



# Bologna

**Municipal area: 140,85 km<sup>2</sup>**

**Resident population:  
about 372.500**

**Metropolitan area:  
nearly 600,000  
residents**



## **City profile**

- **Main town of the Emilia Romagna Region**
- **Centre of the most ancient University of Europe (XI century)**
- **Important interchange city in Italian national transport networks as it represents an obliged passage between North and South Italy**
- **Fair Quarter and an Conferences Palace**
- **Many receptive structures and industrial companies of primary importance in the field of mechanics, agriculture and food-transformation**
- **Served by an international airport (Guglielmo Marconi Airport) which processes over 3,5 million passengers a year and by a very important railway station**

# ATC SpA – The transport company

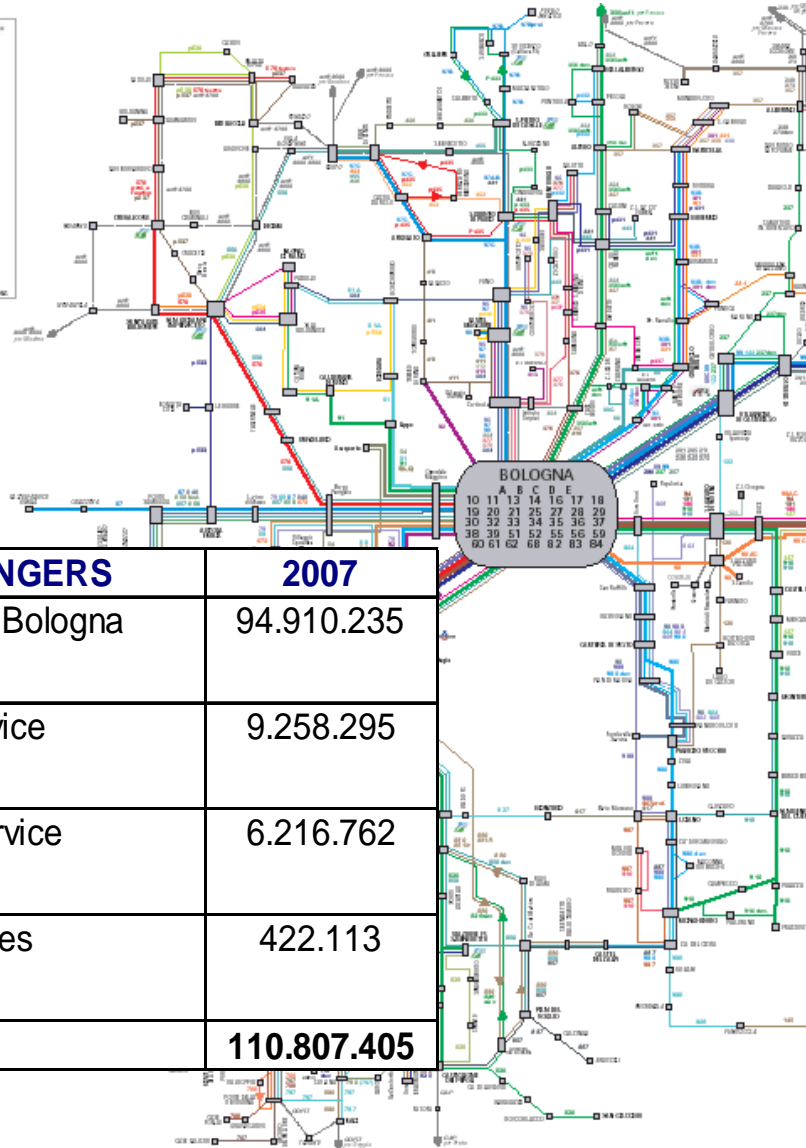
## Shareholders:

- Bologna Municipality 62%
- Province of Bologna 38%



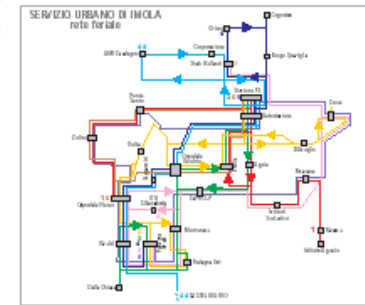
- Urban & extraurban service on all Bologna provincial area
- Served Municipalities 60
- About 36.400.000 Vehicle/Kms per year
- About 111 million passengers
- 51.489 season tickets holders
- 985 Vehicles
- 3 depots
- 1.865 employees (about 1200 bus drivers)
- Parking management (24.000 spaces)
- Turnover: about 160.000.000 euro

# ATC public transport network and service



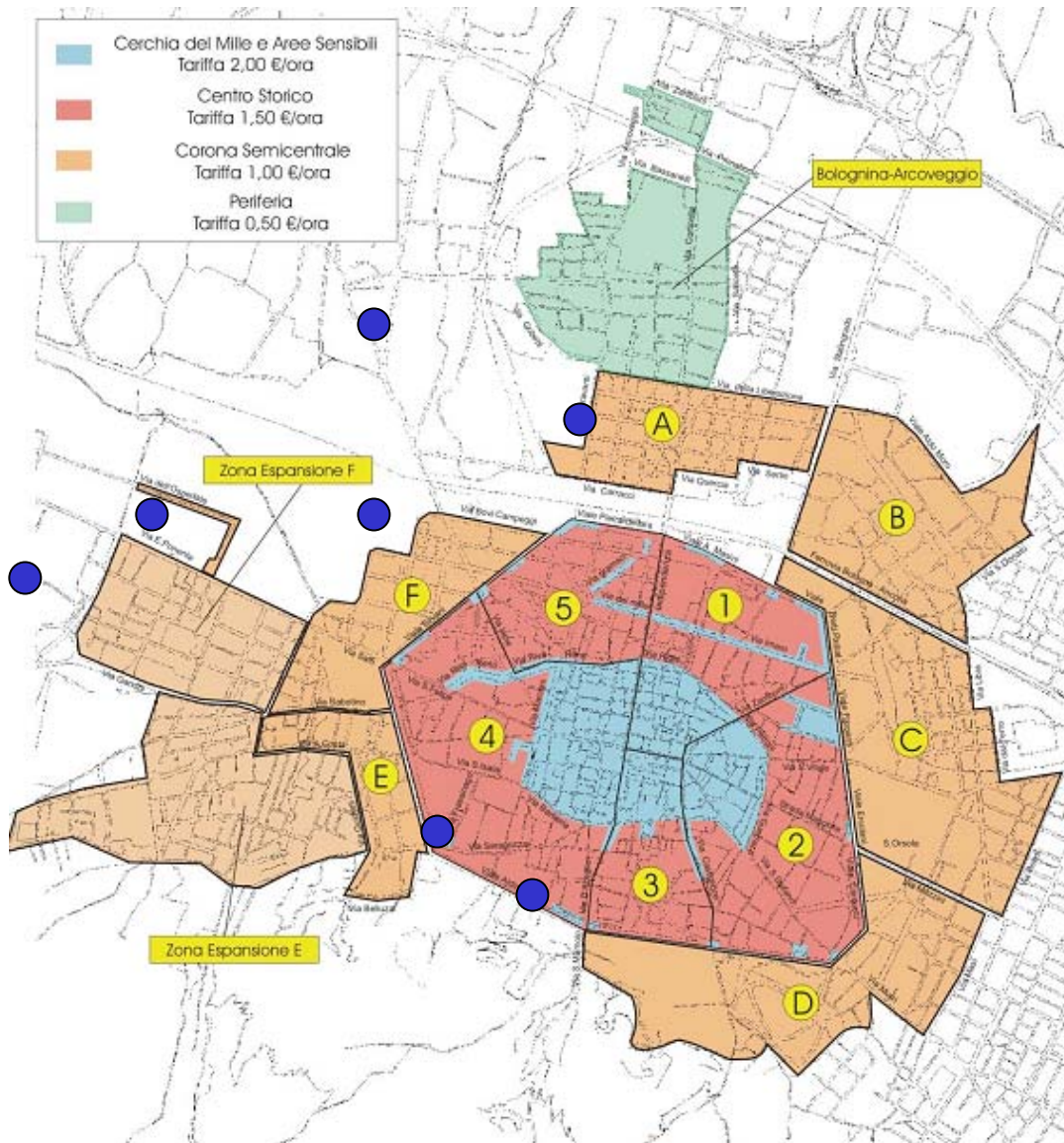
<b>KM</b>	<b>2007</b>
Urban service Bologna	18.090.577
Suburban service	6.737.743
Extraurban service	11.308.966
Special services	271.592
<b>TOTAL</b>	<b>36.408.878</b>

<b>PASSENGERS</b>	<b>2007</b>
Urban service Bologna	94.910.235
Suburban service	9.258.295
Extraurban service	6.216.762
Special services	422.113
<b>TOTAL</b>	<b>110.807.405</b>





# ATC – Parking management



- Management of on street parking **45.457 car/motorbike spaces**, about **29.000** for fee

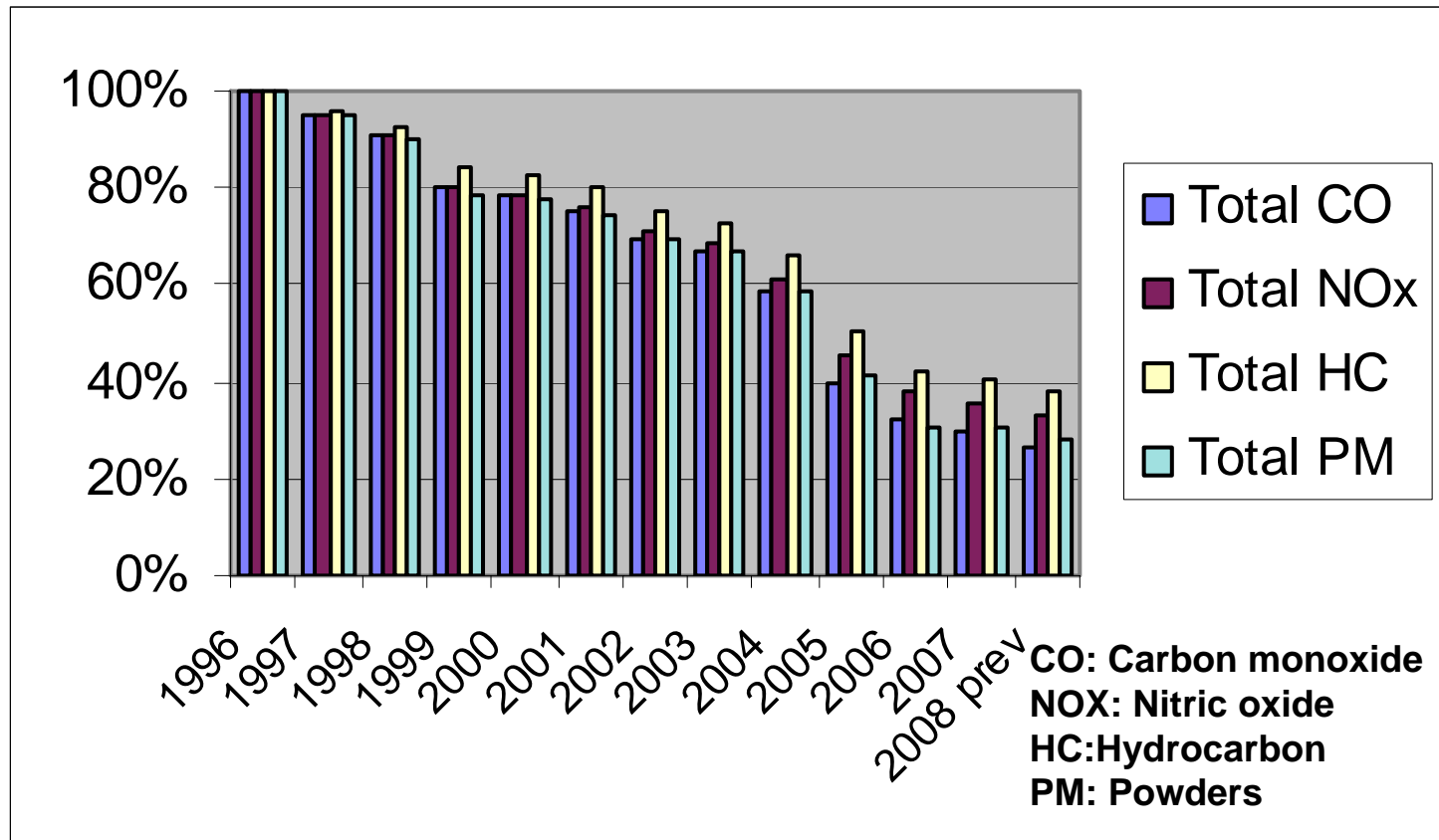
- Management of **7 Parking areas** ●

# ATC buses

<b>FEEDING SYSTEM</b>	<b>31/08/2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
<b>Vehicles pre Euro standard</b>	170	192	216	243	398
<b>Euro 1 or 2</b>	152	207	210	230	324
<b>Euro 3 + CRT</b>	391	340	339	329	128
<b>Euro 5</b>	6	0	0	0	0
<b>CNG buses</b>	141	141	113	102	62
<b>Hybrid buses</b>	39	39	39	39	28
<b>Electric buses+Trolley buses</b>	60	64	64	64	64
<b>Total</b>	<b>959</b>	<b>983</b>	<b>981</b>	<b>1007</b>	<b>1004</b>

<b>2008 - 2004</b>
-228
-172
263
6
79
11
-4

# ATC fleet emissions



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	prev. 2008
<b>Total CO</b>	100%	95%	91%	80%	78%	75%	70%	67%	59%	39%	32%	30%	26%
<b>Total NOx</b>	100%	95%	91%	80%	79%	76%	71%	68%	61%	45%	38%	35%	33%
<b>Total HC</b>	100%	96%	93%	84%	83%	80%	75%	73%	66%	51%	42%	40%	38%
<b>Total PM</b>	100%	95%	90%	79%	77%	69%	79%	67%	59%	41%	31%	31%	28%

In Bologna, the **Public Transport Company ATC** gave birth to the **car sharing service**.

In order to use the service, you need to sign a contract with ATC and pay an annual fee.

The membership card and the personal code enable you to book a car, by calling a national call centre or connecting to the Internet.

You then go to get the car in the nearest car parking and return it back, when not needed anymore.

You can book the car, just few minutes before you use it. If the car is not available, another car or another car parking are suggested.

The costs change according to the car in use and include all the costs, such as VAT, road tax and petrol.

The invoice is sent monthly to the customer.



# Vehicle on board system

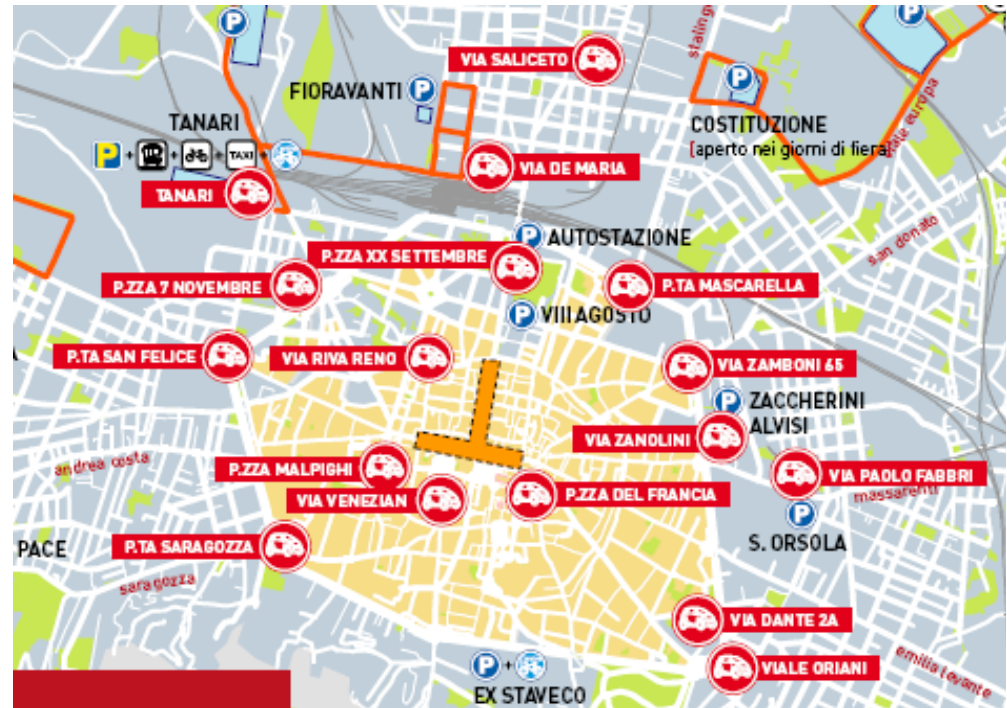


## How it works:

- The on board computer is connected to the vehicle electrical equipment and works also as antitheft device.
- The card reader allows to open the door from outside the vehicle with the contactless card given to each customer at the service subscription.
- After the PIN has been digitized on the on board computer, the vehicle is ready to start.
- The vehicle is connected via GSM to the server centre and send data on its use and receives booking data. GPS allows to localize the vehicle and collect km run.
- After the use the vehicle doors are closed through the contactless card.

# Car sharing in Bologna

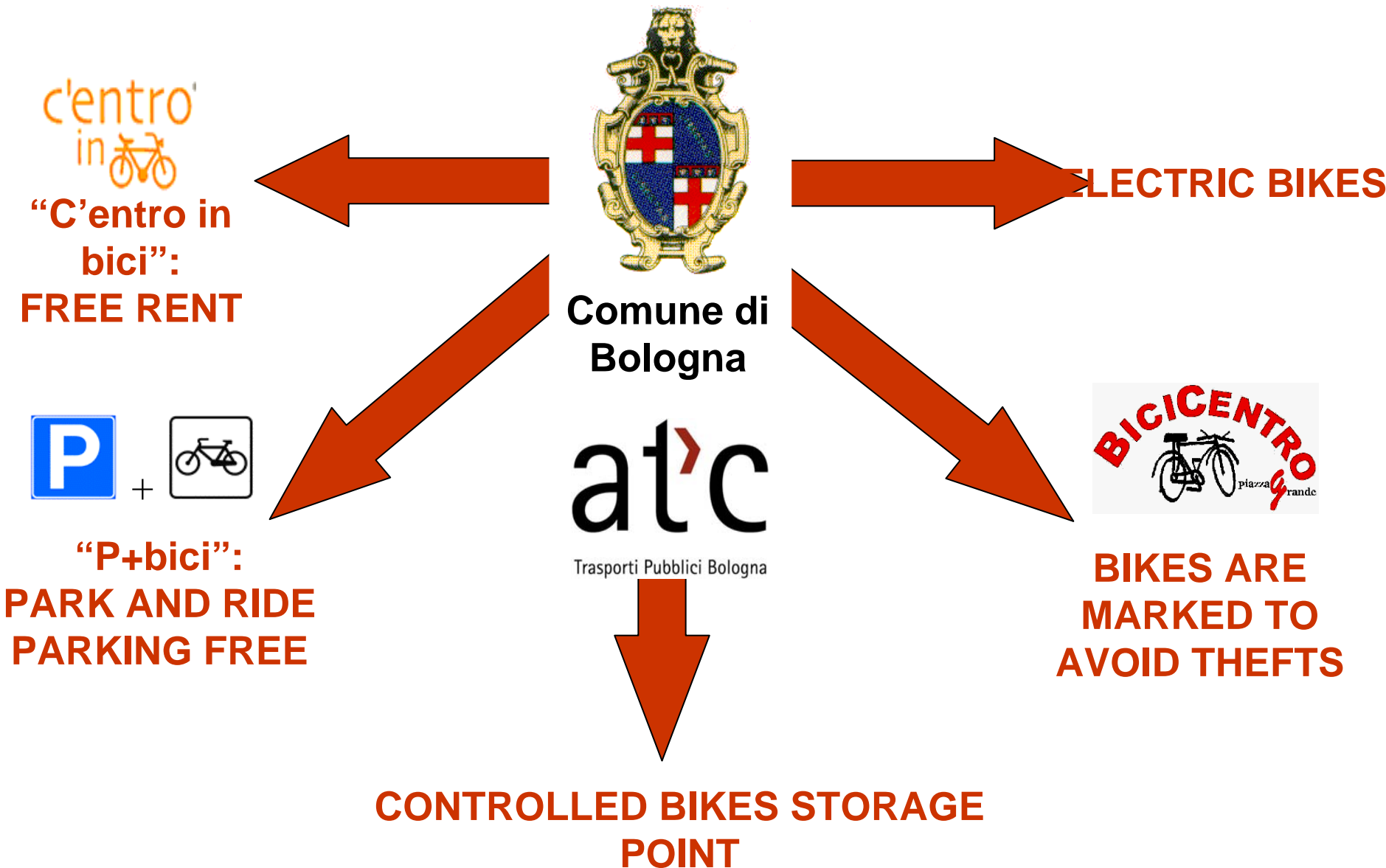
- 17 car sharing locations in Bologna city
- 8 locations in Bologna Province
- 40 vehicles
- 450.000 km/year
- 1.100 users



## Direct advantages for service users

- Flexibility: only when you need a car you book and take it.
- Reduction of costs for car use: car sharing service is always convenient for people using the car up to 10.000 km/year
- You have the possibility to choose among different car typologies depending on your needs
- No time/money waste for insurance, maintenance, owning tax

# BIKERS' FACILITIES





## **“C’entro in bici”: BIKES FREE RENT**

### **WHERE:**

- **20** bikes in Piazza XX Settembre (in front of the Bus Station)
- **16** bikes in Via IV Novembre (in front of the “ATCittà Point”)
- **12** bikes in the area of Parking Tanari
- **12** bikes in the area of Parking Staveco
- **8** bikes in University zone

**Next plans: 60 bikes in many locations in town**

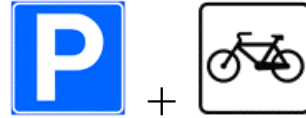
**HOW IT WORKS:** It is a service of “public bikes” with automatic pickup.  
The pre-registered user receives a key with a personal code to lock and unlock the bike from the rack.

**HOW MUCH IT COSTS:** Free  
(key released on bail).



**Note:** ATC manages this service on behalf of the Municipality.

## “P+bici”: PARK AND RIDE (PARKING FREE)



**WHERE:** The users of four PARKING areas can leave their cars without pay the pause and can pickup their bike.

**HOW IT WORKS:** The user can leave his bike in a reserved rack .

**HOW MUCH IT COSTS:** Free

**Note:** A free rental of bikes is guaranteed for the customers of Staveco and Zaccherini Alvisi Parking areas.



## CONTROLLED BIKES STORAGE PO



**WHERE:** ATC Point in the city center

- HOW IT WORKS:**
- The storage point is surveilled by closed-circuit video-camera. It is open every day from 9 a.m. to 7.30 p.m. (40 places);
  - Information desk;
  - Light maintenance service available.

**HOW MUCH IT COSTS:** daily 0,50 €,  
monthly 8,00 €.



## “BIKES IDENTIFICATION CODE TO AVOID THEFTS”

**WHERE:** Tanari Parking



### HOW IT WORKS:

The parking staff marks on the bike an identification code and/or a digital system with the owner's generalities. The service is available a day to week.

### HOW MUCH IT COSTS:

5,00 € for identification code service  
25,00 € for digital microchip system service.

## ELECTRIC BIKES

The Enviroment Ministry finances the 20% of the Electric Bikes Project.

Plans:

- 10 bikes of the Municipality

### ELECTRIC BIKES



Rent bikes service in the "*parking and ride*"

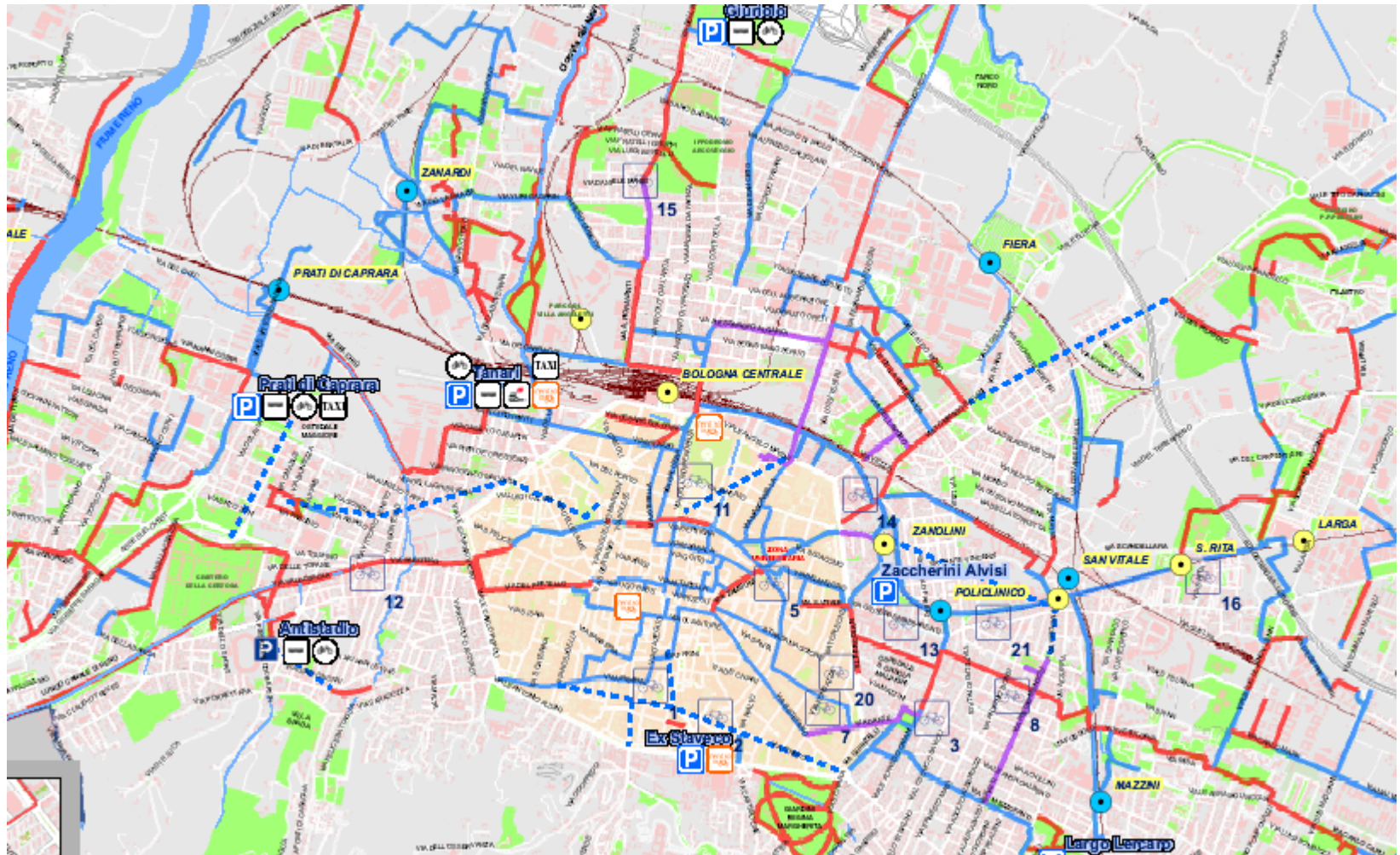
parking :

- Tanari 8 bikes





# Bicycle paths



Existing paths

Planned paths

# Bicycle paths



**Existing bicycle paths:** 92 km

**Main paths are located on radial roads:**

- West radial (City centre - Casalecchio);
- East radial (City centre - San Lazzaro);
- North radial (City centre - Corticella; City centre - Arcoveggio);
- Radial Fair District (City centre – Fair District - Parco Nord).



**Planned new bicycle paths:** 80 km

## **Relevance of MIDAS measures:**

In Bologna the measures identified in MIDAS will contribute to:

- create awareness among all city stakeholders to make mobility sustainable choices
- inform and address citizens towards alternative transport modes (car-sharing, car-pooling, bike-sharing, public transport)
- facilitate integration between private and public transport

## User needs/before survey:

ATC together with the Municipality realized at the end of 2006 a survey on user needs.

The relevant aspects of the survey were:

- collection of information on mobility habits and needs of the citizens.
- the perception of the services already implemented (car-sharing, bicycles services and paths, public bus transport, park+bus): do they know the services?, how do they use them?, why don't they use them?)

The questionnaire has been done as phone survey: during the call we asked people the availability to be contacted again for a focus group on mobility habits and needs of the family unit.

## User needs/before survey:

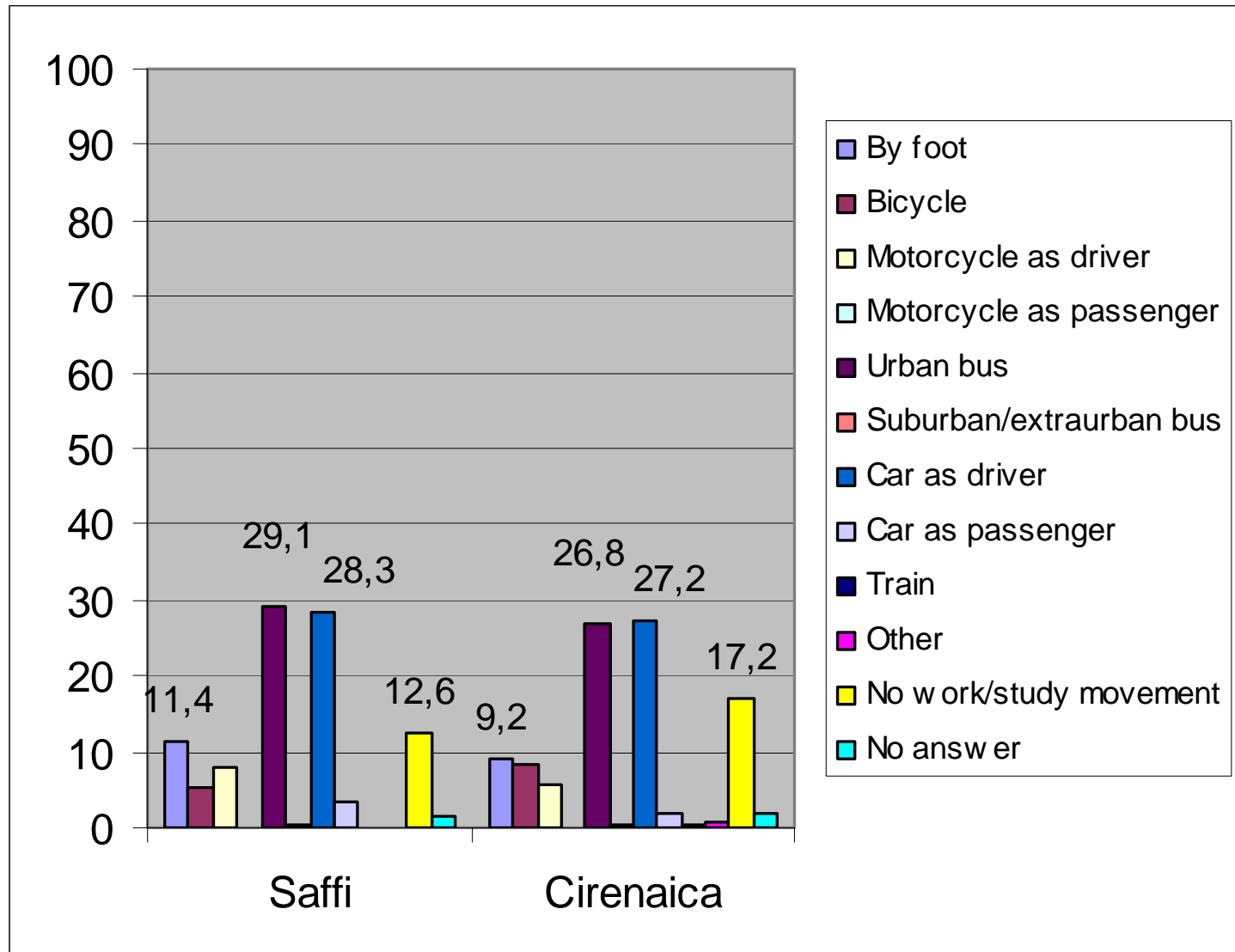
The survey was focused on people living in two different areas of Bologna city :

- an area (Saffi) in the West side of Bologna inside Via Saffi – Via Marzabotto – Via Sabotino – Viale Vicini. In this area car-sharing services have been already implemented, a long cycle path have been realized, public transport service is very effective
- an area in the East side of Bologna (Cirenaica) inside Via Paolo Fabbri – Via Massarenti – Via Rimesse – Via Mondo where “sustainable” services are at this moment less implemented.

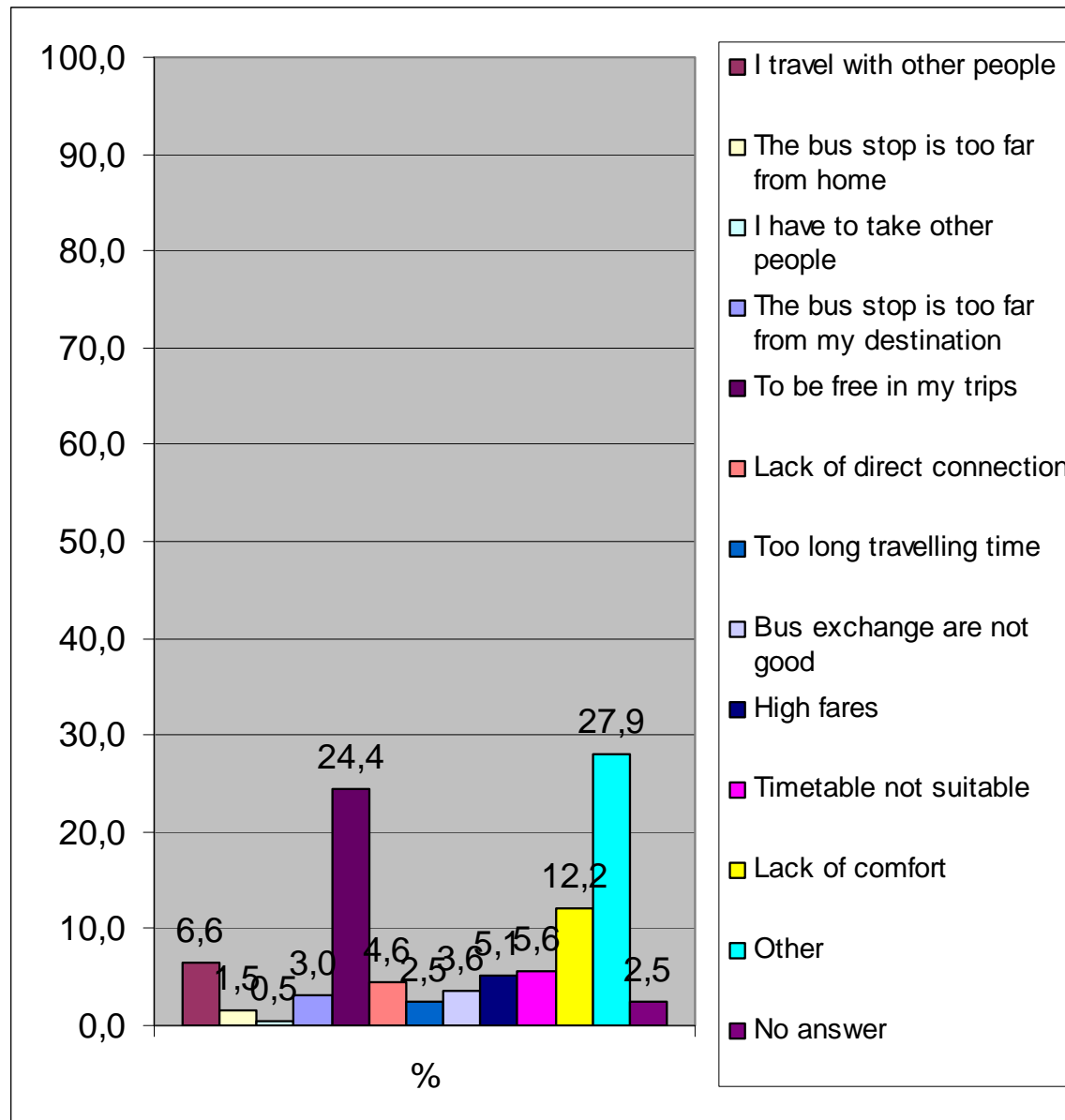
This choice allowed also to compare if the awareness concerning alternative mobility services is considerably different in the two areas.



# Which transport mode do you use for your everyday trips?



# Why don't you use public transport for your trips?



## Main result of survey and focus groups

### “PUBLIC TRANSPORT”

The answers indicate that 28% of people use public transport for everyday trips.

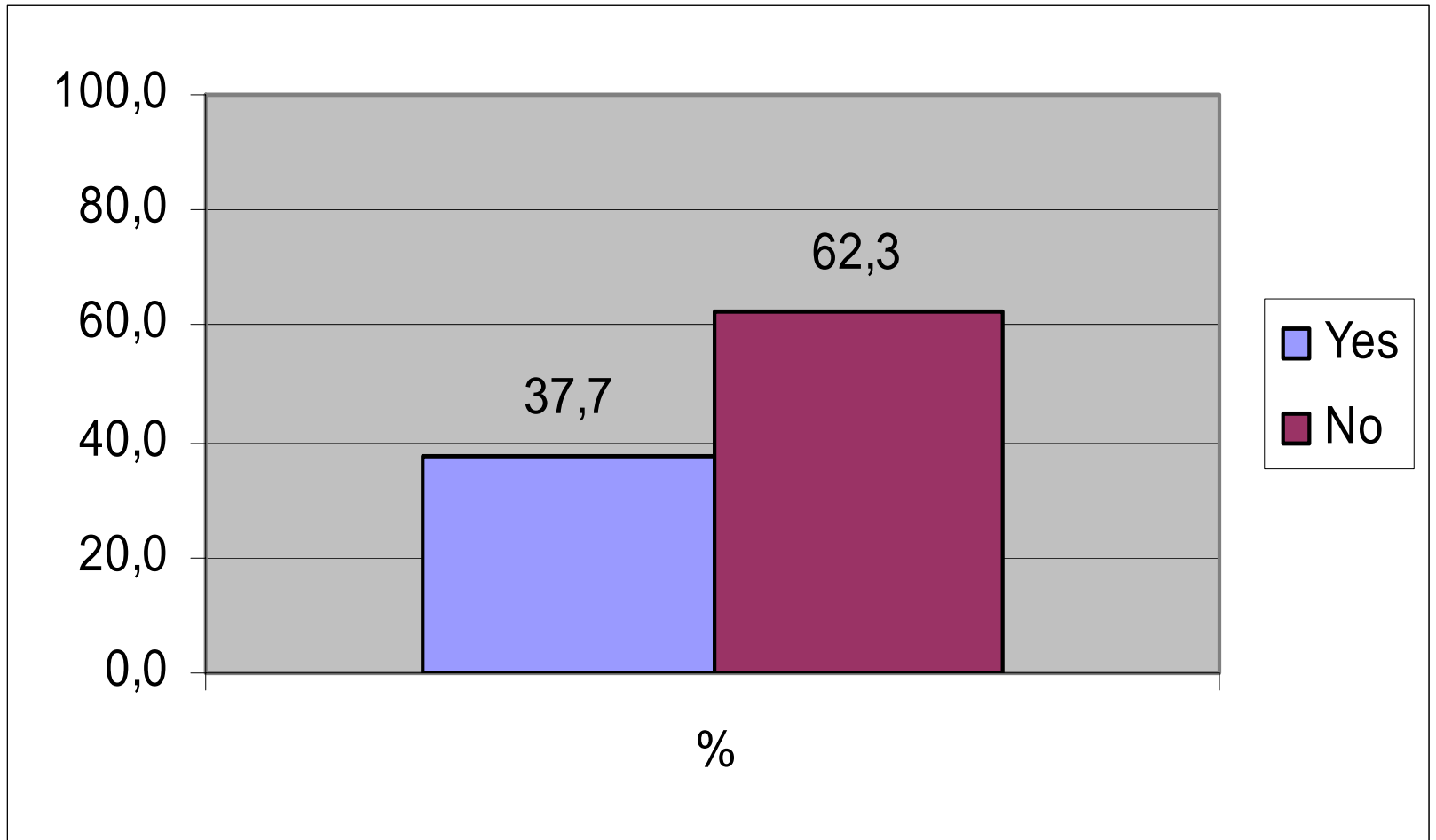
Analysing remaining people that do not use public transport it seems that:

- the main reason is the need of a complete flexibility in trips that can only be guaranteed by private vehicles.
- moreover there are not other substantial reasons for which people do not use public transport. About 28% of answers are “Other” which is composed by a spread of not relevant reasons

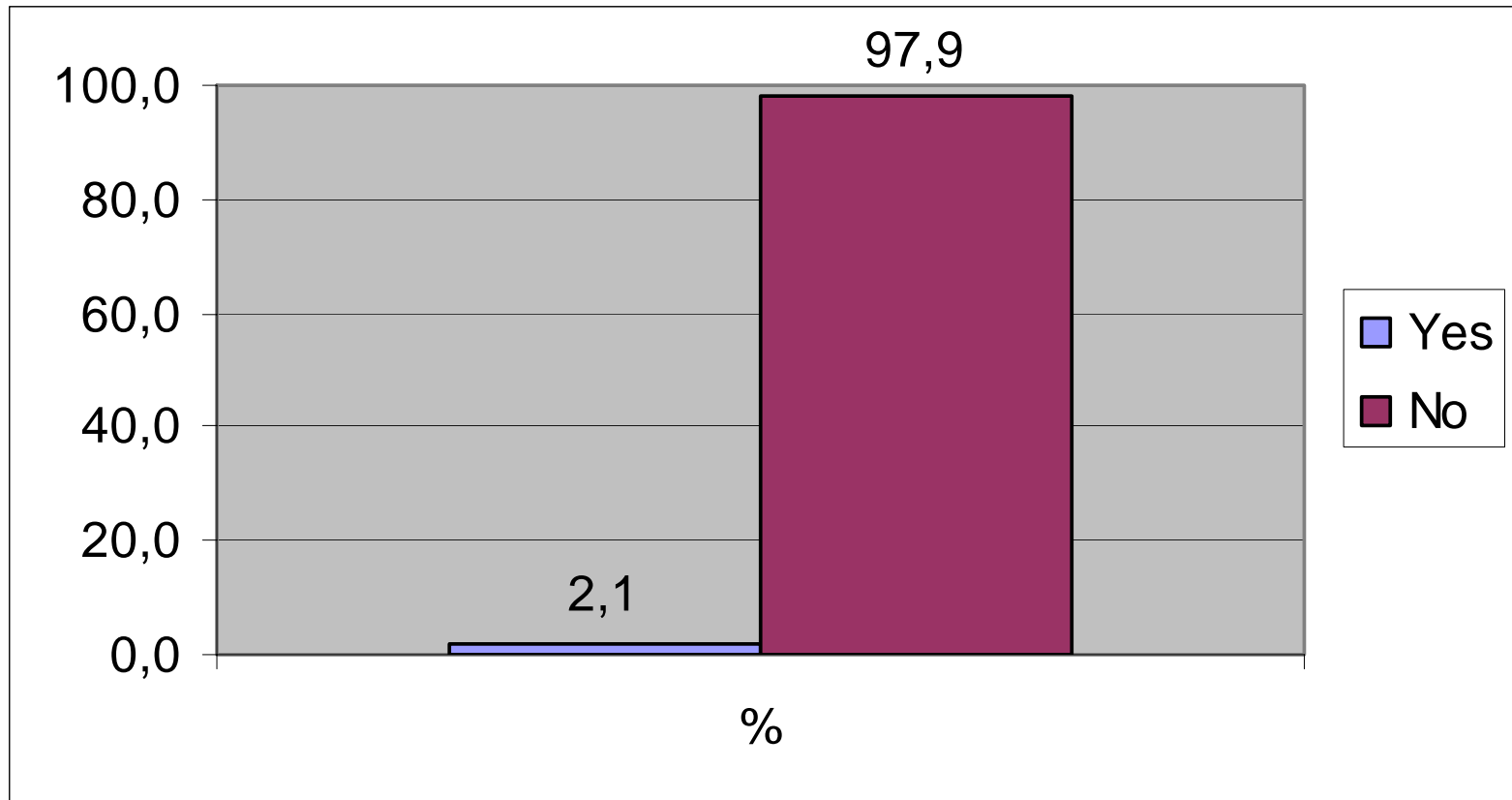
In spite of this Mobility Manager activities reached significant results.

**Deduction:** It is necessary to encourage promotional agreements with companies and institutions and at the same time it is needed the introduction of more restrictive circulation measures.

## Do you know car-sharing service?:

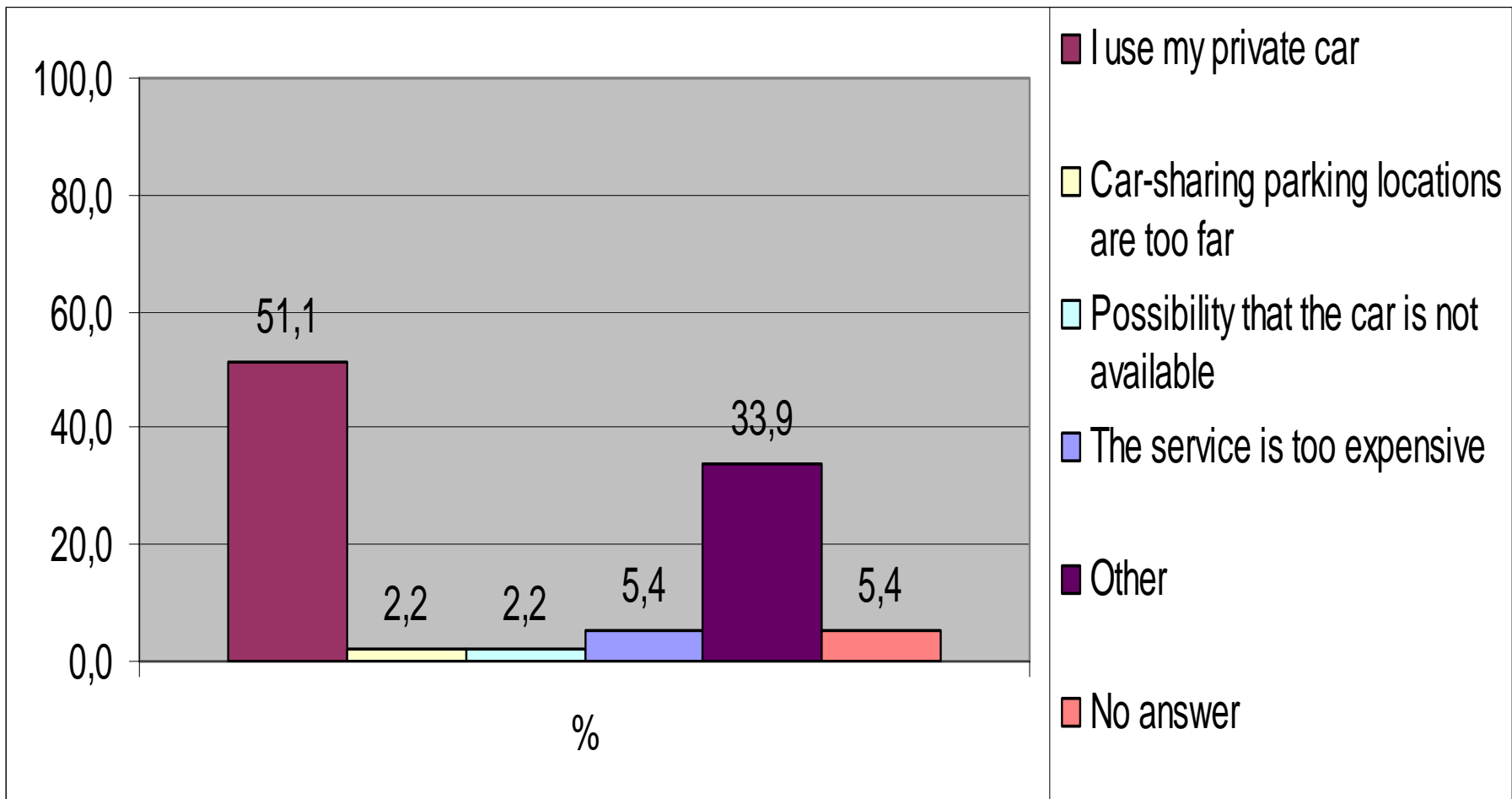


## Do you use car sharing service?:

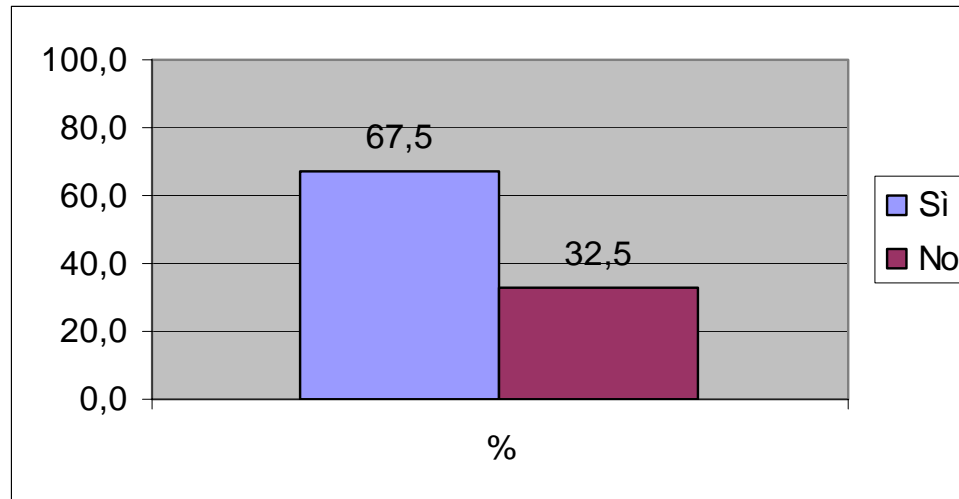




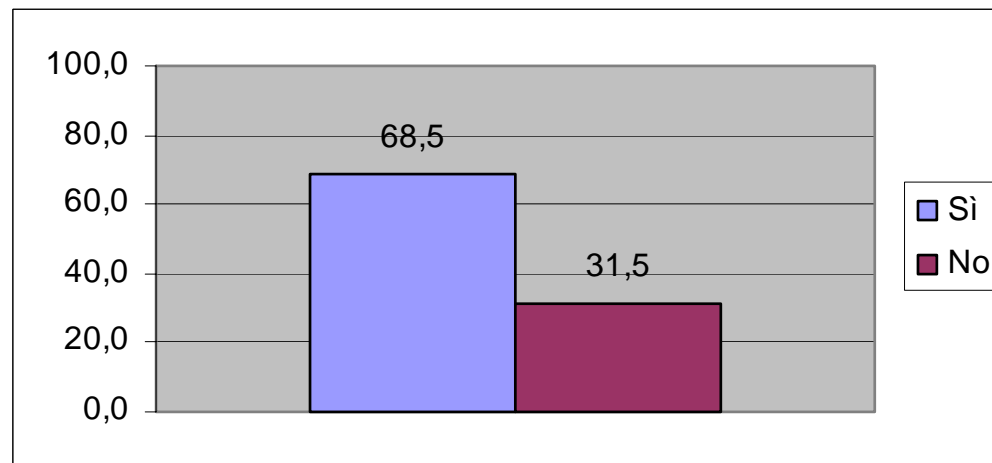
# What is the reason why you don't use car-sharing service?



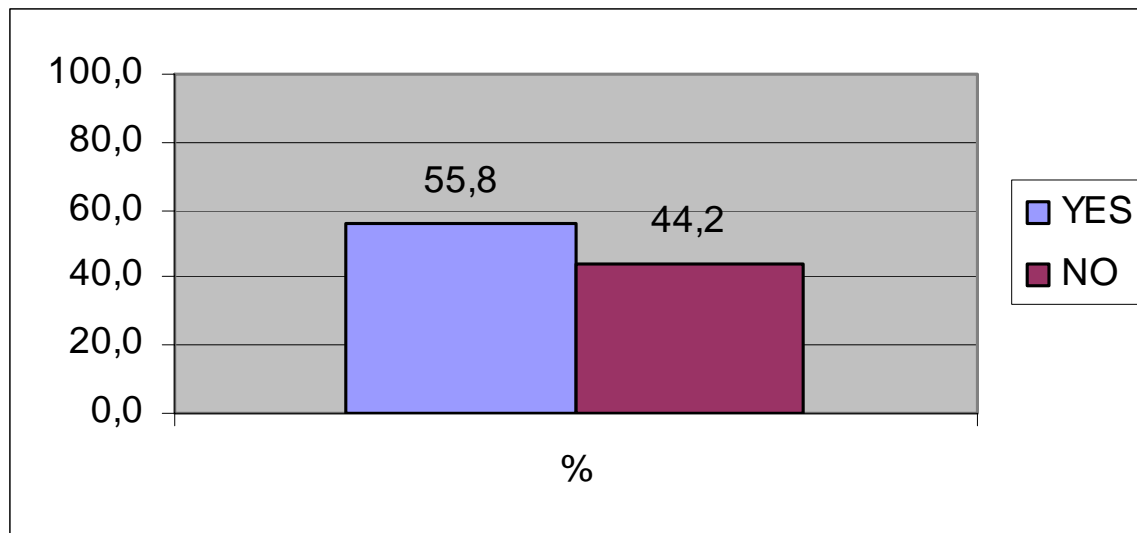
## Do you know bicycle paths in your living area?



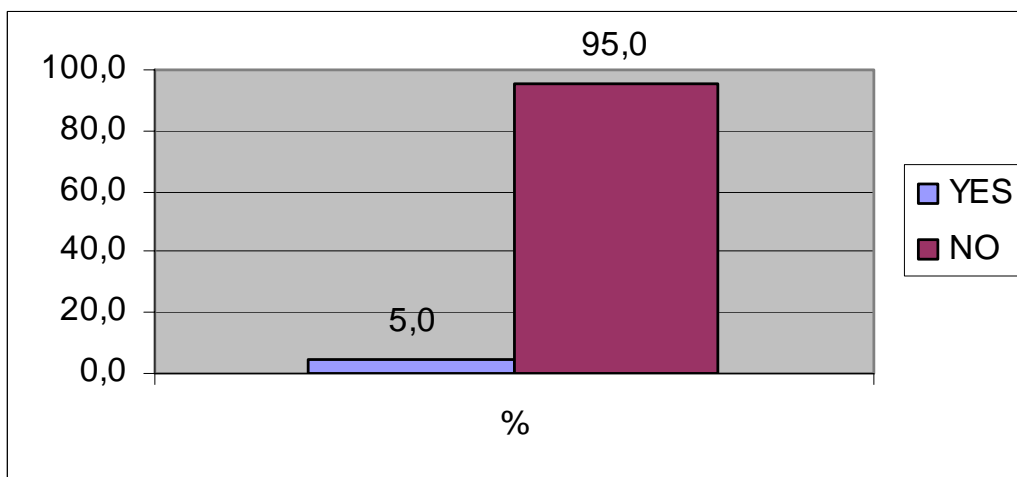
## Have you ever used them?



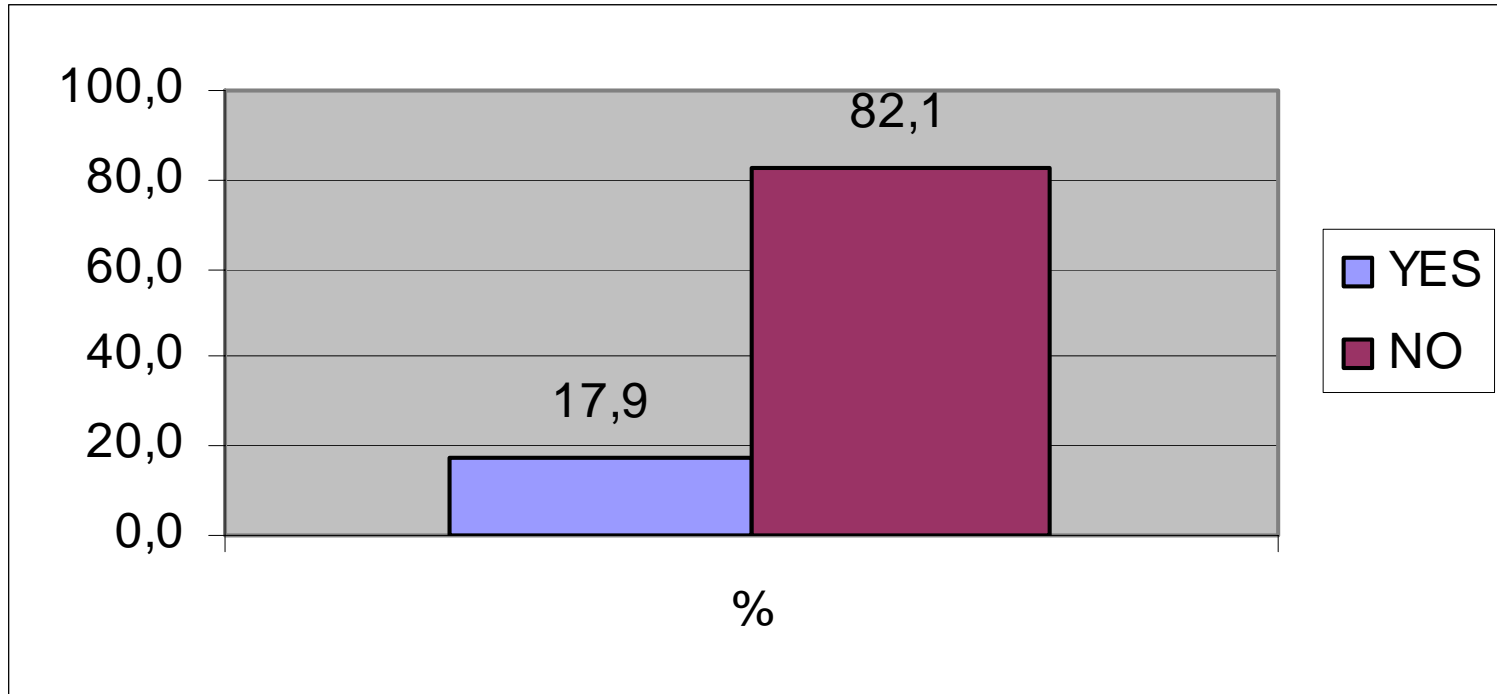
# Do you know the service “C’entro in bici”: BIKES FREE RENT?



## Have you ever used it?



**Do you know the services to support the use of bicycles  
(controlled bike storage point, maintenance service, bike  
identification code, park+bike)?**



## Focus groups

During the telephone survey we asked people the availability to be contacted again for a focus group.

Starting from the results of the survey we realized two focus groups with 10/12 people each concentrating the discussion on:

- car sharing service
- bicycle paths and services

## Main result of survey and focus groups

It appears that there is not a significant difference in knowledge and use of alternative mobility systems in the two different areas of the city we selected even though level of services available are quite different

**Deduction:** The simple offer of alternative mobility services is not sufficient to assure the use of them

**MIDAS Actions:** Awareness campaign on alternative mobility services



## **Main result of survey and focus groups**

### **“CAR SHARING”**

The interviewed citizens confuse information concerning car-sharing service. During the phone survey they told they know the system but going in deep during the focus group we realized that they have wrong perception of the service:

- at the beginning of the focus groups they said that the service is expensive and it costs like or even more than a taxi

- they do not understand when, to which people and why it can be useful

After the discussion people change their opinion and agreed that:

- the service is not expensive;
- It is very useful for people that do not use the car every day;
- it gives the possibility to have a car only when needed without problems and costs related to maintenance insurance and taxes

**Deductions:** The correct information did not reach citizens

**MIDAS Actions:** Promotional campaign that will put on evidence strenght points of the service

## **Main result of survey and focus groups**

### **“BICYCLES PATH AND SERVICES”**

As concerns bicycle paths, the focus groups put on evidence that one of the main obstacles in using bicycle is the lack of safety and the fragmentation of paths.

**Deductions:** Need to review the planning and the realization of the infrastructures with particular attention to safety aspects.

**MIDAS Actions:** Realization of a specific study in order to develop the existing bike path network and review the protection and signalling of the paths (road signs, speed bumps, protection kerb,...).

# Bologna

## MIDAS specific actions





# MIDAS actions: Information campaign



In coincidence with the European Sustainable Mobility Week from 16<sup>th</sup> to 23<sup>rd</sup> September 2007, ATC started the information campaign focused on:

- ✿ car sharing service
- ✿ bicycle use (bicycle paths, bike hire service, bicycle facilities)
- ✿ public transport service.



# MIDAS actions: Information campaign



A stand was placed in Bologna main square for the whole week: personnel from ATC and Bologna Municipality was at disposal for information and distributed info material.



One vehicle of the car sharing fleet was at disposal for demonstration as well as electric bicycles.



**The campaign now is going on at ATCittà the info point for sustainable mobility services and ticket sale point for public transport.**





# MIDAS actions: Information campaign



Con il contributo dell'Unione Europea

### Da settembre quattro nuovi parcheggi CarAtc

A partire dalla metà di settembre, a Bologna, 4 nuove piazzole di sosta del servizio di Car Sharing vanno ad aggiungersi a quelle già presenti, portando a 16 i punti di prelievo delle vetture in città. Si amplia così la possibilità di fruire di questo comodo servizio di mobilità alternativa ed intelligente, in grado di garantire la comodità dell'auto privata negli spostamenti individuali, ma a costi inferiori, specie in caso di spostamenti brevi o occasionali.

Le nuove postazioni CarAtc sono in:

- Piazza Malpighi (prima della fermata bus)



i Comuni dell'hinterland (Casalecchio di Reno, Imola, Persiceto, Anzola dell'Emilia e San Lazzaro Sestri) e nei Comuni della Provincia in cui è attivo il servizio di Car Sharing.

Per l'utilizzo dell'auto si pagano: bollo, assicurazione RCA, tasse di possesso e di circolazione.

Per il tempo necessario, offre la possibilità di inquilinare l'auto in circolazione e aumenta il proprio patrimonio di benefici e vantaggi sia in termini di costi che di servizi.

Per i pubblici, non pagano la sosta in città, hanno diritto alla "T" e possono sempre circolare nei giorni di traffico limitato.

Per le condizioni agevolate sui costi di noleggio, nei Comuni della Provincia in cui è attivo il servizio di Car Sharing, mobilità sostenibile ed eco-compatibile di questo servizio pubblico e del car sharing, per i titolari di un'auto a quota annuale scontata del 50%.

Il Car Sharing dopo aver rottamato la propria auto, può sottoscrivere il servizio di Car Sharing e rottamare l'auto (o la quota dell'incentivo messo a disposizione dal Comune) entro un periodo di 2 anni. Restano a carico del Comune i costi di gestione del servizio.

## DIAMO RESPIRO ALLA CITTÀ



**2007-2008 [GUIDA]**



**BICI BO<sub>2</sub>**

**I PROVVEDIMENTI PER LA CIRCOLAZIONE E LA QUALITÀ DELL'ARIA**

## Info material:

- ✳ cycling path and bicycle services
- ✳ mobility management actions and traffic restrictions
- ✳ info on new car sharing locations



# MIDAS actions: Conference 17<sup>th</sup> September 2007

**lunedì 17 settembre**

## PRESENTAZIONE DELLE AZIONI DEL NUOVO PGTU DI BOLOGNA

ore 17,00 Urban Center Bologna, Voltone del Podestà 1/l

**Incontro pubblico**  
distribuzione materiale informativo

Il convegno si svolge nell'ambito del progetto MIDAS con il contributo dell'Unione Europea - Intelligent Energy Europe Programme. Il progetto promuove attività di sensibilizzazione dei cittadini e delle istituzioni per incentivare la diffusione ed il maggior utilizzo di servizi e mezzi di trasporto a basso impatto inquinante con l'obiettivo di una mobilità sostenibile.

**Intelligent Energy Europe**

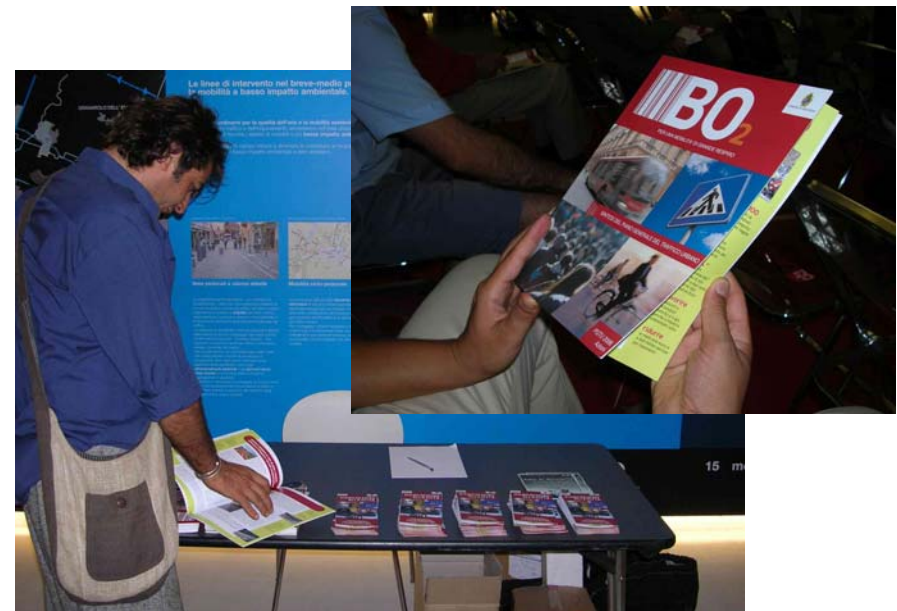
**MIDAS**

**BO**

**UN TRASPORTO**

**giovedì 21 settembre**

The public conference took place on 17<sup>th</sup> September 2007 involving all local and regional stakeholder, to debate on sustainable mobility issues in Bologna in the context of the General Plan for Mobility.



## MIDAS actions: Conference 17<sup>th</sup> September 2007



Institutions involved: the Municipality, the Province, the Transport Agency and the Emilia Romagna Region.



# Mobility Vademecum: “La Carta della Mobilità”

The main goal that we want to reach with “La Carta della Mobilità” is to give essential and concise information to citizens to be really effective.



This booklet issued in August 2007 groups information on all Bologna sustainable mobility services:

- ✿ public transport
- ✿ car-sharing service
- ✿ bicycle paths, bicycle services and facilities.

“La Carta della Mobilità” has been delivered at home to all ATC annual season ticket holders and it is at disposal at ATCittà info point.

## CAR sharing service - Direct information campaign

Realization of a car sharing **information campaign addressed to University Students** in Bologna.

In the context of Mobility Management activities, in order to improve mobility in the city centre and encourage car sharing use, **an agreement between ATC and the University** was signed in September 2008 to guarantee special conditions to university employees and students: the subscription costs have been sensibly reduced and the rules to join the service have been simplified

An information campaign was launched in September 2008 during the Alma Fest (one day dedicated to student for the opening of the academic year).

A mail to all students was sent through the University to inform on car sharing opportunities.