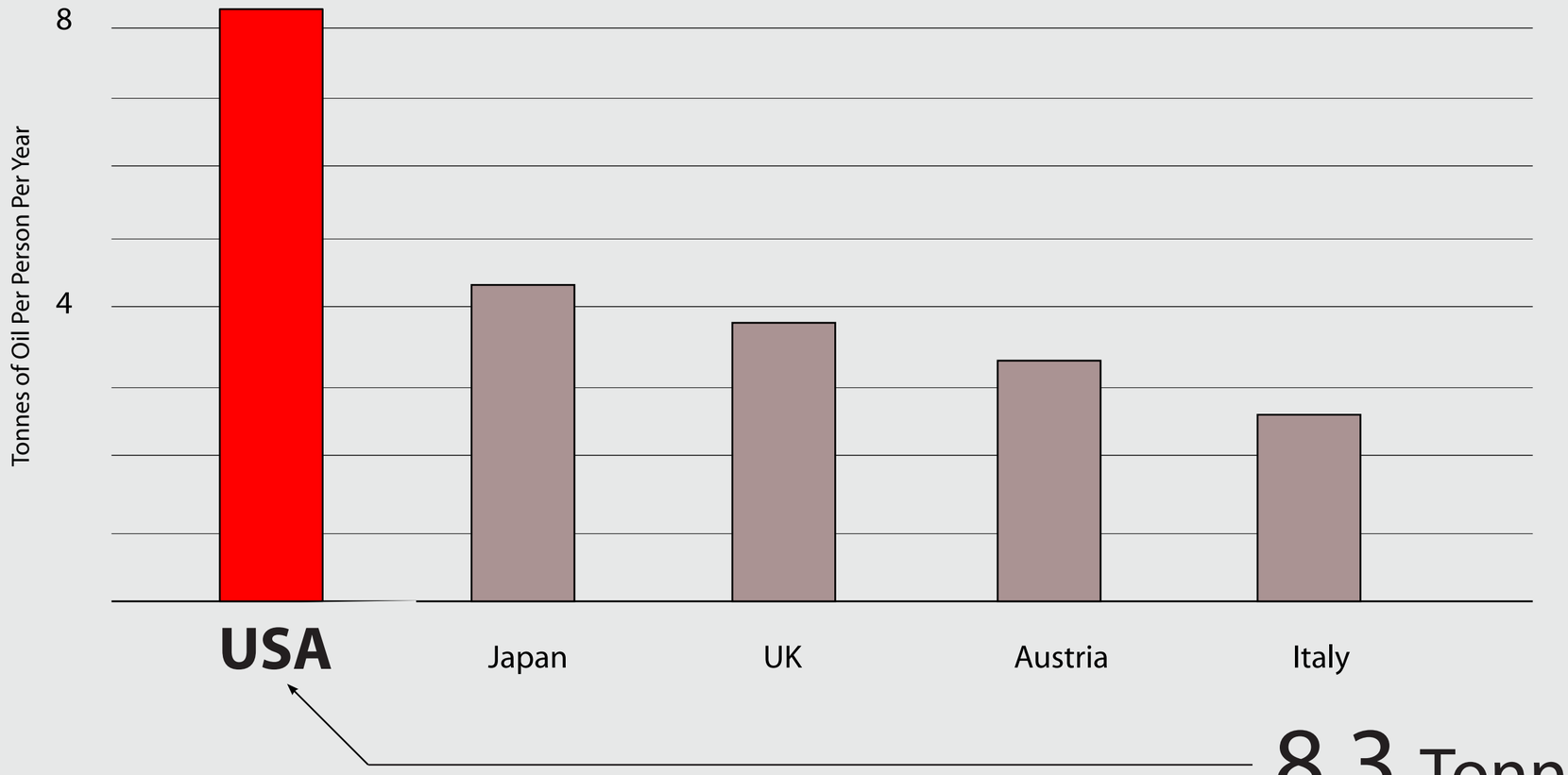
Concept for a Sustainable Urbanism

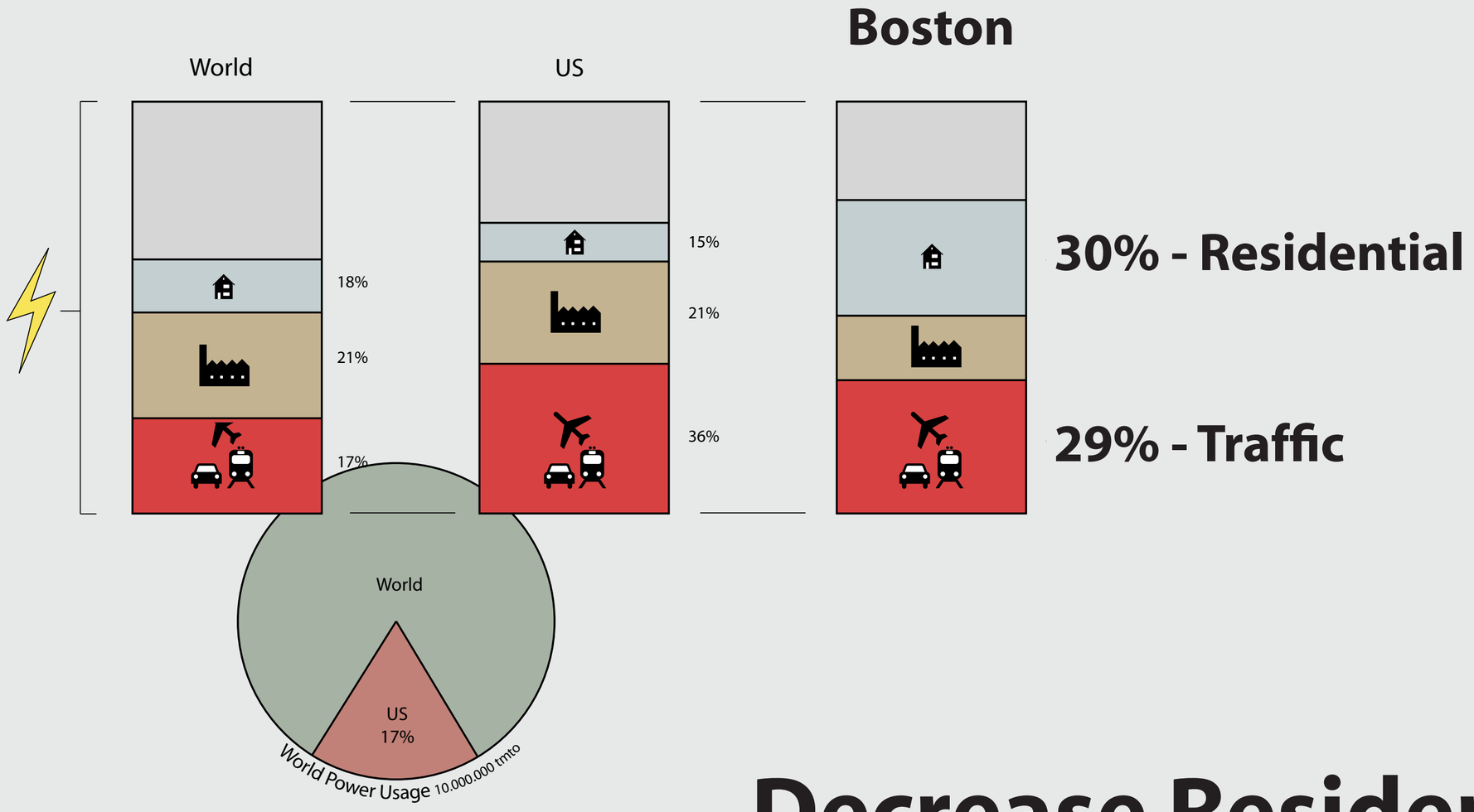
Energy Usage

Energy Usage Per Capita



8.3 Tonnes of Oil
Per Person **Per Year**

Energy Distribution

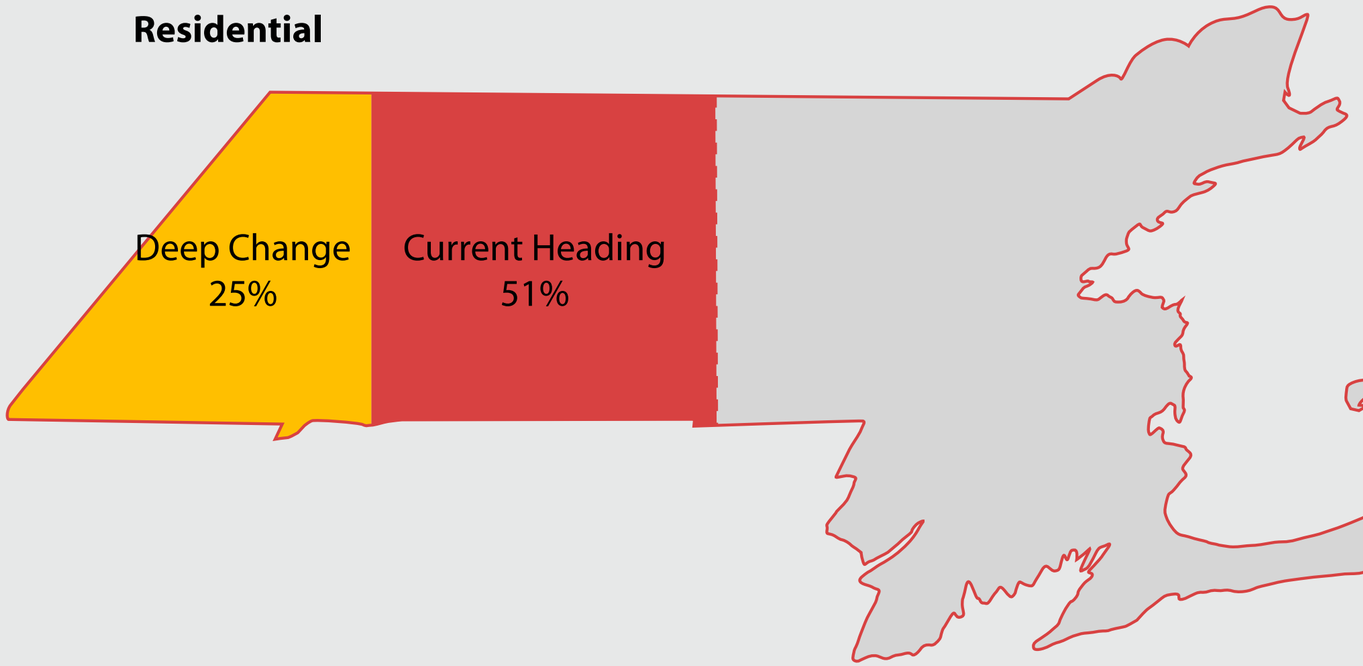


Decrease Residential & Traffic Energy

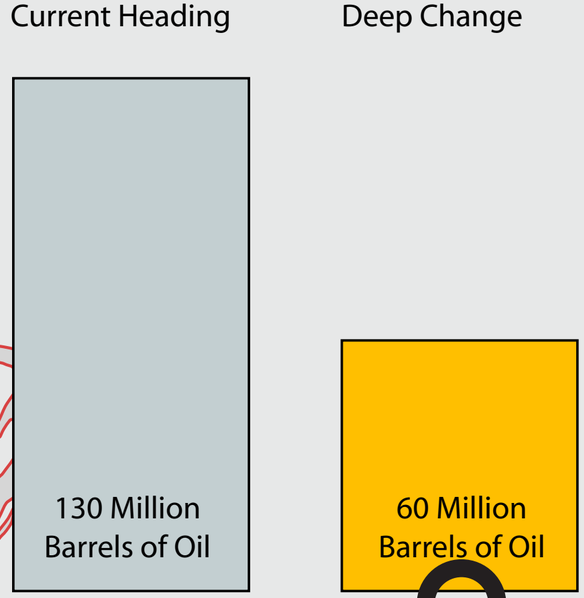
Energy and Land Usage

Future Scenarios: **2050**

Residential



Energy Usage



Deep Change

What is Deep Change?

- **Higher density** housing near transport hubs
- **Reduce Transportation** focus on local amenities
- Reduction of Personalized Motor Traffic
- **Mixed Demographic + Program**

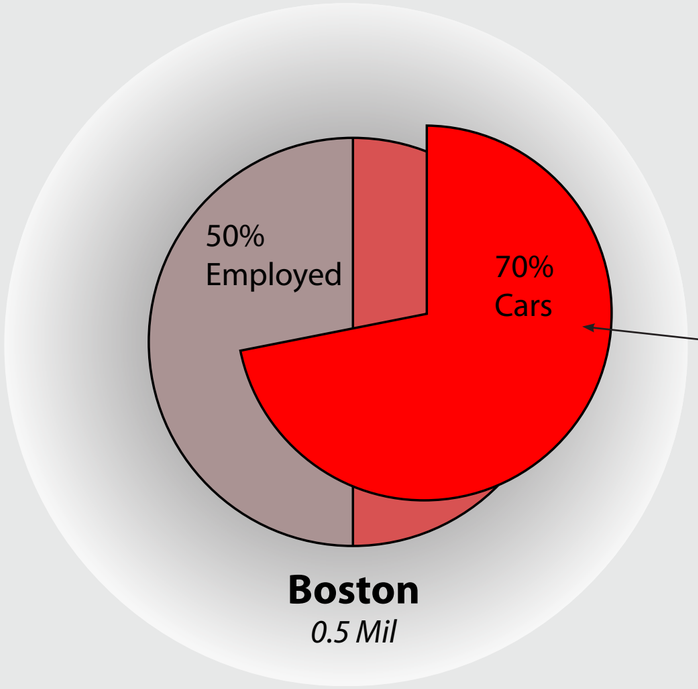
  - Self-Serviceability
  - Full Bicycle and Pedestrian amenities
  - Modesty in Amenities & Space Consumption
  - Long-Life Construction (100+ years)
  - Regional/Local Materials & Labor
  - Programmatically Convertible Design
  - Anticipate Work-At-Home
  - Increase Biodiversity & Biomass
  - Application of Renewable Energy Sources
  - Modesty in Provision

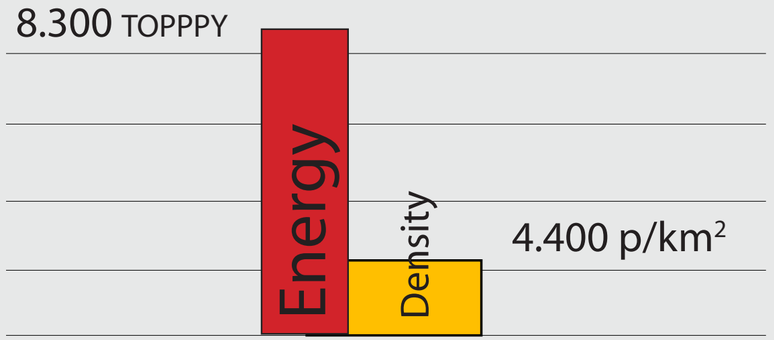
***Reduces required land by* 25%**

1) Decreasing Traffic Energy

2) Decreasing Residential Energy

Urban Energy Configuration

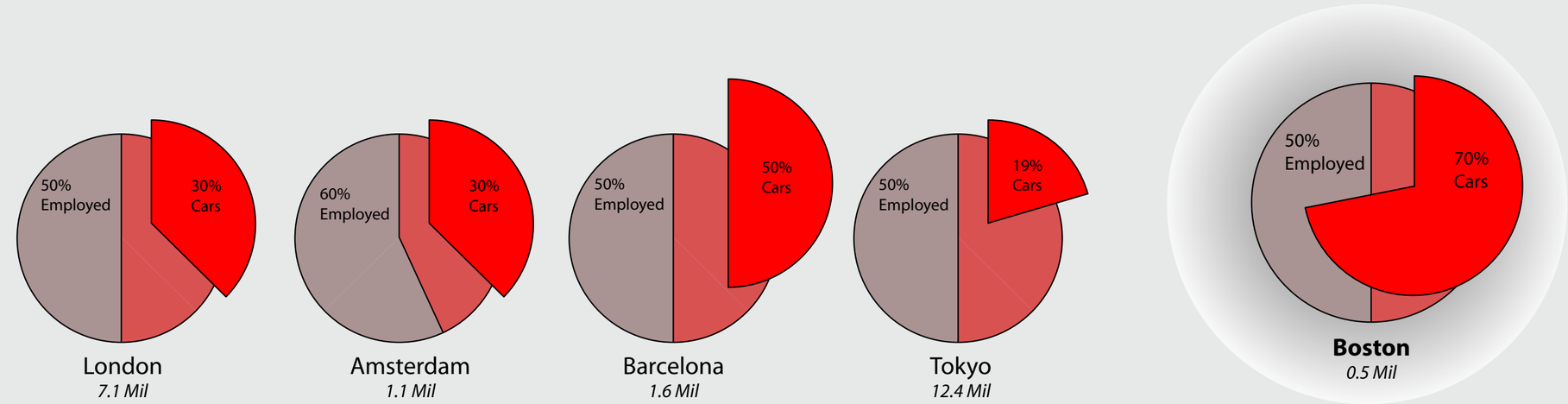


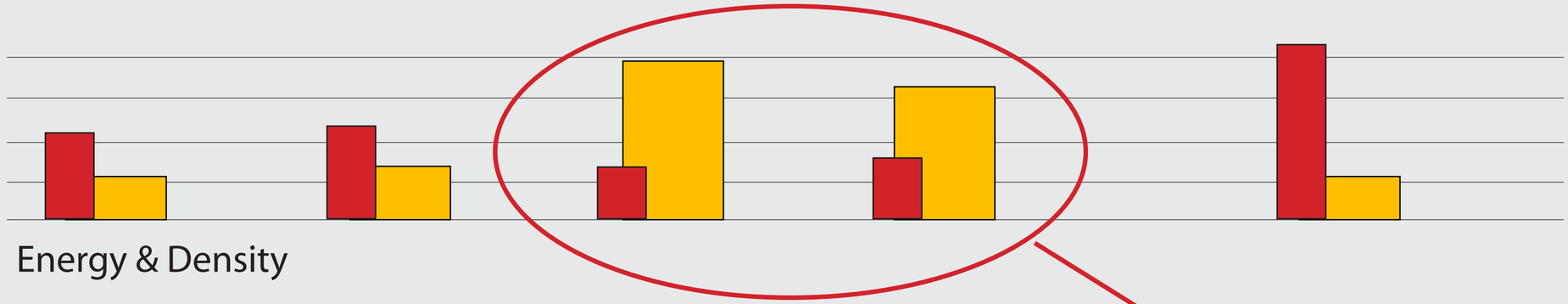


70%

of people in Boston own a **Car**

Energy and Land Usage

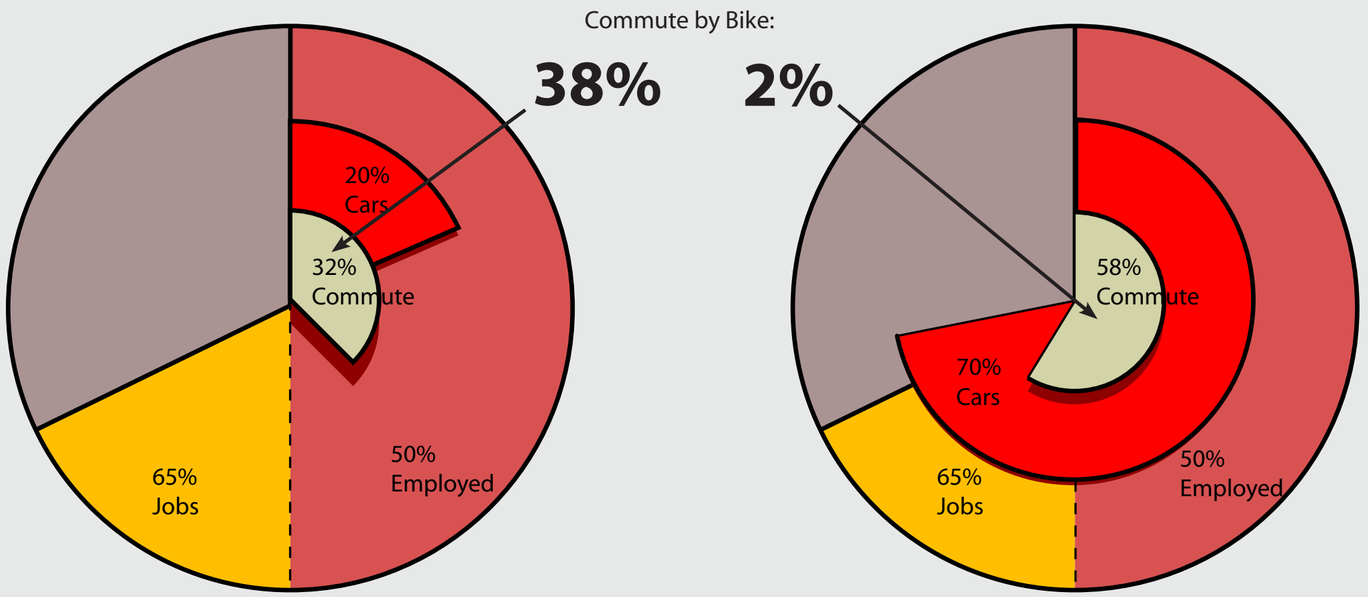




No need for cars

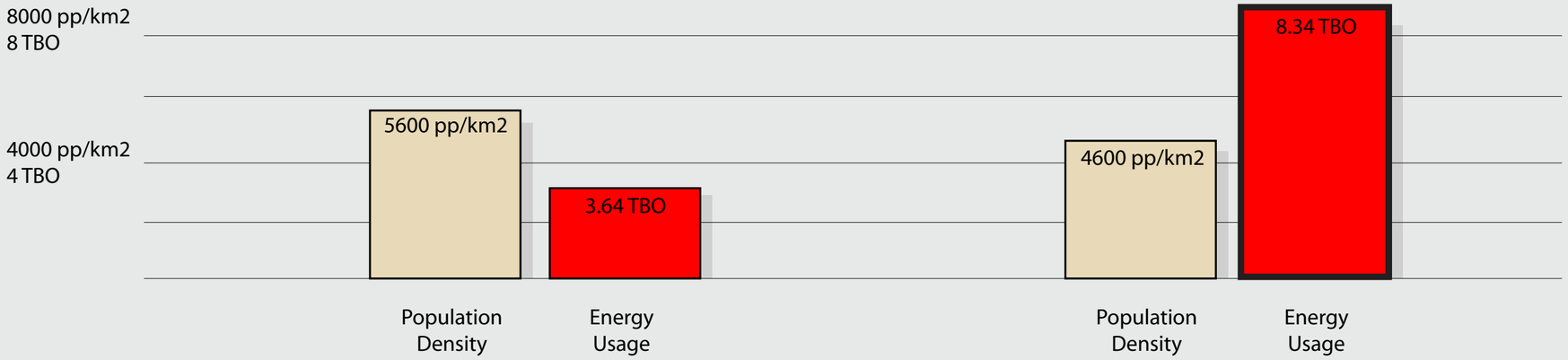
Residential Energy down → Density UP

Walking Cities Compared

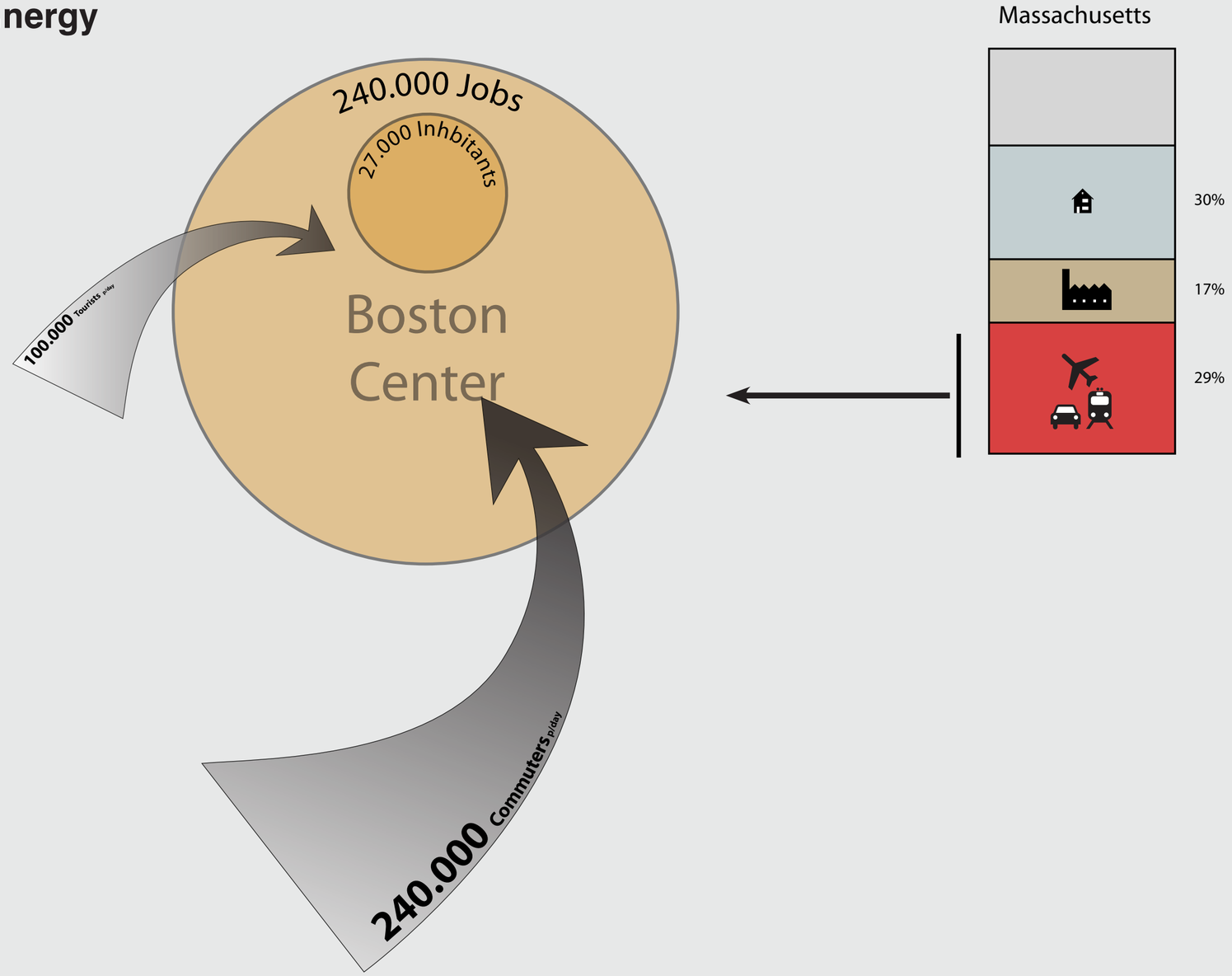


Copenhagen
0.5 Mil

Boston
0.5 Mil

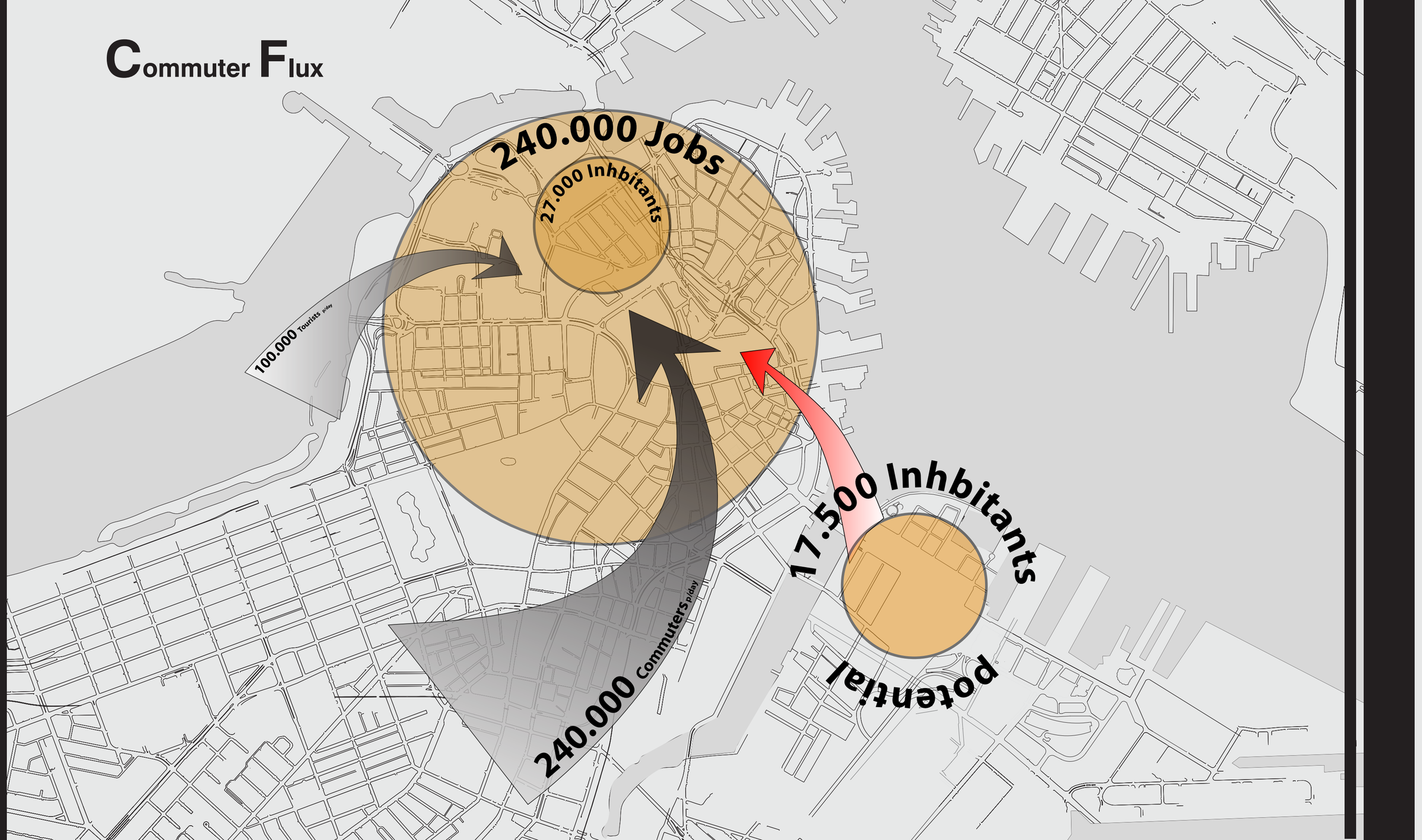


Traffic Energy



Traffic Energy Down → Reduce Commute

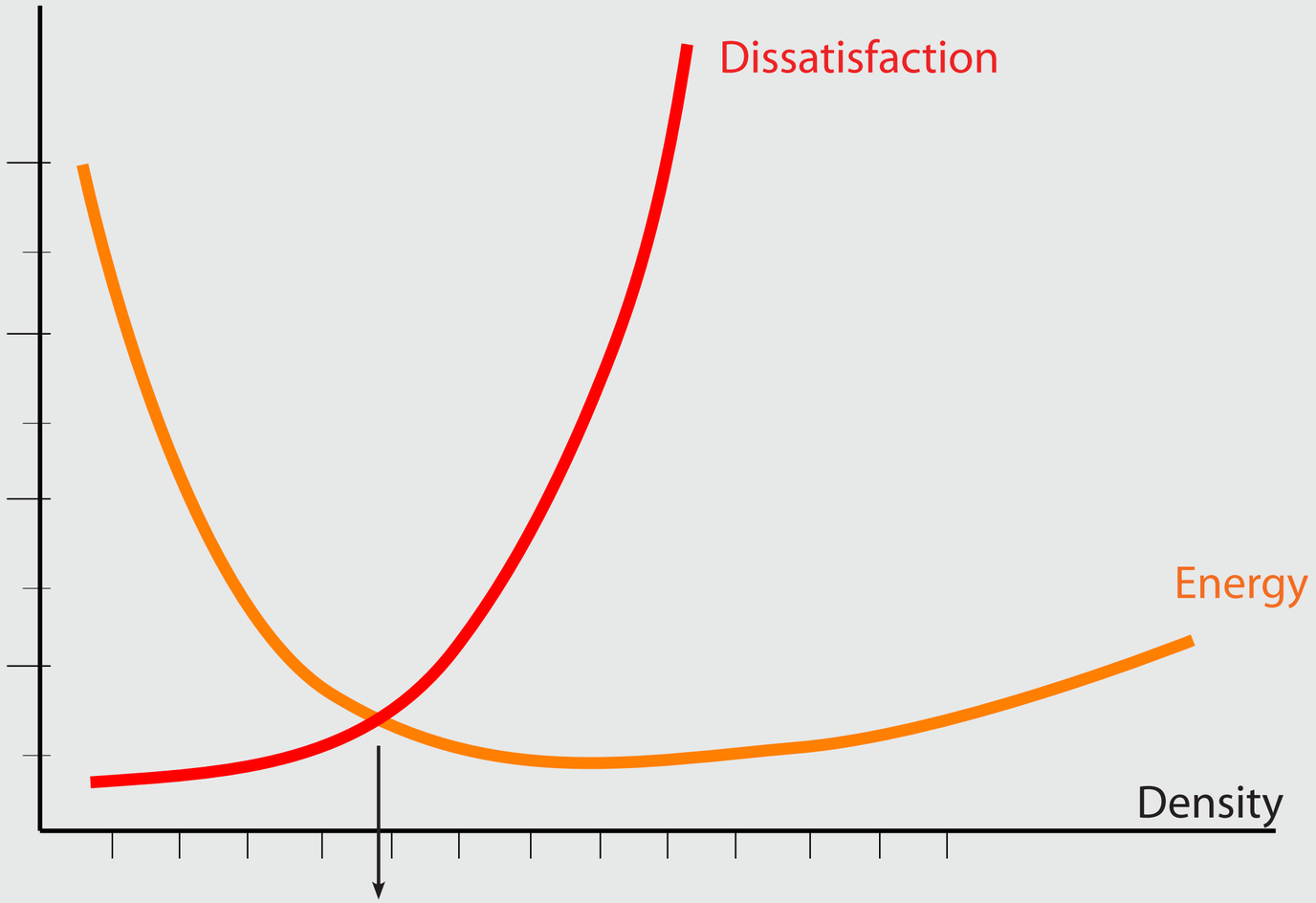
Commuter Flux



1) Decreasing Traffic Energy

2) Decreasing Residential Energy

Density & Energy



17.000 inh/km²

How Dense is Dense?

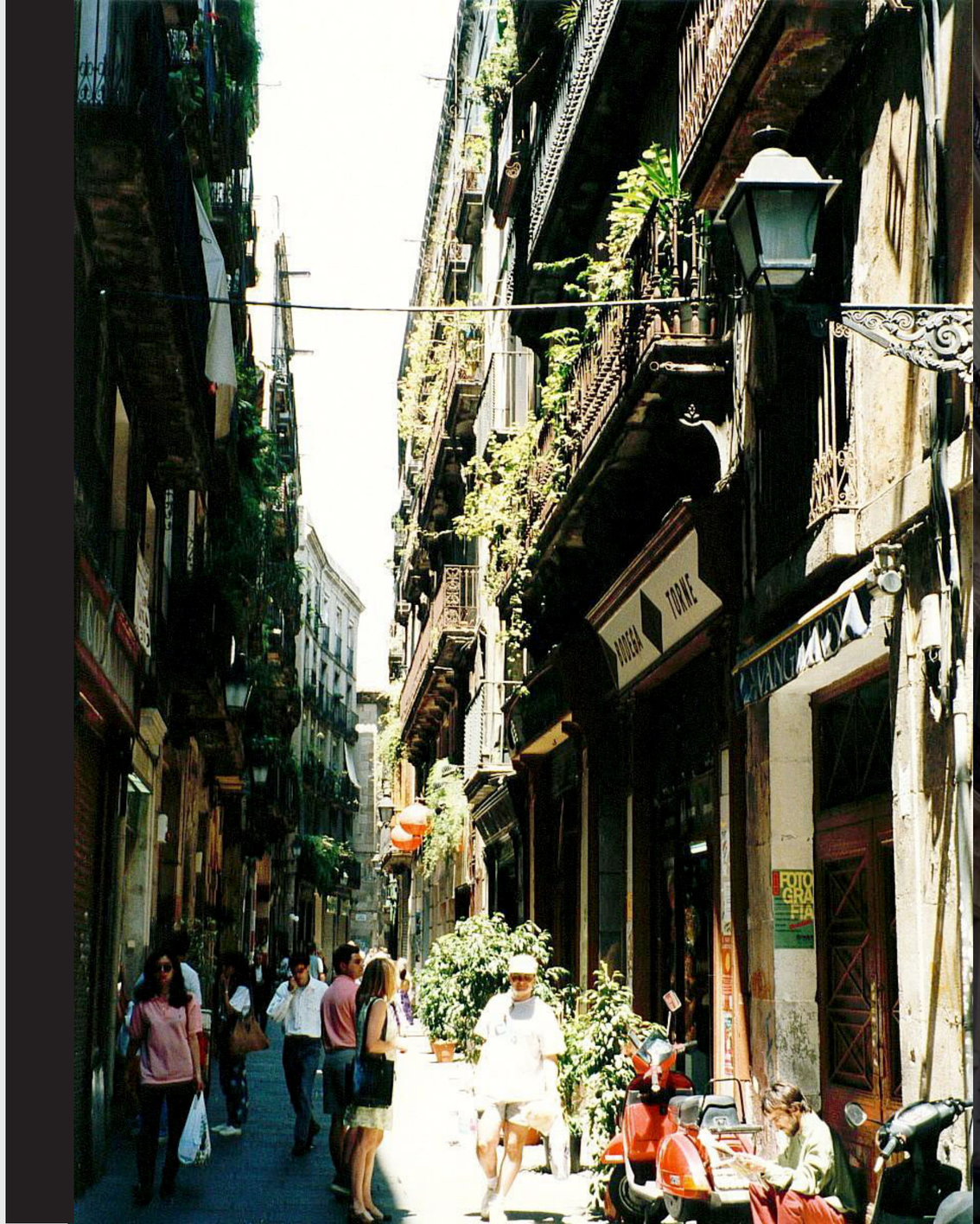
Example:

Barcelona = 16.000 inhabitants / km^2,
our site = 0.93 km^2 , at 40 m^2 per inhabitant, our residential FAR is 6.5.

Add 3 * 500.000 ft^2 of Retail, Hotel and Offices, and 500.000 cultural, amenities and transport, we have an FAR of

8.5


Barcelona, Spain


PUERTA TORRE


met@ya.com

If They Can Do It....

Let's up that measely 6.5 FAR.

17.000 inh/km²

Learning from the Rules

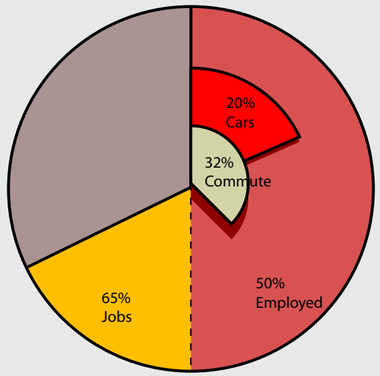
How did they do that somewhere else?

Urban Policy

- Critical Occupation vs Empty Urban Desert
- High Quality High Density
- Mixed Lives, Mixed Living
- 24h Occupation

Copenhagen

Pedestrian Policy

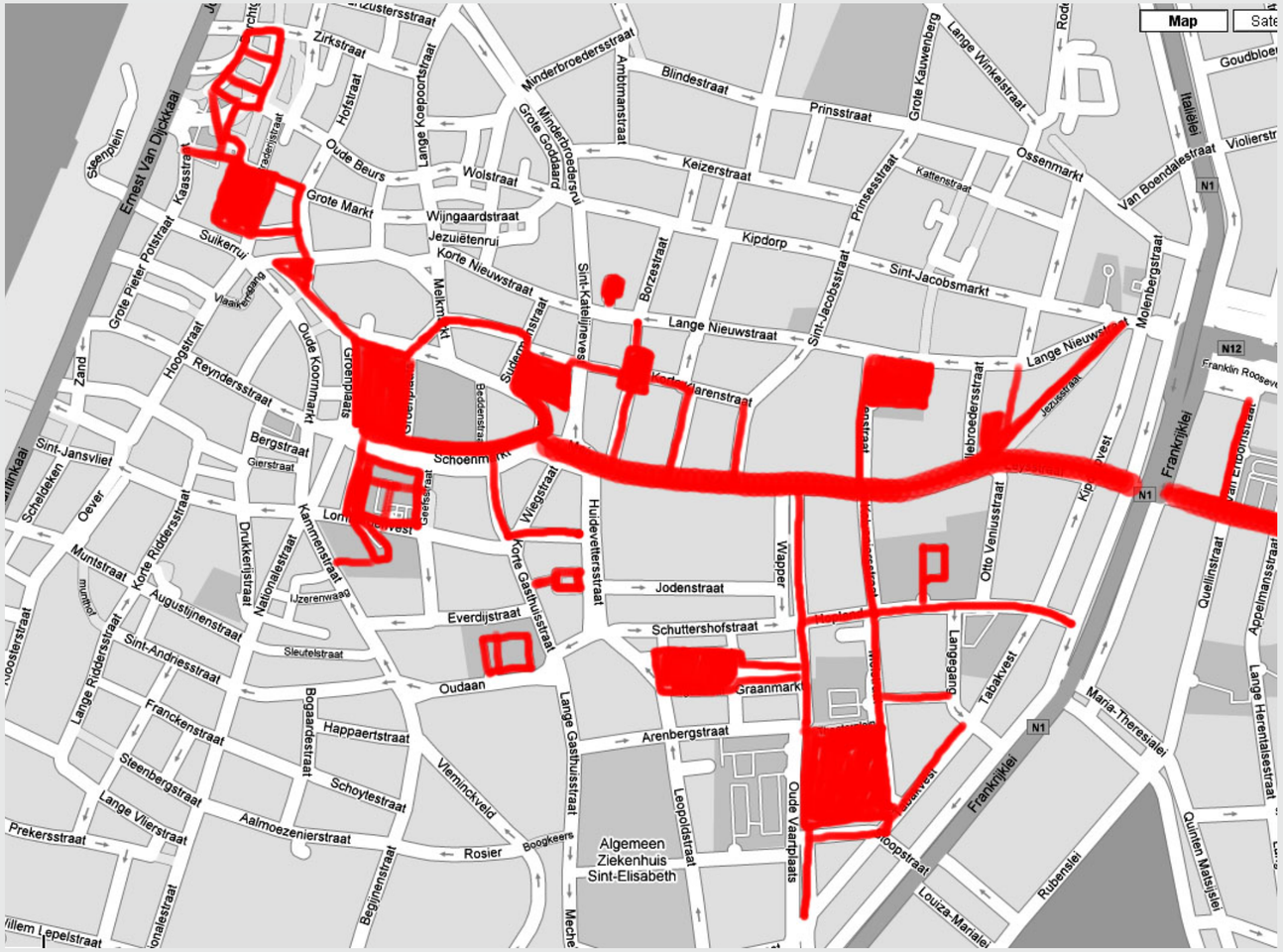


Copenhagen
0.5 Mil

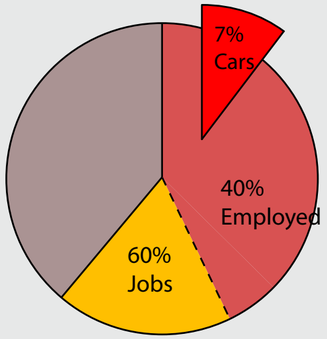
Copenhagen City Center

Copenhagen

Pedestrian Policy



Antwerp City Center



Antwerp
0.5 Mil

Antwerp

Urban Policy

Learning From Copenhagen & Antwerp Policy:

- Encourage Student Living
  (adds to life & culture, prevent desolation, does not congest)

- Reducing Car Access & Parking
  (at a rate of 3% per year)

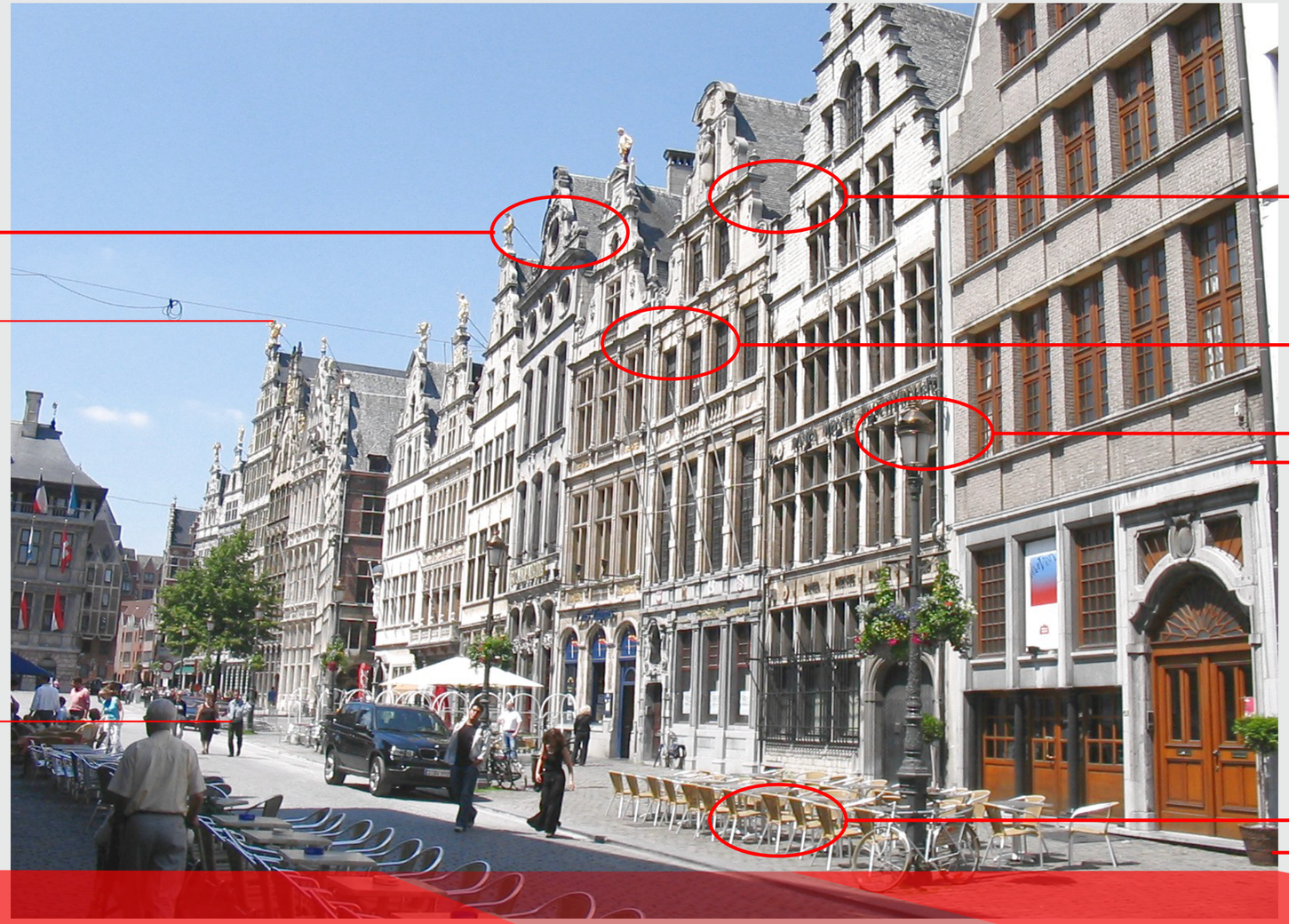
- Honor the Human Scale
  (provide seating and pleasant walking)

- Anticipate Changing Seasons
  (Covered walkways, hiding places, vegetation)

- Promote Cycling
  (Provide paths, intersections, storage & repair)

- Provide Bicycles
  (Easy bike rental for tourists, or Free Bike System)

Urban Policy



Diversity

8 stories

Rich Architecture

Mixed Use

Quality Urban Furniture

Attention to Human Scale

Street Life Generators

Soft Edge

Soft Edge

Pedestrians

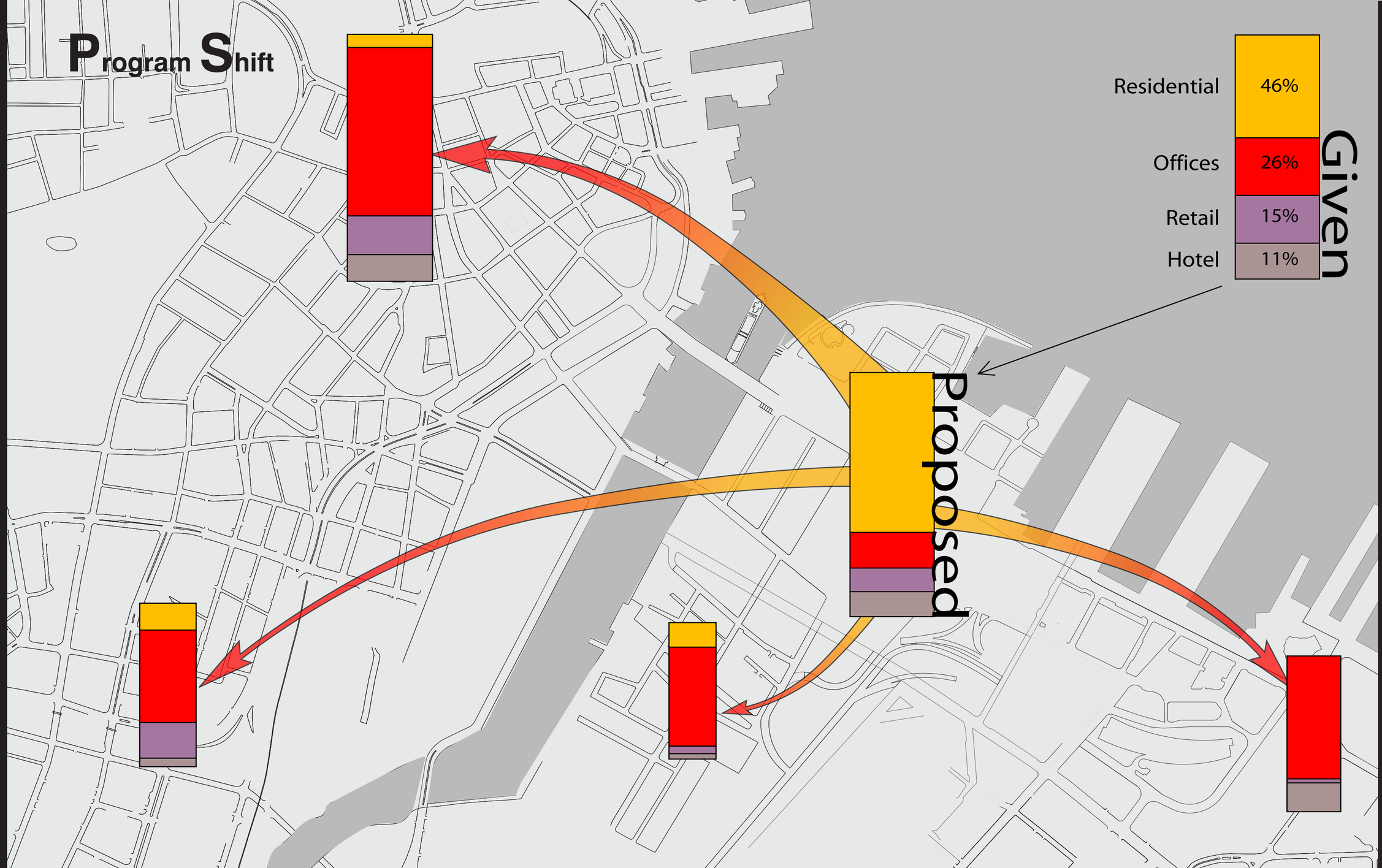
Special Access Traffic

Pedestrians

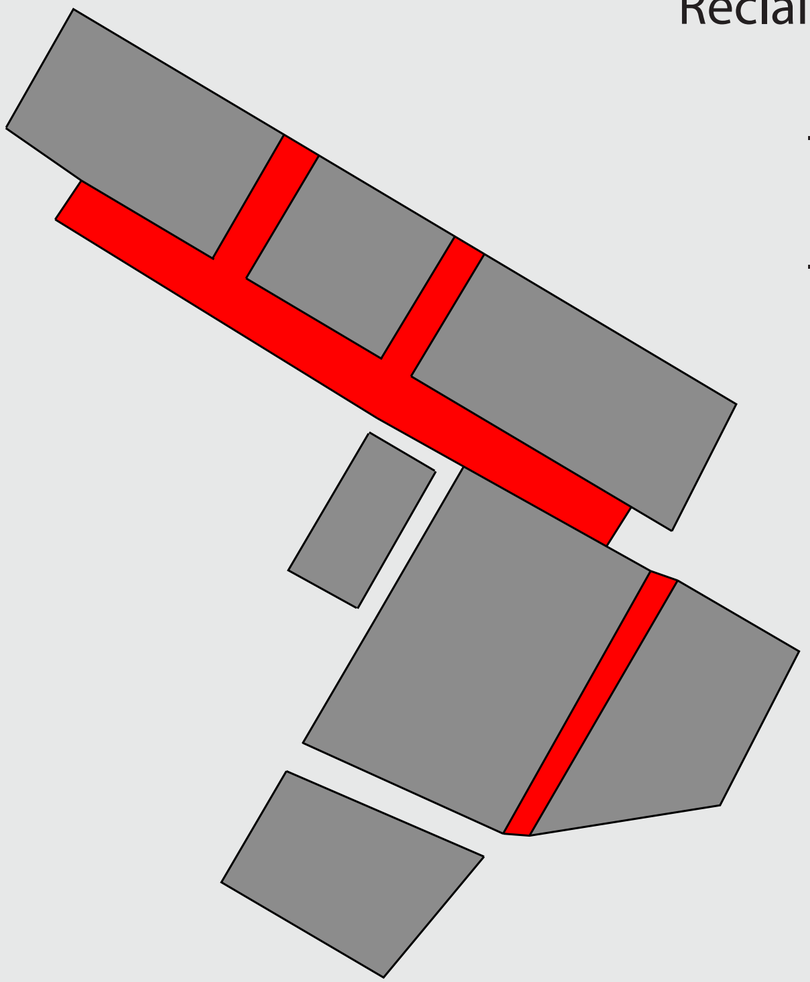
Autodate

Access Control

Making the Rules


Program Shift
Residential
46%
Offices
26%
Retail
15%
Hotel
11%
Given
Proposed

Optimize Land Use



Reclaim road space:

- Reduction of roads

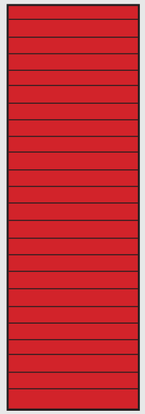
- Buildings Over Roads

Space Gained:

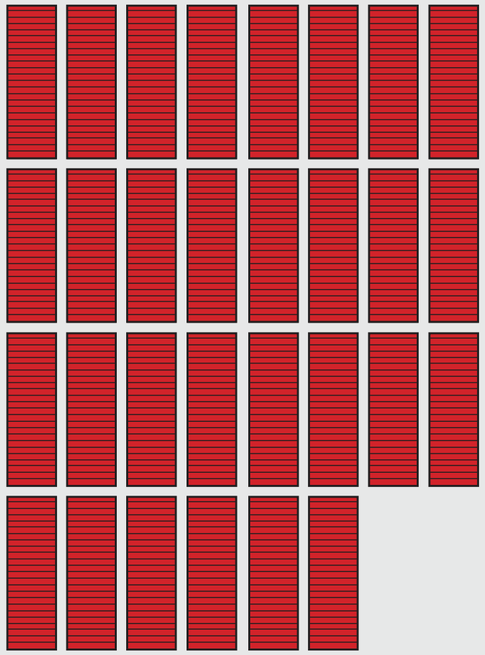
150.000 ft^2

Massing Options

The Corbusian Model:



100′ x 100′
24 Stories
(max height)

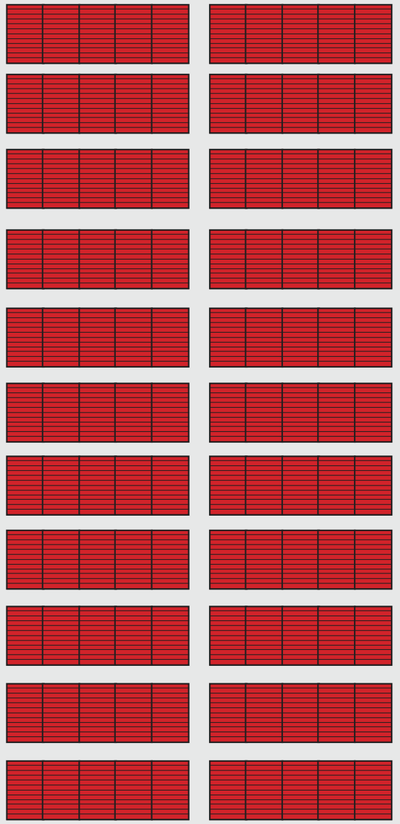


32 towers

Open Space = 64%

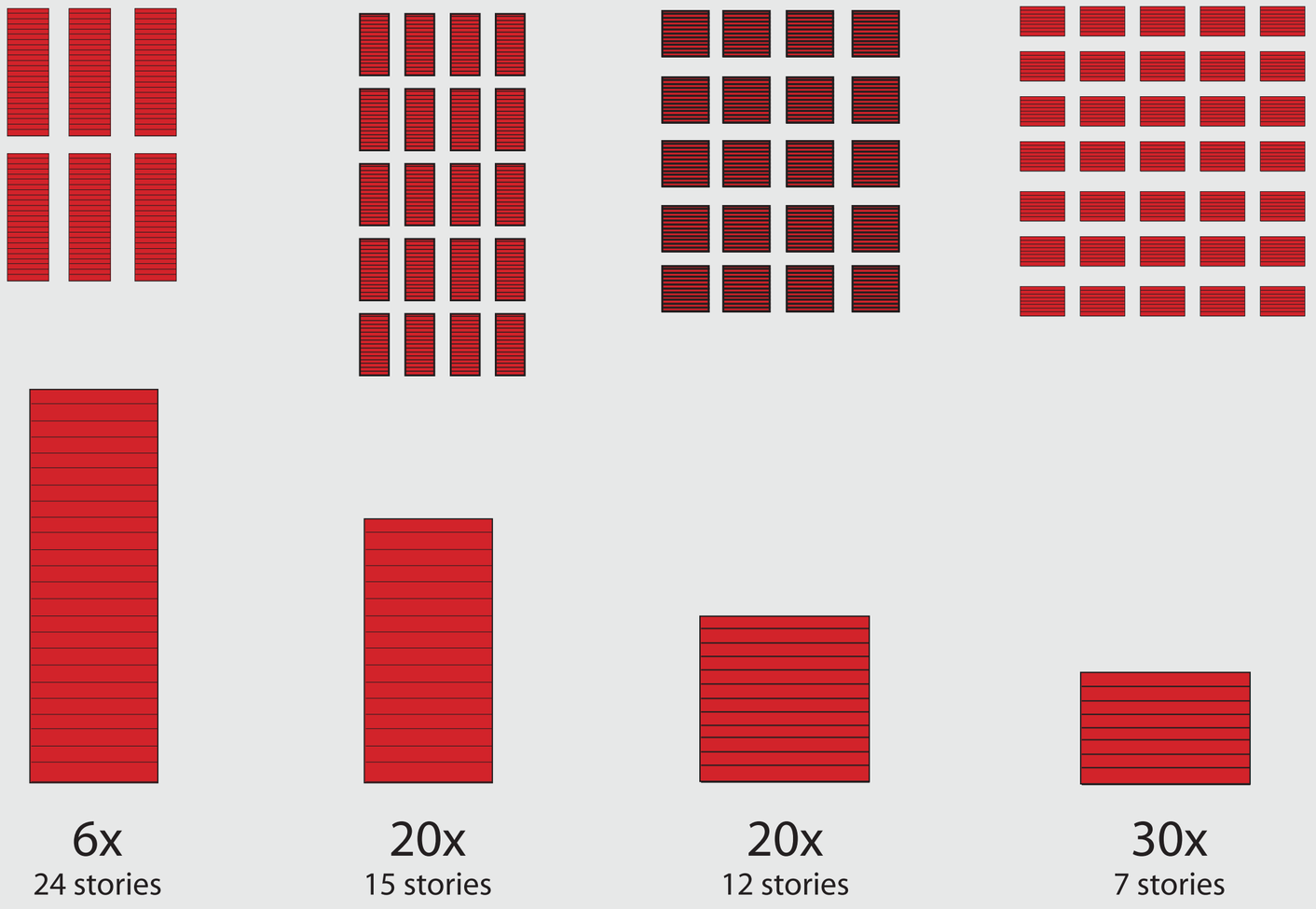
Open Space to 40%:

80′ x 65′
12 Stories



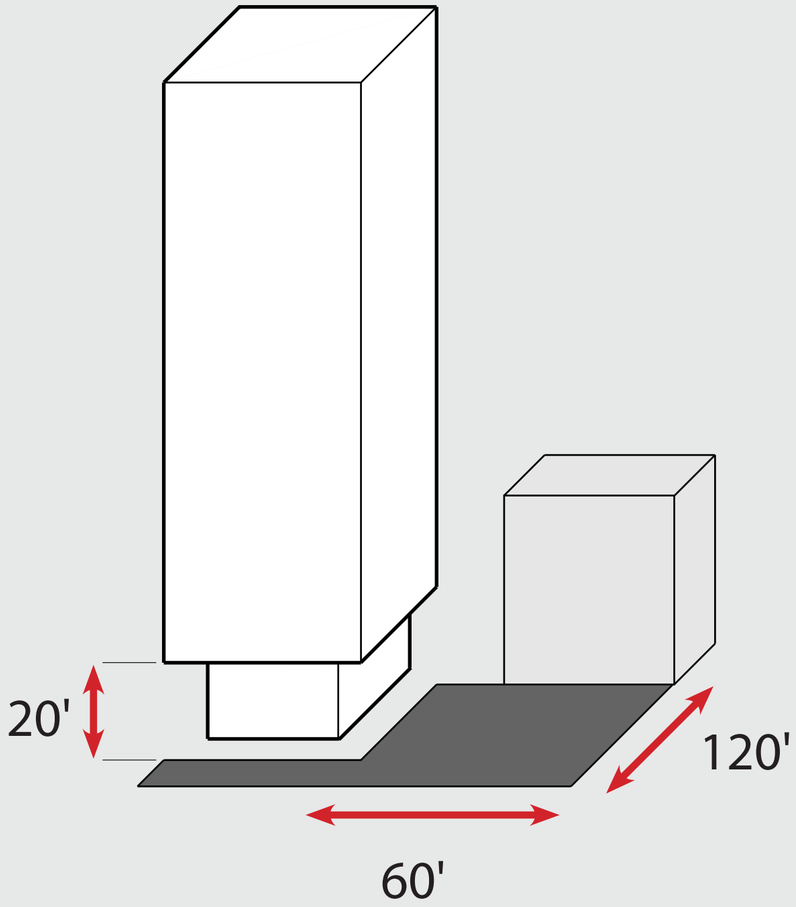
110 infill buildings

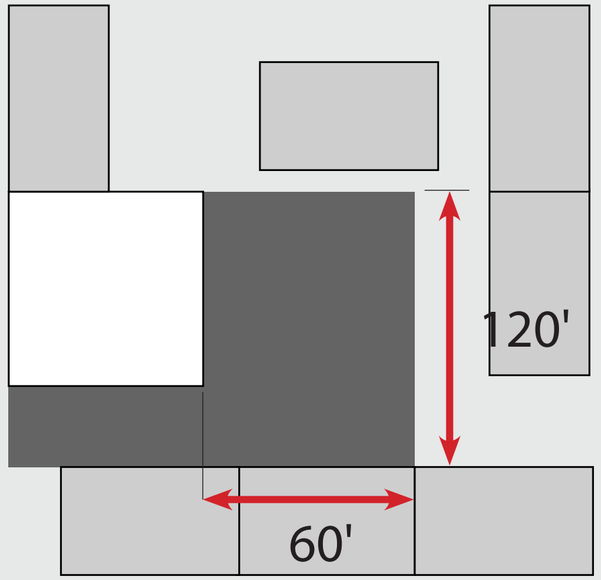
Massing Result



= 7.300.000 ft² residential

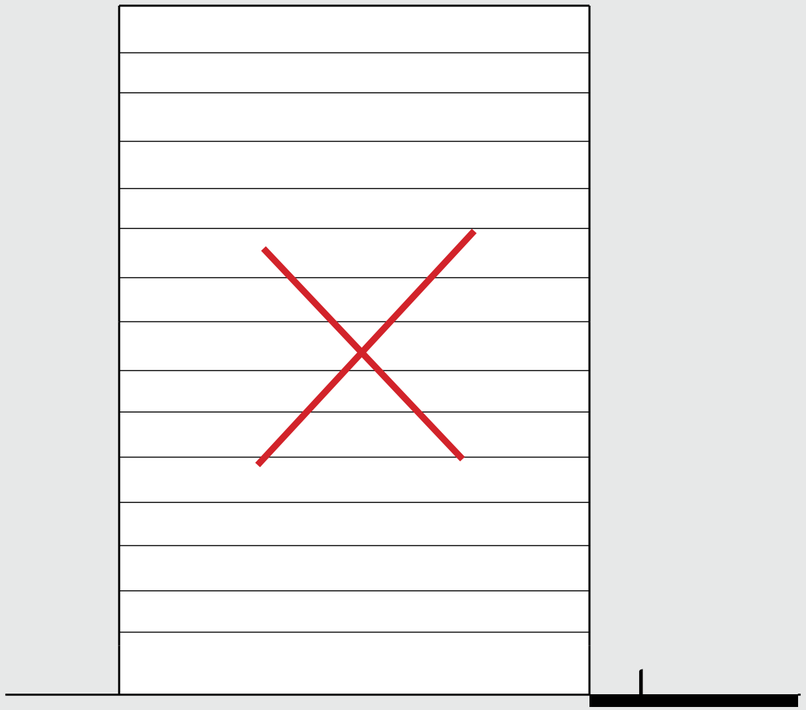
Tower Rules

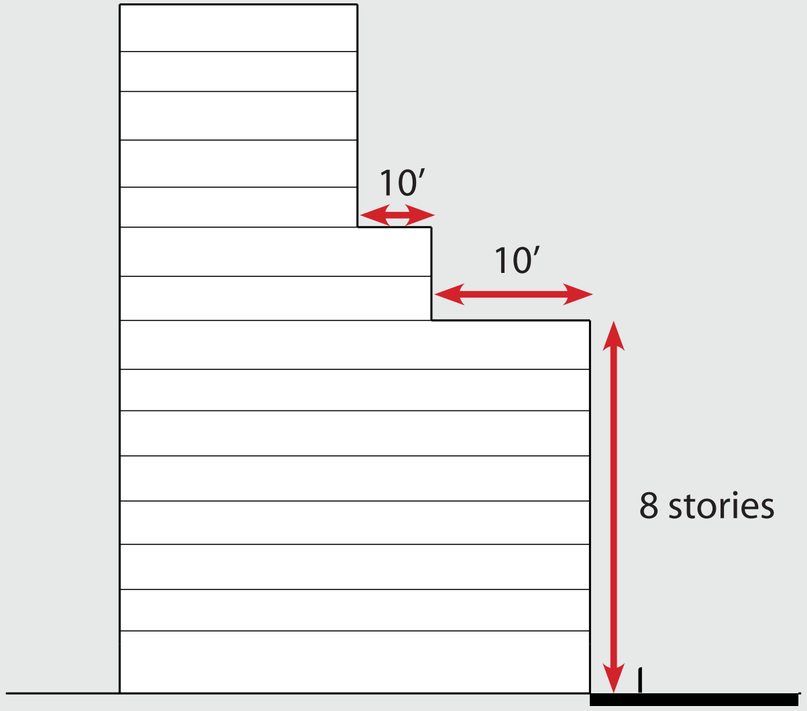




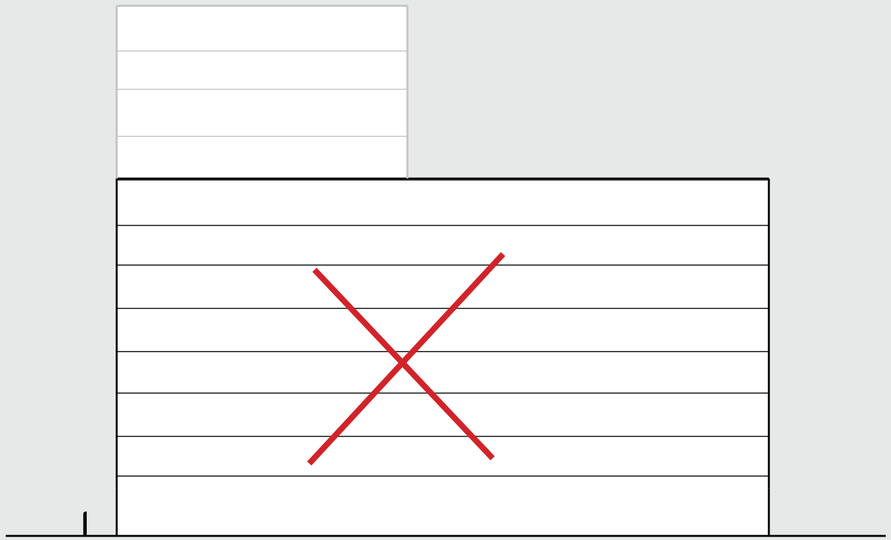
Tower Rules

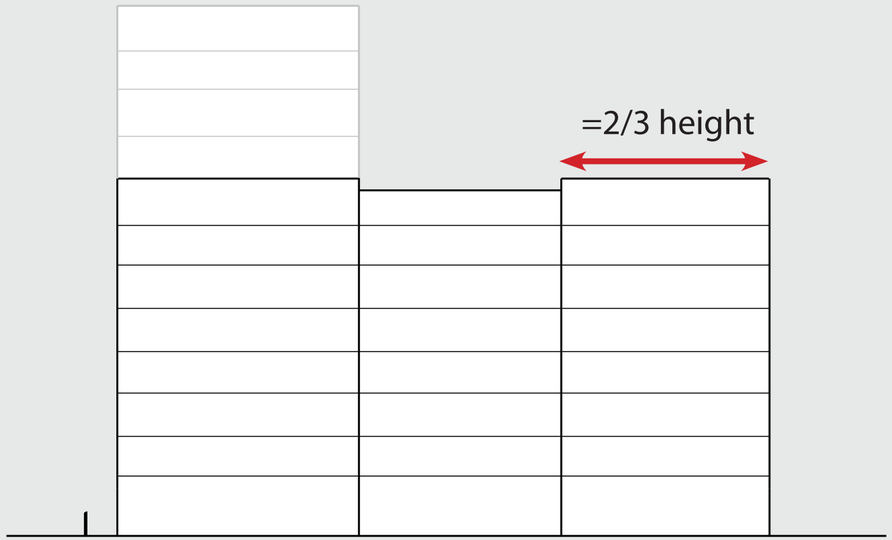
Scale & Diversity



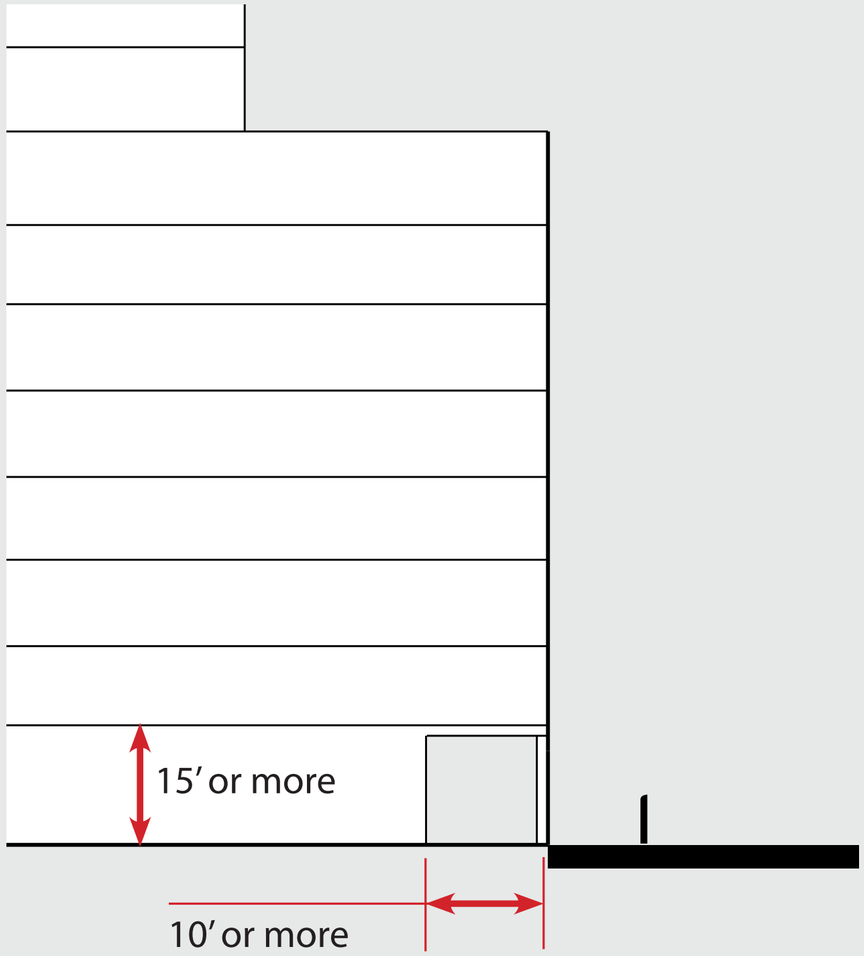


Scale & Diversity





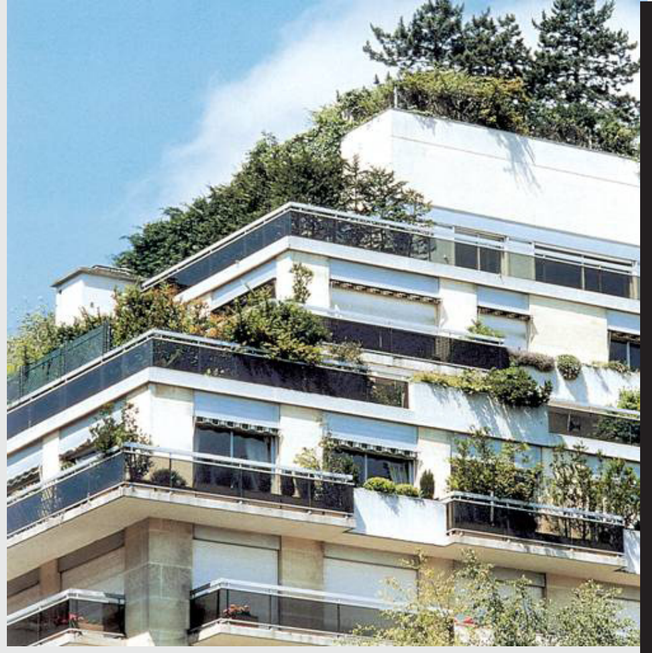
Scale & Diversity



Increase Biomass & Quality of Habitation

All horizontal end surfaces need to be planted gardens and green roofs , accessible by the residents or the general public, depending on size.

Hospitality may be exploited by permit on key locations.

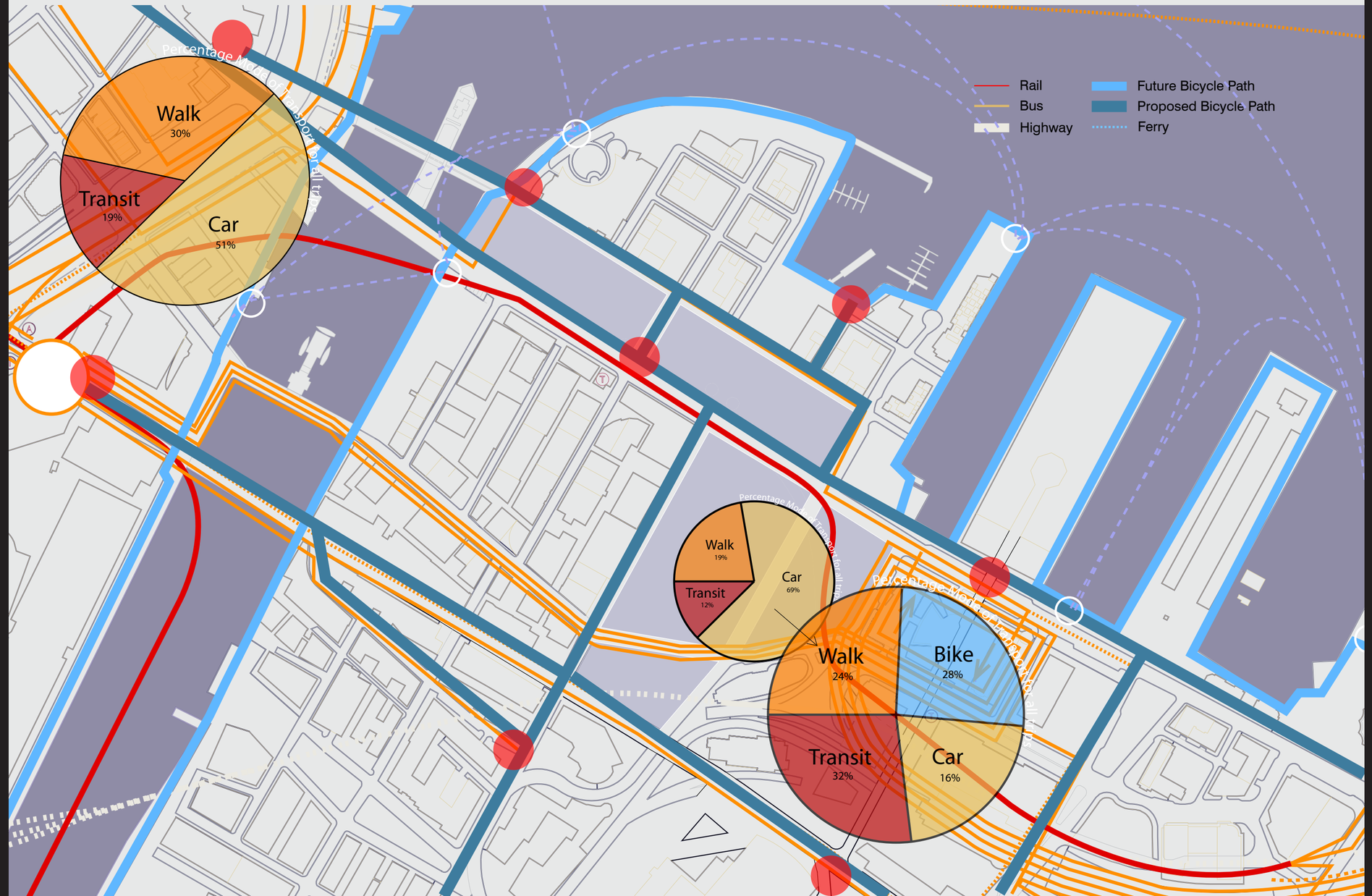


Applying the Rules

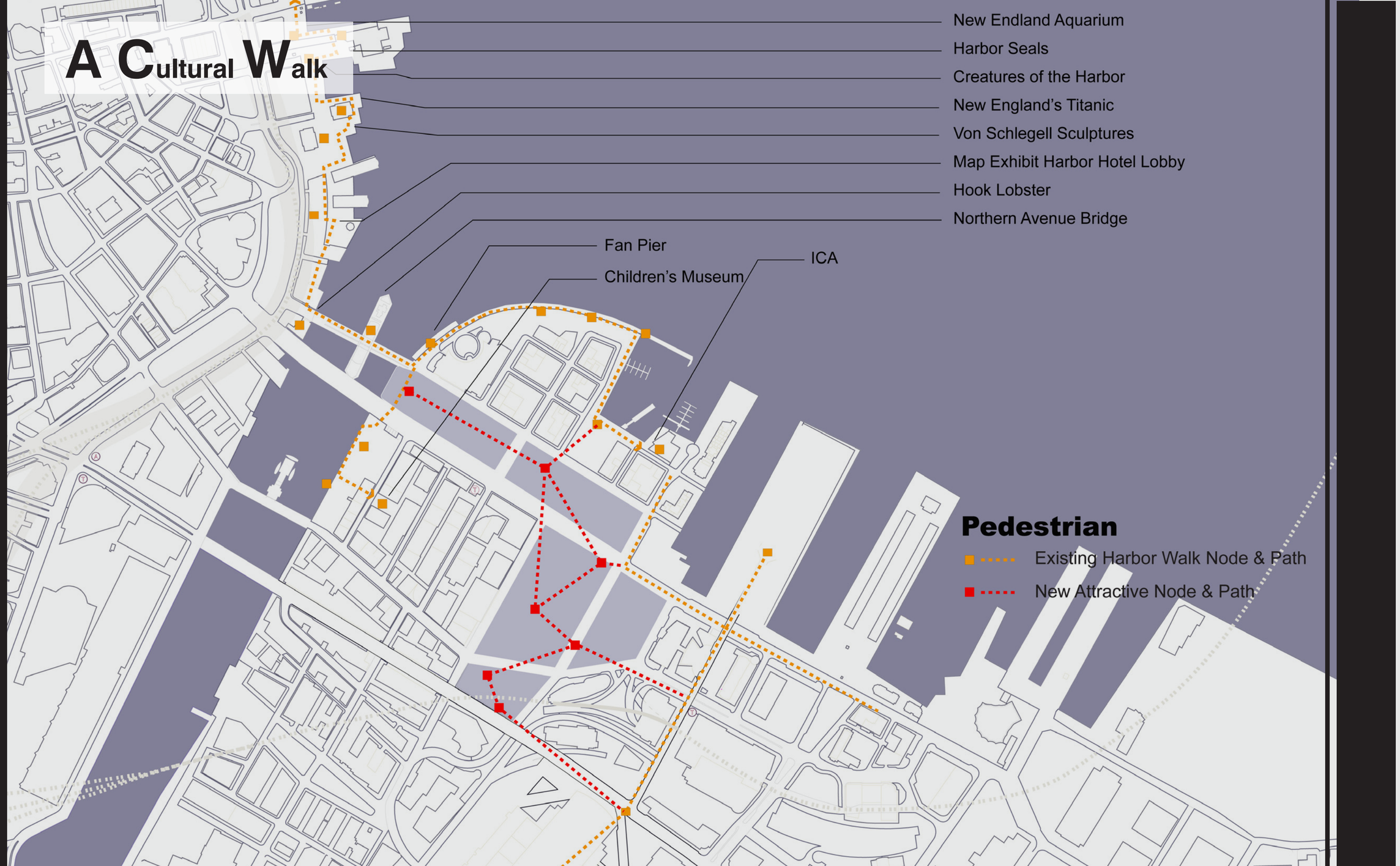

Inner Communities
Inner Communities
10 Minute Walk Radius
5 Minute Walk Radius
10 Minute Walk Radius
5 Minute Walk Radius


Public Transport Extensions
Subway station
Bus Stop
Subway Line
Bus Line
New Subway Line

Bicycle Amenities & Projection

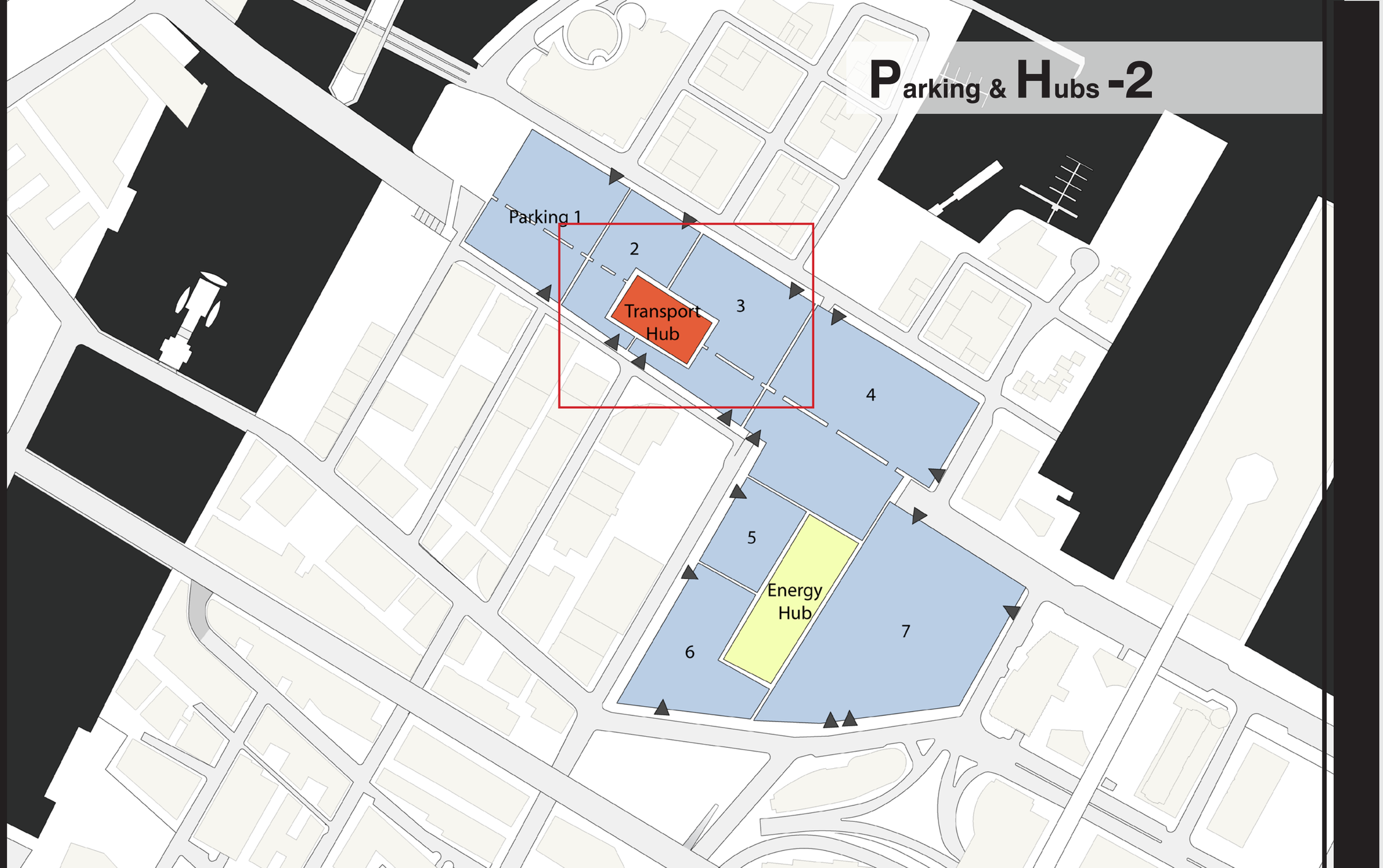


A Cultural Walk



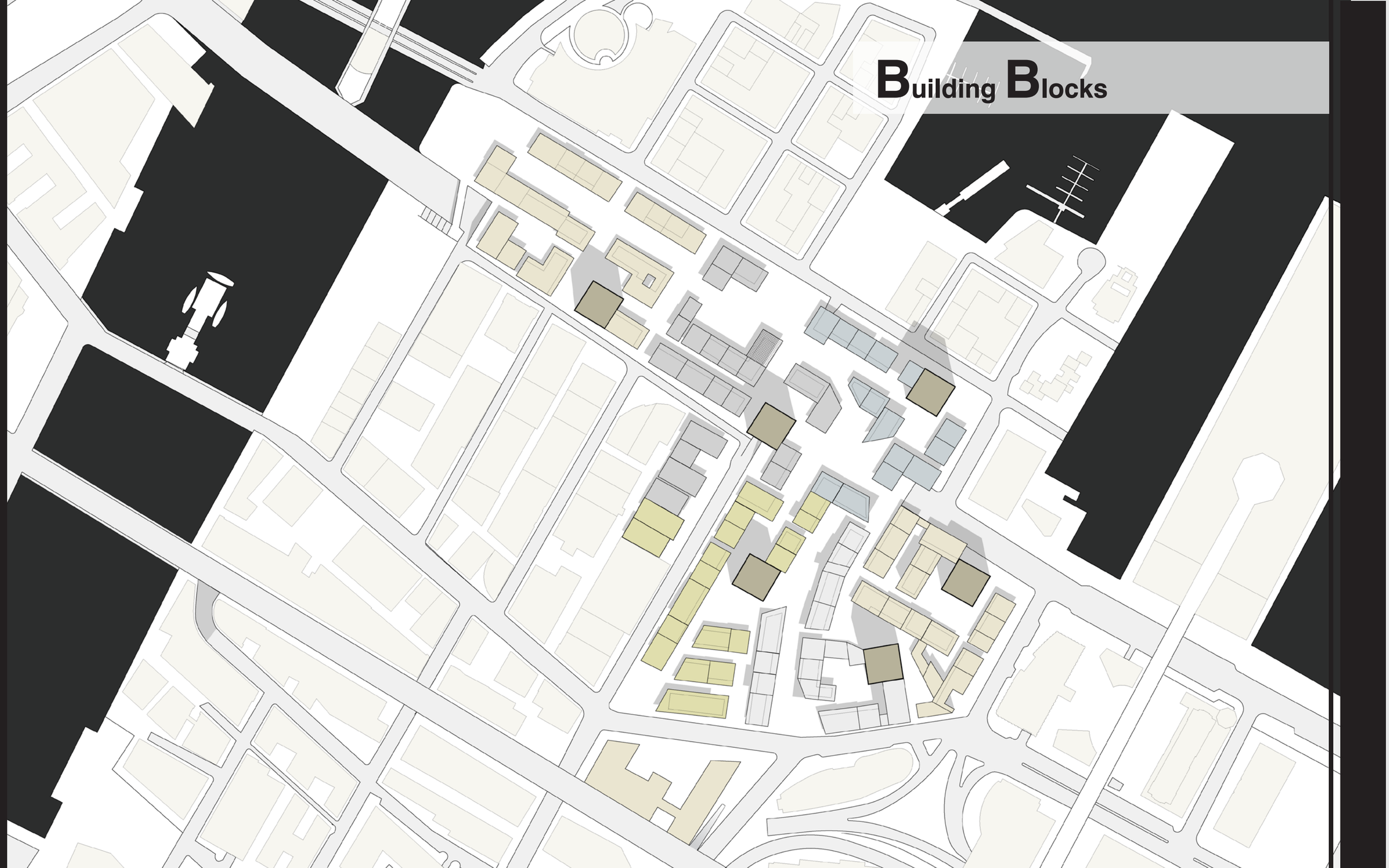

Main Circulation Organization

Parking & Hubs -2




Retail & Markets -1

Building Blocks



Ground Retail

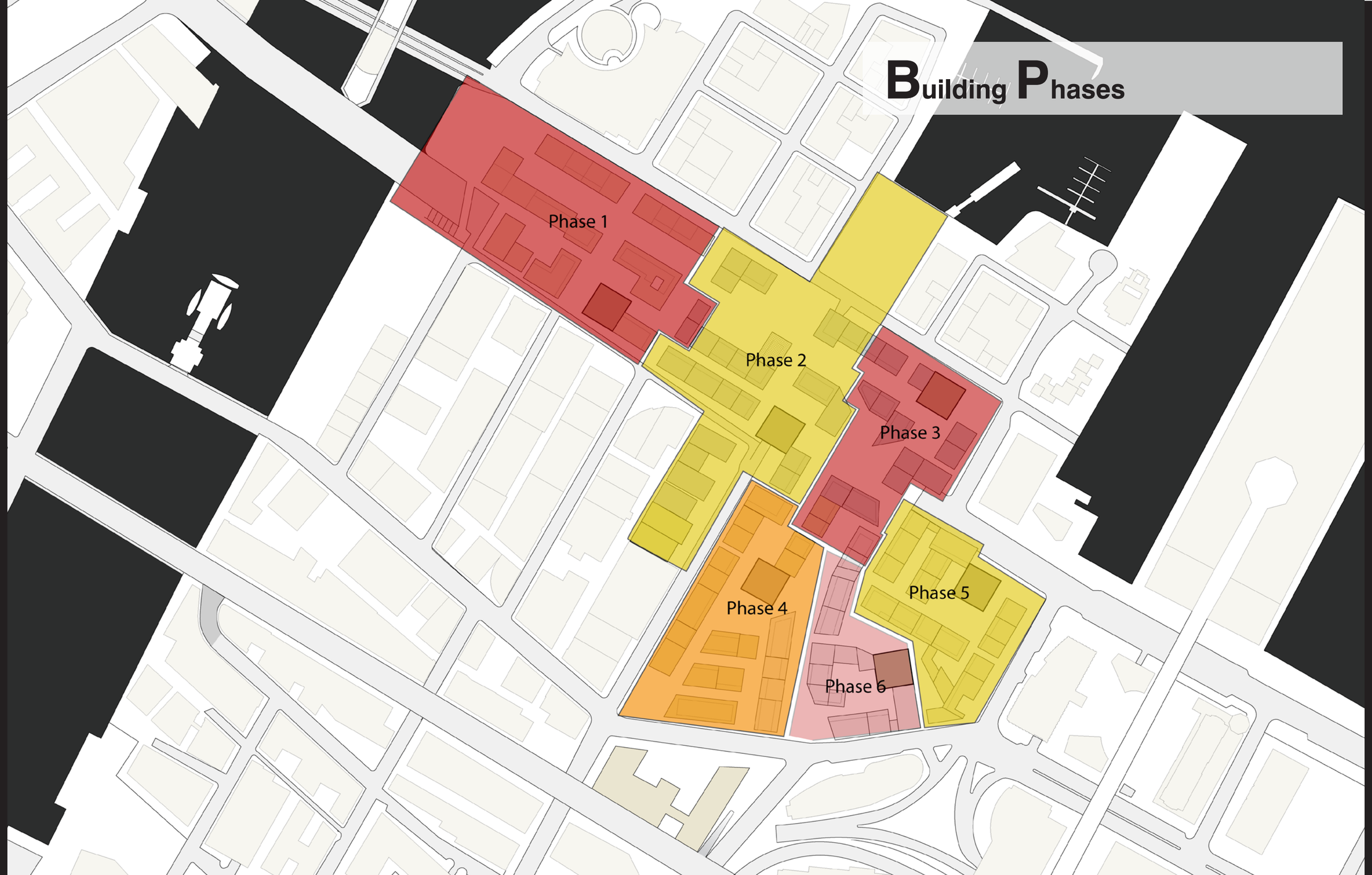
Parks & Landscaping


Channel System

Cultural Foci

Cafes & Restaurants

Building Phases



Sections

Sections

Sections

Sections