



# snowball

Intelligent energy for integrated urban and mobility planning

Intelligent Energy Europe

## PROJECT MEETING snowball

Ludwigsburg, Germany

2008 November 27,28& 29

*Final conference*



### SAN FERNANDO DE HENARES

#### What has been done within Snowball project?

- A process of consensus building, first within the city departments and then with the construction of a participative process involving associations and entities in the change towards a sustainable mobility.
- A Sustainable Mobility Plan for the city has been initiated, and the analysis of the mobility situation (diagnosis) is almost finished, integrating projects and initiatives already implemented.

#### The Snowball events organized by San Fernando:

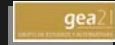
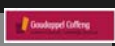
- **Snowball kick off:** project presentation in a SWOT workshop about mobility and accessibility in San Fernando, with decision makers and city diverse officials (19.04.2006)
- **Bicycle Plan:** Discussion with citizens and associations about a bicycle strategy for San Fernando (09.06.2006).
- **Sustainable and safe mobility Committee:** Constitution of the participative structure supporting sustainable mobility (20.09.2006).
- **European alternatives and City Coaching** session on Sustainable Mobility plan and stakeholders (22.09.2006).
- **Access to work mobility:** Debate and round tables co-organised with a trade union (CCOO) about work travels in San Fernando (02.11.2006).
- **A new mobility model:** impact of the new Underground in San Fernando. Ideas workshop about the new mobility framework. Attendance: decision makers and city officials (16.03.2007).
- **International Healthy Urban Planning Conference. Sustainable Mobility and Urban Design:** Project meeting and planning workshop (24 & 25.06.2008)
- **The Citizens design the Mobility Plan:** planning workshop (29.11.2008)



Consortium cities:



Expertise parties



Apuntamiento Real Sitio san fernando de henares



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## WALKING AND CYCLING .....

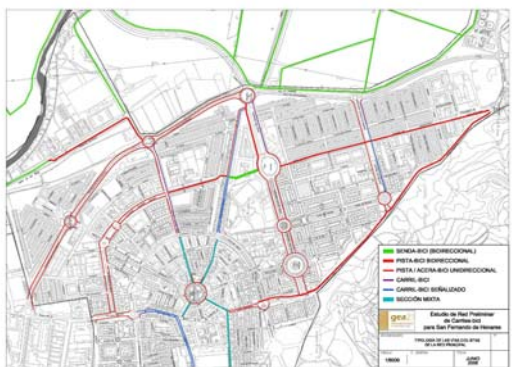
### » SOME STEPS AHEAD

San Fernando special conditions make easy to walk in the city. In the last decade its modal share shifted from a predominantly walkable city towards an increasing share of public transport and car users. In the mobility campaigns thanks are given to those citizens who still walk in their everyday travels.

San Fernando de Henares is also a very appropriate environment for the daily use of the bicycle, due to its generally flat ground, to the reduced distances existing within the municipality and to the good weather.

Measures such as improvement of public spaces, traffic calming, creation of bikeways and bike parking places, and promenades relying city and close nature contribute to link the Snowball project of sustainable mobility both with other San Fernando urban policies as Healthy Cities and with the social policies in general

The City Master Plan favours sustainable mobility through its proposals of dense, and mixed developments and through the spatial proximity of a large part of the city.



### » C&W POSITIVE ACTIONS IN CITY

- Traffic calming: raised crosswalks which help to raise traffic velocity
- Public space improvement projects
- Town centre pedestrian streets
- Bikeways and bike parking facilities
- Integration in the Madrid Region public transport system: Opening of the Underground services and improvement of bus lanes.

### » LESSONS TO LEARN

1. Integration of a strategy for bicycles in the City Master Plan (2005)
2. Parking strategy as a way to improve public spaces network.
3. Easy and safe itineraries for walk and cycle.
4. Reduction of urban velocity of traffic allows the coexistence of walkers and bikes with surface public transport and car traffic.
5. Health as a drive to make the change towards sustainability.

### » NEXT STEPS

- Preliminary Bicycle plan: 11 km of bike lanes are designed to be build by next local government. Three axis N-S and four E-W will create a dense and clearly structured network for the expected flows of bicycle traffic.
- Integrated urban projects of quality public space plus traffic calming and coexistence of walkers, bike and slow traffic.



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## ENERGY ASPECTS AND CO2 EMISSIONS

### » ENERGY AND TRANSPORT

Mobility has become one of the leading reasons for the use of fossil fuels. This is especially true in those metropolitan areas where the distances needed for daily travel to work, shopping or study are significantly greater. In the Community of Madrid working people need (mainly for work trips) to go further and further away from their daily destinations, resulting in a huge dependence on the private vehicle and the use of fossil fuels. This situation is worsening the quality of the air and increasing the impact of mobility on the total CO2 emissions into the atmosphere.

### » EMISSIONS TABLE

Distribution of energy consumption and CO2 emissions by transport mode in San Fernando de Henares (2006)			
	Koe/day	Koe/year	CO2 eT / year
Private vehicle	62,883.79	22,952,583.35	720,711.12
Bus	7,087.45	2,586,919.25	81,229.26
Commuter train	2,348.22	857,100.30	16,113.49
Metro	4,512.02	1,646,887.30	24,373.93
Chartered Coach	1,421.27	518,763.55	16,289.18
Taxis	220.66	80,540.90	2,528.98
<b>TOTAL</b>	<b>78,473.41</b>	<b>28,642,794.65</b>	<b>861,245.96</b>

### » SUSTAINABLE MOBILITY PLAN

#### » DIAGNOSIS

Diagnosis of the Sustainable Municipal Mobility Plan analyses the current situation of mobility, all the different modes of transportation used by the population within the municipality as well as when arriving or leaving our city and the environmental impact of each, including energy consumption and greenhouse gas emissions. Alternative scenarios foresee the opportunity to save energy in the future.





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## SUSTAINABLE MOBILITY PLAN (SMP 2008)

A Sustainable Mobility Plan was initiated in January 2007. It was aimed to offer a diagnose on the current accessibility and mobility situation, to foresee the impacts of planned future and to drive the change towards a more sustainable mobility.

First phase- Diagnosis is completed. Analysis of leading indicators explain the current scenario. Using these variables, SMP has defined the scenarios for future trends and risks as well as the environmental scenario for the shift of mobility towards criteria of sustainability.

### » MAIN GOALS

- A. To define the current trends and risks of San Fernando mobility, enhancing the best vectors for a sustainable mobility: high percentage of pedestrian daily trips and intense use of PT, which has to grow with the new mobility model.
- B. To design a set of programs to be developed in the next years with the support of social and economic city stakeholders, trying to diminish the private car use, to initiate a cycling transport an to improve public transport and intermodality.

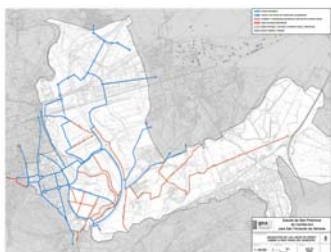
### » PROGRAMS

1. Program for the improvement of pedestrian itineraries.
2. Program for the promotion of cycling
3. Program for the improvement of public transport
4. Program for the promotion of intermodality
5. Program for traffic calming and planning
6. Program for parking demand management
7. Program for the demand management of loading/unloading related with urban goods transport
8. Program for demand management of mobility

### » RESULTS

- ✓ A medium and long term new Strategy for the next eight years, including the sectoral policies in course
- ✓ Solutions for the remaining problems: bigger motorisation, access to industrial areas, impact of planned growth, impact of regional infrastructures.

Modal share evolution 1996-2004		
	1996	2004
<b>Pedestrians</b>	44%	28.12%
<b>Private Vehicle</b>	27.14%	24.86%
<b>Public transport</b>	28.86%	47.02%



### » CITIZEN INFORMATION AND PARTICIPATION

Above all, this Plan is participative. A permanent Committee on Safe and Sustainable Mobility was created in September 2006. The Committee, which meets regularly, is composed of the leading social, economic and institutional agents in our city. It is an instrument for debate and participation in the area of mobility and accessibility in order to advance in the consensus building.