



ANNUAL CONFERENCE
MADRID, APRIL 10-12, 2024

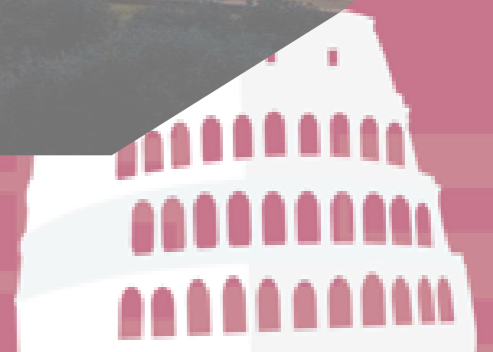
SESSION 1 – DEVELOPING EMISSION FREE CITY CENTRES: LOW EMISSION ZONES AND OTHER APPROACHES

EXPERIENCES WITH LOW EMISSION ZONES AND OTHER APPROACHES TO IMPROVE AIR QUALITY IN ROME



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Head International Co-operation & Sustainability
Mobility Agency of the City of Rome

Roma



Car predominance in Rome

1) Challenges

- **Motorization rate:** 620/1000 inhabitants, 1,9 ML vehicles (parked at least 90% time) + 0,4 ML PTW with 1,4 ML driving licenses;
- **Modal Share:** PT: 21%, Car: 52%, Motorbike:10%, Walking: 14%, Cycling + Sharing: 3%
- **Road safety:** + 120 fatalities per year.
- **Air Pollution:** non-compliance with EU Directive on ambient air quality for NO2 & PM10. Obligations to limit mobility of most polluting vehicles

2) Strategies

Implement the approved **SUMP** with focus on:

1. Strong improvement of Public Transport
2. Promote active mobility and multimodality
3. From car to multimodality: promote the MaaS approach
4. **Strong demand management policies with ITS support;**



1) Improvement of Public Transport

About 3 billion euros financing obtained and works running for:

- **NEW TRAMWAY LINES**

- Tramway TVA Termini-Vaticano-Aurelio and new Tram Depot (*financed by RRF*)

- Tramway via Palmiro Togliatti (*financed by RRF*)

- Tramway via Tiburtina (piazzale del Verano - Stazione Tiburtina)

- Tramway Termini-Giardinetti

- **ROLLING STOCK:** Purchase of 121 new tram and 30 new metro convoys

- **METRO C COMPLETION:** opening of Amba Aradam and Colosseo Station in mid 2025

Improvement of Public Transport



Purchase of zero-emission buses

- Purchase of **411 electric-powered urban buses**, to be put into service by 30/06/2026 (obligatory target to 31/12/2024, minimum purchase of 109 buses), for 208 ML€
- Infrastructure necessary for the commissioning of e-bus: construction and/or adaptation of existing depots and provision of recharging points close to the terminals), for 84 ML€

Integration with EU & Jubilee funds

- **110 hybrid 18-metre** for a total expenditure of €44m.
- **244 methane 12-metre buses** for an expenditure of € 69 million

These new buses will be put into service within 2024

2) Promote active mobility and multimodality



Recover urban space: Flavio Biondo square (Trastevere station)

From on-street parking to 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



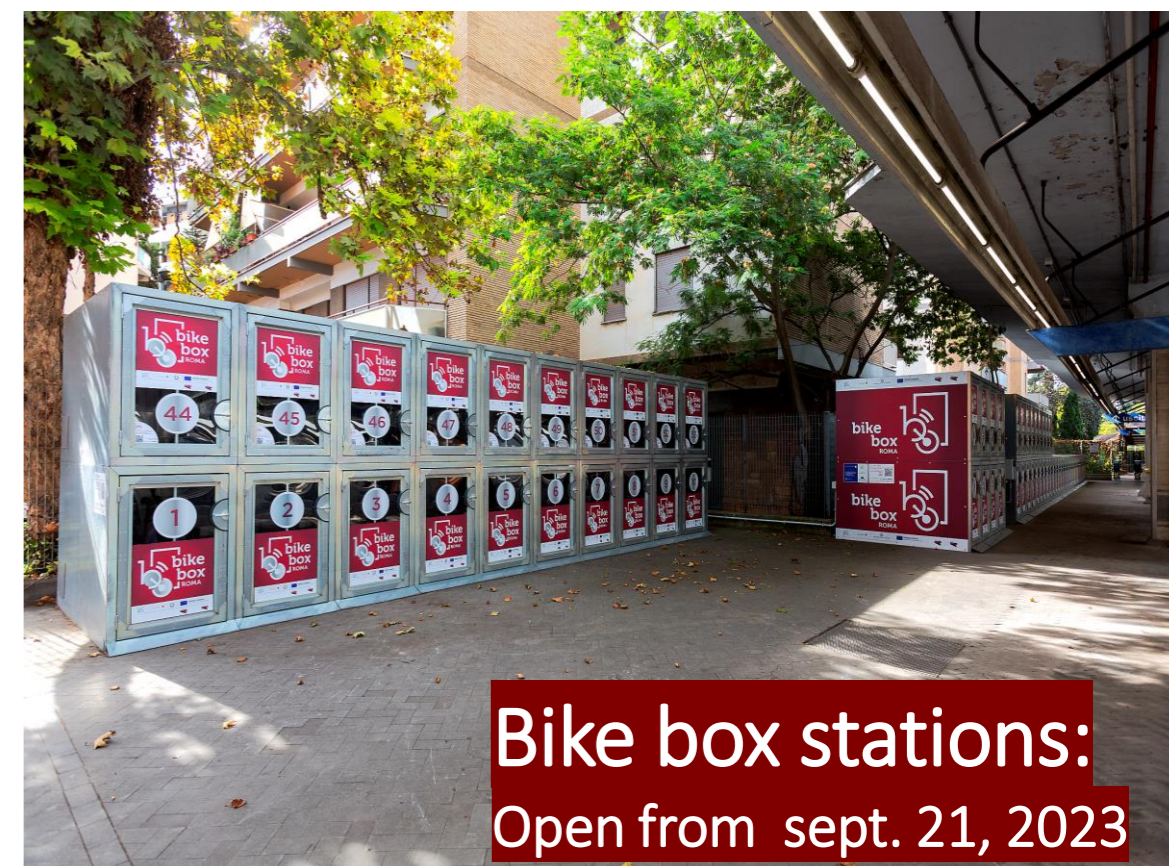
2) Promote active mobility and multimodality



Multimodal hub: bike-box parking

Integration into PT facilities for 408 bike parking spaces in 7 metro stations, integrated in PT card with dedicated app. Extensions to **other 11 stations** within yhis year.

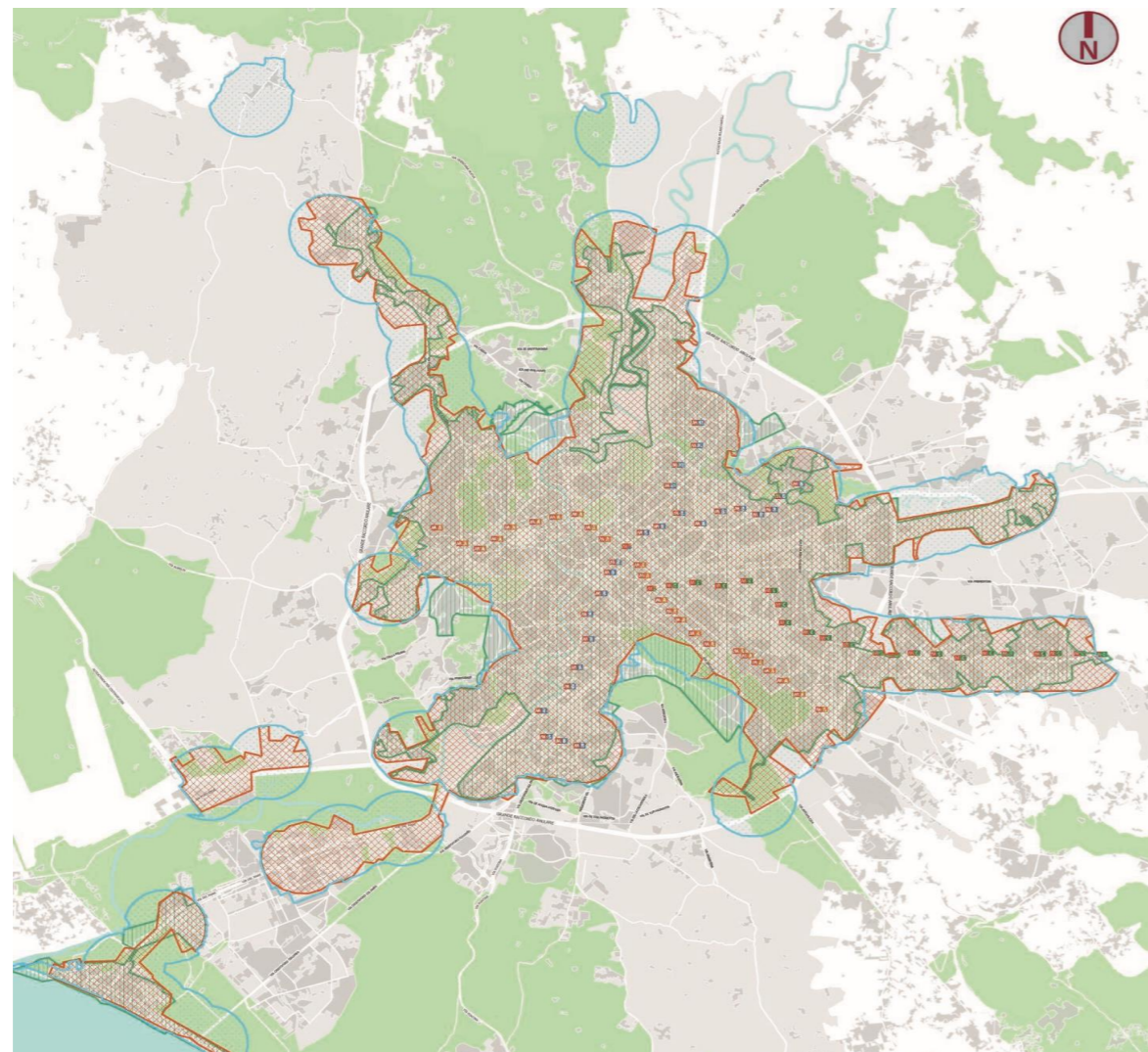
1	LAURENTINA
2	ANAGNINA
3	SAN PAOLO BASILICA
4	EUR MAGLIANA
5	PONTE MAMMOLO
6	ARCO DI TRAVERTINO
7	JONIOO



2) Promote active mobility and multimodality



MaaS & shared mobility – new rules and operators



Legenda

Metropolitane

Metro A	Metro B
Metro B1	Metro C

Gestori servizio monopattini Sharing

Bird	Dott	Lime
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MICROMOBILITY SHARING

- 3 scooter operators with new rules from 1 September 2023;
- 2 e-bike operators from 1 November 2023;

80 rides/month included in annual PT card (Mitrebus)

- new scooter guidelines from March 2023 and planned publication of public noticeo

CARSHARING

- New guidelines approved in March 2023.
- Public notice to be published shortly.
- Currently 3 operators active: Enjoy, ShareNow, E Go

2) Promote active mobility and multimodality



Cycling path extension: GRAB, 45 km portion of 160 km new paths

Legenda

 GRAB
Grande Raccordo Anulare delle Bici

Piste ciclabili - attuazione

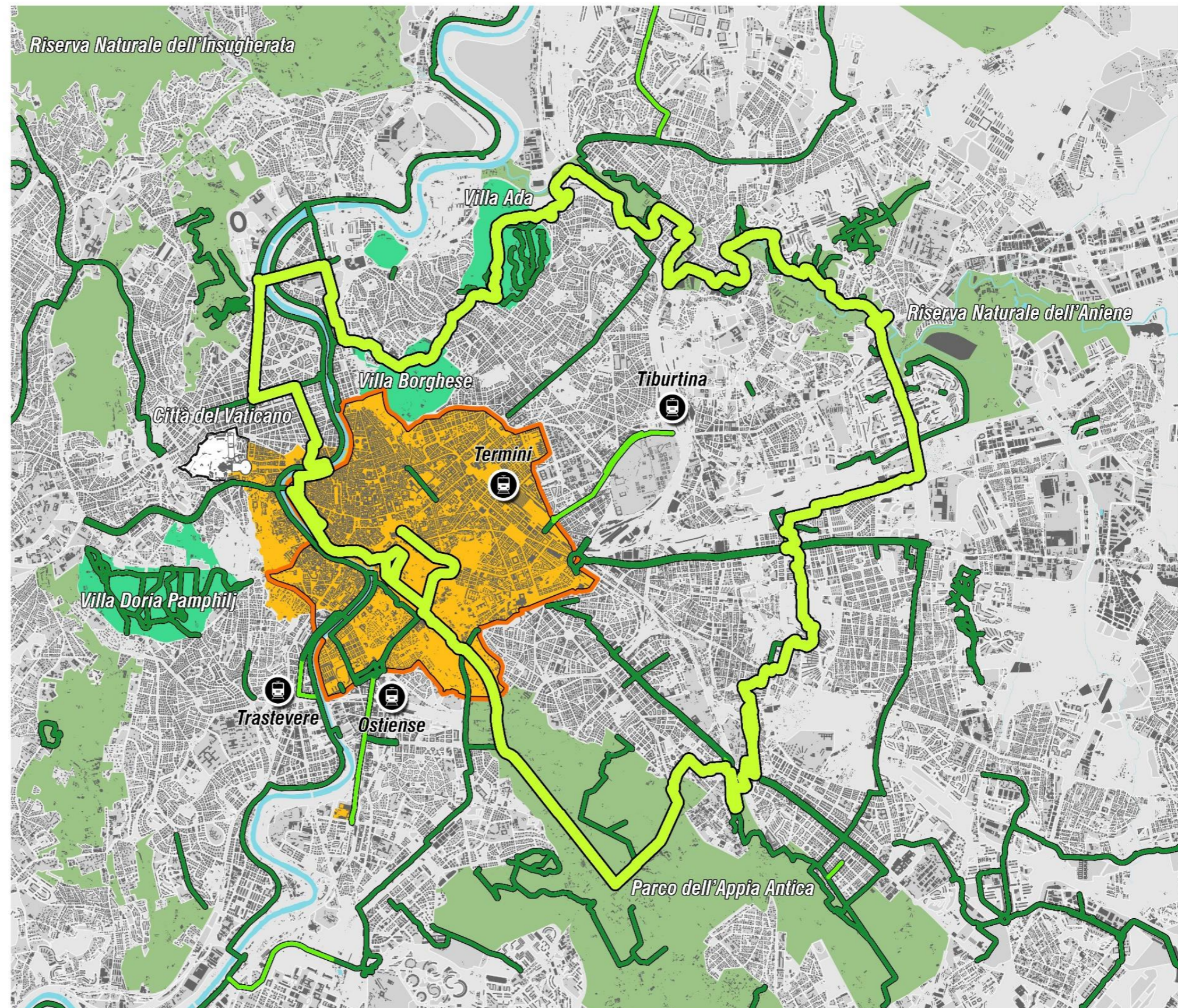
 Esistenti
 Nel breve periodo

Il Sistema storico-naturalistico

 Parchi Istituiti e Riserve Naturali
 Ville storiche e giardini configurati
 Patrimonio UNESCO
 Mura aureliane

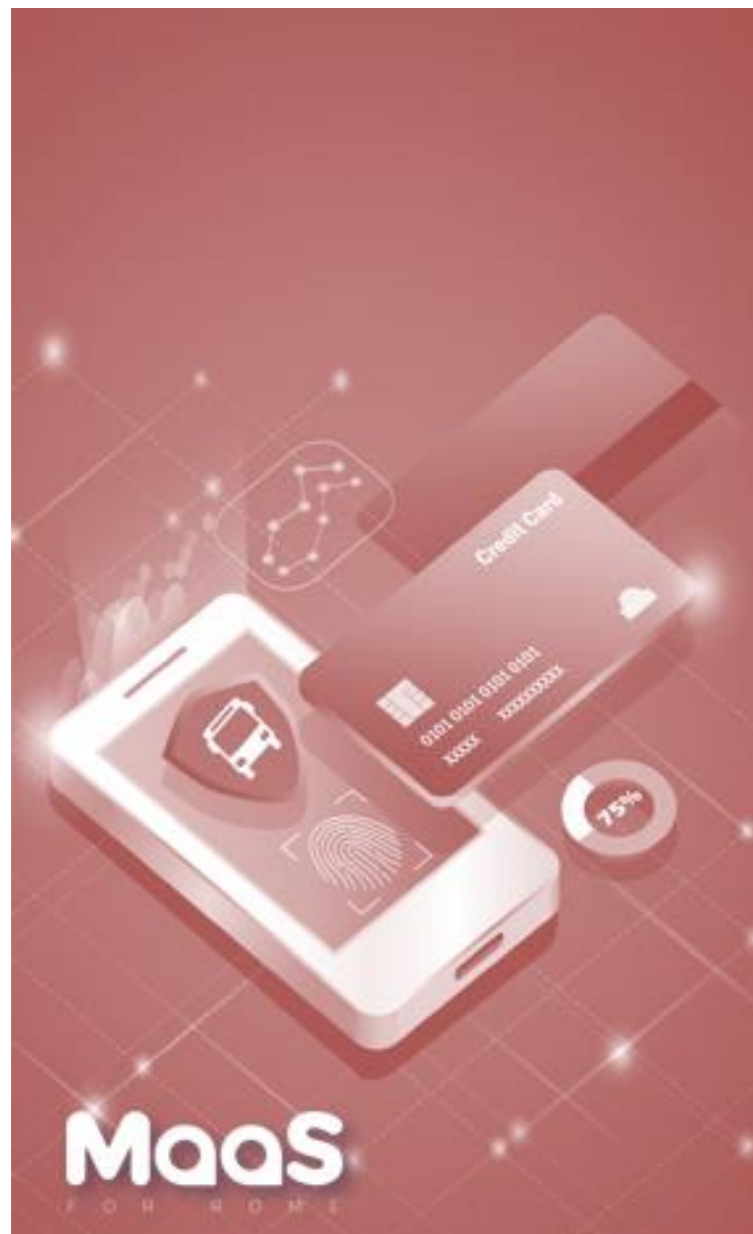
 Stazioni internazionali

 Aree urbanizzate



3) From car to multimodality: promote the MaaS approach

MaaS Functionalities



- » Integrated unique app for all citizen transportation needs;
- » Integrated multimodal travel planner that showcases the best travel options based on client's preferences;
- » Real time information regarding the arrival times of public transport vehicles and the position and status of shared mobility vehicles ;
- » In-app payment for the planned trip and the option to purchase transportation services in bundles.

MaaS4Italy Experimentation (1/2)



Start of Rome's MaaS Experiment: 01/07/2023

Experimentation results as of 30/11/2023



User engagement



1570 users applied for the experimentation.



1570 users accepted for the experimentation.



Active MaaS Operators



Press conference and communication on RSM's and Roma Capitale's social media channels.



Approximately 12,000 users from the RSM database contacted via email.



389 Mobility Managers informed about the MaaS initiative via email and invited to share it with their colleagues. An estimated reach of approximately 428,000 employees.



Direct communication to Federalberghi, with the expectation to reach approximately 600 hotels in Rome and its province.

MaaS4Italy Experimentation (2/2)


Incentives for participation in the experimentation




The incentive is valid for those who have made a trip through the app of one of the MaaS Operators and provided a review of the travel experience.




Incentive type:
Cashback



MaaS Trip + Travel
Experience
Evaluation



MaaS Trip that starts
and ends within 120
minutes



50%
50% of the trip
cost

What does the future hold?

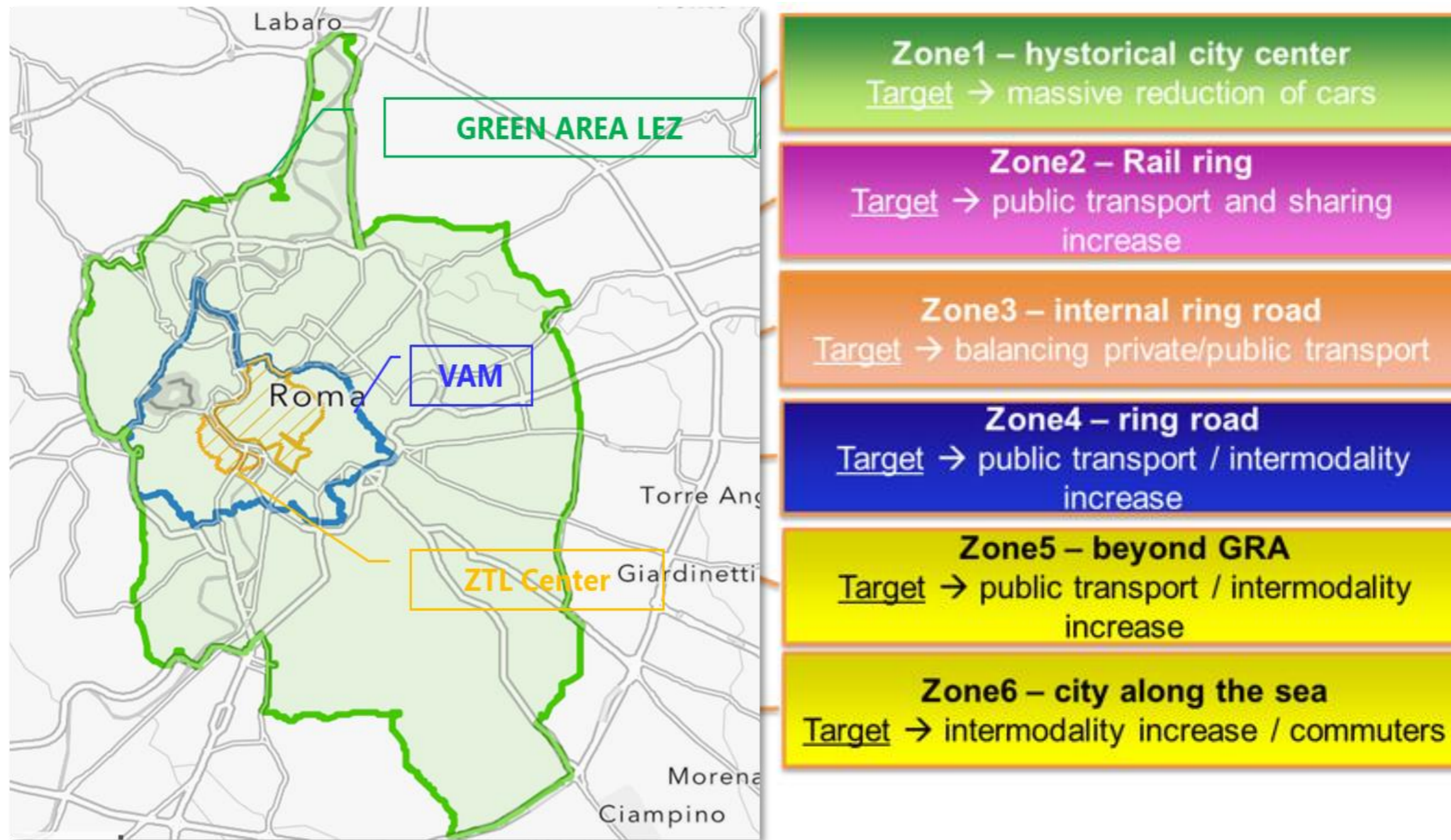


4) Demand Management Policies



City zoning: 6 areas with increasing constraints to private mobility, supported by ITS measures. ¹⁴

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

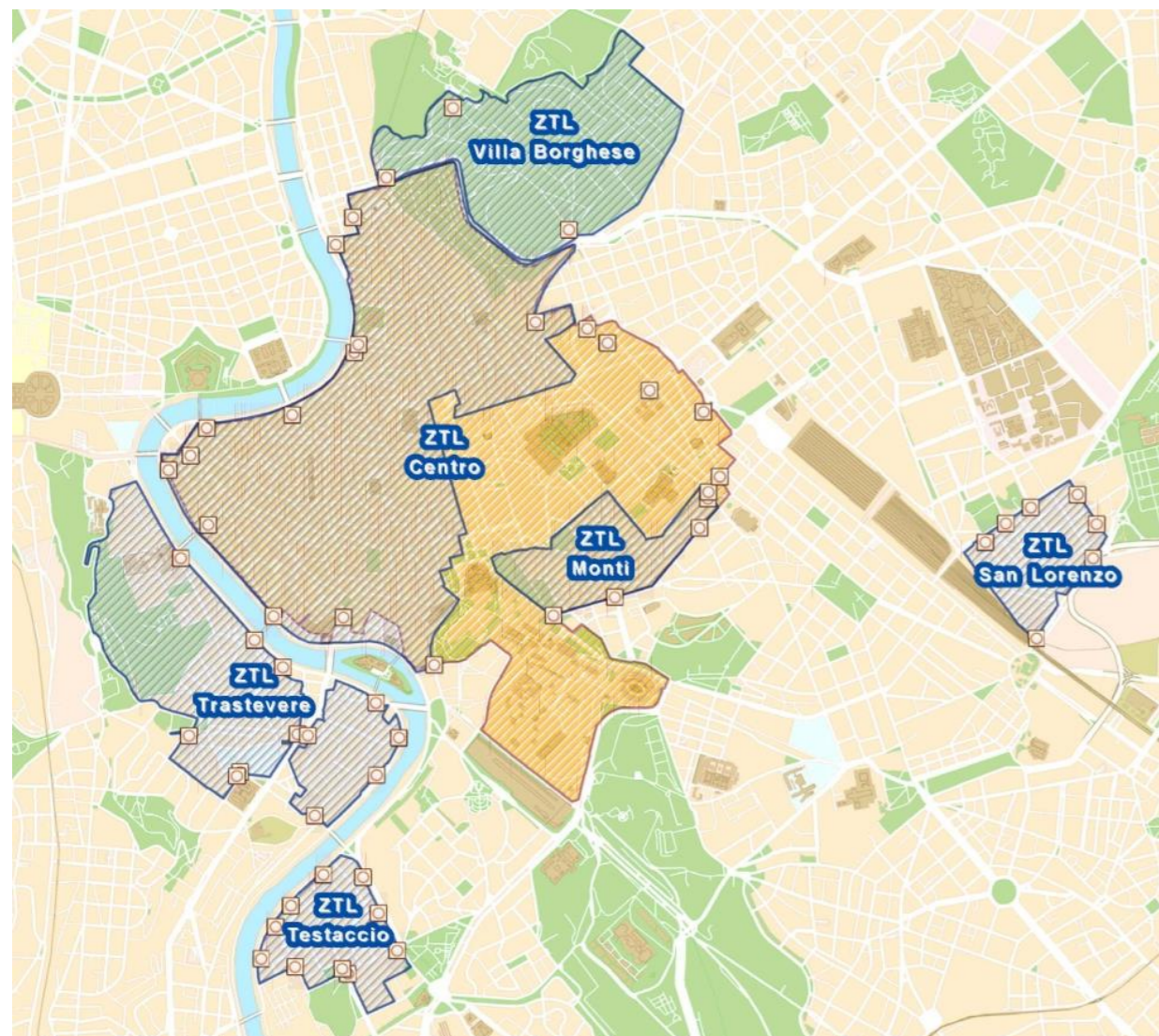


2) Demand Management Policies

Zone 1: City Centre LTZs already fully controlled by electronic access control systems

Time-based, Permits given to selected categories decided by Municipal Council, subject to different annual fees.

ANPR based controls carried out remotely by Urban Police. Electronic Systems implemented, centralized and maintained by RSM.



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

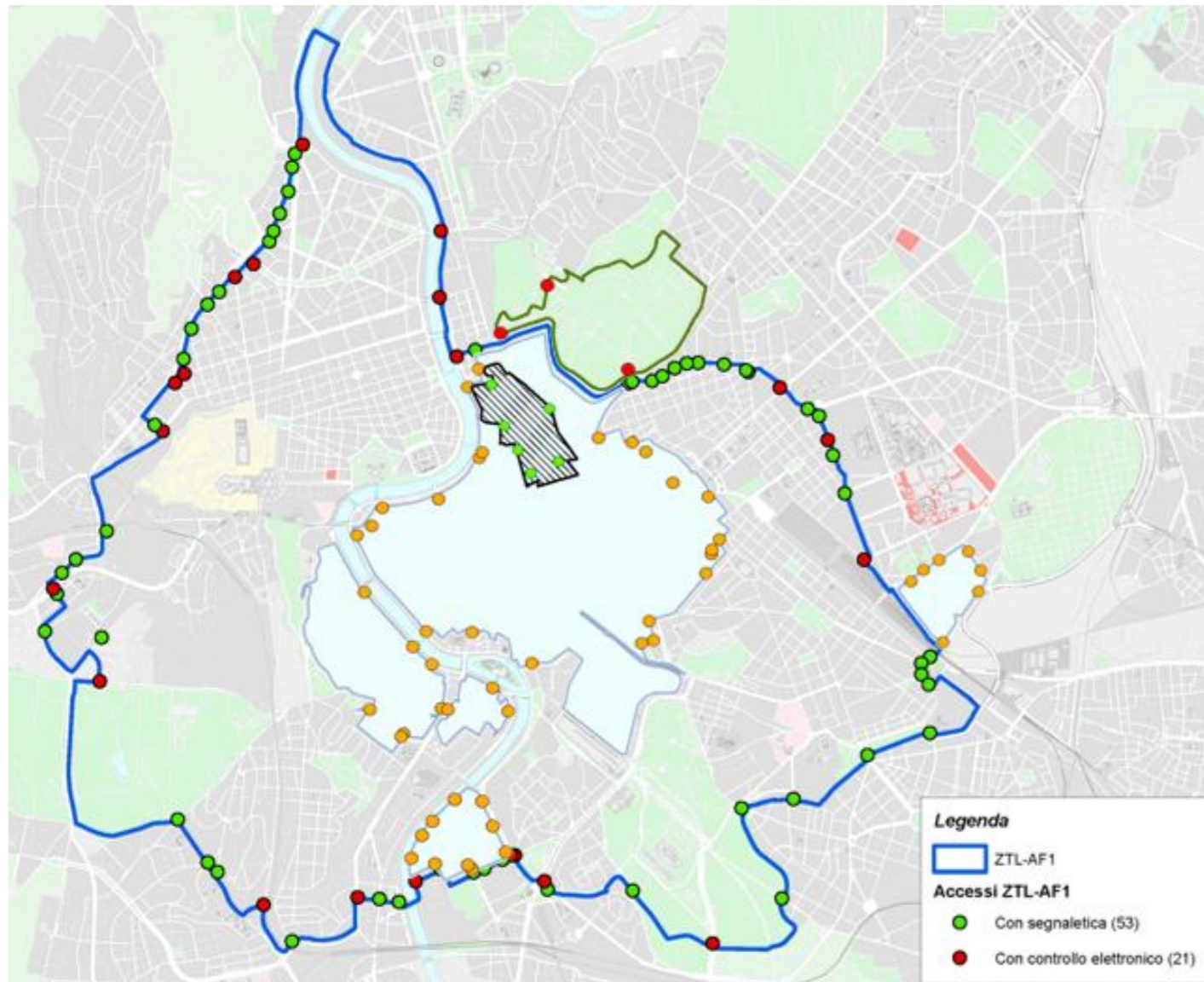
From Wed. to Sat. 9.30 pm – 3 am
(May to July & September- October)
Fri. & Sat. 9,30pm–3am
(November – April)

LTZ Testaccio

Fri. & Sat. 9,30pm–3am

4) Demand Management Policies

Zone 2 – Rail Ring: towards an internal control system



**LTZ VAM-Rail Ring:
63 electronic gates**

Presently operating system

Time-based, Restriction for all vehicles with total length over 7,5 meter controlled on the 21 e-gates in the red dots. Daily or other temporary permits for tourist coaches (or special freight delivery) subject to charge

New operating system

System completed by red & green dots (63 e-gates).

Tourist coaches and freight delivery remain subject to charge.

2025: ANPR based automatic check of Euro categories for all vehicles accessing the zone;

Pollution/Congestion charge for non-resident vehicles

Campidoglio

ECOPASS PER IL CENTRO

R Retromarcia sulla tassa
I romani non pagheranno

Previsto un baizello per accedere alla zona delle Mura Aureliane. L'obiettivo: dare respiro al centro inquinato

Tassa per il centro, romani esclusi

La «congestion charge» parte nel 2025 ma il Campidoglio vuole far pagare solo i non residenti

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••• Nel 2025 sarà «ecopass», ma non per tutti. A quanto pare infatti il Campidoglio ha intenzione di salvare i residenti, almeno per l'Anno Santo. Uno spirito «giubilare» che, forse, risente pure dell'avvicinarsi dell'appuntamento con le urne visto che nel 2026 si voterà per le Comunali. La novità comunque non potrà che risultare gradita ai romani, già spazientiti dal «balletto» sulla Ztl Fascia verde che per ora Comune e Regione hanno rimesso nel cassetto. Ad annunciare l'introduzione della «congestion charge», ovvero il baizello per chi vuole entrare all'interno della Ztl Veicoli a motore - un'area poco più ampia di quella compresa dalle Mura Aureliane - era stato nel 2022 l'assessore capitolino alla Mobilità, Eugenio Patané, ma finora il nodo delle esenzioni non era stato affrontato. Ieri invece, durante la trasmissione «Giù la maschera» di Radio 1 Rai, l'assessore ha spiegato che «con la congestion charge limiteremo l'ingresso ai non residenti. La città - ha aggiunto - è affollata da circa 400 mila autovetture che vengono da fuori Roma». Non tutte ovviamente oltrepassano le Mura ogni giorno, ma l'orientamento del Campidoglio pare ormai chiaro. «Contiamo di partire nel 2025 e visto che è un anno giubilare, l'idea è di far pagare soltanto i non residenti - spiega infatti Patané - Su questo punto stiamo verificando la fattibilità giuridico-amministrativa del provvedimento». Tradotto, significa capire se è possibile impostare i varchi in modo da far scattare la sanzione solo per le auto di chi non risiede nella Capitale. E servirebbe anche a Giubileo finito visto che, a quanto pare, Palazzo Senatorio vorrebbe esentare completamente i residenti dal pagamento del pedaggio stile ecopass. Ma secondo i più scettici, se questa linea dovesse passare verrebbe vanificato l'obiettivo originale della misura: ovvero dare respiro al centro riducendo il numero di mezzi in circolazione. Secondo l'Acì nel 2023 il parco auto dei romani ha superato i 2,2 milioni di veicoli, tra automobili (1,8) e motocicli (poco più di 389 mila). Nel frattempo si è conclusa la gara da sei milioni, indetta da Roma Servizi per la Mobilità, per realizzare entro 12 mesi una piattaforma tecnologica in grado di monitorare gli ingressi all'interno della zona Vam, di realizzare il portale web per il rilascio dei permessi e infine di sanzionare i veicoli non autorizzati. Il software sarà collaudato nel 2025 e da quel momento in poi il centro, almeno per i non residenti, diventerà off limits.

Veicoli in circolazione
Nel 2023 la Capitale ha superato i 2,2 milioni di mezzi, tra auto e motocicli

Permessi e sanzioni
Il Comune sborserà sei milioni per un software in grado di monitorare i passaggi

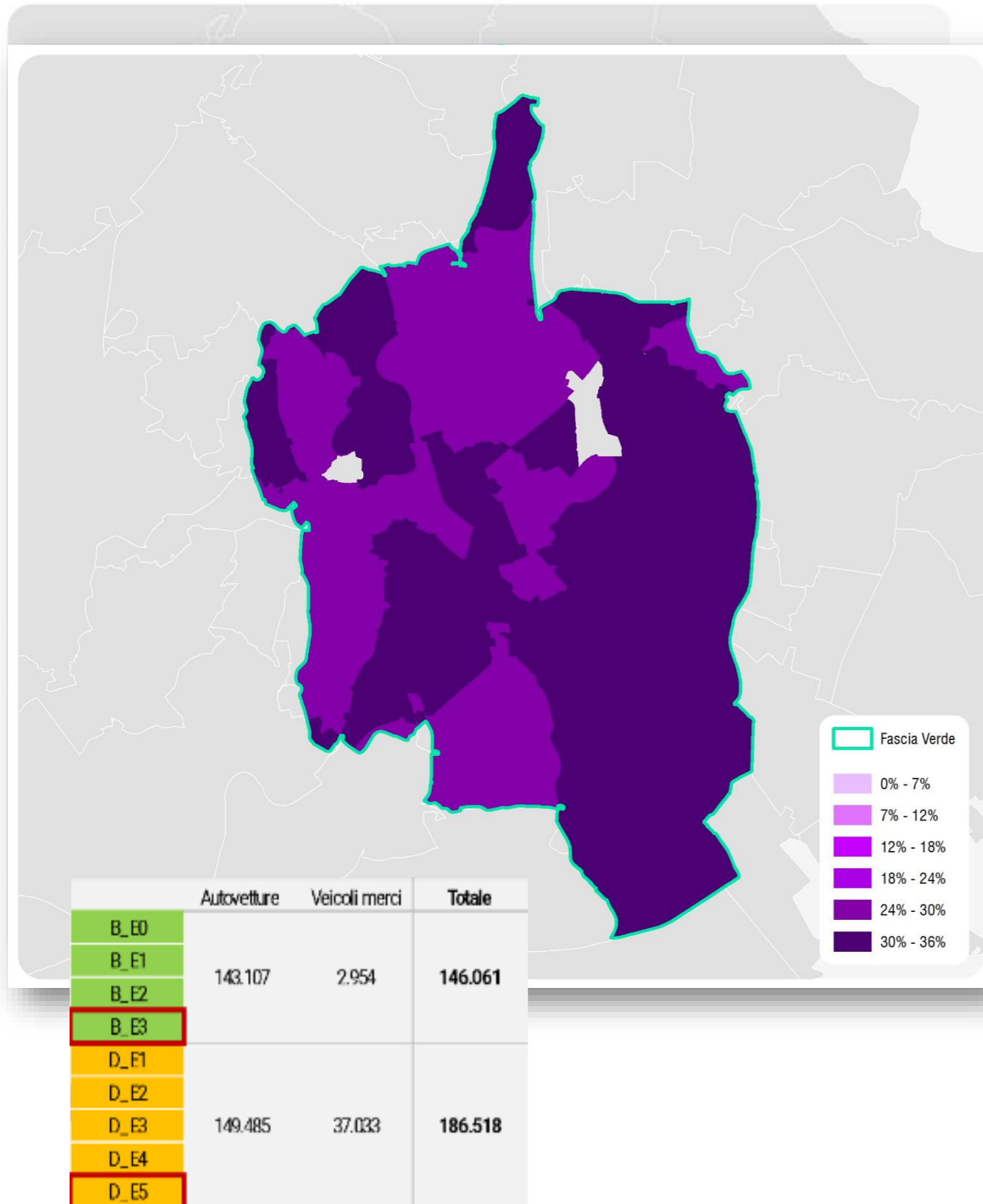
approaches to improve air



4) Demand Management Policies



Zone 3: Green Belt LEZ – Directly impacted vehicles (2022) according to the initial rules



Looking just to residents and domiciled in the Green Belt, the impact on the circulating vehicle fleet within the new LEZ should be (2022 data):

- 178,431 vehicles and goods vehicles in the first phase (11/2023);
- To reach **332,579 vehicles and goods vehicles** in the last phase of the measure, i.e. **about 18% of the total fleet in Rome in 2022.**

Need to obtain social acceptance of these measures

4) Demand Management Policies

Zone 3: Green Belt LEZ – Challenge - impacts on the population

Ztl fascia verde, gli alleati di Gualtieri contro il sindaco e sulle posizioni di Salvini

Una trentina tra assessori e consiglieri regionali, capitolini e municipali chiede al sindaco di revisionare il provvedimento che "sta generando forti tensioni sociali"



Ztl fascia verde: sabotato uno dei nuovi varchi elettronici

I vandali hanno imbrattato la telecamere con vernice rossa e scritte ingiuriose



Ztl Fascia verde, Gualtieri cede: al vaglio "possibili rimodulazioni delle misure"

Dopo l'ondata di proteste scatenate dall'installazione dei varchi e le prese di posizione dei Municipi, il Campidoglio corre ai ripari: istituito un tavolo tecnico ad hoc



A Roma

"Vogliamo libertà di circolare". In marcia contro le restrizioni

Da piazza Vittorio a San Giovanni il corteo di coloro che vogliono fermare l'ampliamento della Ztl fascia verde della Capitale. Si raccolgono firme per un referendum

© ANSA/AGF



Nuova ZTL Fascia Verde, Roma si ribella "Insostenibile per tante famiglie"

Già raccolte oltre 25mila firme online sulla petizione lanciata per fermare i delle vecchie auto inquinanti benzina e Diesel



The question was:

How to achieve a positive attitude on Low Emission Zone and in general on environmental and sustainability issues, after a very strong and effective campaign against it, causing a sharp slowdown in action?

Action to overcome the challenge



- **Mitigation of the measures.**

Postponement of limitations in order to match with PT improvements, if confirmed by monitoring data and surveys.

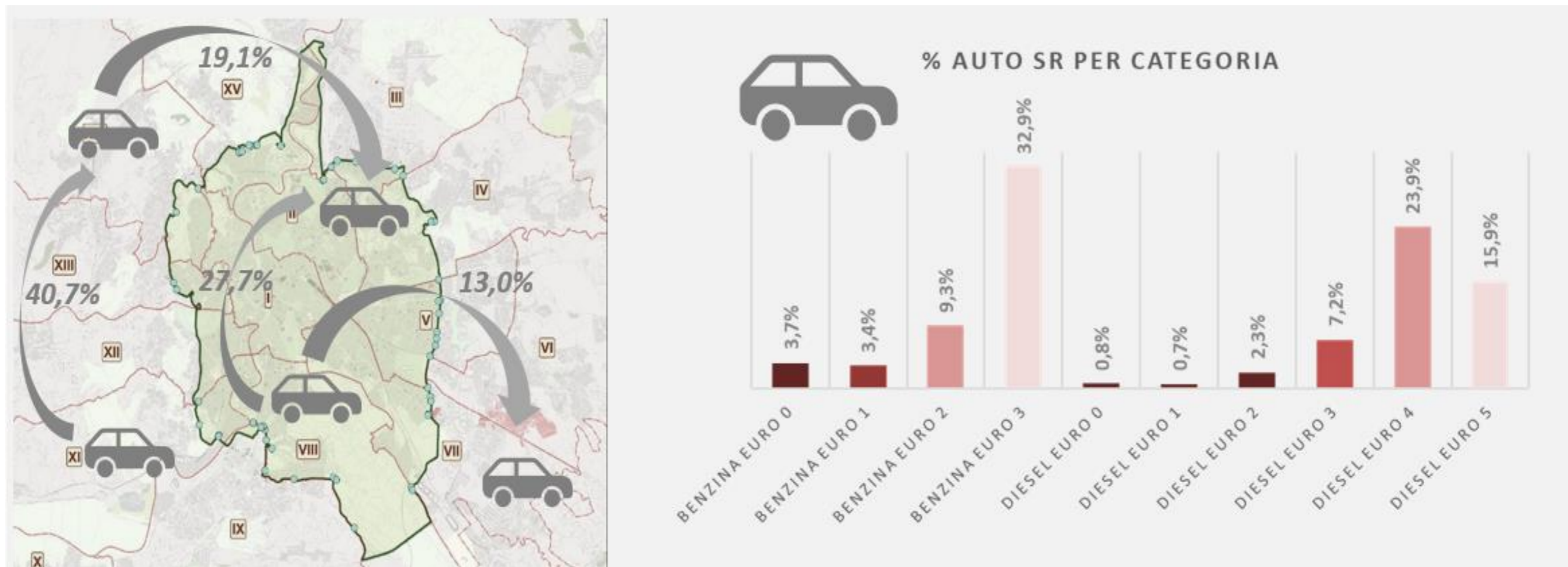
- **Flexibility rules**

Introduction of limited number of free permits of entrance into Green Belt for non-compliant vehicles in the first three years (60,30,5) or MOVE-IN distance – based system remotely controlled;

Ex-ante Survey

The Mobility Agency, together with ISFORT – institute for mobility studies, carried out a study in 2023 to verify the attitude towards modal change following Green Belt LEZ, especially directed towards the vehicles **subject to restrictions (SR)** in the various steps of the measure.

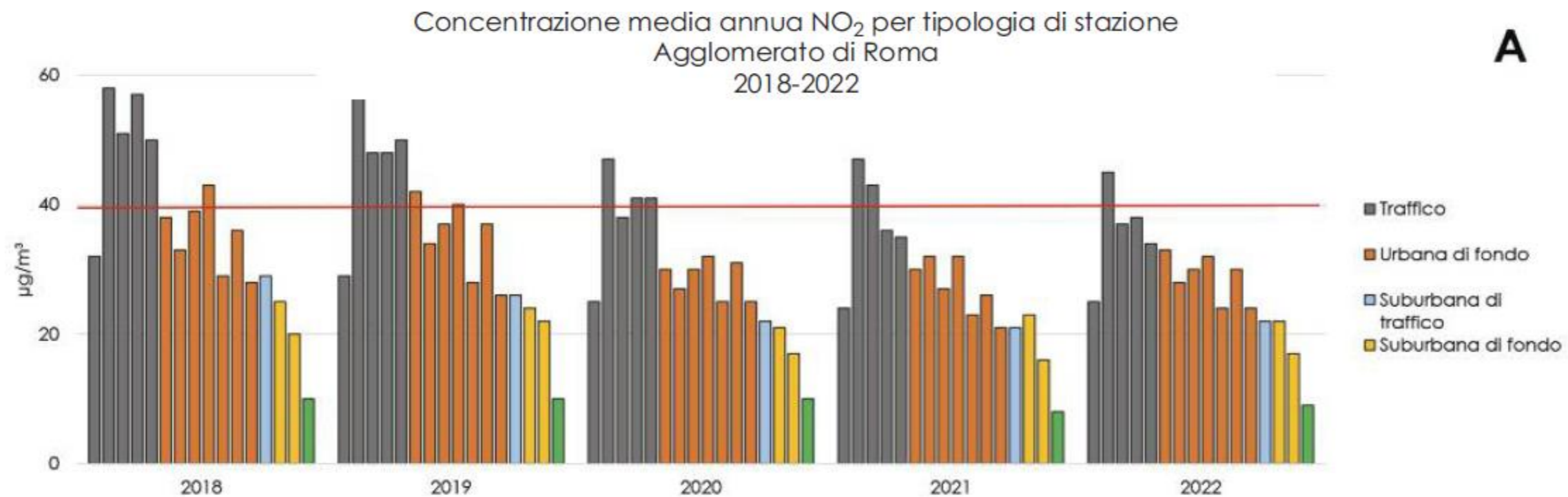
Movement of SR vehicles inside and outside Green Belt LEZ are mostly made with Euro 4 and 5 diesel and Euro 3 petrol vehicles.



Action to overcome the challenge

Monitoring **air quality data**: no exceedances on PM, something remaining on NO₂ and O₃, slowing down during the last years, with only 1 stations slightly outside limits in 2023.

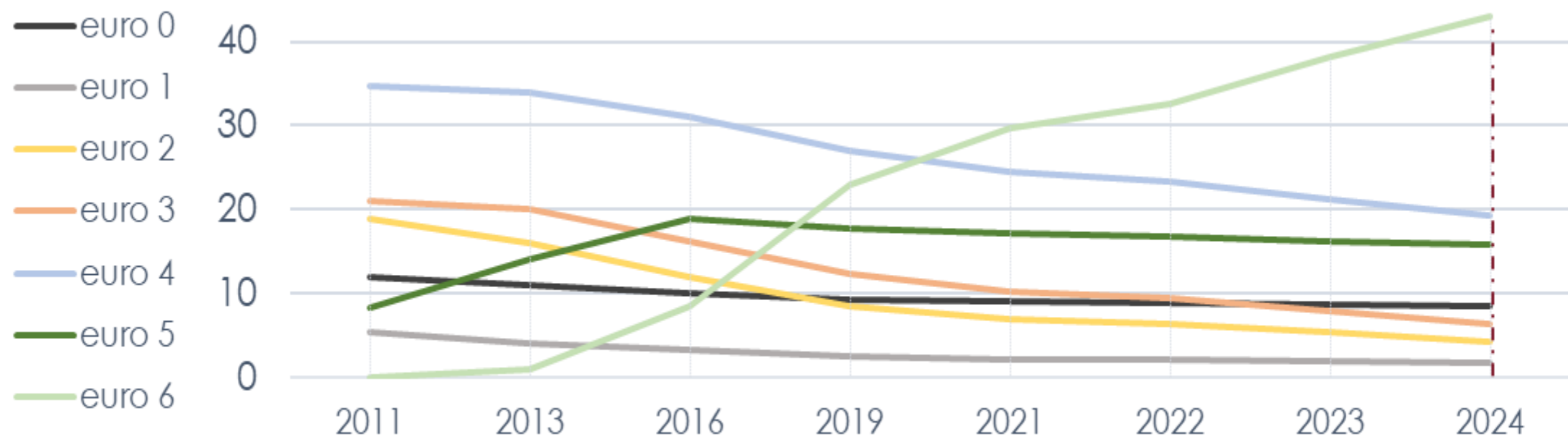
Zona	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	CO	O ₃	Benzene
Agglomerato di Roma	Green	Red	Green	Green	Green	Red	Green



Action to overcome the challenge



Monitoring **evolution of vehicular fleet**: The natural growth of the lowest impacting categories and the decrease of the worst categories was strongly increasing in the last two years.



Action to overcome the challenge

Monitoring **Traffic flows in LEZ**: use of some installed electronic gate in testing period during winter 2024 (last February).

Nord:

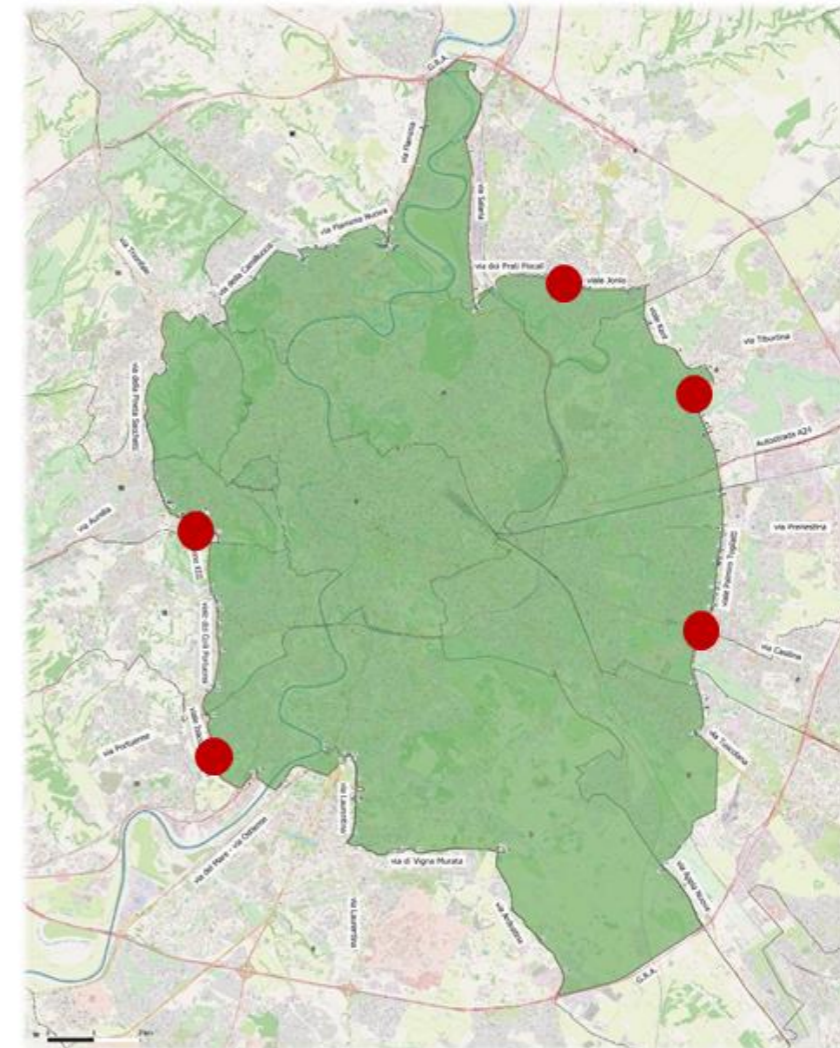
- 613 - Via Pantelleria - Viale Jonio (piste dx e sx)

Est:

- 562 - Via Casilina - Via P. Togliatti
- 594 - Via F. Cicogna - Via Tiburtina

Ovest:

- 526 - Vicolo di Papa Leone - Via Alberese
- 501 - Via Aurelia - Circ.ne Aurelia (piste dx e sx)

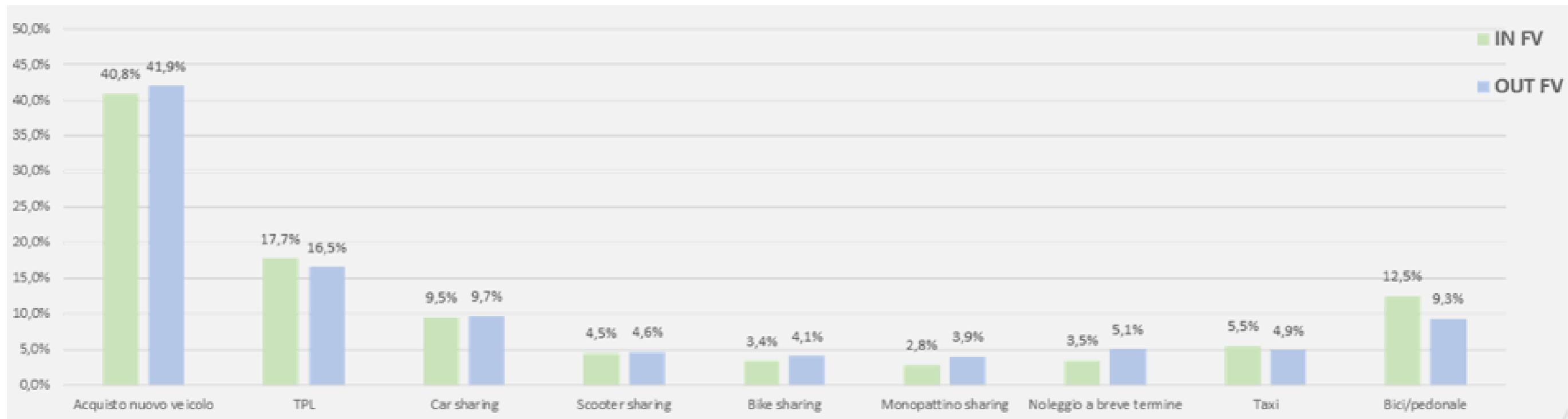


Analysis of about 800.000 transit through e-gates. **Decrease of illegal transit from previous 5% (without e-gates) to 2-3%**, data stability and more environmental vehicle fleets.

Ex-ante Survey on modal change for SR owners



The Mobility Agency and ISFORT study checked the declared modal choices following any restrictive measures on vehicles subject to restrictions (SR) without incentives. About 40% declared their intention to change vehicles and the rest to switch to more sustainable modes.



With a potential incentive of mobility services ranging from 1.500 to 5.000 € to dismiss the SR vehicle, results were:

- The acceptance of the incentive vary from 50% (lowest) to 68% (highest), if included the possibility to change the vehicle;
- The percentage interested in using the incentive for alternative mobility services is about 30%, with youngest group (<30) up to 35%;

Action to overcome the challenge – Next steps



- **Finalize the study with scenario simulations within April**
- **Define the policy entering into force on November 2024**
- **Communication campaigns**
- **Incentive package**

Rome Municipality has now **18 ML€** to incentivize sustainable mobility and **every year 5 ML€** will be available for this scope until 2034.

Multimodality and sharing incentive package, focused mainly on dismissal of old non compliant vehicles, just approved by Lazio Region and ready to start.



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Thank you
for your attention!

For any question:



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Roma

