



Transports Metropolitans **de Barcelona**

Making accessibility central
to providing public transport

Bilbao, 20th October



What is TMB ?

Transports Metropolitans de Barcelona is the management unit of the companies **Ferrocarril Metropolità de Barcelona, S.A.** and **Transports de Barcelona, S.A.** that offer their collective passenger transport services in the city of Barcelona and its surrounding municipalities.

Underground transport network.



Surface transport network.





Scope of Activity

Ferrocarril Metropolità de Barcelona, S.A.



Offers its service to the **municipalities** of Barcelona, Badalona Cornellà, Hospitalet de Llobregat, Esplugues, Sant Adrià del Besós and Santa Coloma de Gramenet.

Transports de Barcelona, S.A.



Offers its urban service to the **municipalities** of Barcelona, Cornellà and Montcada, and also an **intermunicipal service** in Badalona, Cornellà, Esplugues, L'Hospitalet de Llobregat, Montcada, El Prat, Sant Just Desvern, Sant Joan Despí, Sant Adrià del Besos and Santa Coloma de Gramenet.



Transports
Metropolitans
de Barcelona



Network Data

Ferrocarril Metropolità de Barcelona, S.A.
Transports de Barcelona, S.A.






Datos 31/12/05

<M> Stations/Bus stops	123	2433	2556
Trains/Buses	110	1019	1129
No. Lines	7	103	110
Network length (km)	86,6	879,65	966,25

TMB Demand



<p>Ferrocarril Metropolità de Barcelona, S.A. Transports de Barcelona, S.A.</p>			 <p>Transports Metropolitans de Barcelona</p> <p>Datos 31/12/05</p>
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Total passengers (thous.)</p>	<p>345,27</p>	<p>204,96</p>	<p>550,23</p>
------------------------------------------	----------------------	----------------------	----------------------



Transports Metropolitans
de Barcelona

TMB

ACCESSIBILITY



Work Methodology

- **Know user group requirements.**
 - **TMB participates in disabled groups and is in contact with their representatives.**
- **Determine the connection points that provide and guarantee mobility.**
 - **Connection points between various modes of transport**
 - **Connection points in one and the same mode of transport.**
- **Identity high concentration points, and prioritise them.**
 - **Adapted installations.**
 - **Associated Centres.**
 - **Centres of attendance.**



Work Methodology

- **TMB sits on the Governing Board of the Municipal Institute for the Disabled in Barcelona, and takes part in its Transport and Communication Commissions.**
- **The TMB organisational chart comprises a specific arrangement for promoting actions, on a horizontal level, that facilitate accessibility to its transport service.**
- **TMB works proactively, anticipating future requirements, such as new points of urban concentration, shopping centres, etc.**
- **TMB offers its employees special training .**
- **TMB lends its know-how to those who are interested in promoting positive action in support of Diversity Management.**



Transports Metropolitans
de Barcelona

Planning the trip
Accessibility



Plannig the trip (I)

- **Accesible WEB with a blind people**

Transports Metropolitans de Barcelona - Microsoft Internet Explorer

Dirección http://www.tmb.net/ca_ES/home.jsp

Castellano i English TMB multicanal Contacte Mapa Web Cercador

11:29 am

Tots movem Barcelona

THE QUEEN MACHINE MAZONI STAY 12TWELVE

Noves places

Barcelona amb TMB Turistes J ún iors Premsa TMB Compra On Line

Notícies

22.05.2006
El primavera sound baixa al Metro

19.05.2006
La Línia 3 de Metro ja disposa de sistema de seguretat ATP

Gaudaix Barcelona

→ Concert de Eagles el 23.05.2006

→ Concert de The Rolling Stones el 27.05.2006

Mou-te

Tot allò que necessites per moure't per Barcelona

- ▶ TMB iBus
- ▶ On sóc
- ▶ Vull anar
- ▶ Plànols
- ▶ Horaris
- ▶ Targetes
- ▶ Alteracions de servei
- ▶ Amb què arribes
- ▶ Guia d'accés a la Zona Franca

Tour directe

- ▶ Drets del client
- ▶ Atenció al client
- ▶ Transport per a tothom
- ▶ Informació per a mòbils i PDA
- ▶ Treballa amb nosaltres
- ▶ **Oferta conductors /es**
- ▶ TMB Professionals
- ▶ Promocions i Novetats
- ▶ Webs de transports

+ notícies + informació

Avis legal i Accessibilitat

© Copyright 2004 - 2008 TMB. Tots els drets reservats

Internet

Inicio 6 Microsoft Offic... PRESENTACIONS ... Microsoft PowerP... 3 Internet Explo... 11:29

Transports Metropolitans de Barcelona



Planificació del viatge (II)

- **Accesible WEB with a blind people**

TMB: Accessibilitat - Microsoft Internet Explorer

Direcció http://www.tmb.net/ca_ES/site/related/accesibilitat.jsp

TMB Transports Metropolitans de Barcelona

Castellano i English TMB multicanal Contacte Mapa Web Cercador

Barcelona amb TMB Turistes J ún iors Premsa TMB Compra On Line

Inici > [Accessibilitat](#)

> Accessibilitat

TMB.Net, accessible a tothom

TMB ofereix les seves pàgines web amb un disseny accessible amb l'objectiu de garantir l'accés universal a tothom.

S'han tingut en compte les recomanacions de la WAI (Web Accessibility Initiative) i de l'ONCE.

Pautes d'accessibilitat

A continuació es detallen les pautes següents:

1. Pàgina anterior (page back): caldrà utilitzar l'indicador d'ordres alt-data esquerra per anar a la pàgina anterior. Alternativament, es poden utilitzar les tecles d'accés ràpid que s'indiquen en la secció combinacions de teclat.
2. Text ocult: s'utilitza el text ocult quan l'organització o el disseny de la pàgina no fan els continguts plenament accessibles als mitjans tecnològics actuals. Així mateix, s'utilitza aquesta tècnica quan la informació rellevant de la pàgina és fonamentalment visual.
3. Enllaç a les opcions de navegació principals: situa el focus de la pàgina en les opcions que permetin la navegació.
4. Enllaç al mapa web: situa el focus en el mapa.
5. Enllaç al cercador: situa el focus en el quadre d'edició per efectuar la cerca de la informació desitjada.

Combinacions de teclat

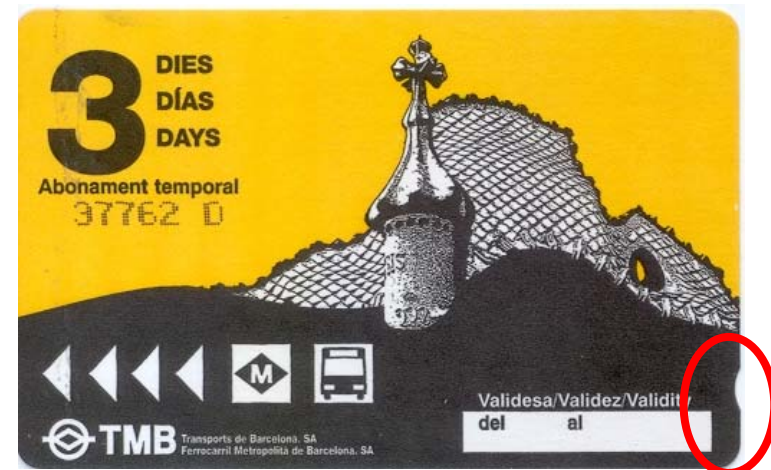
S'han definit una sèrie de combinacions de tecles per accedir de manera més ràpida als enllaços més habituals. Les tecles es combinen amb la tecla alt esquerra i únicament funcionen amb el navegador Internet Explorer.

Internet

Inicio 6 Microsoft Offic... PRESENTACIONS ... Microsoft PowerP... 3 Internet Explo... 11:30

Fare System

- Tickets with orientation nick



Orientation nick



Transports Metropolitans
de Barcelona

BUS

Accessibility



Accessibility: The single-decker bus

Owing to the very nature of a bus, it is very difficult for people with reduced mobility to use it, and

- Its height off the ground,
- Its interior structure,

are two of the main elements that cause this difficulty.

Technological development has provided us with devices to facilitate vehicle access for people with reduced mobility.

Studying their needs in detail, and aiming to promote personal autonomy, has led to the incorporation of single-decker buses.



Features of an adapted TMB Bus

- **Incorporation of single-decker vehicles.**
- **Possibility of inclining the vehicle.**
- **Access device : Ramp or platform .**
- **Space reserved for People with Reduced Mobility.**
- **Wheelchair supports.**
- **Validation device with visual and acoustic feedback.**
- **Bus stop request buttons.**



Features of an adapted TMB Bus

- Incorporation of single-decker vehicles.





Features of an adapted TMB Bus

- **Possibility of inclining the vehicle.**



Features of an adapted TMB Bus

- **Access device : Ramp or platform.**





Features of an adapted TMB Bus

- **Space reserved for People with Reduced Mobility.**





Features of an adapted TMB Bus

- **Wheelchair supports .**



Features of an adapted TMB Bus

- **Validation device with visual and acoustic feedback.**





Features of an adapted TMB Bus

- **Bus stop request buttons.**





Accessibility: Bus Stops

Accessibility must also consider waiting times, getting on/off vehicles, bus stop layout.

- **The detailed study of the area around each bus stop,**
 - **Type of parking,**
 - **Possibility of approaching the vehicle,**
 - **Street furnishings around the bus stop,**

means searching for alternative solutions to each of these situations.

Installing access platforms on vehicles has provided a solution in the above-mentioned cases.



Features of an adapted TMB bus stop

Consider:

- **Type of parking.**
- **Possibility of approaching the vehicle.**



Features of an adapted TMB bus stop

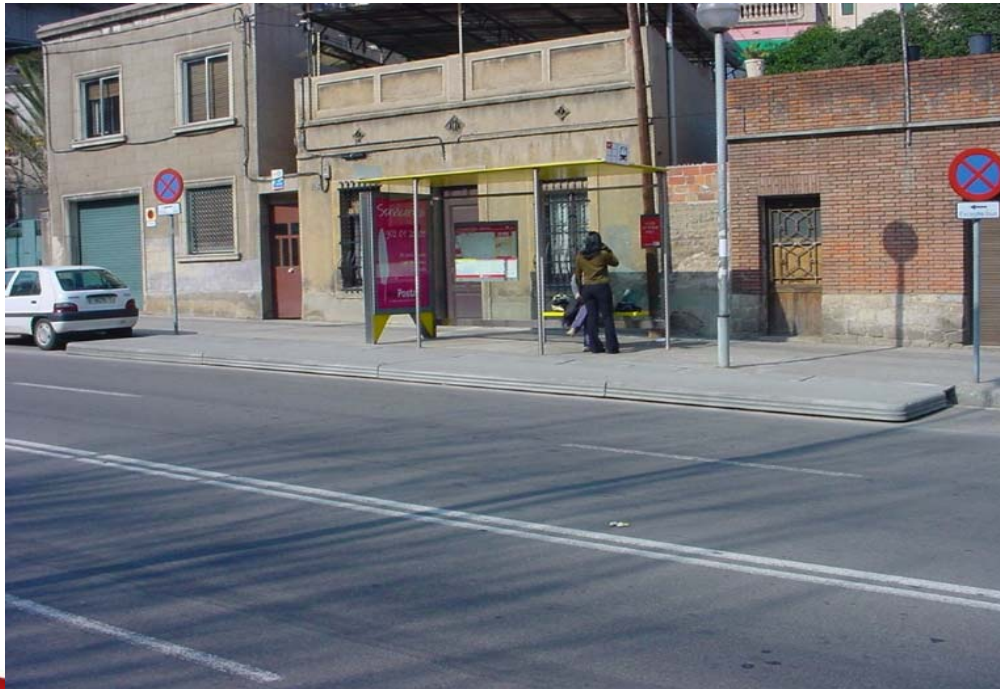
- Type of parking.





Features of an adapted TMB bus stop

- Possibility of approaching the vehicle.





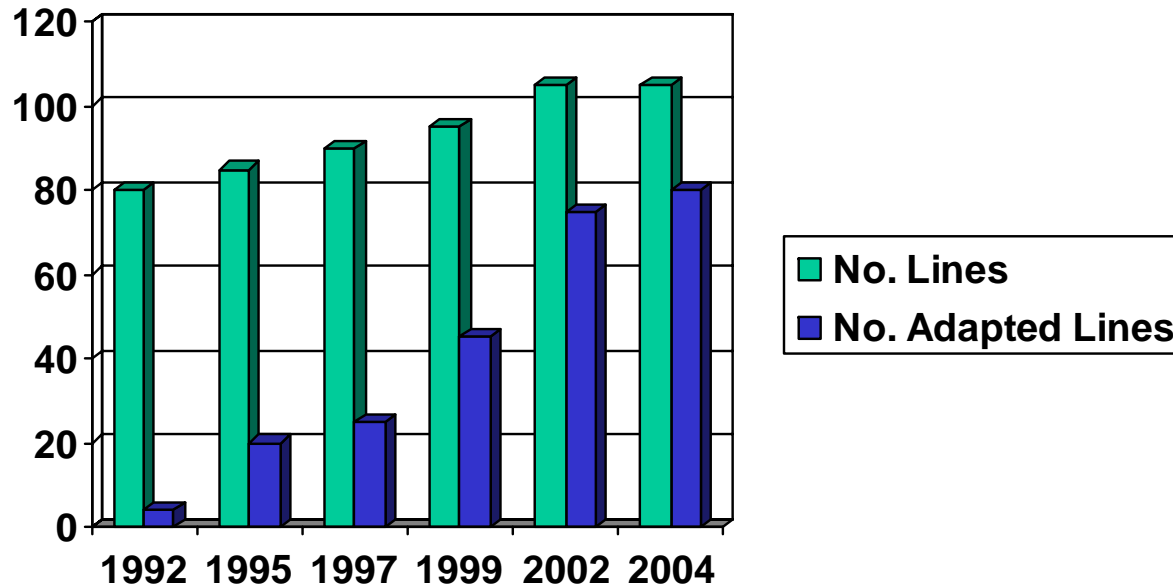
Work Methodology

- **Know user group requirements.**
 - **TMB participates in disabled groups and is in contact with their representatives .**
- **Determine the connection points that provide and guarantee mobility.**
 - **Connection points between various modes of transport**
 - **Connection points in one and the same mode of transport.**
- **Identity high concentration points, and prioritise them.**
 - **Adapted installations.**
 - **Associative Centres.**
 - **Centres of attendance**

Bus line accessibility

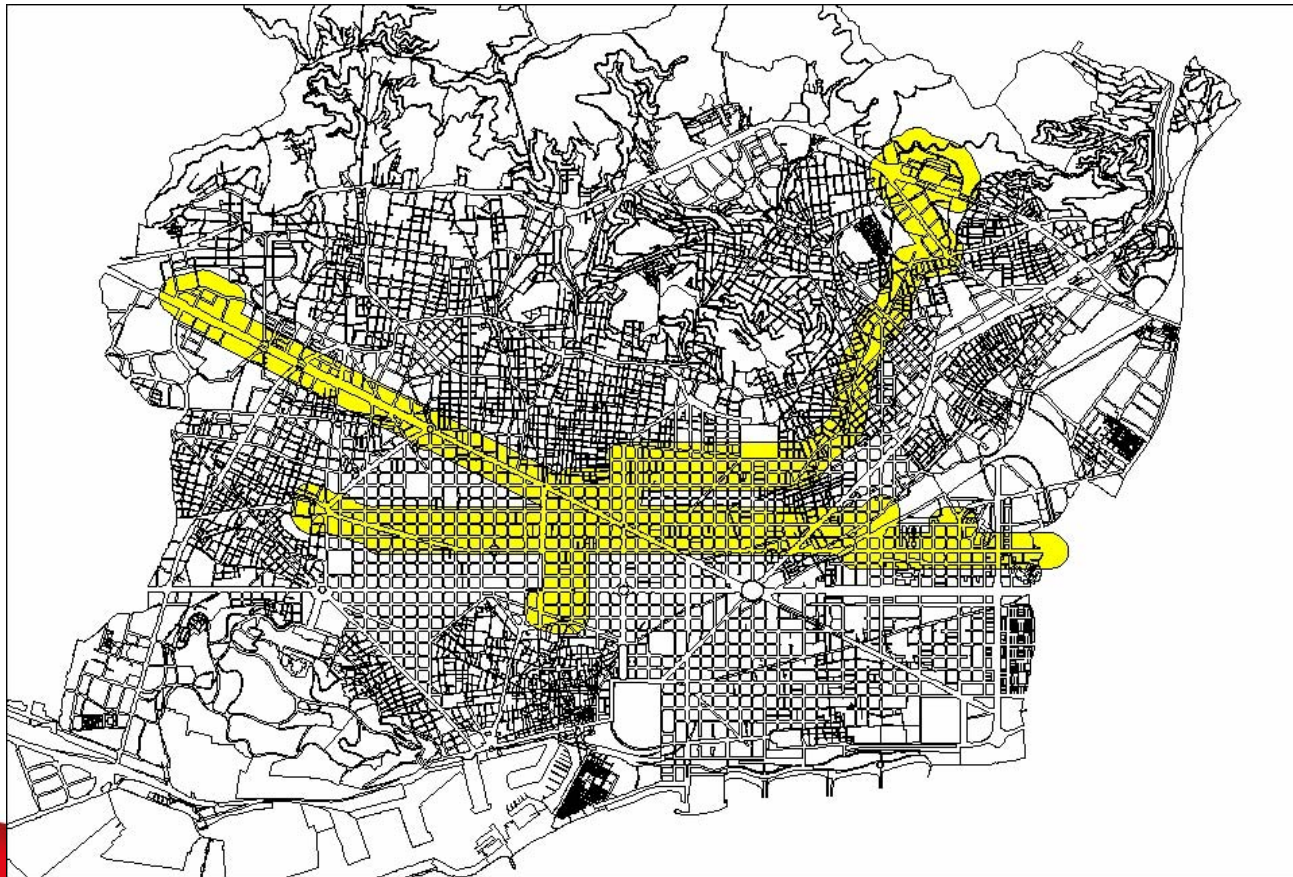


In the last decade, the number of accessible bus lines has increased exponentially:





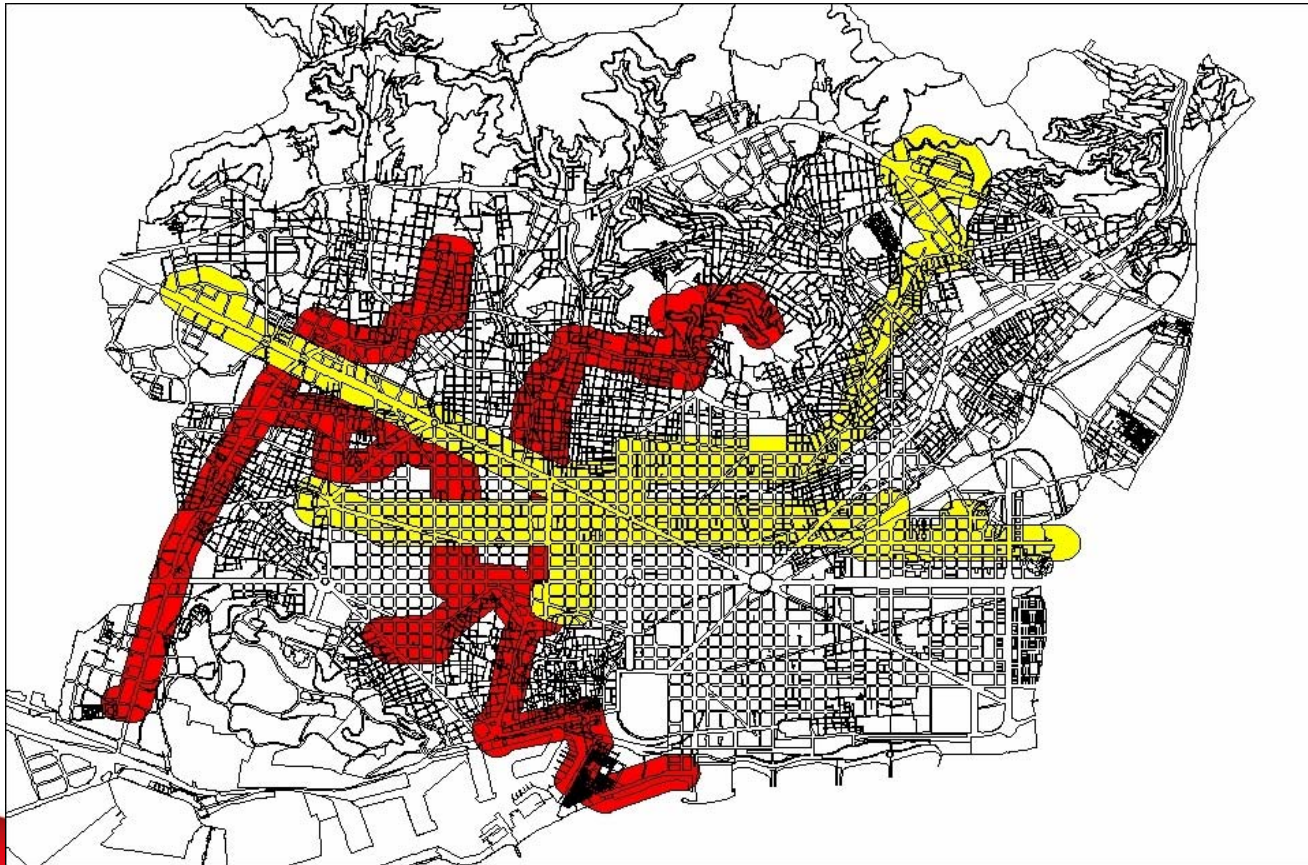
Accessible Lines 1992



Transports
Metropolitans
de Barcelona



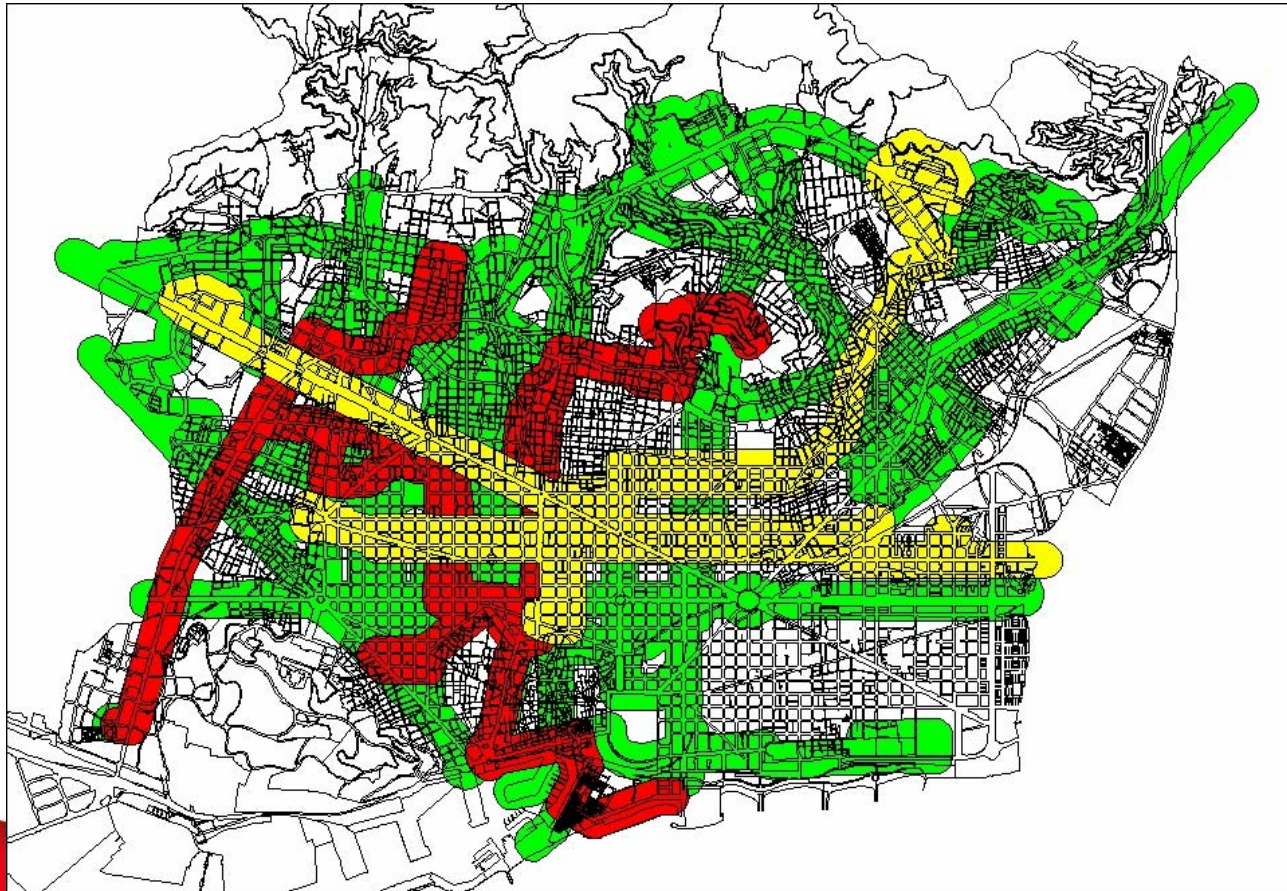
Accessible Lines 1995



Transports
Metropolitans
de Barcelona



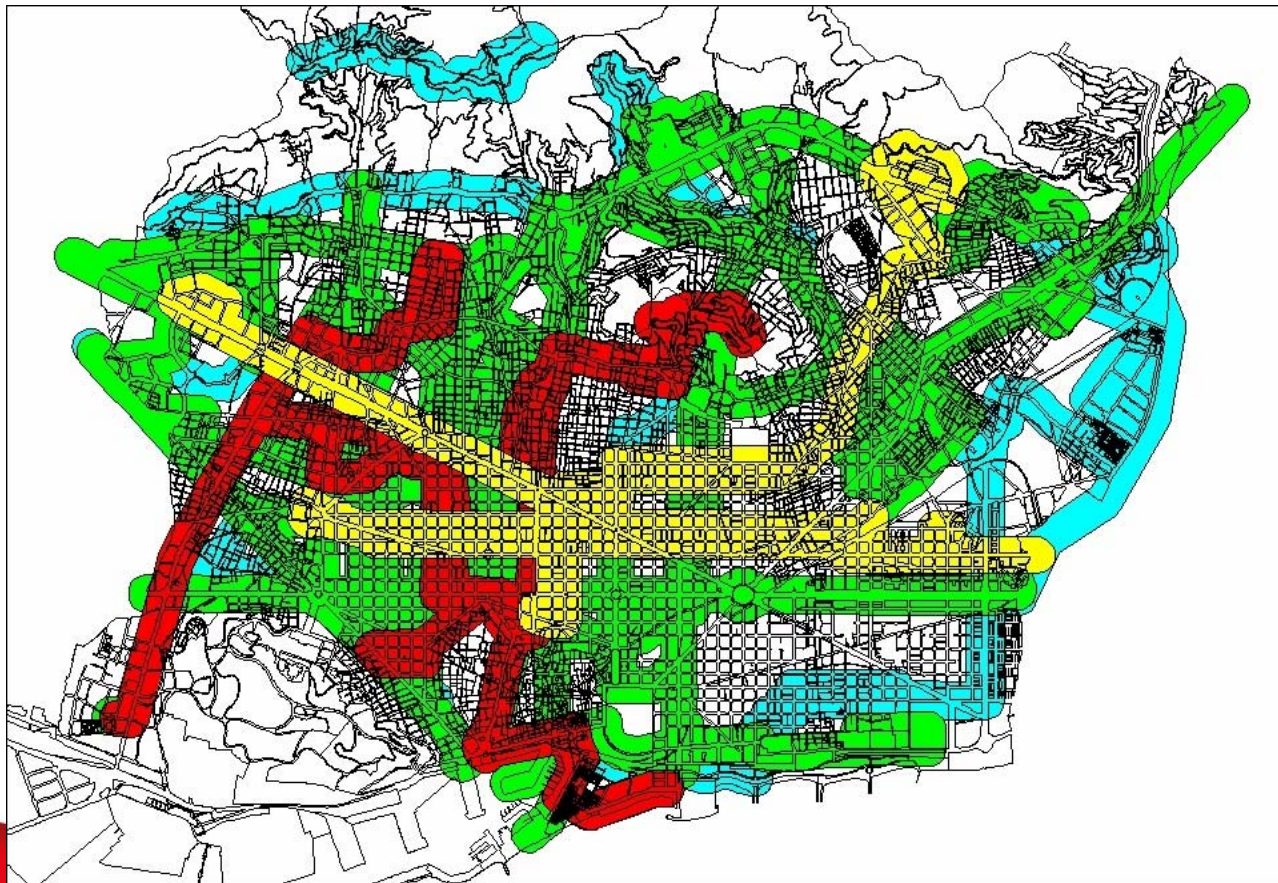
Accessible Lines 1997



Transports
Metropolitans
de Barcelona

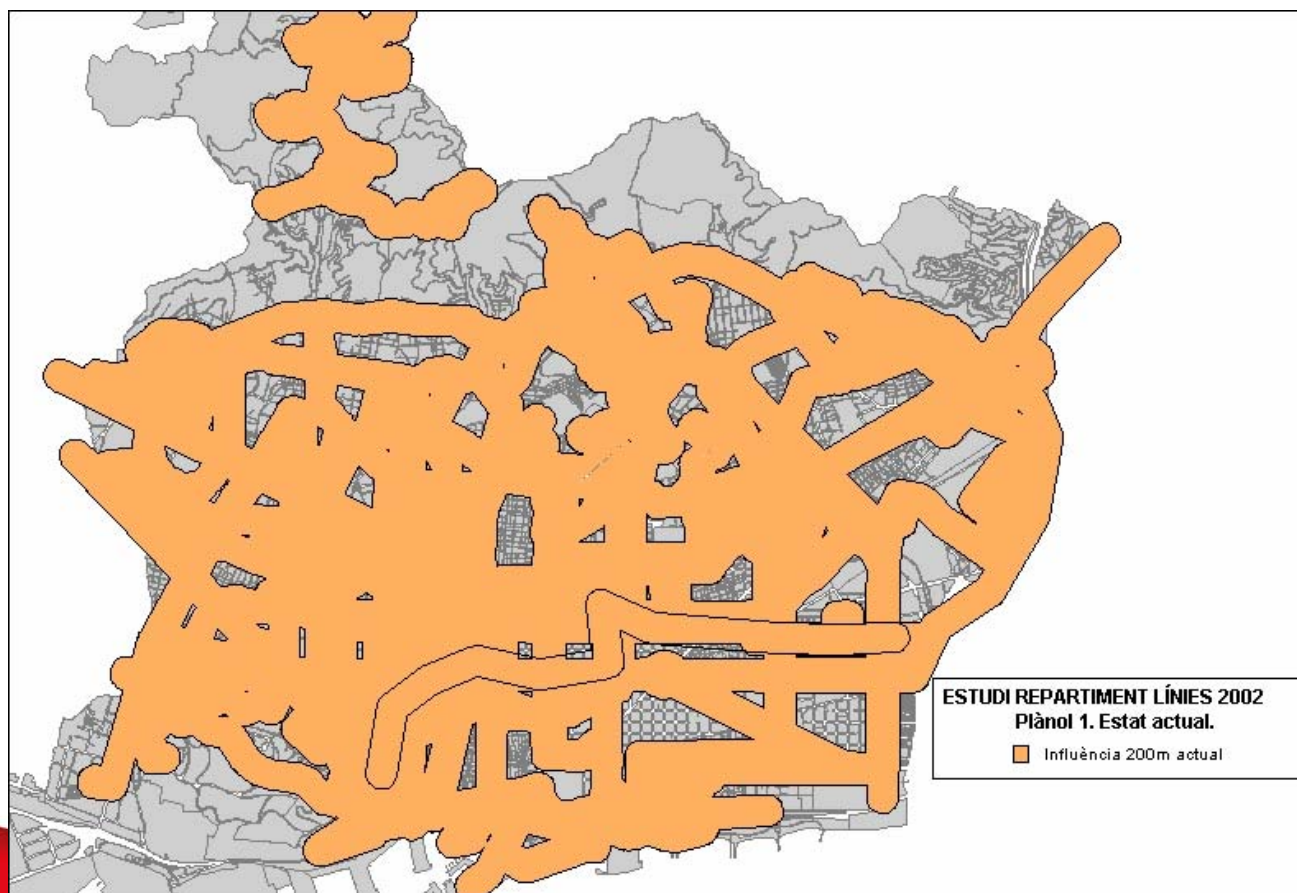


Accessible Lines 1999



Transports
Metropolitans
de Barcelona

Accessible Lines 2002





Transports Metropolitans
de Barcelona

METRO
Accessibility



Accessibility: An accessible Metro

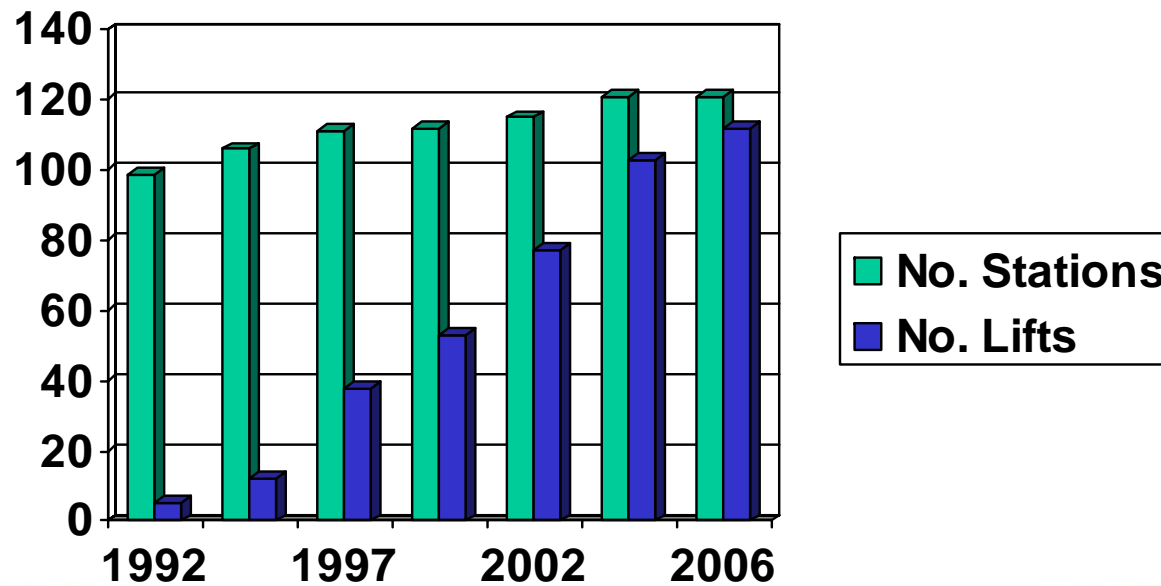
The historical and structural features of the Barcelona Metro have not dissuaded us from providing citizens with a fast, accessible top quality public transport service.

Remodelling existing stations, and designing and building new ones, always in line with accessibility criteria, is one of the distinguishing features of Ferrocarril Metropolità de Barcelona.

Metro accessibility



Exponential growth in the number of lifts installed, and other access-permitting elements, reflects the company's awareness in this respect.





Accessibility in the Metro

The following elements have been incorporated to guarantee accessibility to underground stations:

- **Devices enabling vertical movement.**
- **Devices covering the gap between train and platform.**
- **Guiding elements for the blind or partially sighted.**
- **Elements facilitating ticket purchase.**
- **Elements guaranteeing safety.**
- **Elements guaranteeing information.**

Accessibility in the Metro

- Incorporating devices enabling vertical movement.



Accessibility in the Metro

- Incorporating devices covering the gap between train and platform.





Accessibility in the Metro

- Incorporating guiding elements for the blind or partially sighted.



Accessibility in the Metro

- Incorporating elements facilitating ticket purchase.





Accessibility in the Metro

- Incorporating elements guaranteeing safety.



Accessibility in the Metro

- Incorporating elements guaranteeing information (with relief and contrast colors).





Transports Metropolitans **de Barcelona**

**What does TMB do for
people with hearing
difficulties?**



Hearing impediments on board a Bus

The following elements have been incorporated to guarantee accessibility in TMB buses:

- Visual ticket validation confirmation.
- Visual feed-back to bus stop requests.
- Information on waiting times, service alterations, etc...

Technical aids on board a Bus

- Visual ticket validation confirmation.





Technical aids on board a Bus

- Visual feed-back to bus stop requests.



Technical aids on board a Bus

- Information on waiting times, service alterations, etc...





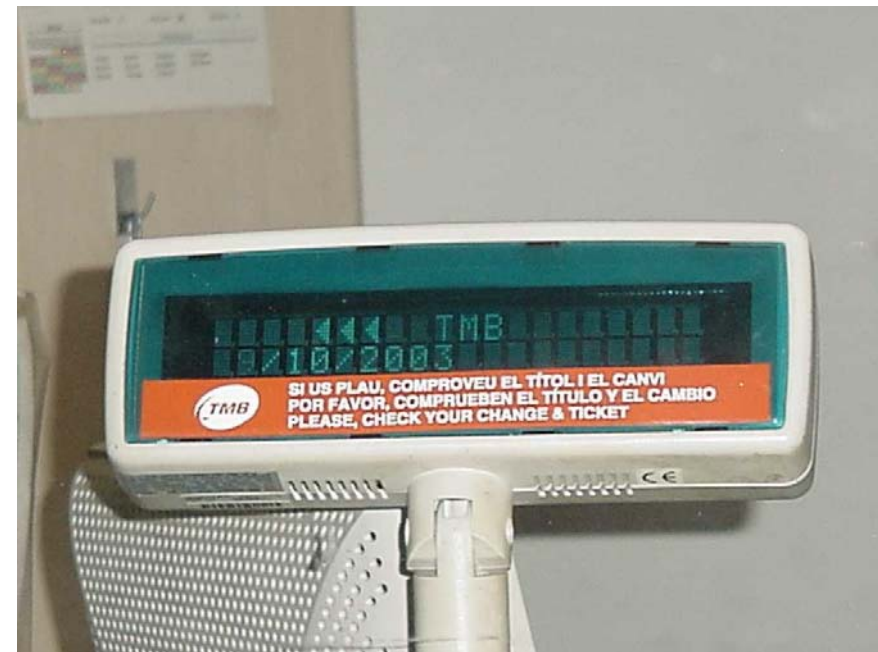
Hearing impediments in the Metro

The following elements have been incorporated to guarantee accessibility in the TMB metro network:

- **Visible confirmation screen for travel ticket purchases.**
- **Specific communication elements. Eg. Breakdowns, etc...**
- **Information screens. Eg. Waiting times, incidents, ...**
- **Requests for assistance, information ...**
- **Notification of next stop.**
- **Elements guaranteeing safety.**

Technical aids in the Metro

- **Visible confirmation screen for travel ticket purchases.**



Technical aids in the Metro

- **Specific communication elements. Eg. Breakdowns, etc...**



Technical aids in the Metro

- Information screens. Eg. Waiting times, incidents, ...



Technical aids in the Metro

- Requests for assistance, information ...



Technical aids in the Metro

- Notification of next stop.



Technical aids in the Metro

- Elements guaranteeing safety. Eg. Opening and closing the doors, ...





Transports
Metropolitans
de Barcelona





Line 2

The opening of Line 2 in 1995 marked a new era in suburban accessibility, ...





Line 2

...its first extension in 1997, ...



Line 2

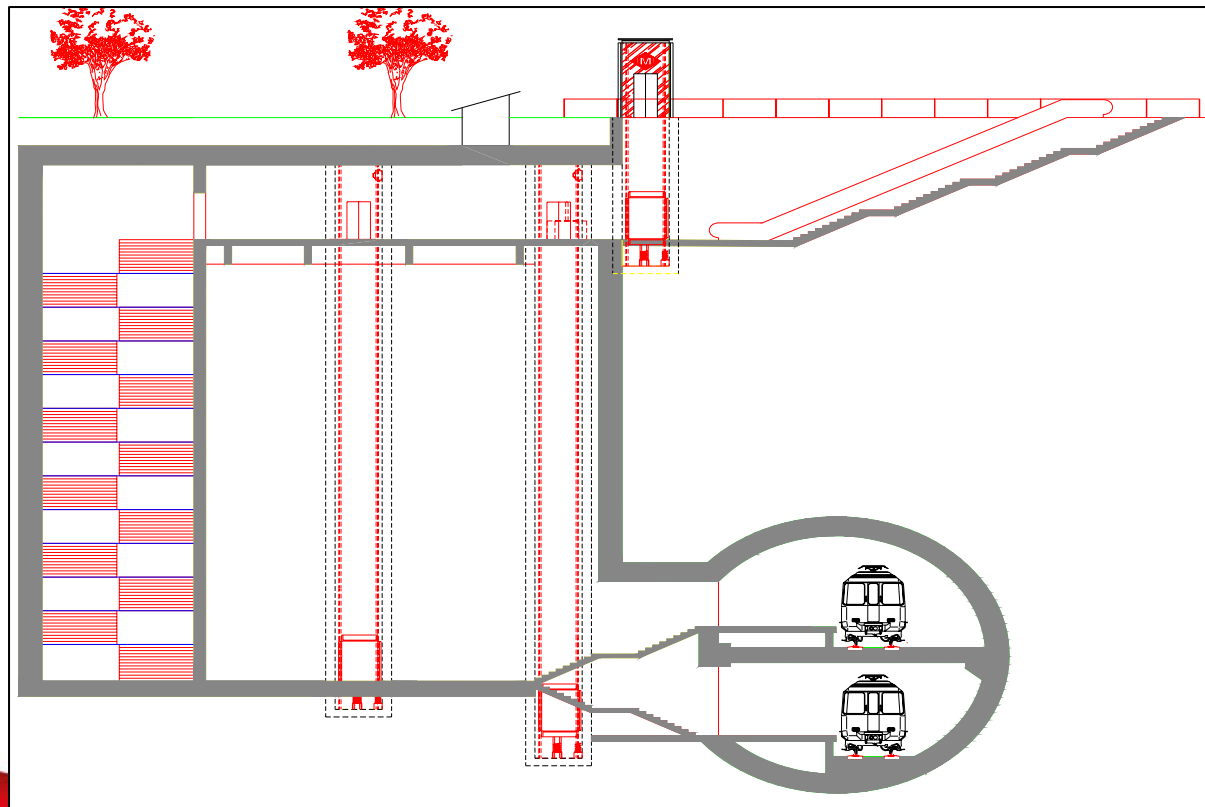


... and its latest extension, in 2002, have resulted in the first totally accessible metro line.





Accessibility in the Metro New Projects, L-9





Accessibility in the Metro New Projects, L-9





Accessibility in the Metro New Projects, L-11





Other positive action

- TMB is one of the founding members of the international “DESIGN FOR ALL FOUNDATION”



Through which TMB has adopted its “COMMITMENT TO DESIGN FOR ALL”.



The Commitment to Design for All

This commitment is adopted by all companies that adapt their services, goods and organisation systems to the ability, needs and expectations of all users and consumers, by applying the Design for All principles.

This is a systematic process that integrates users and consumers, ethical values and organisational innovation in an company or entity, through an Implementation Plan.

Design  for all
FOUNDATION



TMB, is looking to the Future ...

...which is already upon us,
and aiming for dedication to service,
respect and quality ...



Transports Metropolitans
de Barcelona

A Sustainable Future



Transports
Metropolitans
de Barcelona