



Learning from CIVITAS:
From MIRACLES to the Sustainable Urban Mobility Plan and 20-20-20 objectives for Rome.

CiViTAS
 Cleaner and better transport in cities

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

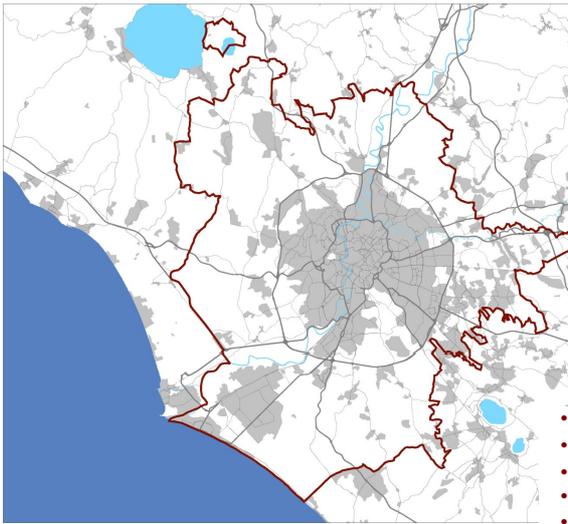
CIVITAS Forum
 18 October 2011
 Funchal (Portugal)

Fabio Nussio, Rome Mobility Agency, Italy



THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

The context of mobility in Rome



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)

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

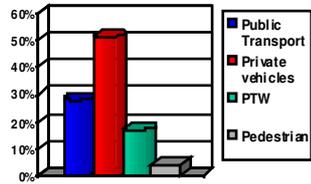


THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

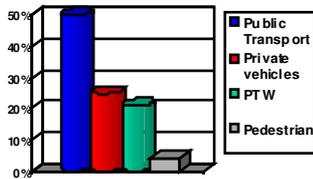
The Modal Shift and its impacts in Rome

CIVITAS

Metropolitan Area



Old Town – City Centre



Traffic Inducing :

- Energy disruption
- Congestion
- Pollution
- Safety risks

Impacting on:

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



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Trends towards urban sprawling

CIVITAS

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

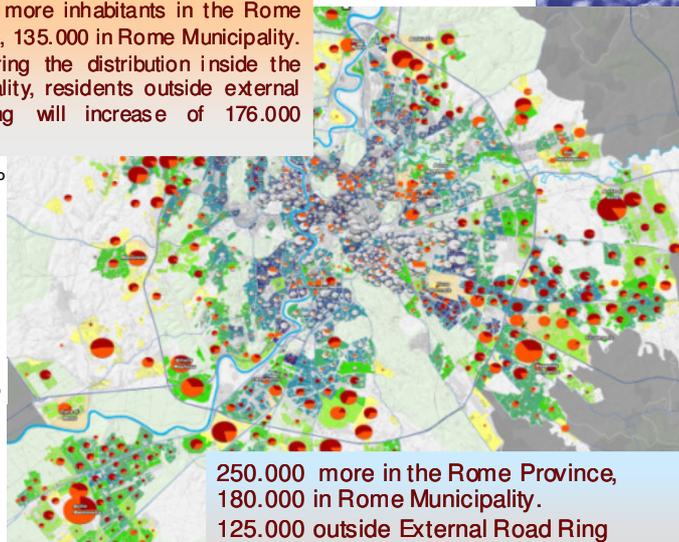
5.000

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



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Rome mobility renaissance

CIVITAS

- **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**

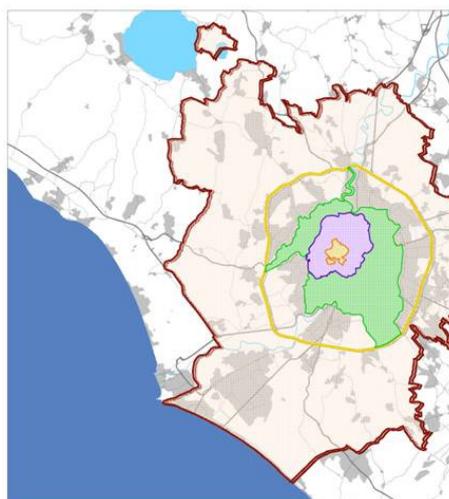


CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Managing mobility: restriction zones

CIVITAS



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)

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

CIVITAS

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 categories

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

CIVITAS

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

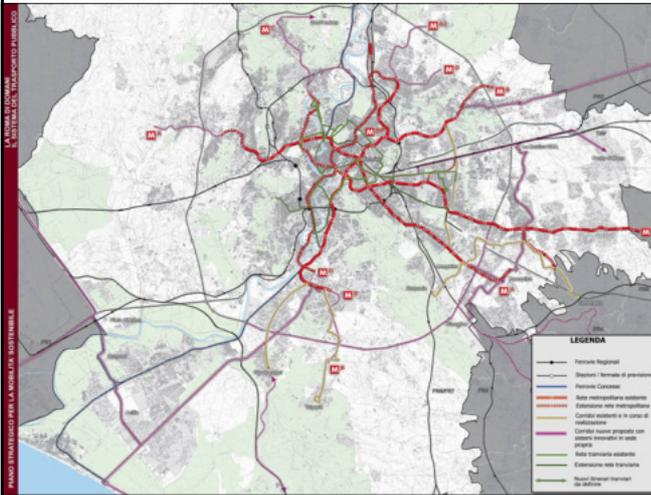
Cooperation Rome-Beijing (ITS-TAP & IBOCS project)

Cooperation Rome-Tongji

Cooperation with Indian MUD

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

Mass Rapid Transport System Expansion



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

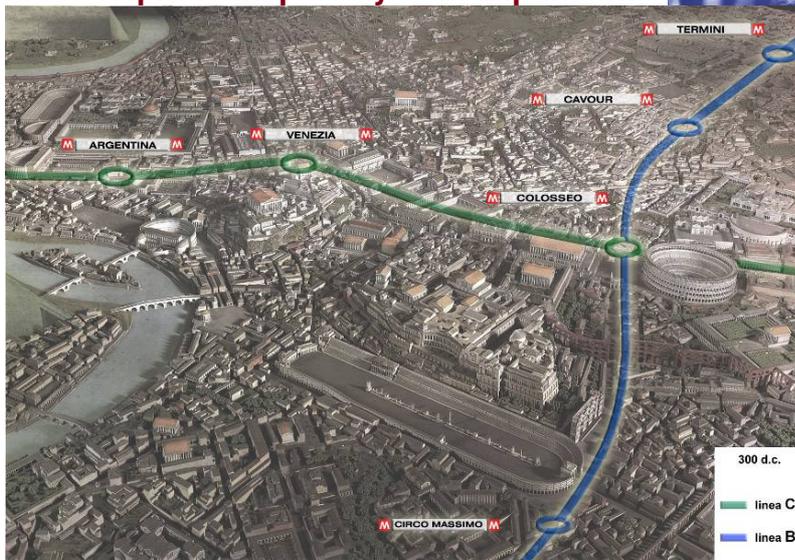
- Line B extension (on-going)
- Line C (on-going)
- Line D
- Extension of Lines A,B

Integration of urban railway system;

- New tramways
- Adjustment of Termini & Tiburtina exchange Nodes



Mass Rapid Transport System Expansion



300 d.c.

- linea C
- linea B



Sustainable Mobility Strategic Plan

CIVITAS

Mass Rapid Transport System Expansion



Piazza Venezia survey:
preserving our heritage!



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Sustainable Mobility Strategic Plan

CIVITAS

Mass Rapid Transport System Expansion: Reality in 2012!



Opens Jan. '12
up to
Conca D'Oro



Pantano-Centocelle: 2M2
Centocelle-Lodi: 10M2
Lodi-S. Giovanni: 12M3

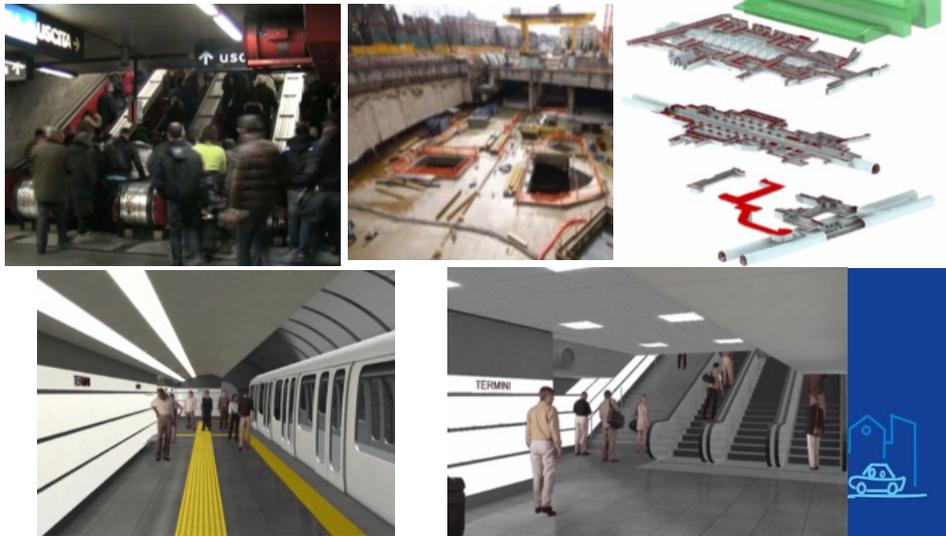
CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Sustainable Mobility Strategic Plan

CIVITAS

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



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

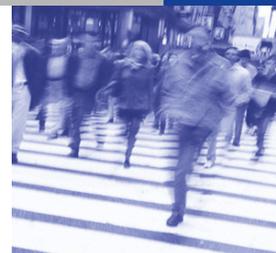
Sustainable Mobility Strategic Plan

CIVITAS

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**



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

CIVITAS

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

	ROMA	WINCHESTER	BCN	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	●	●	●	●




CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

CIVITAS

B 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

CIVITAS

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**

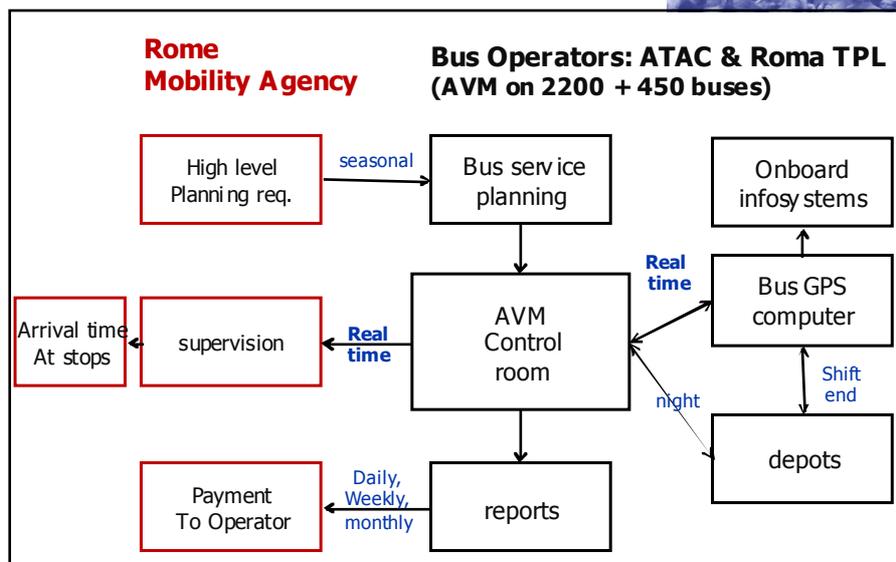


CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

C - REORGANISATION OF SURFACE PUBLIC TRANSPORT NETWORK

CIVITAS



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

From MIRACLES: ITS System in Rome

CIVITAS

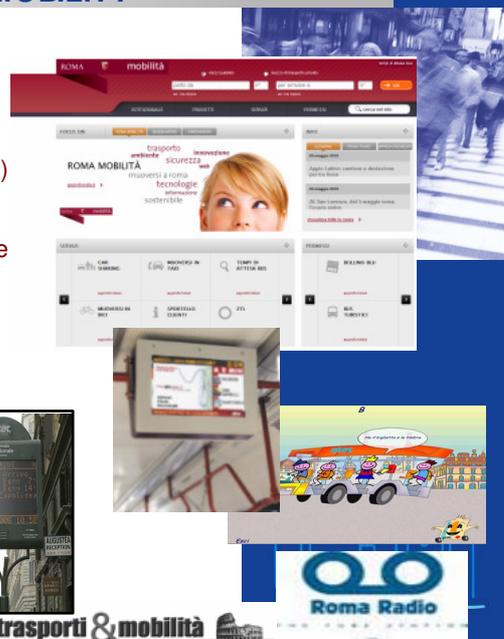


To... SERVICES FOR URBAN MOBILITY

CIVITAS

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**



Infomobility – ATAC Mobile

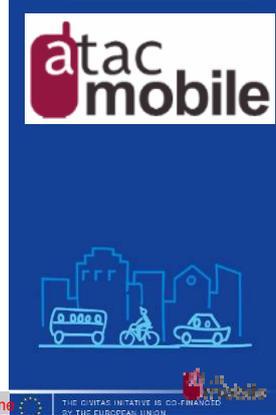
CIVITAS



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



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Infomobility – ATAC Mobile

CIVITAS

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)	
▲ 6: 2 stops (4')	☐
▲ 9: 3 stops (5')	☐
▲ 9: 8 stops (13')	☐
▲ 6: 12 stops (18')	☐
▲ 9: 20 stops (28')	☐
▲ 6: 20 stops (29')	☐
Show key	
▲	= Foldaway lifting device
☐	= Ticket vending machine
☐	= Air conditioning
☐	= Moby

atac mobile

Reload | Home

Bus waiting times

Monday 3 May - 6:37 PM

Enter the bus stop id*:

Go

Alternatively, enter the bus line number:

Go

* It is a number, usually consisting of 5 numbers

◀ Reload

◀ Back

◀ Bus waiting times

◀ Home



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

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
- Piazzale Labicano
- Viale Manzoni
- Via Emanuele Filiberto

Key

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

[Reload](#)
[Back](#)
[Traffic bulletin](#)
[Home](#)

atac mobile
Reload | Home

Travel times

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

- Emporio - Ara Pacis - Porta Pia
22 minutes

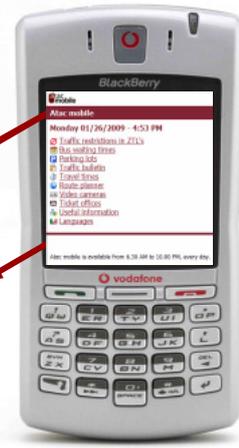
atac mobile
Reload | Home

Travel times

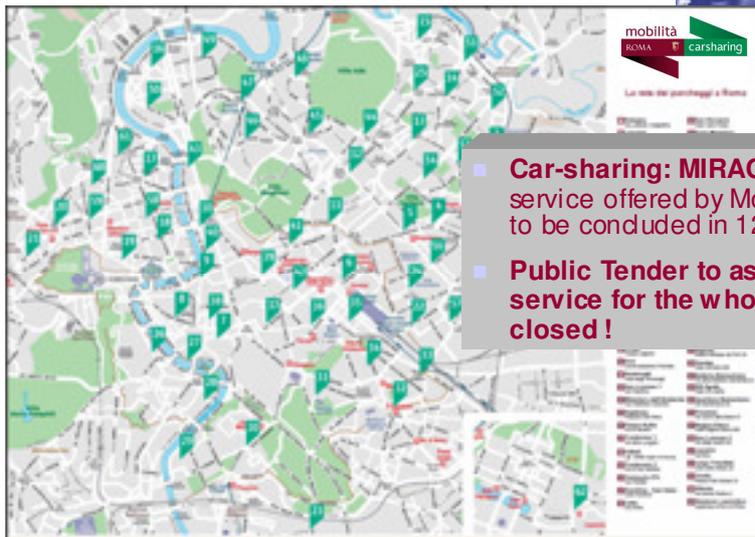
Monday 3 May - 6:30 PM
Please select a route to get travel times of its sections:

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

Travel times are updated every 5 minutes (Reload)



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

CIVITAS

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 De' Pretori	

Dal 1° Ottobre i varchi elettronici.
Un occhio di riguardo per la città.

www.sta.roma.it

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Short-term strategy for pedestrian OLD TOWN

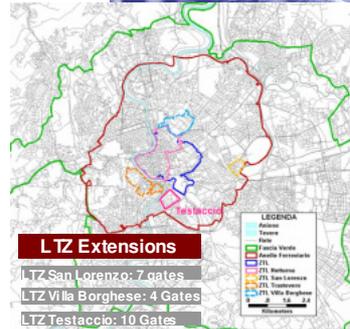
CIVITAS

Old Town is a full LTZ with electronic gates

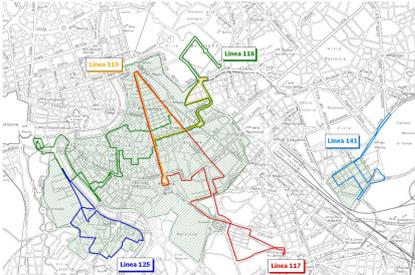
Old City Centre: 23 access gates



Trastevere: 12 access gates



City-centre is already provided by electric PT lines



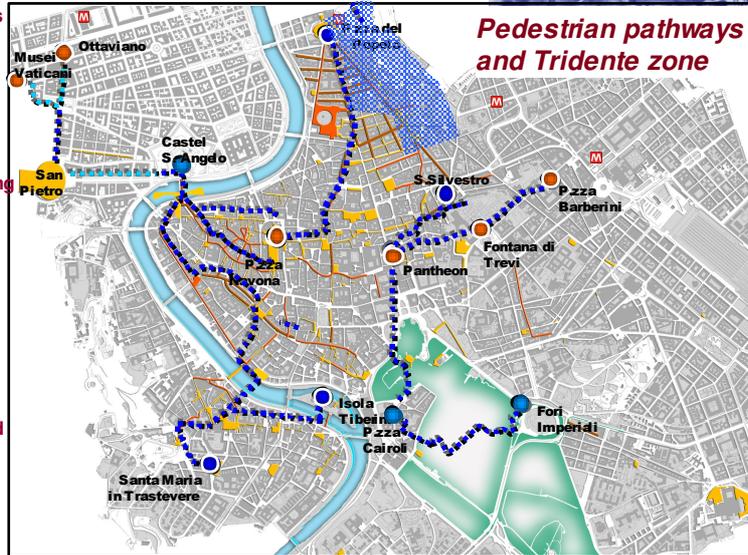
CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

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

CIVITAS

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



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

Mobility Scenario medium-short term (2020)

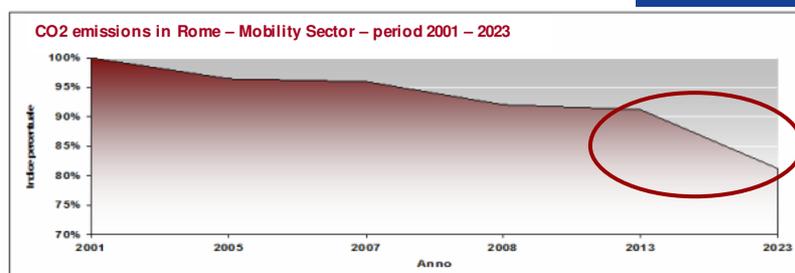
CIVITAS

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



CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

.... But also on air quality:

Trends in pollutant emissions 2001/2023

CO emissions in Rome – Mobility Sector – period 2001 – 2023

Anno	Indice percentuale
2001	100%
2005	~70%
2007	~50%
2008	~45%
2013	~40%
2023	~30%

PM10 emissions in Rome – Mobility Sector – period 2001 – 2023

Anno	Indice percentuale
2001	100%
2005	~95%
2007	~85%
2008	~80%
2013	~70%
2023	~65%

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

The Olympic City – Rome 2020

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

CIVITAS Forum • 17-19 October 2011 • Funchal • Fabio Nussio, Mobility Agency – City of Rome

THE CIVITAS INITIATIVE IS CO-FINANCED BY THE EUROPEAN UNION

CIVITAS

CARTINA A - Concorso generale dei XXXI Giochi Olimpici e Paralimpici

CIVITAS Forum • 17-19 October 2011 • Funchal • **Fabio Nussio, Mobility Agency – City of Rome**

Thank you!

For further information, please contact:

Ing. Fabio Nussio, ing. Chiara Di Majo
Mobility Agency of the City of Rome
fabio.nussio@agenziamobilita.roma.it,
chiara.dimajo@agenziamobilita.roma.it



CIVITAS
Cleaner and better transport in cities



THE CIVITAS INITIATIVE
IS CO-FINANCED BY THE
EUROPEAN UNION

CIVITAS Forum • 17-19 October 2011 • Funchal • **Fabio Nussio, Mobility Agency – City of Rome**