



'Better half' of Bangalore
WOMEN . WORK . WAYS .

P4 Presentation 20th May, 2016
Nikita Baliga 4424573

Contents

Problem
Methods
Research
Diagnosis & Design
Reflection

Problem

Relation between gender & space



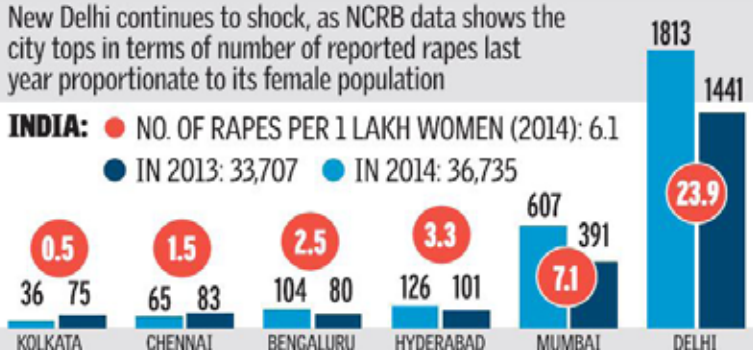
16th December 2012



2nd May 2016

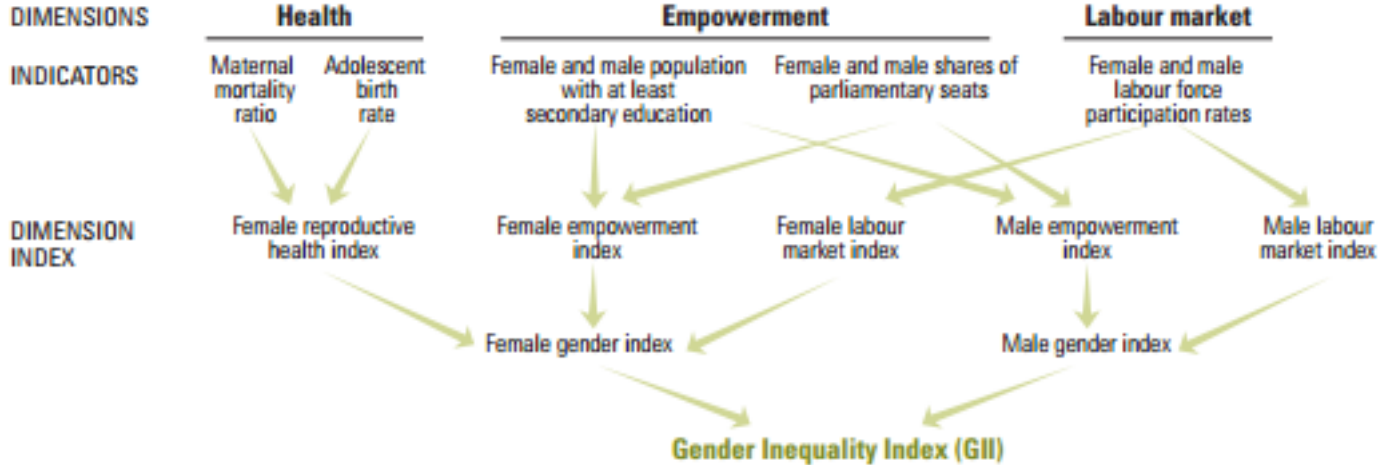
Gender equality and space

What is the relationship?



Gender inequality

Female workforce participation rate



Indian ranks 127th out of 142 countries

Gender roles

Binary way of thinking



Public

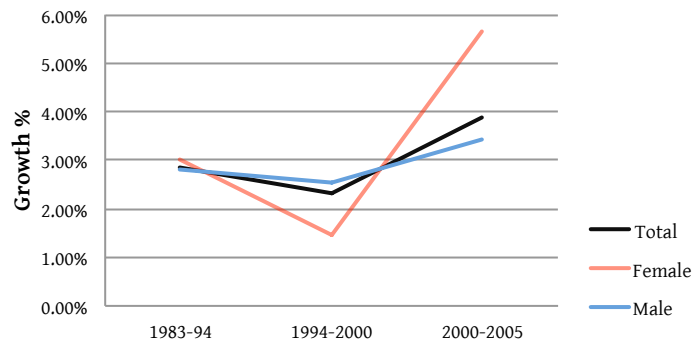
Private

Feminisation of workforce

Impact of globalisation



Growth% of workforce in Urban India



Source: Calculated from unit level NSS data, various rounds and Census of India, Registrar General of India.

Redefining gender roles

Work-life balance



Public : Private

Problem statement

As a consequence of **globalisation**, the role of women in the industry has seen a **substantial improvement**, resulting in the rising need for them to be in the **public sphere**, in contrast to their dominant presence in the domestic sphere. However, the approach to planning and designing the built environment still remains **gender neutral** leading to an **unequal access** to economic opportunities.

Case study

Bangalore'd!



Bangalore , India

IT Capital of India

Large impact of globalisation

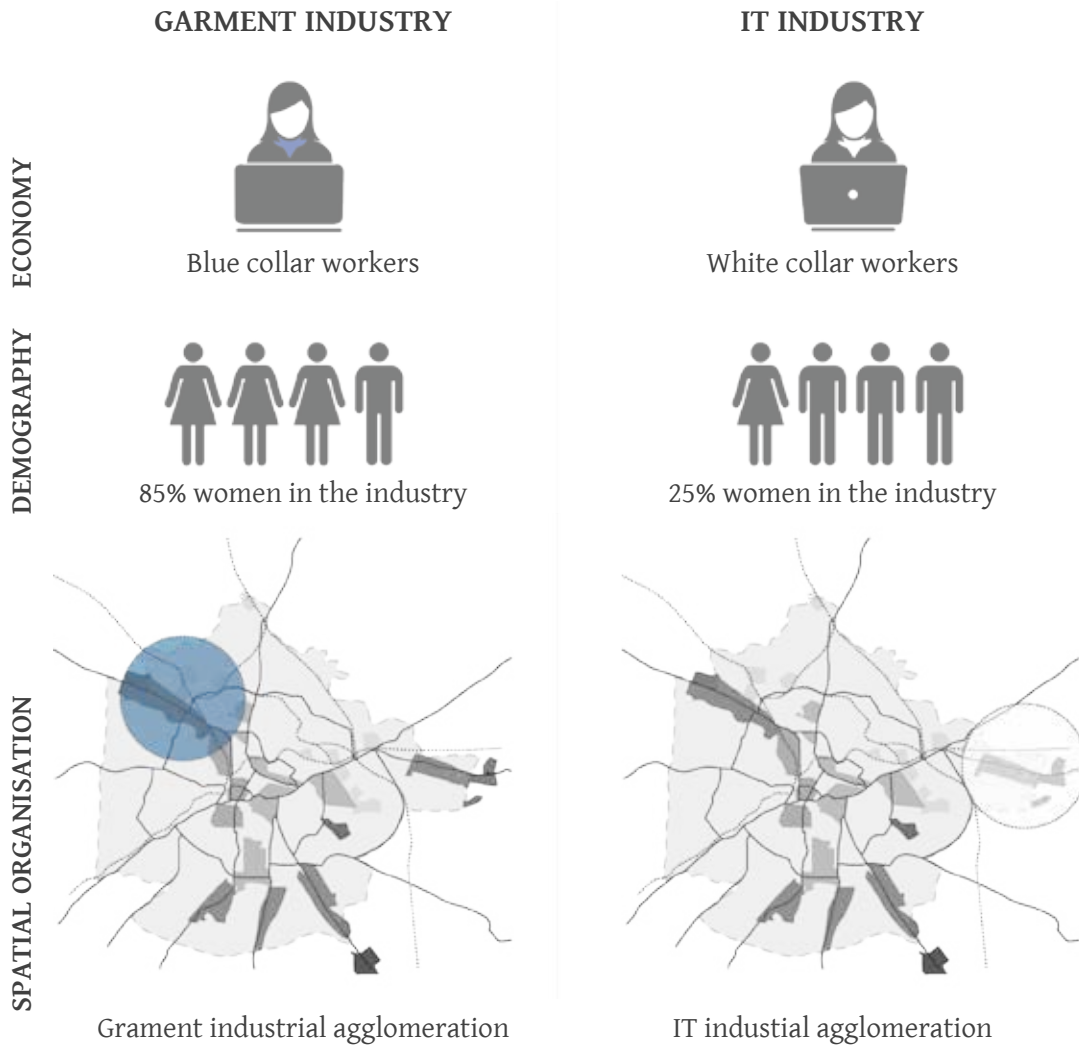
Second fastest growing city

Largest female workforce population

Familiarity

Industry choice

Inclusive approach



Research question

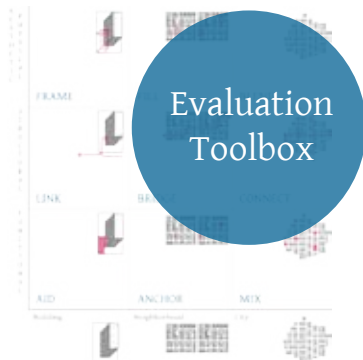
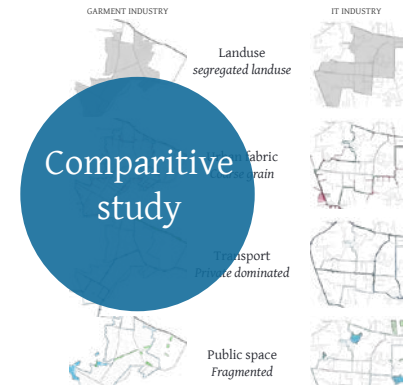
How can **improving spatial conditions** (*accessibility & quality*) **for women** in Bangalore considering their specific spatial needs increase their **economic opportunity** ?

Research & Methods

Methodology & conclusions

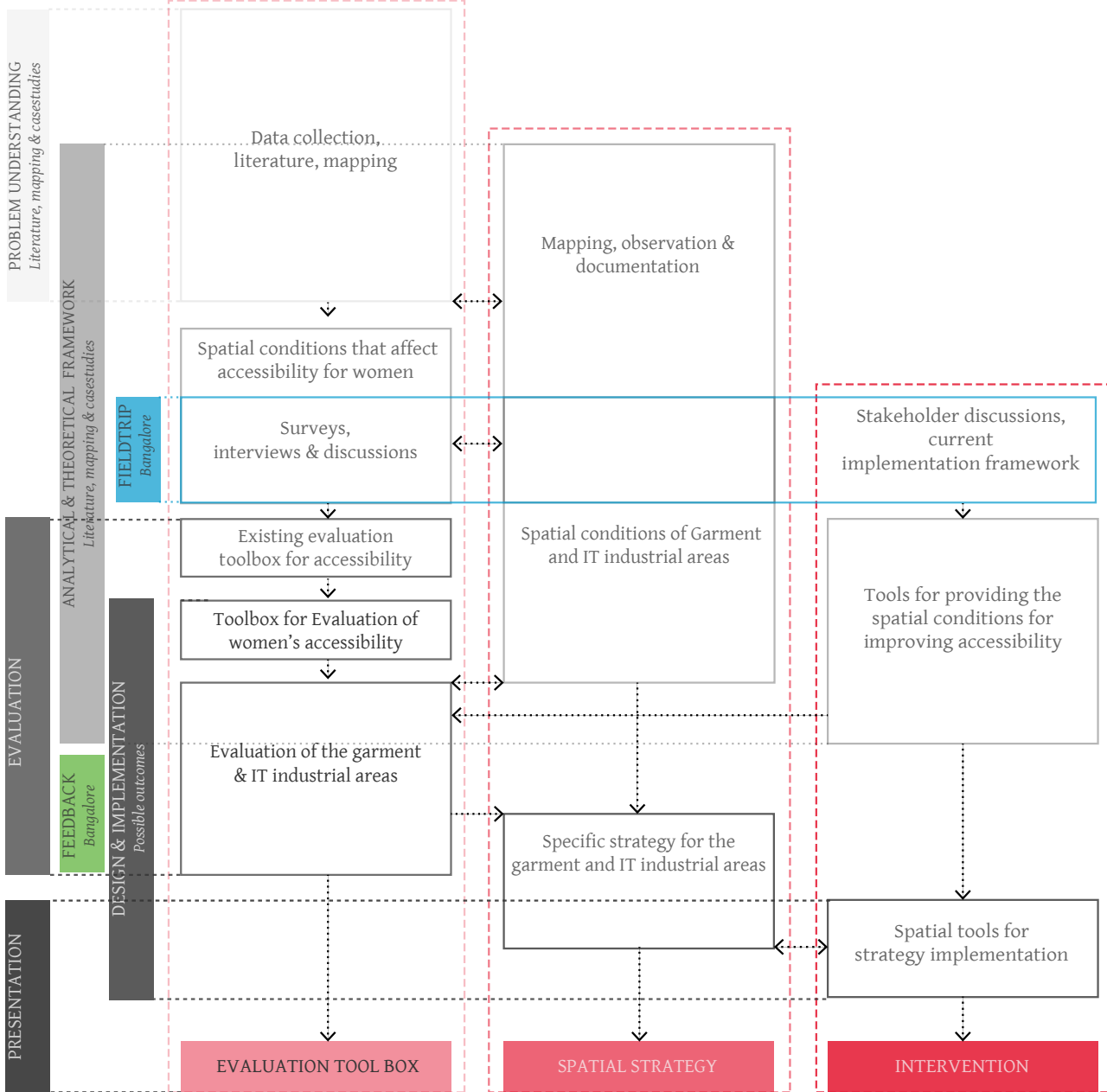
Methodology

Research tools



Methodology

Designing the process



Case studies

Projects at varying scales

Urban development (*Flugfeld Aspern, Vienna*)



Building scale (*Frauen-Werk-Stadt I, Vienna*)



Public space (*Safetie pin audit, India*)

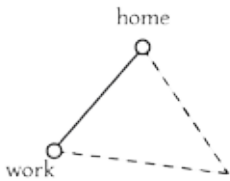
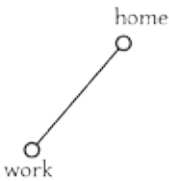
AUDIT		
?		X
Light (Night) Enough	Openness Completely Open	Visibility More Eyes
People Some Crowd	Security Minimal	Walk Path Poor
Public Transport None	Gender Usage None	Feeling None

Comparative study

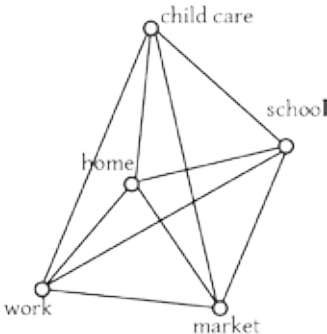
Similarities



SAFETY



TRIP CHAINING



Comparitive study

Differences



MODE OF COMMUTE



DISTANCE OF COMMUTE

Blue collar.



White collar.



0 2.5km 5.0km 7.5km 10.0km

Evaluation criteria

Spatial components through scale

GENDER & SPACE



FUNCTIONAL
distribution in SPACE



MOBILITY
through SPACE



STRUCTURAL
composition of SPACE



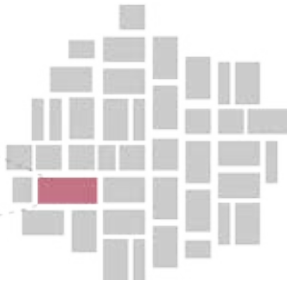
PHYSICAL/AESTHETIC
quality of SPACE



BUILDING



NEIGHBORHOOD



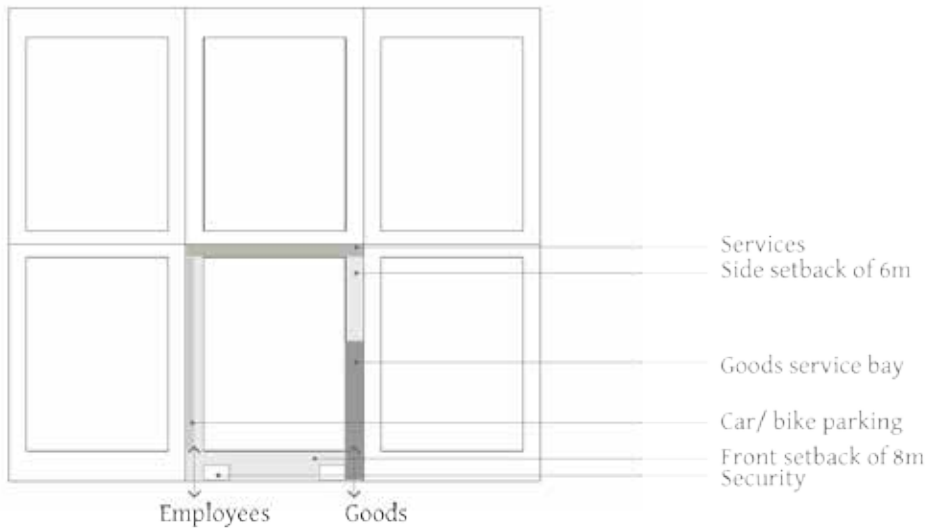
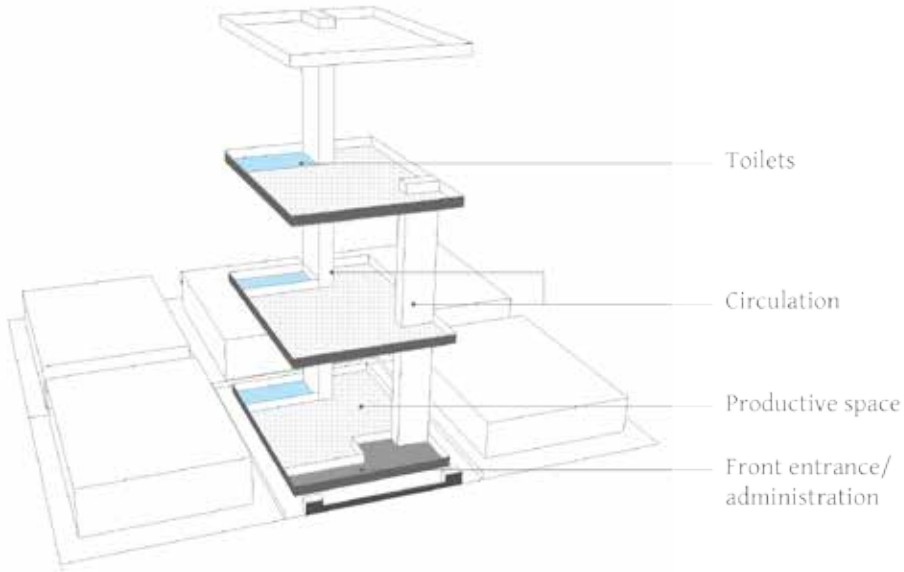
CITY

Diagnosis & Design

Garment industry

Narrative

From the industry



Spatial challenge

Gendering in public space at urban scale

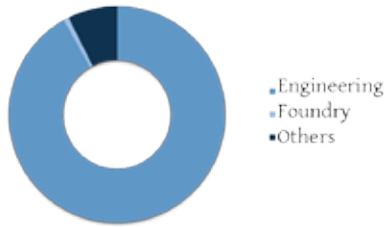


Spatial diagnosis

Industrial development



Post-independence



Globalisation



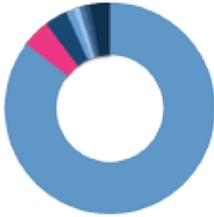
Spatial diagnosis

Gendering in public space



Current

Post-globalisation



- Engineering
- Textile-garment
- Engineering: Electro
- Pharmaceutical
- Foundry
- Others

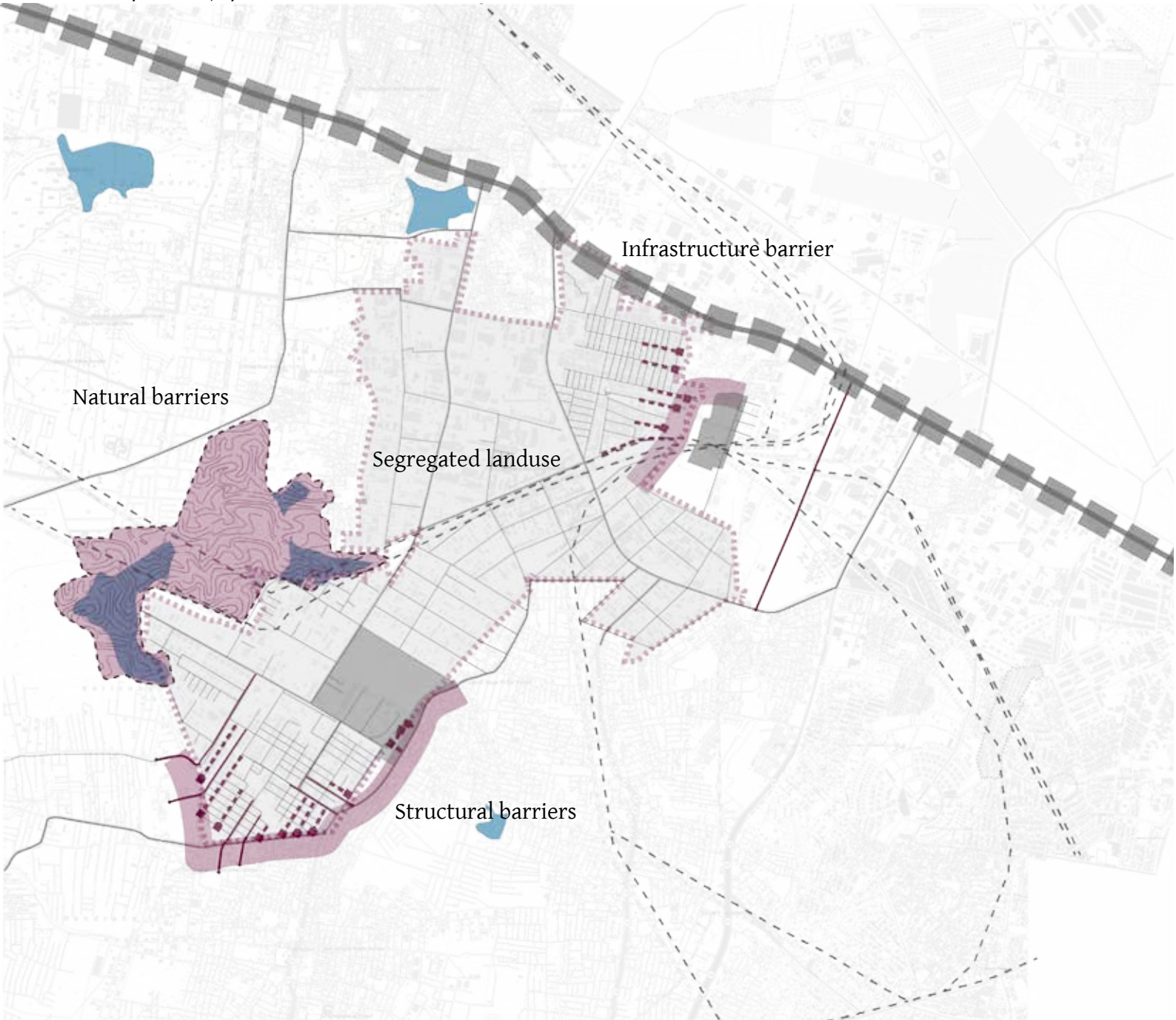


300,000 women workers



Spatial barriers

Social consequences of space



Natural barriers

Infrastructure barrier

Segregated landuse

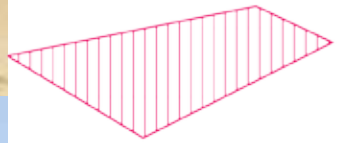
Structural barriers

Demography disparity

Gendering in public space



90%



10%

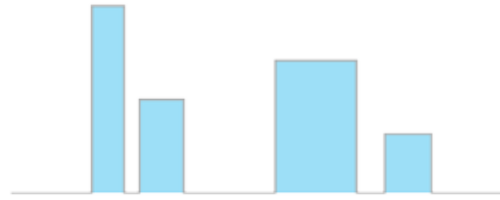
Sub-research question

What are the ideal spatial conditions that would create inclusive spaces?

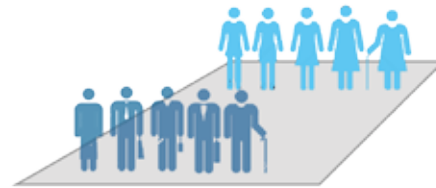
Spatial conditions

Ideal spatial objectives needed for the garment industry

SPATIAL QUALITY

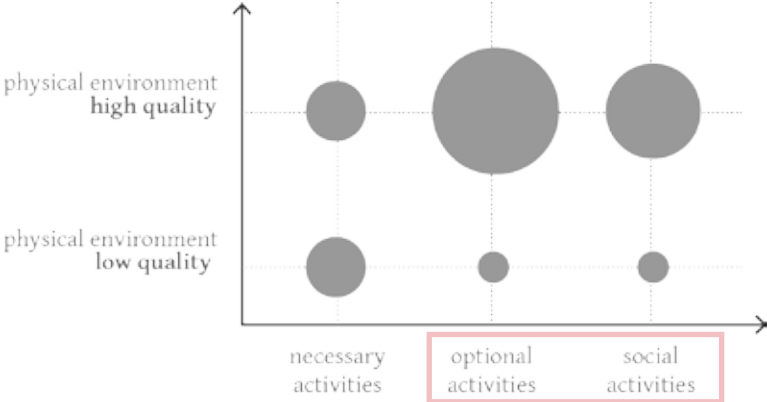


SPATIAL EQUITY



Spatial conditions

Spatial quality of activities



Necessary activities



Optional activities



Social activities

Spatial conditions

Ideal conditions of optional & social activities

protection



FEELING SAFE

Against traffic or accidents

FEELING SECURE

Eyes on street

Overlapping functions day and night

Lively public realm

PLEASANT SENSORY EXPERIENCES

Climatic protection

delight



HUMAN SCALE

Varied scale

CLIMATE

Protective walkway

SENSORY EXPERIENCE

Landscaped edge

comfort



SIT

WALK

SEE

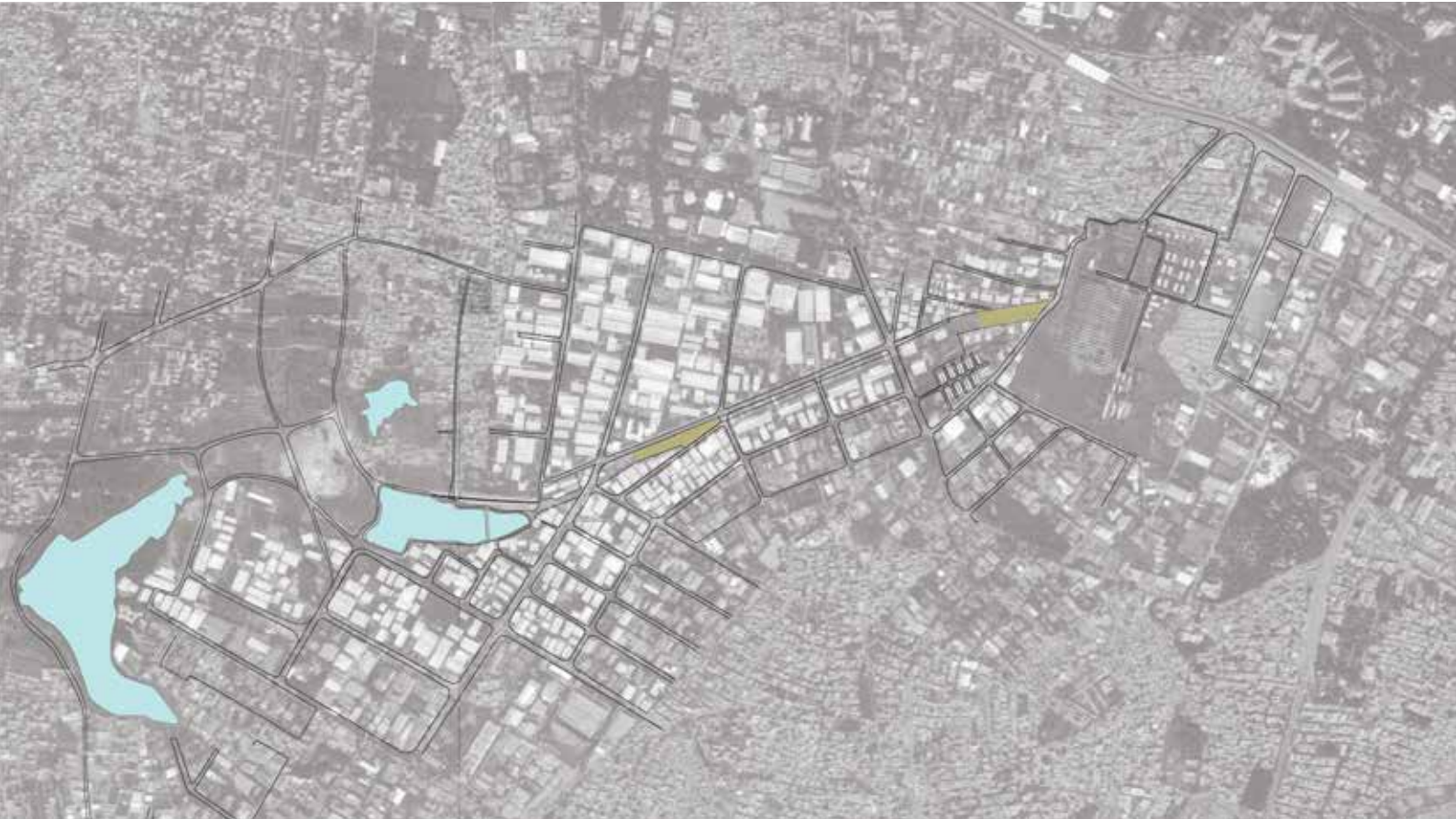
TALK or LISTEN

STAY or STAND

PLAY or EXERCISE

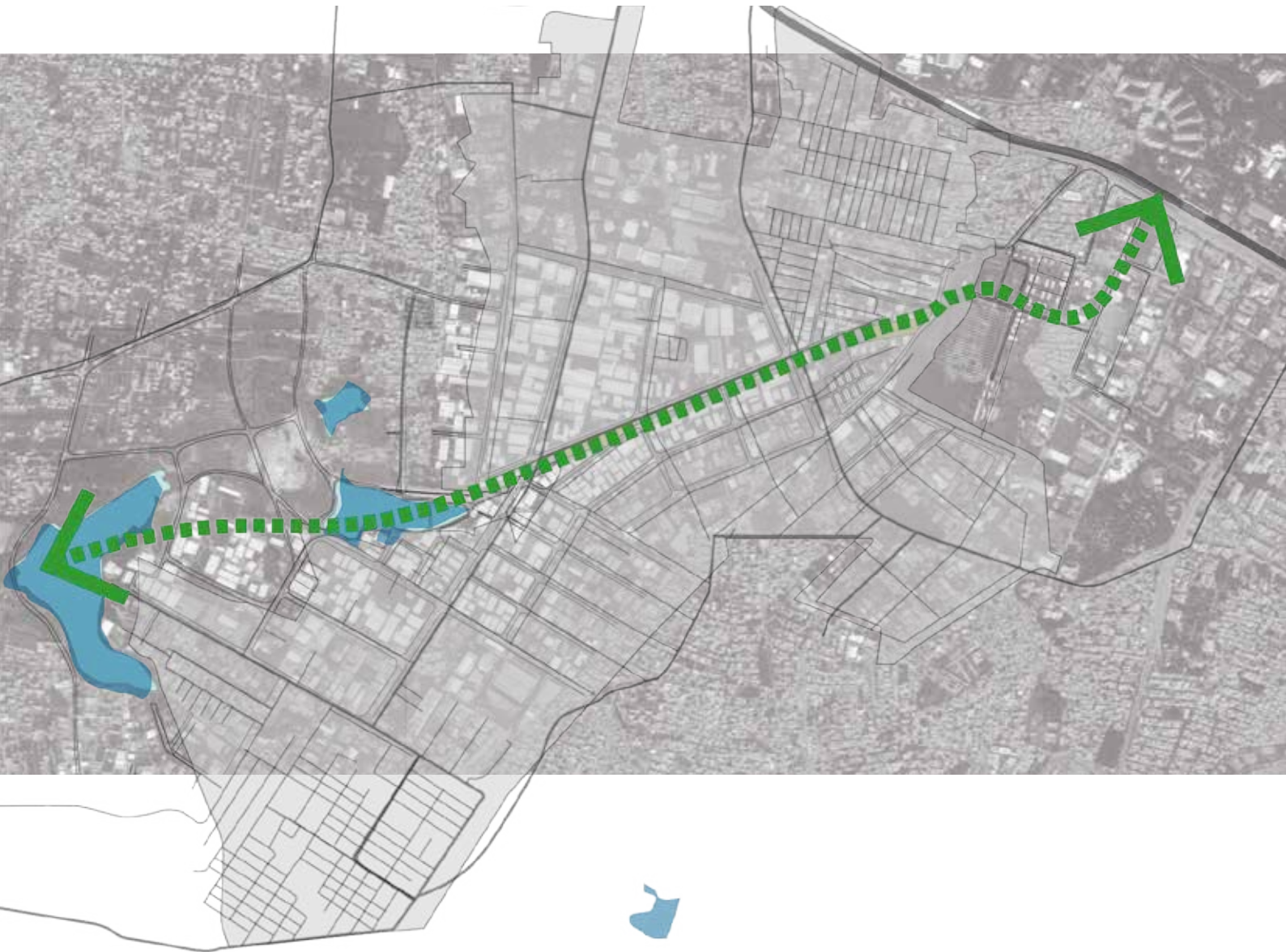
Strategy

Existing conditions



Strategy

Inclusive spine



Strategy

Spatial strategies to create an inclusive spine

SPATIAL STRATEGIES

AESTHETIC

To connect the existing open spaces & develop them to be inclusive for all.

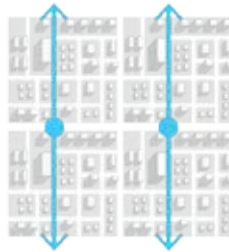
INCLUSION : Increases diversity & familiarity



MOBILITY

To introduce public transport routes intersecting the spine.

CONVENIENCE : Increase accessibility, reduces travel time and diversity.



Introduction of an inclusive spine through spatial interventions in order to promote an inclusive & safe work environment.



STRUCTURAL

To introduce alternate pedestrian routes to reduce travel distance & reduce the urban block size.

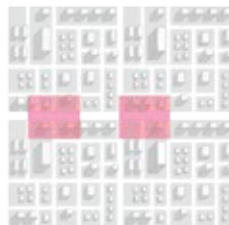
CONVENIENCE : Reduce travel time and distance.



FUNCTIONAL

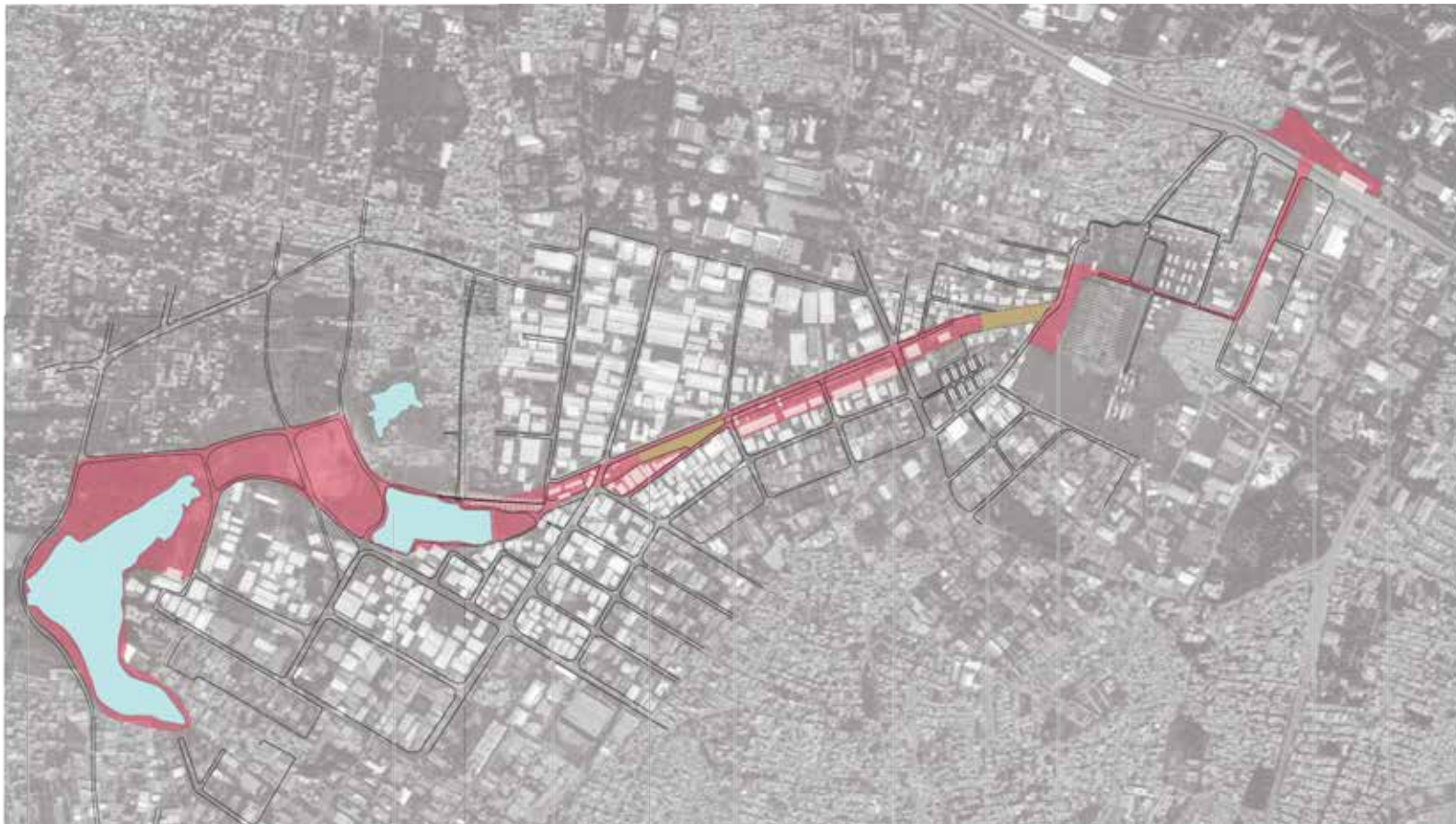
To densify the nodes of transit change and introduce new land uses.

CONVENIENCE & INCLUSION : Increase the uses & diversity.



Strategy

Program for the inclusive spine



Recreational landscape
Lake, waterfront, walkways, seating,
art & sculpture

Recreational landscape
Landscaped park, walkways, seating,
art & sculpture

Recreational landscape
Landscaped park, children's play area
walkways, seating, art & sculpture

Natural landscape
Lakes, wetlands, agricultural land

Node 1
Mixed use buildings,
plazas, walkways, transit
hub, road crossing

Link
Walkways, seating, art
& sculpture

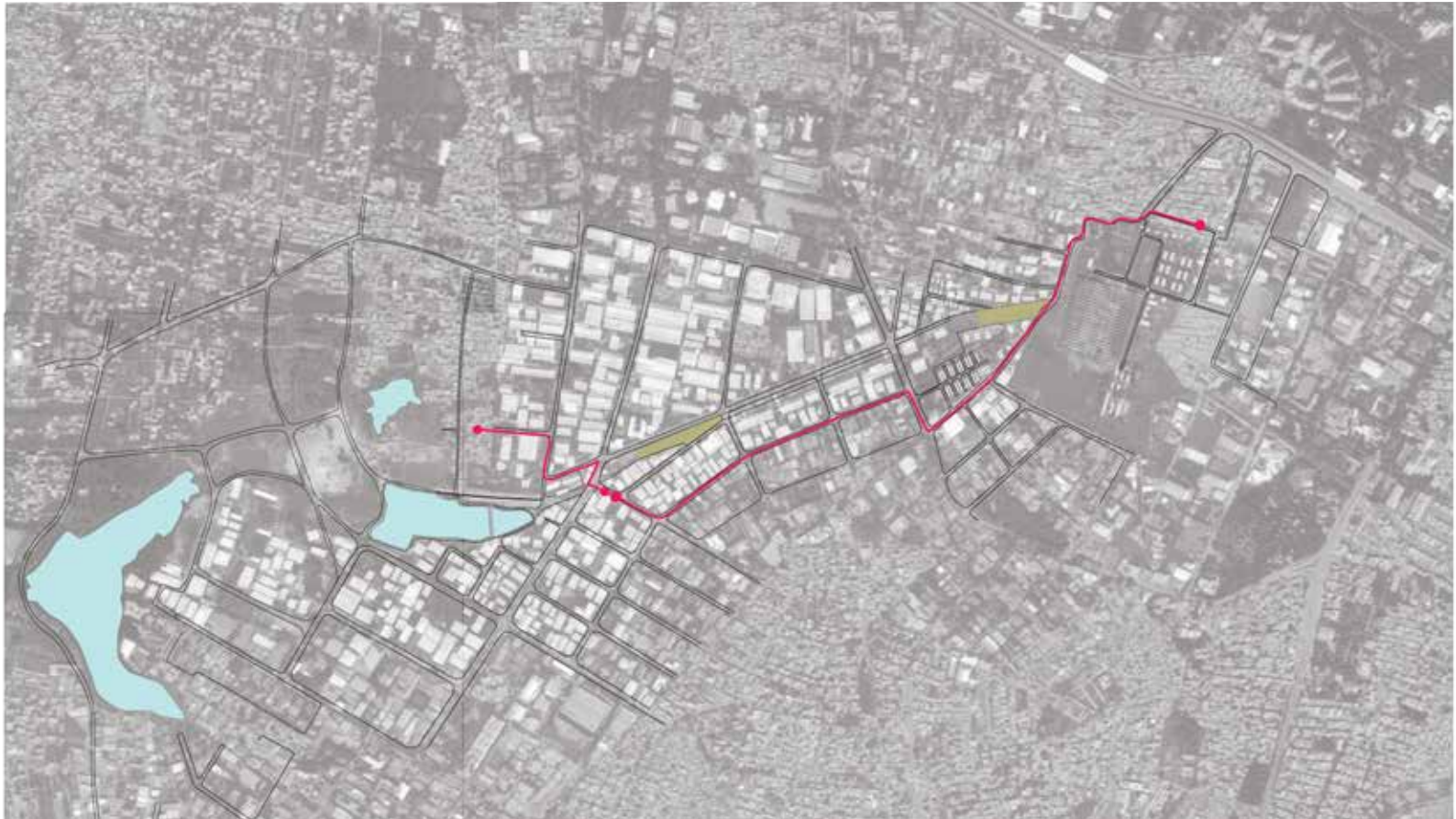
Node 2
Mixed use buildings,
plazas, walkways, transit
hub, road crossing

Link
Walkways, seating, community
gardens, art & sculpture

Node 3
Plazas, walkways,
transit hub, road
crossing

Strategy

Girisha's route to work



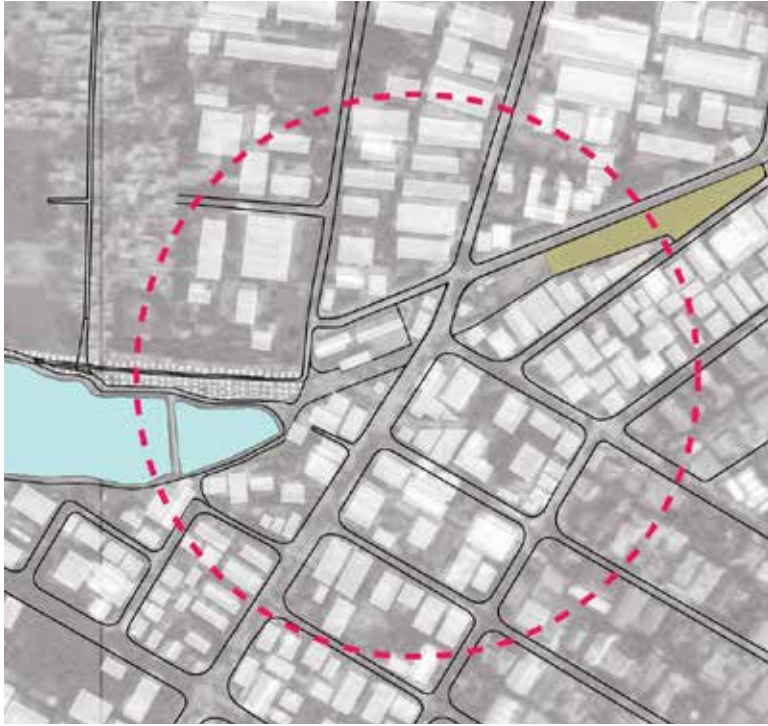
Design

Plan of the inclusive spine



Design

Node 1: Before



'Better-half' of Bangalore

WOMEN . WORK . WAYS

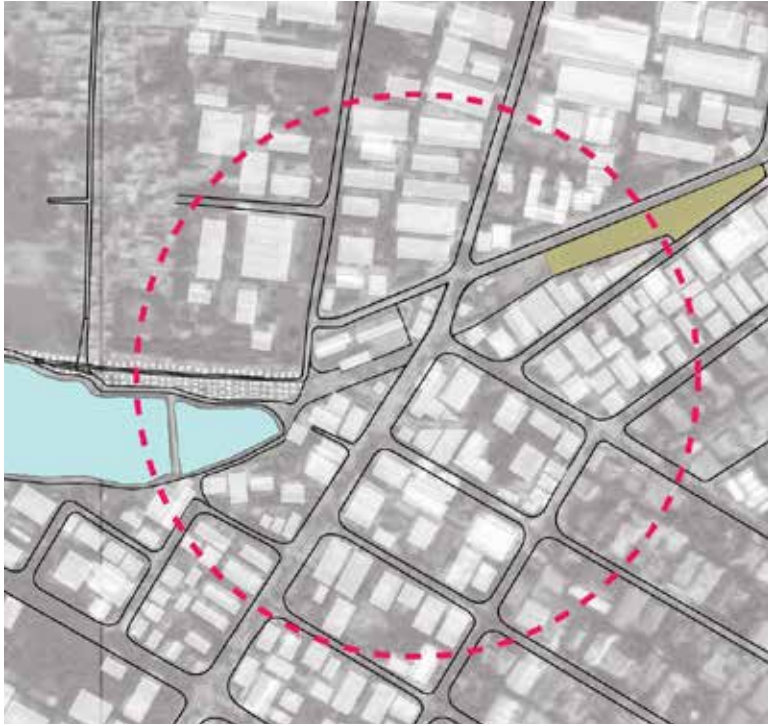
Design

Node 1 : After



Design

Node 1: Before



'Better-half' of Bangalore

WOMEN . WORK . WAYS

Design

Node 1 : After



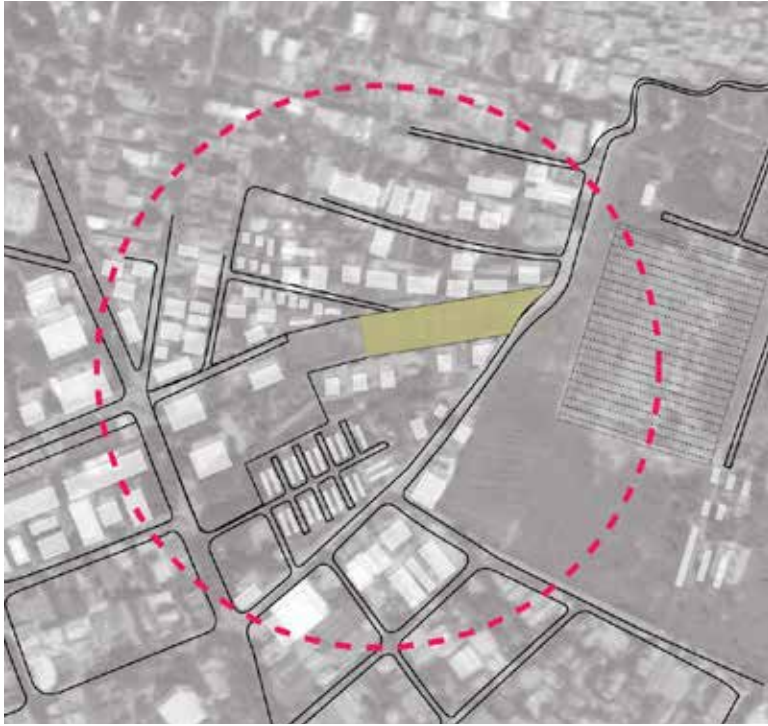
Design

Plan of the inclusive spine



Design

Node 2: Before



'Better-half' of Bangalore

WOMEN . WORK . WAYS

Design

Node 2: After



Design

Node 2: Before



'Better-half' of Bangalore

WOMEN . WORK . WAYS

Design

Node 2: After



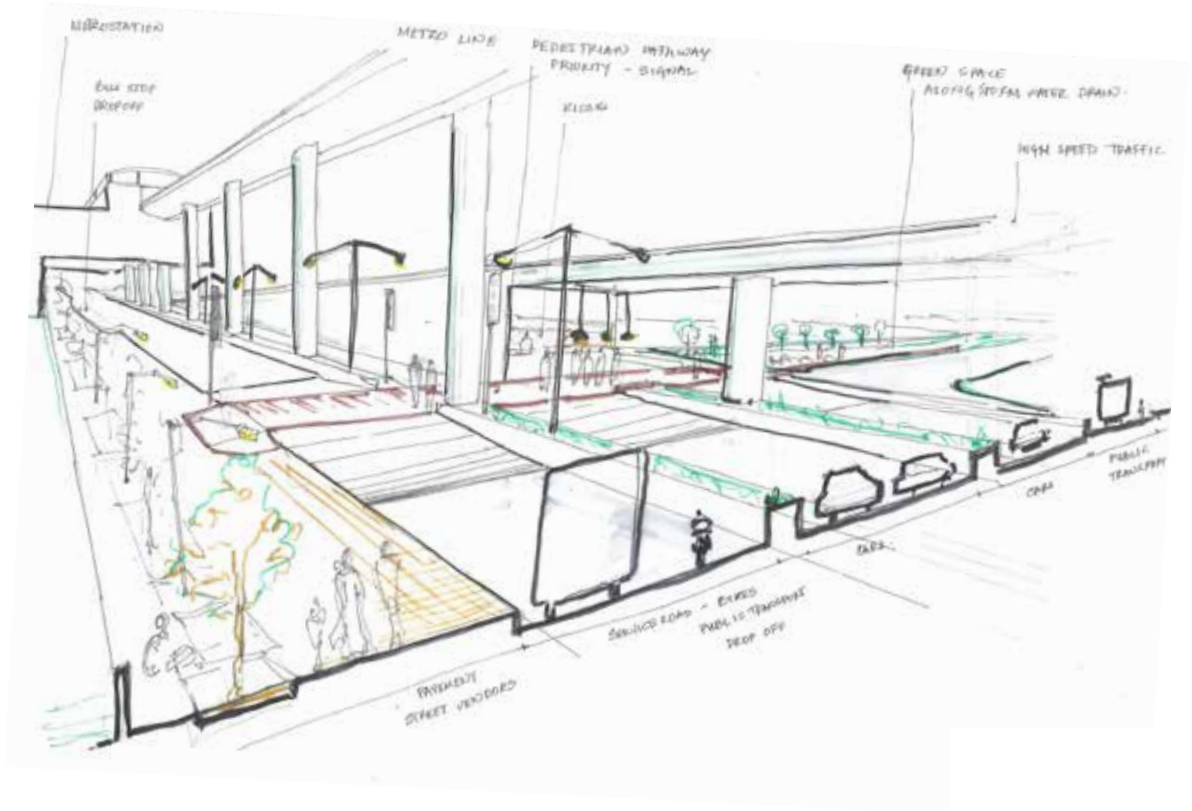
Design

Impact at the city scale



Design

Node 3



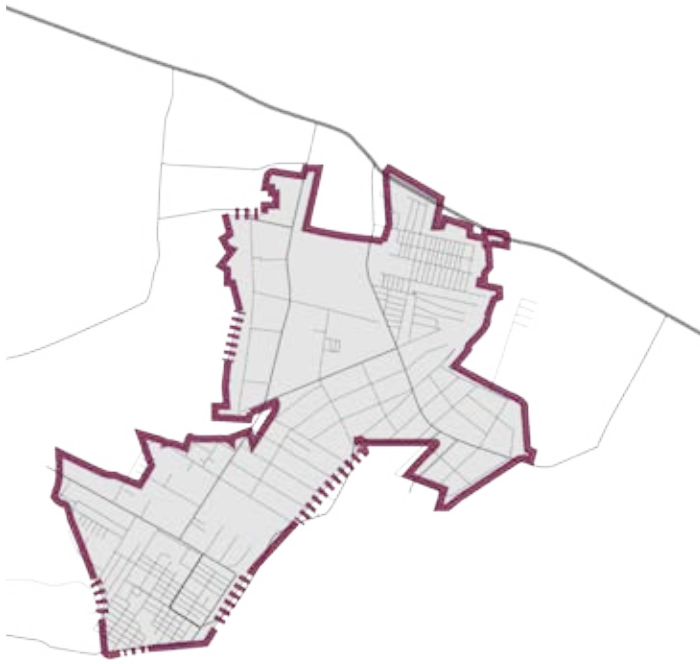
Design

Impact of spine on the neighborhood



Design

To achieve permeability of the neighborhood



Before



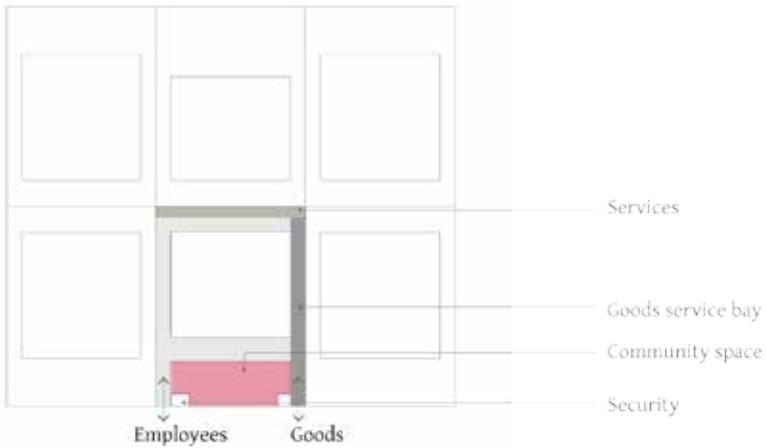
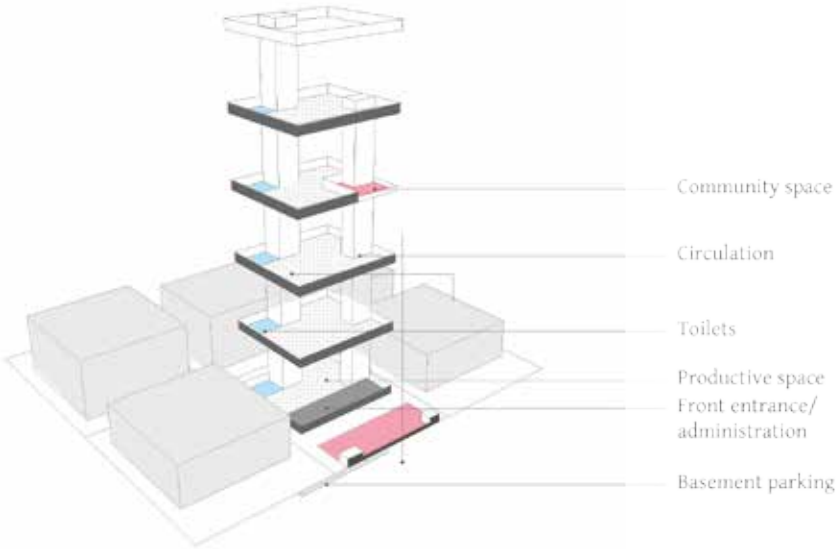
After

Diagnosis & Design

IT industry

Narrative

Itisha's route to work



Spatial challenge

15 minute to work



Spatial diagnosis

Industrial development



Post-independence



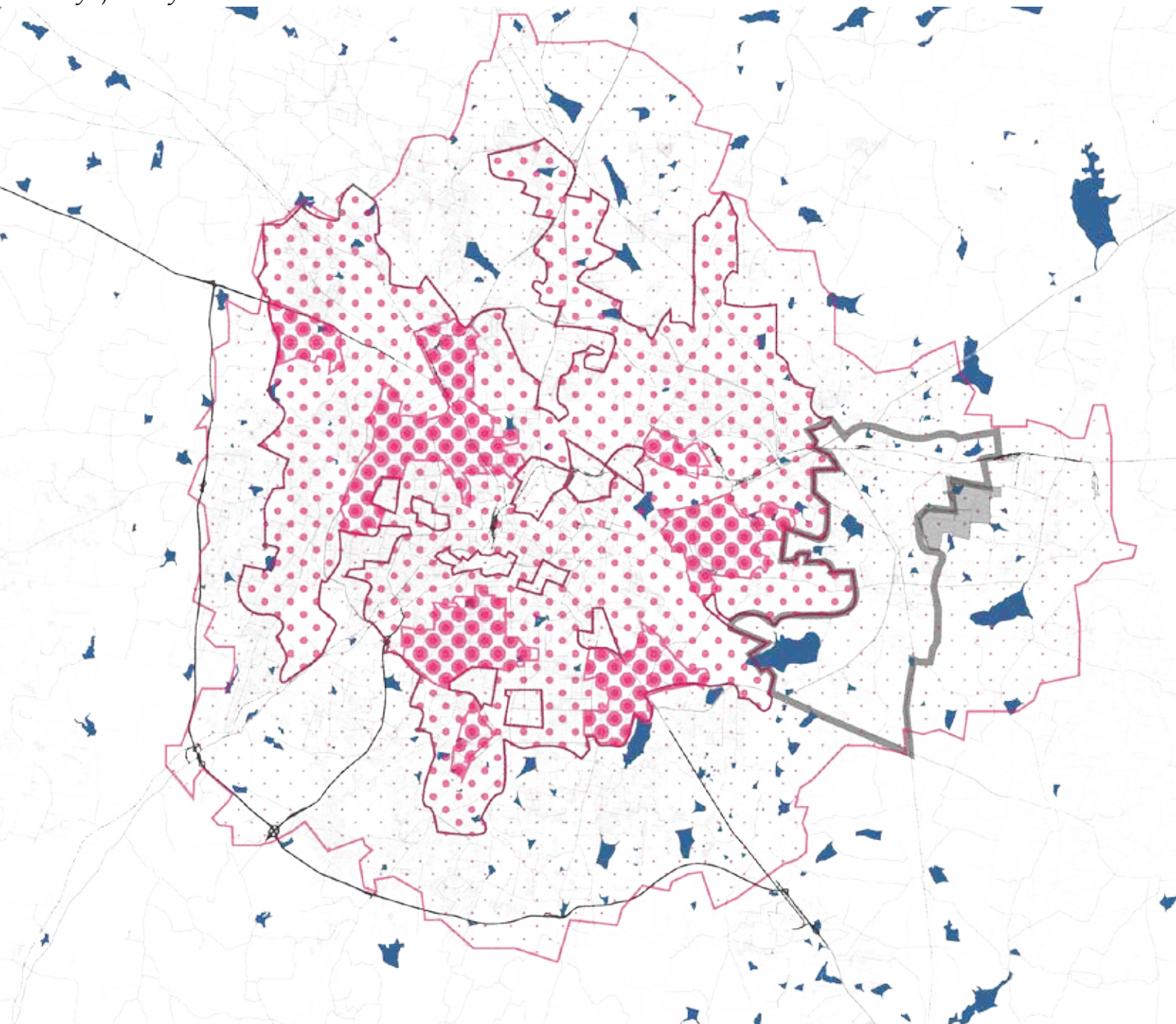
Globalisation

Post- Globalisation



Spatial diagnosis

Density of the city

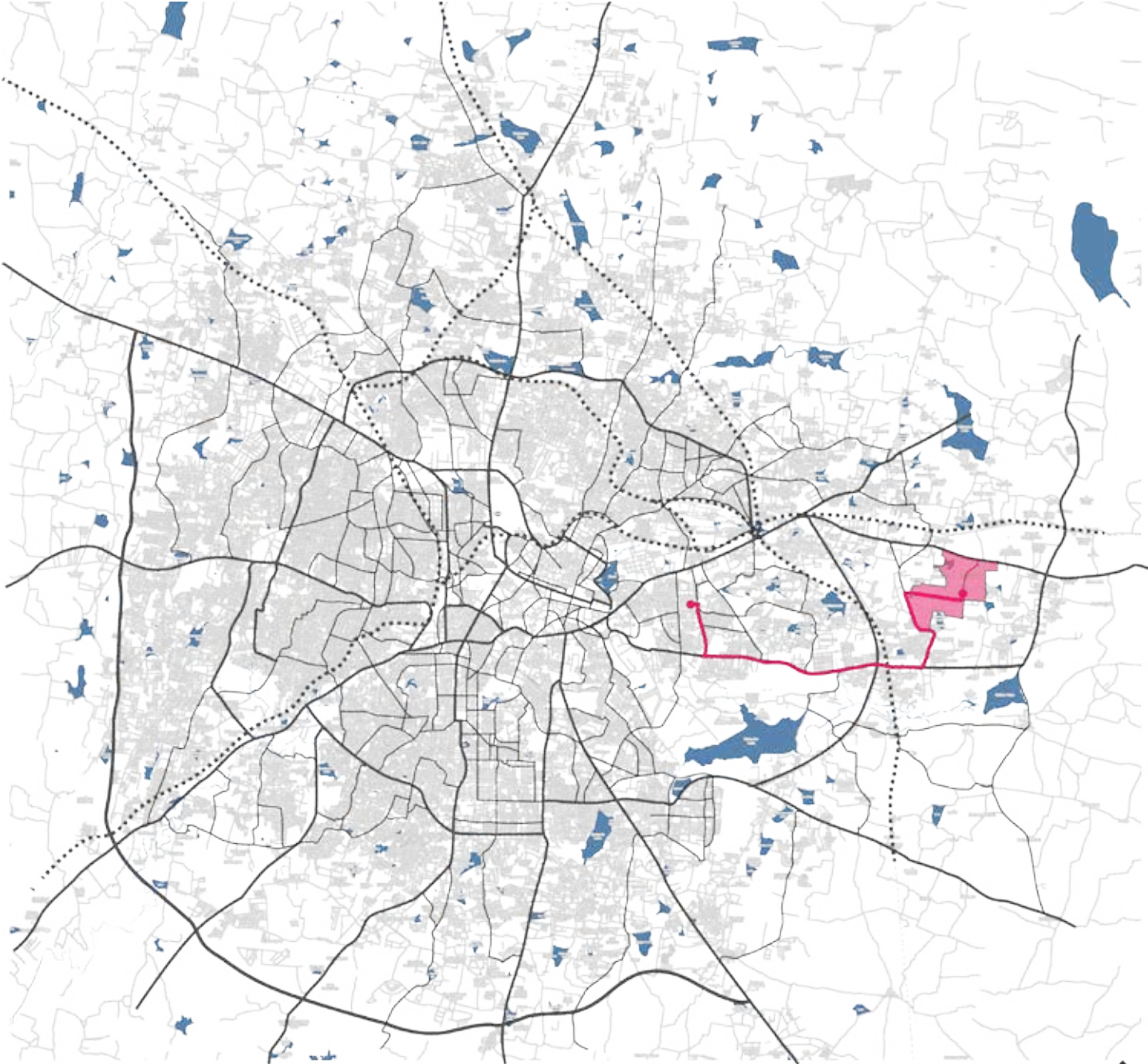


'Better-half' of Bangalore

WOMEN . WORK . WAYS

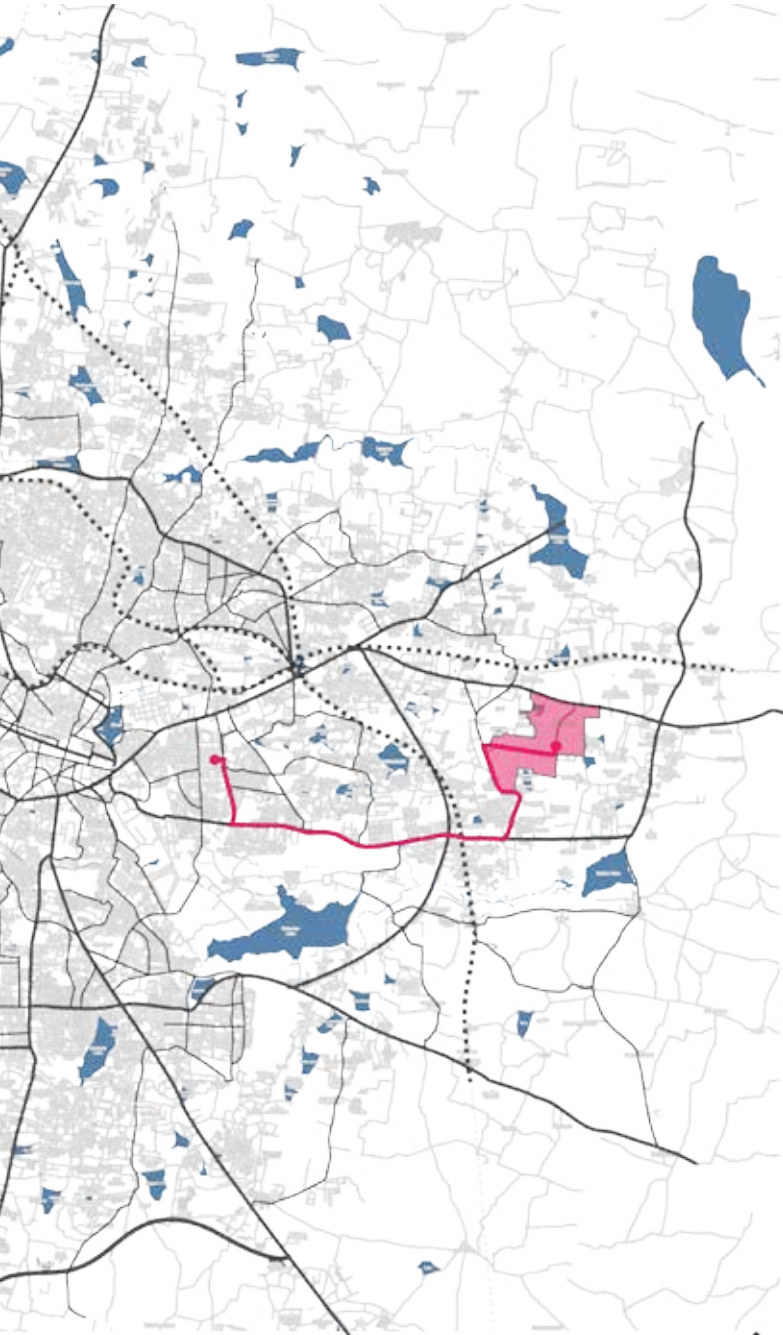
Spatial diagnosis

Itisha's route to work

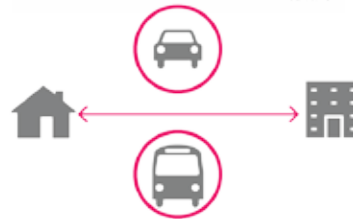


Spatial diagnosis

Itisha's route to work



- via Old Airport Rd typically 35 min - 1 h
Active around 7:10 PM
14.9 km
- via Swamy Vivekananda Rd and NH7 typically 35 min - 1 h 10 min
Active around 7:20 PM
14.1 km
- via Malleshwalya Rd/Nemjoshi Rd typically 45 min - 1 h 10 min
Active around 7:20 PM
16.8 km



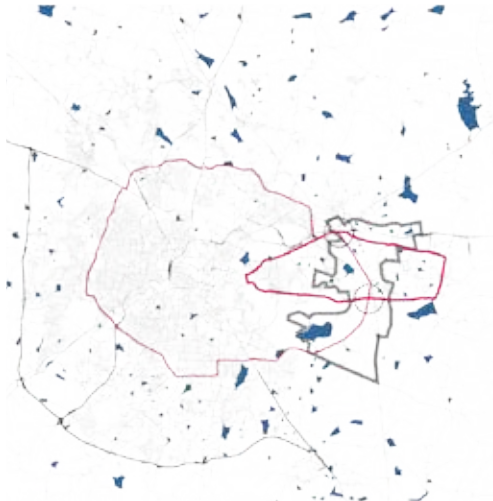
- 6:10 PM - 7:00 PM 50 min
[315U] [889-TXK] [V-900CA]
6:11 PM from Hal 6th Main
4 min
DETAILS
- 6:17 PM - 7:02 PM 45 min
[2012] [KIAA-4] [V-903E]
- 6:27 PM - 7:13 PM 46 min
[4Y1A] [KBS-E]
- 6:18 PM - 7:08 PM 50 min
[2010] [KBS-1K] [D-6]

'Better-half' of Bangalore

WOMEN . WORK . WAYS

Spatial diagnosis

Itisha's route to work



Private transport in Bangalore

Public transport in Bangalore



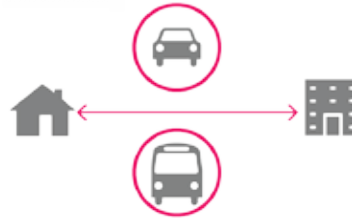
TRIP CHAINING



ATTENTION DUE TO CLOTHING



AFFORDABILITY



TRAFFIC DELAYS



PROXIMITY



NO PUBLIC TRANSPORT OPTIONS

Sub-research question

What are the ideal spatial conditions that would make accessibility easy for women?

Spatial conditions

Ideal spatial objectives needed for the IT Industry

CITY OF SHORT DISTANCES



ENVIRONMENTALLY FRIENDLY TRANSPORT



Transit oriented development



'Better-half' of Bangalore

WOMEN . WORK . WAYS

Strategy

Ideal spatial objectives

SPATIAL STRATEGIES

MOBILITY

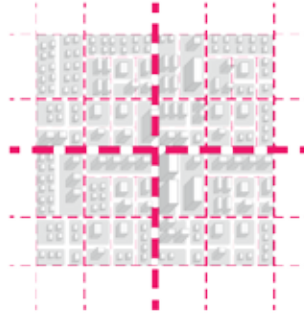
To increase the density of public transport to initiate a higher density development.



INCLUSION : Increases diversity & familiarity

STRUCTURAL & MOBILITY

To introduce public transport routes and design a street hierarchy for inclusion & safety of pedestrians.



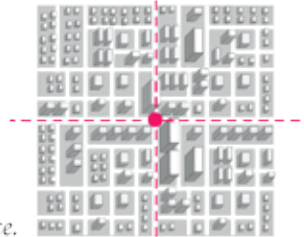
CONVENIENCE : Increase accessibility, reduces travel time and diversity.

Densifying and diversifying the gap between the industrial suburb and the city to result in a city of short distances.



STRUCTURAL

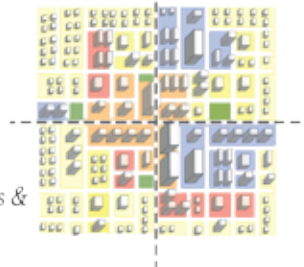
To increase the density around the transit to make the city accessible to a larger population.



CONVENIENCE : Reduce travel time and distance.

FUNCTIONAL

To densify the nodes of transit change and introduce new land uses based on the location of the transit.

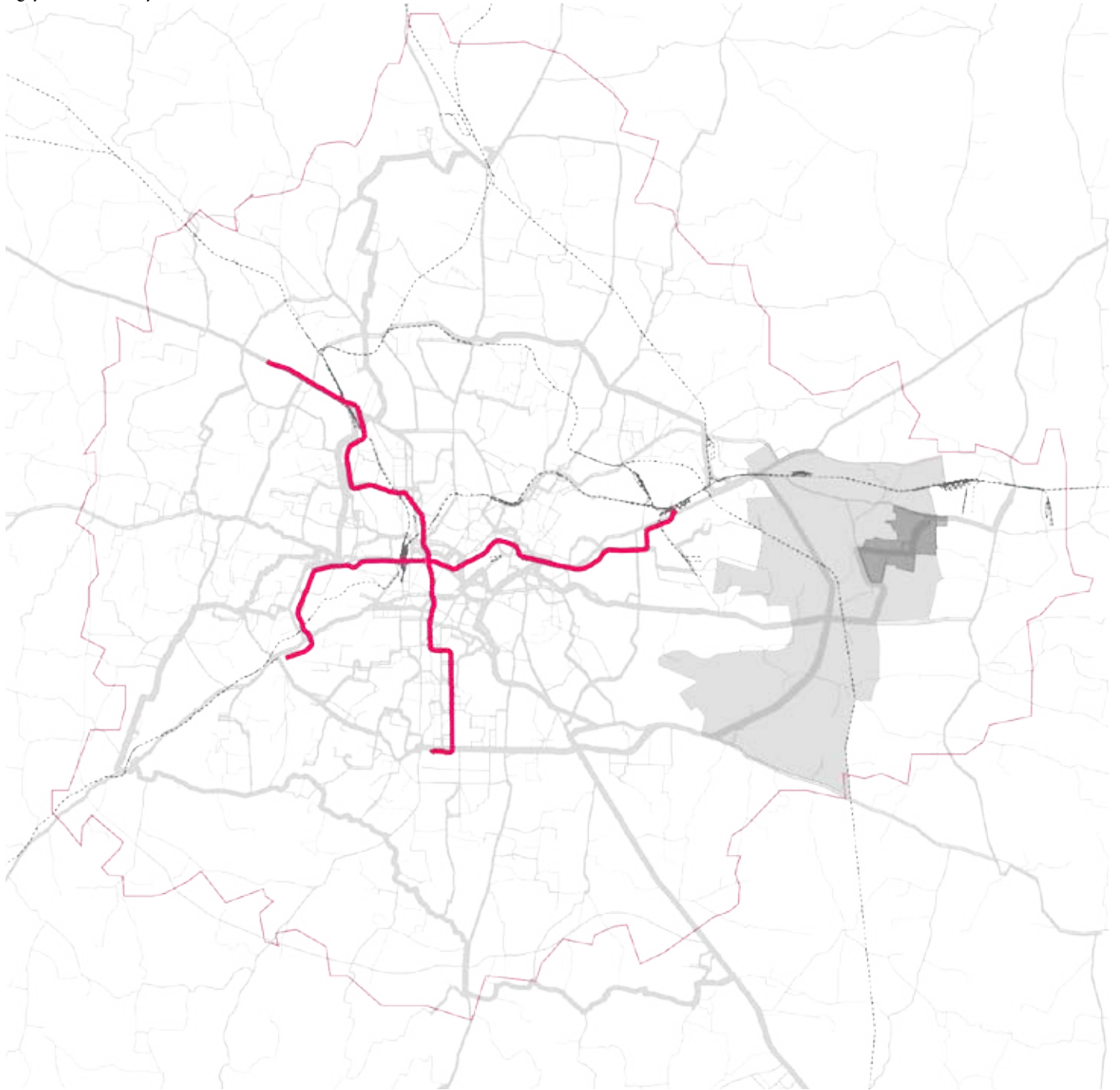


CONVENIENCE & INCLUSION : Increase the uses & diversity.

'Better-half' of Bangalore

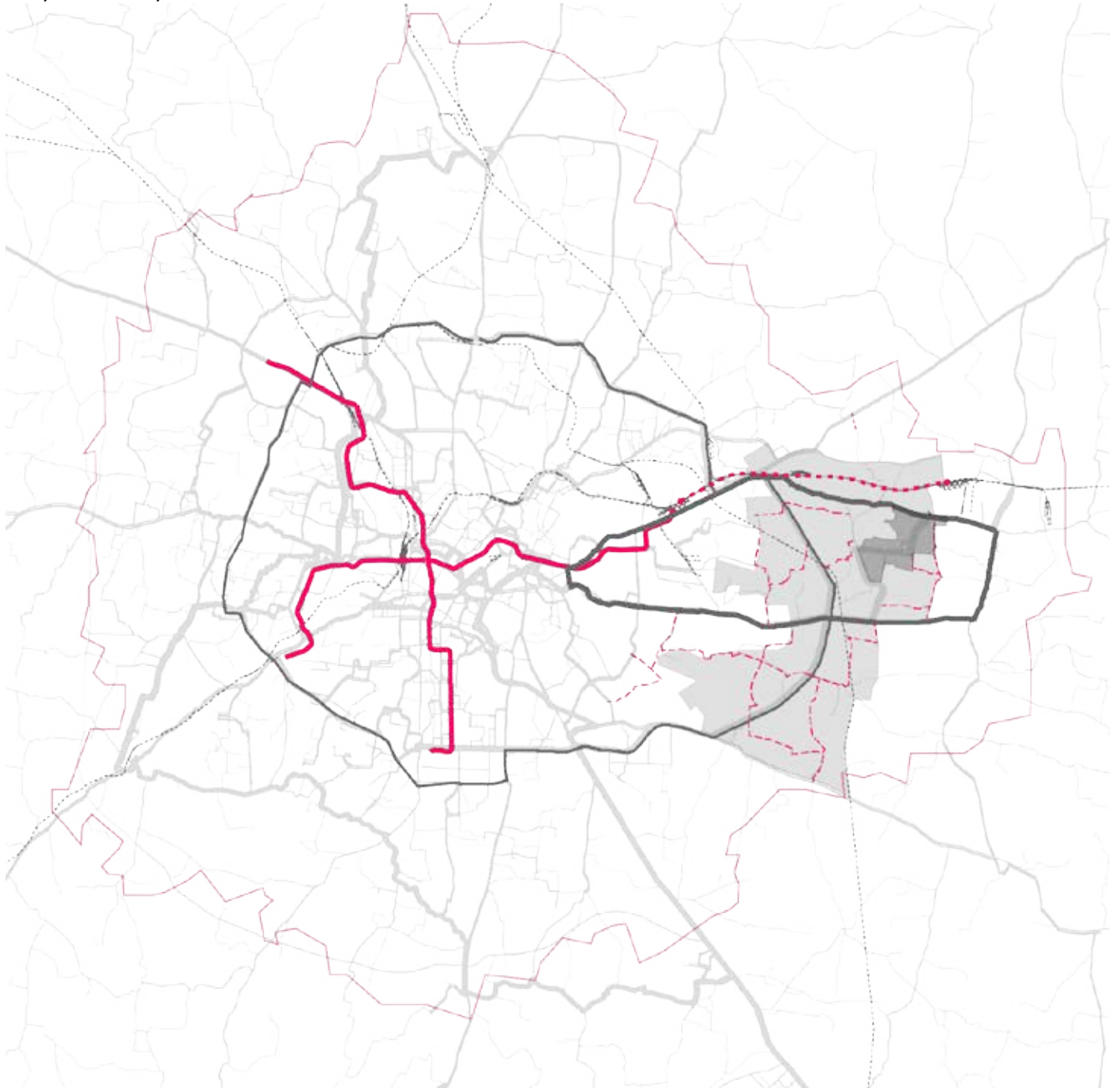
Design

Existing public transport



Design

Proposed public transport routes



Design

Street hierarchy



Highway

Public transport on service roads
Building edge conditions soft
Road crossing to be frequent



Arterial road

Broad foot paths



Sub-arterial road

Parking along the footpath
Building conditions soft

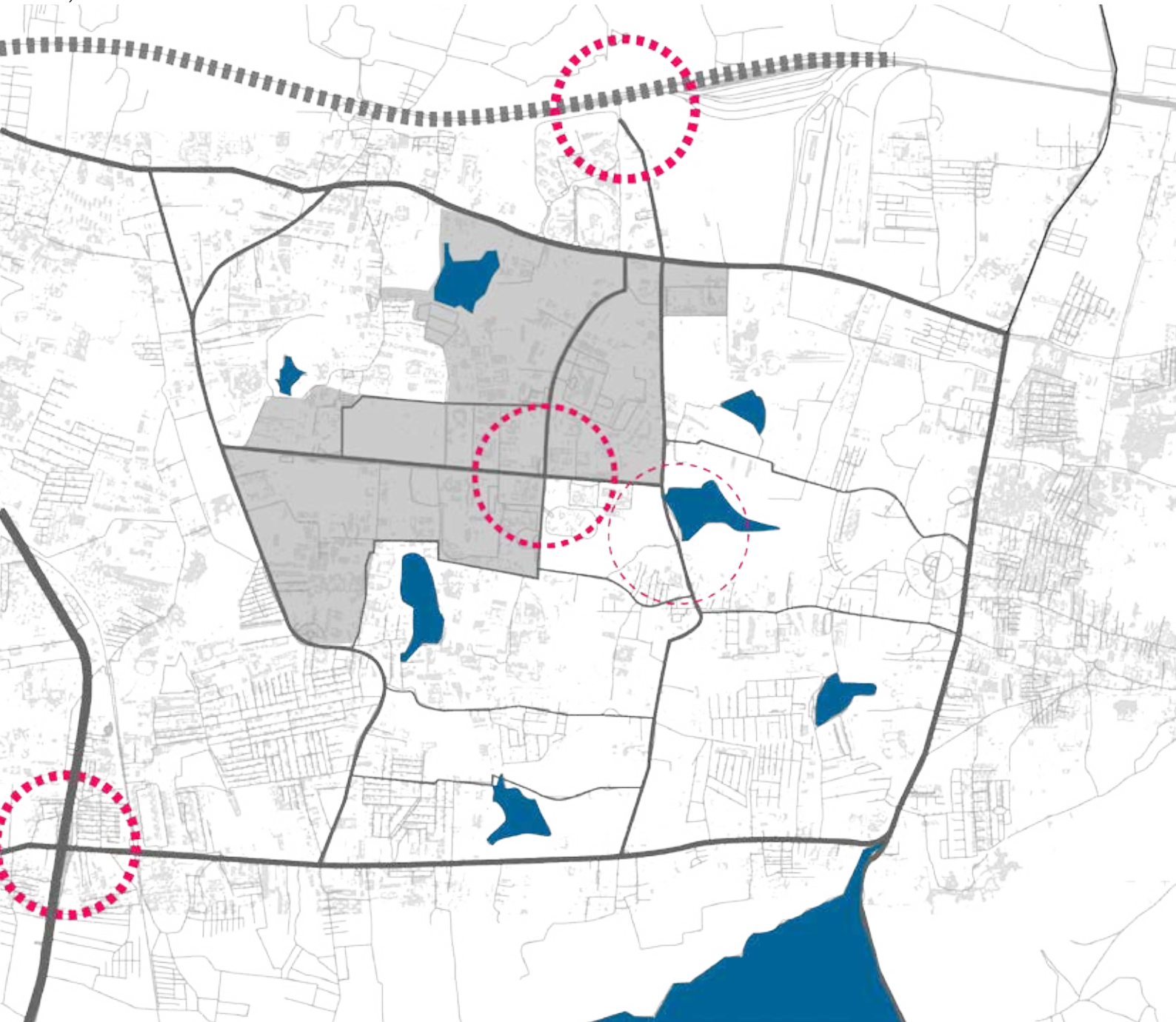


Local road

Building conditions soft

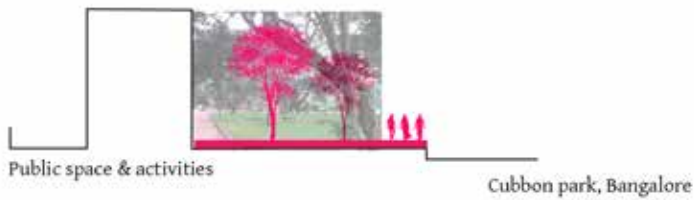
Design

Densification



Design

Building conditions



Design

Public space



'Better-half' of Bangalore



Activities

Local children's park



Point of attraction

Freedom park, Bangalore



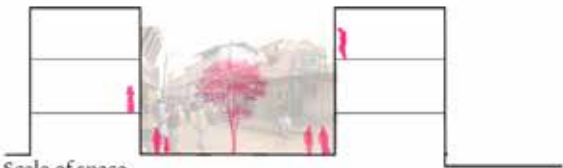
Edge and entrance

Shivaji park, Mumbai



Visibility

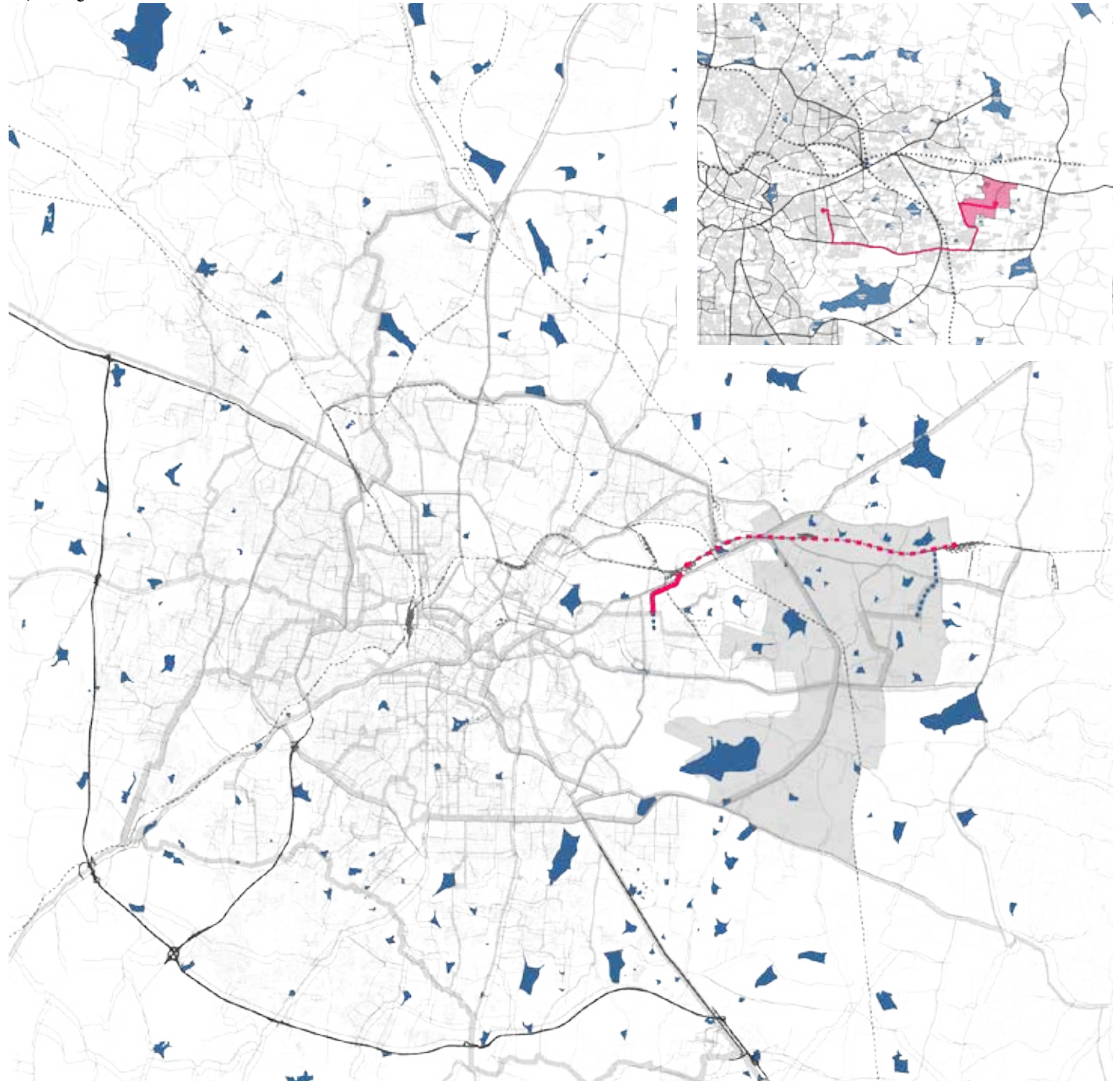
M.G Road, Bangalore



Scale of space

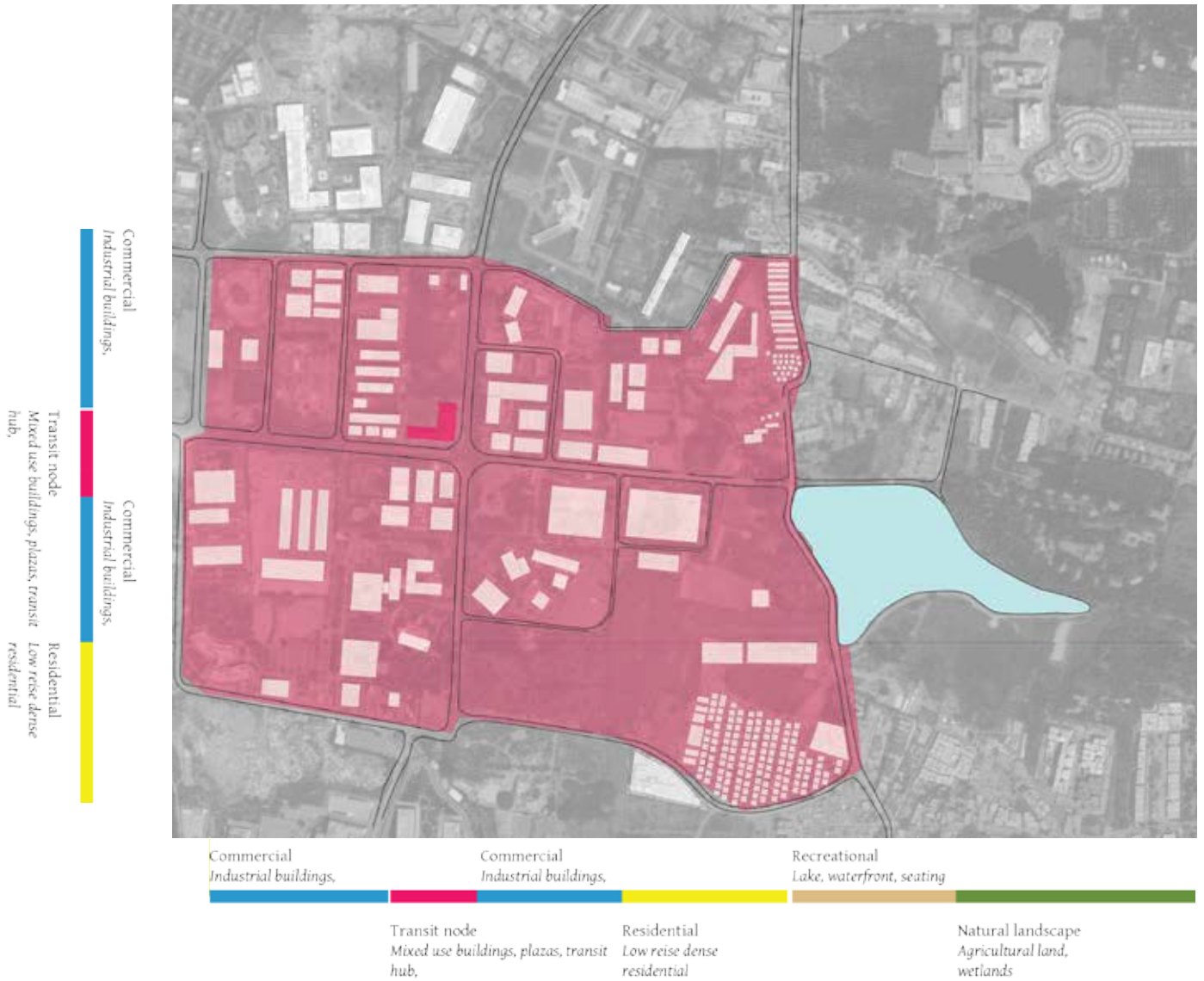
Design

Impact of design



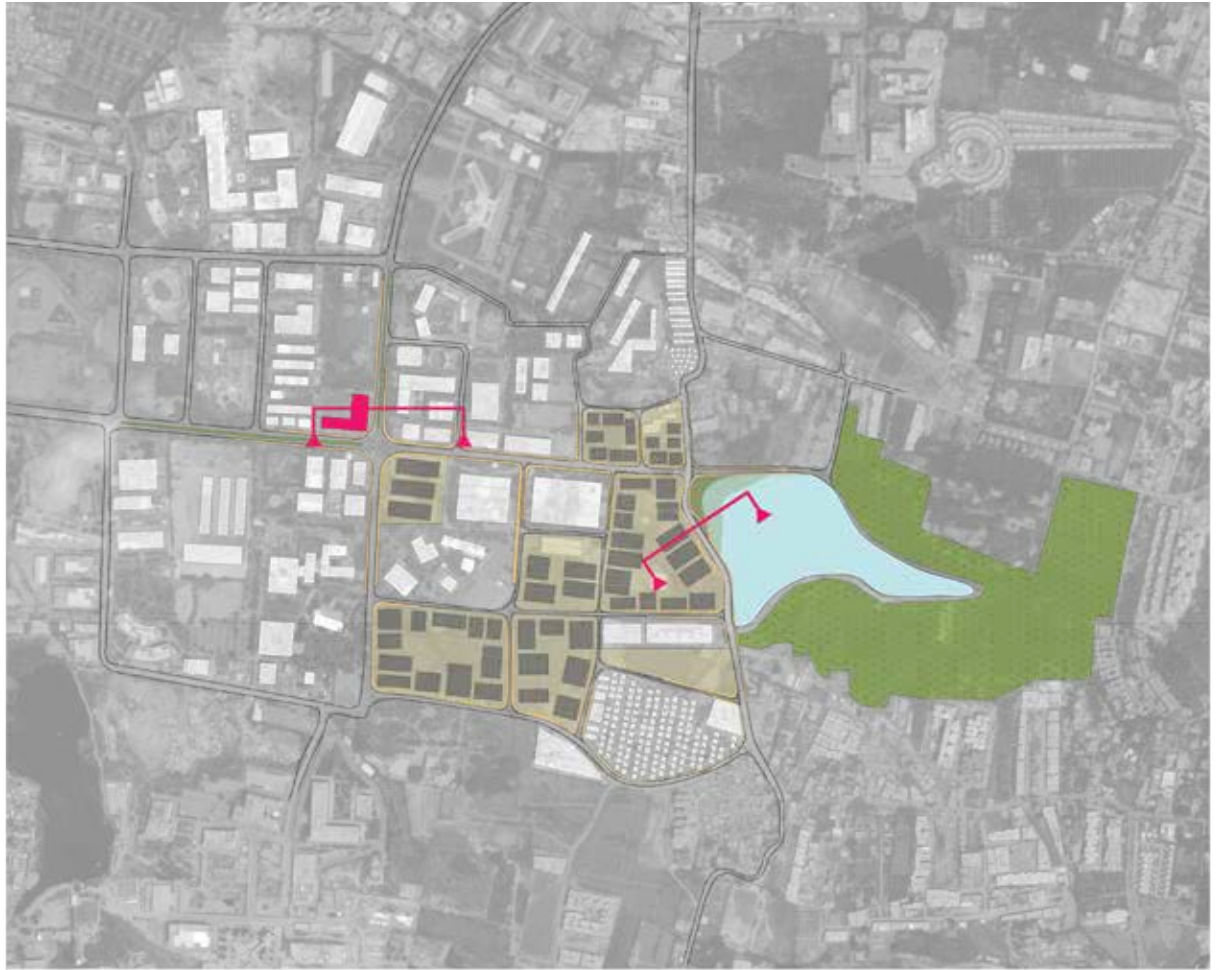
Design

Program for transit oriented development



Design

Densification



'Better-half' of Bangalore

WOMEN . WORK . WAYS

Reflection

Inclusive cities of the future

Happiness

Gender as a function of happiness

Happiness

Quality of life
Capability approach

Gender based
Context driven

Socio-cultural background
Economic capacity
Institutional framework
Space

Accessibility

Gender perspective

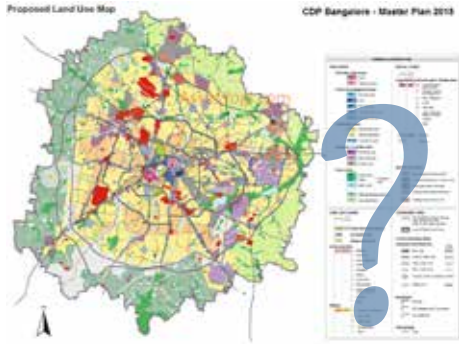
Accessibility is not only about getting from A to B in the quickest way, but the spatial quality of this route and the public space should also be considered in defining the level of accessibility.

'Better-half' of Bangalore



Planning approach

Reparative rather than visionary



Reality



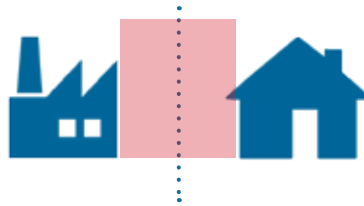
Reparative



Visionary



Distinct separation of uses



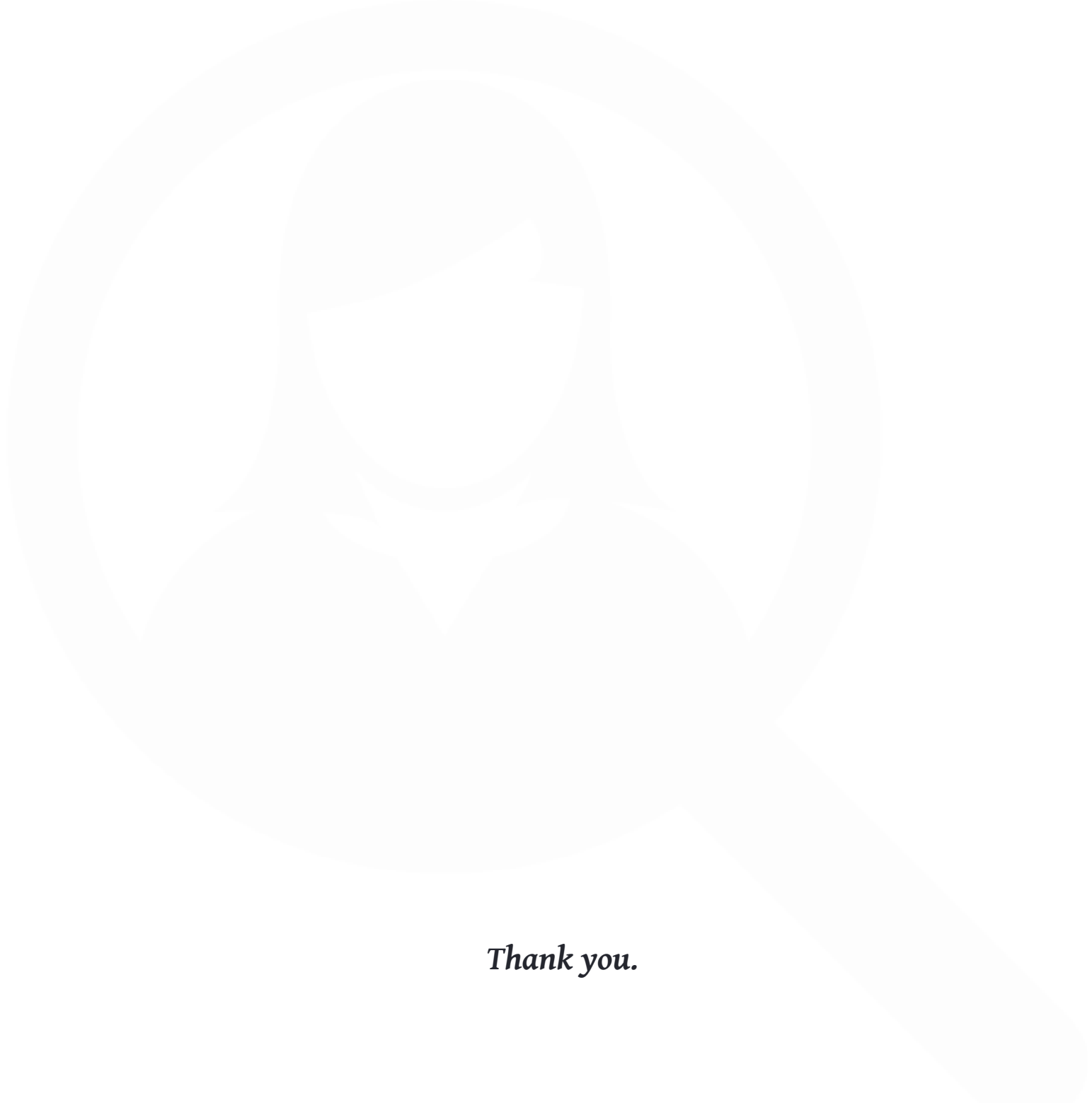
Redefining the interspace



Re-examining the organisation



Looking ahead
Gendered utopia



Thank you.