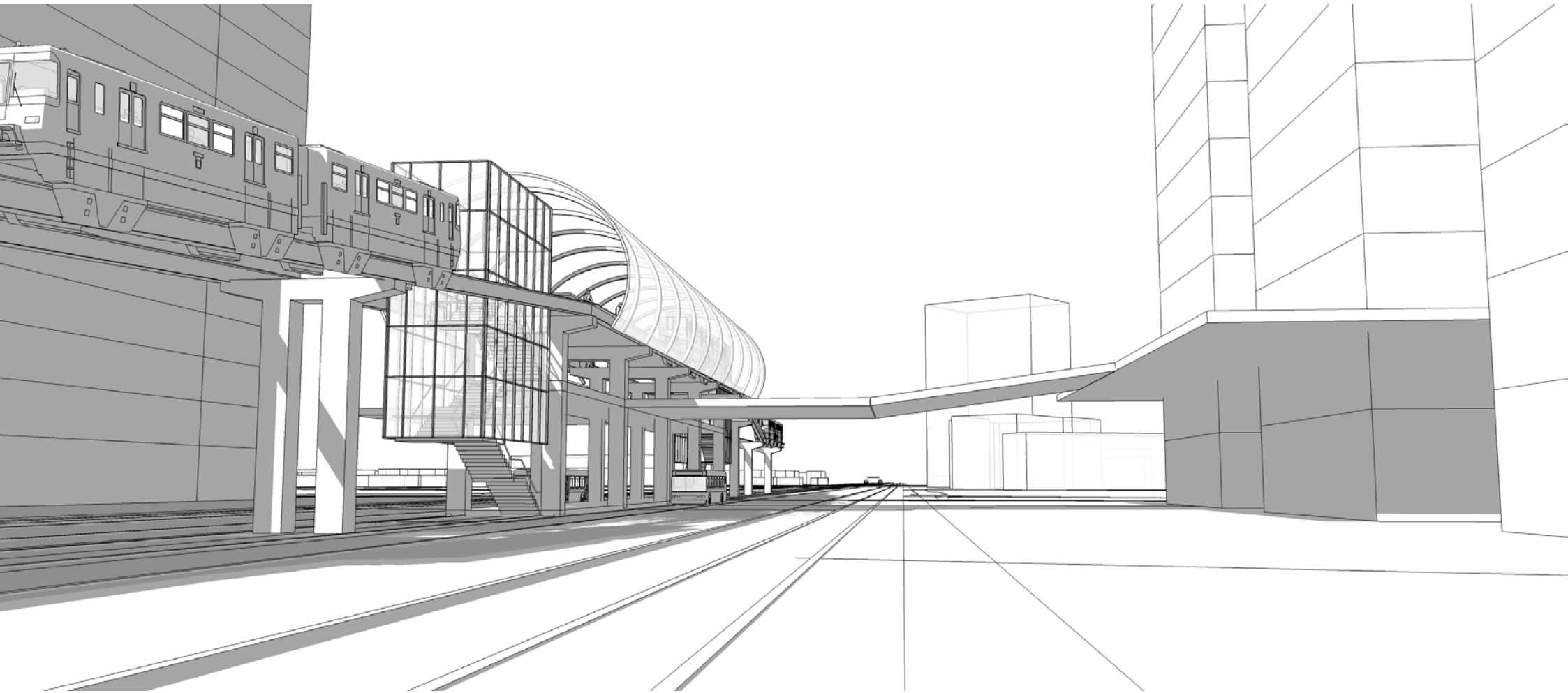
# CONCEPTUAL PROGRAMMING





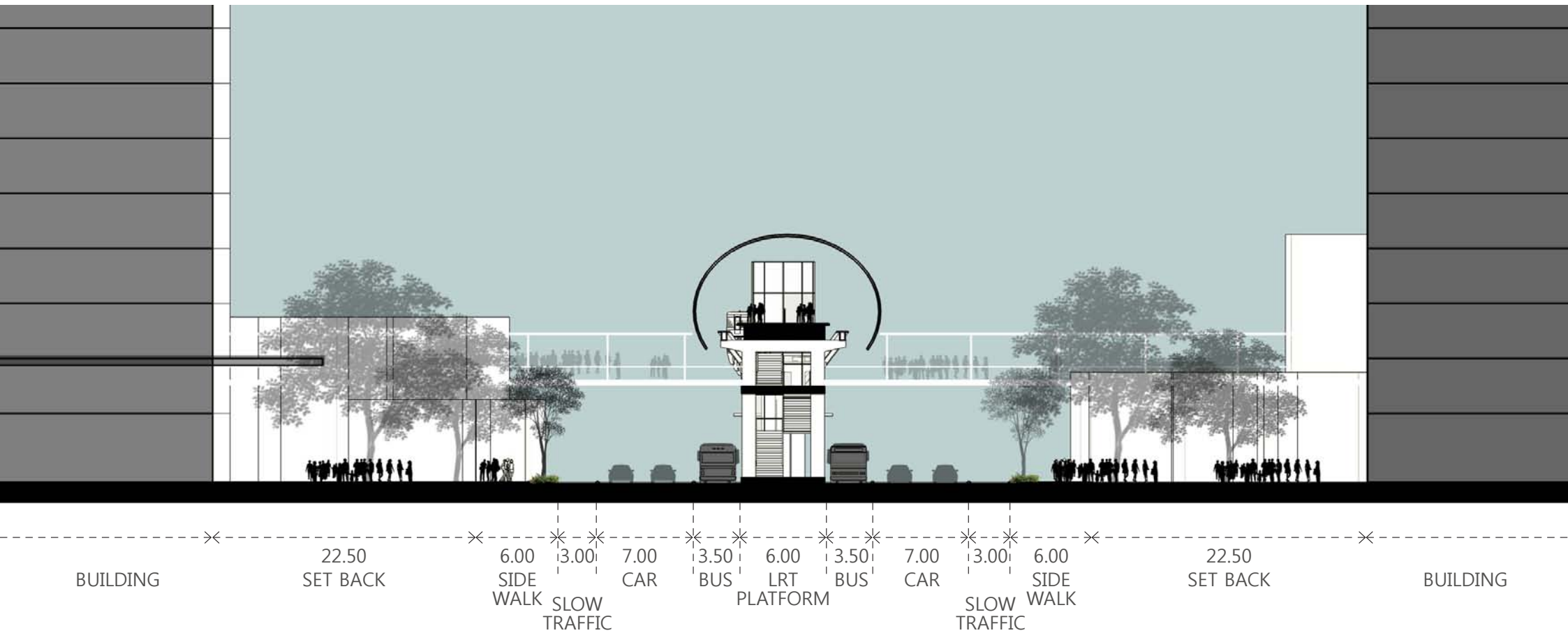
**ILLUSTRATION:  
AERIAL VIEW**





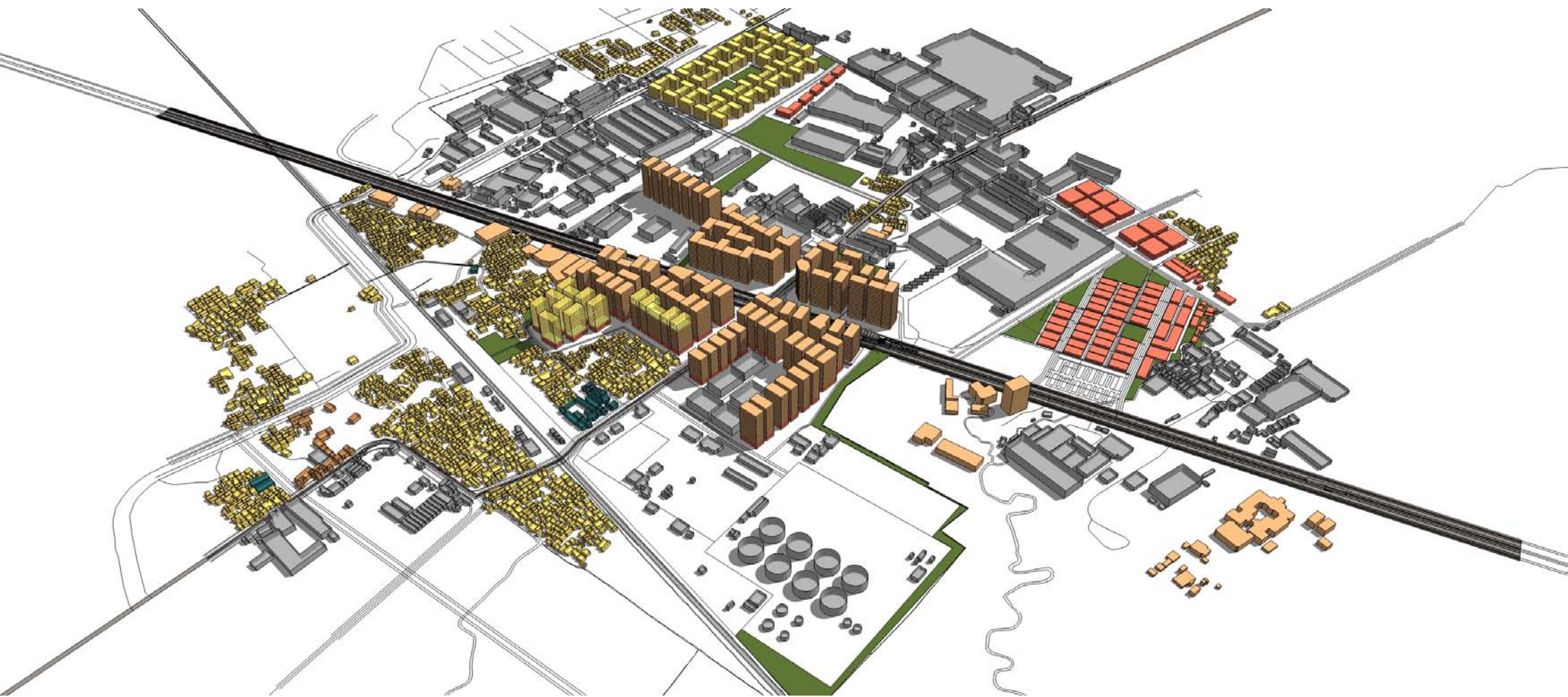
**ILLUSTRATION:  
TRANSIT NODE**





**ILLUSTRATION:  
ROAD SECTION**





#### OFFICE REDEVELOPMENT

GROUND FLOOR : 23,442 m<sup>2</sup>  
TOTAL : 401,220 m<sup>2</sup>

#### MIXED-USE REDEVELOPMENT

GROUND FLOOR : 39,320 m<sup>2</sup>  
COMMERCIAL : 79,702 m<sup>2</sup>  
OFFICES : 483,296 m<sup>2</sup>  
HOUSING : 77,544 m<sup>2</sup>  
TOTAL : 640,542 m<sup>2</sup>

#### TRADITIONAL MARKET REDEVELOPMENT

BUILDING : 20,000 m<sup>2</sup>  
ANGKOT TERMINAL : 27,556 m<sup>2</sup>

#### OPEN SPACE REDEFINITION

TOTAL : 99,108 m<sup>2</sup>

#### MID-RISE HOUSING DEVELOPMENT

6 STOREYS HOUSING  
GROUND FLOOR : 38,880 m<sup>2</sup>  
TOTAL : 233,280 m<sup>2</sup>  
(6,480 UNITS)

#### 3 STOREYS RETAIL

GROUND FLOOR : 3,888 m<sup>2</sup>  
TOTAL : 11,664 m<sup>2</sup>  
(36 UNITS)

# DEV. VOLUME



