



Learning from CIVITAS:

From MIRACLES to the Sustainable Urban Mobility Plan and 20-20-20 objectives for Rome.





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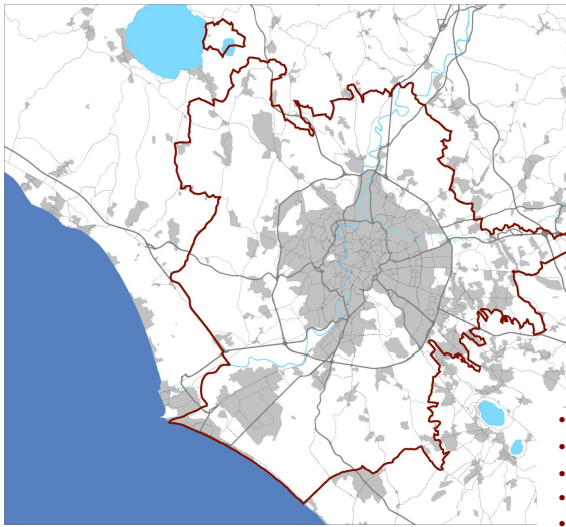
Technical Session 3: Demand-Management Strategies:
Using Incentives and Disincentives to Achieve More
Sustainable Urban Transport

CIVITAS Forum
18 October 2011
Funchal (Portugal)

Fabio Nussio, Rome Mobility Agency, Italy

The context of mobility in Rome


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| | |
|-------------------|-----------|
| Municipal Area | 1.285 skm |
| Population | |
| Metr. Area | 4.500.000 |
| City residents | 2.800.000 |
| Road Network | km 5.000 |
| Main road network | km. 800 |
| Vehicles | 2.650.000 |
| cars | 1.890.000 |
| 2 wheels | 600.000 |
| goods delivery | 160.000 |
| Daily Trips | 6.100.000 |
| Peak-hour Trips | 650.000 |

- The historic and cultural heritage
- Narrow and not modifiable roads
- The status of Italian Capital City
- The inner presence of the Vatican City
- The Attitude (85 vehicles/100 citizens)
- The Tourists (>23 millions per year)

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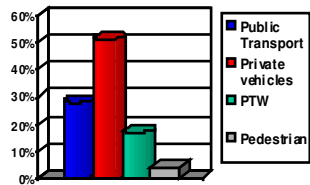


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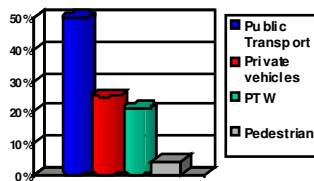
The Modal Shift and its impacts in Rome

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Metropolitan Area



Old Town – City Centre



Traffic Inducing :

- Energy disruption
- Congestion
- Pollution
- Safety risks

Impacting on:

- Health
- City attractiveness
- Economic growth
- Quality of life



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Trends towards urban sprawling

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500.000 more inhabitants in the Rome Province, 135.000 in Rome Municipality. Considering the distribution inside the Municipality, residents outside external road ring will increase of 176.000 people.

SVILUPPO INSEDIATIVO LUNGO PERIODO

5.000

Incrementi

Popolazione

Addetti

Decrementi

Popolazione

Addetti

DENSITA' DEL CARICO INSEDIATIVO (Popolazione e Addetti Km²)

Meno di 10

da 10 a 25

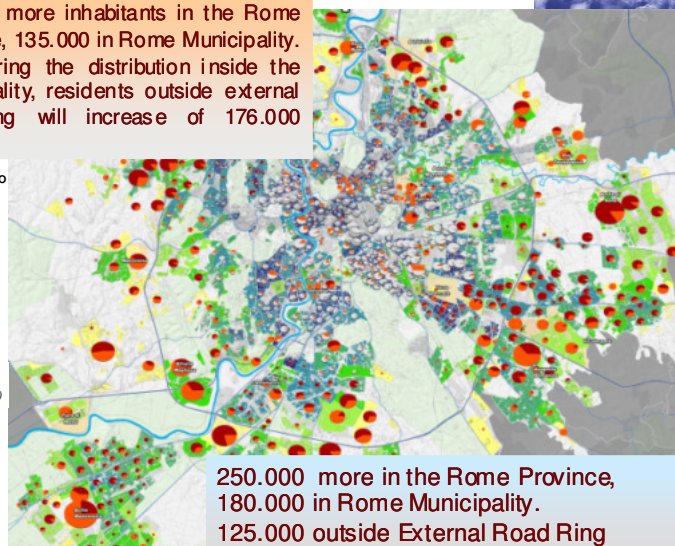
da 25 a 50

da 50 a 100

da 100 a 200

da 200 a 300

Oltre 300



250.000 more in the Rome Province,
180.000 in Rome Municipality.
125.000 outside External Road Ring



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Rome mobility renaissance

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- **Based on Sustainable Mobility Strategic Plan - approved in 2009-10**
 - **Mass Rapid Transport System Expansion** Underground and Urban Railways, new tramways system.
 - **Completion of the road system** as well as PT priority, parking management and park&ride improvements.
 - **Fleet Renewal & Monitoring** public & private towards lower emissions with New Fast Lanes for Public Transport
 - **Sustainable Mobility** car & bike sharing, electric and micro-mobility, ...
 - **Technologies and ITS**
 - **Infomobility** for citizens and tourists
- **International Co-operation : essential tool for best-practice exchange**

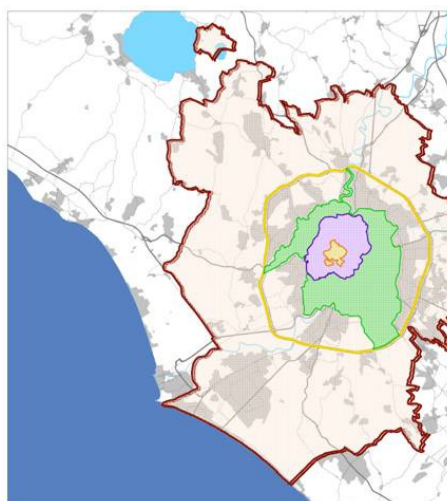


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Managing mobility: restriction zones

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Municipality Area – 1285 km²
Emission Check “Blue Label”
(yearly all vehicles and PTWs)

External Ring (GRA) – 344 km²
Tourist Coaches Regulation

Green Belt – 154 km²
Pollution emergencies,
Multi-modal interchanges, Park&ride

Rail Ring – 48.4 km²
Emission restrictions, Pay parking schemes

LTZ – 5.5 km²
Stop to all vehicles (except permit holders)

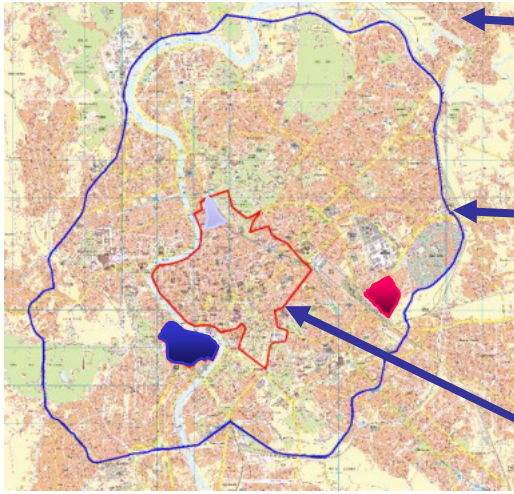
Pedestrian – 0.5 km²
Zero Emission Area (walking & electric)

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The MIRACLES Lab Area and main limitations



Ring Road (GRA):
 COACHES - Daily Charged permits
 All Vehicles with "Blue Sticker"

Rail Ring:
 NON CATHALIZED VHCLS
 Payment of on-street park

Historical centre (ZTL):
 STOP to ALL VEHICLES
 Permits concessions
 to preselected cathegories

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International Co-operation: best-practice exchange

EU R&D Framework Programmes:
 ATAC – Agency: more than 50 projects (1998-2009)











Cooperation with International Associations like POLIS, UITP, MMG, ECMT, IMPACTS, C40







Cooperation Rome-Beijing (ITS-TAP & IBOCS project)
Cooperation Rome-Tongji



Cooperation with Indian MUD





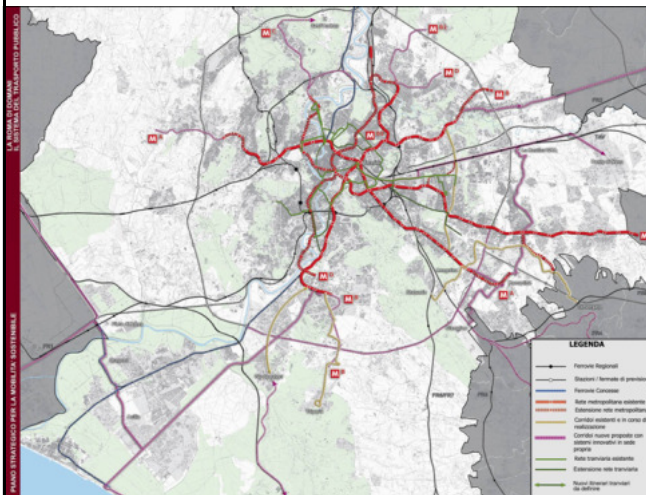
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Sustainable Mobility Strategic Plan

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Mass Rapid Transport System Expansion



Underground Network expansion, from current 36,5 km to more than 100 km through the building of:

Line B extension (on-going)
Line C (on-going)
Line D
Extension of Lines A,B

Integration of urban railway system;

- New tramways

- Adjustment of Termini & Tiburtina exchange Nodes

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Sustainable Mobility Strategic Plan

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Mass Rapid Transport System Expansion



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Sustainable Mobility Strategic Plan

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Mass Rapid Transport System Expansion



**Piazza Venezia survey:
preserving our heritage!**



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Sustainable Mobility Strategic Plan

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Mass Rapid Transport System Expansion: Reality in 2012!



**Opens Jan. '12
up to
Conca D'Oro**



**Pantano-Centocelle: 2/12
Centocelle-Lodi: 10/12
Lodi-S. Giovanni: 12/13**

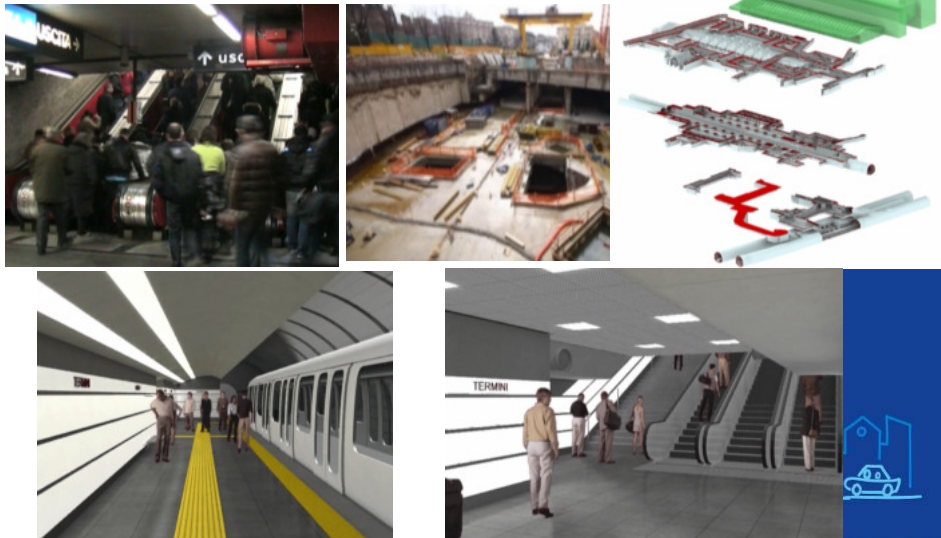
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Sustainable Mobility Strategic Plan

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Refurbishment and updating of Termini Station: To be completed in 2012!



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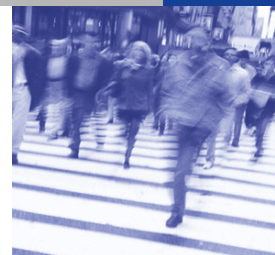
Sustainable Mobility Strategic Plan

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Short-term action strategies: CIVITAS approach scheme!

Immediately acting on the rationalization of the mobility system through soft measures requiring no specific law and low or medium impact execution.

- A. Reorganization of the primary road network
- B. Implementation of **Detailed Municipal Traffic Plan**
- C. Reorganization of the **network of the surface LPT**, the tram network and corridors of mobility
- D. Review of the Rules
- E. Starting a strong **action for Road Safety**
- F. Development of **Technological Innovations** for the City mobility
- G. Development of second level services for **sustainable mobility**
- H. **Distribution of goods**
- I. **Action for the Old Town**





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The CIVITAS Measures in MIRACLES: confirmed in city strategy up to 2020

| | ROMA | WINCHESTER | BON | CORK |
|--|------|------------|-----|------|
| WP5 Access Restrictions | ● | ● | ● | ● |
| WP6 Pricing Policies | ● | ● | | |
| WP7 Collective Transport | ● | ● | ● | ● |
| WP8 New forms of vehicle use | ● | ● | | |
| WP9 Distribution of goods | ● | ● | ● | |
| WP10 Soft Measures | ● | ● | | ● |
| WP11 Integration of Transp. Mngt. System | ● | ● | | ● |
| WP12 Clean Fleets | ● | ● | ● | ● |

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IMPLEMENTATION OF LOCAL DETAILED TRAFFIC PLANS

Local detailed traffic plans

Extended to all the city Boroughs
It is a tool to consult & inform citizens

- Scheme for the reduction of crossing traffic
- Traffic calming measures
- Reorganisation of parking areas
- Reorganization of the intersections and crosswalks
- Footpaths, public transport stops
- Review of road signs
- Dissemination of systematic interventions to improve the livability of the area and overcome physical barriers
- Encouraging residential and commercial functions and creating “environmental islands “



C - REORGANISATION OF SURFACE PUBLIC TRANSPORT NETWORK

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OBJECTIVE: A new network with a clearer identification of the typology of the Lines:

- **Main network high frequency :**
 - On reserved lanes or on smooth flow traffic;
 - Bus Terminus close to the railway/subway network;
 - Replanned according to the updated mobility demand surveys
- **Distribution network with low average frequency**
- **Flexible services in low demand areas**
- **Extension of communication and information for PTUsers on board, at the bus stops and on the web**
- **Achieving better environmental performances of the PT fleets: new CNG, LEV & ZEV vehicles**

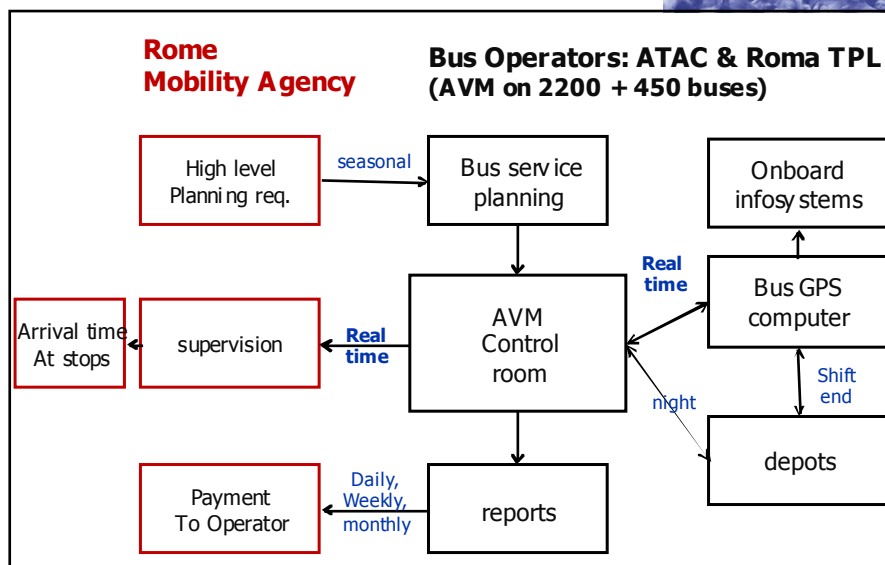


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C - REORGANISATION OF SURFACE PUBLIC TRANSPORT NETWORK

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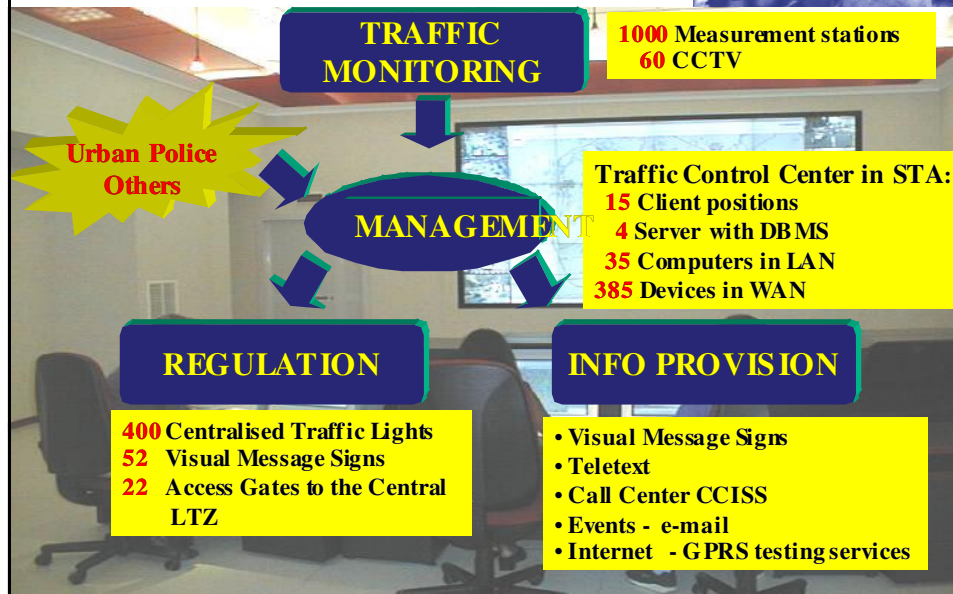


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From MIRACLES: ITS System in Rome

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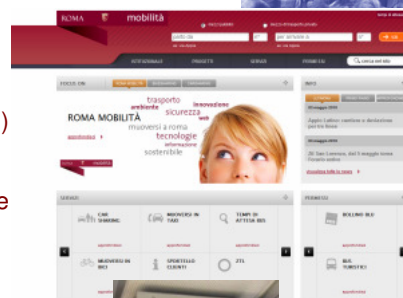


To... SERVICES FOR URBAN MOBILITY

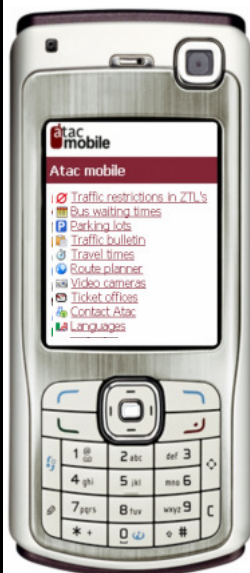
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DIFFUSION OF MEDIA SERVICE:

- **Web Sites (5.5 Mil pag/month)**
- **Electronic Bus Stops (300)**
- **On Board Bus Information (400 vehic.)**
- **Newspaper page "METRO"**
- **Roma Radio (The Tube station) & Tele News Metro (underground TV)**
- **Awareness Campaigns**
- **ATAC Mobile & Social networks**



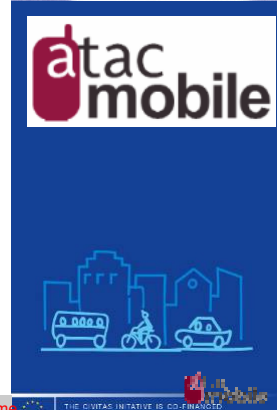
trasporti & mobilità



Free of charge! (pay only the connection with your TLC operator)

<http://atacmobile.it>

- Traffic restrictions in ZTL's
- ★ Bus waiting times
- Parking lots
- Traffic bulletin
- ★ Travel times
- Route planner
- Bike-sharing
- Video cameras
- Ticket offices
- Contact Atac



Bus waiting times

The service provides the estimated arrival of the bus at the bus stop of interest.

The information is generated in real time by Automatic Vehicle Monitoring (AVM), a GPS system installed at the moment on most of the buses.

| Bus waiting times | |
|---------------------------|-------------------------|
| Monday 3 May - 6:39 PM | |
| P.ZA IRNERIO (MA) (73154) | |
| 46: 2 stops (4') | ▲ * |
| 49: 3 stops (5') | ▲ * |
| 49: 8 stops (13') | ▲ * |
| 46: 12 stops (18') | ▲ * |
| 49: 20 stops (28') | ▲ * |
| 46: 20 stops (29') | ▲ * |
| Show key | |
| ▲ | Foldaway lifting device |
| ● | Ticket vending machine |
| ✱ | Air conditioning |
| □ | Moby |

Enter the bus stop id*:

Alternatively, enter the bus line number:

* It is a number, usually consisting of 5 numbers

[Reload](#)
[Back](#)
[Bus waiting times](#)
[Home](#)



ATAC Mobile features – Traffic bulletin & travel times



Atac mobile
Reload | Home

Traffic bulletin

Monday 3 May - 6:34 PM
Last bulletin (compiled at 6:00 PM)

Vittorio Emanuele

- Piazza Vittorio Emanuele
- Via Emanuele Filiberto
- Piazza di Porta Maggiore
- Piazzale Labicano
- Viale Manzoni
- Via Emanuele Filiberto

Key

- = No congestion
- = Moderate congestion
- = Severe congestion
- = Not available

« Reload
« Back
« Traffic bulletin
« Home

Atac mobile
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Travel times

Monday 3 May - 6:27 PM
Please select a route to get travel times of its sections:

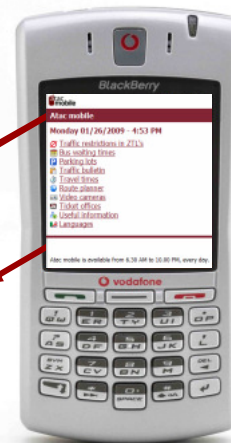
- Emporio - Ara Piacis - Porta Pia
22 minutes

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Monday 3 May - 6:30 PM
Please select a route to get travel times of its sections:

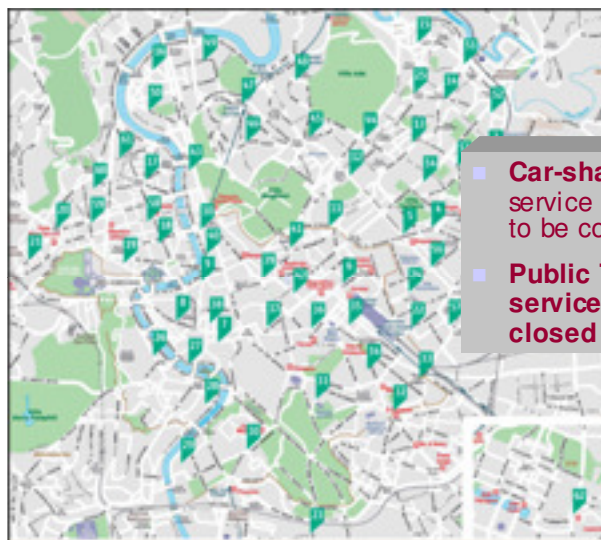
- Emporio - Ara Piacis - Porta Pia
22 minutes
- Emporio - Sinagoga
3 minutes (no congestion)
- Sinagoga - Ara Piacis
8 minutes (moderate congestion)
- Ara Piacis - Porta Pia
11 minutes (moderate congestion)

Travel times are updated every 5 minutes (Reload)



G SERVICES FOR SUSTAINABLE MOBILITY

Car-Sharing system



- **Car-sharing: MIRACLES testing** service offered by Mobility Agency to be concluded in 12/11;
- **Public Tender to assign the service for the whole city just closed !**

Short-term strategy for pedestrian OLD TOWN

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MIRACLES: ACS+RP system operating from 10/2001

I varchi elettronici di accesso alla ZTL

| | | |
|-------------------------------|-----------------------------|---|
| 1. Via Ferdinando di Savoia | 9. Via S. Filippo Neri | 17. Via Torino |
| 2. Passeggiata di Ripetta | 10. Via Giulia | 18. Via Nazionale (ingresso da Piazza della Repubblica) |
| 3. Via Tomacelli | 11. Via Arenula | 19. Via XX settembre |
| 4. Via di Ripetta | 12. Via del Teatro Marcello | 20. Via S. Basilio |
| 5. Via Zanardelli | 13. Via dei Serpenti | 21. Via Veneto |
| 6. Via di Panico | 14. Via S. Maria Maggiore | 22. Via Crispi |
| 7. Corso Vittorio Emanuele II | 15. Via Urbana | |
| 8. Largo dei Fiorentini | 16. Via Degretto | |

Il sistema "Miracles" garantisce la riservatezza nel trattamento dei dati personali, ai sensi della Legge 31/12/1996 n. 675, e controlla i dati accessi alla ZTL, li registra in base alle seguenti norme: Legge 15/5/97 n. 127 art. 17, comma 133 bis, con integrazione e modifiche di cui alla Legge 15/5/98 n. 101 art. 2, comma 133, 4/3/99, 22/5/99 n. 105.

Dal 1° Ottobre i varchi elettronici.

Un occhio di riguardo per la città.

www.sta.roma.it

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Short-term strategy for pedestrian OLD TOWN

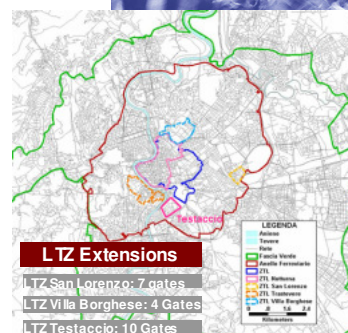
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Old Town is a full LTZ with electronic gates

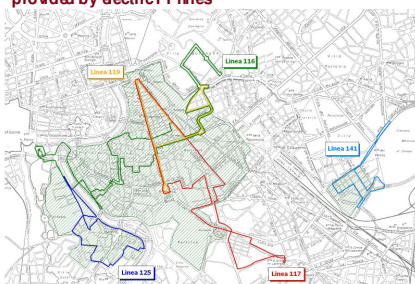
Old City Centre: 23 access gates



Trastevere: 12 access gates



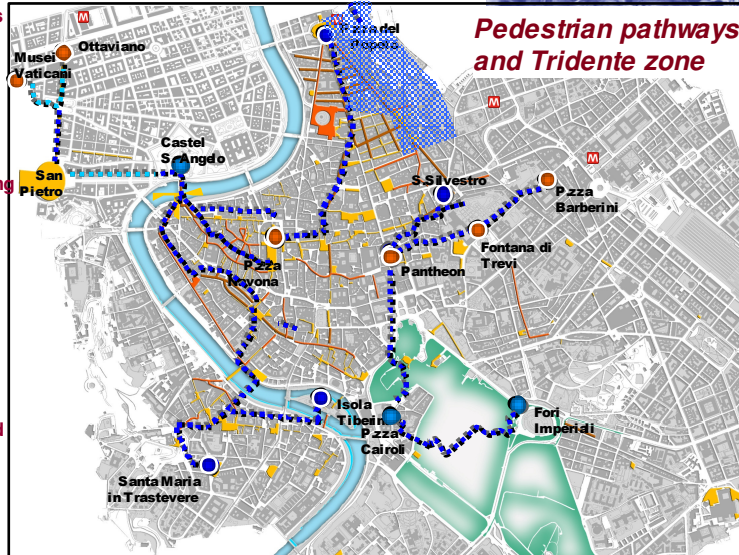
City-centre is already provided by electric PT lines



Short-term strategy for pedestrian OLD TOWN: Dec. 2012

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1. Definition of areas and routes closed to traffic – avoidance of flow traffic;
2. Review of regulation for access and parking of vehicles for mobility of people and goods
3. Development of vehicles sharing systems (cars, vans, bicycles)
4. Progressive introduction of electric and hybrid vehicles
5. Realization of pedestrian areas and pathways



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Mobility Scenario medium-short term (2020)

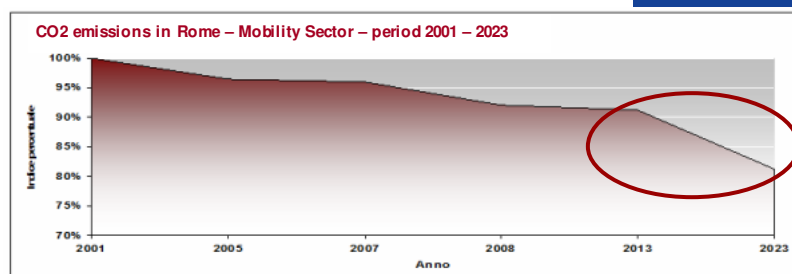
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Results for Peak hour

- ✓ 23% Reduction of the travel time on the city road network;
- ✓ 15% Increase of the modal split towards PT;
- ✓ 11% reduction of private vehicles movements.

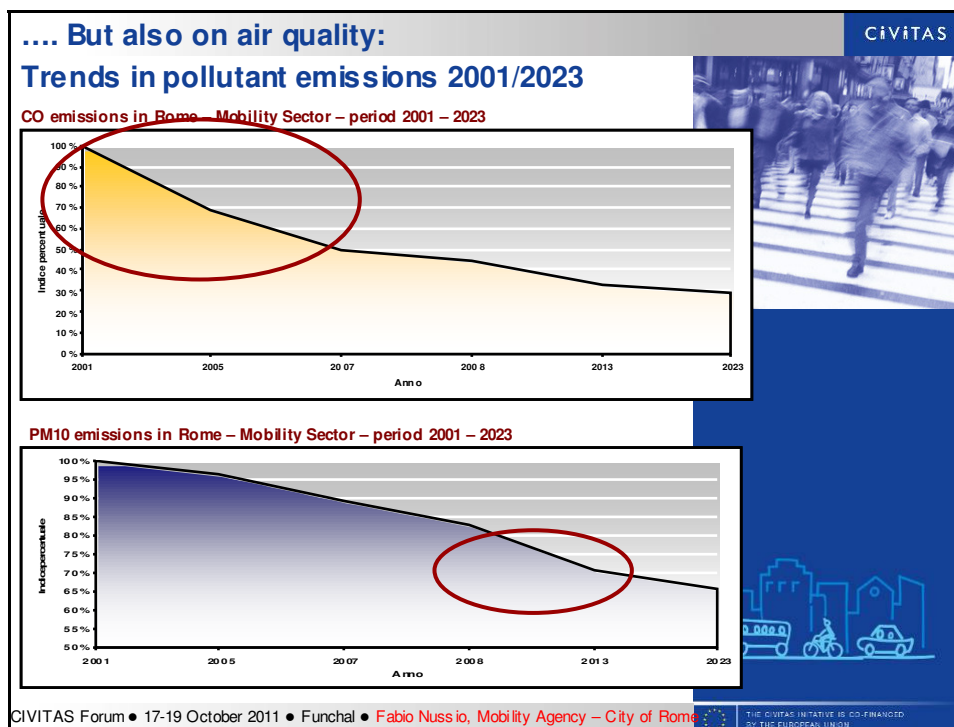


Result: a careful eye on 20-20-20 objective



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The Olympic City – Rome 2020

***A city hosting the Olympic Games,
Always remains an Olympic City.***

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CARTINA A - Concorso generale dei XXXI Giochi Olimpici e Paralimpici

1 STADIO OLIMPICO
2 FORO ITALICO
3 STADIO FLAMINIO
4 STADIO PAOLO ROSI
5 TORI DI QUINTO
6 GOLF CLUB OLGIATA
7 ACQUACETOSA
8 CIRCO MASSIMO
9 PIAZZA DI SERRA
10 PALASPORT EUR
11 EUR
12 TORI VERGATA
13 PRATONE DEL VIVARIO
14 LUNGHEZZA
15 SETTEBAGNI
16 NUOVA FERRA
17 PORTO DI ROMA
18 LIDO DI OSTIA

km 27,4 dal VO
km 39,2 dal VO
km 39,2 dal VO

Candidato della Città di Roma ai XXXI Giochi Olimpici e XII Giochi Paralimpici del 2020

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Cleaner and better transport in cities

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Thank you!

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