



**UNIONE EUROPEA**  
Fondi Strutturali e di Investimento Europei

# DEVELOPMENT OF MOBILITY IN ROME WITH REACT-EU STRUCTURAL FUNDS: FROM NEW LEZ, TRAFFIC MONITORING, NEW BUS FOR PUBLIC TRANSPORT TO ROME MAAS

*Rome Mobility Agency  
Sustainable Mobility and Transport Department*

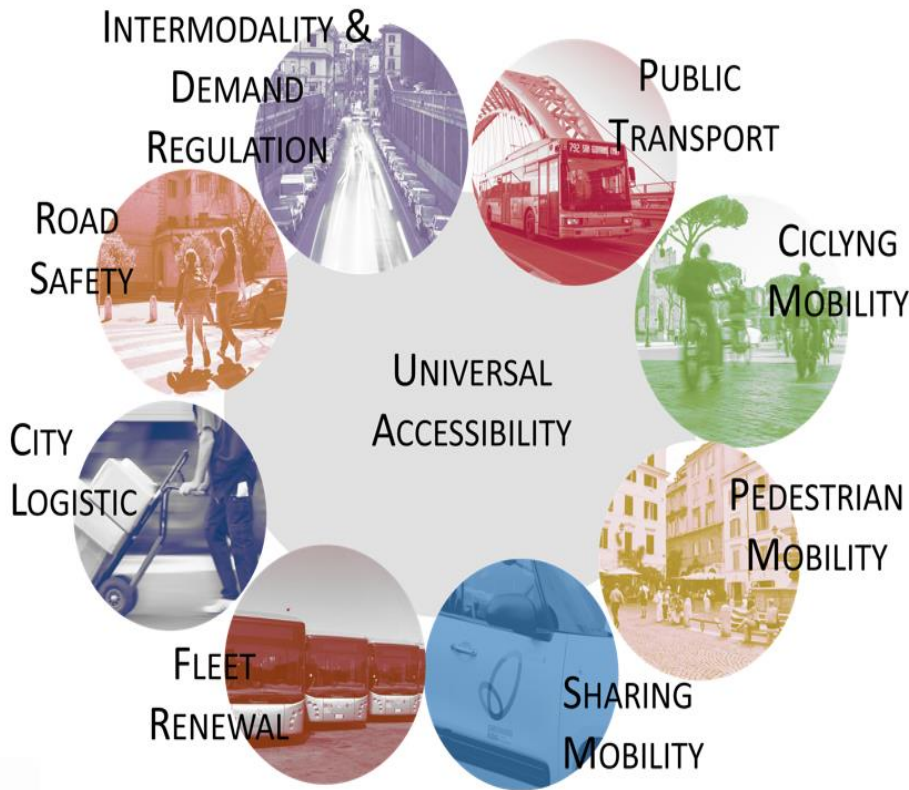
SMART CITY CONGRESS BARCELONA – NOVEMBER 07/09, 2023



Roma



## PON Metro and React-EU: focused to SUMP development



From the old “**traffic approach**” towards “**Plan for people**”:

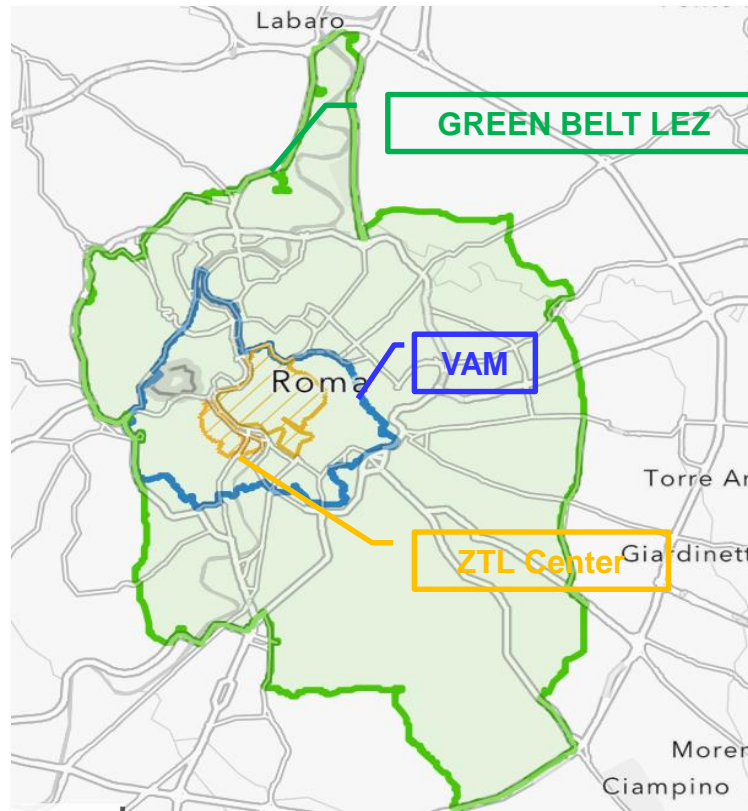
- **Multimodality & reduction of private car ownership**
- **Public transport capacity increase**
- **Safety levels increase** for PT and road traffic
- **Active mobility**, soft & sharing mobility increase (car pooling, car, **bike**, van sharing, mobility manager activities)
- **Less congestion and atmospheric & acoustic pollution** - energy consumption reduction – **CO2**
- Pathway to **Climate Neutrality** according to Rome participation in **EU Mission '100 climate neutral cities by 2030'**

## SUMP: Demand Management Policies

### City zoning: 6 areas with:

- increasing constraints to private mobility,
- focusing on multimodal mobility
- emphasis to soft modes,
- supported by ITS measures.

From November 2023 new regulations (with gradual bans over the years) with **new access and circulation rules** to limit air pollution



<p><b>Zone1 – hystorical city center</b> Target → massive reduction of cars</p>
<p><b>Zone2 – Rail ring</b> Target → public transport and sharing increase</p>
<p><b>Zone3 – internal ring road</b> Target → balancing private/public transport</p>
<p><b>Zone4 – ring road</b> Target → public transport / intermodality increase</p>
<p><b>Zone5 – beyond GRA</b> Target → public transport / intermodality increase</p>
<p><b>Zone6 – city along the sea</b> Target → intermodality increase / commuters</p>

## *Sustainable mobility interventions financed by PON Metro 2014-20*

**Total funds** dedicated from PON Metro to Rome for **sustainable mobility interventions** is about **15,4 ML€**

In 2021, **REACT-EU** extraordinary fund added **further 62,3 ML€** to PON Metro for Rome.

### *1. Cycling Plan*

- 6 new bicycle lanes, with upgrading of the existing network and widespread bicycle parking
- Multimodal hubs and bike parking
- New express lanes for Public Transport

### *3. Development of ITS systems*

- Infomobility
- Environmental e-gates
- Monitoring congestion of road infrastructures
- Mobility-As-A-Service: first core of integrated services

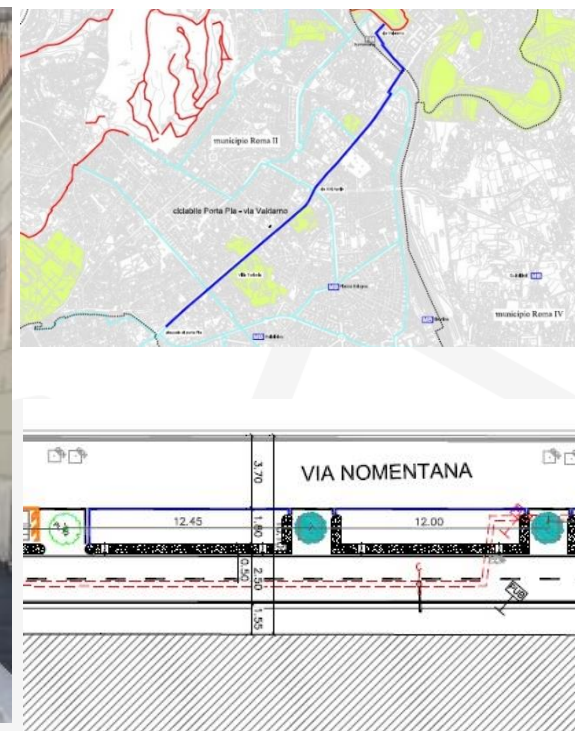
### *2. Public Transport & Mobility Infrastructures*

- BusRoma: renovation and upgrade PT fleet
- + BUS X ROMA
- Multimodal Hub in Trastevere station
- PT infrastructures: Smart maintenance & Analytics



## 1. Cycling Plan: Via Nomentana example

- **Extended 3.6 km.**  
It connects Porta Pia with the V. dei Campi Flegrei bicycle path (height V. Valdarno). Along the right side of Via Nomentana (northbound).
- **Two-way cycle track** in its own right-hand lane, 2.5 m in section protected with prefabricated kerb laid in situ without excavation



## Multimodal hub: bike-box parking

Integration into PT facilities for 408 bike parking spaces in 7 metro stations with:

- Optimisation of ATAC management costs (internal bike parking)
- Improved integration of the service into ATAC's system architectures
- Increased security (theft deterrence)
- Place bookability (dedicated App)

1	LAURENTINA
2	ANAGNINA
3	SAN PAOLO BASILICA
4	EUR MAGLIANA
5	PONTE MAMMOLO
6	ARCO DI TRAVERTINO
7	JONIO





## *2. Public Transport & Mobility Infrastructures New public transport vehicles. 59 CNG buses*



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### *New public transport vehicles. 75 mild-hybrid buses*





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*New public transport vehicles. 75 mild-hybrid buses*



## *Multimodal hub – Trastevere station: requalification of Flavio Biondo square*

• **Complete redevelopment of the square into a multimodal hub with:**

- Central area dedicated to PT;
- Special routes to connect the station and PT stops;
- Green areas, pedestrian areas, bicycle parking spaces and parking spaces for car/bike sharing and charging of electric vehicles.
- Presence of parking spaces for loading and unloading goods, Kiss & Ride area.
- Dedicated lighting project

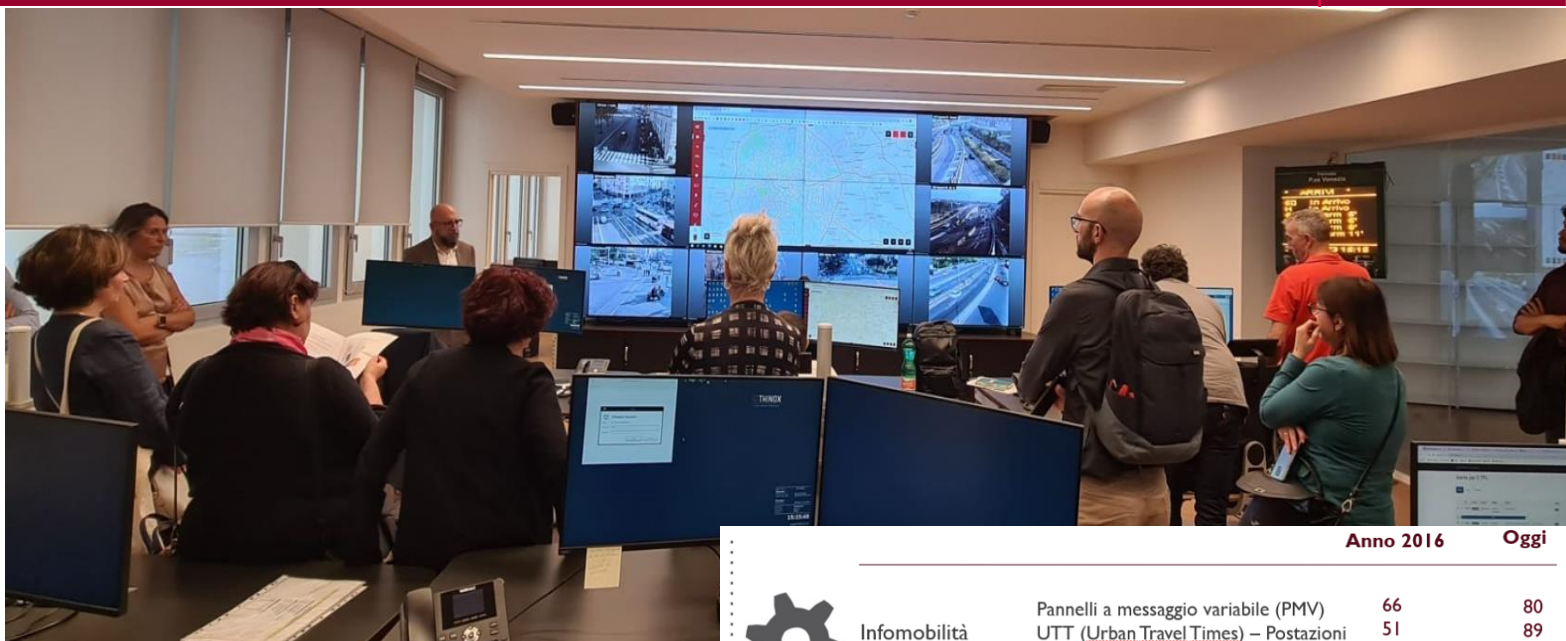




# The Mobility Centre

Roma Servizi per la Mobilità

Via Silvio D'amico, 40



The Center puts together a series of subsystems, each dedicated to the performance of specific functions of monitoring and / or regulation of traffic flows.

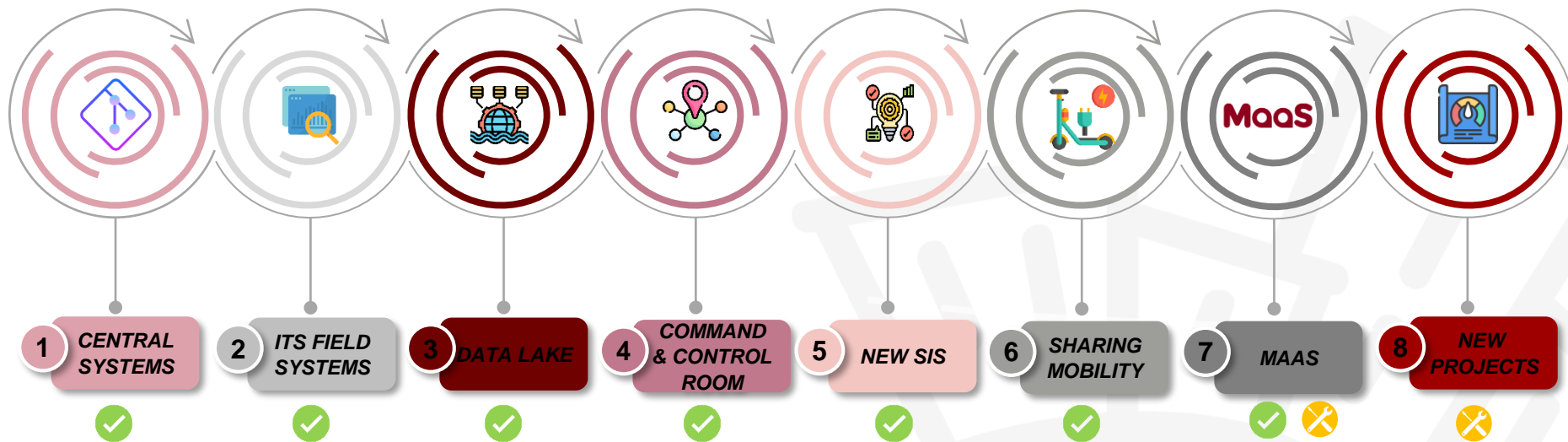
Free acces to all services, codes and open data, updated real-time when available

		Anno 2016	Oggi
Infomobilità	Pannelli a messaggio variabile (PMV)	66	80
	UTT ( <u>Urban Travel Times</u> ) – Postazioni	51	89
	Paline elettroniche	300	320
Sanzionamento	Varchi elettronici ZTL	47	113
	Varchi corsie preferenziali TPL	17	39
	Fotored	1	1
	<u>Vistared</u>	10	10
	<u>Safety Tutor</u>	2	2
Monitoraggio Regolazione Controllo	Telecamere di videosorveglianza	75	93
	Stazioni di Misura	130	64
	Impianti semaforici	1376	1410



# Digitization path of the Rome Mobility Agency

Starting in 2018, Rome Mobility Agency embarked on a path of infrastructural innovation and digitization, also in line with European best practices in the area of Smart Mobility. This path aims to respond to the **growing demand for research and development and services for urban mobility.**



## *ITS development & infomobility in PON Metro 2014-20*

- Centralised traffic light priority systems for the implementation of **LPT traffic light priority routes**,
- LPT priority lanes **control gates**
- Journey time monitoring systems (UTT system)
- Traffic measurement stations on the carrier network
- Expansion of **data connection and video surveillance** infrastructure (Image Processing);
- Data fusion platform for the integration of transport modes in the municipal area. First part of **Data Lake system**
- Integrity Technologies: **Disaster Recovery**.



## *Example: Lights Priority for public transport*

After an initial experimentation phase of the TP forecaster, the priority for the TP was implemented in the following tracks with the installation of local sensors:

- Tram line 8, from Casaletto to Piazza Venezia 5 km
- Verano-Thorwaldsen tram lines 3 and 19, about 5 km, 25 IS in total
- Togliatti itinerary (about 8 km - 34 IS total)
- Trieste-Labia-Melaina itinerary (about 5 km - 15 IS total)

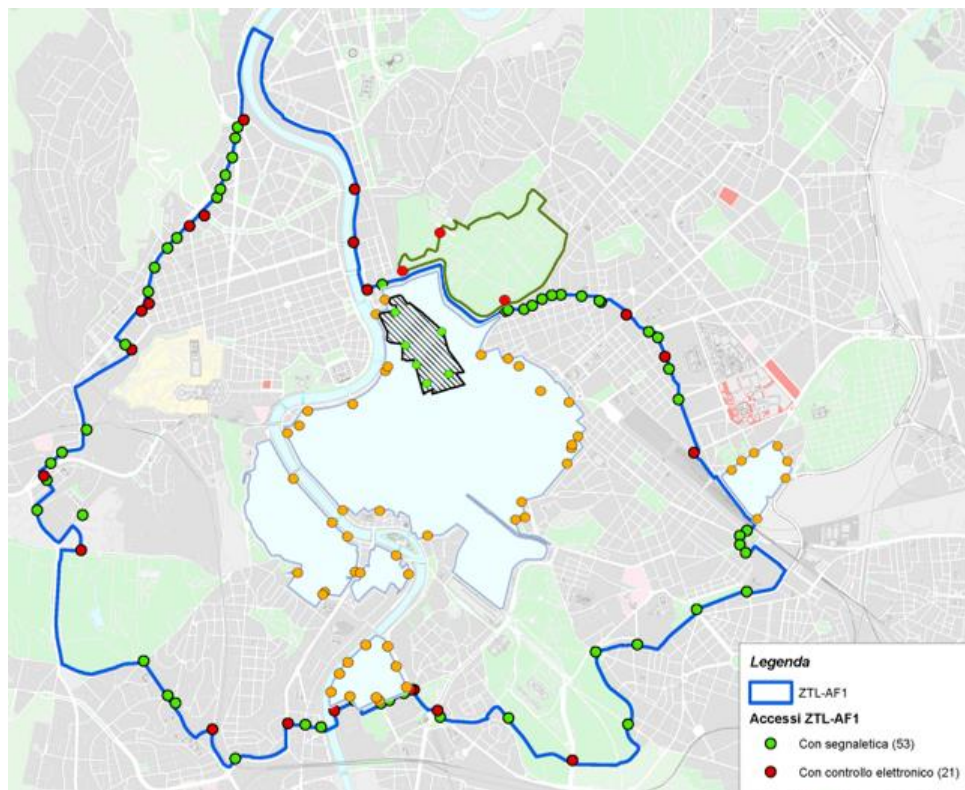




## Present status of City Centre LTZs & electronic access control

**LTZ VAM-AF1:**  
52 electronic gates

**All days** Restriction for all vehicles with total length over 7,5 meter, except authorized (tourist coaches)



**LTZ Historic Center**  
Mon. to Fri. 6.30 am - 6 pm  
Sat. 2 pm – 6 pm  
Fri. & Sat. 11 pm – 3 am

**LTZ Trastevere**  
Mon. to Fri. 6.30–10 am  
Fri. & Sat. 9,30pm–3am  
**LTZ Villa Borghese**  
Mon. to Sun. 0 –24

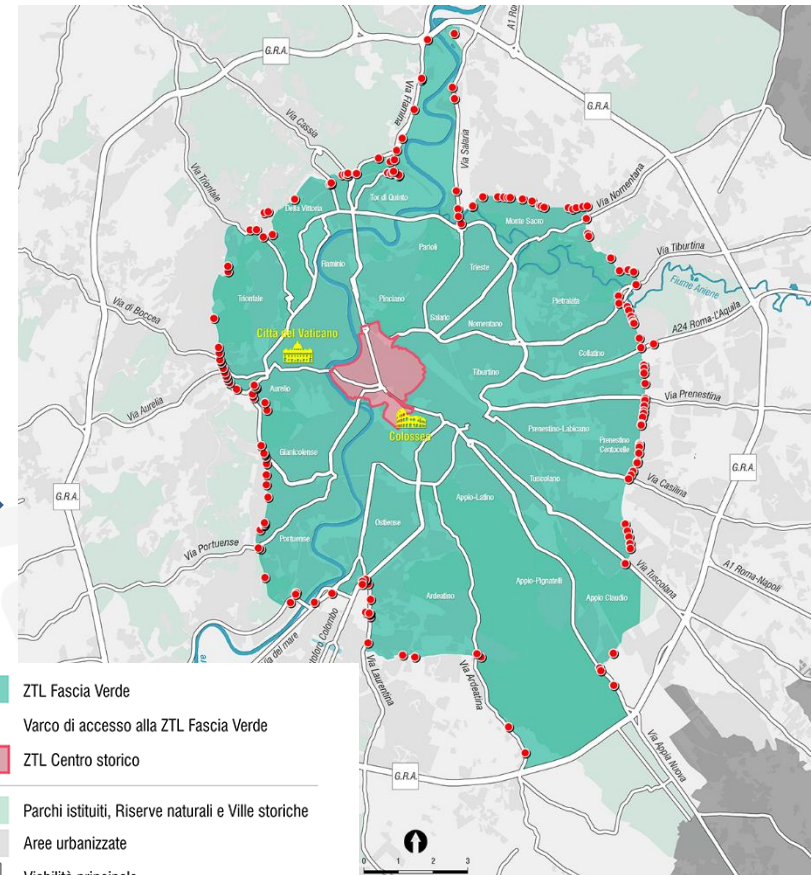
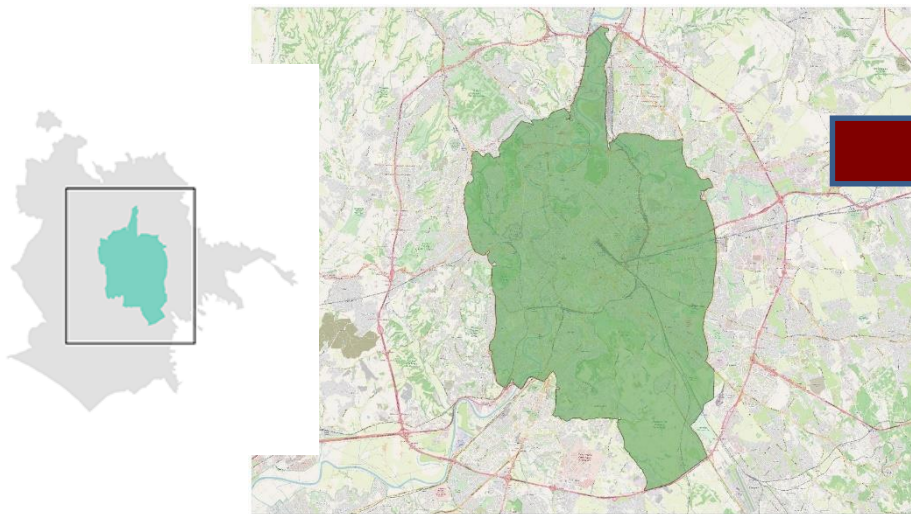
**LTZ San Lorenzo**  
From  
Wed. to Sat. 9.30 pm – 3 am  
(May to July & September-October)  
Fri. & Sat. 9,30pm–3am  
(November – April)

**LTZ Testaccio**  
Fri. & Sat. 9,30pm–3am

# Electronic gates on the Green Area: the new LEZ

**PON Metro - React EU** is funding the first batch of the project (8 ML€)

- Completion of the **System Data Center**
- Installation of the **first 80 electronic gates (51 access roads)**



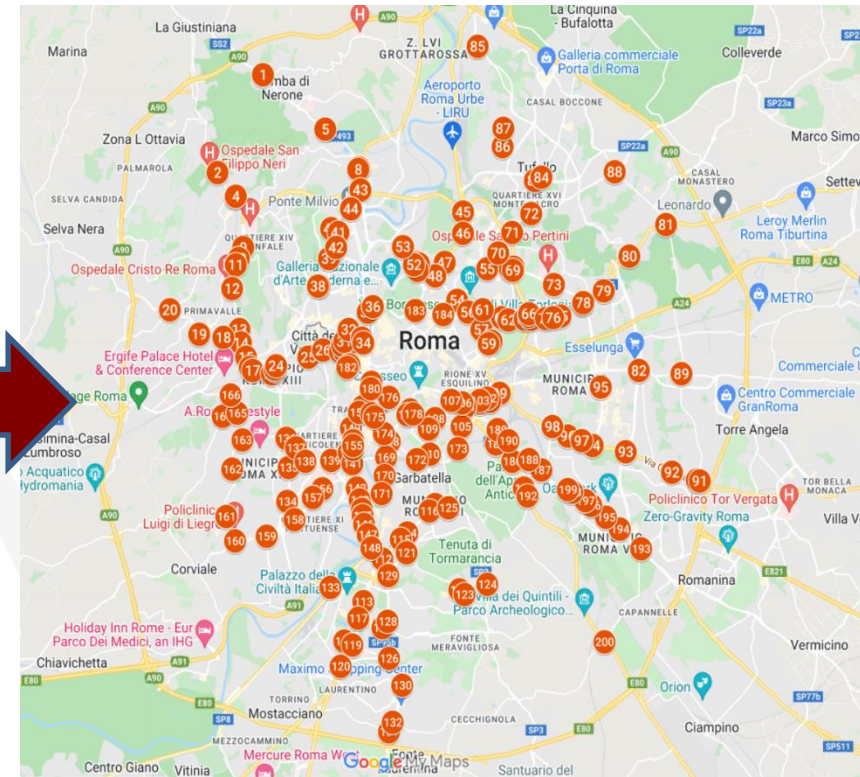
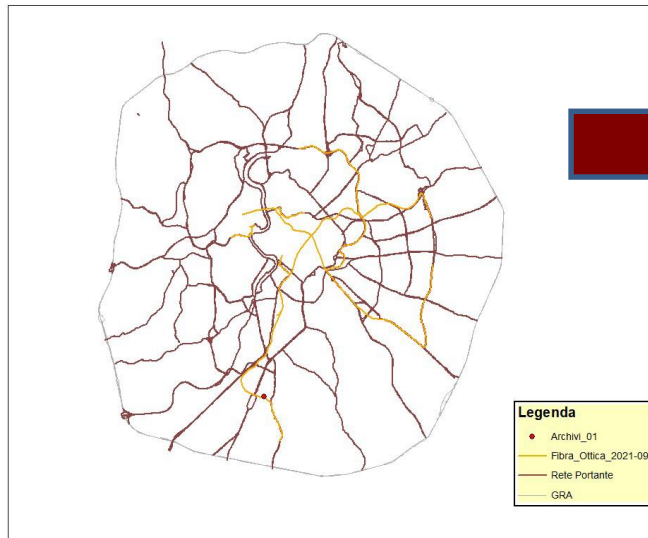


# Monitoring congestion on main city roadways

**PON Metro - React EU is funding the project**

**(10 ML€)**

- Monitoring (flows, speeds, vehicle categories) of about 200 road intersections using the latest Radar technology.
- Environmental monitoring of 20 areas



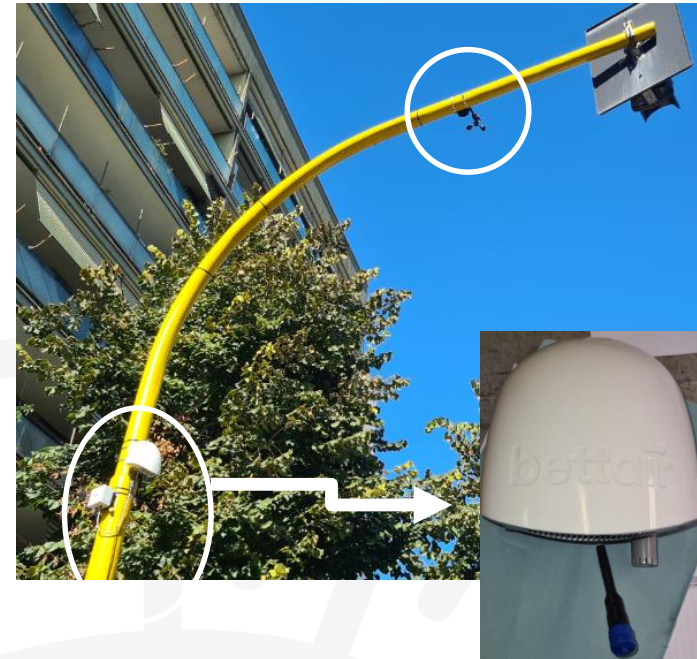


## Traffic monitoring and environmental analysis systems: On field implementations

### Traffic manager sensors



### Environmental sensors



## Mobility – as – a – Service (MaaS) in Rome

Within the framework of Mobility as a Service, financed by **REACT-EU** and **PNRR funds (RRF facility)**, MaaS is presented as a **single integrated platform**, open at regional and national level, that brings together the offers of mobility service providers and provides users with access to them via a digital interface



The MaaS4Italy trial period started on **1 July 2023**

Flexibility in travel planning and choice of the most appropriate service

Implementation of a single payment and validation platform for city users

BENEFITS



More connected cities and improved quality of services

Dissemination of MaaS through the interaction of MaaS Operators with the platform and the involvement of new actors

Improved perception of mobility as a unique facility



# MaaS - MOBILITY AS A SERVICE FOR ROME

Soluzioni integrate per una nuova esperienza di mobilità.







# INTEGRATED AND SUSTAINABLE MOBILITY OF THE FUTURE: PNRR & REACT-EU tools to be ready for the updated ITS Directive



## Mobility Centres

as a tool for monitoring mobility services: integrated supply, system performance, criticality management, integrated infomobility

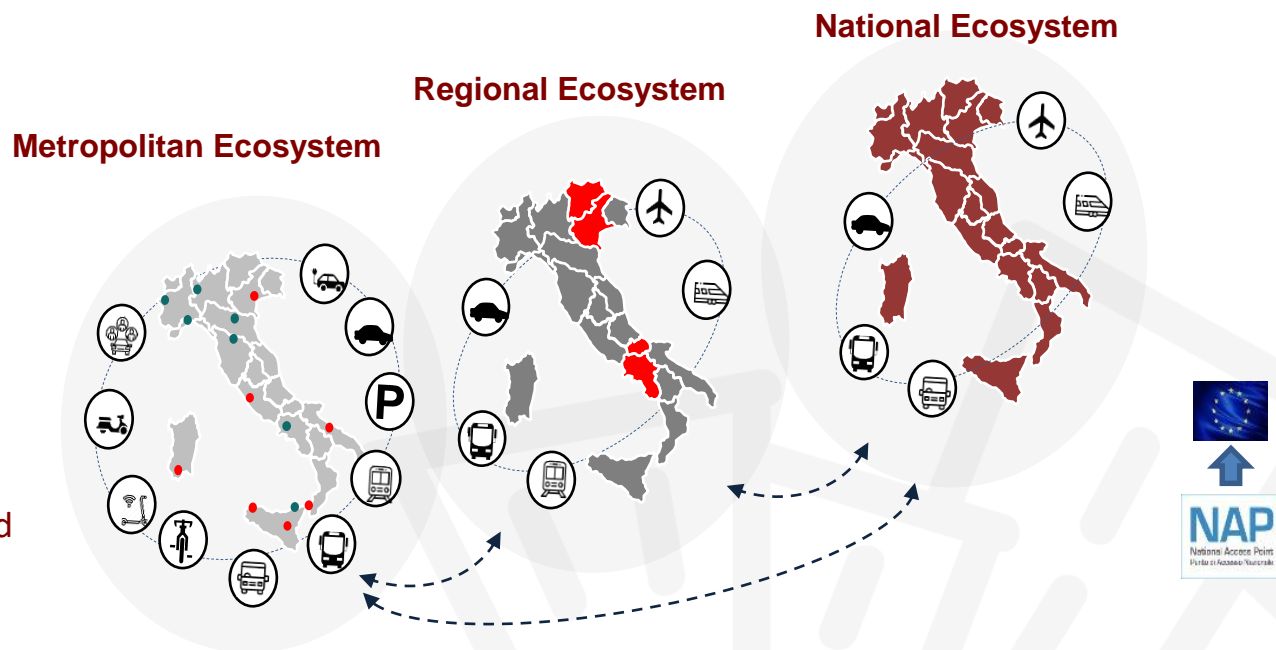


## RAP - Regional Smart Information Hubs

to facilitate interoperability and information sharing



**National Access Point** to facilitate access, easy sharing and re-use of transport data in the deployment of interoperable EU-wide services



## Conclusions

**PON Metro has laid the foundations** for the developments financed by the POR FESR, REACT EU and investments by Roma Capitale such as the through the modernization of the public transport fleet, active mobility implementations, new Control Room, new data management applications and predictive systems, functional to the next **Smart Road and Smart City projects**.

Thanks to PON Metro funding integrated by RRF EU Facility, Rome can continue its **sustainable mobility development policies** and **go towards multimodality** with the diffusion of **new MaaS applications** at national level.





ROMA



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# Thank you for your attention !

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Roma

