

# THE BICING EFFECT



## 1.- DEFINITION OF THE SERVICE

**Bicing**, the new **public transport service for individuals using bicycles**, has become a common sight in Barcelona city in just a few months. It is a simple, practical and sustainable service that allows you to go wherever you want to, when you want to, without making any noise or emitting exhaust fumes. It is a transport service that complements the underground and bus networks.

The system consists of a network of stations and bicycles, intended for use on regular journeys, and not for leisure use or use by tourists.



## 2.- PTIB = AN INNOVATIVE SOLUTION

Repositioning a classic means of transport, the bicycle, combined with computing and logistics.

Creating an innovative and flexible solution for urban transport.

20th C., BICYCLES ←→ 21st C., BICING = Bicycle + Technology + logistics



- This is a **new product, young, not yet mature**  There is a need to improve it and establish it on a firm footing at all levels, both technologically and logistically.

### 3.- DEFINITION OF THE SERVICE

#### How Bicing works in 5 easy steps:

1.- Users subscribe to the service via the internet or in the Customer Services Office.

2.- Users receive a user card and activate it.

3.- At the starting station, users identify themselves by passing the card over the card reader and the screen then tells the users which bicycle to take.

4.- Users cycles to their destination.

5.- When they reach their destination stations, Users return the bicycles placing them in the self-locking bicycle rack.

### 3.- DEFINITION OF THE SERVICE

#### Components of the service

The service consists of the following components:

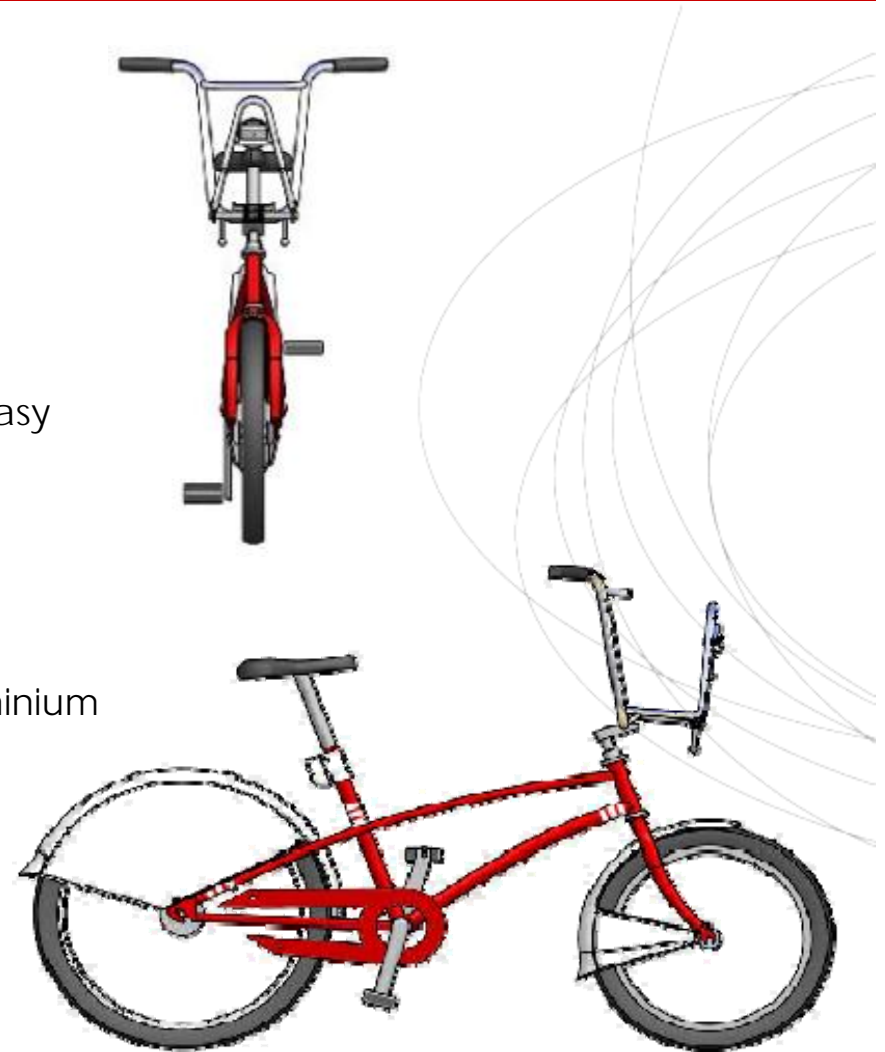
- Bicycles
- Stations
- The **distribution and maintenance** service
- System management Software
- The **customer services office**



### 3.- DEFINITION OF THE SERVICE

#### The bicycle specifications

- A bicycle suitable for urban use
- A specific Barcelona image
- Dimensions suitable for young people and adults
- Wide, ergonomic handlebars that make riding easy
- Three speed gear change
- Lights for cycling at night
- An anti-theft system
- An identification chip
- Material suitable for intensive use: steel and aluminium



### 3.- DEFINITION OF THE SERVICE

#### Stations

These consist of:

- **An access terminal.** This allows users to identify themselves and access the system.
- **Anchorage points.** These have clamps that make it possible to block and unblock the bicycles.

The different possible settings are:

- The diode is red: clamp closed
- The diode is flashing red: clamp blocked
- The diode is green: clamp open



3.- DEFINITION OF THE SERVICE

Parking areas: Structure and safety for users





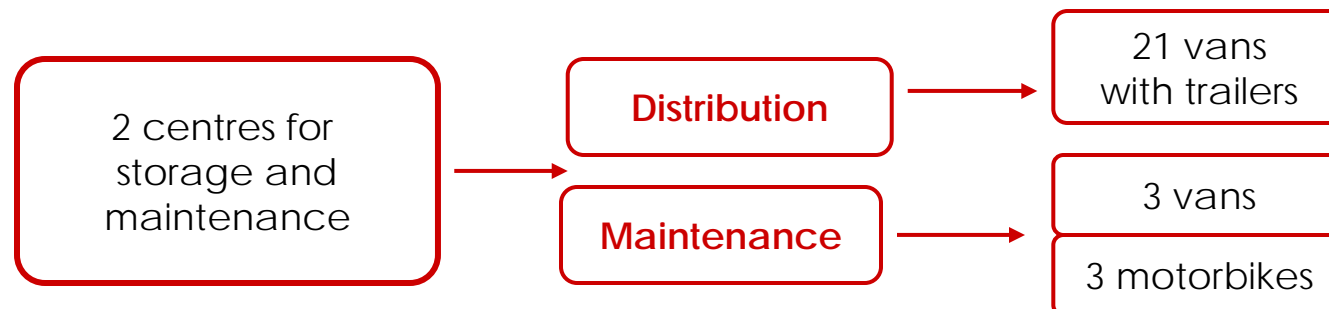
### 3.- DEFINITION OF THE SERVICE

#### The distribution and maintenance service

A bicycle **distribution service** is available across the different stations, able to respond adequately to user demand and to the availability of parking spaces at the destination.

In addition, the system has a **maintenance service** (3 vans, a workshop, a store and operatives) which ensures that the bicycles are kept in good working order.

To coordinate all the activities there is a central **control centre**.



### 3.- DEFINITION OF THE SERVICE

#### The Customer Services Office

Functions:

- Face to face and telephone service
- Registrations and deregistrations.
- Management and administration (incidents, complaints, etc)

It should be remembered that the user interacts with the service almost exclusively via the internet.



### 3.- DEFINITION OF THE SERVICE

#### The service timetable

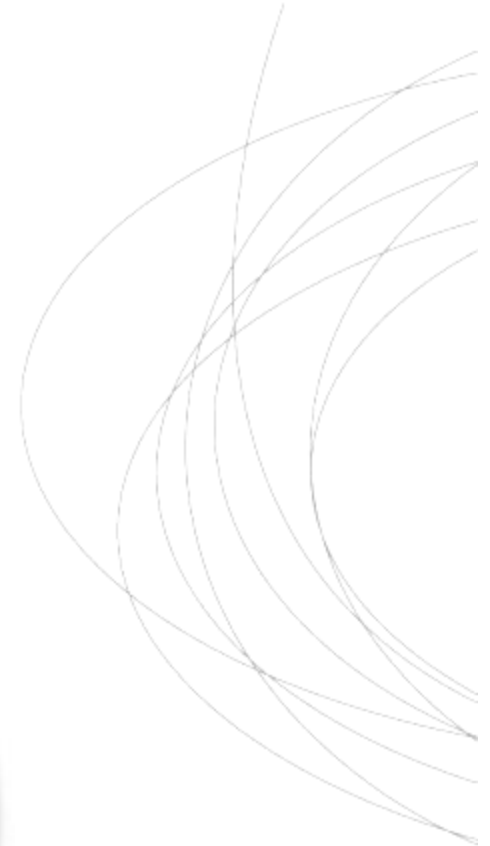
The service is available 365 days a year with the following timetable:

- **From Sunday to Thursday:**

Open from 5 am to midnight, after which time bicycles can only be returned

- **Friday and Saturday:**

The service operates 24 hours a day



### 3.- DEFINITION OF THE SERVICE

#### Subscriptions

The service is equipped to offer two types of subscriptions:

**Annual subscription:** For regular users of the service. After registering, the user receives a welcome pack at home which provides information about how the system works and the need to activate the user's card so as to be able to use it.

**Associated subscription:** A subscription combined with other public services. Pending implementation.



### 3.- DEFINITION OF THE SERVICE

#### Charges

The subscription gives the user the right to use the service **free of charge** for the first half hour.

So as to encourage bicycle rotation, the **maximum period of use** of a single bicycle is **2 hours** and users that exceed this time limit are penalised.

	Subscription charges	Charge units 30 min.	Penalty for exceeding 2 hours	Deregistration from the service
<b>Annual subscription:</b>	€24	€0.3 0	€3 /hour	After 3 warnings
<b>Associated subscription:</b>	Pending implementation.			

*During the first four months of operation there will be an introductory promotional price for the annual subscription of €6.*

### 3.- DEFINITION OF THE SERVICE

#### Insurance

Bicing has public liability insurance that covers all damage or harm that any part of the service, piece of equipment or user could cause to a third party, as well as any damage or harm that could be caused to the users themselves.



### 3.- WEBSITE



miércoles 12 de septiembre de 2007 | 12:08:46

Catalán

  
 Mapa de estaciones

  
 Información del servicio

  
 Zona de usuarios

  
 Contacto

  
 Noticias

**Coge el Bicing.** Tu nuevo transporte público en Barcelona



Mapa Web ↗

Añadir a Favoritos ★

#### últimas noticias

**IMPORTANTE USUARIOS BICING!!!**

Recordad que en la utilización del sistema Bicing, es necesario que cumpláis la normativa y que hagáis un uso responsable del mismo

[Leer más]

noticias

#### carril bici

- Consulta la red de carril bici de Barcelona y su conectividad con estaciones.

Descárgate el plano del carril bici. Consulta su relación con aparcamientos y transporte público.



[Leer más]

#### estaciones

- Visualiza en tiempo real las ubicaciones de las estaciones y su disponibilidad de bicicletas.

Busca en el mapa las estaciones más cercanas. Puedes realizar la búsqueda por distrito y CP.



[Acceso]

#### zona usuarios

- Activa tu tarjeta y consulta tus datos en tu cuenta personal Bicing.

Puedes consultar tus datos de , movimientos y solicitar duplicado de tarjeta.

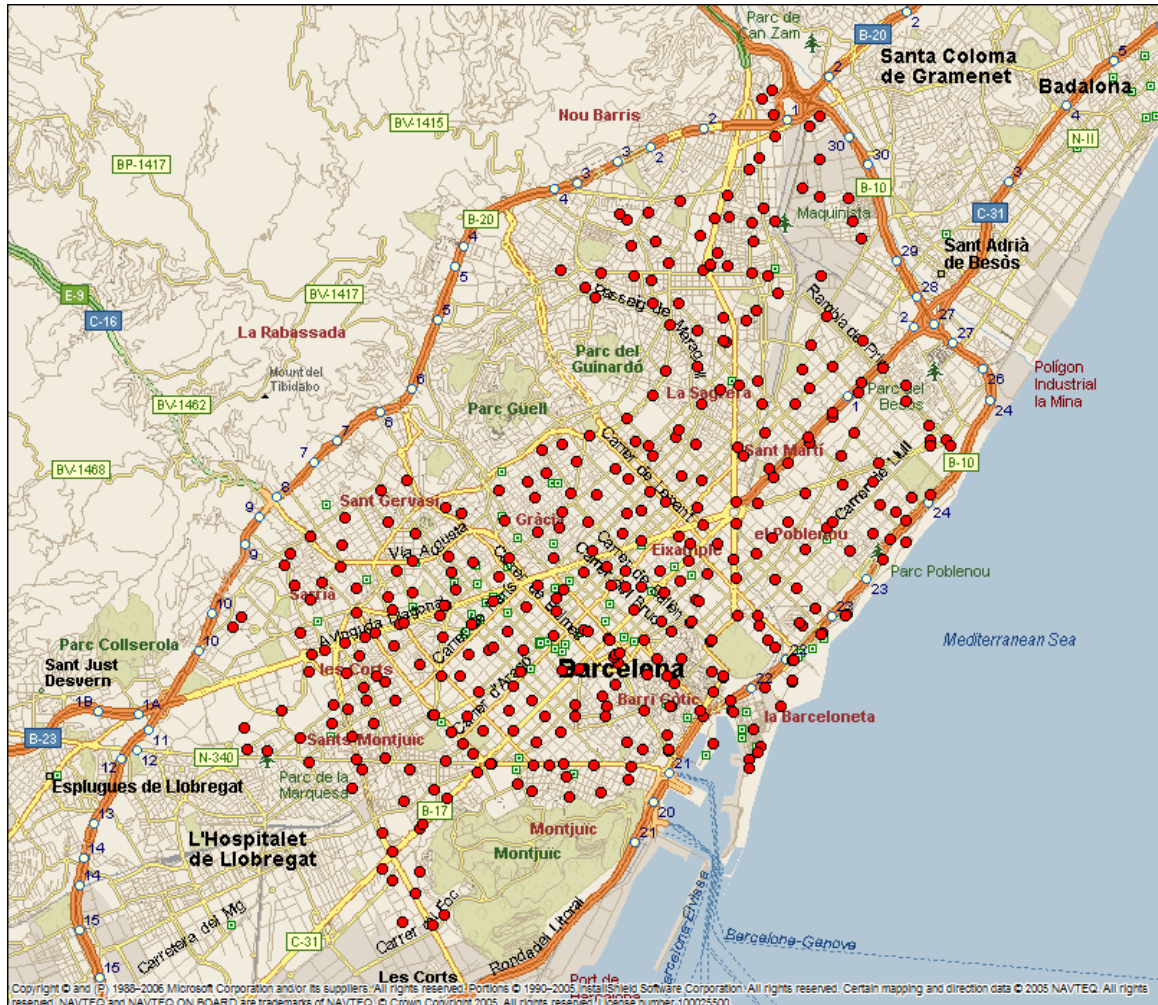
Usuario:

Contraseña:

Regístrate [aquí](#)

¿Has olvidado tu usuario y/o contraseña?

## 4.- MAP OF THE STATIONS



The Bicing stations are **situated** on the basis of three criteria:

- Proximity to underground and train stations and public car parks
- Proximity to public services: libraries, civic centres, etc.
- A guarantee of coverage of a 300 metre area for each station

Nº of stations: 391  
Nº of bicycles: 5,800



## 5.- THE PEACEFUL REVOLUTION IN SUSTAINABLE MOBILITY

In this first year of operation, it is true to say that the residents of Barcelona have "fallen in love" with Bicing, making the initiative a success:

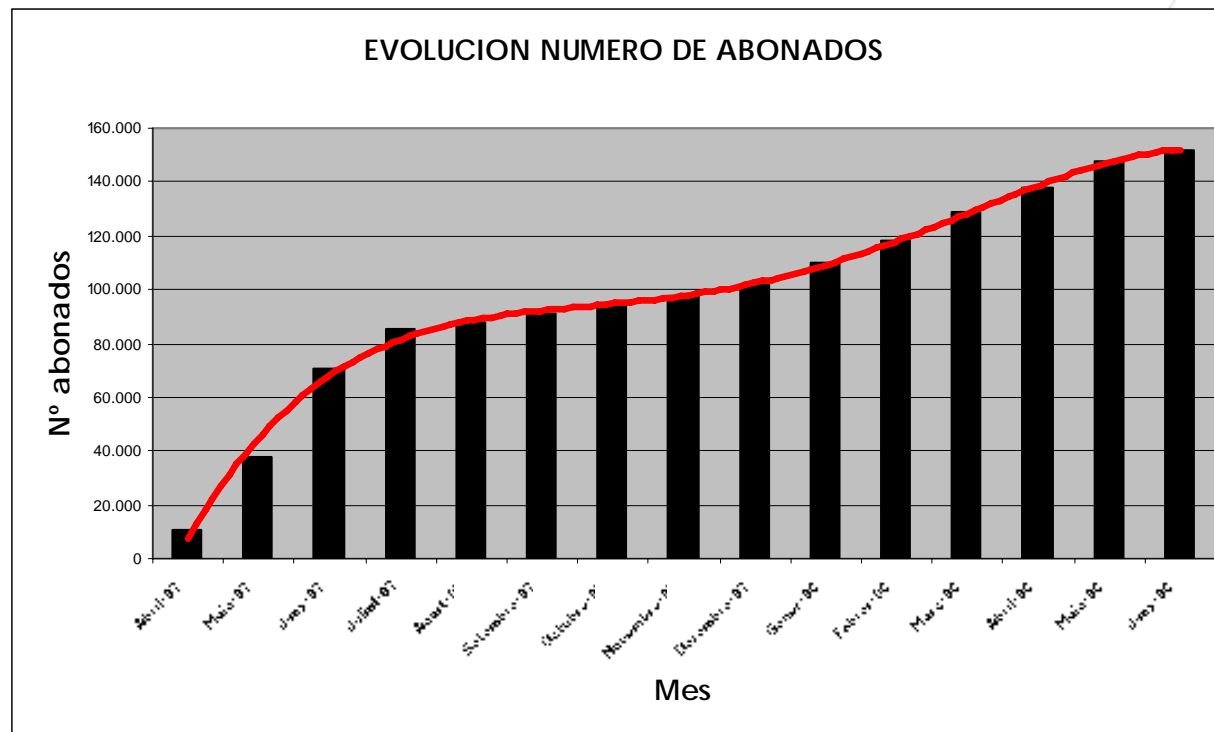
- Total no. of visits to the website: **more than 2.5 million visits**
- Total no. of times bicycles used: **more than 15 million times**
- Total distance travelled: **43.4 million km.**
- N° of subscribers: More than **178,000 subscribers**



## 6.- GROWTH IN SUBSCRIPTIONS

Regarding the growth in the number of subscribers, the highest rate of new registrations, 3,000 a day, was reached in the first week of July, coinciding with the end of the promotional period.

By the middle of November there were over **178,000 subscribers**.



## 7.- A CHANGE OF CULTURE - POLITICAL WILL

Before the introduction of a public transport service for individuals using bicycles, it is necessary to have previously promoted the bicycle as a means of transport. It is necessary **to prepare the city and the public**. There was already a clear will to promote the use of bicycles before Bicing was established.



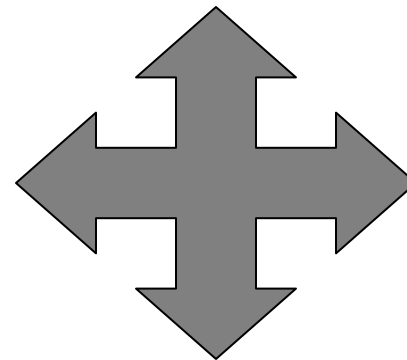
An increase in the number of bicycle rack slots, **to 14,696**



New bicycle lanes, **up to 156 kilometres**



Improve the safety of existing bicycle lanes



30 more zones (cars and bicycles combined)



## 8.- CHANGE OF CULTURE – BICING USER PROFILE

Bicing users are of all ages, areas, professions...

- **By gender:** - 51% of subscribers are men
  - 49% of subscribers are women
- **By age:** - 51% are between 26 and 35 years old
  - 37% of subscribers are more than 35 years old



PROFESSION	% SUBSCRIBERS
<i>Student</i>	13.21 %
Administrator	10.07 %
Engineer	6.83 %
Self-employed	4.42 %
Artist	4.20 %
Teacher	3.27 %
Architect	2.99 %
Manager / Director	2.52 %
Doctor	2.13 %

## 9.- ENVIRONMENT AND HEALTH – BICING USERS

Why this resounding success? We asked the users: **Why do you use Bicing?**

- It is **QUICK**
- It is **EASY**
- It is **CONVENIENT**
- It is **ECONOMICAL**
- It is **HEALTHY**



It enables you to get **exercise** on your **routine journeys**, **using up calories** on each trip

- It is **ECOLOGICAL**



**The average journey is 3 kilometres**, which means not emitting **480 gr. of CO<sub>2</sub>**.

In just over a year **emissions will have been reduced by 4,176 tonnes of CO<sub>2</sub>\***



Calculating the distance that would have been travelled using a vehicle, according to European average carbon dioxide emissions of 160 gr. of CO<sub>2</sub>/km. travelled

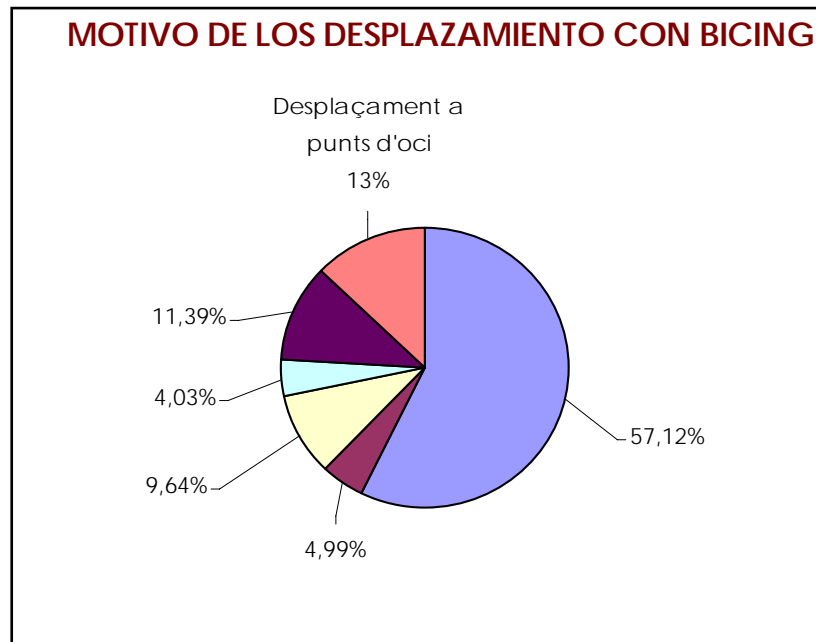
## 9.- ENVIRONMENT AND HEALTH – The reasons for the journeys

The service was created as a form of transport aimed at **essential journeys**.

**57% of the journeys** are undertaken to go to work.



Travelling to work is converted into **healthy exercise**.



- Average no. of journeys on work days: **45,000**

- Average no. of journeys on non-work days: **32,000**

**9.- THE ENVIRONMENT AND HEALTH- how the journeys were made previously**

The introduction of the service has led to a **change in the travel habits** of many users. Journeys using Bicing have replaced:

	Form of transport that Bicing has replaced
Underground	32.9%
Train	21.85%
Gov. of Catalonia trains	2.6%
Municipal buses	18.4%
Walking	26.1%
Tram	1.2%
Commuter buses	4.03%
Car (driver)	2.8%
Car (passenger)	0.5%
Motorbike	6.3%
Own bicycle	6.3%

Out of a total of **210,000 journeys a week** using Bicing on work days:

**71.63%** are undertaken exclusively using Bicing

**28.37%** combine Bicing with other means of transport, principally underground and train.

## 10.- MANAGING AND FINANCING THE BICING SERVICE

Barcelona City Council entrusted B:SM with setting up Bicing



B:SM invited tenders to provide the service



The contract was awarded to ClearChannel who have 10 years experience in Rennes, Oslo and Stockholm

The **tender specification** through which the service contract was awarded contained both the basic characteristics that the service has to fulfil and aspects relating to the quality of the service:

- **Service quality levels:**

- Availability of the bikes and stations.
- Repair times.
- Maintenance and cleanliness levels.

- **Compensation for non-compliance** with the quality levels established.

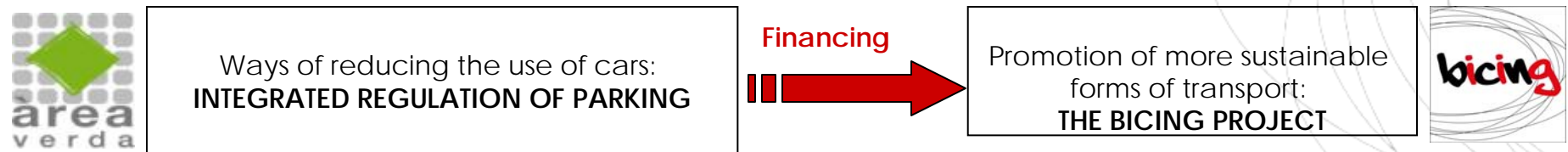
- **Establishing a CSI** (Customer Satisfaction Index), as another indicator of quality. Given the fact that the service provided to the public has to be of a satisfactory quality, the CSI serves as a way of improving the service over time.



## 10.- MANAGING AND FINANCING THE BICING SERVICE

The introduction of Bicing, the individual public transport system in Barcelona, has involved a **new approach to financing**.

### 1. Through the provision of services: **The Barcelona model**



### 2. Through the advertising contracts: **The model used in other cities**

Normal street furniture advertising is replaced by or complemented with advertising for the bicycle service

## 11.- ADVANTAGES OVER OTHER FORMS OF PUBLIC TRANSPORT

- It is ideal for short, urban journeys.
- It makes it possible to reach destinations that are poorly served by conventional public transport
- It requires less infrastructure
- It is relatively economical to acquire and maintain
- It generally does not increase vehicle congestion
- It does not cause pollution
- It provides the user with the added benefit of physical exercise

### ON THE OTHER HAND

- It is not comfortable in bad weather
- It cannot be used by the disabled
- You have to be able to ride a bike
- Bicycles can be hard to use on certain terrain



## 12.- POINTS FOR REFLECTION

The service is innovative and it has not yet been perfected. There remains a lot of work to do to perfect it. From the management point of view it must not be forgotten that **resources are limited** and it will be necessary to **maximise the quality of the service offered using the available resources.**

CLICHÉS...	BREAKING THE CLICHÉS...
Quick (turn up and take or leave a bicycle)	Waiting times like any other form of public transport.
Availability (always available)	There is a finite capacity for bicycles and lockable racks
An infinite system (on every corner)	A finite system, in terms of resources and urban space
Excess use is not penalised	Charge after the first 30 minutes
A service for young people	The typical user is between 26 and 35 years of age
Tourism use	Regular travel



THANK YOU VERY MUCH FOR YOUR ATTENTION!

