



ITS IN EUROPE '99  
Amsterdam, June 14-17, 1999

# ITS Strategies and Tools to Meet City Needs

Mikel Murga and Eric Britton

Leber Ingenieria, Bilbao

EcoPlan International, Paris

# Contents



- ❑ The Long Road to ITS Deployment
- ❑ Why ITS?
- ❑ Bilbao as a Test Case
- ❑ Our Present Transport Priorities
- ❑ Our Present ITS Priorities
- ❑ Epilogue

# The long road to ITS Deployment

---

- ❑ ITS tools easy to buy... but difficult to integrate
- ❑ They require organizational changes and new networking schemes
- ❑ Existing technological, political and jurisdictional barriers have to be addressed
- ❑ ITS itself has to be integrated into conventional planning

# Why ITS?

---

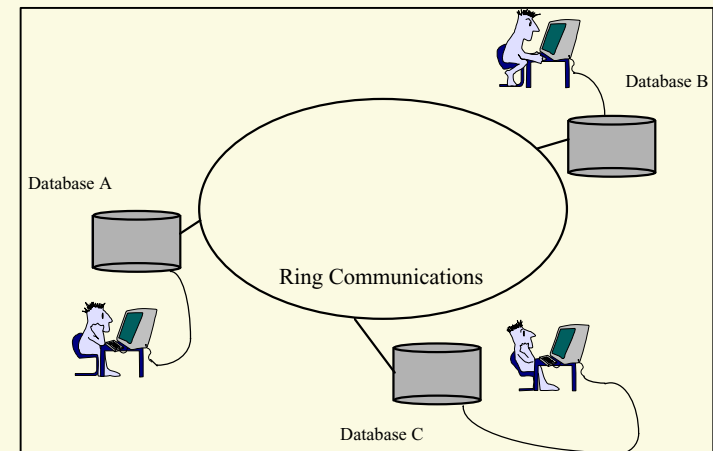
❑ To address these goals:

- ★ Adoption of a Common Transport Vision
- ★ Adoption of a Common Strategic Approach
- ★ Reduction of Road Congestion
- ★ Decreased Negative Environmental Impacts
- ★ Supply and Demand Systems Management
- ★ New Model for Institutional Cooperation

# Why ITS?

As Ertico's ITS City Pioneers Awareness Booklet states, ITS serves 3 critical functions for the region:

- ★ **Information**
- ★ **Communications**
- ★ **Integration**





# Some Background on Bilbao

- ❑ A metropolitan area of one million people, undergoing massive changes in its economy, transport system and urban landmarks
- ❑ Growing pressures on the road system, despite heavy investments in transit
- ❑ Time to adopt supply **and** demand management policies



# Bilbao the City

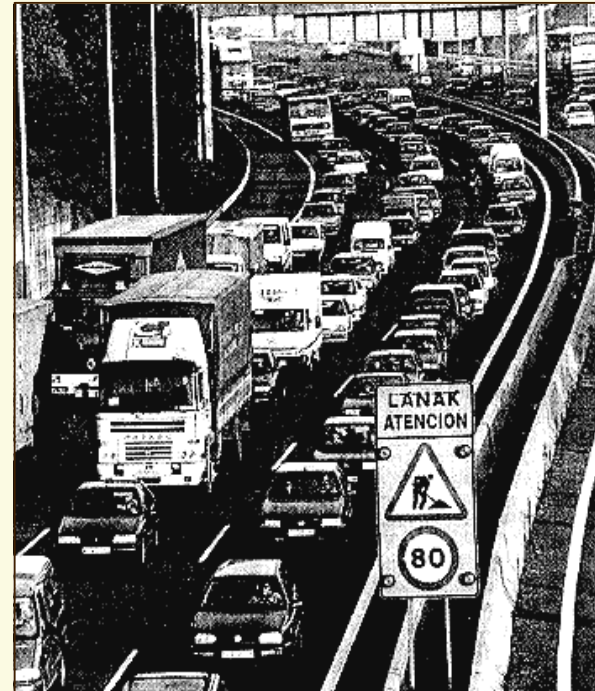
High density +  
mixed uses =  
modal split with  
48% on foot,  
23% transit,  
25% by car



# Our Road System Today

Saturation on A-8 led to  
an 80 km/hr limit:

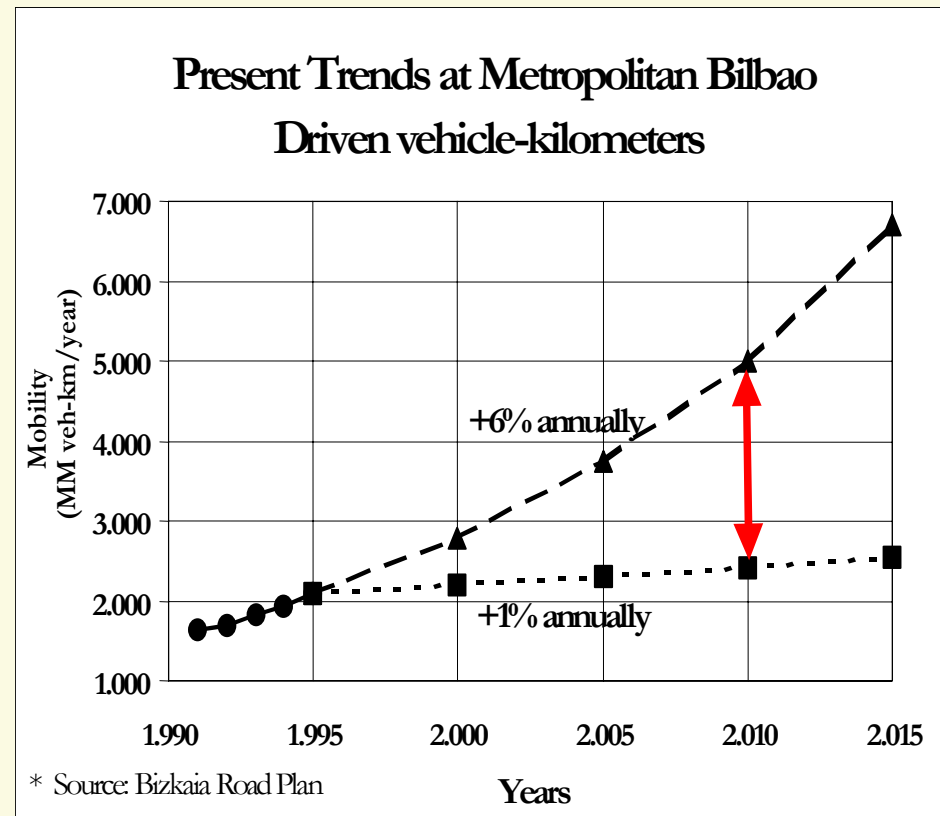
- ❑ Accidents reduced  
60%
- ❑ System Management  
as a New Policy





# Our Road System Tomorrow

- ❑ A new road plan under available sources cannot cope with  $>1\%$  yearly growth
- ❑ ...But traffic is growing at 3-6%



# Our Public Transport

- ❑ Major investments and growing operating deficits
- ❑ Demand served, basically captive
- ❑ State of-the-art ITS tools
- ❑ ... But lack of integration



# Access in Bilbao

---

- ❑ Several years of preparatory work
- ❑ Close examination of transportation trends, urban patterns and likely future scenarios
- ❑ A Sustainable Planning Framework
- ❑ Mobility and Access

# Our Present Transport Priorities

---

- ❑ Reduction of the number and importance of road incidents, and, car accidents
- ❑ Reduction of road saturation
- ❑ Attraction of choice riders to Metro service
- ❑ Reduction of atmospheric pollution
- ❑ Promote demand management
- ❑ Foster public-private initiatives



# Access Bilbao 2010



- ❑ Round table w many different Institutions
- ❑ A process of exchange and collaboration:
  - ☆ Let's share information
  - ☆ Let's decide with others in mind
- ❑ International network

# Our Present ITS Priorities



- ❑ Create a program of multi-modal indicators
- ❑ Integrate existing ITS subsystems
- ❑ Integrate ITS into conventional planning
- ❑ Disseminate real-time information as a first step towards demand management

# Our Present ITS Priorities

---

- Create a program of multimodal indicators:
  - ☆ A step towards a unified vision
  - ☆ Common levels of service for all modes
  - ☆ Use wealth of real time information
  - ☆ Historical trends and benchmarking
  - ☆ Relationship between transport and land use

# Our Present ITS Priorities



## □ Integrate existing ITS subsystems:

- ☆ New Traffic Control Centers (Control-->Info)
- ☆ New links bet'w Public Transport and Traffic
- ☆ Resolve issues of lack of compatibility
- ☆ Effective exchange of information among all public and private actors



# Our Present ITS Priorities

---

- ❑ Integrate ITS into conventional planning
  - ☆ Non recurrent congestion (incidents and accidents) has become the main threat
  - ☆ Traditional planning focuses on the average working day, but special events, adverse weather conditions and incidents...
  - ☆ Peak spreading
  - ☆ Impact of real-time information on demand

# Our Present ITS Priorities

---

❑ Dissemination of real-time information as a first step towards demand management:

☆ Bilbao's traffic conditions on the Net

☆ Soon parking availability as well

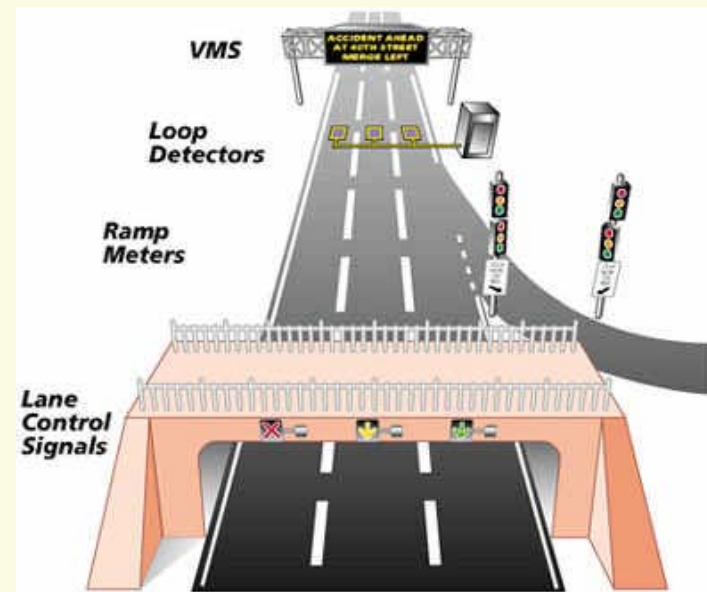
☆ Next:

- How to go from A to B by Public Transport
- Common databases for all transport operators
- Info on transport AND on land use
- Levels of atmospheric pollution
- Regional traffic information

# Epilogue

*ITS is not only a technical issue but a new frame for:*

- ❑ Voluntary cooperation
- ❑ Seeing the big picture
- ❑ Bringing others into the decision process
- ❑ Adopting necessary new policies





ITS IN EUROPE '99  
Amsterdam, June, 1999

# ITS Strategies and Tools to Meet City Needs

Mikel Murga and Eric Britton

Leber Ingenieria, Bilbao

EcoPlan International, Paris