

Politecnico di Milano
School of Architecture and Society

URBAN DESIGN STUDIO– 056252

First Semester, Academic Year 2020 - 2021

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1

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TRANSFORMING THE CITY

URBAN PLANNING REASONS DRIVING THE CHANGE

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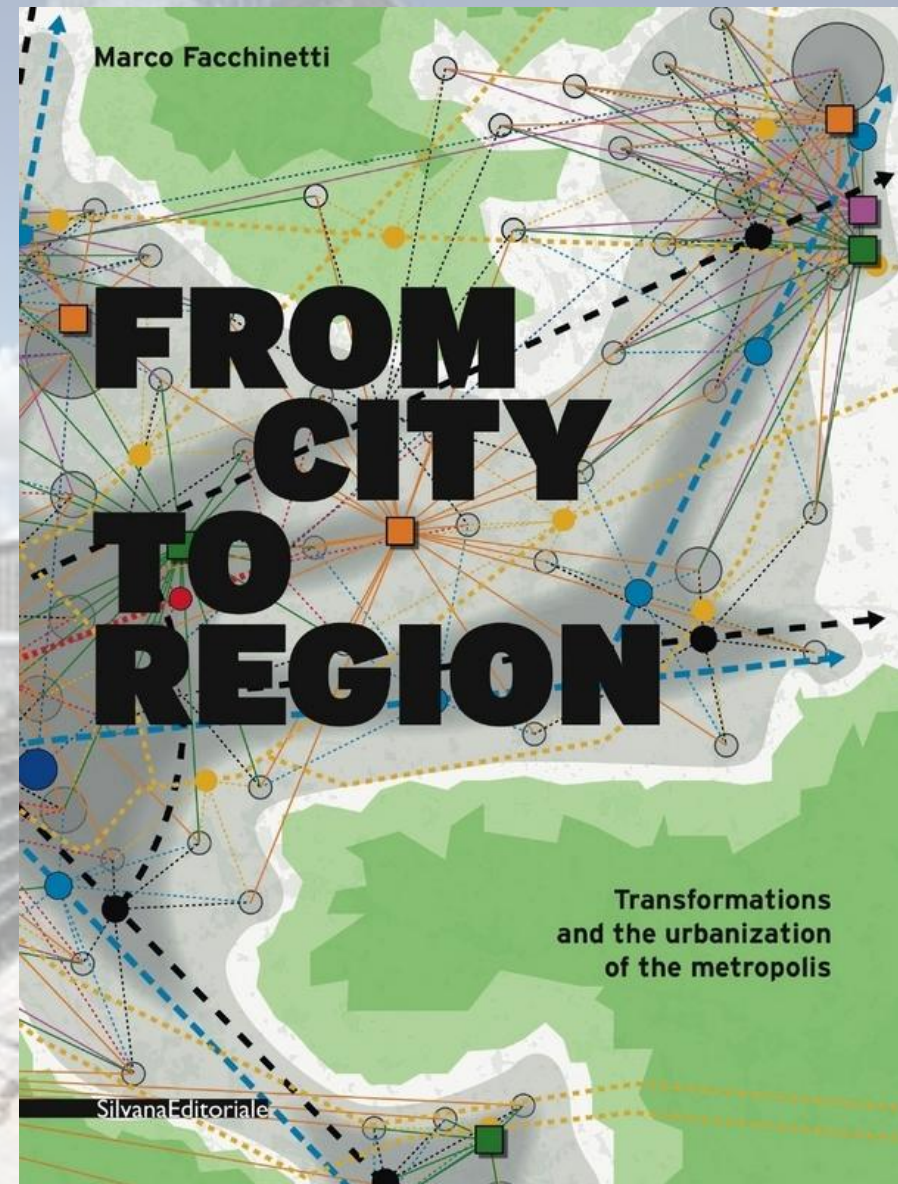
Visiting Professor at State University of New York at Albany, NY USA


Urban planner and architect, founder of The Blossom Avenue

I belong to the School of Architecture of Milano, taking its origins in the idea of reforming the city, changing and updating its rules and the urban planning tools behind the rules. The reform should have started from a strong integration between plan and project, where the first set the rules so smartly that the second can take inspiration from them, and not being bound by them, developing the best architecture able to express itself and making the city.

This tradition is the most important and the deepest root of the School of Milano and it is able to offer an integrated and rich approach to the process of making the city.

Marco Facchinetti




An aerial photograph of a city skyline, featuring a prominent, modern skyscraper with a glass facade and a unique, angular design. The building is surrounded by other urban structures, including smaller office buildings and residential blocks. The sky is blue with scattered white clouds. The overall scene depicts a dense, modern urban environment.

The Urban Design Studio aims at supporting the process of re planning a specific site within the Milan region showing the reasons and the process behind any transformation of the city.

During the last 40 years, all cities have experienced **fast and large processes of transformations**, aimed at changing the shape of the city, the relations within the city, the position of the city and the transformation of the city into a connected region.


For the first time, thanks to inner changes the city has changed itself completely.

An aerial photograph of a city skyline. The most prominent feature is a tall, modern skyscraper with a glass facade, located on the right side of the frame. To its left, there are several other high-rise buildings, some of which appear to be under construction. The foreground shows a mix of older, lower-rise buildings and a large green park area. The sky is blue with scattered white clouds.

European cities, first and at the beginning of the '80s, have started experiencing with:

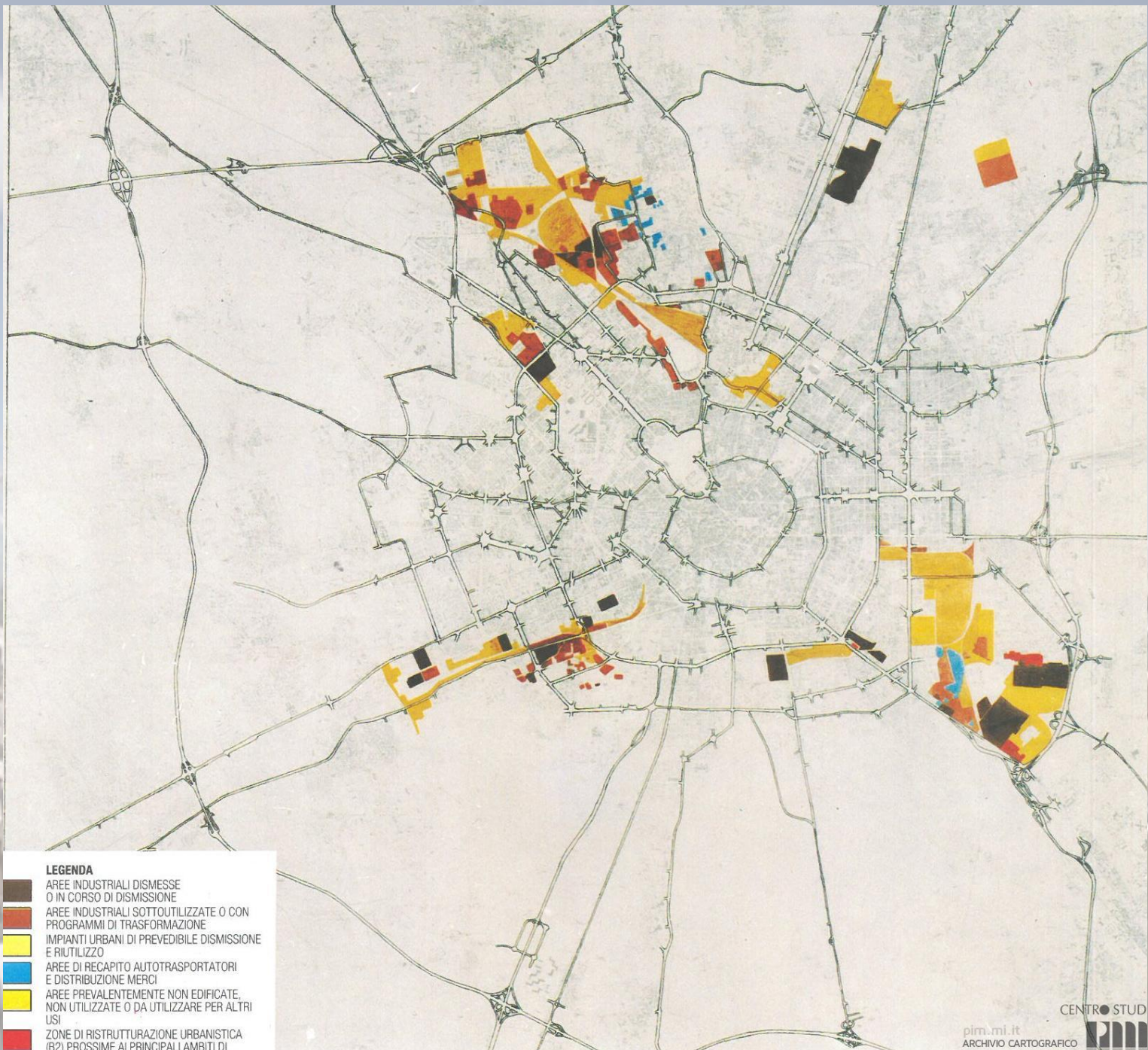
- (1) A large amount of available lands within the city, due to the changes in the economic processes that affected, first of all, the processes of manufacturing and moving goods



An aerial photograph of a city skyline, featuring a prominent, modern skyscraper with a glass facade in the center. The surrounding area includes various other buildings, some with traditional architectural styles, and a mix of urban development. The sky is blue with some light clouds.


European cities, first and at the beginning of the '80s, have started experiencing with:

- (1) A large amount of available lands within the city, due to the changes in the economic processes that affected, first of all, the processes of manufacturing and moving goods
- (2) A strong cultural debate, able to focus on the transformation of the areas, as a unique chance to change the city, starting a competition, not always peaceful, between the reasons of urban planning and the reasons of architecture design – The Plan VS The Project



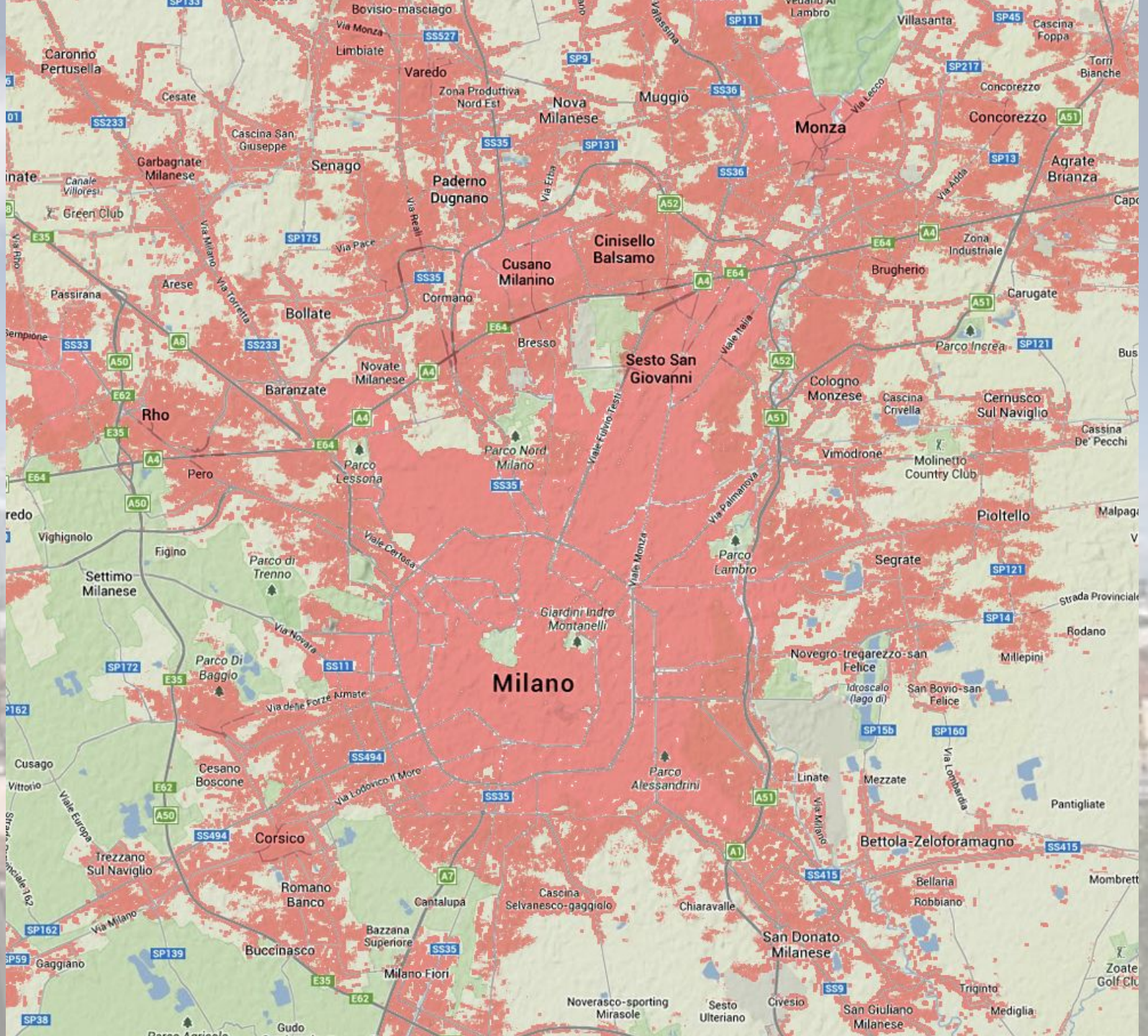
LEGENDA

- AREE INDUSTRIALI DISMESSE
O IN CORSO DI DISMISSIONE
- AREE INDUSTRIALI SOTTOUTILIZZATE O CON
PROGRAMMI DI TRASFORMAZIONE
- IMPIANTI URBANI DI PREVEDIBILE DISMISSIONE
E RIUTILIZZO
- AREE DI RECAPITO AUTOTRASPORTATORI
E DISTRIBUZIONE MERCI
- AREE PREVALENTEMENTE NON EDIFICATE,
NON UTILIZZATE O DA UTILIZZARE PER ALTRI
USI
- ZONE DI RISTRUTTURAZIONE URBANISTICA
(B2) PROSSIME AI PRINCIPALI AMBITI DI

An aerial view of a city skyline, featuring a prominent skyscraper in the center. The image is slightly faded and serves as a background for the text.

European cities, first and at the beginning of the '80s, have started experiencing with:

- (1) A large amount of available lands within the city, due to the changes in the economic processes that affected, first of all, the processes of manufacturing and moving goods
- (2) A strong cultural debate, able to focus on the transformation of the areas, as a unique chance to change the city, starting a competition, not always peaceful, between the reasons of urban planning and the reasons of architecture design – The Plan VS The Project
- (3) A developing vision on the city, moving the city towards the region, enlarging the domain of the urban on the surrounding areas

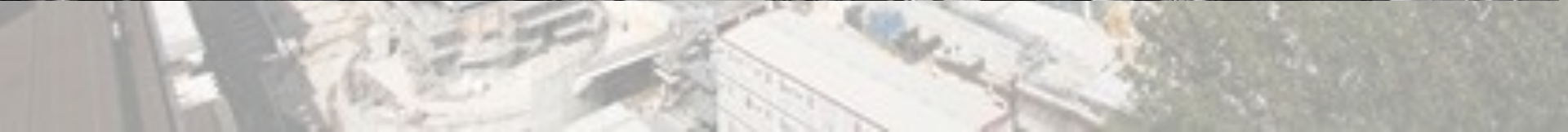
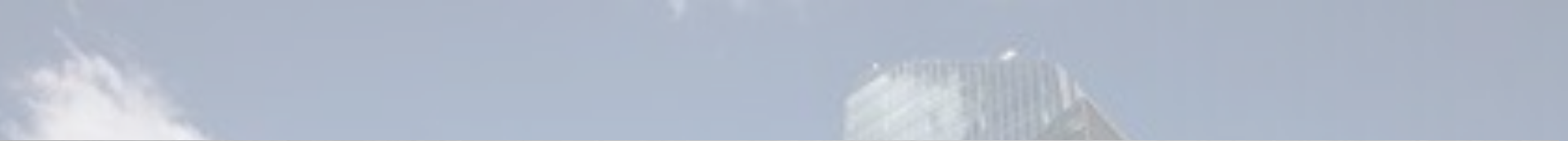



American cities started dealing with transformations even before, during the '60s, trying violently to update the image of the city, its uses and its relations, with the experience of the Urban Renewal Projects.

Entire neighborhoods of many cities have been completely transformed, displacing people, introducing new shapes and new 'international' architecture and focusing on attracting within the city as many people, users, functions, investments as possible. On a clear division with the region, where edge cities and suburbs continue to grow.



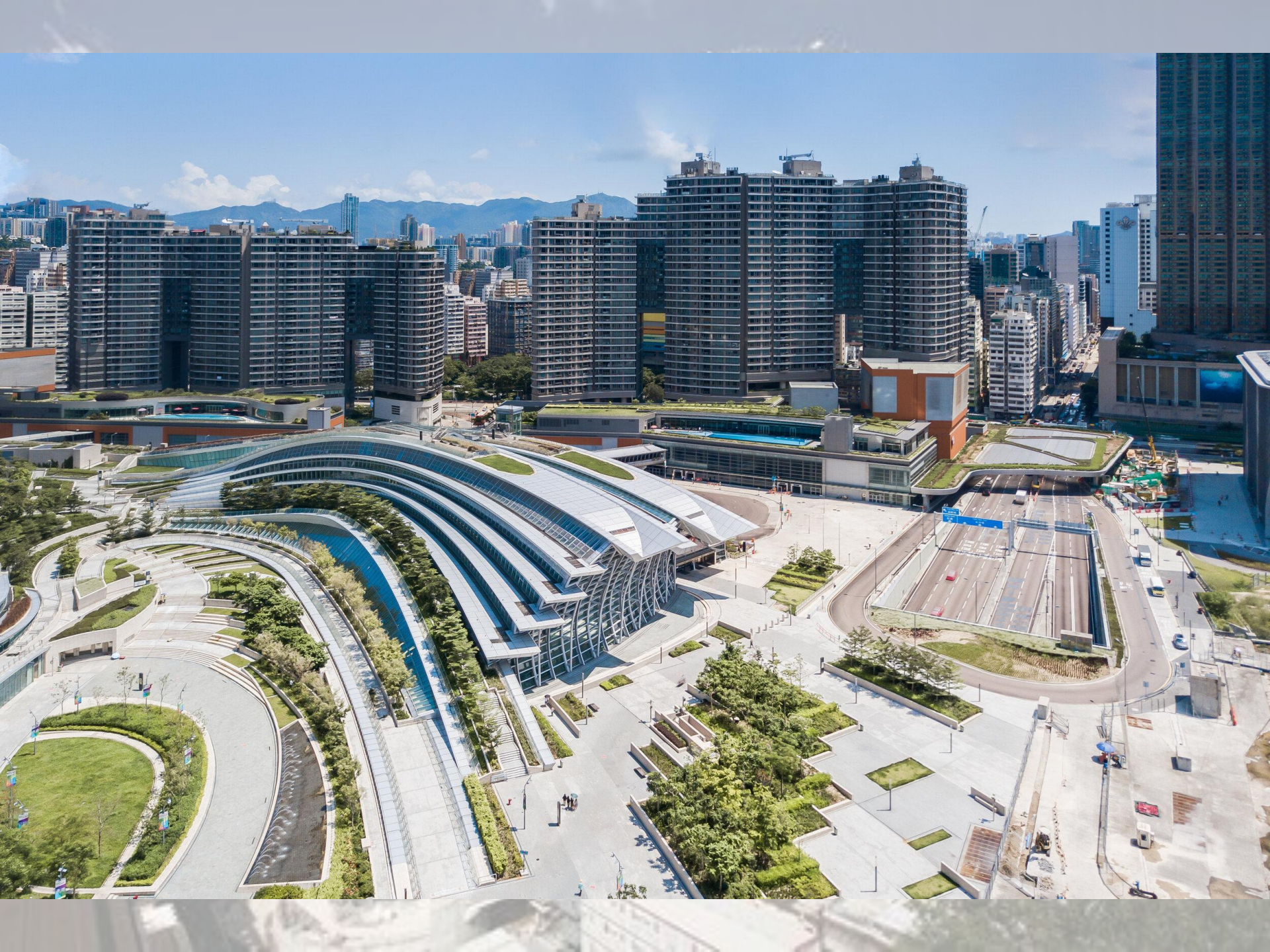


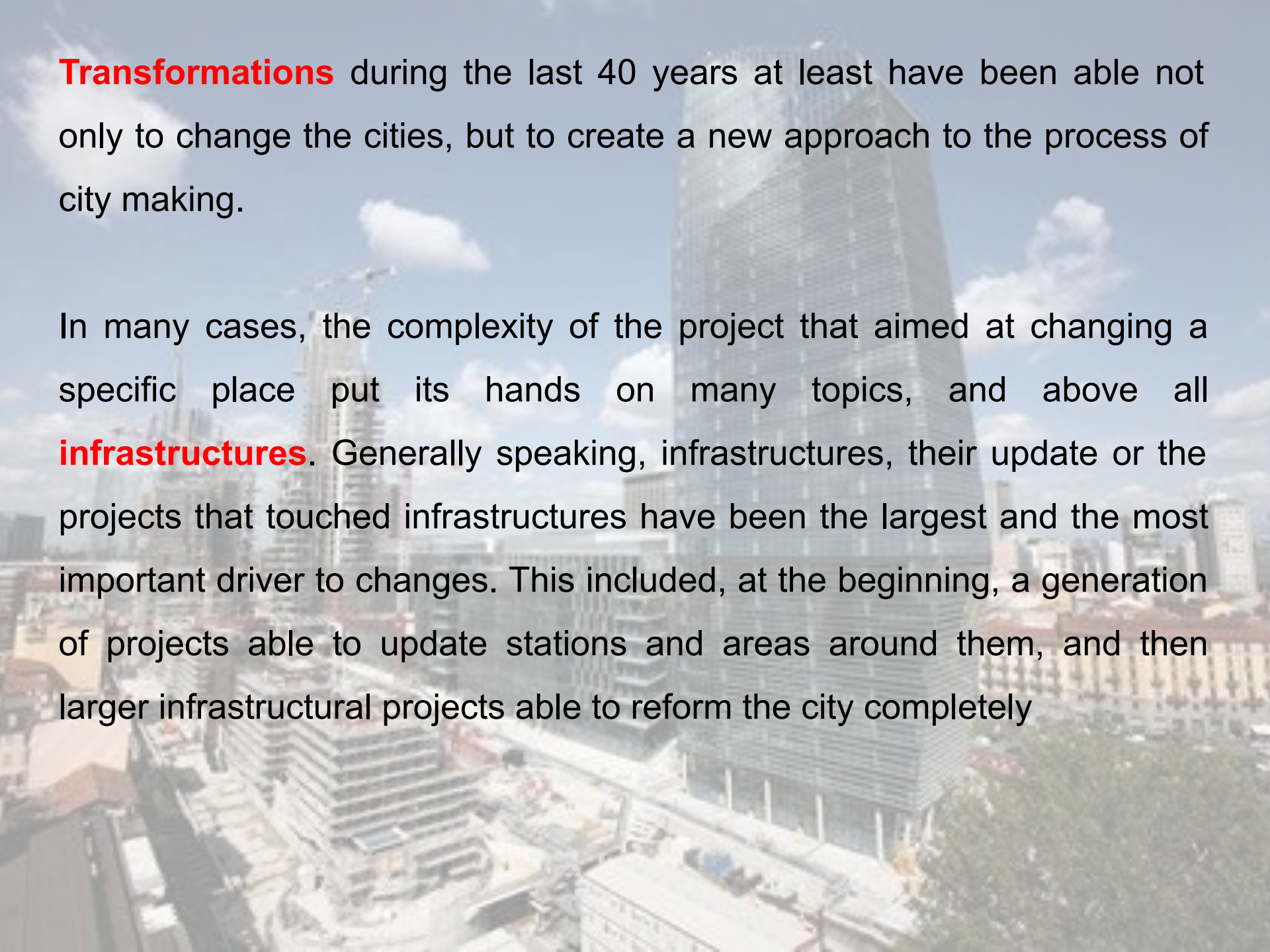


An aerial photograph of a city skyline, featuring a prominent, modern skyscraper with a glass facade and a distinctive, slightly curved top. The surrounding area includes various other buildings, some with traditional architectural styles, and a mix of urban development. The sky is blue with some light clouds.

Eastern world cities such as Chinese cities or other cities belonging to quickly developing countries, used the transformation of the city as paradigm to build a completely new city, where development drove the growth of large areas within the city already with a regional dimension. Typologies of transformations, such as waterfront, or culture complexes, or shopping and entertainment areas have been developed to change the shape, the role and the image of the city. Absorbing the experience and the organization of the city that other places, in Europe above all, firstly experienced.



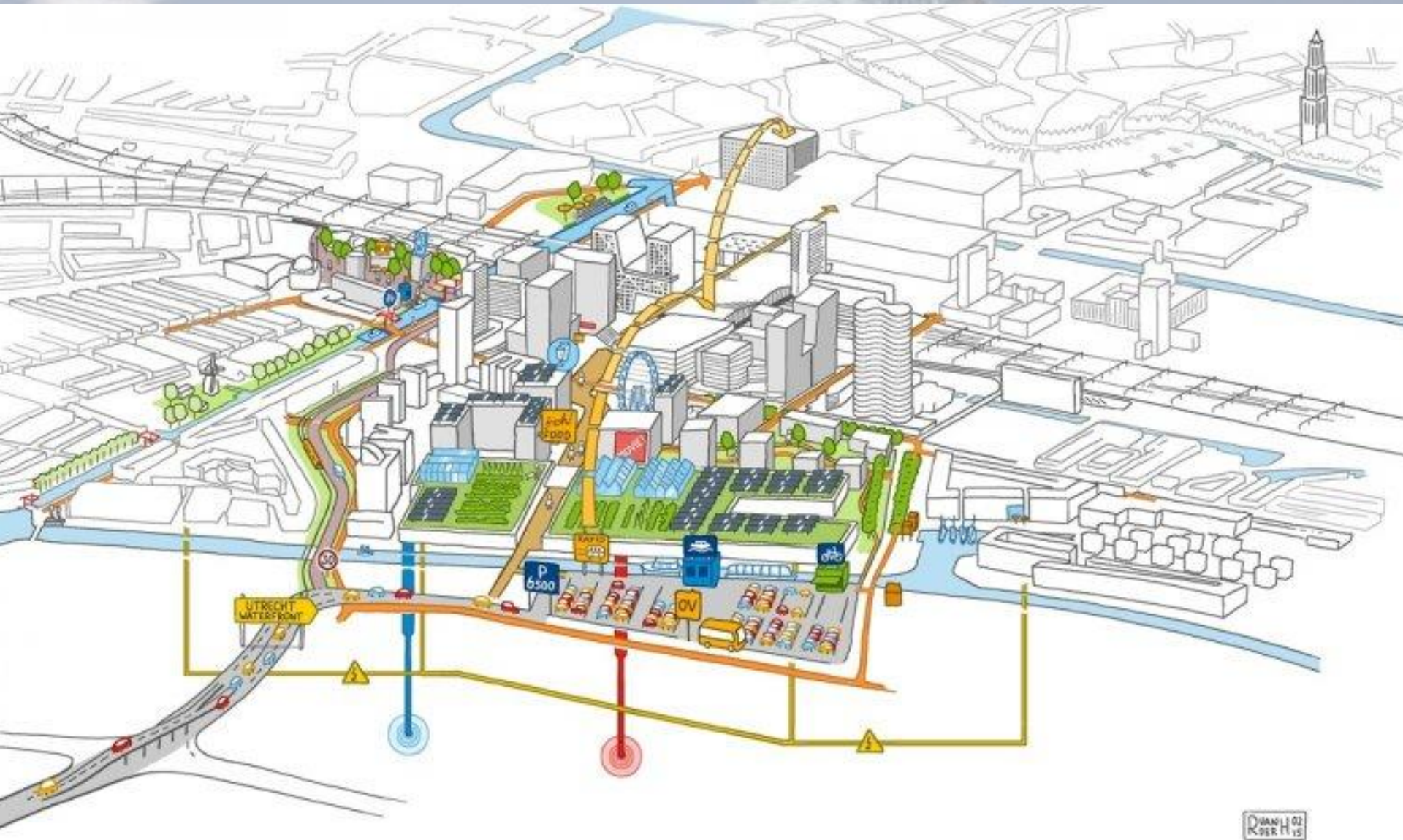


An aerial photograph of a city skyline. A tall, modern skyscraper with a glass facade is the central focus, appearing to be under construction or recently completed. The surrounding area is filled with various other buildings, including some older, lower-rise structures. The sky is blue with scattered white clouds. The overall scene depicts a dense urban environment in the process of transformation.

Transformations during the last 40 years at least have been able not only to change the cities, but to create a new approach to the process of city making.

In many cases, the complexity of the project that aimed at changing a specific place put its hands on many topics, and above all **infrastructures**. Generally speaking, infrastructures, their update or the projects that touched infrastructures have been the largest and the most important driver to changes. This included, at the beginning, a generation of projects able to update stations and areas around them, and then larger infrastructural projects able to reform the city completely





BUILDING A NEW CITY WITHIN A CITY

Hudson Yards won't just be the largest development in U.S. history. It will create a ready-made neighborhood spanning more than 26 acres on Manhattan's far West Side. Over the next decade what's now a sprawling rail yard will be covered by 18 million square feet of offices, apartments, and luxury shopping malls.

PHASE 1 EASTERN RAIL YARD, 2018

The 13-acre portion will accommodate 7 million square feet of mixed-use development, including office, residential, hotel, retail, cultural, and parking facilities, and at least seven acres of public open space.

PHASE 2 WESTERN RAIL YARD

The western portion of the project is also 13 acres and will accommodate 6 million square feet of predominantly residential development along with office, retail, educational, and parking facilities.

SUBWAY STOP (north of project)

The extension of the No. 7 subway line will connect the Hudson Yards to the rest of the transit system. Offers direct access to the North Tower and opens in 2014.



NORTH TOWER—80 STORIES

2.4-million-square-foot commercial office tower. Projected for completion in 2018.

SOUTH TOWER—52 STORIES

1.7-million-square-foot commercial tower. Will be home to Coach, L'Oréal USA, SAP, and Fairway Market. Under construction; to be completed in 2015.

E TOWER—75 STORIES

1.1-million-square-foot mixed-use tower. 60 floors of residences and 11 floors to host a 200-room hotel. Expected to end construction in 2017.

OBSERVATION DECK

Highest outdoor deck in New York City.

RETAIL—FIVE STORIES

750,000 square feet of retail space. Shops, cinemas, restaurants, markets, and bars. Opening in 2017.

PUBLIC SQUARE

A monumental sculpture will be at the center of the space.

CULTURE SHED

Will host a range of art, design, and performance activities starting in 2018.

D TOWER—70 STORIES

800,000-square-foot residential tower. The first residential building to be completed, in 2017.

SCHOOL

750-seat K-8 public school.

PLATFORM

The real estate development requires the construction of platforms over the active rail yard.

HIGH LINE

Elevated freight rail line transformed into a public park on Manhattan's West Side.

HUDSON YARDS REDEVELOPMENT PROJECT

NYC



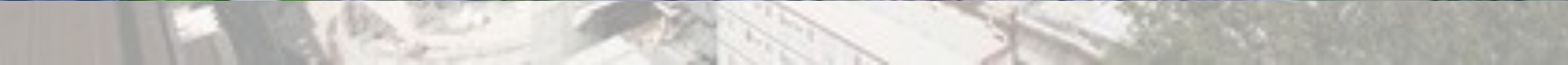
— Crossrail's tunnels

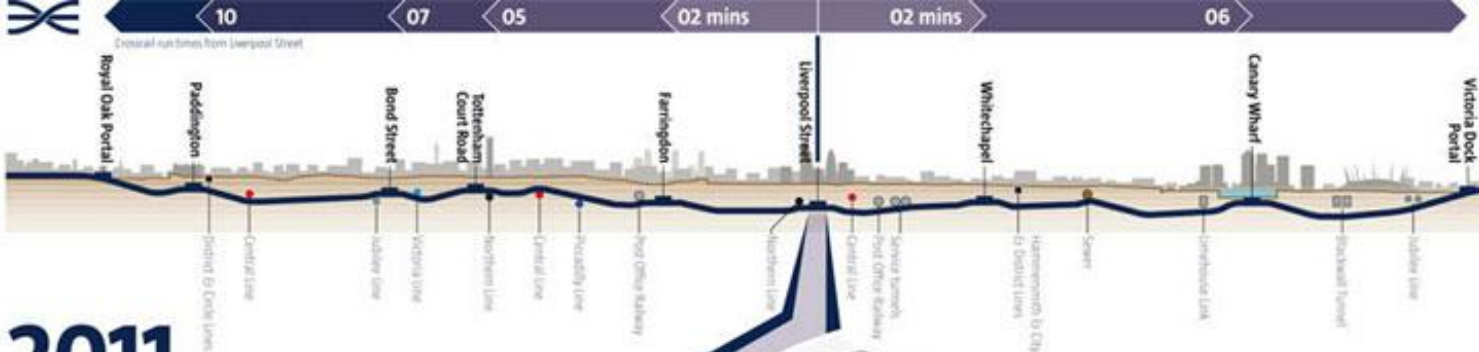


Source: Crossrail









2011
Main construction contractors break ground

40m
Depth of Blomfield Street box structure

This will accommodate ventilation, electrical, mechanical and systems equipment

108.8k
Daily passenger use (Crossrail)

33m
Depth of draught relief shaft at Moorgate

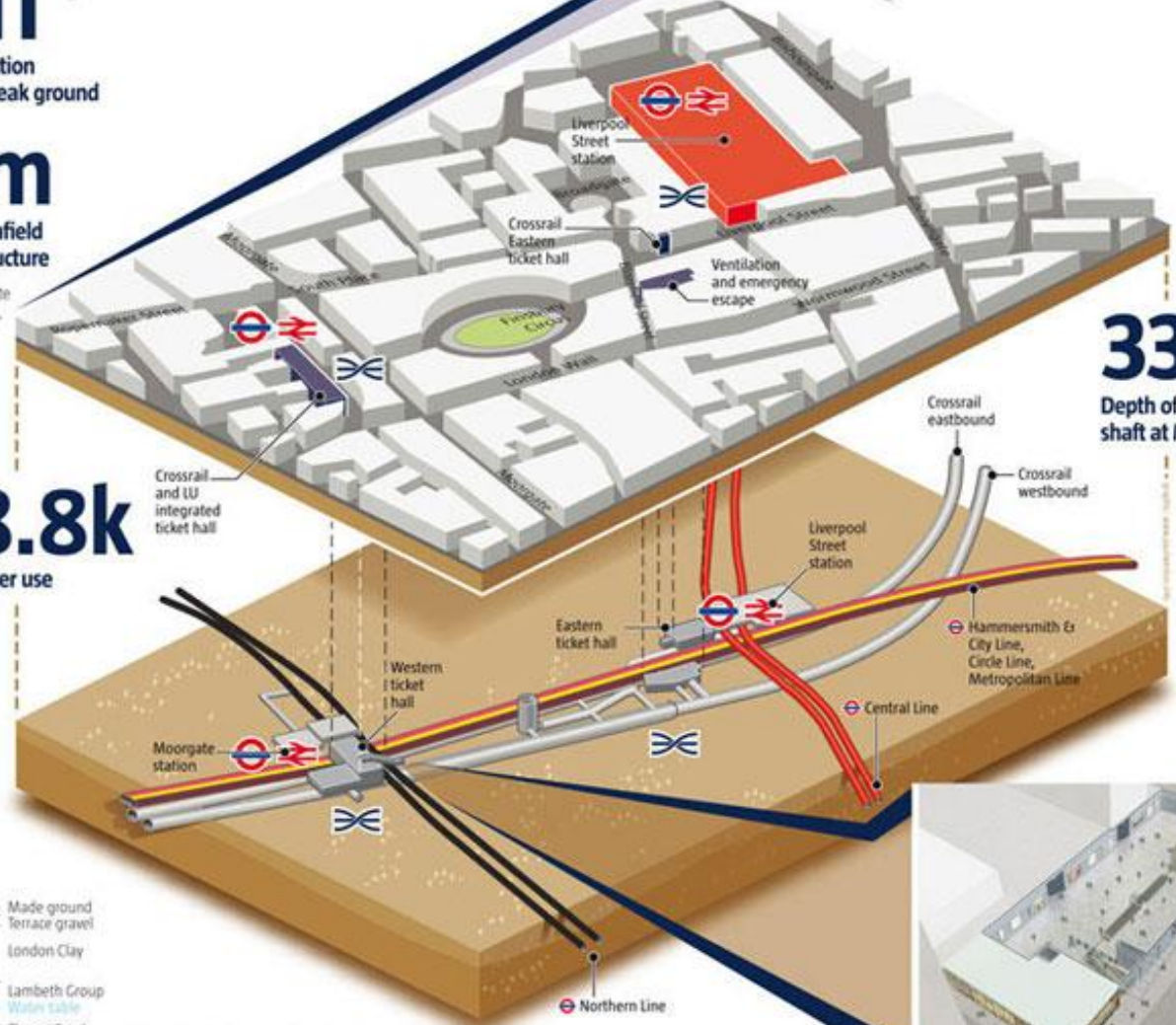
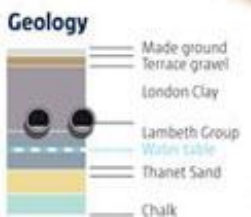



Illustration by Crossrail



An aerial view of a city skyline, featuring a prominent, modern skyscraper with a glass facade in the center. The surrounding area includes various other buildings, streets, and green spaces, all under a clear blue sky with some light clouds.

The **Urban Design Studio** will move through these aspects, and in its focus on the creation of a masterplan for the redevelopment of Porta Romana's area in Milano, it will:

- Explain the area now on the process of urban planning of a contemporary city role of transformation's
- Understand the elements that need to be considered, on a large and integrated approach and with the deep acknowledgment that every stone changed on a complex city has impacts on the whole region
- Highlight the systems that compose a masterplan, dividing them between structural elements and strategic assets
- Consider the official rules and plans, always moving towards them to implement them or to propose amendments
- Create a toolbox of keywords and elements able to move students from project to practice

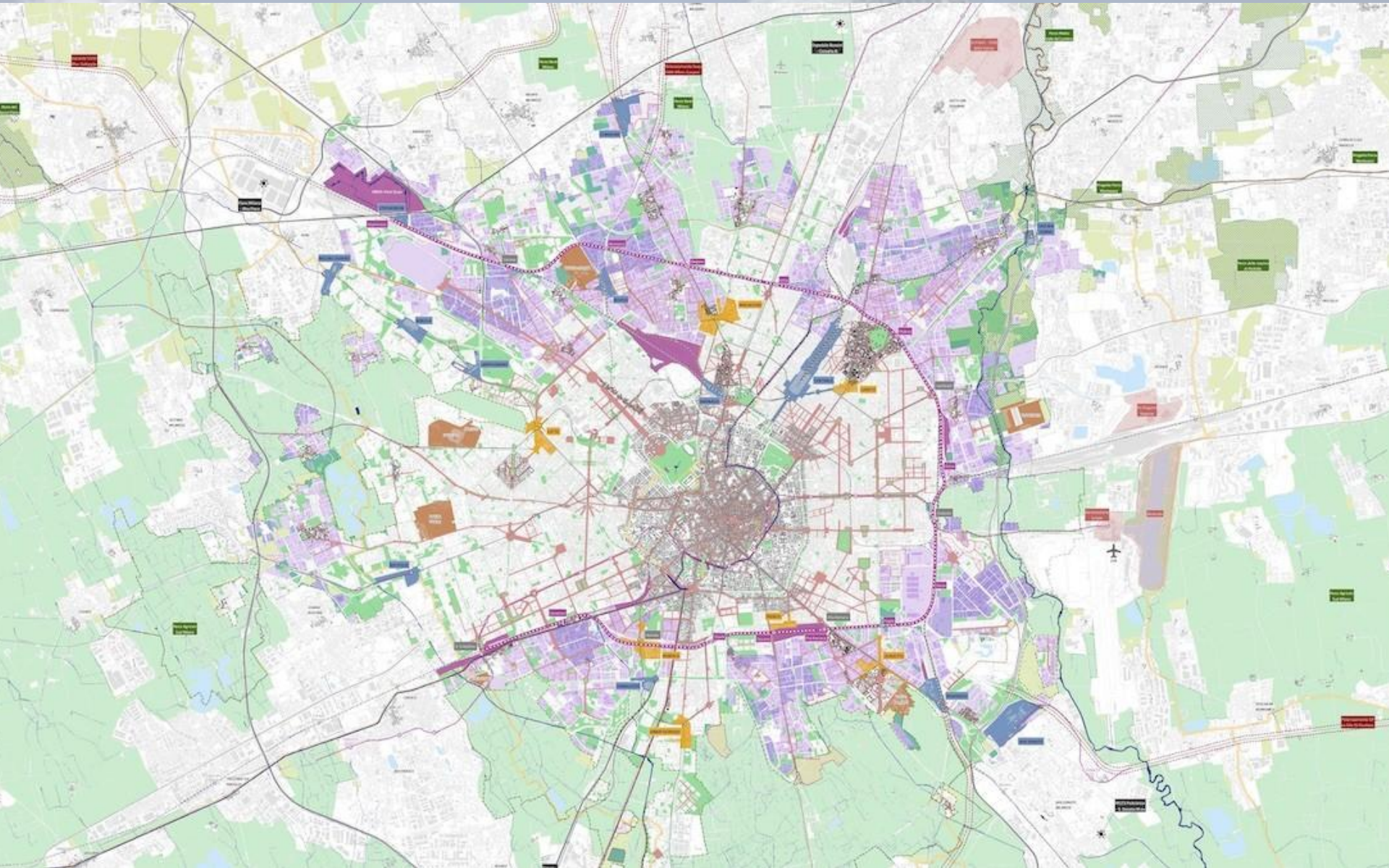
Progetto passante -
Documento Direttore

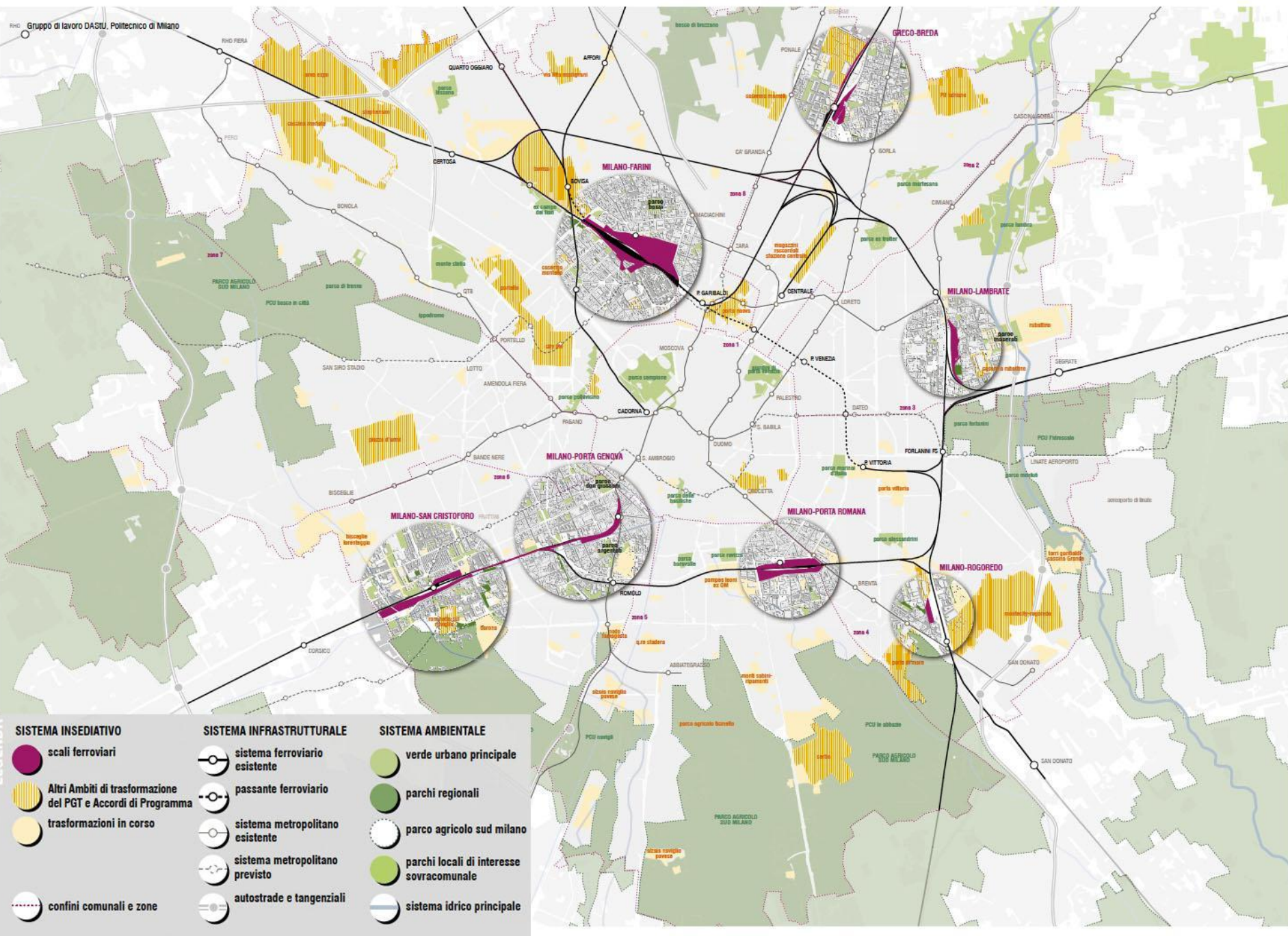
PROGETTO PASSANTE - SINTESI DEGLI
INDIRIZZI GENERALI PER GLI INTERVENTI



LEGENDA

- LINEE FERROVIARIE
- LINEE METROPOLITANE E STAZIONI
- PROGETTI DI AREA
- AREE DI RIDEFINIZIONE
- SISTEMI DI VERDE E SERVIZI DA PROGETTARE
- SPAZI PUBBLICI DA RIQUALIFICARE
- NODI DI INTERSCAMBIO






SISTEMA INSEDIATIVO

-  scali ferroviari
-  Altri Ambiti di trasformazione del PGT e Accordi di Programma
-  trasformazioni in corso
-  confini comunali e zone


SISTEMA INFRASTRUTTURALE

-  sistema ferroviario esistente
-  passante ferroviario
-  sistema metropolitano esistente
-  sistema metropolitano previsto
-  autostrade e tangenziali

SISTEMA AMBIENTALE

-  verde urbano principale
-  parchi regionali
-  parco agricolo sud milano
-  parchi locali di interesse sovracomunale
-  sistema idrico principale

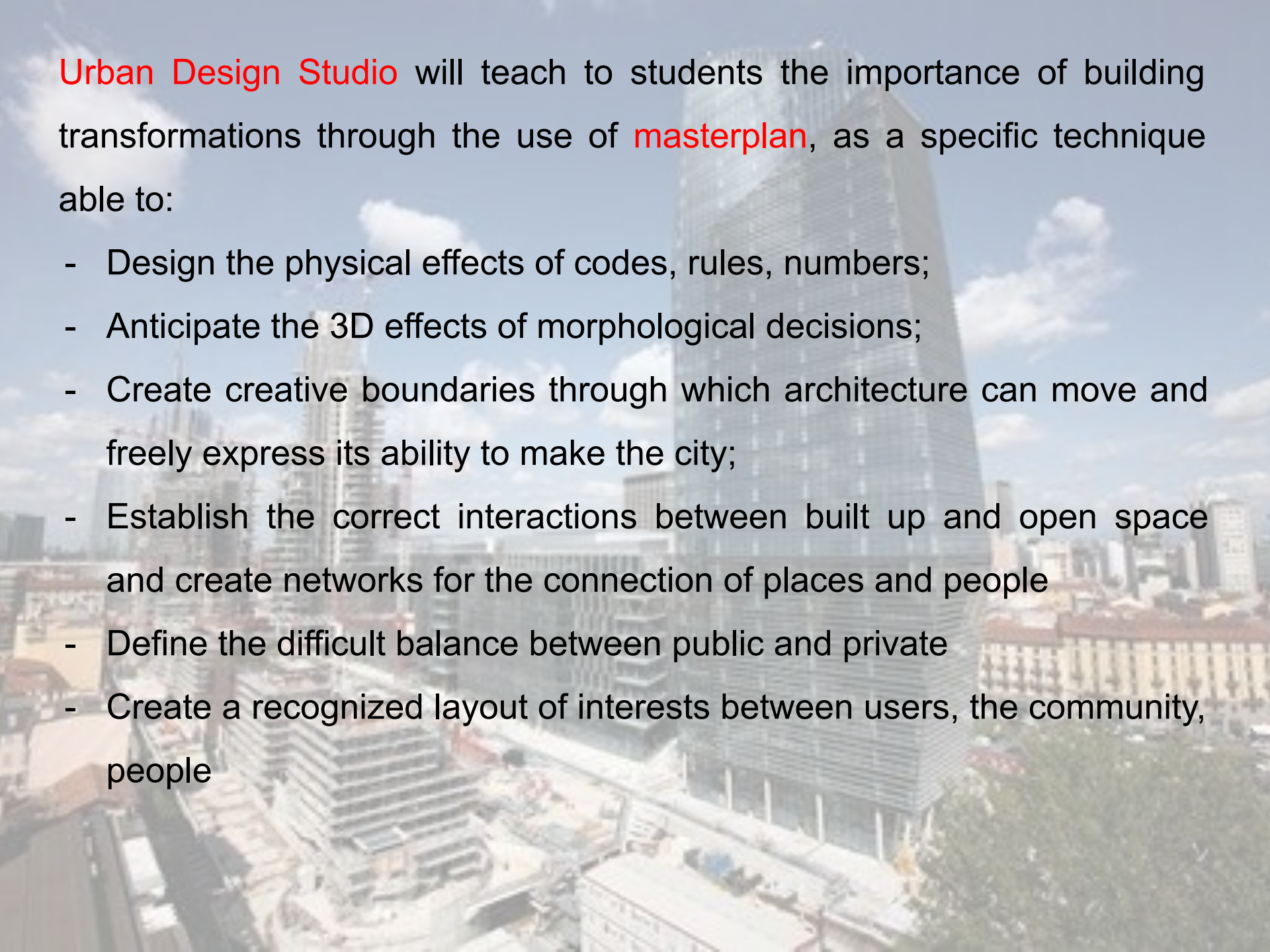
LEGENDA

An aerial photograph of a city, featuring a prominent, modern skyscraper with a glass facade in the center. The surrounding area includes other buildings, streets, and green spaces. The sky is blue with some clouds.

The aim of **Urban Design Studio** is to fill of urban planning contents the masterplan students shall prepare and propose for the redevelopment of Porta Romana railyards.

Through some important keywords, Urban Design Studio will guide the creative process of designing, with architecture, the transformation of this section of the city:

- **Innovation**, as a new engine able to combine the most active actors of urban life, from anchor institutions or events (such as the Olympics) to communities and groups of interests;
- **Sustainability**, as a changing paradigm, able to invest the whole urban economy with new contents
- **Urbanity**, and a reviewed idea of centrality, in a world with new distances, and a changing geography of interests
- **Togetherness**, with a new view of the idea of neighborhood

An aerial photograph of a city skyline, featuring a prominent, modern skyscraper with a glass facade in the center. The sky is blue with scattered white clouds. The foreground shows a dense urban environment with various buildings and green spaces.

Urban Design Studio will teach to students the importance of building transformations through the use of **masterplan**, as a specific technique able to:

- Design the physical effects of codes, rules, numbers;
- Anticipate the 3D effects of morphological decisions;
- Create creative boundaries through which architecture can move and freely express its ability to make the city;
- Establish the correct interactions between built up and open space and create networks for the connection of places and people
- Define the difficult balance between public and private
- Create a recognized layout of interests between users, the community, people