

WORKSHOP INTERNACIONAL 2020
“RESILIENCIA URBANA EN LA CIUDAD POST-COVID”

EUROPEAN MASTER IN POLICY AND PLANNING
FOR CITIES, ENVIRONMENT AND LANDSCAPE (PPCEL)

Students:

Andrea Visioli
Giovanni Ianniello
Roberto Lorenzon

Tutor:

Gianmarco Di Giustino
Gabriele Gana
Mónica Castañeda

Professor:

Matelda Reho
Oriol Porcel

I
- -
U
- -
A
- -
V

0.

RETHINKING VENEZIA-MESTRE

RETHINKING VENEZIA-MESTRE

URBAN RESILIENCE IN THE POST-COVID CITY

1. THE CASE STUDY AND COVID19
VENEZIA-MESTRE

2. SOCIO-ECONOMIC ANALYSIS

3. POLICIES FOCUS

4. THE FIRST RESULTS OF THE
SOCIO-ECONOMIC ANALYSIS

5. THE STRUCTURE OF PUBLIC
SERVICES IN MESTRE

6. STRATEGY

7. OBJECTIVES

8. LOCATING ACTIONS

9. PLANNING TOOLS

10. EVALUATING ACTIONS

11. CONSIDERATIONS

1.

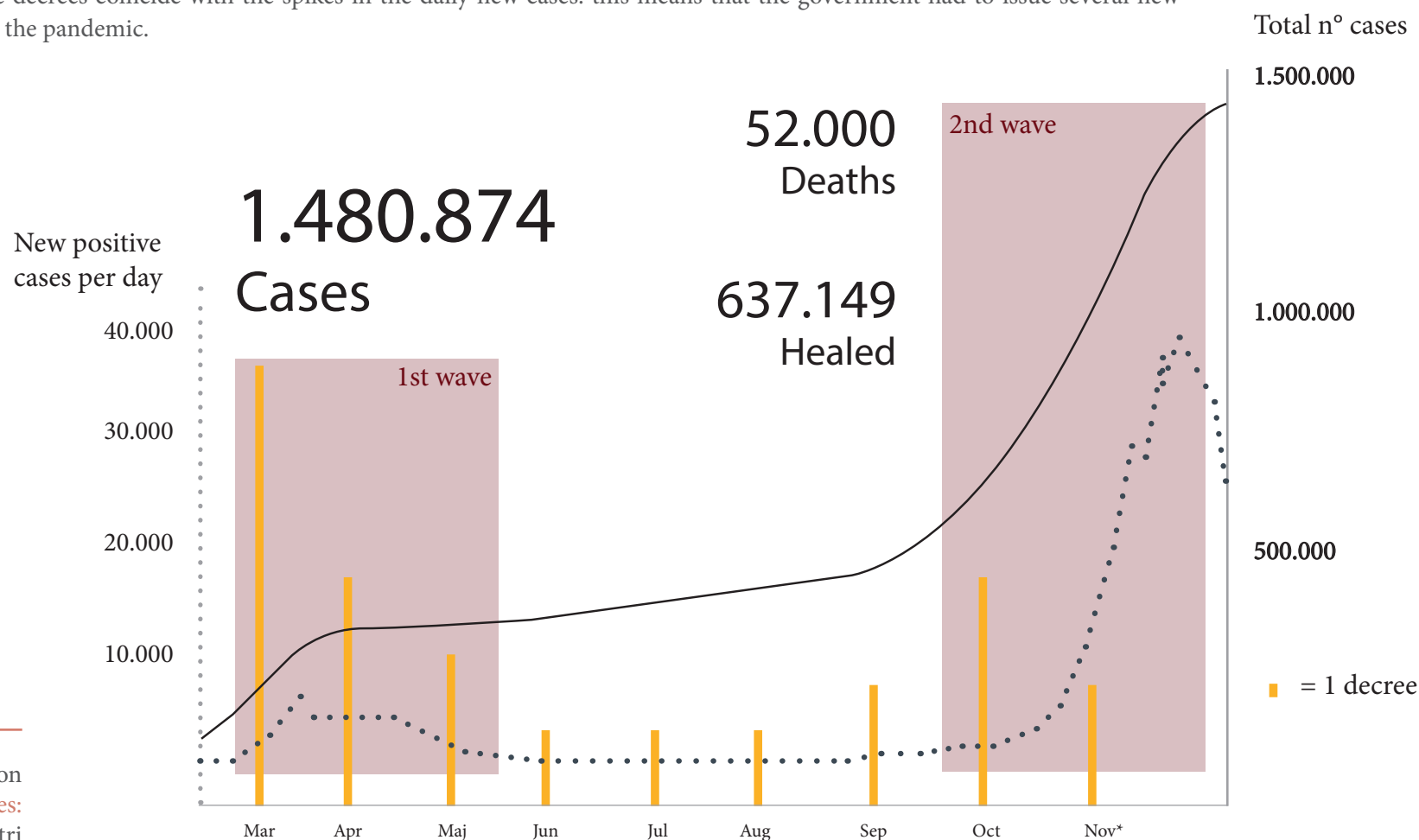
THE CASE STUDY AND COVID19 VENEZIA - MESTRE

THE CASE STUDY AND COVID19

NATIONAL LEVEL - DIFFERENCES BETWEEN REGIONS

Total number of cases (solid line), number of new positive cases per day (dotted line), total monthly decrees (yellow columns). We can see that the spikes in the decrees coincide with the spikes in the daily new cases: this means that the government had to issue several new measures to cope with the pandemic.

*as 03-11-2020

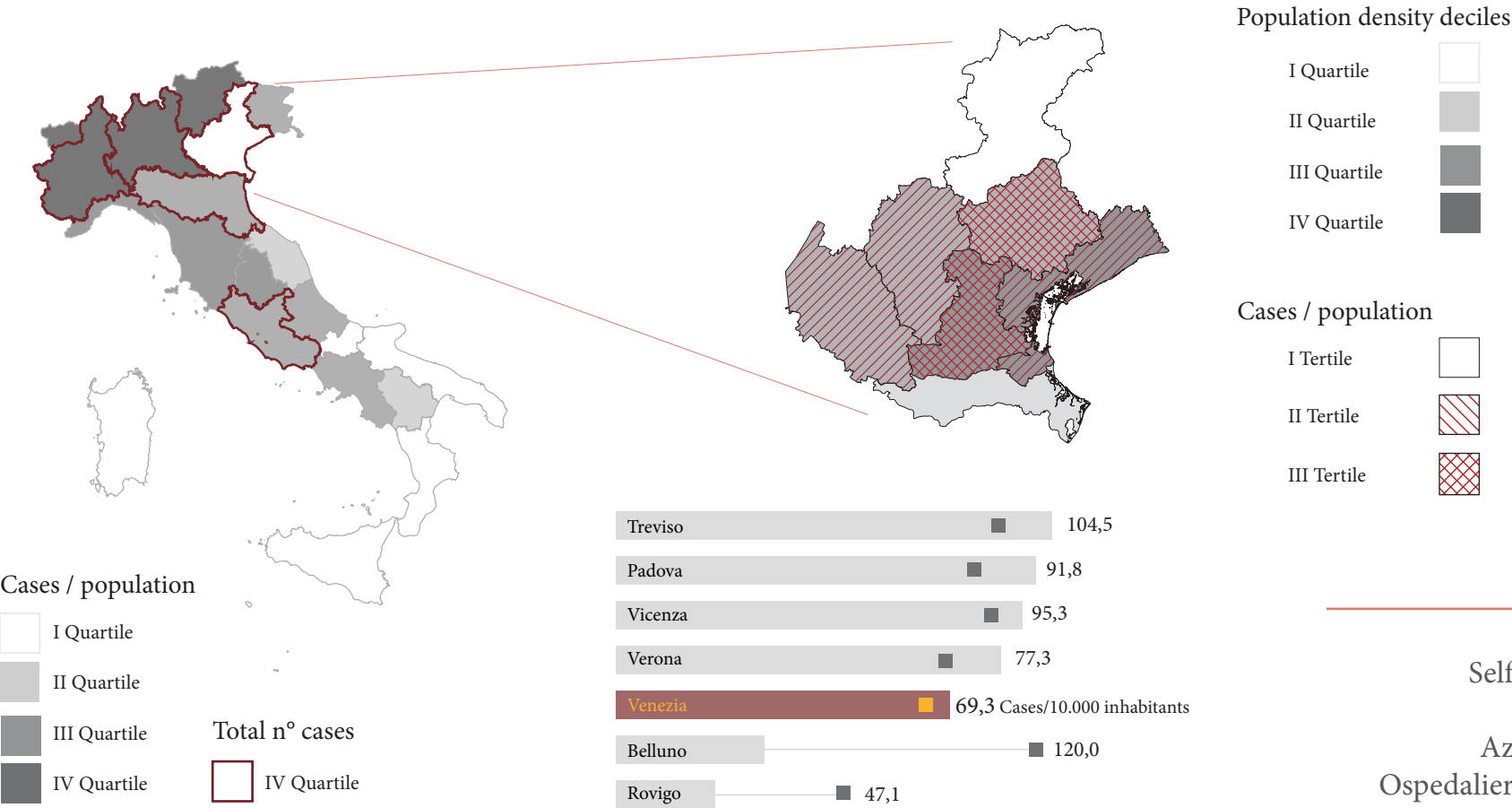


Self-elaboration
Sources:
Presidenza dei Ministri

THE CASE STUDY AND COVID19

THE VENETIAN PROVINCES AND POPULATION DENSITY

Even being one of the safest regions looking at the cases/population ratio, because of its high population, Veneto was one of the most affected regions. Histogram show the number of cases (column) and the normalization of cases per 10,000 inhabitants (square). The study area is located in the regional capital of Veneto, Venezia, focusing on the land part of the city, Mestre.

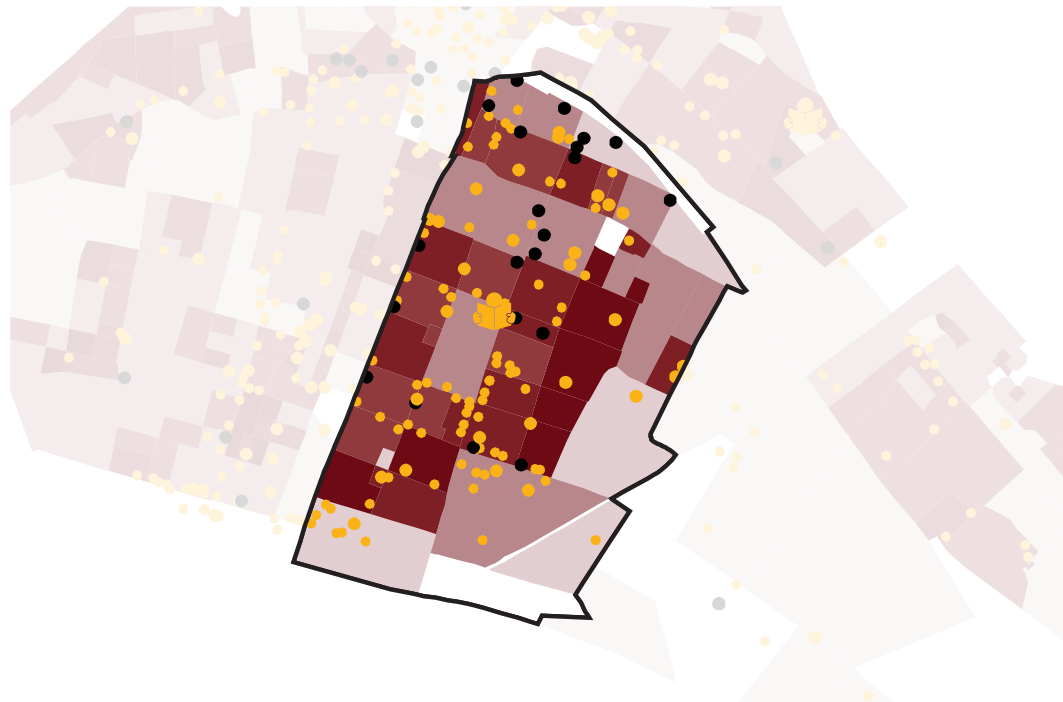


Self-elaboration
Sources:
Aziende ULSS;
Ospedaliere del Veneto

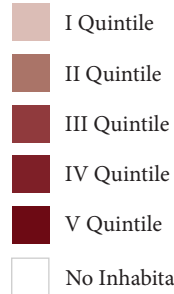
2.

SOCIO-ECONOMIC ANALYSIS

DEMOGRAPHY AND ASSETS MAP



Inhabitants/km2



High school

Post offices, pharmacies

Coffee, restaurants, banks and food shops

Case study

38.81% of the open space is public in Mestre

2,173,603 mq of public space

29% of which are parks and green spaces

During the lockdown people weren't allowed to move freely nor leave the city. For mitigating the vulnerability experts suggested maintaining distances, using personal protective equipment and measures like masks and hand sanitizer gel and avoid being in close environments. Restaurants and coffees were dangerous places since you can't wear protective masks when eating. Schools were another sensitive place. Having local access to basic assets such as food shops, postal services, banks and pharmacies during this time was of primary importance, especially for the less independent groups of the population.

Self-elaboration

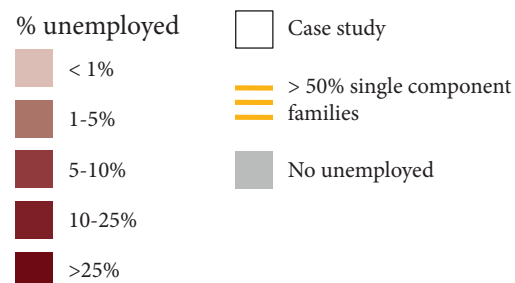
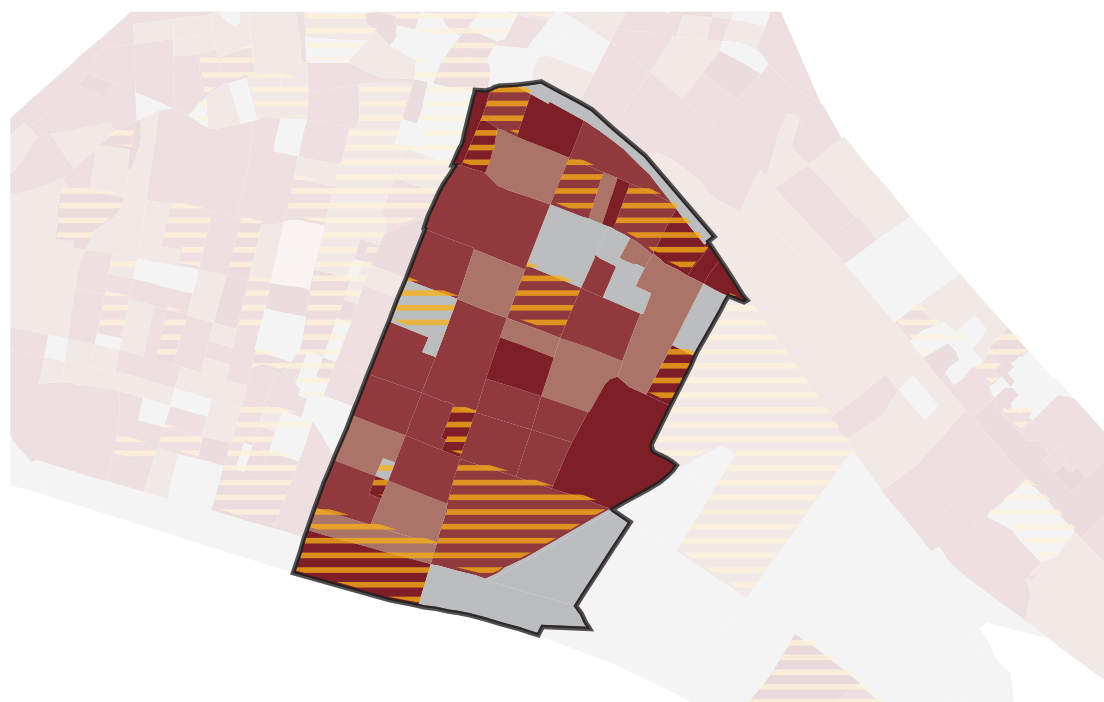
Sources:

ISTAT 2011;

Regione Veneto 2010;

Google 2020

INHABITANTS AT RISK MAP



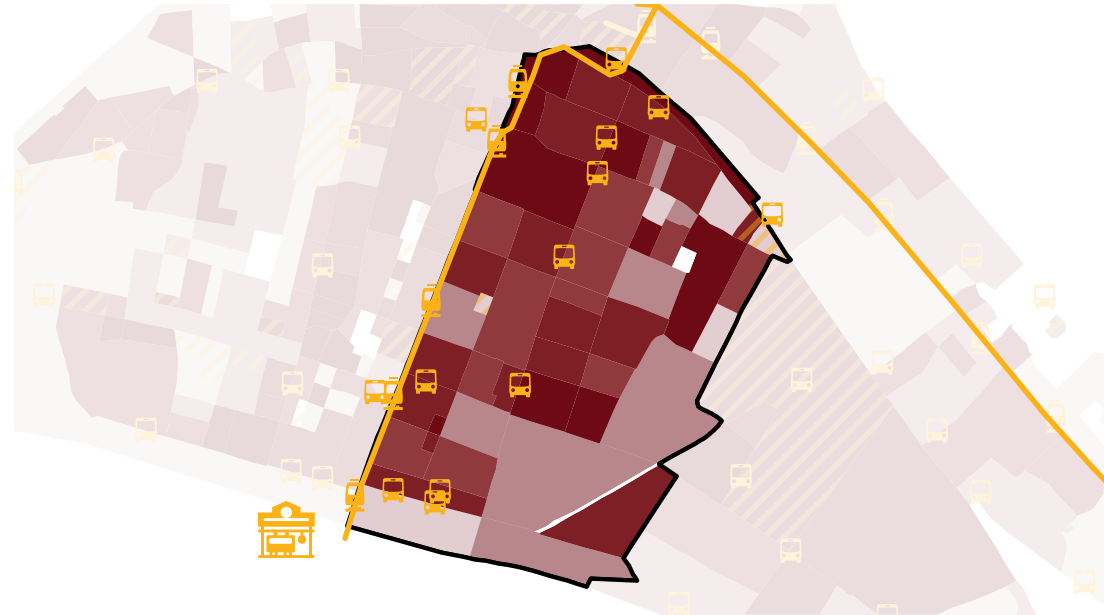
2786 single member families

373 unemployed

This dramatic event made the life of the less affluent population even harder: a lot of workers were forced to stop their activities due to the high risks of infections and mandatory quarantine was introduced as a measure to cope with the less dangerous patients. This measures could've been unsustainable for single component or low income families. Understanding if there is some spatial pattern in the distribution of those people is important, since they have priority for institutional aids. Another proxy that could explain this kind of situation is the value of the land, but was not applicable here since all land was listed with the same value.

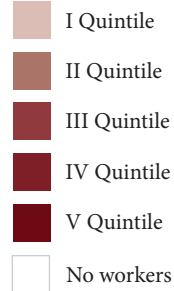
Self-elaboration
Sources:
ISTAT 2011;
Agenzia delle entrate 2020

WORKERS AND PUBLIC TRANSPORT MAP



0 0,5 1 Km

Workers/km2



Train station



Bus stop



Bus, tram stop



Tram lane



Case study



>10% commuters

12 bus stops
7 tram stops
4km bus line

The spread of infection was due to the high displacement habits the modern times requires. Having data on who moves outside the city on a daily basis is important, since they could be a vector that brings the disease from far away into the local environment: mainly these people are students and workers. Even with all the precautionary measures the government took not all activities could stop. Active workers are the people that continued working during the lockdown, being another active vector for the disease. These people also use public transport to move from and towards their places.

Self-elaboration

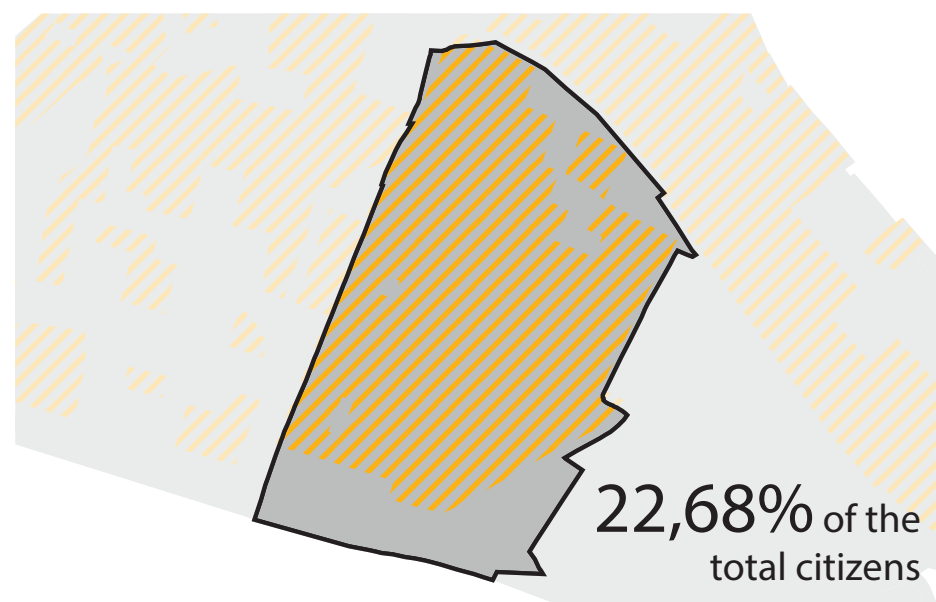
Sources:


ISTAT 2011;

Regione Veneto 2010;

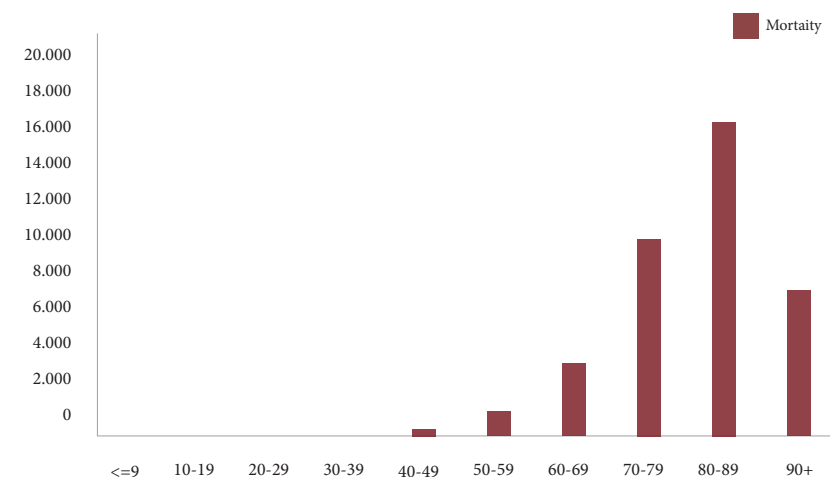
Google 2020

STATISTICALLY MORE EXPOSED INHABITANTS MAP



 > 25% senior citizens

 Case study



Data shows that elderly people (aged 70+) make up the part of the population with the most deaths among COVID-19 patients. Knowing how much their presence concour to the demography is important to elabotote suitable solutions. Data show how much this is an issue in this place.

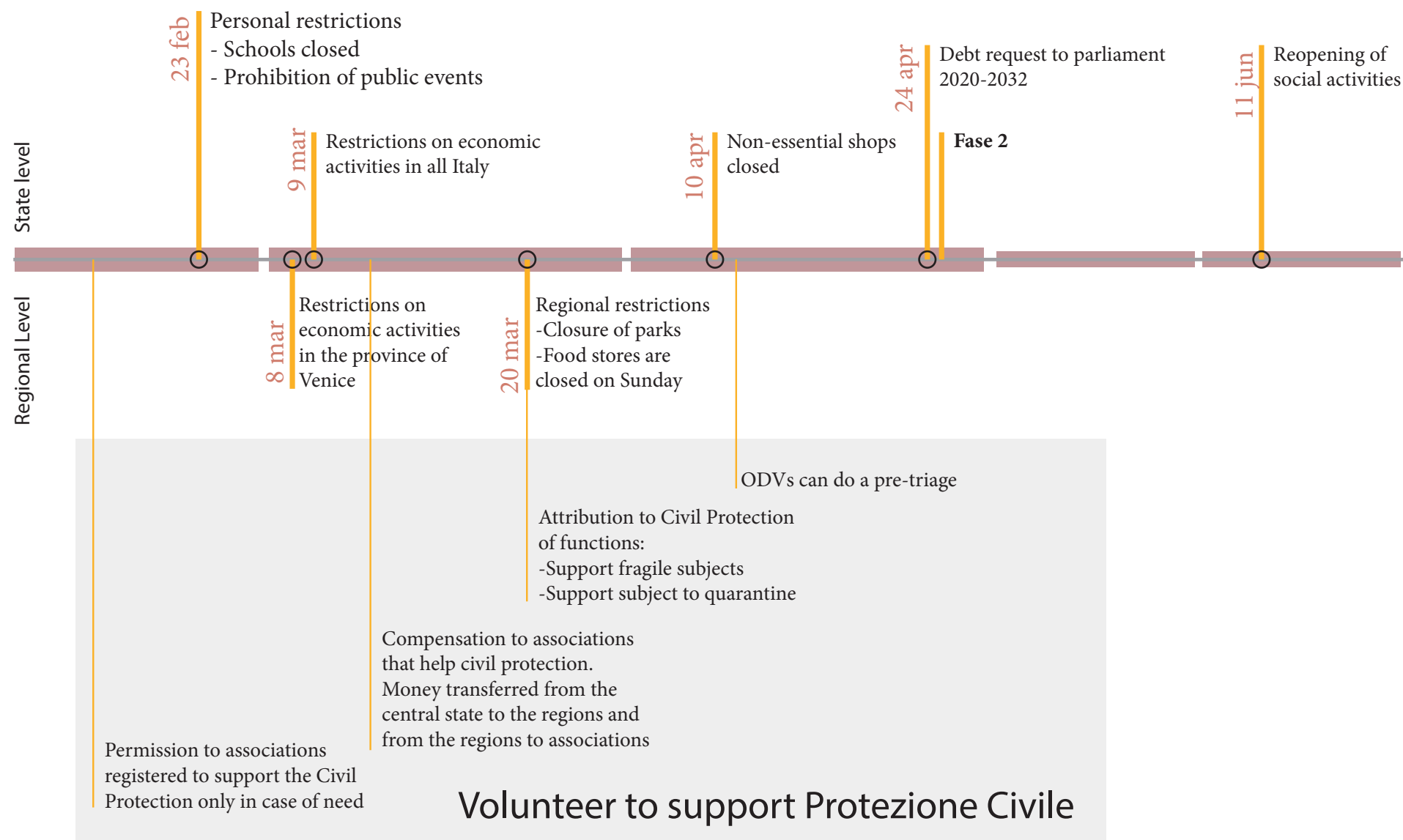
Self-elaboration
Sources:
ISTAT 2011;
Gruppo della Sorveglianza
COVID-19 2020

3.

POLICIES FOCUS

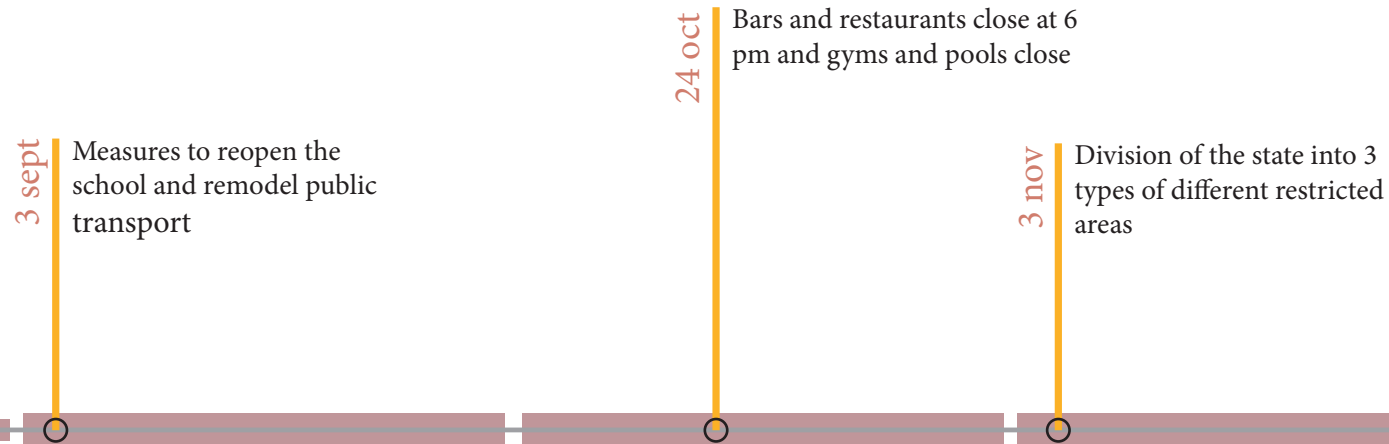
POLICIES

STATE AND REGIONAL ACTS



POLICIES

STATE AND REGIONAL ACTS

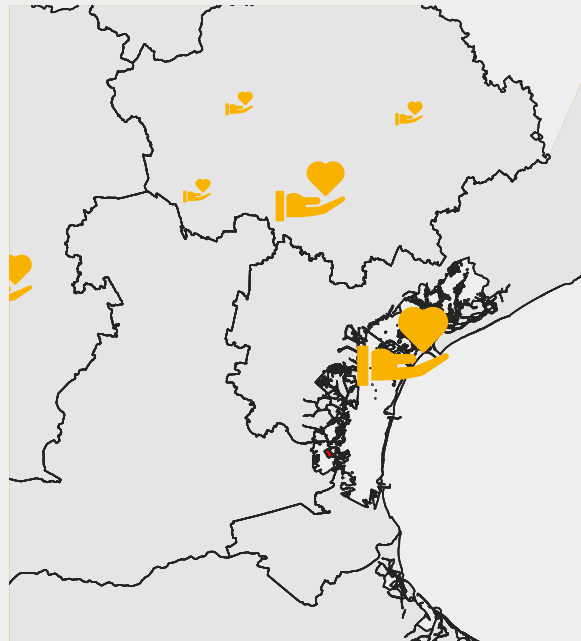


23 charitable
activities mapped

12 in the metropolitan
city of Venice

1 in the case-study
area

Solidarity actions



Kind of solidarity initiatives in Venice:



maps of local commerce
and e-commerce services



help with shopping/home delivery



food bank



support for elderly people



free distribution of masks

4.

A FIRST RESULTS OF THE SOCIO-ECONOMIC ANALYSIS

THE FIRST RESULTS OF THE SOCIO-ECONOMIC ANALYSIS

-
- 1 Territory dense of population and activities
 - 2 Many people pass through this area or use it during the day in a different way. Workers and students commuting.
 - 3 A fragile resident population compared to the surrounding neighborhoods

5.

THE STRUCTURE OF PUBLIC SERVICES IN MESTRE

THE STRUCTURE OF PUBLIC SERVICES IN MESTRE

Focusing on the location of tertiary activities, in the Mestre area, the structures dedicated to public services and commercial activities are mainly located close the historic center and in the southern area along the station. A line of services, especially schools, runs from north to south.



The synthesis work of the service system of the mestre area shows a rather balanced system (almost geometrically). This scheme introduces and guides the project phase.

The two nodes (historic center and rail station) are located at the ends of the central spine, as well as the two green areas (currently only the one to the west is usable).

THE STRUCTURE OF PUBLIC SERVICES IN MESTRE



The area of analysis is crossed by flows of people who do not live in the area. After having reconstructed the system of services on a mestre scale, this map assumes the point of view of the residents.

- Neighborhood
- Blocks
- Focus areas
- Focus points
- Boundaries
- Paths

6.

STRATEGY

STRATEGY

Reorganize the welfare spaces system ensuring accessibility to services by everyone and protecting the introverted nature of residential areas.

7.

OBJECTIVES

OBJECTIVES

STRATEGY

Reorganize the welfare spaces system ensuring accessibility to services by everyone and protecting the introverted nature of residential areas

O.1

REGENERATE AND FUNCTIONALIZE THE EXISTING OPEN SPACES

The pandemic introduced new needs and forced anyone to find different ways to satisfy old needs. Open spaces were a must, since the open air was less dangerous infection wise, so people started to use the open public spaces in the cities: having too few of them meant that urban parks became crowded place with a high risk of infection. Using the available space to provide new open-air public spaces will reduce this risk and increase the urban quality of the neighbourhood.

O.2

INCREASE THE CHARACTER OF “NEIGHBORHOOD SPACES” OF PUBLIC SPACES IN THE RESIDENTIAL AREAS

During the pandemic people were forced to don't move between cities and was suggested to limit the amount of displacements. The “new normal” was a return of a locally lived everyday life. It's important to create some pedestrian friendly spaces to allow the slow mobility on the local scale. Increasing the amount of “slow users” on the street we can also increase the sense of social security. We found in the shared streets the right tool for the job, being sufficiently elastic to the extent of possible uses. In our vision the new normal will be more local oriented so the car will be used lesser and lesser. Banning this kind of mobility isn't the right way to cope with the new normal, since the car remains a necessary medium for some kinds of displacements, but stimulate the slow mobility will help inhabitants to choose sustainable alternatives.

O.3

WELDING THE CITY-SCALE SERVICES IN THE AREA INTO A SINGLE HIGHLY ACCESSIBLE SYSTEM

It's impossible to think to totally live a strictly local life. The part of the city studied needs to be connected to its exterior: using the principles of the slow mobility it's possible to lower the pressure on the mass public transport (a risky vector pandemic wise) and increase the sustainability of the displacements. We aim at boosting this kind of mobility making the spaces of the collective and social life suitable for this mobility.

OBJECTIVES

STRATEGY

Reorganize the welfare spaces system ensuring accessibility to services by everyone and protecting the introverted nature of residential areas

OBJECTIVES

ACTIONS

O.1

Regenerate and functionalize the existing open spaces

A) Regenerate and open the eastern green space

B) Regenerate and functionalize public spaces adjacent to schools along the “spine”

O.2

Increase the character of “neighborhood spaces” of public spaces in the residential areas

C) Transform some roads in the residential areas into shared streets

D) Inserting “infrastructure to stay” in public space along shared streets

O.3

Welding the city-scale services in the area into a single highly accessible system

E) Fortify the existing cycle path that connects the various services with equipped stopped points and bike sharing point

F) Connect the schools of corso del popolo to the bicycle system

8.

LOCATING ACTIONS

LOCATING ACTIONS

AN OVERVIEW

F

Improve the schools slow and sustainable mobility

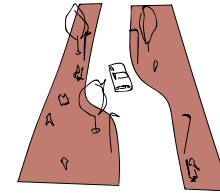
B

Regenerate and functionalize public spaces adjacent to schools along the “spine”



D

Transform secondary roads into shared streets to improve the slow mobility and neighborhood quality of life



C

Adding a new dimension and uses to the open public spaces (“infrastructure to stay”)



A

Regenerate the available spaces to improve the quality of life

E

Fortify the existing cycle path that connects the various services with equipped bike points and bike sharing point



A NEW GREEN SPACE

A) REGENERATE AND OPEN THE EASTERN GREEN SPACE

On the east side of the area we found a currently unused space. The Città di Venezia should acquire the place to be able to build the project here. The area is 3 hectares big, divided in two parts by a street.

The idea behind this project is to fulfil the necessity of the inhabitants to have some urban green spaces to spend their time in, avoiding congestion in the few currently available. Using the right furniture and equipment, this place could be transformed into a multifunctional spaces (adding tables, seats, connections and power outlets). Adding these kind of services will widen the range of potential users of this area.

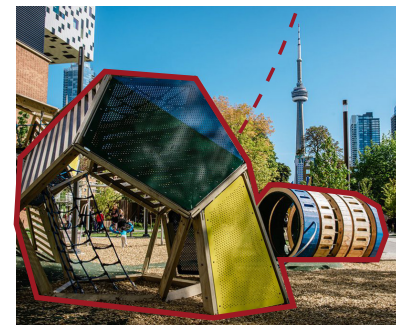
This space is connected to the rest of the city thanks to the cycling lane, improved by the bikesharing service.



Co-working Space
Kilowatt, Bologna



Playground
Grange Park, Toronto



Urban Garden
Milan



Best practices

THE “SPINE” OF SERVICES

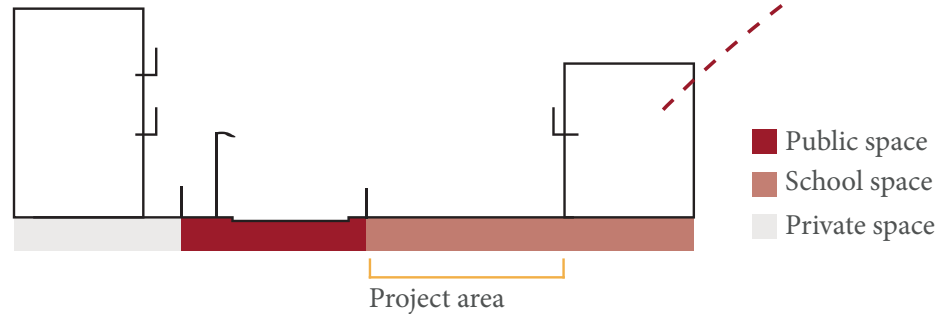
B) REGENERATE AND FUNCTIONALIZE PUBLIC SPACES ADJACENT TO SCHOOLS ALONG THE “SPINE”

Due to the lack of available spaces one of the strategy was to rethink the already used public spaces. Improving the quality of these spaces could have positive effects on the neighborhood.

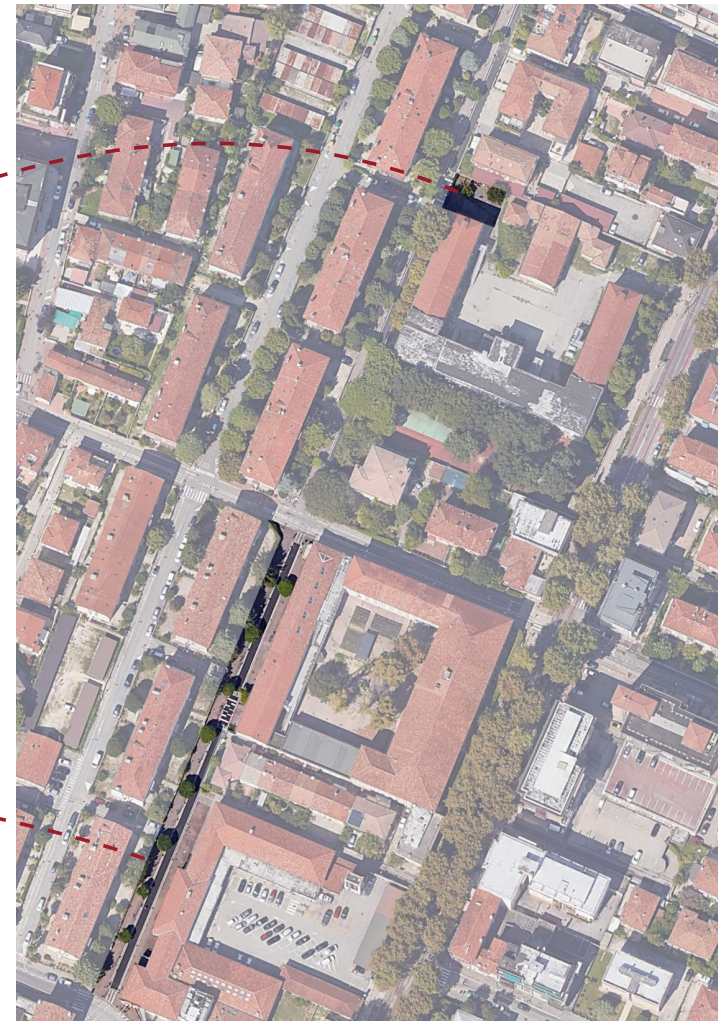
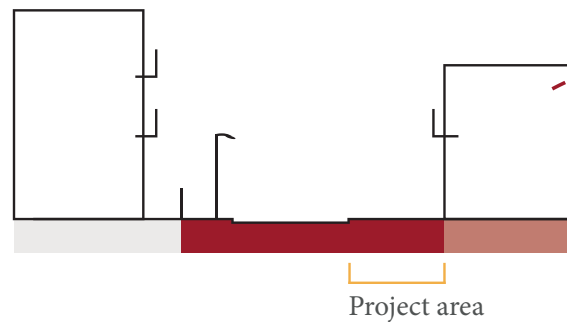
Being already main attractors schools can improve their utility increasing the opportunities offered in the same spaces for its users, being for example a part time recreative space.

Two types of school-related spaces have been identified where intervene. A first inside the school, a second on the side on the public road

OPEN COURTYARDS



LIMINAL SPACES AROUND THE SCHOOL

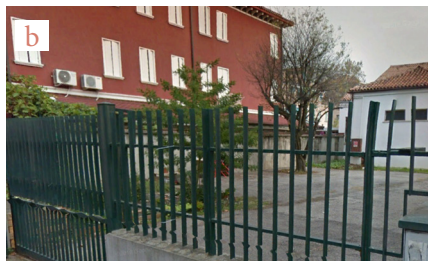
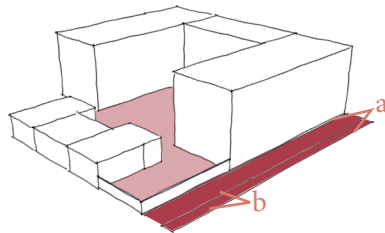


THE “SPINE” OF SERVICES

OPEN COURTYARDS

Current situation

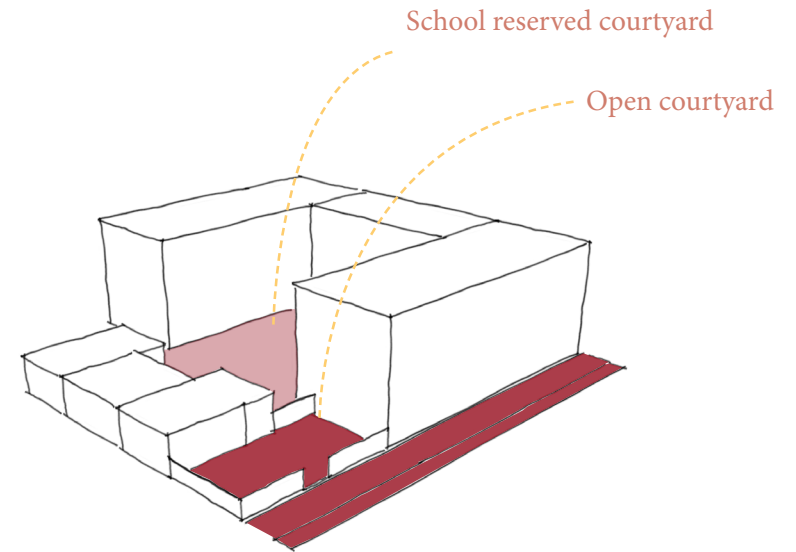
The school faces directly the street: there is no public space acting as a buffer



Project scenario

This project aims to open up to the inhabitants some spaces previously used only as school courtyard. This will allow the space to be used even during the off school time (the courtyard remain closed during school hours).

This “new” public space can hold urban furniture, recreational equipment, and urban gardens: this will help to solder this space to the system of urban services.



Best practice: open courtyards in Turin

Turin has extensively experimented open courtyards and the project refers to them. The image below concerns a realization in this city.



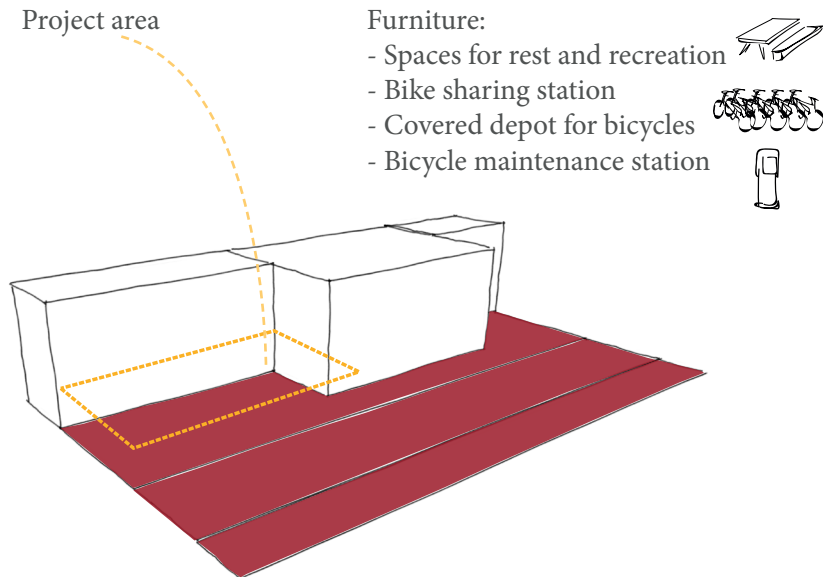
DESIGN ACTIONS IN THE SPACE

LIMINAL SPACES AROUND THE SCHOOL

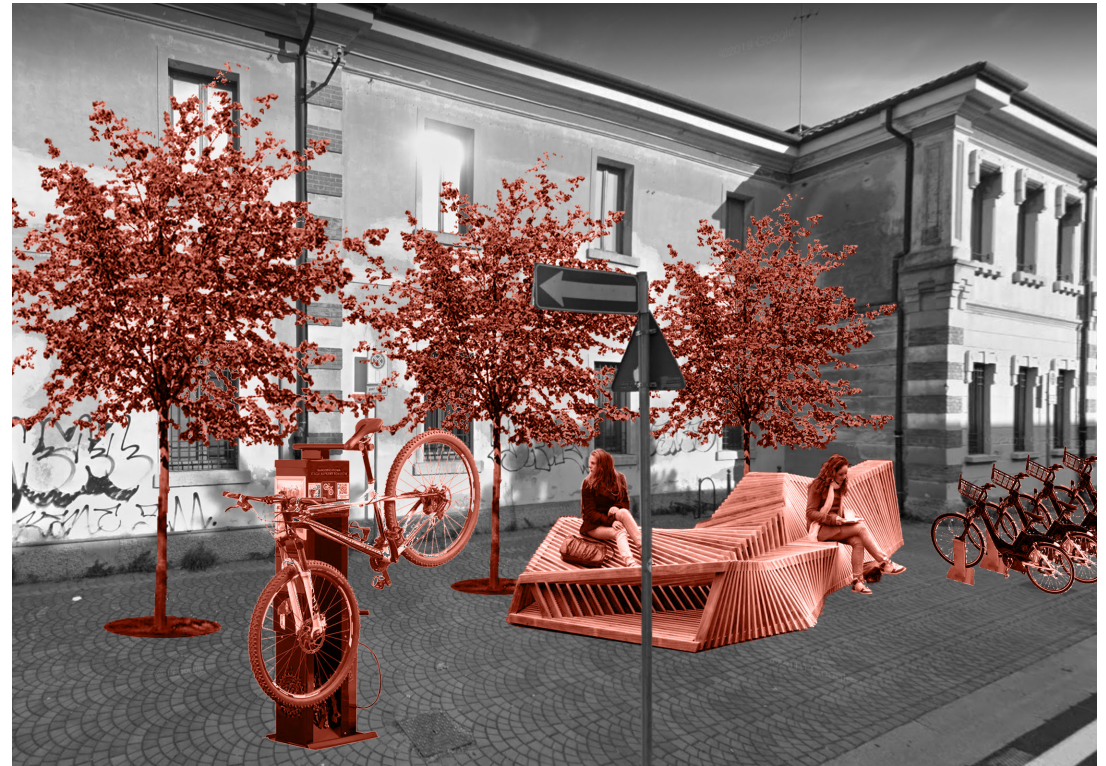
Current situation

These small resulting spaces are a waste of public land resources since are very underused. Functionalizing these spaces could improve the slow and sustainable mobility for the users of the surrounding spaces (i.e. schools). Functionalizing should consist in adding the right furniture for this kind of mobility as shown in the picture.

Project area



Project scenario



NEIGHBORHOOD SPACES

C) TRANSFORM SOME ROADS IN THE RESIDENTIALS AREAS INTO SHARED STREETS

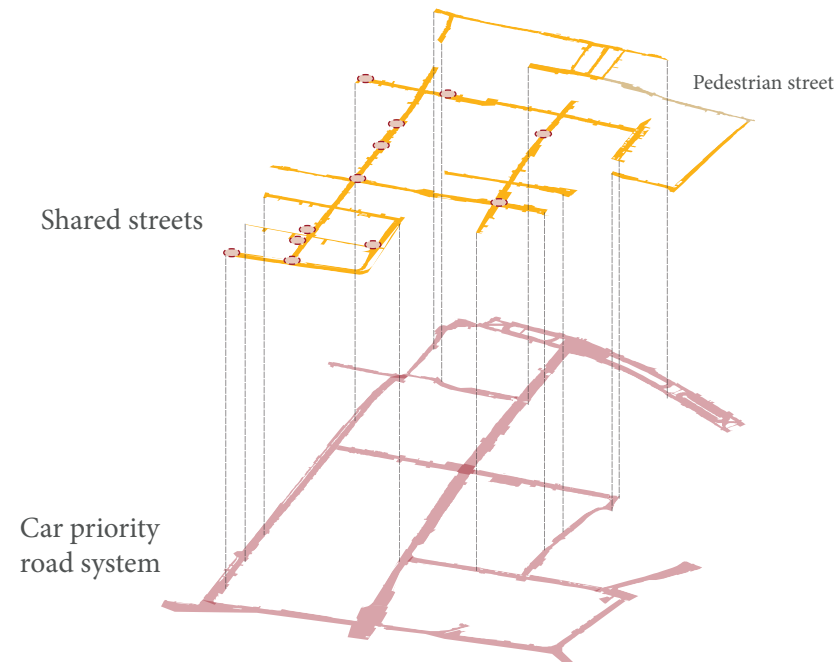
D) INSERTING “INFRASTRUCTURE TO STAY” IN PUBLIC SPACE ALONG SHARED STREETS

Shared street as a way to boost local life and sustainable slow mobility.

16 suitable roads

12 suitable areas to install urban furniture

The areas where to install “staying” equipment” are currently liminal spaces. Are enhanced especially the spaces located at the intersections between the different shared streets.







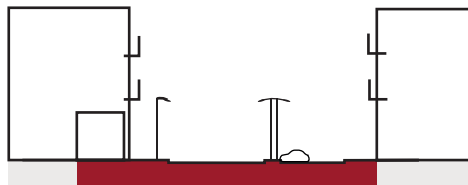
SLOW MOBILITY

E) FORTIFY THE EXISTING CYCLE PATH THAT CONNECTS THE VARIOUS SERVICES WITH BICI POINTS AND BIKE SHARING POINT

F) CONNECT THE SCHOOLS OF CORSO DEL POPOLO TO THE BICYCLE SYSTEM

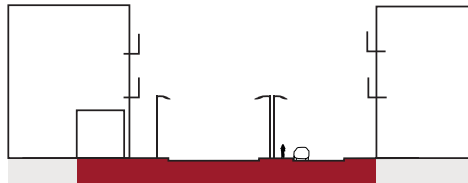
The connection cycle path between the schools located in corso del Popolo and the existing cycle system will be 220 meters long and will use the space of the traffic divider and the counter avenue, re-project it and obtaining the necessary space for the lane

Current situation



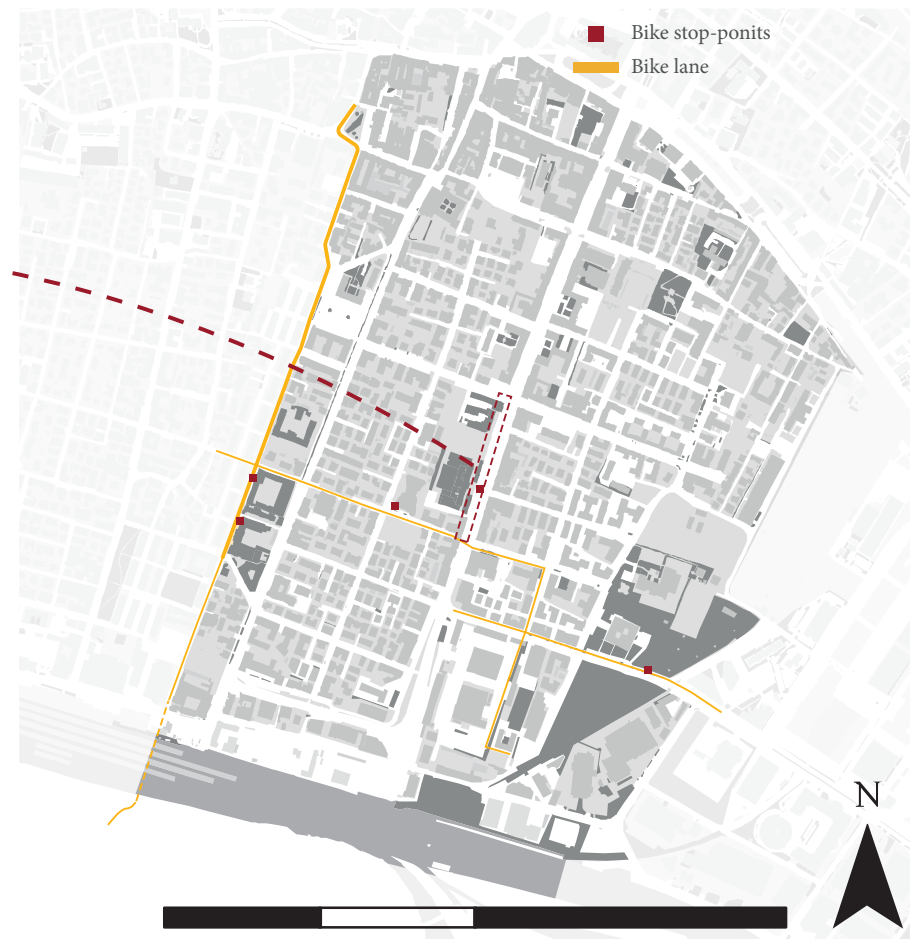
Project area

Project scenario



The new cycle path together with the planned shared streets will make the project area bike friendly. The project includes 5 stop-points dedicated to bicycles and fully equipped. As previously illustrated, each stop point will be provided with:

- maintenance tools
- water refillers for reusable bottles
- seats
- bicycle stalls

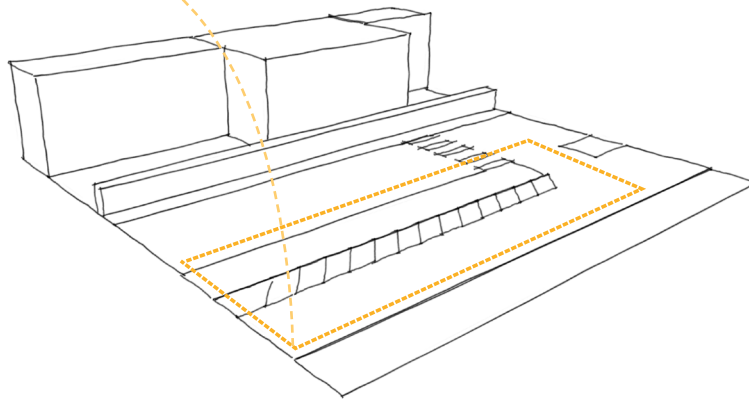


SLOW MOBILITY

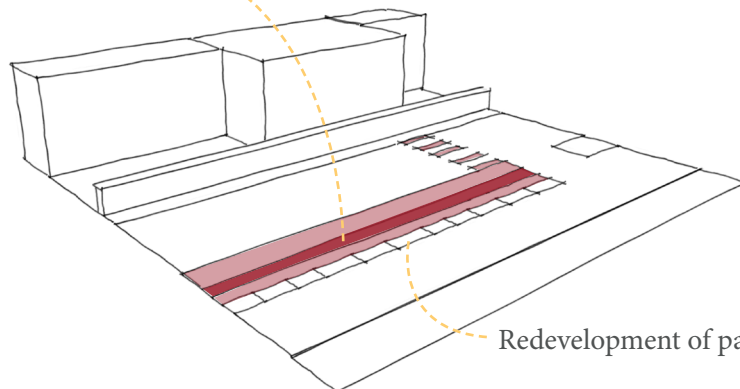
NEW BIKE LANE

School reserved courtyard

Project area



Cycle along the traffic island



Redevelopment of parking lots

Current situation - Corso del Popolo



Best practice - New York



9.

PLANNING TOOLS

PLANNING TOOLS

EAST PARK

According to **Legge Regionale n.14/2017** and to the **Piano di Assetto del Territorio** the chosen area can be used to improve the urban quality maintainig the naturalness of the area. Our study area is composed of a compact building texture, so the avaiability of free areas is low while inhabitants have needs to fulfill: the use of the “**compensazione**” allows the owner to keep the building capacity of it's area (and using it somewhere else) while transferring the ownership of the area to the public administration.

Since it's a green area, it must be entered into the **annual program of the Ufficio per il Verde Pubblico** for its management.

SHARED STREET AND BICYCLE

The change of the street use is possible via **Ordinanze Comunali**.

Città di Venezia has its **PUMS** in its preliminary state: adding these projects will improve the systemic view of the sustainable mobility in the city.

10.

EVALUATING ACTIONS

EVALUATION OF TRANSFORMATIONS

OBJECTIVES	ACTIONS	INDICATORS
<p>O.1 Regenerate and functionalize the existing open spaces</p>	<p>A) Regenerate and open the eastern green space</p>	<p>m² of public services/inhabitant</p>
	<p>B) Regenerate and functionalize public spaces adjacent to schools along the “spine”</p>	<p>m² of regenerated green space m² of new accessible green space nr. of park users per year</p>
<p>O.2 Increase the character of “neighborhood spaces” of public spaces in the residential areas</p>	<p>C) Transform some roads in the residential areas into shared streets</p>	<p>m² of regenerated sidewalk nr. of new street furniture installed</p>
	<p>D) Inserting “infrastructure to stay” in public space along shared streets</p>	
<p>O.3 Welding the city-scale services in the area into a single highly accessible system</p>	<p>E) Fortify the existing cycle path that connects the various services with equipped stopped points and bike sharing point</p>	<p>m of new bicycle path nr. of new bicycles sharing in the area</p>
	<p>F) Connect the schools of corso del popolo to the bicycle system</p>	<p>Km of new roads at 20 km/h</p>

11.

CONSIDERATIONS

Working on this area highlighted the two sides of the same coin.

First of all, working on an already developed area it's very challenging since the amount of limitation imposed by the existing structures and patterns are very high.

Secondly, despite this negative aspect it's fundamental include these areas in this kinds of projects since in these spaces live the majority of people.

As we learned, the pandemic should be not only an issue-emergency to cope with, but should be used as a trigger to start a paradigm change in our cities towards a better future, in which the sustainability is not only technical and economical but also environmental and social.

We think that stimulating the citizens to use their local space will open up a new perspective about their environment and will help to shape a better city.