



Annual Conference

London, October 2-4, 2019

SESSION 1 – DEALING WITH UNCERTAINTY IN PLANNING AND TRANSPORT

“JUST APPROVED: THE SUSTAINABLE URBAN MOBILITY PLAN (SUMP) FOR ROME”



Ing. Fabio Nussio
International Co-operation
Mobility Agency of the City of Rome



PUMS
Piano Urbano
della Mobilità
Sostenibile



ROMA



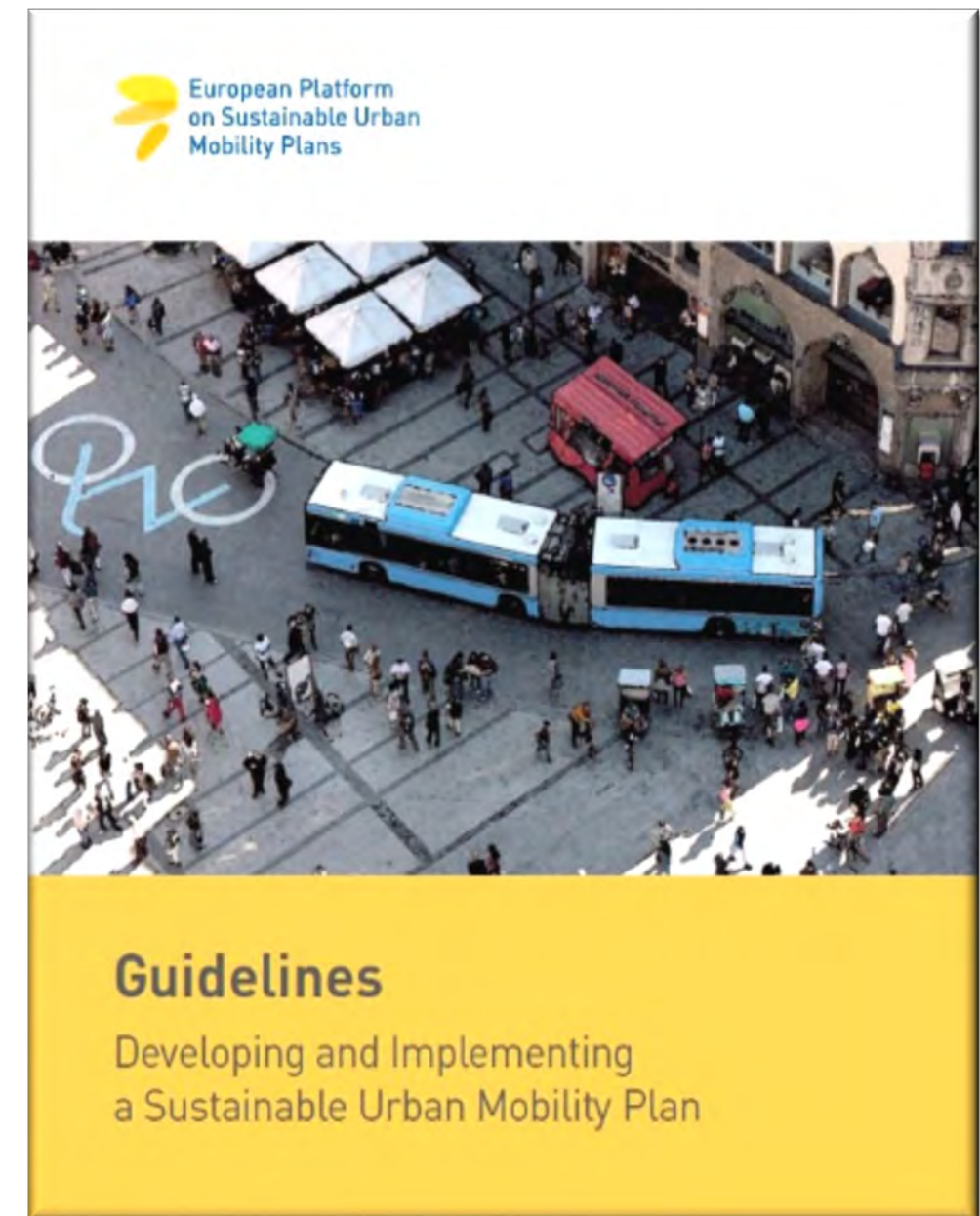
RISORSE
PER ROMA *spa*

Mid term infrastructural measures – SUMP in Italy

EU provides at Local level Best Practice and Guidelines:

- **Action Plan for Urban Mobility**, <https://ec.europa.eu/futurium/en/urban-mobility>
- **Europe on the Move 2017**: Package of measures for a more connected and less polluting mobility
- **Guidelines** for Sustainable Urban Mobility Planning (**SUMP**), now in the 2° edition

Italian Ministry of Transport: adoption in 2017 of the National Guidelines for SUMP in Italian Cities, to be approved in each city in **24 months**.



Overcome the “traffic approach” towards “Plan for people” with:

- **Integration of** mobility resources
- Promotion of **multimodality** with private car minimization for individual use
- **Safety** levels for PT and road traffic increase
- **Public transport** capacity increase
- **Soft & sharing mobility** increase (car pooling, car, bike, van sharing, mobility manager activities)
- Less **congestion** and atmospheric & acoustic **pollution** - energy consumption reduction – **CO₂**

A LONG PATH IN ROME...

4



Rome PUMS guidelines publication in **march 2017**

"Fixed Intervention Plan"

Opening of the portal for citizen participation

PUMS Guidelines approval by the Local Authority

Analisis of the proposals received in the listening phase

1st Listening phase



Participation process with organization of events on each relevant topic

Building scenarios for each Component Plan

Checking the General and Specific Objectives Plan

SUMP Document drafting

Official Participation phase.

2nd Listening phase

Consultation phase

Adoption and publication of the SUMP – 8/19



Strategic Environmental Impact Assessment (EIA)

Observations transposition to the SUMP

SUMP final approval by Local Authority

PARTICIPATION APPROACH

- **CITIZEN LISTENING PHASES**
- **THE CONSULTATION**
 - **CITY USERS**
 - **ASSOCIATIONS**
 - **STAKEHOLDERS**
 - **BUSINESS OWNERS**
 - **CITY DISTRICTS**



PARTICIPATION APPROACH: WWW.PUMSROMA.IT

1^a LISTENING PHASE

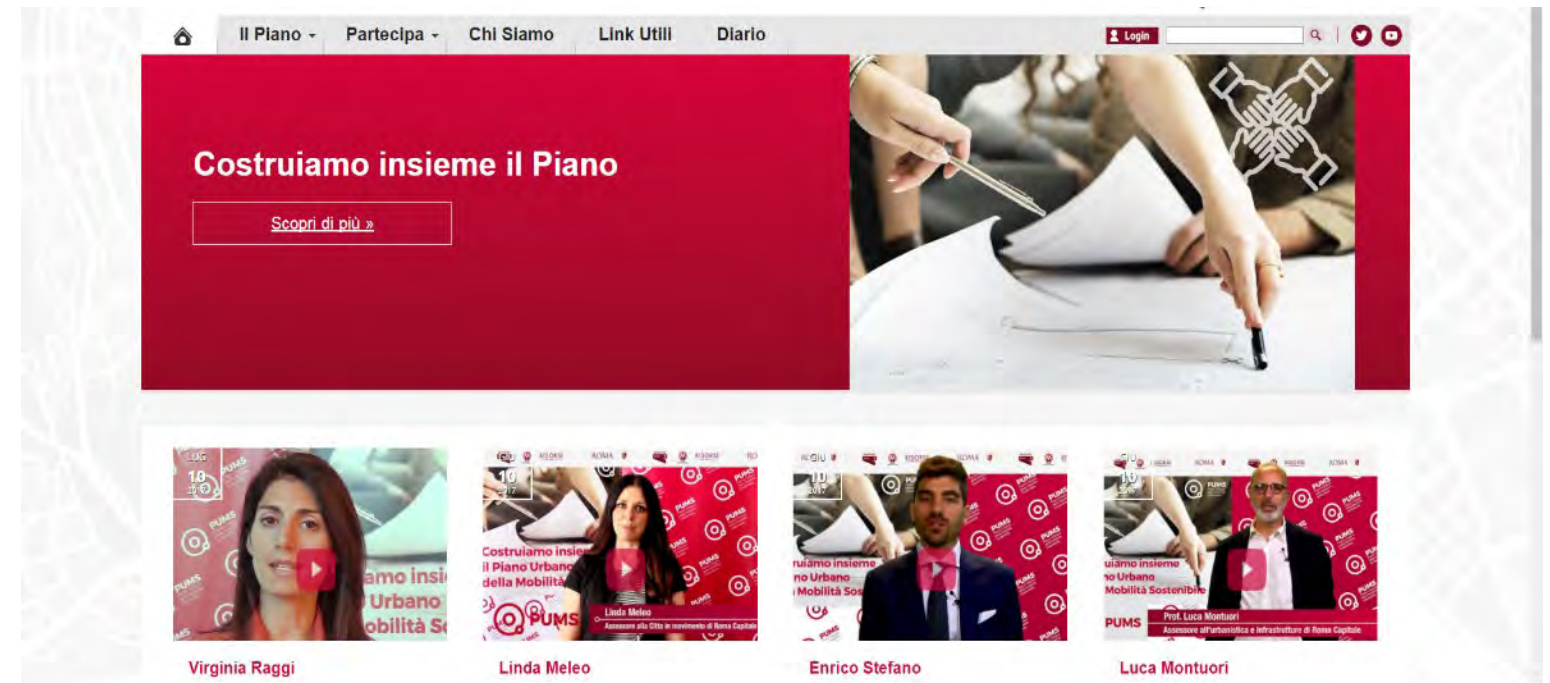
18 SEPTEMBER
2018

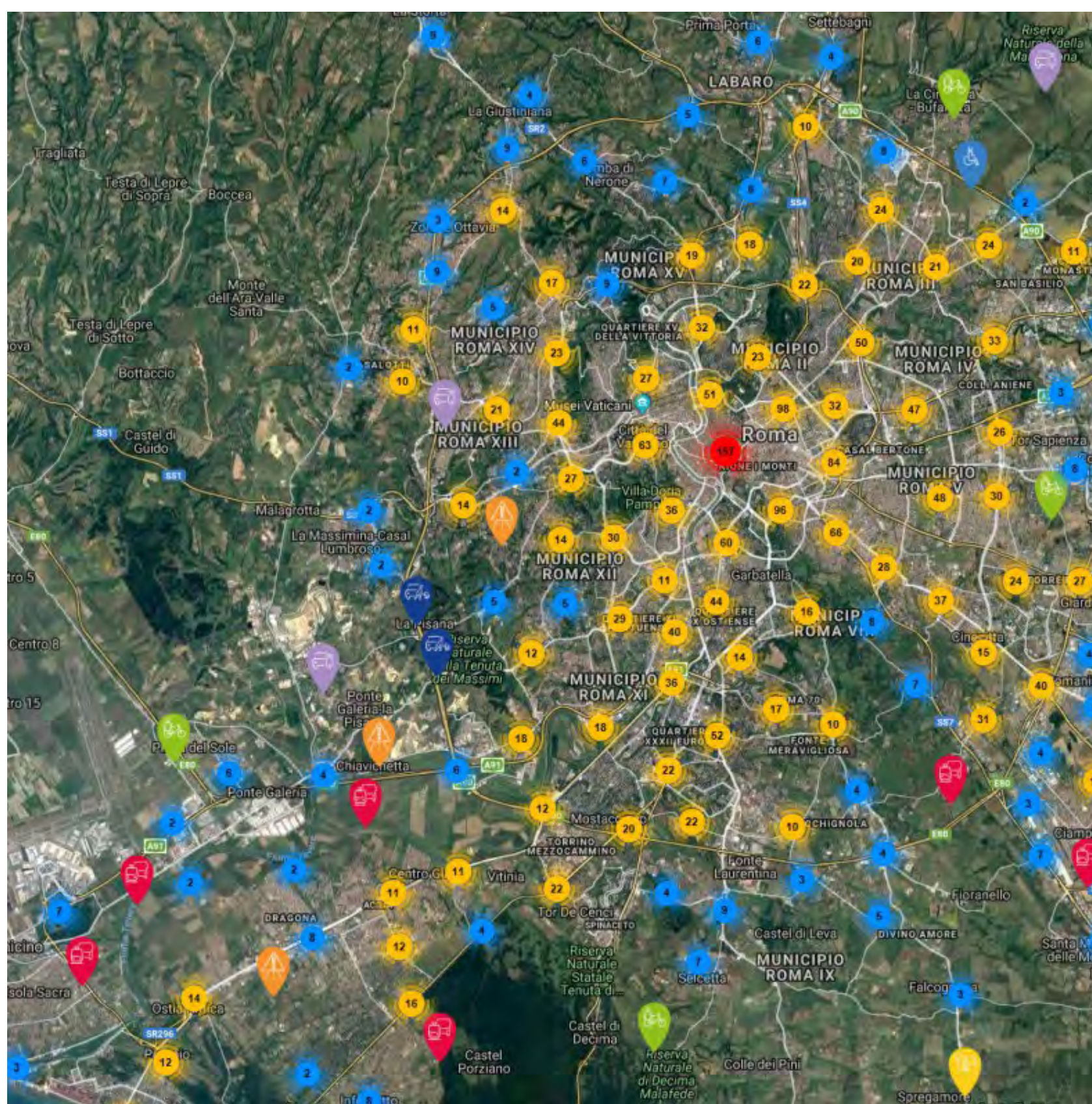
Listening phase

28 FEBRUARY
2018

At the same time:

- **Public meeting** in City District
- **Interview** and analysis (published on the Portal)
- **account** on social channel *Twitter@PumsRoma*





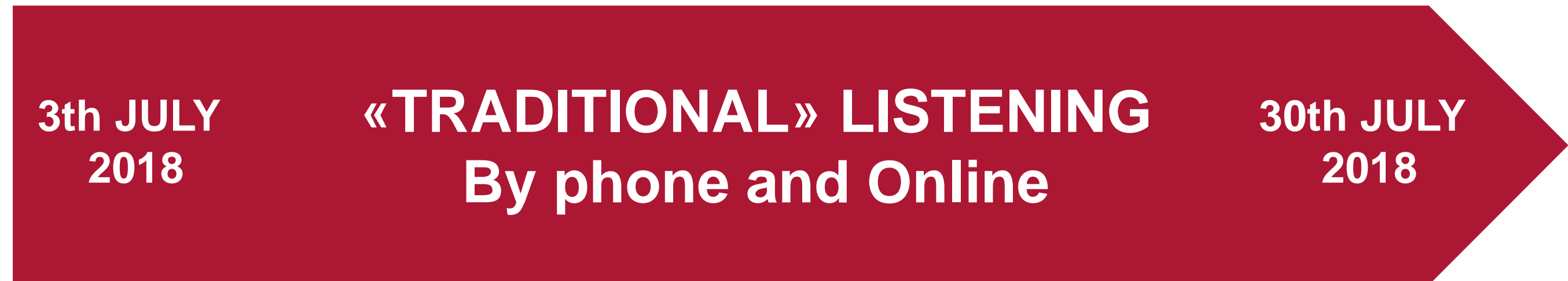
1st LISTENING PHASE

The figures

RECEIVED PROPOSALS	4,106
PUBLISHED PROPOSALS	2,668
COMMENTS MADE	3,132
CONTACTS	43,651
VOTES CAST	28,123
MEAN TIME	4,3 MIN

All the proposals have been examined and each has been answered

2^a LISTENING PHASE



Telephone survey
(CATI – Roman
residents)



2.000

+

Online survey
(CAWI – web users)



5.415

6.814 contacts

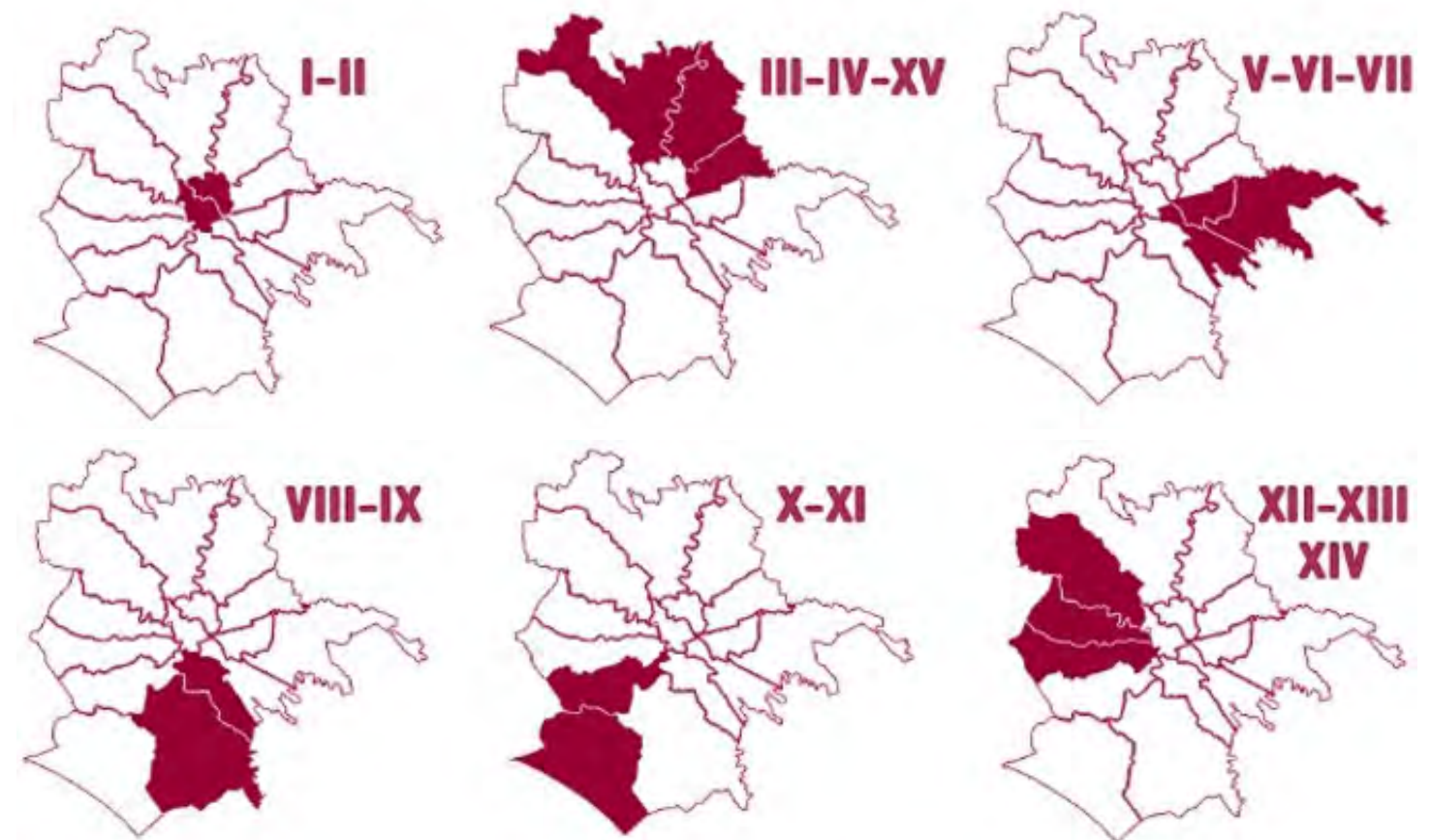
RANKINGS

TOP 3	BY PHONE	ON LINE
1	Reduce the accident rate	Strengthen infrastructure for LPT
2	Reduce traffic jams and congestion	Reduce traffic jams and congestion
3	Reduce polluting emissions	Promove urban cycling

CONSULTATION PROCESS on the SUMP PROPOSAL - 1

BUILDING TOGETHER FINAL SUMP SCENARIO

The municipal area has been divided into **six** territorial areas defined by the union of two or three Municipalities and, for each area, **three meetings** have been held in the period 18 March - 20 May.



The majority of institutional stakeholders were also involved, starting with the **trade unions**. Meetings were also held with the **business owners** categories, commerce and tourism association and with the **Municipality Commissions**.

CONSULTATION PROCESS on the SUMP PROPOSAL -2

The **proposals and observations** have been summarized on tables and tables and classified into **5 themes** detecting some macro-needs:

- improve the **quality and supply of public transport**;
- Improve **road safety**;
- complete itineraries and routes dedicated to **soft mobility**, especially **cycle-pedestrian** in order to improve the network effect and safety.

SUMP Proposal: participation path	N° Proposal	%
Public Transport	135	45%
Intermodality	36	12%
Cycling	76	25%
Env & pedestrian Areas	20	7%
Sharing+Logistic+Safety	34	11%
TOTAL Proposal	301	100%

THE APPROVED SUMP (D.A.C. 60/19 – AUGUST 2, 2019)

DOCUMENTS AVAILABLE ON

[HTTPS://WWW.PUMSROMA.IT/PARTECIPA/DELIBERE-DI-GIUNTA/](https://www.pumsroma.it/partecipa/delibere-di-giunta/)

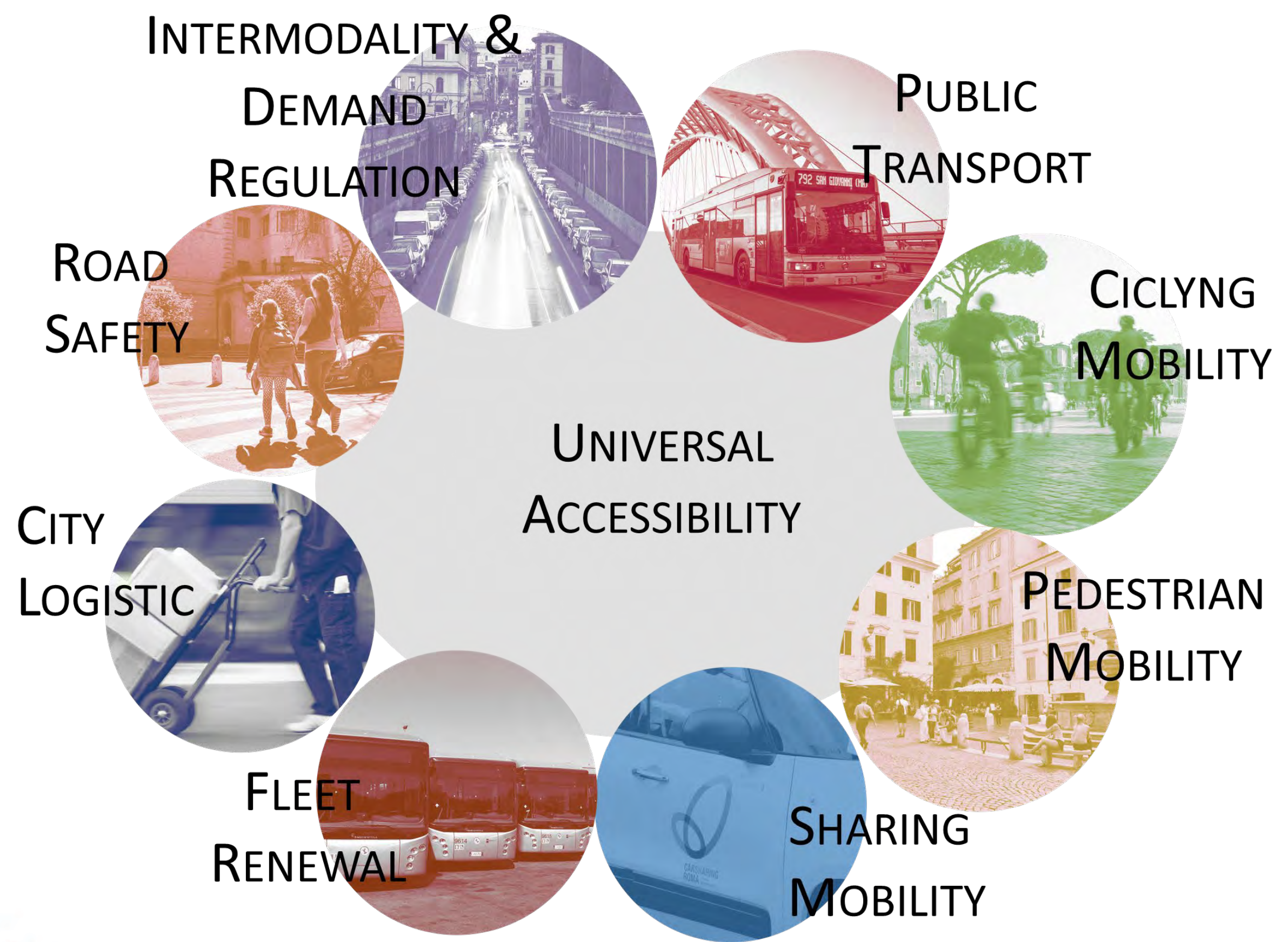
IN THE FOLLOWING

REFERENCE SCENARIO (SR): INCLUDES THE ACTIONS ALREADY FINANCED, EVEN NOT YET IMPLEMENTED.

THE SUMP SCENARIO (SP): ACTIONS AND INTERVENTIONS TO BE IMPLEMENTED IN 10 YEARS FROM PLAN APPROVAL.



SUMP MAIN COMPONENTS





PUBLIC TRANSPORT

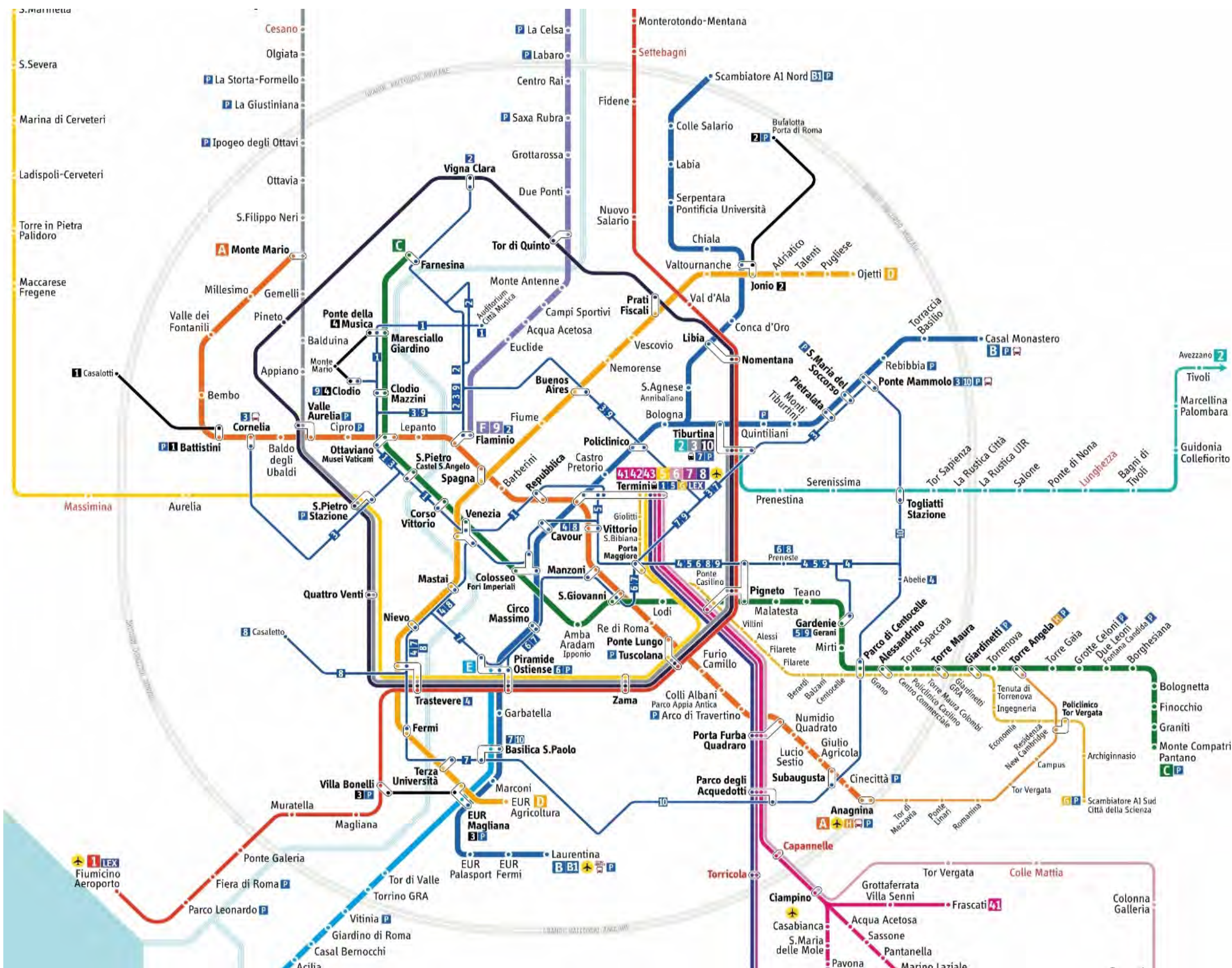
Extension of PT infrastructure	km	New Stations / Stops
METRO & RAILWAYS Extensions	43,4	42
New intermediate lines (cableway, people mover, etc.)	9,8	20
New tramway branch / link / connection	58	123

REFERENCE SCENARIO: Rail PT Network



SUMP SCENARIO: Whole Rail PT Network

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legenda

- M** linee metropolitane
- A** Anagnina-Monte Mario FS
- B** Casal Monastero-Laurentina
- B1** A1 Scambiatore Nord-Laurentina
- C** Monte Compatri/Pantano-Farnesina
- D** Ogetti-EUR Agricoltura
- E** Piramide/Ostiense-Ostia C.Colombo
- F** Flaminio/Piazza del Popolo-Montebello
- T** linee tramviarie
- 1** Stazione Termini-Auditorium/Città della Musica
- 2** Flaminio/Piazza del Popolo-Vigna Clara
- 3** Cornelia-Ponte Mammolo
- 4** Togliatti/Abellie-stazione Trastevere
- 5** piazza dei Gerani-stazione Termini
- 6** largo Preneste-stazione Ostiense
- 7** Basilica S.Paolo-Ponte Mammolo
- 8** largo Preneste-Casaleto
- 9** piazza dei Gerani-piazzale Clodio
- 10** Ponte Mammolo-Basilica S.Paolo
- G** metrotam Giolitti-Scambiatore A1 Sud
- H** metrotam Torre Angela-Anagnina
- FL** linee ferroviarie regionali
- 1** Orte-Fiumicino Aeroporto
- 2** Roma Tiburtina-Tivoli-Avezzano
- 3** Roma Tiburtina-Cesano-Viterbo
- 41** Roma Termini-Frascati
- 42** Roma Termini-Albano Laziale
- 43** Roma Termini-Velletri
- 5** Roma Termini-Civitavecchia-Grosseto
- 6** Roma Termini-Cassino
- 7** Roma Termini-Minturno/Scauri
- 8** Roma Termini-Nettuno
- 9** Roma Flaminio/Piazza del Popolo-Viterbo
- 10** Anello metropolitano
- LEX** servizio espresso Termini-Fiumicino Aeroporto
- capolinea bus regionali
- bus per aeroporti
- treni nazionali
- parcheggio di scambio
- stazione** limite di validità della tariffa urbana Metrebus

SUMP SCENARIO: PT Network

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First interventions for the next 5 years

SHORT TERM < 5 years	Financing request
Cableway Battistini-Casalotti	2018
Cableway Villa Bonelli-Magliana-Eur Magliana	2018
Tram branch Verano-Stazione Tiburtina	2018
Tram connection Piazza Vittorio-Largo Corrado Ricci Fori Imperiali/Piazza Venezia	2018 2019
Tram Line Roma-Giardinetti da Termini a Tor Vergata	2018
East tangential tramway link Subaugusta-Viale Palmiro Togliatti-Ponte Mammolo	2018
Tram connection Stazione Termini-Piazza Venezia-Piazza Risorgimento	2019
Upgrading and upgrading of the railway line Roma Lido and transformation into Metro E	
Upgrading and upgrading of the railway line Roma Nord and its transformation into Metro F	
New stations Torrino e Giardini di Roma on Roma-Lido	
Improvement of station node Ostiense-Piramide MB-Porta S.Paolo	
Link Ponte Lungo Metro A- Stazione Tuscolana FL	
Link Libia Metro B1-Stazione Nomentana FL	

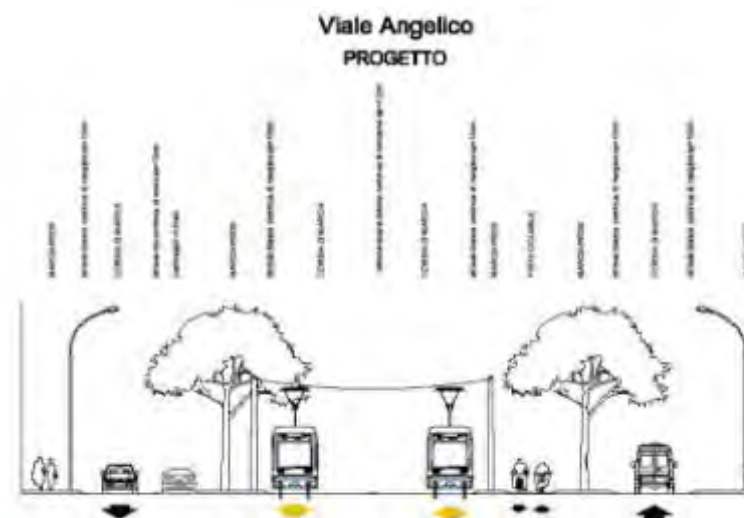
SUMP - I step for PT network – project sample recovering urban spaces

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Schede progetto Tramvia della Musica

Corografia generale e sezioni tipo



SUMP - I step for PT network – project sample

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ROMA



Schede progetto

Tramvia dei Fori

Corografia generale



Planimetria del collegamento tra piazza Venezia,
piazza del Colosseo e la sede esistente su via Labicana

SUMP - I step for PT network – Innovative solutions to connect peripheral areas

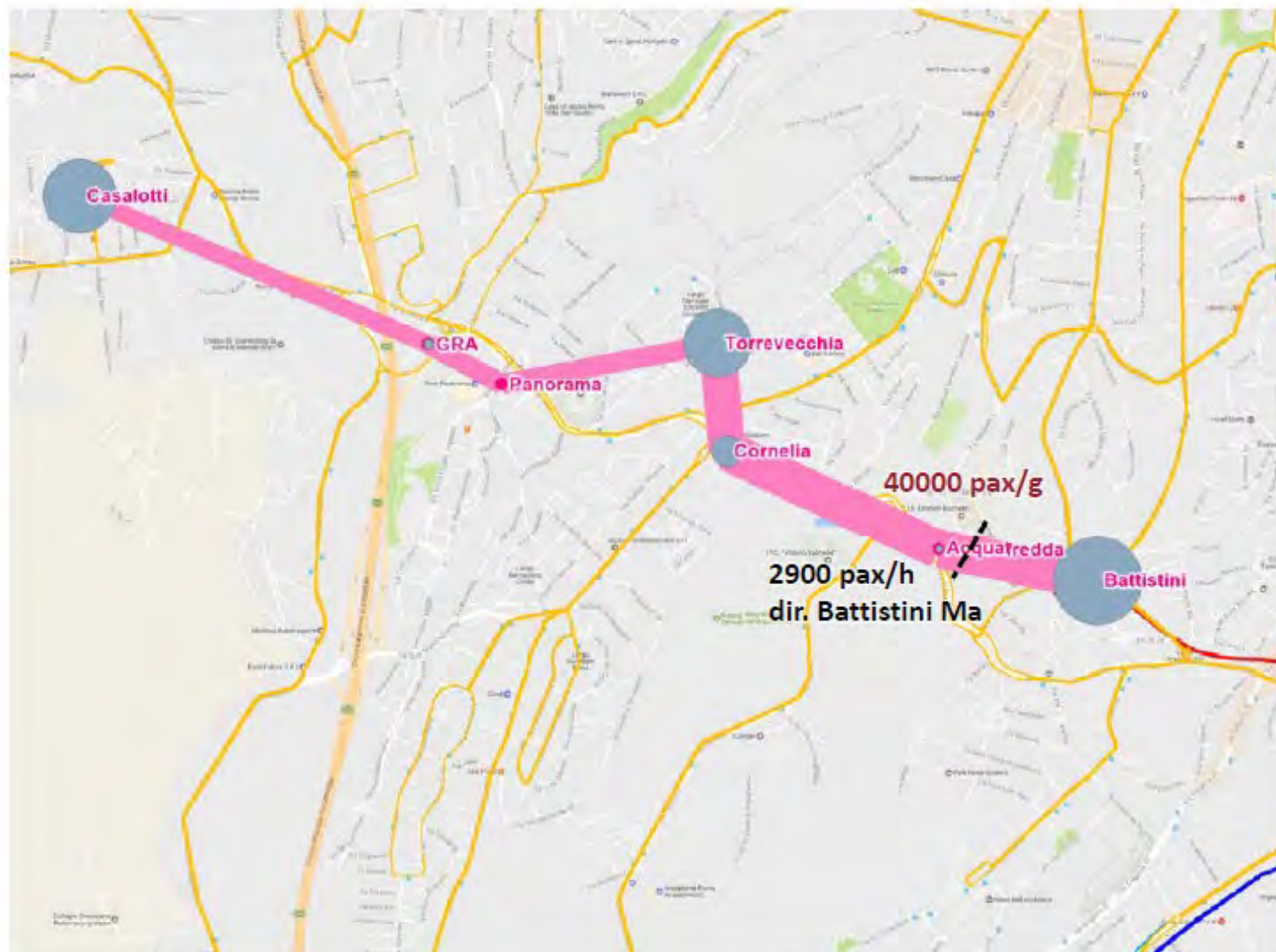
21

ROMA



Schede progetto

Funivia GRA – Battistini MA (con
attestamento a Casalotti)

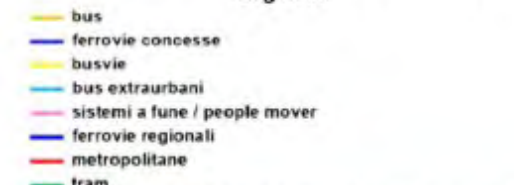


Valutazione trasportistica

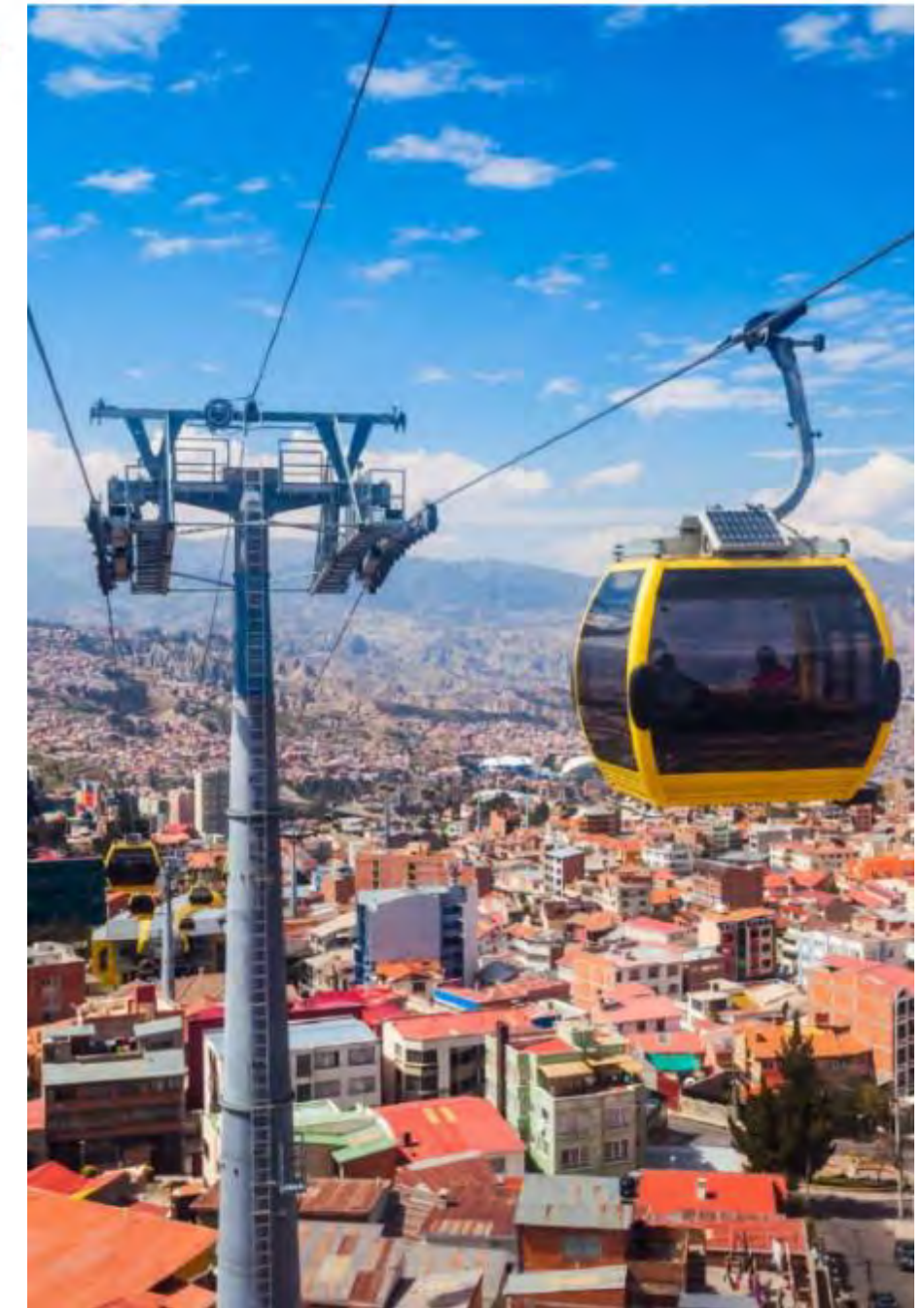
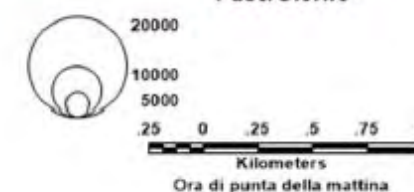
Utenza giornaliera della linea

43.000 passeggeri

Flussi del trasporto pubblico
Legenda



Pass/giorno (sistema a fune/people mover)



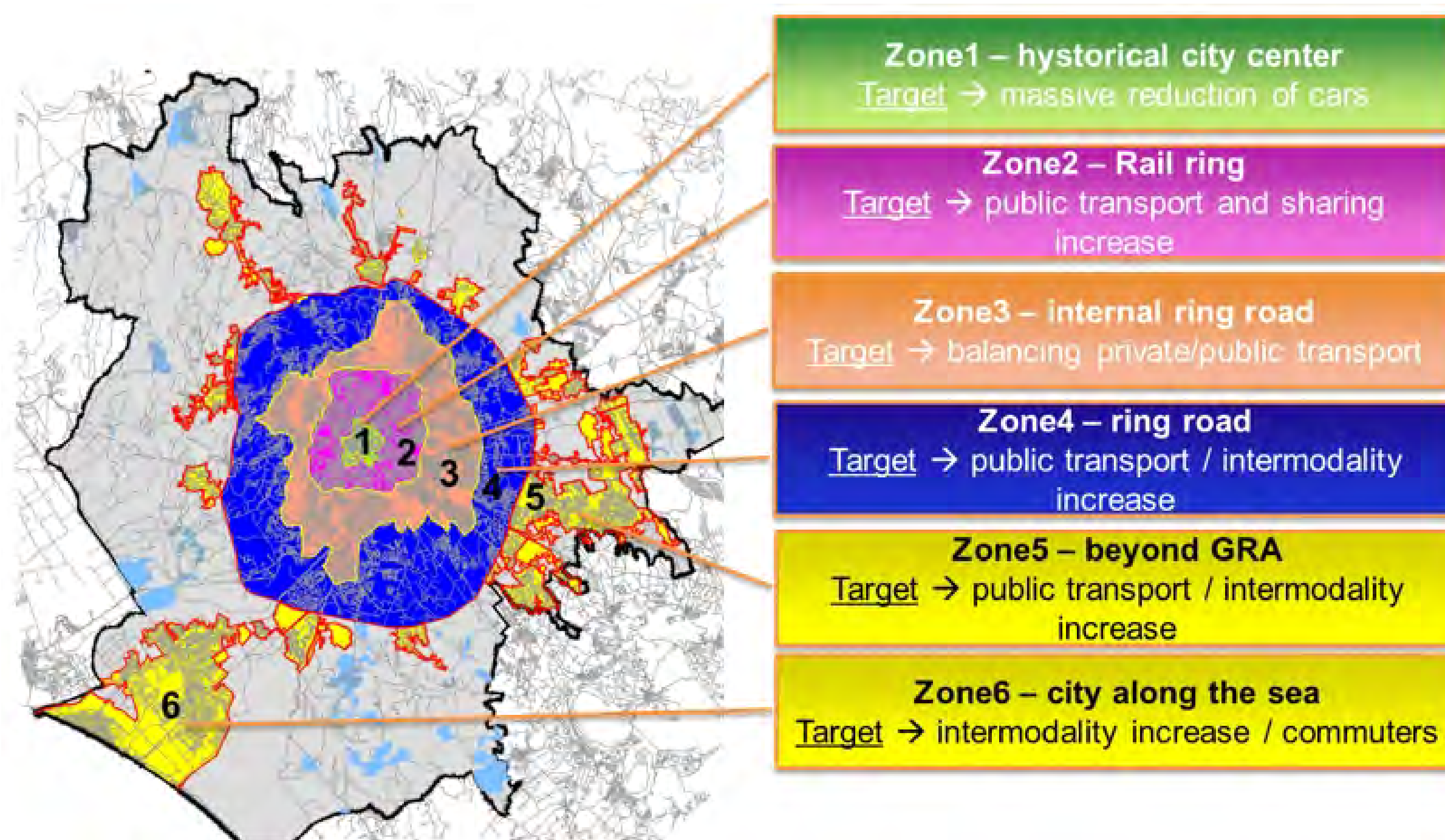


DEMAND REGULATION

SUMP: Demand Management Policies

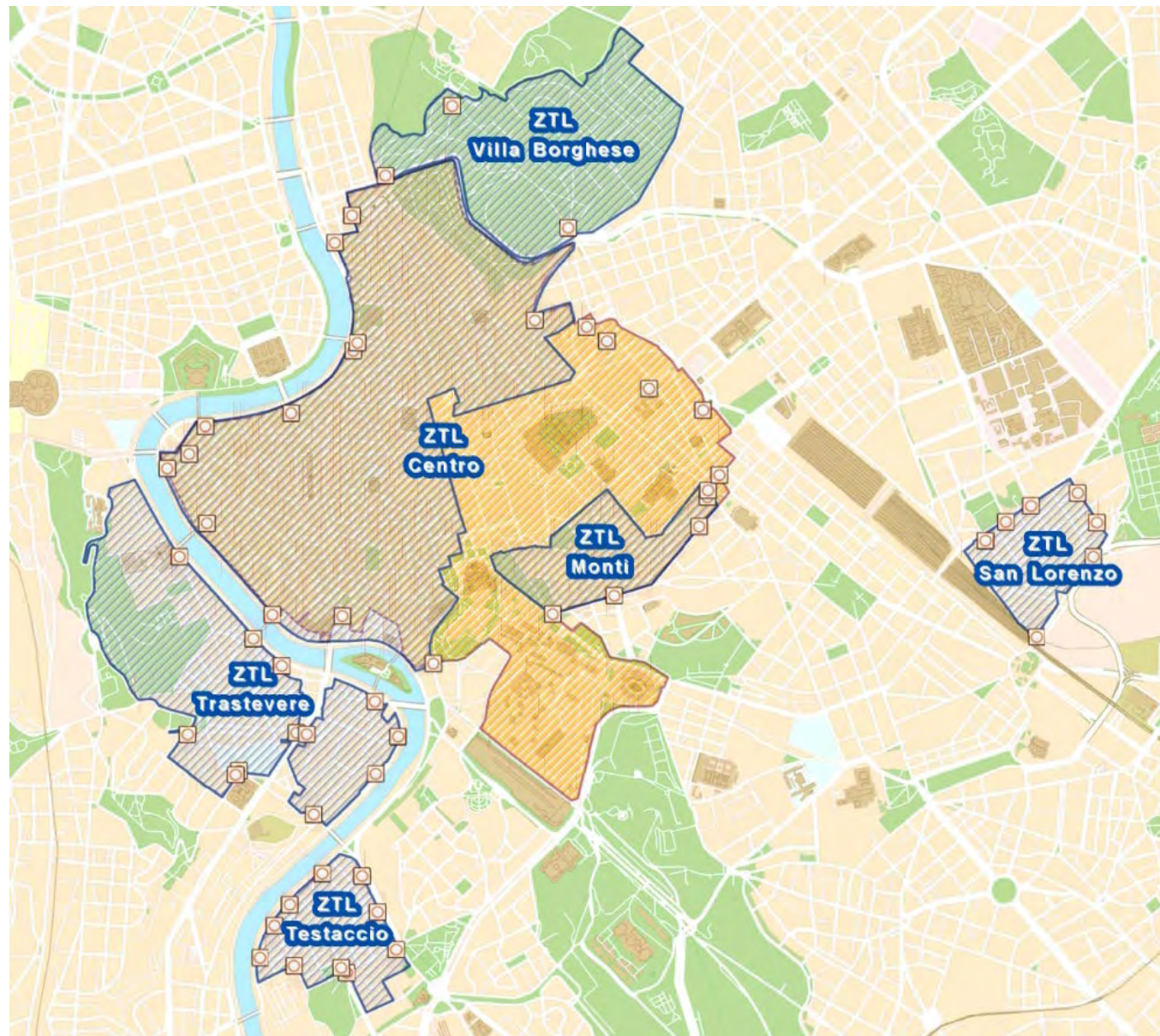
23

City zoning always more in **6 areas with increasing constraints to private mobility** and focusing on multimodal mobility with emphasis to soft modes, supported by ITS measures.



SUMP: Demand Management Policies

Present status of City Centre LTZs & electronic access control



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

SUMP SCENARIO: Demand Management

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Adoption of the C40 protocol - FFFS

Participation in the "FOSSIL FUEL FREE STREETS" (FFFS) Declaration of the C40 international network which consists of two objectives:

- Purchase of **only emission-free PT vehicles starting from 2025**
- Realization of at least one **urban area "with zero emissions"** from transport by 2030

UVAR in the Railway Ring Area

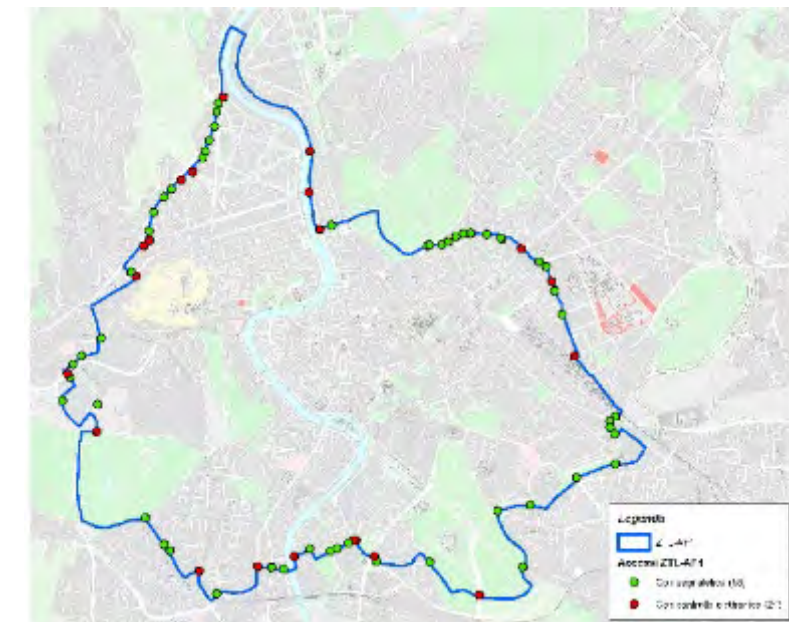
Installation of the **53 gates of the ZTL AF1 - VAM** missing for vehicle control. Next development of an innovative technological and management model towards "Pollution Charge" and shared mobility.

Policies for on-street parking

Adjustment and strengthening of the hourly rates, with reduction of free permits for categories.

Upgrading P&R

Extension of the P&R system with 7 new controlled parking areas and extensions of existing ones.



ITS choice - The Mobility Centre

P.Le Degli Archivi, Roma

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



Real-Time information

Variable Message Signs (VMS)	66
UTT (Urban Travel Times) – work stations.....	51
Electronic poles muoversiaroma.it mobile.....	300



Fining & control Systems

Electronic gates and LTZ Variable message signs	
Gates bus lanes TPL	17
Fotored	1
Vistared	10
Safety Tutor	2



Monitoring Regulation Control

Video surveillance cameras	75
Measurement	130 stations
Traffic lights	1,387
Centralized traffic lights	529

New UTT system – monitoring main routes

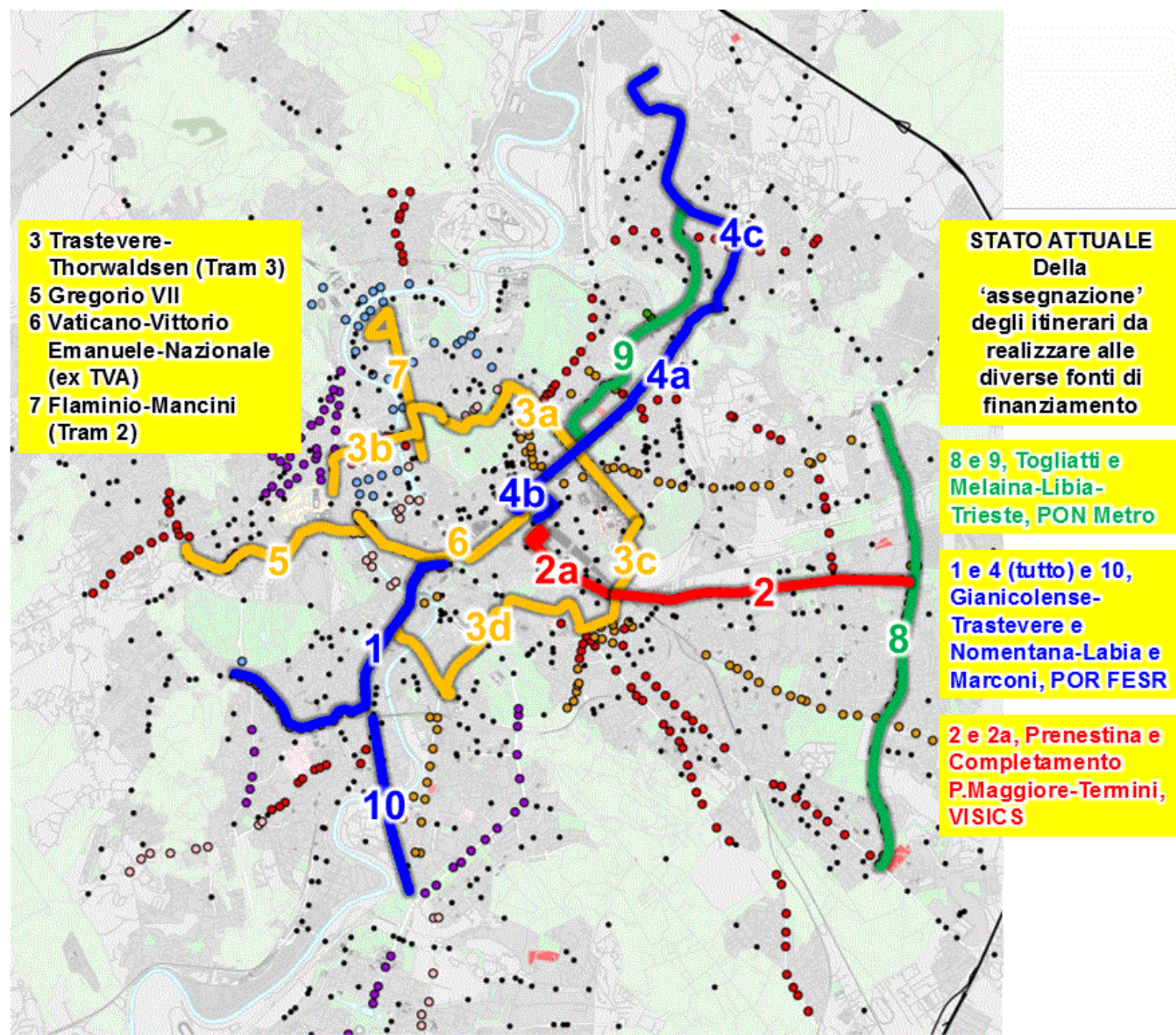
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- Bluetooth®/Wi-Fi® sensors on road: real-time information on travel times and O/D dynamic matrix
- 30 main routes, each one constituted by 3-4 bidirectional paths.
- O/D Matrix: 90 Origin/Destination relations.



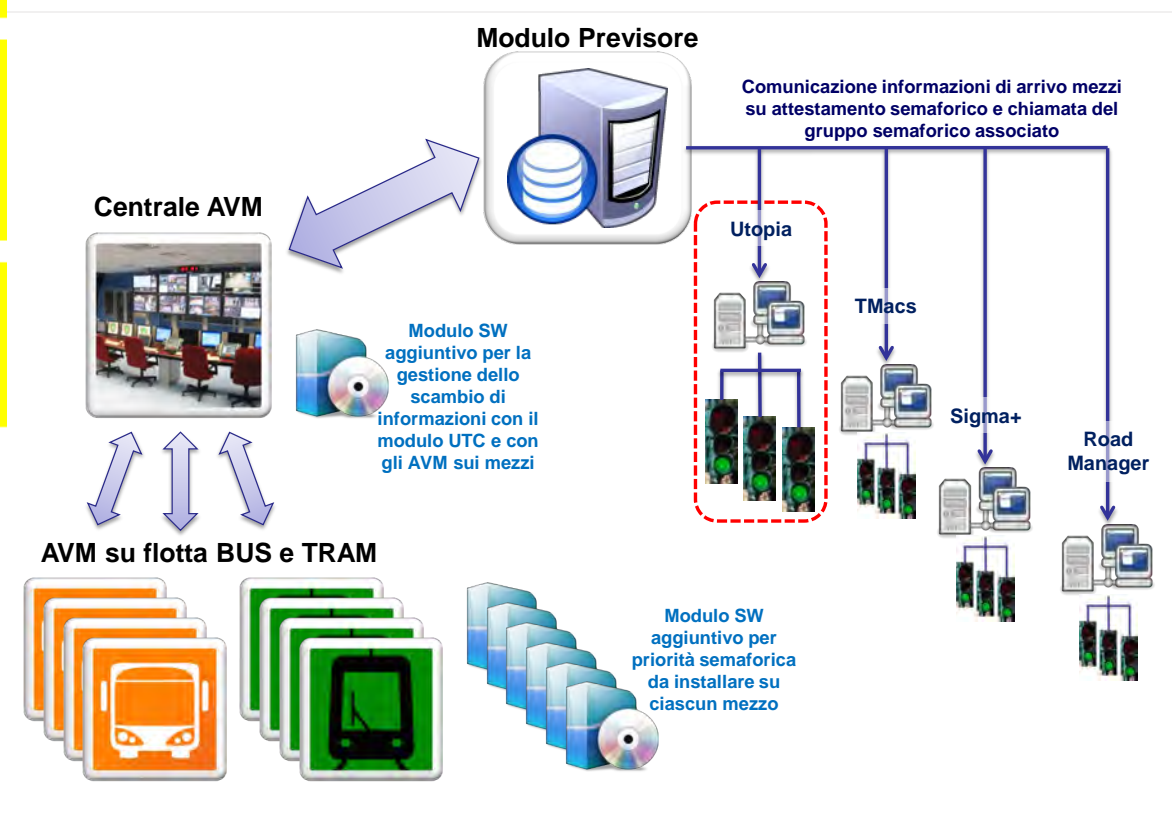
PT & Tramway network: new priority systems on traffic lights

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**REDUCTION ABOUT 10% OF MACHINE
STAFF SHIFTS ON ALL LINES**

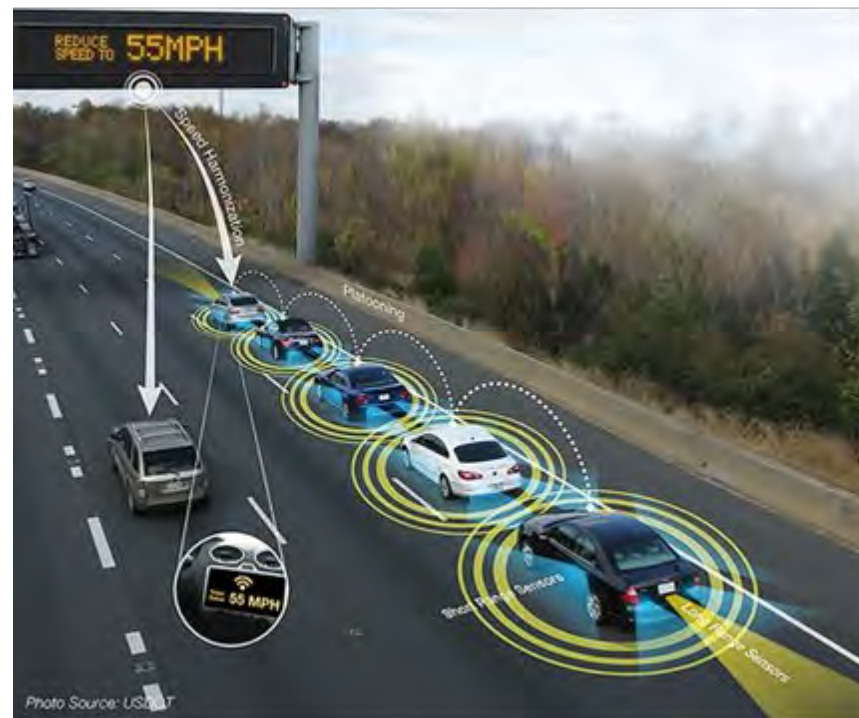
-10% STANDARD COST
**TRAMWAYS YEARLY PRODUCTION COST -
€ 5.200.000**



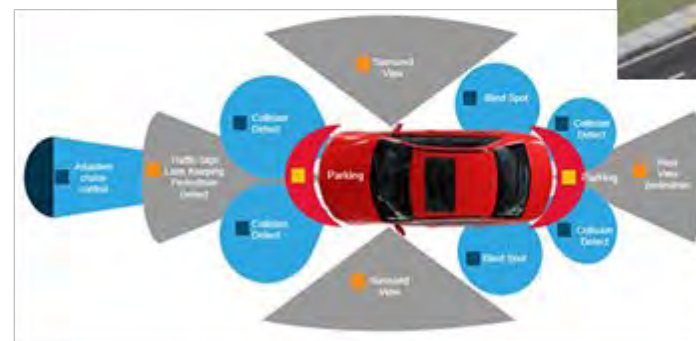
The Mobility Centre – Future Development

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Elementi innovativi per il trasporto e la mobilità
Nuove prospettive di integrazione tra sistemi, infrastrutture, veicoli e persone



Sistemi
di guida
cooperativa



DEVELOPMENT OF CYCLING MOBILITY

SUMP Scenario: 91 km of new cycling routes

SUMP Scenario: 304 km of new cycling routes

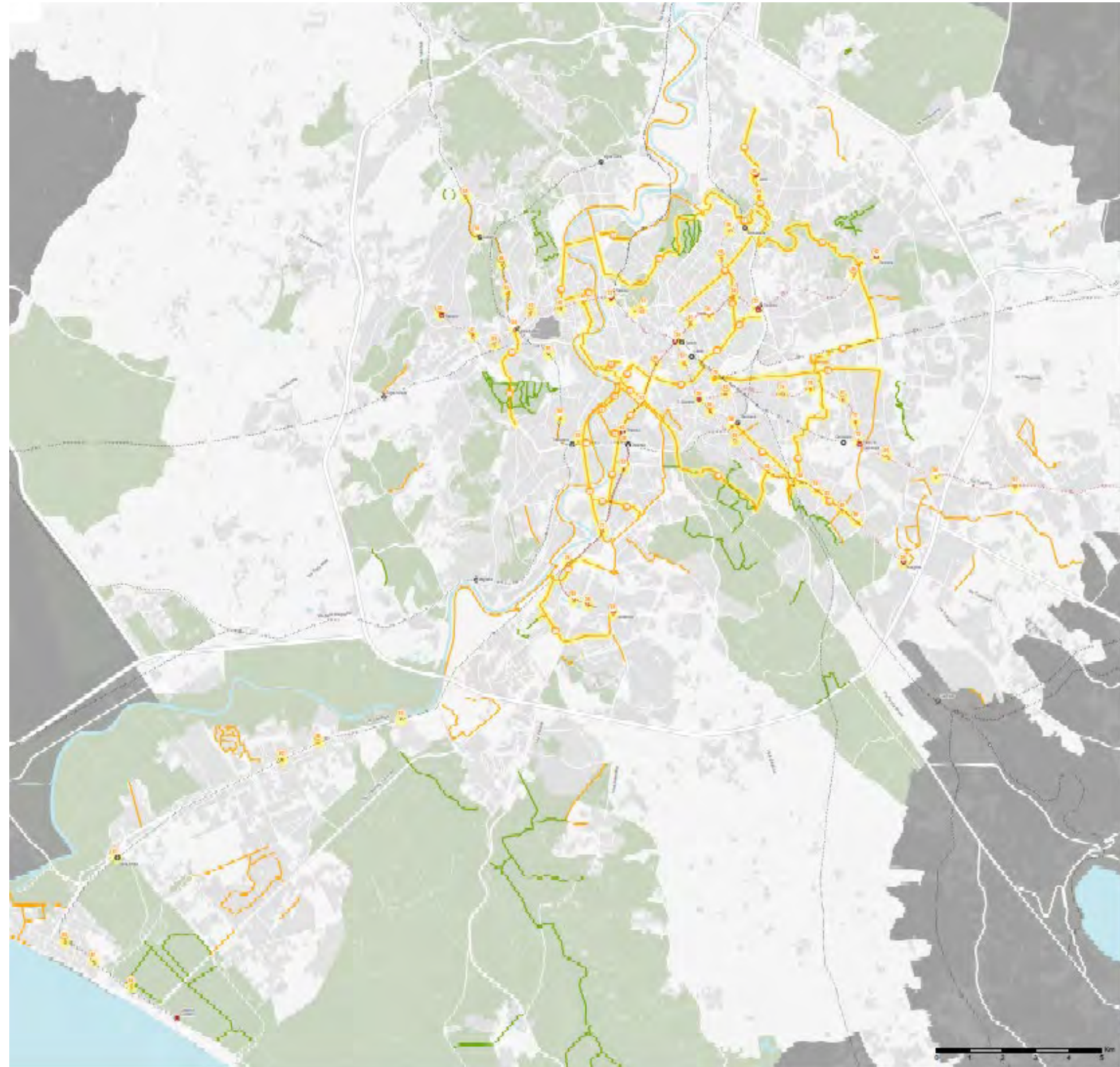
DEVELOPMENT OF PEDESTRIAN AND ENVIRONMENTAL AREAS

SUMP Scenario

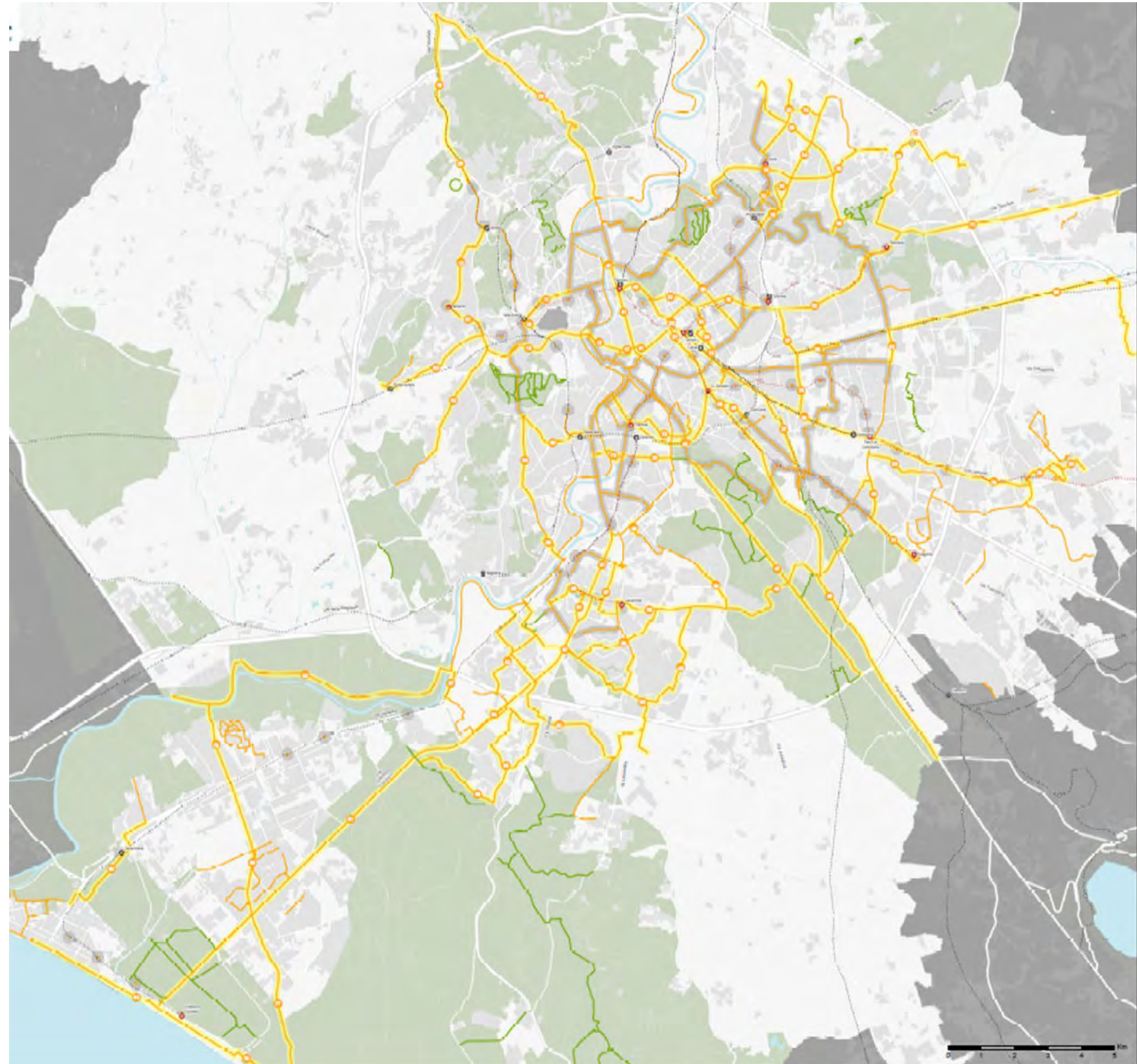
80 new complex pedestrian and semi-pedestrian areas:

- 3 work in progress
- 8 already designed
- 16 call by City Districts,
- 11 in the Historical Centre
- Further interventions also in peripheral areas proposed directly by the citizens and civil society

REFERENCE SCENARIO



SUMP SCENARIO



Extending active mobility across the city: zooming on new Tridente LTZ

Tridente zone is controlled from **June 2019** by a dedicated **e-gates system**.

Only residents and craft enterprises located in Tridente can still access the Tridente and must park in designated areas during **6.30-19.30 weekdays** and **10-17.00 on Saturdays**.

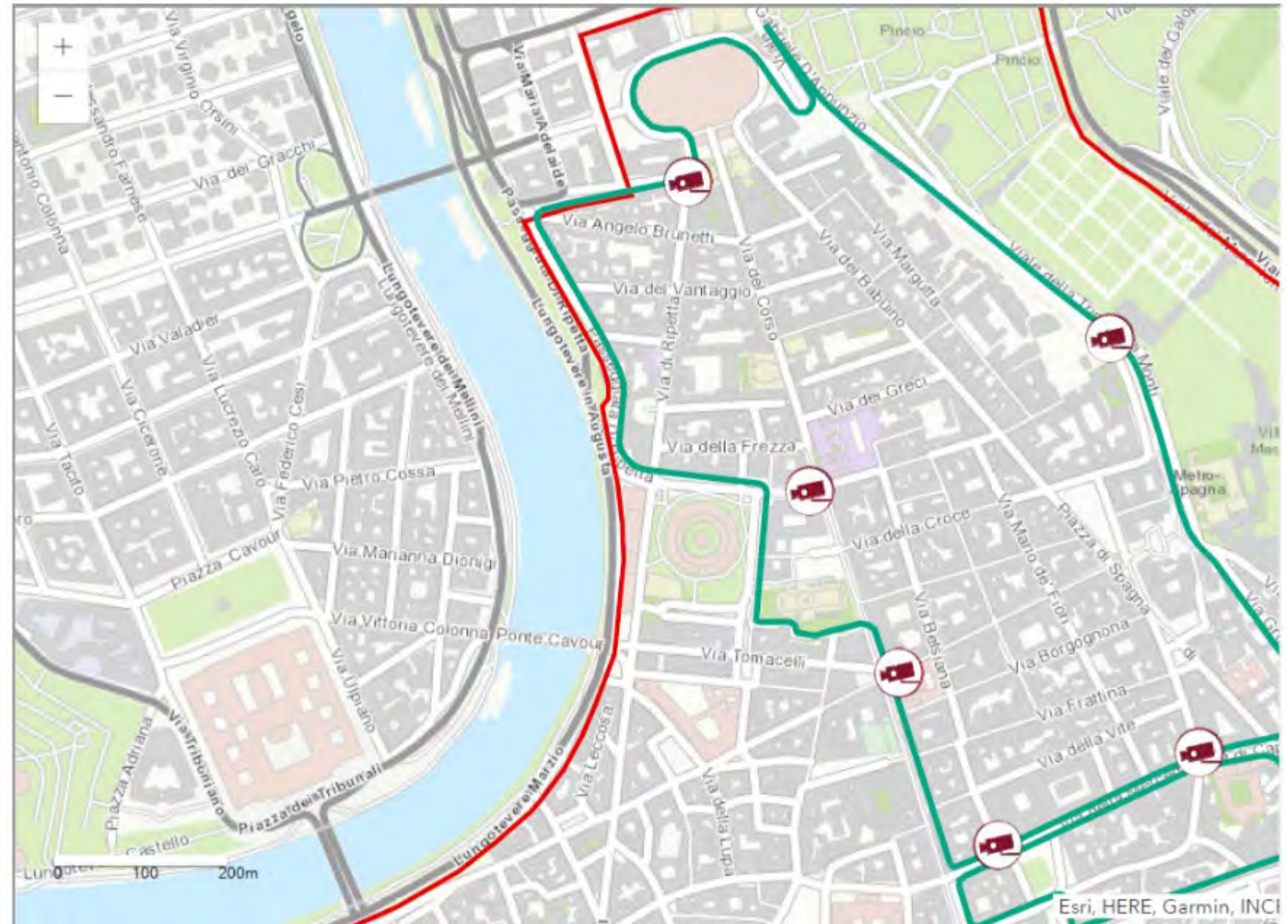
First LTZ where **PTW are controlled and not exempted**.

Electric vehicles are exempt as well as special category vehicles (emergency services, municipal vehicles, transport of medicine, etc).

ZTL Tridente (A1)

■ Ztl Tridente, from May 13 to the pre-exercise of electronic gates (/it/ztl-tridente-da-luned%C3%AC-al-pre-esercizio-dei-varchi-elettronici-1)

Published on: 08-05-2019





SHARING MOBILITY



DEVELOPMENT OF SHARING MOBILITY: SUMP SCENARIO

- **Strategic action of the plan:** further impulse to car / bike / scooter sharing schemes, car-pooling and taxis towards low environmental impact solutions, with rewarding criteria for operators extending the service in the external areas of the city
- **Mobility Manager (MM) Corporate and Scholastic:** Common soft mobility projects for home-school connection and for Home Work Travel Plans with monetizable benefit.
- Prize-winning adoption of **smart working** in the various working realities in the territory of Roma Capitale.
 - Initial target (reference scenario): **10% threshold of employees** over emergency smart working.
 - Estimated **reduction of private vehicles: 4%** private car use (home-school and home-work).

Car sharing fixed scheme: managed by Mobility Agency. Annual fee, fixed places, return to same place to be extended as one-way service in 2018, low hourly costs.

Car sharing free-flow schemes: working in 35 sq km of the city, free entrance to city centre, catch & leave where you want, higher costs (per minute).

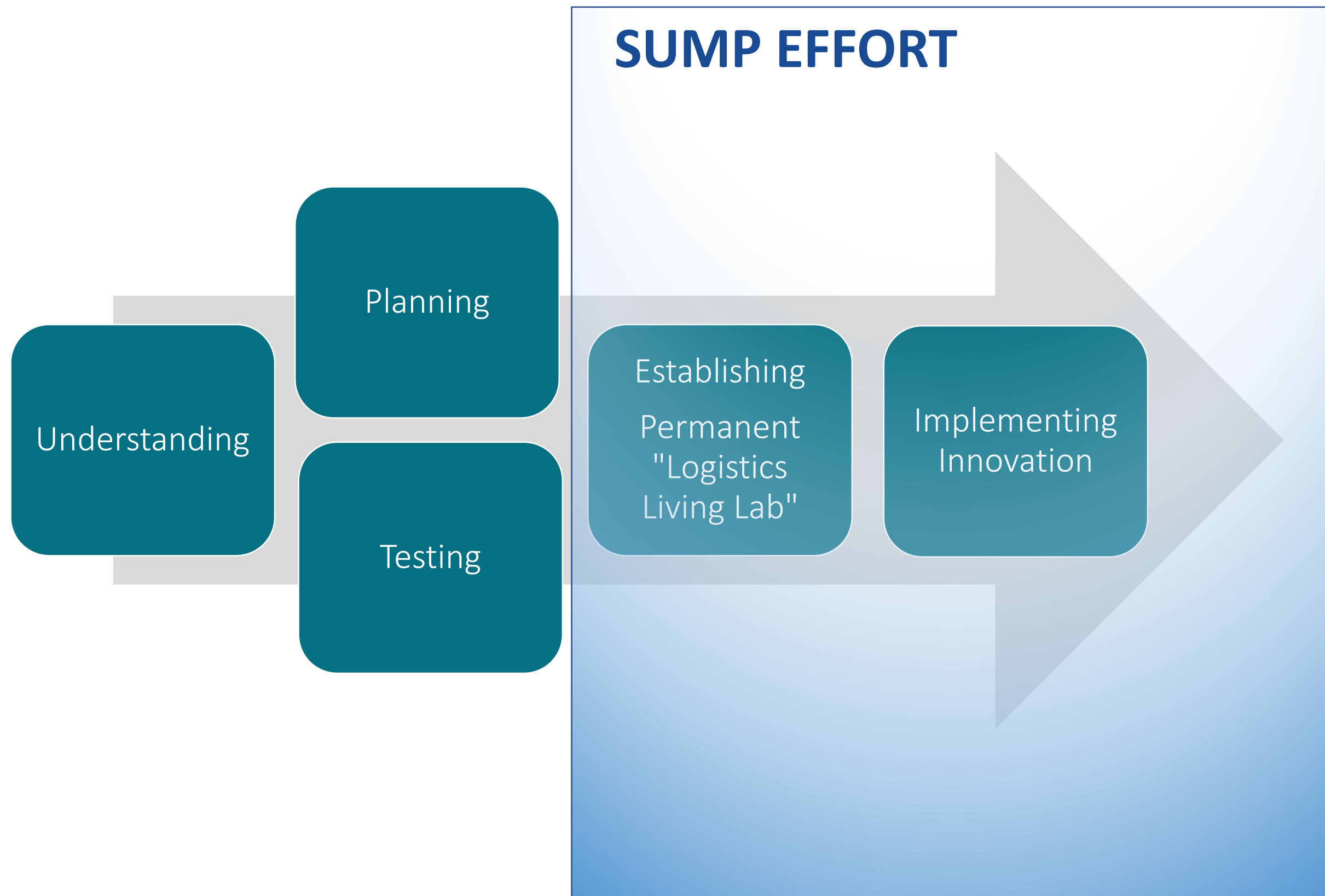
Managed by Private Operators: Car2go (with Smart), Enjoy (with FCA 500), Sharengo (with e-cars, Feb 2016), eCooltra (with e-scooters, Feb 2017), ...

+ 2.000 shared vehicles
> 200.000 users





CITY LOGISTIC



SHORT TERM (<3 years)	MEDIUM TERM (3-7 years)	LONG TERM (7-10 years)
<ul style="list-style-type: none">• Incentives for the purchase of low environmental impact vehicles• Work tables with "logistic living lab" approach• Increased offer of freight stalls• Extension of the “Freight LTZ” to “Rail Ring VAM LTZ”	<ul style="list-style-type: none">• Activation of vehicle accreditation systems• Creation of mini-platforms (mini-hubs)• Creating parcel lockers• Implementation of technological systems for the management and control of freight stalls• Introduction of electric charging points• Crowdshipping promotion• Promotion of delivery systems with cargo bikes• Out-of-hours delivery systems	<ul style="list-style-type: none">• Creation of urban freight distribution terminals (UFT)• Reverse logistics• Promotion of electric van-sharing



ROAD SAFETY

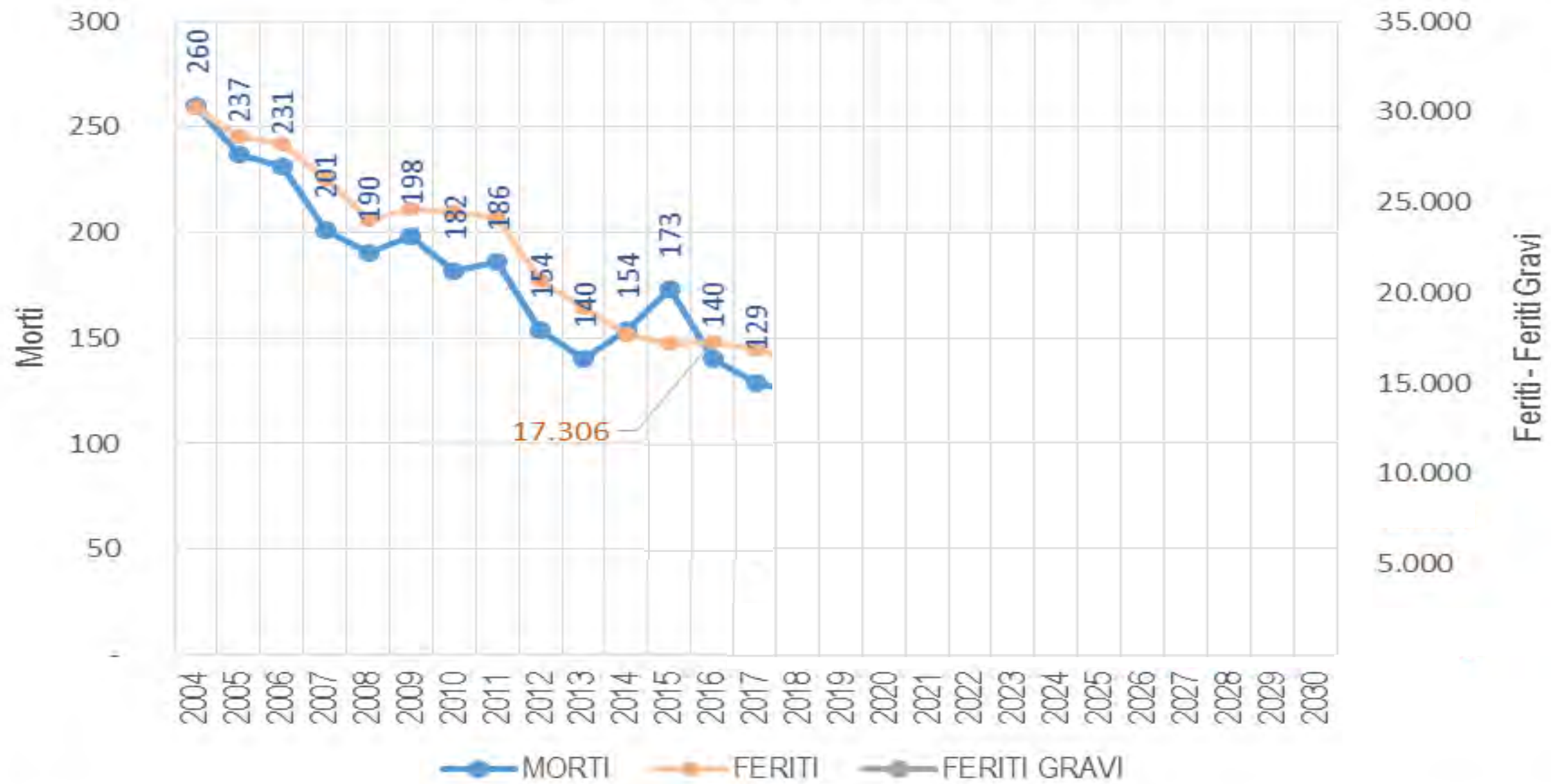
TOPIC

ROAD SAFETY Management

Present situation

129 deaths;
17.306 serious injuries

PRESENT SITUATION



Rome, Road Safety Centre

The Centre now gathers and process accidents data detected and released by the Urban Police (approx 30.000 record/yr), via a dedicated Info System.

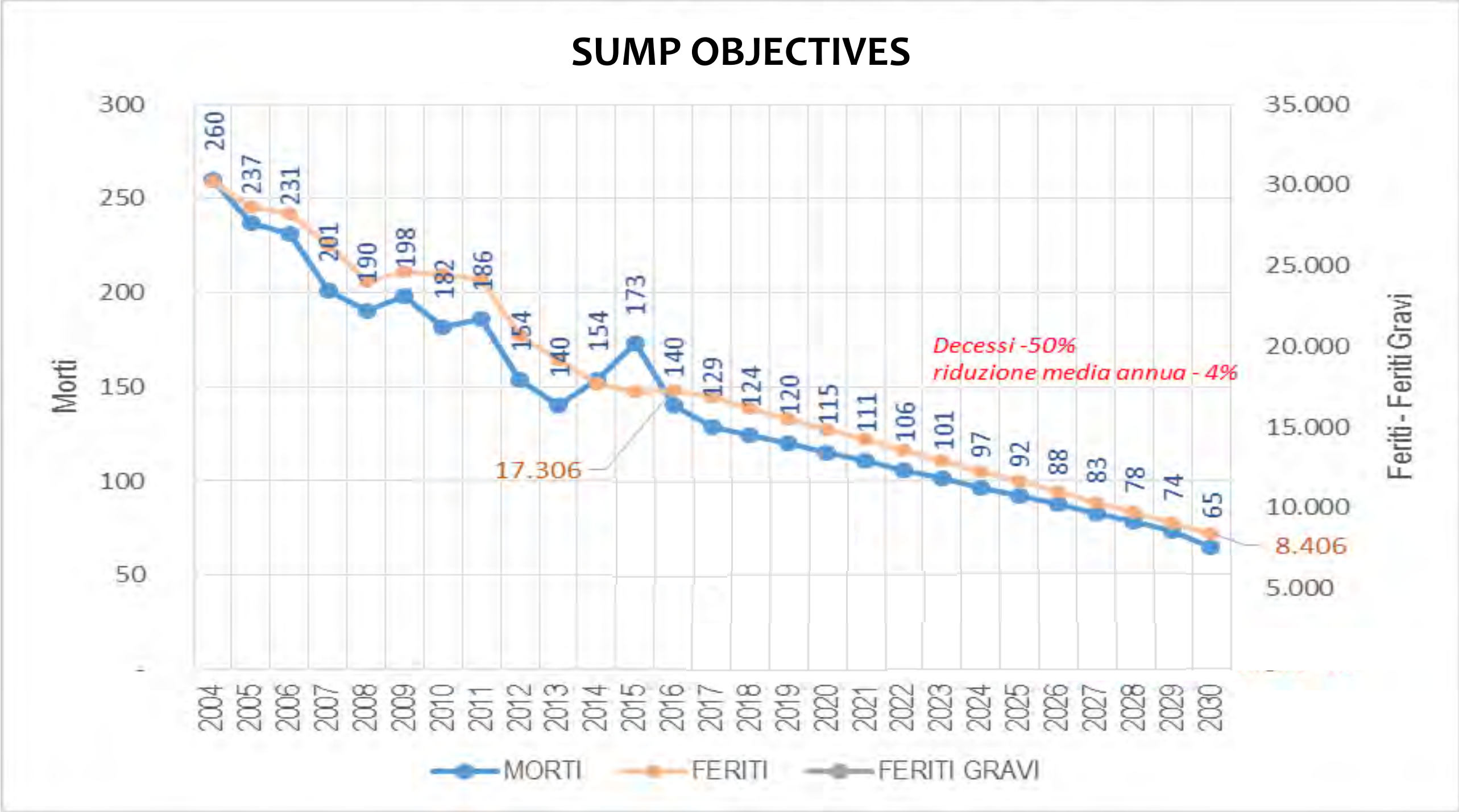
According to safety priorities and critical situations, interventions are planned in the SUMP **with increasing investment each year.**



EXPECTED RESULTS

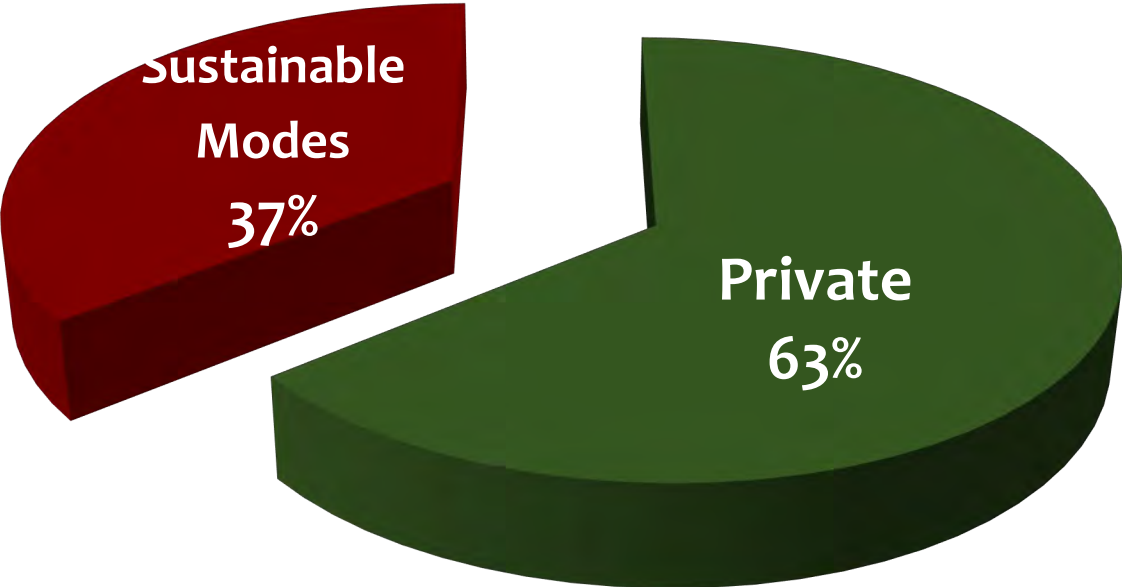


TOPIC	Present situation	Reference Scenario	SUMP Scenario
ROAD SAFETY Management	129 deaths; 17.306 serious injuries	- 20% deaths; - 20% serious injuries	- 50% deaths; - 50% serious injuries

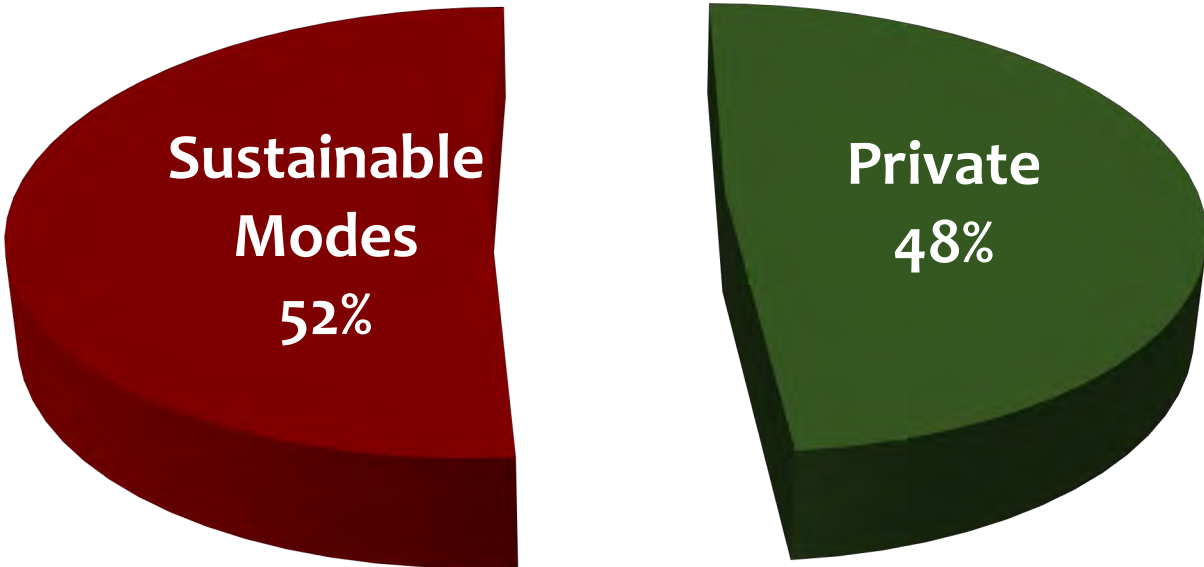


MODAL CHANGE

Reference Scenario (SR)



SUMP Scenario (SP)



Modal Change – Peak hour movements

Mode	Reference Scenario (SR)	SUMP Scenario (SP)	%
Public Transport	168.165	231.161	27,3%
Private vehicles + PTW	359.049	261.229	-27,2%
Bike + Sharing + Ped	42.617	55.770	23,6%

Saved Emissions (tons/year)
conservative hip on private fleet renewal

Pollutant	Reference Scenario (SR)	SUMP Scenario (SP)	%
NOx	9.364	7.649	18,3%
PM10	639	518	18,8%
CO2	3.856.431	3.140.903	18,6%



Annual Conference

London, October 2-4, 2019

**Thank you
for
your attention!**



International Co-operation
Mobility Agency of the City of Rome
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