"Open streets"
How to plan in an emergency

Quartieri. Con "Strade aperte" nuove aree pedonali, ciclabili, zone 30 e spazi pubblici

Il progetto dell'Amministrazione per una città più sostenibile e sicura. Lazzaretto e Isola progetti-pilota del quartiere a 15 minuti a piedi

Milano, 30 aprile 2020 - Realizzare nuovi percorsi ciclabili anche in sola segnaletica; incrementare le strade a velocità moderata e le zone 30 e le strade residenziali a prevalente mobilità pedonale e ciclabile; ampliare i percorsi pedonali attraverso l'allargamento di marciapiedi; prevedere pedonalizzazioni temporanee nei quartieri ampliando l'offerta per il gioco e l'attività fisica dei bambini; realizzare nuovi interventi di urbanistica tattica nell'ambito del progetto Piazze Aperte; facilitare la possibilità di posare tavolini per bar e ristoranti sulle aree di sosta ai fini di recuperare parte della capienza persa all'interno per il distanziamento.

Sono le azioni chiave di "Strade aperte", il piano del Comune per ripensare la mobilità e lo spazio pubblico nei prossimi mesi. Una strategia che vede convergere la visione di una città più sostenibile e vivibile, cui l'Amministrazione sta lavorando attraverso molteplici azioni dall'inizio del mandato, con le temporanee esigenze di distanziamento sociale e sicurezza legate all'emergenza sanitaria in corso. L'obiettivo è realizzare strade più protette e fruibili da parte di tutti, offrendo nuovi spazi pubblici per grandi e bambini e incentivando gli spostamenti a piedi, in bicicletta e monopattino per le percorrenze su scala urbana attraverso un'offerta diversificata, complementare e alternativa al trasporto pubblico e all'auto privata.
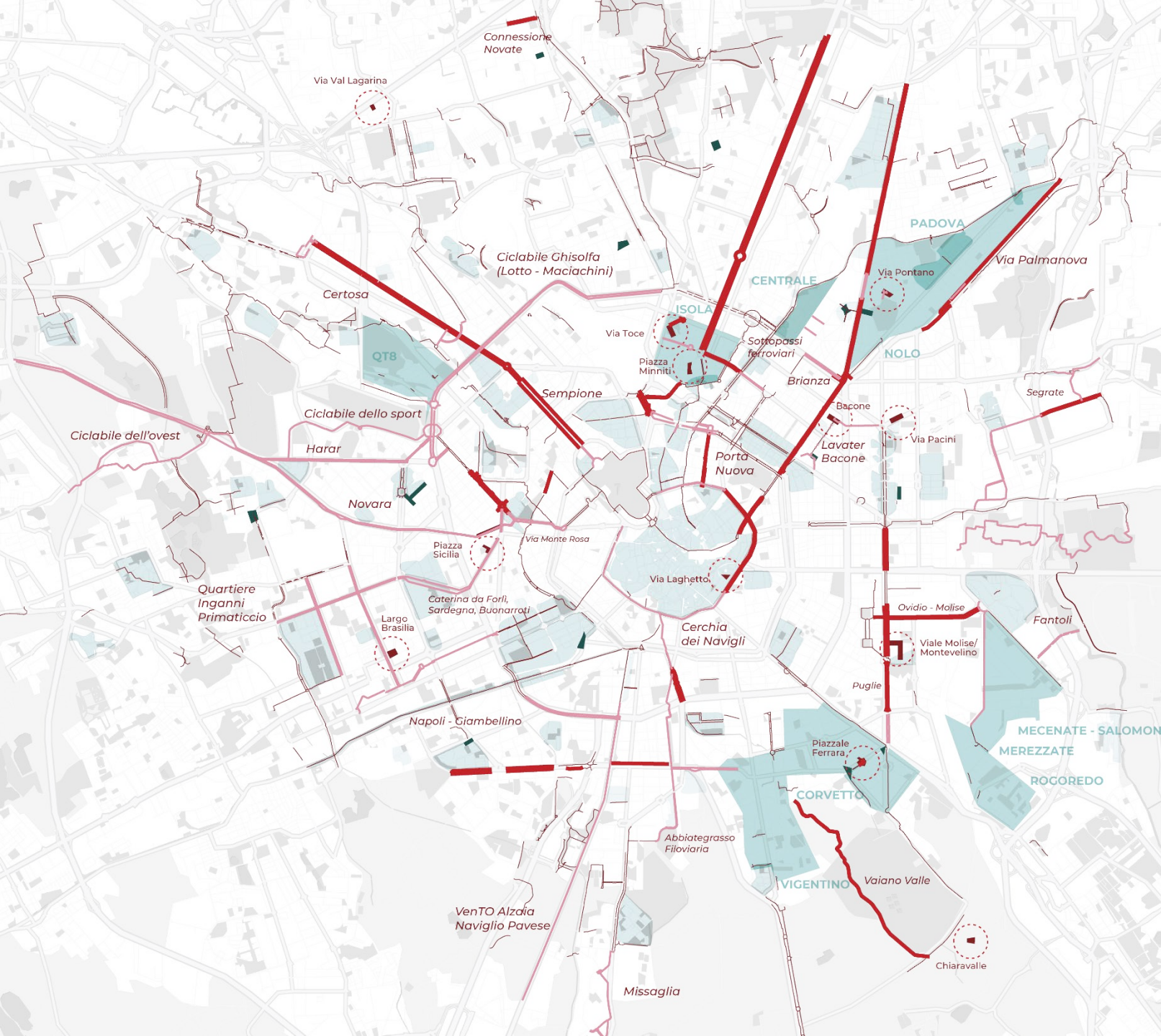
Programmazione

— **Itinerari ciclabili realizzati**

— Itinerari ciclabili programmati

Nuove Zone 30

Piazze Aperte 2020

Stato di fatto

Itinerari ciclabili esistenti

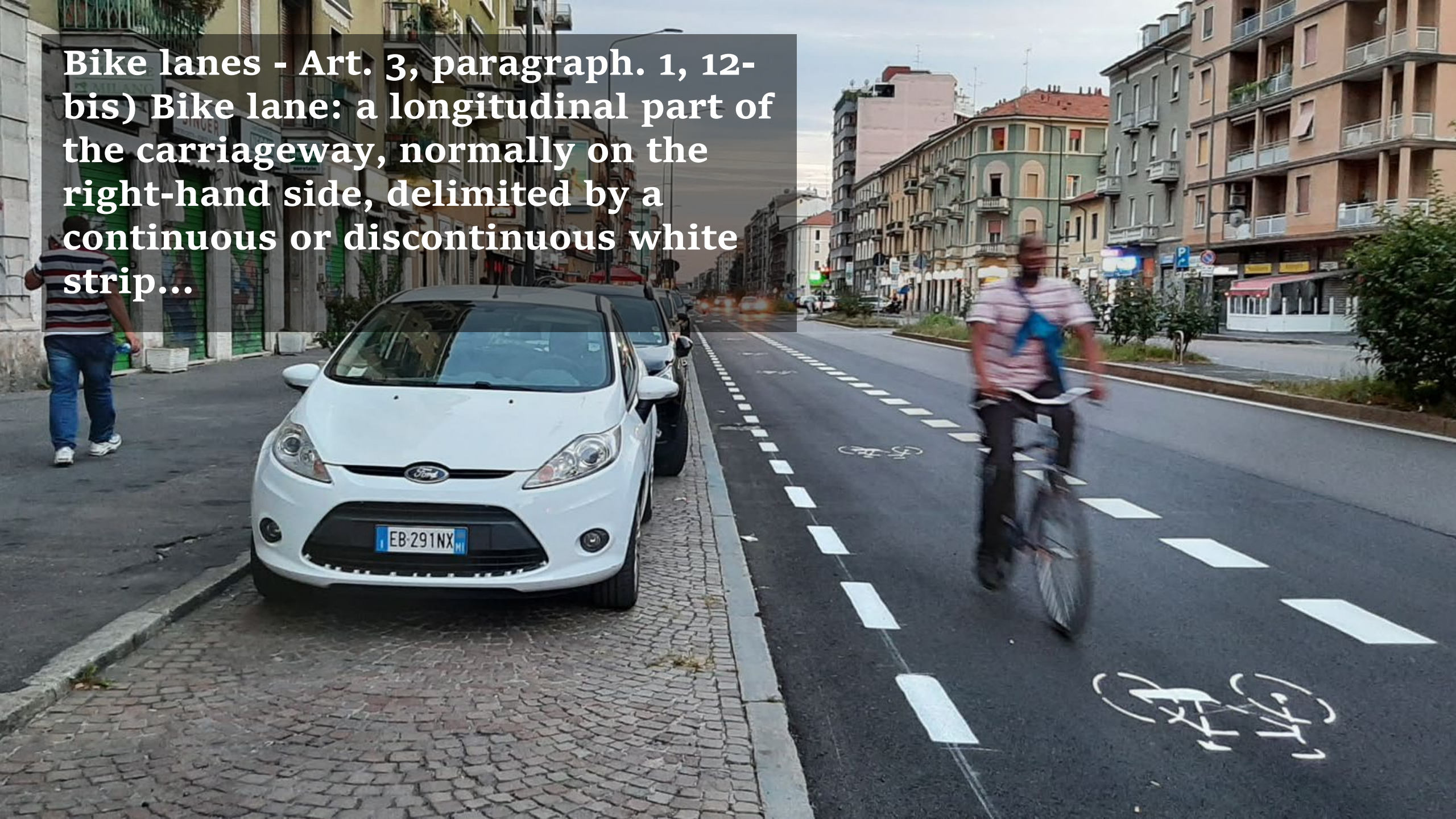Zone 30 esistenti

Piazze Aperte realizzate

Cycle routes (km)

2019 - **226 km**

2020 - **293 km**

*2021 -* **298 km**

+ 72 km

Law no. 120 of 11 September 2020 - amendment of the Highway Code

Bike lanes - Art. 3, paragraph. 1, 12-bis) Bike lane: a longitudinal part of the carriageway, normally on the right-hand side, delimited by a continuous or discontinuous white strip...

Bike lanes in the Public Transport lane - Art. 7, paragraph 1, i-ter) allow the circulation of bicycles on the roads referred to in letter i) - i.e. the lanes reserved for the circulation of public transport vehicles...
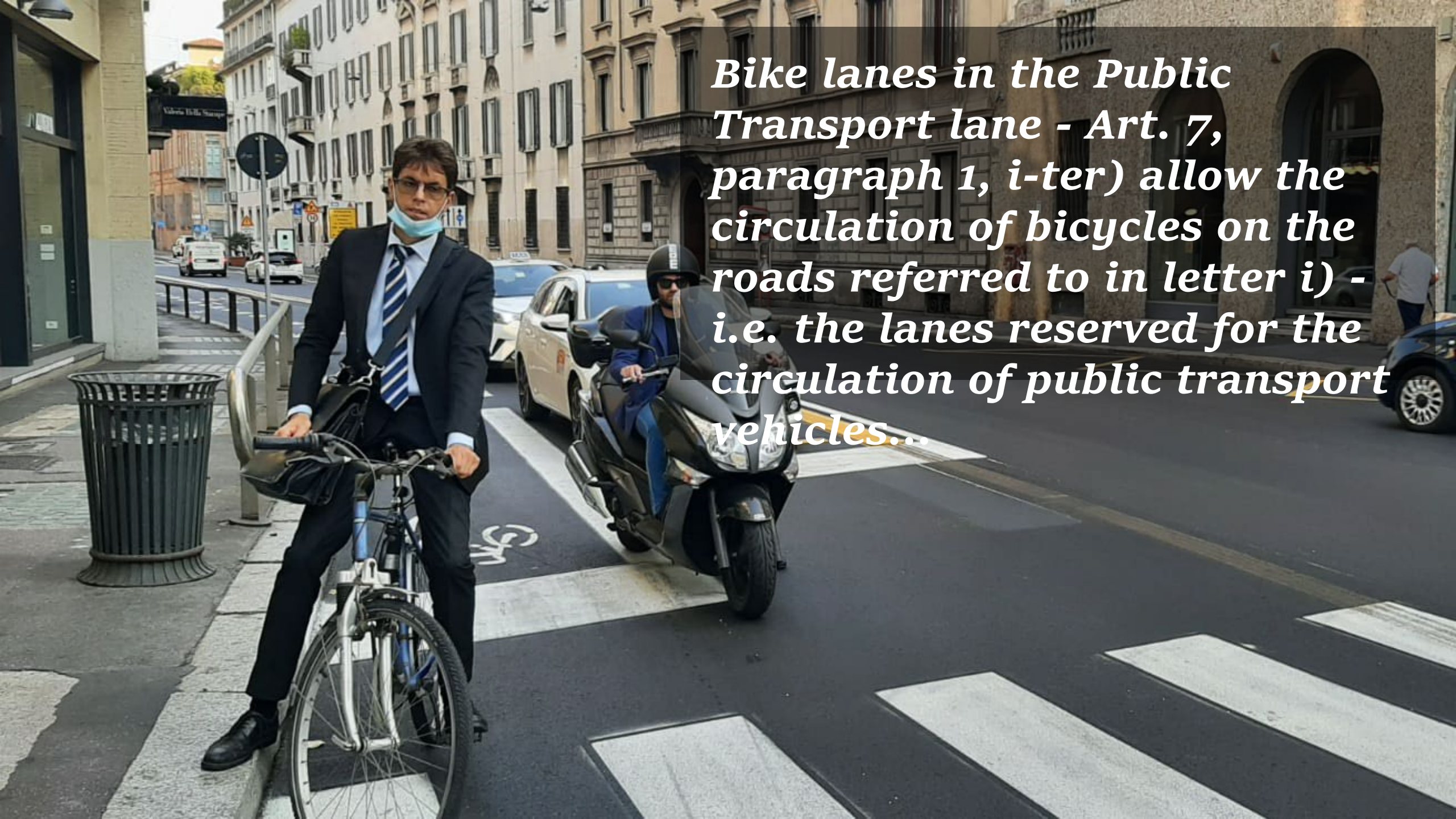
Two-way bike lane - Art. 3, para. 1, 12-ter) Two-way bike lane: a longitudinal part of the one-way urban carriageway, located to the left of the direction of travel, delimited by a discontinuous, crossable and mixed-use white strip....

Bike Boxes- Art. 3, para. 1, no. 7a) stop line for bicycles in advanced position compared to the stop line for all other vehicles...

Bike Boxes - Art. 182, par. 9-ter) at traffic light intersections, [...] the bike boxes may be built, extended to the whole width of the carriageway or the semi-carriageway...
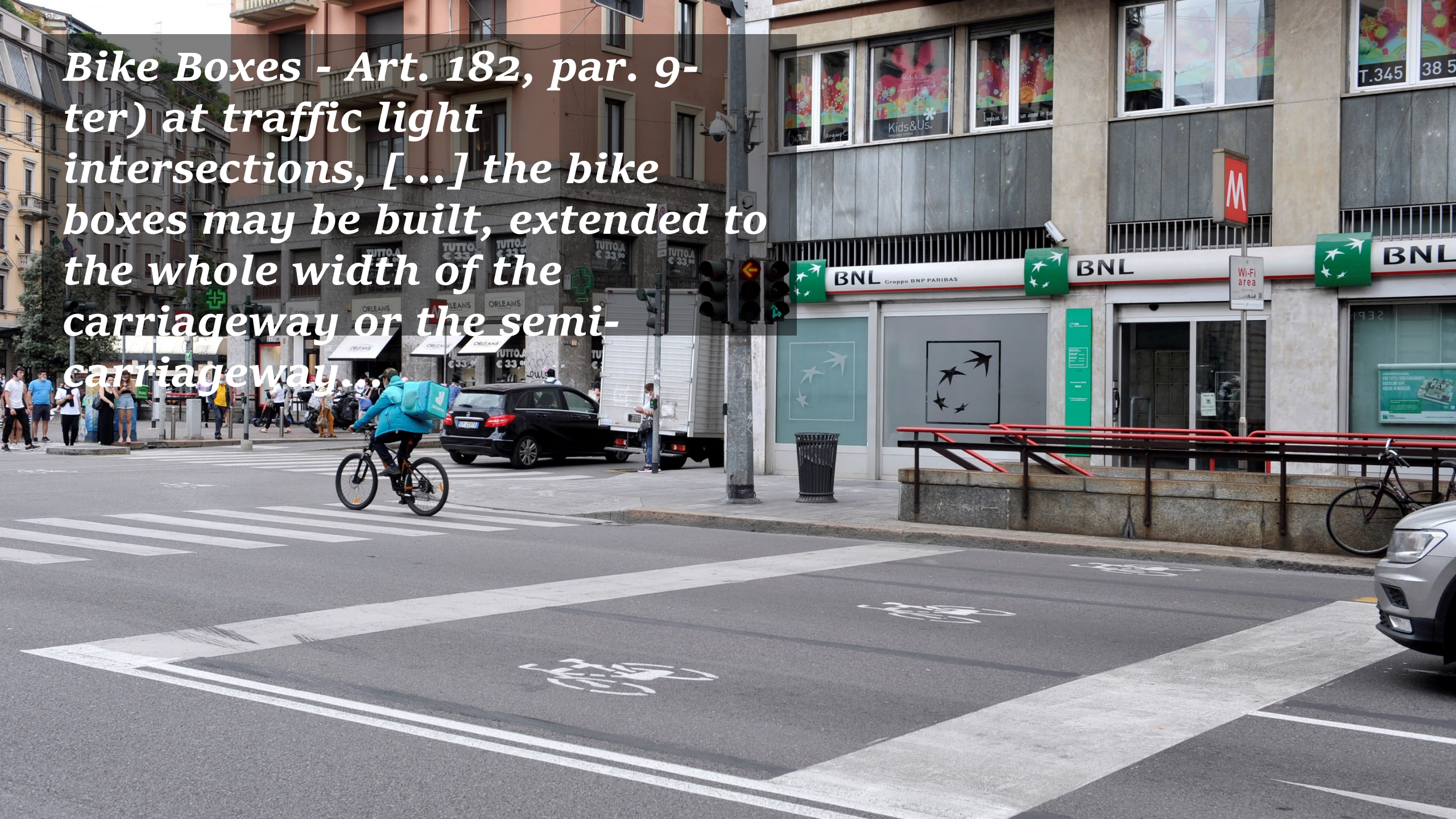
Case study, Venezia – Buenos Aires – Loreto - Monza

Preliminary analysis - Safety and accidents

TOTALE INCIDENTI

69% coinvolti UTENTI DEBOLI
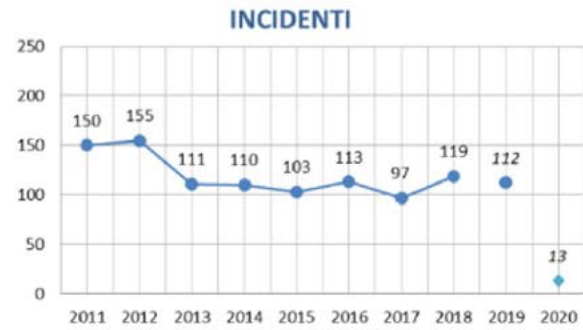
48% motociclisti
12% pedoni
8% ciclisti

INCIDENTI CON CICLISTI
tipologie di veicoli

62% — autovetture
19% — autocarri
9%
6%
2%
2%

INCIDENTI

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	150	155	111	110	103	113	97	119	112	13
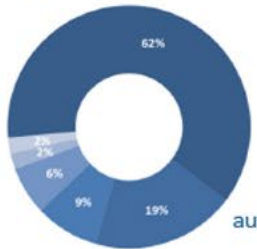
Dal 2011 ci sono stati
1083 INCIDENTI

[**1** INCIDENTE ogni **3,3** GIORNI]

che hanno causato
6 MORTI

FERITI

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	206	193	157	144	128	139	132	150	149	16
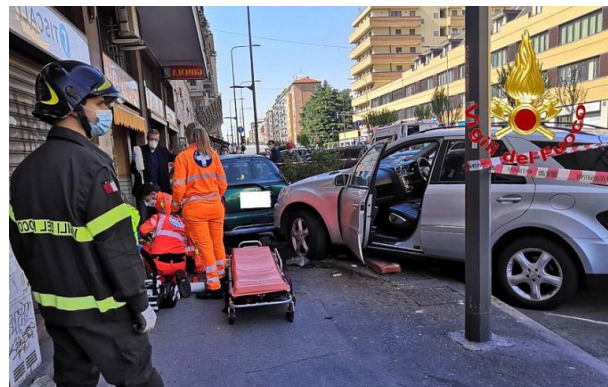
il **57%** dei FERITI è un UTENTE DEBOLE:

PEDONI FERITI

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	14	14	21	13	13	23	8	13	12	0
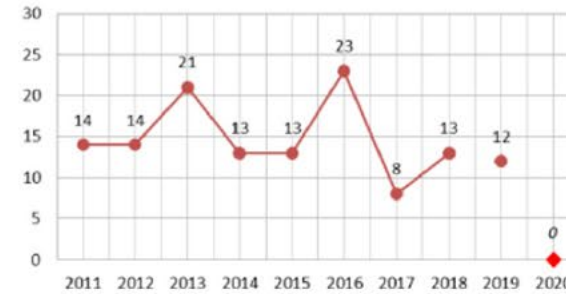
*i dati relativi al 2019 sono in fase di consolidamento
**i dati relativi al 2020 sono parziali

21 SOTTOPASSI FERROVIARI direzione SUD

25 SAULI-BATTAGLIA direzione SUD

17 GORLA

28 VIA POPOLI UNITI + **17** VIA BOLZANO
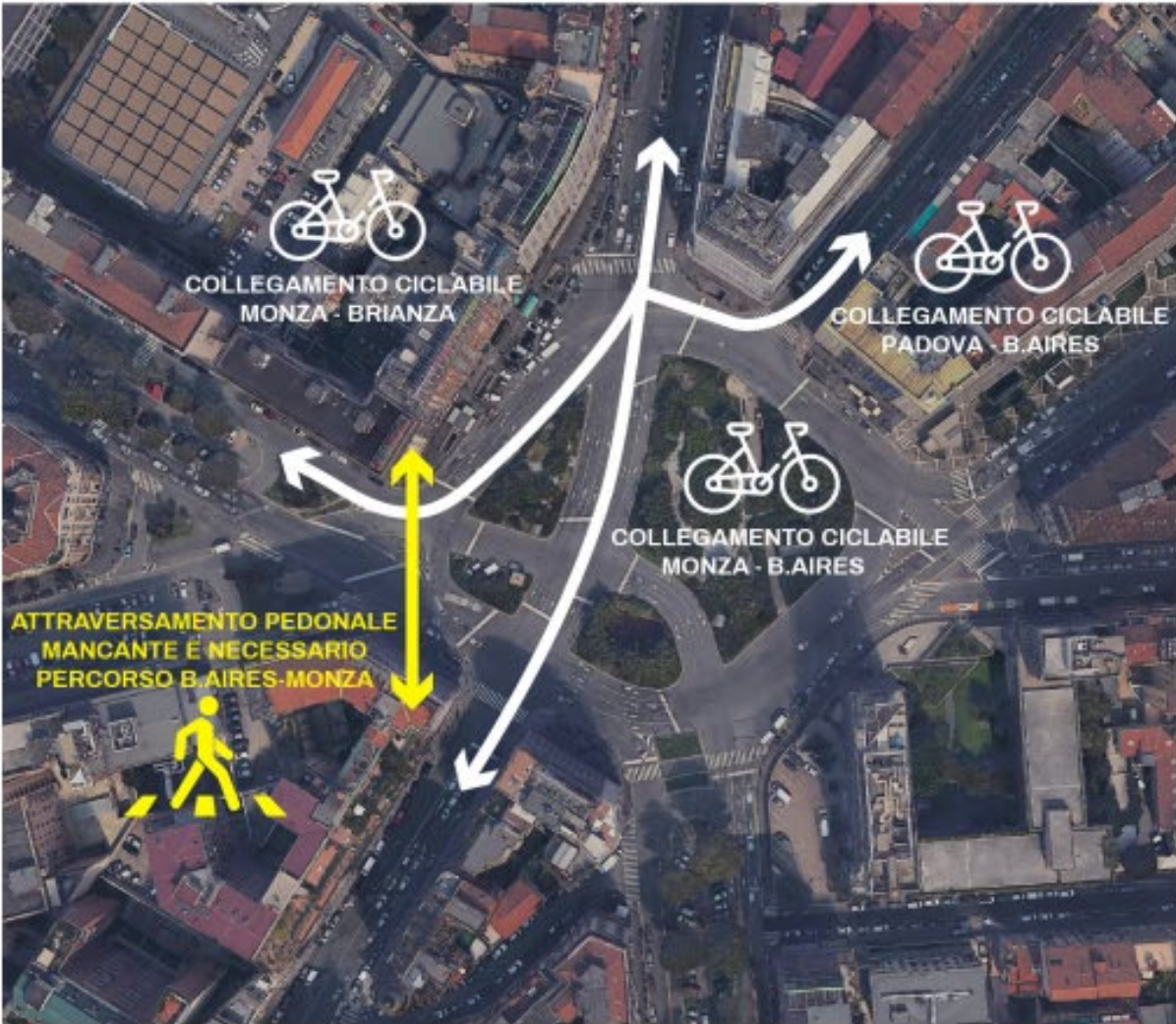
30 MONZA-LORETO
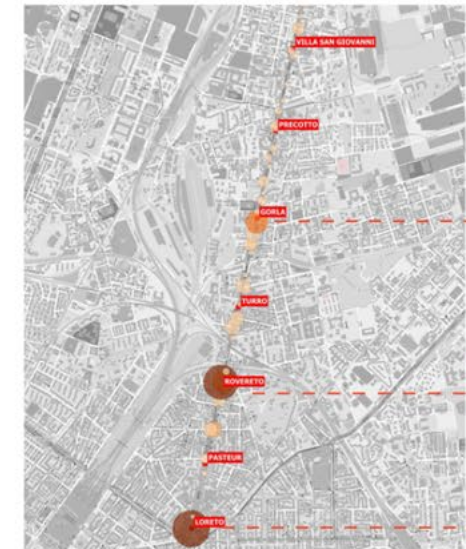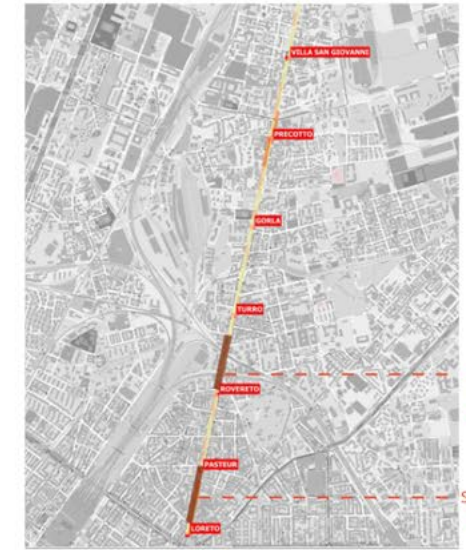
Viale Monza

Preliminary analysis - Parking. How to manage public space
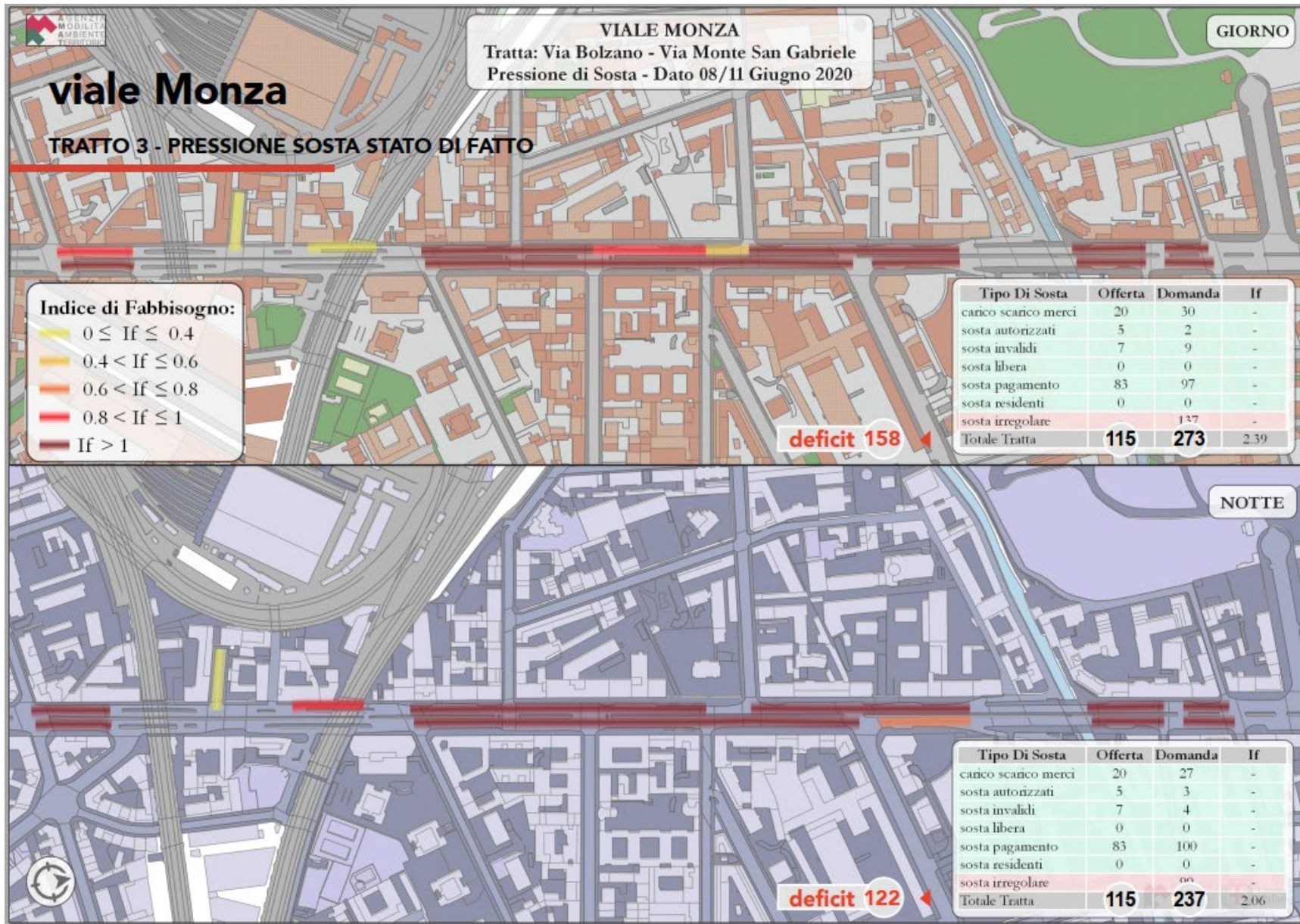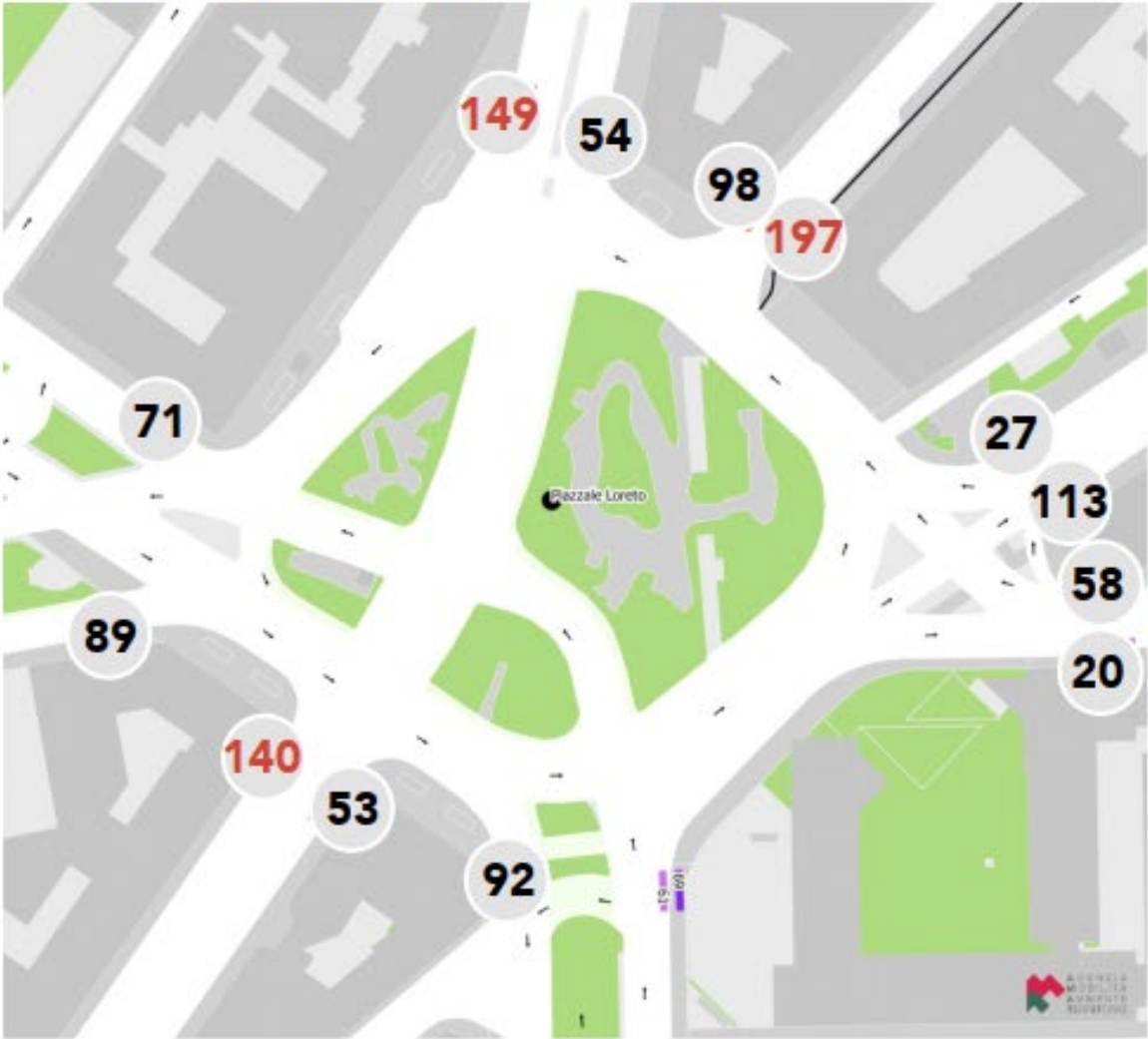

Viale Monza

Preliminary analysis - Survey of flows. Understanding demand and analysing connections

FLUSSI CICLABILI (h 7.30-9.30, dicembre 2019)

Piazzale Loreto

Monitoring analysis

Monitoraggio 2020-2021   corso B. Aires

Oberdan

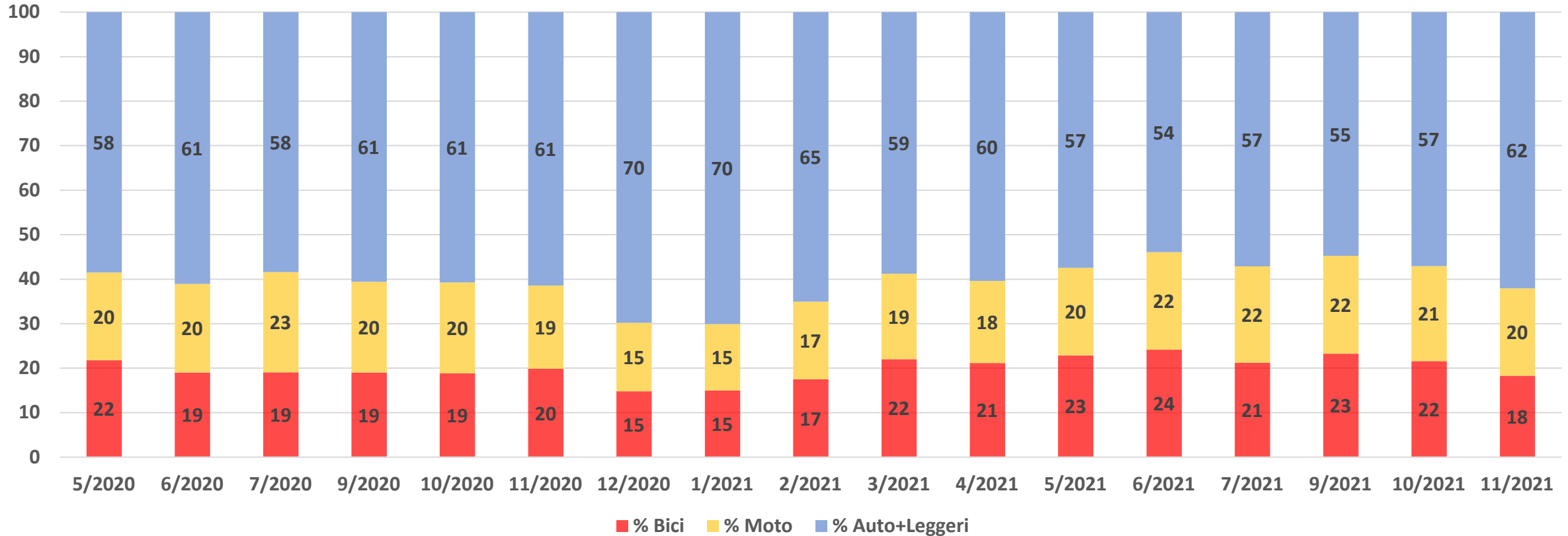|	21/11/2019	17/09/2020	19/11/2020	18/11/2021
auto 🚗	75%	54%	65%	58%
moto 🏍️	20%	23%	17%	21%
bici 🚲	5%	23%	18%	21%

**End of work
May 2020**

Buenos Aires c/o Oberdan (monitoraggio: 26 maggio 2020 – in corso)

Monitoring analysis

Modal share trend (weekday) c.so Buenos Aires maggio 2020 - November 2021

Average weekday bike 6.00-22.00 <u>post intervention</u>: **6.471** bikes bi-directional

Average festive bike 6.00-22.00 <u>post intervention</u>: **5.053** bikes bi-directional

Peak hour bi-dir.: **1.138** (time slot 18-19, Tue 04/05/2021)

Most transited day 6.00-22.00: **10.457** (Tue 01/06/2021)

Towards a new phase, metropolitan planning

Cambio – the network of cycling corridors in the metropolitan city

New opportunities

Foto: Matteo Saderis

Urban cycle road - a single-carriageway urban road, with paved verges and pavements, with a speed limit of no more than 30 km/h with priority given to cycles.

FIG. II 318/b

FIG. II 319/b

School zone - *a street or area within which there are buildings used for school purposes and in which particular precautions of behaviour are in force.*
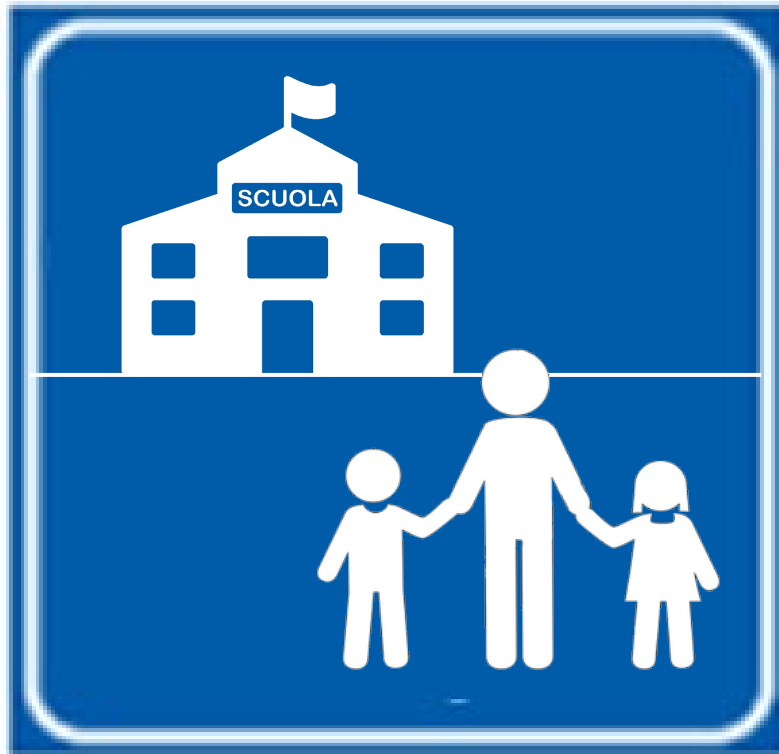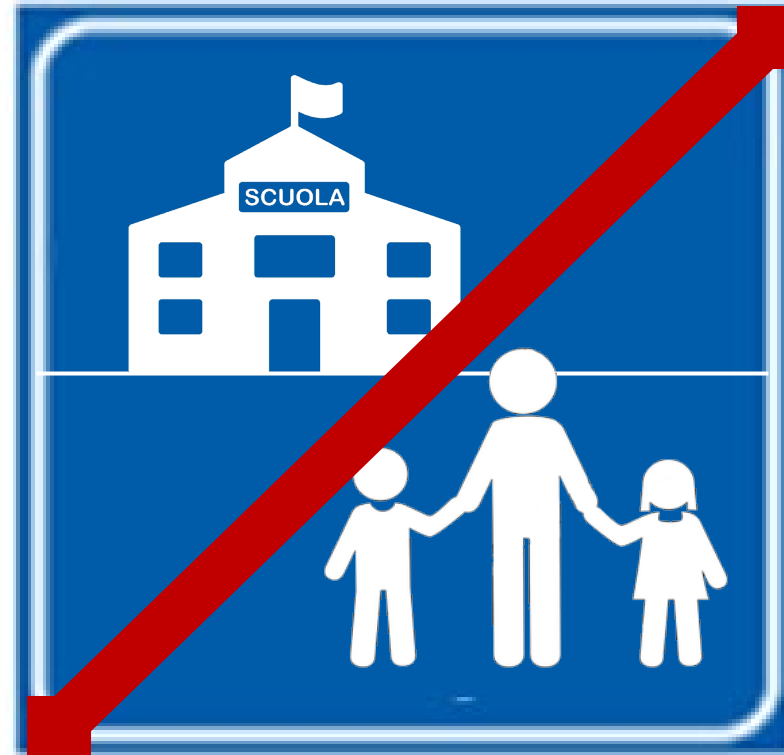

FIG. II 318/c

FIG. II 319/c

Accessibility and inclusion

MOTOR DISABILITY

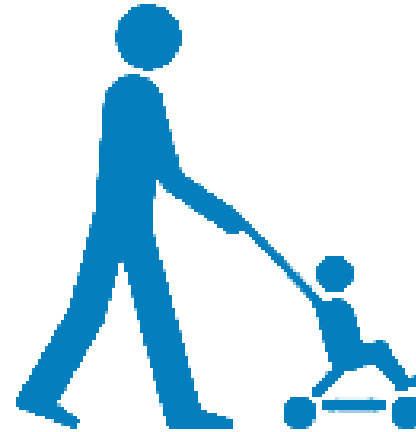VISUAL DISABILITY

HEARING DISABILITY

COGNITIVE DISABILITY

ELDERLY

WOMEN

CHILDREN

FOREIGNERS

OpenStreetMap

The "Barrier-free City" project aims to:

- *create a more inclusive society;*
- *build a more accessible city for everyone;*
- *promote active mobility of citizens;*
- *enable the use of local public transport;*
- *support urban planning;*
- *guide the redevelopment of public spaces.*

Mapping on OpenStreetMap plays a crucial role in the "Barrier-free City" project, in fact:
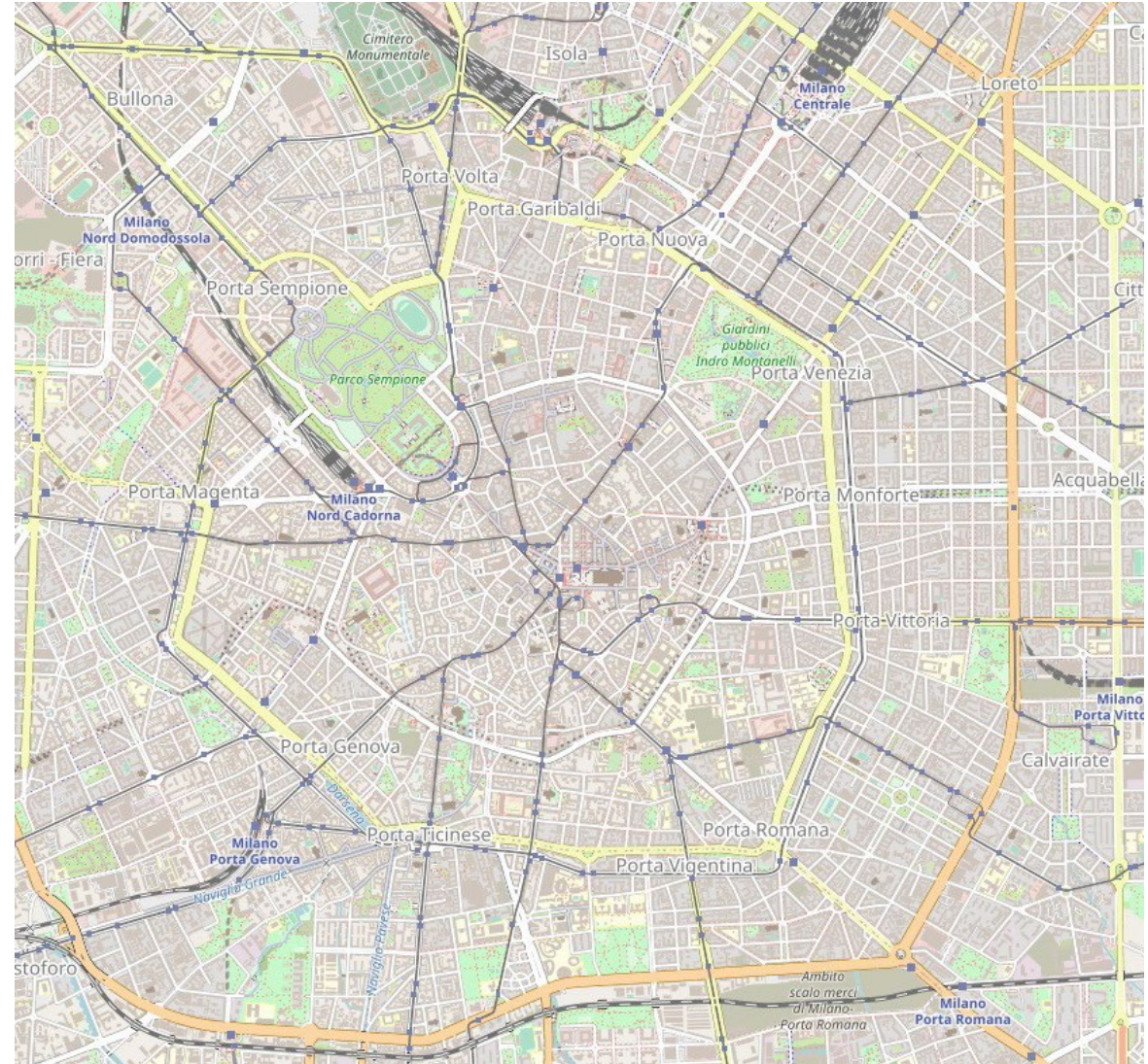
OPTIMIZE
to enhance the data already mapped: integrate rather than replace or duplicate.

SHARING
to allow third-party companies to use the pedestrian graph and have a common basis to exchange further information (e.g., maintenance).
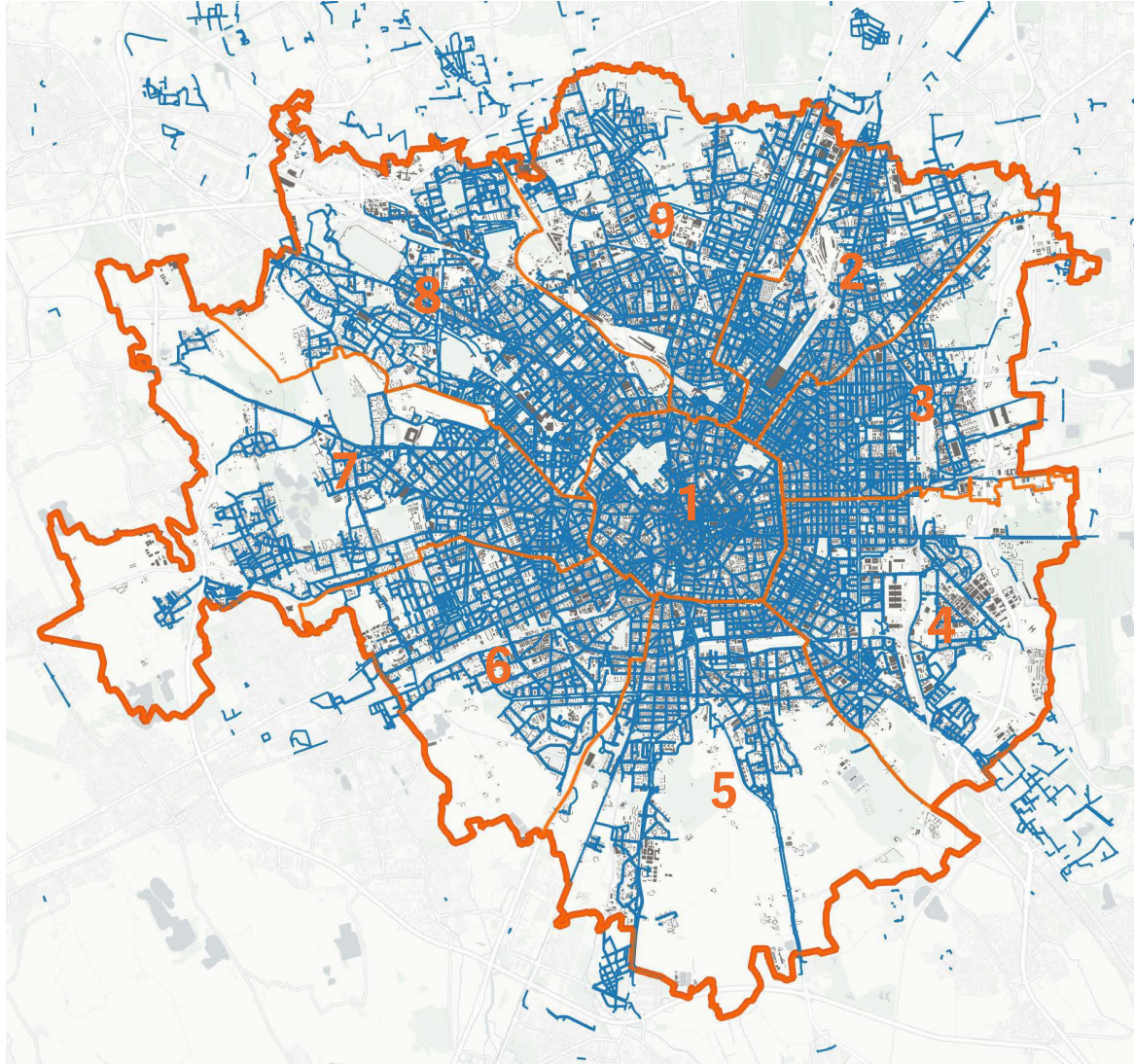
COLLABORATE
*to enable collective intelligence on the strategic issue of accessibility.*

OpenStreetMap is an editable map of the world built by volunteers and released under an open-content license.

Pedestrian path

Sidewalks are the main pedestrian link between residences, local public transport, and public and private services, and are therefore among the main points of interest in mapping and analysis for promoting accessibility. However, other types of pedestrian paths such as open spaces, green areas, indoor paths in services and stations also need to be implemented.
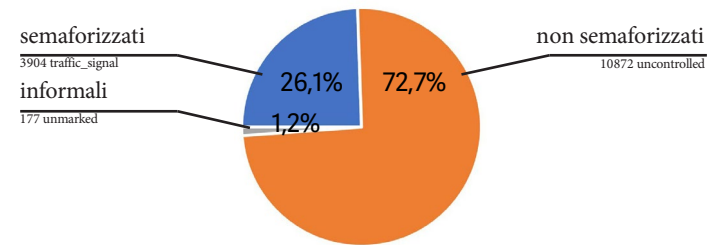
2360 km
Of sidewalks
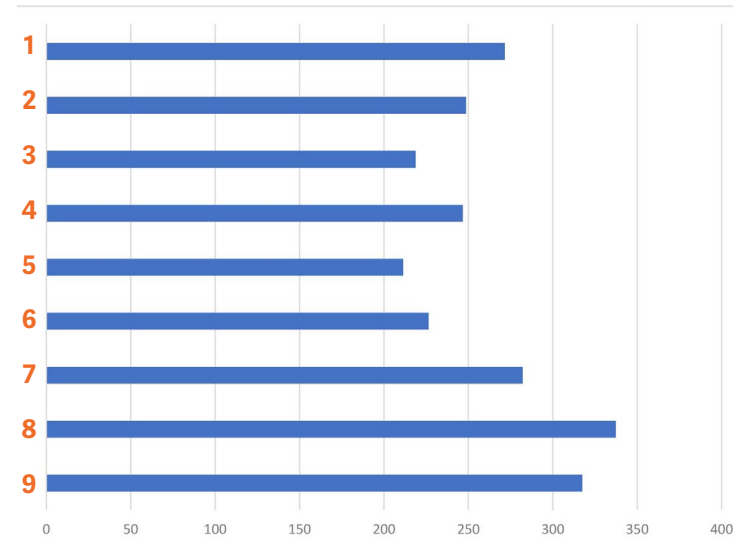
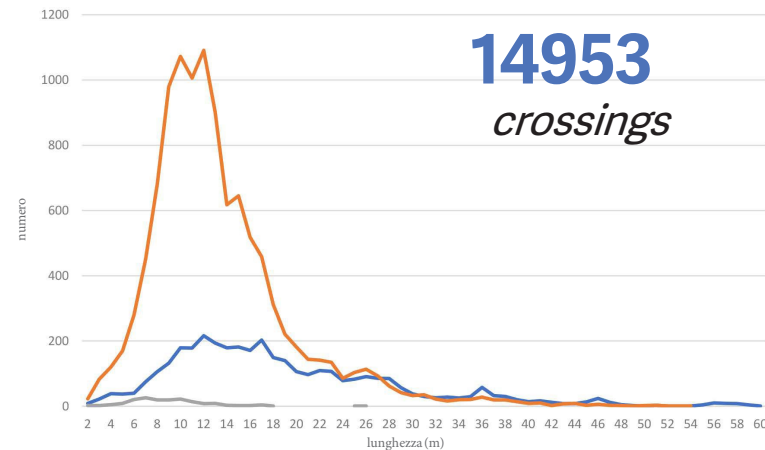Distribuzione dei marciapiedi per municipio (km di estensione)

Crossings

Crossings are the main problem related to the mobility of people with disabilities, both due to changes in level (physical barrier) and the risks associated with other traffic flows (trucks, cars, motorcycles, bicycles). Crossings can be signalized or not, and sometimes they are informal but commonly used (the most dangerous ones).
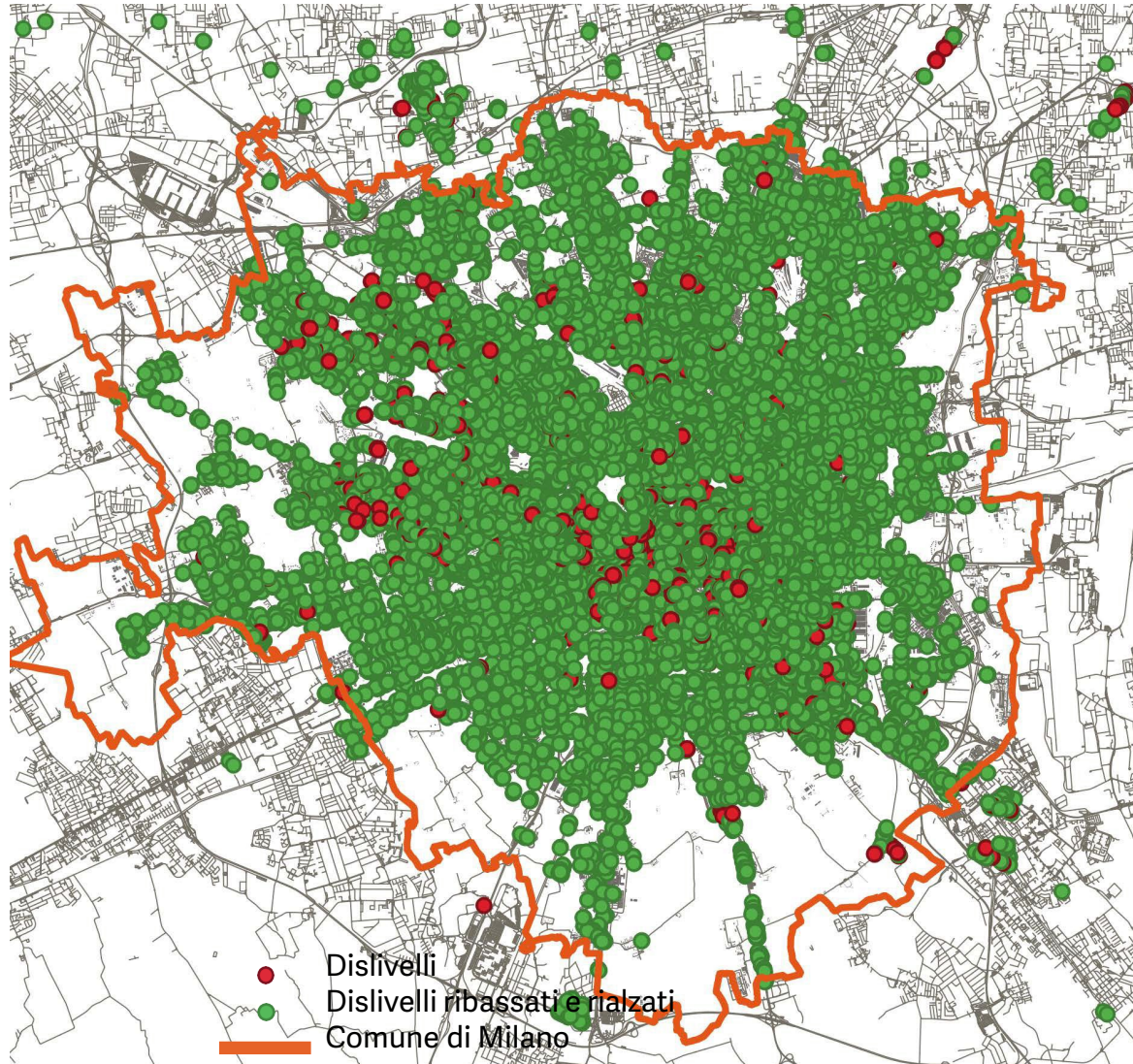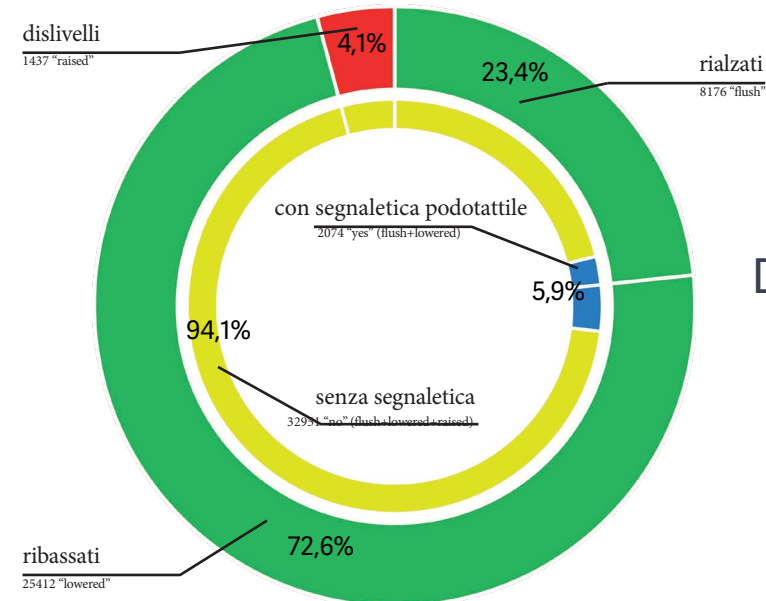

semaforizzati
3904 traffic_signal

non semaforizzati
10872 uncontrolled

informali
177 unmarked

26,1% 72,7%

1,2%

Analysis of Crossings by Type

14953

crossings

numero

lunghezza (m)

Analysis of Crossings by Length

Kerbs and ramps

Dislivelli
Dislivelli ribassati e rialzati
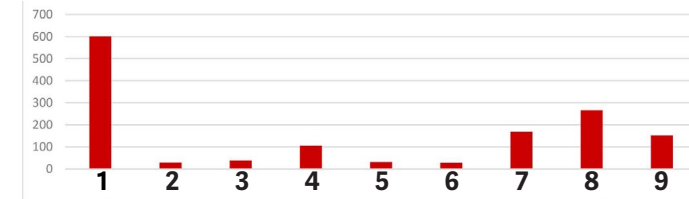Comune di Milano

The point of transition between sidewalks and crossings is the privileged point of interest for ensuring the maximum accessibility of public space. They may or may not have tactile signaling.
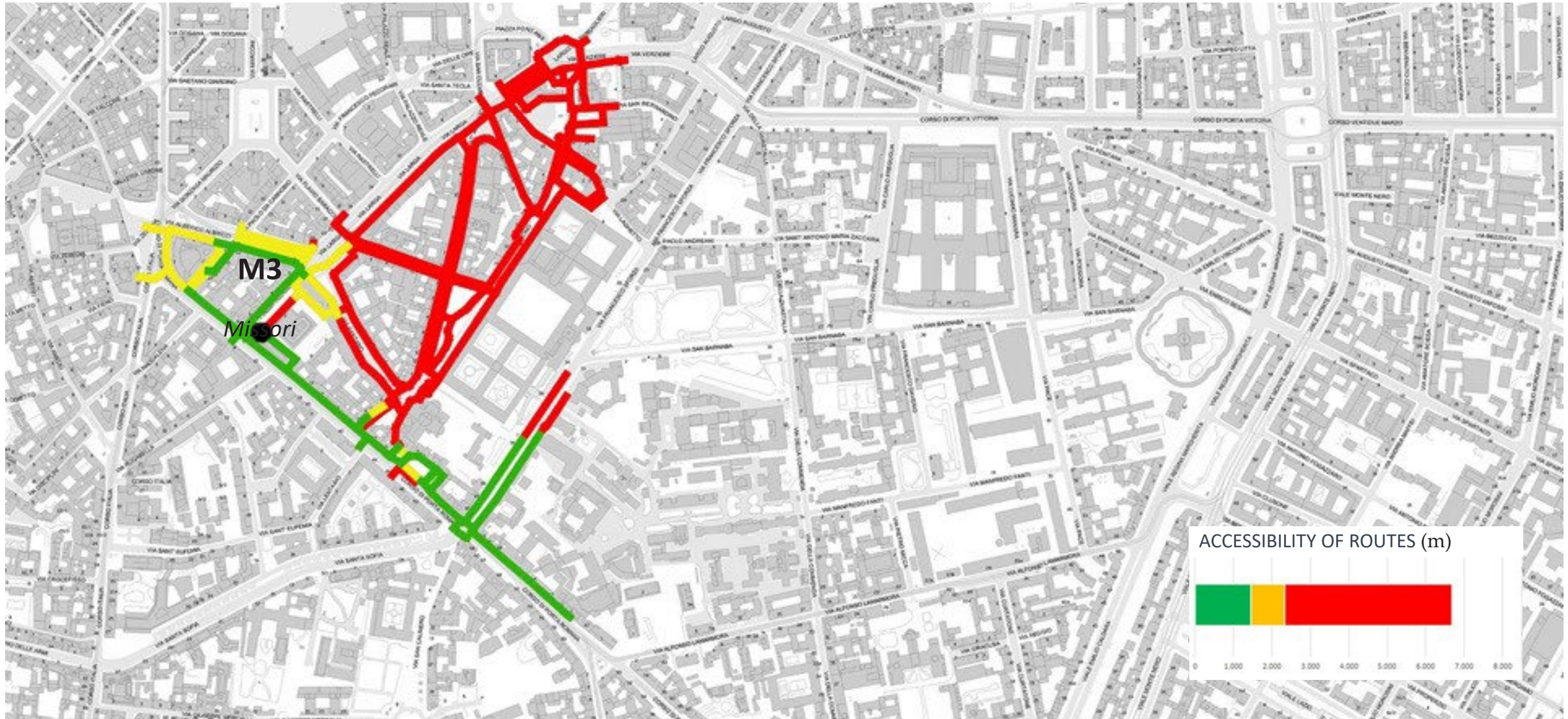

dislivelli
1437 "raised"

4,1%

rialzati
8176 "flush"

23,4%

con segnaletica podotattile
2074 "yes" (flush+lowered)

5,9%

94,1%

senza segnaletica
32951 "no" (flush+lowered+raised)

72,6%

ribassati
25412 "lowered"

34951
Detected points

Analysis of level differences by type and presence of tactile paths

Number of unconnected level differences by municipality

Accessibility analysis from Public Transport

M3

Missori

ACCESSIBILITY OF ROUTES (m)

0   1.000   2.000   3.000   4.000   5.000   6.000   7.000   8.000

Accessibility analysis of Public Services

M3
Missori

Tribunale

Università Statale

MuBa

Ospedale Policlinico

Teatro Carcano

M3
Crocetta

M3
Porta Romana
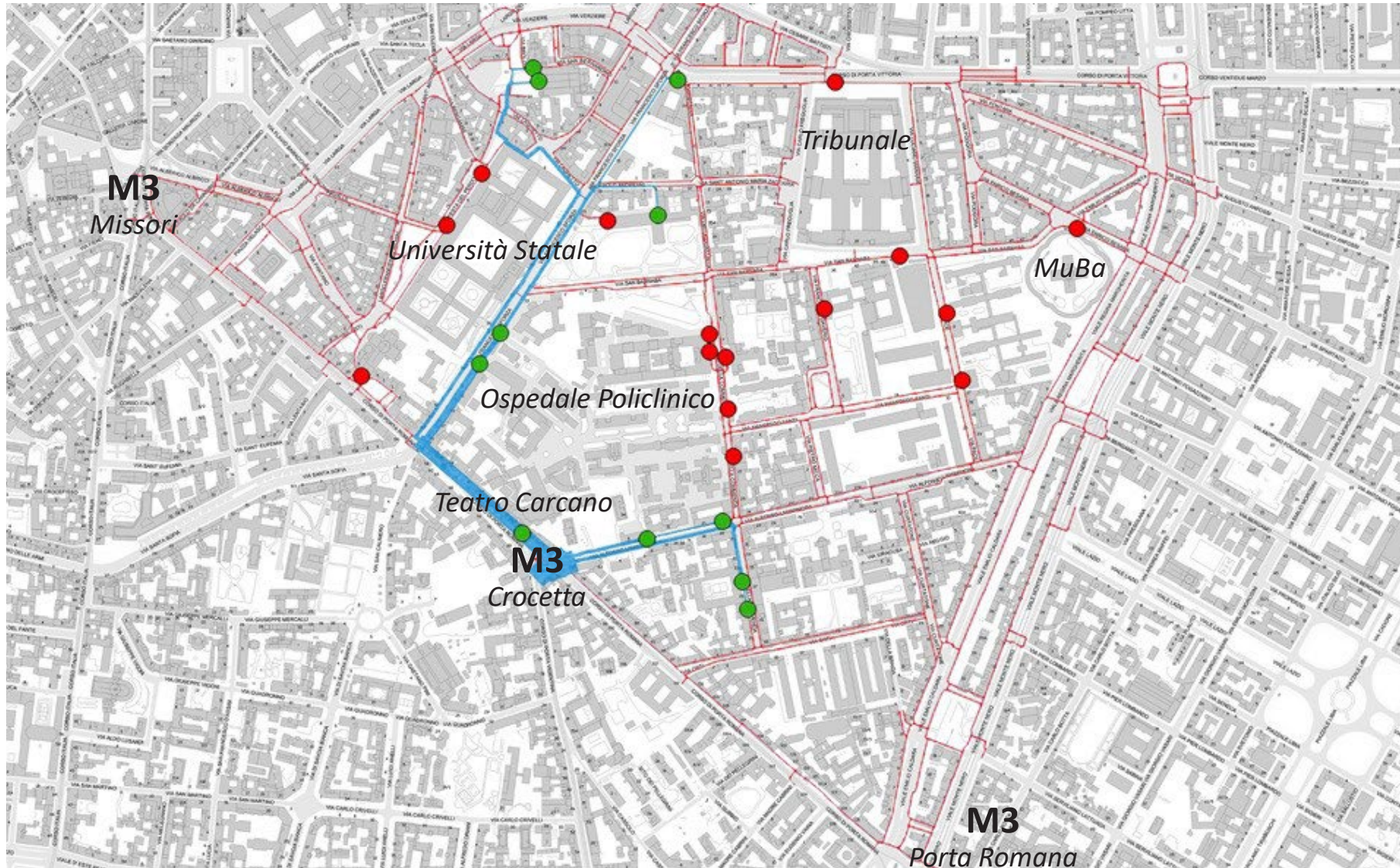
ACCESSIBLE ROUTES

NOT ACCESSIBLE ROUTES

REACHED PUBLIC SERVICE

UNREACHED PUBLIC SERVICE

Use of roads during morning rush hour by pedestrian

LEGENDA

0 - 2.500	USERS
2.500 - 7.500	USERS
7.500 - 15.000	USERS
15.000 - 30.000	USERS
30.000 - 60.000	USERS
> 60.000	USERS
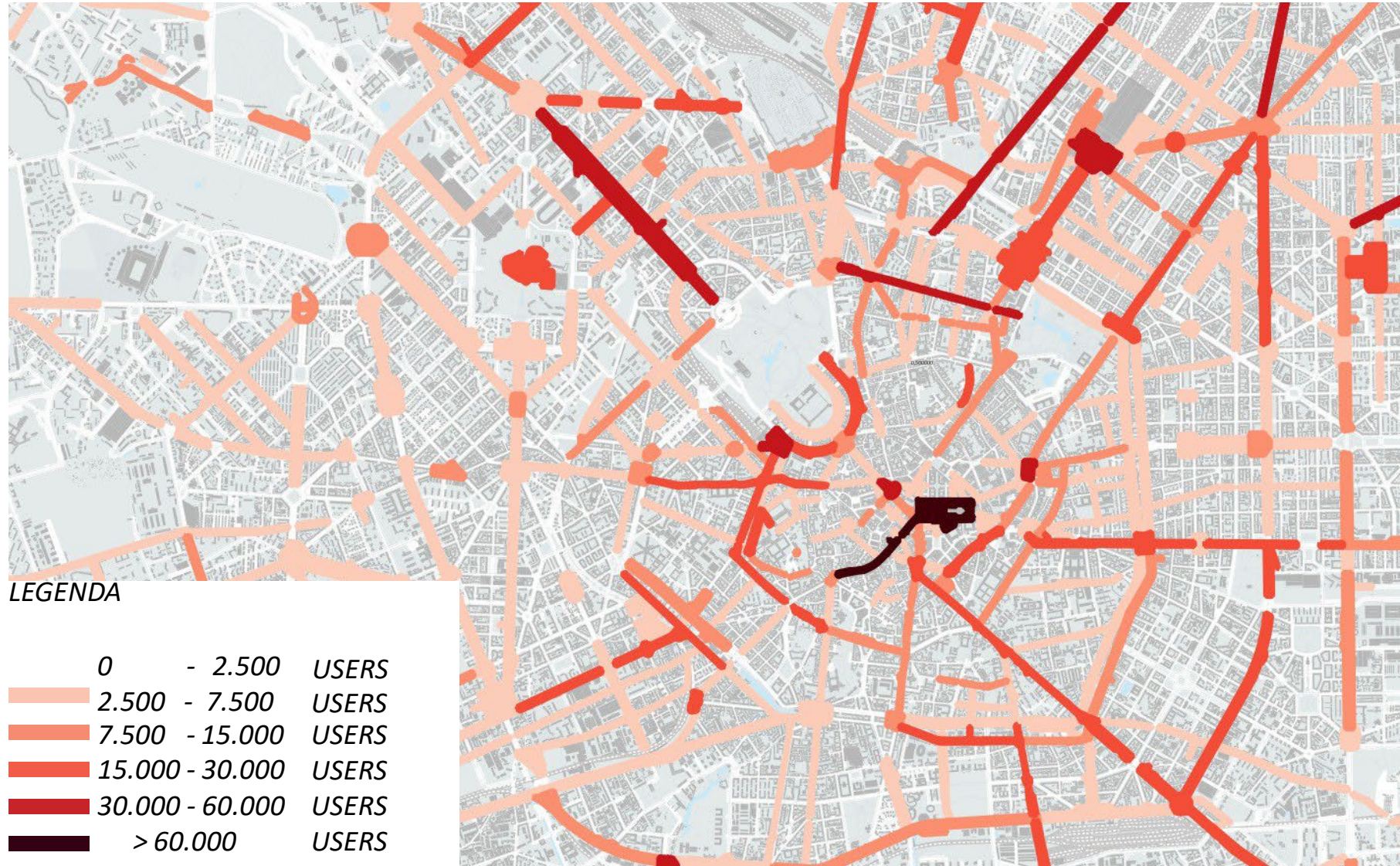
The calculation method used was a modeling simulation of the movements made with the Local Public Transport (LPT) in the morning rush hour from 8:00-9:00 am. This allowed us to estimate the pedestrian flows on each street in Milan generated by LPT users (trips made to reach the starting station of the journey, to change lines if necessary, and to reach the final destination from the end station).

The origin/destination of each trip was obtained from the O/D matrix (which provides an estimate of the movements made between each pair of zones) and the location of attractors/generators of movements such as residences, public/private services, and workplaces.

The map represents the main pedestrian routes, where for each street axis the number of LPT users who walk on that street during their commute from 8-9 am is reported.

THANK YOU!

For more information: andrea.canevazzi@amat-mi.it