







# Cleaner and better transport in our cities

Final Brochure



# Introductory word



Cleaner and better transport in cities is the objective that the European Commission is aiming at when supporting the CIVITAS Initiative. This was also the goal of the cities of Venice, Ljubljana, Debrecen, Odense and Toulouse when they decided in the year 2003 to establish a partnership which has turned into the CIVITAS MOBILIS demonstration project. With the project ending at the beginning of 2009, it is now time to assess how far the partner cities could go in the development of a clean and alternative mobility and to see whether the mobility conditions have been improved in the five demonstration cities.

The answer is certainly yes but this not all about the CIVITAS MOBILIS project. Even with a continuous increase in transport demand, mobility and public transport management are now considered as some important issues that can not be ignored anymore in the frame of the development of a sustainable mobility policy in our cities.

This evolution is confirmed by having a look at how was the situation a few years ago. Among others, we could see how Toulouse committed itself to realize a strong accompaniment of a major public infrastructure such as the line B of the metro (opened in June 2007) and how cities like Odense with its exemplary cycling policy have experimented various soft measures in order to promote clean mobility. There is no doubt that CIVITAS MOBILIS has contributed to modify the mobility cultures of the 5 partner cities.

This project which is getting close to an end has enabled to address differently the various issues of mobility management and to implement some measures that could never had time to come into being in such a short time without CIVITAS MOBILIS. This is the main interest of a project like this. We try to create different synergies and we are gathering all the different stakeholders who are not that used to work all together.

All in all, more than fifty measures have been implemented in the different partner cities and more than one hundred people from all over Europe have contributed to this project. If I had to hold up as some examples, my personal preference would go to the creation of a Mobility Agency in Toulouse, the development of the car-sharing scheme in Venice, the deployment of the traveller information system of the tramway of Debrecen, the biodiesel experimentation in Ljubljana or the implementation of environmental zones in Odense.

These works as well as some precious more transversal thoughts carried out within this project are all presented in the present brochure. By publishing it, our objective is to present you the list of results and solutions on which we have been working on for four years and to provide you with the contacts of the numerous stakeholders of the project who are committed to share their knowledge and experience with you.

The CIVITAS MOBILIS project will remain for me, the coordination team and for the site managers of the other cities, a wonderful and fruitful human experience and I am glad to take the opportunity of this brochure to thank all the staff who worked on the project and who made all his best to turn this project into an important success. The reading of this brochure will permit you to appreciate this success by yourself.

Stéphane Coppey President of Tisséo



## The CIVITAS Initiative

CIVITAS - cleaner and better transport in cities - stands for Clty-VITAlity-Sustainability. With the CIVITAS Initiative, the EC aims to generate a decisive breakthrough by supporting and evaluating the implementation of ambitious integrated sustainable urban transport strategies that should make a real difference for the welfare of the European citizen.

CIVITAS I started in early 2002 (within the 5<sup>th</sup> Framework Research Programme); CIVITAS II started in early 2005 (within the 6<sup>th</sup> Framework Research Programme).

Within CIVITAS I (2002-2006) there are 19 cities clustered in 4 demonstration projects, whilst within CIVITAS II (2005-2009) 17 cities in 4 demonstration projects are taking part. These 36 cities all over Europe have been funded by the EU with  $100 \, \mathrm{M} \in \mathrm{A}$  and the overall budget of the Initiative has been more than  $300 \, \mathrm{M} \in \mathrm{A}$ .

CIVITAS Plus is now starting in 2009 for a duration of 4 years and will bring together 26 cities in 5 demonstration projects.





#### **CIVITAS** policy strategies

The CIVITAS initiative addresses the challenge to achieve a radical change in urban transport through the combination of technology and policy based instruments and measures. Eight policy fields have been identified as the basic building blocks of the strategy:

- Energy efficient, cost effective and clean public and/or private vehicle fleets and the necessary infrastructure;
- Demand management strategies based upon access restrictions to the inner city areas and other sensitive zones;
- Demand management and revenue raising strategies based upon integrated area-wide pricing strategies;
- 4) Stimulation of collective passenger transport and the quality of service offered to passengers;
- 5) New forms of vehicle use and/or ownership and less car intensive lifestyles;
- 6) New concepts for the distribution of goods
- 7) Innovative 'soft' measures for managing mobility and demand:
- 8) Integration of transport management systems and related information services.

# Mobility issues in ...

# Toulouse

## **Linking territories**

With more than 800.000 inhabitants, Toulouse is an attractive pole for workers, students, leisure and customers in the Region. Due to the important annual growth rate of the conurbation of Toulouse (1.6% - one of the most important in France), public transport and traffic management are some crucial issues in the objective to avoid the congestion of the city centre. Some of the particularities of the city centre of Toulouse are its mixed urban structure (commercial-residential-industrial/services-tourist) and the fact that a large area of Toulouse is structured with narrow streets where it is essential to preserve the typical quality of life.

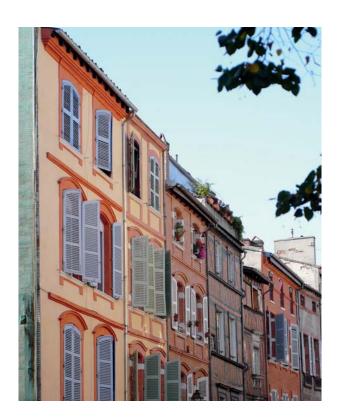
With the opening of the 2<sup>nd</sup> line of metro in June 2007, the CIVITAS Toulouse partners have undertaken some numerous accompanying projects in order to achieve a radical change towards the development of an alternative mobility culture. The city centre has been entirely redesigned and the attractiveness of the public network has been reinforced through diffe-

rent improvements of the quality of service such as the development of the contact less ticketing system.

The preponderance of private vehicles in the streets of Toulouse entitled the CIVITAS partners to engage some important and innovative actions in order to increase the modal share of public transport and other alternative soft modes. Some of the most outstanding actions were the continuation of the development of the CNG public transport fleet, the realization of a biodiesel experimentation, the implementation of a new parking management policy, the improvement of the quality of service of the bus network through the development of dedicated bus lanes and of the bus priority system, the launch of the contact less ticketing system or the launch of a mobility agency. All together, these measures have contributed to achieve a significant leap ahead in the development of an alternative mobility culture in a city where cars have been dominating the streets for a long time.



# **Mobility issues in Toulouse**



#### **Political Statement**

Thanks to the CIVITAS MOBILIS project, it has been possible to gather all the local stakeholders in charge of mobility in the greater Toulouse area and it is great to see how important the change in the mobility patterns of the inhabitants of Toulouse was. There have been some important changes in the way how people are now moving around in the city. The quality of life of the inhabitants has been considerably improved and congestion in the cities center tends towards something which will soon belong to another time. The mobility policy of Toulouse is based on the complementarities between the development of major public transports infrastructures (such as the high quality bus corridors) and the development of an alternative mobility culture through the launch of new innovative services and the promotion of alternative soft modes. CIVITAS MOBILIS has been the tool to link up these two complementary strategies and there is no doubt that all the Toulouse partners have learnt a lot from this fruitful experience.

## The local partnership

Tisséo – Public Transport Authority and Operator Grand Toulouse – Great Toulouse Authority SICOVAL – South East Toulouse Authority City of Toulouse City of Blagnac Gaz de France CETE du Sud-Ouest (ZELT) AUAT – Urban Planning Agency CECILE – SME groupment specialised in GNSS Technology

Connex Toulouse – Public Transport Operator withdrew the project in January 2006

# Mobility issues in ...

# Venice

## **Going Places**

The city of Venice is unique. It was founded 1500 years ago as a temporary settlement on the islands of the Venetian lagoon. The City itself is built 1m above sea-level, 4km from the mainland, and is the regional capital. The City stretches across 118 small islands in the Venetian Lagoon along the Adriatic Sea in northeast Italy. The saltwater lagoon stretches along the shoreline between the mouths of the Po (south) and the Piave (north) Rivers. The population estimate of 272,000 inhabitants includes the population of the whole Comune of Venezia; around 62,000 in the historic city of Venice; 176,000 in Terraferma (the Mainland), mostly in Mestre and Marghera; and 31,000 live on other islands in the lagoon. Island and mainland Venice are connected by a bridge.

As the regional capital, and one of Europe's most historically established cities, Venice is compact, well situated and well connected by an efficient transport infrastructure, comprising of air, road, rail and water transport.

Although a historical city, Venice has rapidly adapted to new requirements of modern urban life, and has developed a technological infrastructure that has enabled the city to become an advanced global telecommunications hub of real-time contact with other parts of the world, and an innovation site.

Venice is an extraordinary, complex and unique city. It is both an historical and contemporary urban reality, a living city conditioned in all aspects by the presence of the sea. It's climate, eco-system, and socio-economic systems are all determined by its unique seafront position. This means that Venice is also city of dichotomies.



In fact, critical issues for transport on the mainland concern the number of private cars due to the tendency to use them even for short journeys instead of walking and cycling and traffic due to tourism. Congestion is widespread from the centre to the outskirts. Whereas, the water traffic problems in the canals of the island city are related to the high number of boats and technical characteristics of vessels; bulky craft equipped with oversized engines with high energy consumption in addition to typical problems of parking and delivery services.

The CIVITAS MOBILIS measures have focused on achieving sustainable mobility both on the mainland and the lagoon and canals of island Venice. Special emphasis has been placed on the improvement of public transport and the promotion of alternative mobility modes, the mitigation of traffic and congestion, the improvement of access management in the city centre, the access to disabled users, the promotion of the use of the bicycle and the expansion of the car sharing scheme.

With a particular focus on the liveability of the Venice mainland and islands, and thus on residents, commuters and visitors, initiatives in Venice have brought about positive changes to mobility.

# **Mobility issues in Venice**

#### **Political statement**

An opportunity to take a large step towards sustainable mobility in an integrated manner: that is what CIVITAS MOBILIS has meant to the City of Venice. In fact, our measures have addressed the different mobility issues faced by island Venice and the issues which are typical of a medium sized urban area in mainland Venice. The project has given us the framework within which to systematically focus on and evaluate measures regarding the number of and speed of boats in the canals as well as the age old problem of parking and delivery in the canals, while issues of access management, alternative mobility modes, cleaner public transport and promotion of the bicycle have been tackled on the mainland. The project has contributed to increasing the attractiveness and liveability of the City for residents, commuters and visitors.



## The local partnership

City of Venice

ACTV – Public Transport Company

ASM – Mobility Company

AGIRE – Energy Agency

FormaUrbis – an engineering and architecture SME

VESTA – the local environmental services company withdrew the project in January 2007 CDG TALV – The Office of the Commissioner delegated by the Government for Waterborne Traffic withdrew the project in January 2007

# Mobility issues in ...

# Ljubljana

## Meeting place at the crossroad

Ljubljana, the largest city and the capital of the Republic of Slovenia is an important political, cultural and economic centre. It has more than 270,000 inhabitants but together with neighbouring municipalities the population rises to over 500,000. Ljubljana's geographical position has governed its colourful past, since it is situated on a natural passage leading from Central Europe to the Mediterranean and toward the East called the "Ljubljana Gate." It is not by pure coincidence that trade routes and waves of migration have passed through it since centuries. From the times of the first settlers right down to the present day, the transit character of this area has stimulated the constant growth of economic and cultural ties with other cities and nations.

Ljubljana has faced steady traffic growth and an increasing number of commuters, reaching 130,000 daily commuters today. A modal split ratio between public transport and individual modes of transport is in favour of the latter.

Ljubljana has anticipated problems such as congestion, a fall in the use of public transport and continued decline in the level of car occupancy. Walking, cycling and other more sustainable transportation/mobility modes are increasing but the City has recognised that more supporting action can be given.



The focus of CIVITAS MOBILIS in Ljubljana has been on linking urban and traffic planning, promoting the use of public transport, alternative mobility and low emission vehicles, facilitating civil society engagement and improving traffic infrastructure with one goal: to create better living conditions for all citizens in Ljubljana.

Ljubljana has all the facilities of a modern capital, and yet it has preserved its small-town friendliness and relaxed atmosphere. It is a vibrant city full of surprises. During winter, its dreamy central European character prevails, and during summer its relaxed Mediterranean feel. Ljubljana's surrounding areas are packed with natural beauty, cultural sights bearing witness to the city's dynamic history, attractive walking, running and cycling trails, and a diverse range of places to satisfy culinary desires.

# Mobility issues in Ljubljana

#### **Political statement**

CIVITAS MOBILIS in Ljubljana has been considered an opportunity to rethink urban mobility. The focus of the Ljubljana project partners was on biodiesel production and testing it in city public transport fleet, supported by information dissemination activities. Recent global developments in biofuel field and local circumstances led us to the conclusion that biodiesel is not a challenge to the City any more. We furthermore realised how very important is to build and maintain partnerships and to engage citizens in mobility measures planning. Therefore, the CIVITAS MOBILIS experiences are invaluable and the impacts "irreparable". Our final aim is to create better living conditions for all citizens in Ljubljana.

## The local partnership

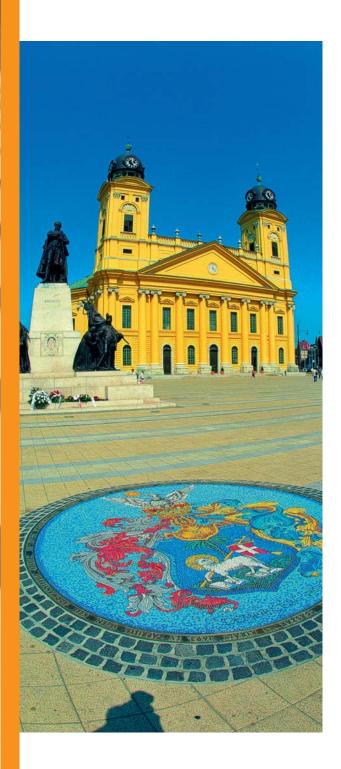
City of Ljubljana
LPP – Public Transport Company
Pinus Rače d.d. – Bio Diesel Producer
FME – University of Maribor
KIS – Agricultural Institute of Slovenia
REC CEE – Regional Environmental Center, for Central
and Eastern Europe
CO Slovenia

TEOL and SAVA withdrew the project in January 2007



# Mobility issues in ...

# Debrecen



## A city dressed in the sun

Debrecen is the second largest city in Hungary after Budapest with a population of 204,000. The city is the regional centre of the Northern Great Plain region and the scientific, cultural centre of the eastern part of the country. It has been the stronghold of Protestantism for a long time, which is why Debrecen is often called the "Calvinist Rome". The city is also regularly mentioned as the town of festivals, schools and even the town of permanence.

Debrecen is one of the most vivid and coziest nooks in Hungary: this city is a unique and outstanding whirlpool of a dynamic cultural and intellectual heritage and of an effective and successful economic life. The centuries' old traditions and the most recent technical and scientific innovations enhancing each other make Debrecen a renowned city.

The suburban area of the city, taking into consideration the agglomeration also, provides supply, education, communication and services to approximately 350 thousand people within a radius of 20 kilometers. Due to its religious, political and economic strength, the settlement, which functioned over the centuries almost like a city-state, served as the capital of Hungary twice in its history. Today, Debrecen is the dynamically developing centre of the North Great Plain Region.

Key objectives of the development of the city transport have changed due to the rapid growth in the car ownership. Recently the main objective is to maintain the recent modal share with the improvement of public transport, and demand management schemes i.e. parking charges, access control, etc. By raising the standards of urban mobility in Debrecen, the measures of the CIVITAS MOBILIS project are major contributions to our attempts to improve the quality of life of our citizens. The smooth cooperation between local actors proved to be the way to create a well-organized sustainable mobility fra-

# **Mobility issues in Debrecen**



mework for all transport modes. This is one of the most important local mobility achievements that was facilitated by the CIVITAS MOBILIS project. The politicians and stakeholders realized the importance of involving all the different actors in the process of sustainable development and being able to address the transportation challenges ahead in Debrecen.

#### **Political statement**

The main goals of the project partners of Debrecen are to maintain the current modal shift and to create a well-organized sustainable mobility framework for all transport modes. During the process Debrecen focuses on environmental and economical but also on social aspects, as it is necessary to identify, understand and satisfy the specific needs of different social groups. The CIVITAS MOBILIS project measures are thus major contributions to improve the quality of life for the citizens of Debrecen by raising the standards of urban mobility.

## The local partnership

City of Debrecen

DKV – Public Transport Company

HV – Hajdú Volán – Regional and Urban bus services

HBM ÁKK – County State Road Maintenance

Company

UoD – University of Debrecen

# Mobility issues in ...

# Odense

## Centre for soft modes of transport

Odense is an atmospheric city in the heart of Denmark on the green island of Funen. With its 186,000 inhabitants Odense is the third largest city in Denmark. The city is internationally known as the birth city of the great writer of fairytales, Hans Christian Andersen. But it can tell many more stories.

Odense is located centrally in the middle of Denmark and is today a major traffic terminal for road, rail and bus traffic. Over 26,000 commuters travel to Odense each day. The city is one of the largest university towns with over 17,000 students enrolled at academic level and ca. 13.000 students on other courses. Odense also hosts the largest single university hospital unit in Denmark with approx. 8.000 employees. Once a heavy industrial city, Odense has now developed into a centre for small and middle sized firms with a wide range of supporting service enterprises.

Odense is a relatively low-rise city with a low urban density and ideal topographical conditions for cycling. Cycling is a natural part of daily life in Odense, and in 1998 Odense was elected as the National Cycle City of Denmark and given extraordinary funding for cycle research and demonstration activities by the Danish Government. Cycling now covers more than 30% of the trips in the city and in central areas it exceeds 50%. The city administration has built up advanced knowledge and competence within the fields of cycle promotion and infrastructure improvement and assists many public authorities both in Denmark and in other countries across the world.



# **Mobility issues in Odense**

#### **Political statement**

Ever since the 1970's, Odense City Council has supported an environmentally friendly and sustainable transport policy. The goals of Odense's upcoming traffic and mobility plan are to create a whole and integrated city centre with focus on urban life; to prompt cycling, walking, and the use of public transport. One of our political goals in relation to city planning is to "create a city for the people living in it" – to put people first instead of cars.

The CIVITAS MOBILIS activities in Odense have been a highly valuable contribution to our work in the field of sustainable mobility. Apart from the already achieved successes and improvements in the city gained through the project, the CIVITAS MOBILIS experiences will be very useful in the future implementation of the cities new traffic and mobility plan.

Cycling has a long tradition in Odense and the city has more than 500 km. of cycle paths. The cycling policies in Odense have demonstrated that dealing with transport and mobility as part of a total integrated, societal problem complex has helped the re-discovery of the bicycle as a modern and attractive transport mode which – at the same time and amongst other added values – benefits the urban environment, local economy, public health, city liveability, personal well-being, civic pride and civic responsibility. The theoretical bases for Odense's efforts to encourage cycling are based on the idea that success for a change in modal split starts with changes in behaviour and mobility culture.

## The local partnership

City of Odense



# The CIVITAS MOBILIS Objectives

Since 2005, the European cities of Toulouse (France), Venice (Italy), Ljubljana (Slovenia), Debrecen (Hungary) and Odense (Danemark) are involved in CIVITAS MOBILIS.

Those five cities have formed a strong partnership with high-level political commitment to face future challenges in the field of sustainble urban transport and mobility.

Within 49 measures based on the application of existing technology solutions, the CIVITAS MOBILIS cities have carried out research, demonstration and innovation-related activites over a duration of four years (Febrary 2005 – January 2009).

The project aimed to implement radical strategies for clean urban transport in the five cities partners, building on a broad range of policies and instruments.

The CIVITAS MOBILIS partners have received a EC funding of 9,3 millions of euros over a total budget of 22 millions of euros.



## Our project objectives were to:

- Foster a transition process towards the broad use of alternative fuels and clean energyefficient vehicles;
- Promote modal shift away from the use of the motor car towards sustainable transport modes;
- 3. Improve the quality and fair share of public space;
- 4. Create transport minimizing urban structures;
- 5. Foster safety, security, social inclusion and equity in urban mobility;
- 6. Reduce noise and improve air quality in urban areas;
- 7. Support economic development and competitiveness;
- 8. Advance efficient planning, management and implementation processes and coordination between mobility stakeholders at different administrative levels;
- Increase participation of citizens and civil society in environment- and mobility-related decision making;
- 10. Raise awareness for sustainable mobility and promote behavioural change;
- Improve innovation and creativity capacities of local mobility stakeholders.

# Technical achievements \_\_\_\_\_

What the cities have developed within the CIVITAS MOBILIS project?	Toulouse	Venice	Ljubljana	Debrecen	Odense
Development of clean public transport fleets (CNG & BioDiesel)	✓	1	1	✓	
New Public Transport Infrastructures (Segregated Bus lanes & High Quality Bus Corridors)	✓				
Improvement of the quality of service and accessibility of Public Transport	✓	1		✓	✓
New ticketing system and Public Transport innovative fares	<b>√</b>				✓
Development of Public Transport Priority & Information Services	✓			✓	✓
Urban planning integrating mobility management	1	1		1	✓
Innovative parking management	1	1		<b>√</b>	
New form of access management / control	<b>√</b>	1		<b>√</b>	
Development of pedestrian areas and environmental zones	<b>√</b>			✓	✓
Dedicated scheme to develop clean vehicles for a private use (CNG Cars & LPG Boats)	✓	1			
Awareness raising and marketing for a new mobility behaviour	✓		1		✓
Application of Information and Communication Technologies for mobility management	<b>√</b>	1			
Development of car-pooling / car-sharing use and services	1	1		1	
Goods distribution management	1	1			
Development of a new cycling culture / policy	1	1	1	<b>√</b>	<b>√</b>

# Who are the people involved in the MOBILIS project?

# Toulouse



1. Jean-François DARME: Project Officer/Tisséo 2. Jonathan TURGY: Site Manager/Tisséo

**3.** Aurore ASOREY: Site Dissemination Manager/Tisséo **4.** Alexandre BLAQUIERE: Project Coordinator/Tisséo **5.** Marie-Reine BAKRY: Project and Site Evaluation Manager/CETE-ZELT **6.** Patrick Van EGMOND: Former Site Manager/Tisséo **7.** Patrick OLIVERO: Former Project and Site Evaluation Manager/CETE-ZELT

# Venice





From the City of Venice:

1. Gabriele VERGANI: Evaluation Manager 2. Carlo ANDRIOLO: Site Manager 3. Chiara TENDERINI: Project Officer 4. Jane WALLACE-JONES: Site Dissemination Manager 5. Frédéric BROCHIER: Site Evaluation Manager 6. Isabella MARANGONI: Senior Project Officer

# Who are the people involved in the MOBILIS project?

# Ljubljana



1. Nataša OPLOTNIK: Project Officer/City of Ljubljana 2. Marko KAMNIK: Measure Leader/LPP 3. Zdenka ŠIMONOVIČ: Site Manager/City of Ljubljana 4. Albin KEUC: Site Dissemination Manager/REC CE 5. Milena MAREGA: Project Dissemination Manager/REC CEw

# Debrecen



From the City of Debrecen

1. Norbert JAKAB: Measure Leader 2. László KRAJCZÁR: Project Officer 3. László SZÜCS: Site Manager

4. Tibor GYULAI: Measure Leader

# Who are the people involved in the Mobilis project?

# Odense



From the City of Odense: 1. Kurt FREDERIKSEN: Site Manager 2. Kristina DIENHART: Site Evaluation Manager

- 3. Kristina EDRÉN: Site Dissemination Manager 5. Kim MEHLSEN: Measure Leader
- 4. Mette FYNBO/the Danish Road Directorate and 6. Søren JUNCKER/FynBus: Measure Leaders

# RUPPRECHT CONSULT



**1.** Matthias FIEDLER and **2.** Siegfried RUPPRECHT, Rupprecht Consult GmbH, Cologne – Germany. Matthias and Siegfried assisted the site managers and the coordination staff in the horizontal tasks of the CIVITAS MOBILIS project, coordinated the preparation of policy recommendations and organisation of the technical workshops and political steering group meetings.

# Mobiel 21



Annemie Van UYTVEN – Mobiel 21 Unit research and campaigns, Belgium. Annemie was in charge of gender issues in the CIVITAS MOBILIS project

# Who are the people involved in the Mobilis project?

Political Steering Group



1. Roman JAKIC: Councillor of the City of Ljubljana 2. Stéphane COPPEY: President of Tisséo 3. Christian LAVIGNE: Vice-president of Tisséo 4. Philippe GOIRAND: Councillor of the City of Toulouse 5. Thomas FUNDING: Councillor of the City of Odense 6. Lisa RÜCKER: Deputy Major of the City of Graz 7. Gyula GYÖRI: Councillor of the City of Debrecen 8. Pierantonio BELCARO: Coucillor of the City of Venice



# Toulouse



CNG Buses and filling station

#### Towards a 100% clean public transport fleet in Toulouse

In 2004, Toulouse already had one of the biggest CNG public transport fleet in France (100 vehicles). During the CIVITAS MOBILIS project, the Public Transport Authority (Tisséo) has decided to go ahead in its CNG policy by constructing a new CNG filling station in the new bus depot of Langlade, and purchasing 68 new CNG buses.

The CNG solution is not an isolated action in the wider frame of the development of a clean vehicle strategy in Toulouse. Together with the launch of a biodiesel experimentation (81 buses), the installation of soot filters (28 buses) on diesel buses the procurement of diesel buses already equipped with soot filters (101), Toulouse has reached some spectacular results in terms of emissions cuts.

Between 2004 and 2008, it has been calculated that the polluting emissions of the whole bus fleet have decreased by 31,9% for Nox, 54,2% for CO, 42,8% for HC and 84,4% for particulates.

In addition, it also has to be highlighted that Toulouse is the first city in France where the CNG micro-compressor solution for private households has been launched.



On-street parking in Toulouse

#### Definition of a new parking management policy

Toulouse has implemented a new parking management policy in the city centre. Initially foreseen in 5 neighbourhoods of the city centre, the measure has been extended and is now covering the 19 neighbourhoods of the city centre.

In order to achieve the objectives of this sensitive measure, the City of Toulouse has implemented a resident subscription system and has reduced the parking capacity of almost 2000 on-street parking lots.

Among the results, it has to be underlined that there is an important satisfaction rate of the people who subscribed to the resident fare (80% of satisfied people) and that the necessary time to find a parking place in the city centre has been divided by 4 them.

In terms of implementation process, there is no doubt that the high quality of the communication and public consultation process has been the key success factor of this measure.



Entrance of the newly redesigned Alsace-Lorraine street

#### Public space redesign in the city centre

In accompaniment to the realization of the line B of the metro, Toulouse has decided to redesign its city centre in order to give more space to alternative and soft transport modes such as walking, cycling and public transport.

In this measure, the City of Toulouse has performed some important works in terms of public space design and a lot of streets of the city centre have been redesigned with a priority given to pedestrians and cyclists.

The car traffic has been reduced considerably and the total redesign of one of the main streets of the city centre (rue Alsace-Lorraine) shows how important the urban environment has been modified (from 8000 to 3000 private vehicles passing by per day) and how effective this urban redesign was in terms of improvement of quality of life for the people living in the city centre.

Moreover, the City of Toulouse has also implemented some dedicated delivery areas and corridors in order to improve the efficiency of the new goods delivery regulation.



High Quality BusCorridor in Toulouse outfkirt

# High Quality Bus Corridors and development of bus segregated lanes in the city centre

Accompanying the new metro line, Toulouse has developed some complementary solutions for the bus network in order to achieve a substantial lap ahead for the quality of the public transport network.

Two High Quality Bus Corridors have been constructed in the outskirts of Toulouse and have been connected to the metro network and several dedicated bus lanes have also been created in the city centre in order to improve the quality of service of the bus network (regularity, running times...).

Results are very encouraging since they are highlighting some clear and important improvements in terms of quality of service for the bus network without having any negative effects on the general traffic conditions. As an illustration, the buses running on dedicated bus lanes have decreased their average running time by 10% and the buses running on High Quality Bus Corridors is now enabling the public transport users of the outskirts of Toulouse to save some precious time when going to the city centre (-20% to -40% depending on the routes and bus lines).

# Toulouse



Contactless ticket collector

# Innovative multimodal public transport contracts, services and electronic ticketing

In June 2007, Tisséo has launched its new contactless ticketing system. From this date, the "Carte PASTEL" has entered into the life of the public transport users.

In parallel, some important works are being carried out in the frame of the interoperability with the regional public transport authorities. Soon, the Carte Pastel will enable everybody to move on the different public transport networks of Toulouse with one single transport card.

Tisséo is also experimenting some products which are now made available thanks to the smart card concept functionalities.

The first product experimented targets "commuters" using frequently the Tisséo network for going to their workplace. This product called ACTIVEO is a "year subscription" where the payment is debited automatically at the beginning of the month. This specific fare has been experimented with 6 societies that have already been implementing a Commuter Plan.

The second innovative concept experimented within CIVITAS MOBILIS is corresponding to an "anonymous card" that permits to charge an illimited number of single trips tickets (from 1 to 100 at 1,17  $\in$  the ticket) or an impersonal monthly or weekly fixed rate. This concept was oriented towards the non-frequent users and also to the users who don't want to proceed for a personnalised subscription.



Mobility agency entranse

## Set-up of a mobility agency and customised mobility services

In 2005, the CIVITAS Toulouse partners have launched an experimentation with the creation of a the first mobility agency in the south-eastern part of the conurbation of Toulouse which has turned into a very successful story.

The objectives of this mobility agency were to inform and advice about existing solutions of public transport, integrate this information service with other mobility services such as car-pooling, transport on demand or bicycle rental and, to promote new mobility behaviours.

More and more people have pushed the doors of the mobility agency (from 250 monthly contacts in March 2006 to 550 contacts in April 2008) and the Public Transport Authority decided to build an action plan where several mobility agencies will be developed around the main intermodal nodes of the public transport network.



Vélô Toulouse bicycle and station

#### Promotion of bicycle use and integration with public transport services

Starting from a situation where the cycling modal share is 4% at the level of the whole conurbation, all the CIVITAS Toulouse partners agreed that there was a lot to do in order to develop and promote cycling.

The main achievement within this measure is the realization of a "How to promote cycling" guide where several issues like developing infrastructure for cyclists, improving signing, facilitating services and improving communication are being addressed. This guide will be considered in the coming revision of the Urban Mobility Plan (PDU).

Cycling is also a complementary solution to public transport. This is the reason why Tisséo as the Public Transport Authority has launched the secured bicycles parks at the level of several metro stations.

In parallel, the City of Toulouse has launched an automatic bicycle renting system called Vélô Toulouse (250 stations and 2500 bicycles in 2008) in order to remind people that cycling is also an urban transportation means.

With the launch of the Vélô Toulouse system, the bicycle has now become more visible in the city centre and cycling is now becoming a real means of transportation and is no longer only a leisure activity.



Traffic junction with bus priority

#### Implementation of an adaptative bus priority solution

The bus priority system is considered as one of the most efficient solutions for the improvement of quality of service of the bus network (respect of the time table).

In this measure, two bus lines have been equipped with a priority request system in order to assess the advantages and constraints of this system both for public transport and private cars flows.

A lot of data was collected over a period of two weeks and the evaluation underlined several outstanding good results such as an important increase of bus commercial speed through the diminution of the waiting times at traffic junctions (average of 52%). The system showed a good level of acceptability from the bus driver's point of view and the bus priority system had no impact on the general traffic conditions.

The high quality of the evaluation results is now pushing the City of Toulouse to equip other crossroads with this system and a large deployment scheme is foreseen in the coming years.

# Venice



One of the 35 CNG buses purchased with the CIVITAS MOBILIS co-financing

#### **Deployment of CNG buses**

One of the greatest challenges for Venice was the implementation of the measure which aimed to increase the number of clean energy efficient vehicles that runs with natural gas in the public transport fleet.

At the beginning of CIVITAS MOBILIS, 2 buses using conventional fuel were transformed into buses using dual fuel (diesel and natural gas) in order to empirically verify their functioning and highlight any potential problems. ACTV decided, as a result of these tests, that the purchase of new CNG buses was more economically viable than the conversion and that the new buses would have an even better environmental performance than the converted buses. Consequently, 35 new CNG buses were purchased and have been operating since February 2006. Moreover, 5 CNG minibuses were purchased and since December 2007 they are used to connect the park & ride car parks with the Mestre city centre.

However, the real challenge for the city administration was the connection of the CNG filling station in the bus depot to the natural gas network; the station was completed in March 2007, but, due to the need to obtain many authorizations from the organisations involved, the gas pipeline works started in March and finished in October 2008.



The event organised for children by the City of Venice in collaboration with the FIAB

## Promotion of safe and increased bicycles use in Venice mainland

One of the priority objectives of the City of Venice administration is to increase significantly the use of bicycles in daily urban trips.

Therefore, through CIVITAS MOBILIS, the city administration implemented a communication campaign, produced a map of the cycle paths and provided 100 new safe bike racks positioned in the Mestre city centre. Moreover, in collaboration with a local school and involvement of the students, critical points of the home-schools bicycle routes were identified and made safe.

Thanks to the collaboration with FIAB in Mestre, the Italian Association for the "Friends of Bicycle", two very successful projects were realised: the ABiCi Project which aimed to promote the use of bicycle in local elementary schools and the BICIBUS Project, a demonstration project which foresaw the accompanying of elementary students by volunteers along three different routes. This demonstration project was carried out during the annual BIMBIMBICI event and was therefore very visible.



The LTZ check-in point in Marghera where the tourist coaches arrive

# Access management for the city centre

Venice is a very attractive city to tourists with more than 70.000 tourist coaches every year. Although it is not possible to force tourists to use forms of transport with low environmental impact, the city administration decided to encourage, thanks to CIVITAS MOBILIS, the use of cleaner tourist coaches in Venice through the design and implementation of differentiated access tariffs in order to promote the use of coaches with class EURO IV standard exhaust emissions. The new tariff system, approved in February 2007, incorporates all the factors

of the previous tariff system (destination, vehicle size, school trips, etc) and also the energy efficiency of the coaches in terms of emissions.

The system was widely disseminated, through a dissemination campaign "Schools meet in Venice" to raise the awareness of young people to environmental issues and sustainable mobility. Advertising spaces were purchased in tourism magazines aimed at operators and agencies and press releases and a leaflet were produced to show the economic and environmental benefits of the use of less polluting buses, and to provide information regarding the pass, the area involved, the tariffs applied and the exemptions.



The Grand Canal access point monitored by ARGOS

#### Access and traffic management in the Grand Canal through ARGOS (Automatic Remote Grand Canal Observation System)

ARGOS is an innovative water traffic navigation control system on Grand Canal, capable of executing an efficient automatic monitoring of navigation and functioning as an effective deterrent against law breaking, thus rationalizing the need for Local Police presence. One of its effects is the reduction of wave motion in crucial points of the city of Venice.

This system, based on digital image processing collected by sensors installed along the Grand Canal, is able to supply a continuous control and real time boat traffic monitoring.

The system's in-depth analysis functions allow to automatically obtain useful information about flows and traffic density in any time interval, as well as to highlight any illicit behaviour on the part of boats. Moreover, the system allows to run through the recorded situations instant by instant, in a synthetic way, in order to rationalize any decision related to traffic regulation.

ARGOS also makes it possible to check specific areas, such as the dockings or all places where mooring is forbidden, in order to ensure control, safety and the observance of navigation rules.

# Venice



Law impact waterbuse in front San Giorgio island

#### Introduction of low impact, access for all waterbuses

ACTV, the local transport company, has successfully reached the objective of improving the public waterborne transport in terms of lower environmental impact and access for all users through the introduction of 18 new greater capacity, lower environmental impact boats, equipped for the transport of people with disabilities on a crucial boat route, from Piazzale Roma to Murano Island, which otherwise has no direct transport services for people with disabilities.

The construction of each waterbus has been supervised at the shipyards and RINA official tests have been done.

Since February 2007, all the 18 waterbuses are operating. They have more efficient engines (123 KW) than the previous ones, reduced environmental impact and a reduced impact on wave action on the fragile lagoon environment due to a new hull design. Moreover, they allow to reduce the travel time for people with disabilities from Murano Island to the Mainland by one half.



One of the main car sharing drop off and pick up points

#### Expansion and diversification of the car sharing scheme

One of the most successful measures implemented in Venice and widely publicised thanks to CIVITAS MOBILIS, aimed to expand the original car sharing fleet by 30%, increasing the proportion of the fleet that runs on alternative fuels to 50%, to introduce vehicles suitable for the transport of people with disabilities and to reduce the number of private cars in the city by designing and demonstrating a corporate car sharing scheme

20 new alternative vehicles have been purchased equipped with on board computers, 2 of them fitted out for the transport of disabled people, on the basis of reports regarding the customers preferences and the cost benefit analysis of alternative vehicles. At present, there are circa 2.000 contracts in force and circa 4.500 users.

Regarding the corporate car sharing, ASM has drawn up agreements with 9 big organisations and circa 500 firms for the use of car-sharing vehicles by their employees, as service cars and for home-work journeys. Many car collection and return points have been set up in the Province.

# Ljubljana



A biodiesel bus running through Ljubljana



Bicycle in Ljubljana

#### Implementation and large-scale deployment of bio-diesel and CNG fleets

This measure was planned when biofuels were not connected with the increase of food prices. Measure was composed of three main actions:

- a) the deployment of bio diesel in Ljubljana Public Transport (LPP) bus (EURO 0) fleet,
- b) the improvement of the quality of bio diesel production, and
- c) the testing on two locations in Slovenia of the production and use of bio diesel from rape seeds at small farms.

CIVITAS MOBILIS project was testing buses running on B100 in comparison with two buses running on D2. The data collected gave poor operational results and higher financial demands than expected. Therefore, the LPP decided not to use bio diesel in 100 old buses but rather to extend testing of 20 buses and to perform additional measurements of emissions of pollutants.

On the other hand project partners developed equipment for efficient pressing of rape seeds by farmers to support decentralised production and provide additional income for the farmers.

# Participatory planning and promotion of sustainable mobility in Ljubljana with emphasis on safe and increased bicycle use

Cyclists need security and to attract more people for cycling in urban areas security shall not overshadow their safety. This can be achieved only by their engagement and involvement. The primary objective of this measure were to develop public participation model in mobility development in the city and to improve cycling infrastructure and cycling activity in the city.

Opening decision-making process to key stakeholders, city administration learned that security of the bikes is not the priority of the cyclists. It was safety that they are seeking for. Having a participation model prepared administration could shift the focus more to the safety issues and learn the importance of the engagement to deal with real problems.

CIVITAS MOBILIS brought considerable change in understanding of cycling in Ljubljana. Cycling is in increase, additional bicycles are available for rent and also 480 new stainless bicycle racks and 50 stainless covered bicycle racks have been installed on public spaces in Ljubljana.

# Debrecen



Trolley bus at stop in Debrecen

# A C

Cycling in Debrecen

# Tramway priority scheme and real-time passenger information system

An important objective of the city of Debrecen is to maintain the current modal shift and to prevent the city from the heavy motorized traffic. The measure is a tool for making public transportation more appealing, effective and competitive with car using. As the heart of the city is open for tram transport exclusively, the measure is focusing on the development of this mobility option principally.

With the help of the project a network wide vehicle location system was installed not only for tram but for trolley bus vehicles as well. The system is able to fullfil several functions such as automatic vehicle location for trams and trolley buses, complete fleet management for the vehicles and handling priority requests of tram vehicles at traffic signals. At all the tram stops electronic information display system has been installed which announces the time remaining till the next coming vehicle and able to provide with useful information concerning the traffic situation of the city. The trams and trolleys have been equipped with LCD information displays on board. The system is based on the automatic vehicle location and electronic schedule system.

#### Integrated and extended cycling network

Owning and using private car is still a kind of status symbol in Debrecen which resulting that the number of cars and car users are still groving. For that reason, cycling still takes a back-seat compared to other transport modes. In the last few years the development of cycling trasport has become more and more articular and as a result the activity of the city has significantly increased in this field.

The geographical conditions and the features of the ground are advantageous for cycling. There are no downhills and slopes, moreover, the roads are wide and spacious enough to provide good conditions for cycling in the whole city.

With the measure, an overall cycling development plan was elaborated that defines the necessary developments step by step, in harmony with the current and foreseen financial situation of the city. According to the plan, low-cost, innovative measures are highlighted. As a part of this innovative development, an approx. 4 km long cycling path has been created. It has to be highlighted that the new road surface has not been built in a conventional way. The existing pavement and service roads were used for forming the cycling lanes mainly by painting and sign-posting works.

Besides the extension of the cycling road network 51 pieces of bicycle racks were purchased and installed in the city that can provide safe storing option for more than 350 bikes.



Main building of the University of Debrecen with students



The pedestrian area in the city centre of Debrecen

#### Car pooling service for students

Alternative mobility modes are not very wide-spread in Hungary as they have no real history. At present the University has about 25 000 students, most of them are mainly public transport users. As students travel with a price reduction, the use of public transport is stimulated and is much cheaper than a private vehicle. Other main need for mobility among students is the trip on weekends as the students regularly return home for the two free days. The measure is a new way of collecting people for common journey. It helps to share the resources efficiently, thus helps preventing air and environmental pollution. The target of this measure is to develop a car-pooling assistant system to bring together drivers and passengers travelling to the same destinations. The measure consists of two elements. The first part is the research task in which the city elaborated a concept and promotion study concerning the system. The second part of the measure was the implementation of the system itself. The system operates like an internet forum or a message wall. The students can log into the system with a user name and password and place adds seeking or offering rides for specific journeys on a kind of electronic bulletin board

#### Accessibility scheme for the conference centre and pedestrian zone

During the past four years, the most spectacular investment in the life of Debrecen was the development of the pedestrian zone in the main street of the city. The other most important parallel development was the construction of Kölcsey Convention Centre, which is one of the largest and most well-equipped buildings of its kind in Eastern-Europe.

There is a 25 000-square-meter pedestrian zone in the city centre at present, where public transport has exclusive access. With the help of the measure the final construction drawing was prepared concerning the extension of the existing section of the pedestrian zone. The construction will be carried out within the next years. According to the plan the new pedestrian area will cover the conference centre and some other attractive areas. The Convention Centre attracts conference tourism to Debrecen. By offering a direct connection to the pedestrian zone from the conference centre it is assumable that participants coming to take part in a 2-3 day event with their own car will rather walk to the city centre - and access the tram from the stops on the main square - for sightseeing than use their own cars. By enlarging the pedestrian space, the number of surface parking lots will be reduced but the underground garage of the conference centre will be able to compensate them. If the underground car park of the centre can serve as a "park and walk" facility, the foreseeable impact of de-motorisation can reach further than the actual pedestrian zone itself.

# Odense



Child drawing in the street during the Living Streets campaign

#### Implementation of environmental zones

To increase the health and the quality of life for both residents and visitors in Odense City we have implemented alternative environmental zones through the establishment of 2 zones with 30 km/h in two residential areas. The public road space can be used for many other things than traffic by reducing the impact of motor vehicles. There has been a high level of citizens' involvement in the Living Streets projects. The public has given input to the size of the zone, the targets and the legal rules. The process has resulted in an increase in local identity and local civic pride and an increase in social interaction and interdependence between residents. As part of the coming plan for traffic and mobility, Odense City wants to copy the principles from Living Streets to all the residential streets inside the Ring Road 2.

Beside the two environmental zones in the residential areas we carried out a pilot project in the city centre. The train station and the city centre were connected by means of technical solutions in order to create a better flow for pedestrians and cyclists. This was done by establishing countdowns in traffic signals, green waves for pedestrians and interactive info points along the way.



Children in a trailer in Odense

#### Creating alternative mobility options for owners of old cars

The mobility choice measure for marginal car owners and users provides a unique opportunity to demonstrate that personal mobility management together with integrated public transport services, and use of services such as taxi and car sharing (car clubs) can help remove older, polluting cars from the roads.

To carry out the objectives, a marketing plan and strategy for the campaign was developed in cooperation with a Public Relation Agency to attract families. Some 160 families joined the campaign. The families all received alternative transport possibilities to the car. Marketing various types of transport modes at the same time is effective in creating awareness of alternative types of transport. Citizens are normally very positive to personal contact as long as it is voluntarily and without any commercial pressure.

The measure has given useful inspiration for the traffic department, and the coming plan for traffic and mobility will focus very much on how the individual citizens can make a change to contribute to a liveable city.



An SMS ticket for public transport trips in Odense

#### Integration and quality improvements of sustainable modes

Turning the current trend of the growth of car transport in Denmark at the expense of public transport modes is one of the greatest challenges for mobility planning. One way of turning the tide is to focus on improving the qualities of the public transport. In the busses information signs have been installed telling about next stop and giving real time information. Interactive information points have been installed at the bus station with free wireless internet, giving real time information and other relevant information to travellers and commuters. A bus priority system based on GPS has been implemented.

An SMS service has been introduced as a tool to improve the passengers' experience with public transport travel. At each bus stop you can see a code which can be used to get real time information via SMS on when the next bus will arrive. This helps eliminate some of the traditional disadvantages with a written timetable.

For the first time in Denmark it is possible to use your mobile phone to pay for the bus trip with a SMS simply by showing the driver the SMS in the bus. The passengers are charged directly on their phone bill. The system did not exist in Denmark before this measure and it is a huge success.



Filming for the B-game in Odense

## Interactive traffic training for children

B-game is an interactive traffic game which seeks to give children knowledge and understanding of potentially dangerous situations as cyclists in traffic. By training the children though an interactive game with real life filming and locations which they recognise, you give them a realistic and safe way of training dangerous traffic situations which they may encounter when they move around the city on bicycle.

The interactive game teaches children about distances, speed and motion traffic through a number of planned and structured video sequences which make the situation as real as possible. Filming was done in a very realistic way thanks to on site filming from a special bicycle. The game has been introduced to all schools in Odense and can be used as a supplement to the obligatory cycling test for all children in the 6th grade. By teaching children safe traffic behaviour it can encourage families to let their children use the bicycle more. This means that e.g. the trip to school can be done by bicycle instead of by car. If children are taught to use their bicycle as a natural mode of transportation, they are more likely to choose the bicycle for transportation when they grow up.

# Increasing our knowledge through the exchange of experience

## **Technical Workshops**

CIVITAS MOBILIS cities have organized a series of seven thematic technical workshops addressing topics common to CIVITAS cities. These technical workshops have proven great opportunities to identify solutions to common issues among cities. The technical workshops were supported by the preparation of focused comprehensive dossiers that are available to the public.

- Hosted by Tisséo in **Toulouse** (France), a workshop has been organised in **March 2006** dealing with commuter plans as an appropriate means for further stimulating the use of alternative transport modes and as part of a broader sustainable mobility management. The experience of implementing such measures in the framework of urban transport plans raises particular interest among the CIVITAS MOBILIS cities.
- The CIVITAS MOBILIS cities are following different approaches of parking management: While some cities (mainly the smaller ones, such as Odense, Ljubljana and Debrecen) limit their policies to some streets in the actual city centre, Venice and Toulouse have developed integrated concepts, including also access management in the case of Venice. The CIVITAS MOBILIS cities have shared their experiences in a workshop held in **Cologne** (Germany) in **June 2006**.
- Hosted by **Ljubljana** (Slovenia), technical workshop, held in **November 2006**, focused on cycling safety improvement measures. For cyclists security is very important, however their safety is an imperative. Level of safety varies among cities. Developers of practical solutions need to work hand in hand with the citizens to ensure high level of safety to cyclists. New culture of public space is needed to return citizens on cycle lanes.
- Ticketing has technical and marketing/organisational aspects. The question of cost-effectiveness of electronic ticketing systems is an essential issue. On



the one hand, it is difficult to calculate the benefits of such a scheme on the other hand many cities opt for it as they have to renew their old equipment anyway. A workshop held in **Toulouse** in **November 2007** pointed out, that electronic ticketing is a financial burden for implementing authorities and a clearer view on benefits and costs would ease their decision.

- The CIVITAS MOBILIS workshop on car sharing across Europe was held in **February 2008** in **Venice** (Italy). A close look at car sharing is offering insights into the cultural aspects of mobility. While the advantages have always been clear, the uptake was rather small in the beginning and there is still a lot of potential. It is clear that the rational use of the car is still not common in our societies and the private vehicle is still a status symbol rather than a mobility option among others.
- In May 2008, health and transport workshop was held in Odense (Denmark). Physical exercise every day is preventing diseases resulting from one's life style. By promoting active travel, expenses of the health system and mobility costs can be reduced. At the same time, CO2 and air pollutants can be diminished while improving quality of life. In the light of demographic change, obesity, climate change and fuel issue, promotion of health and of active travel could become a key activity on European level for the coming years.

# Increasing our knowledge through the exchange of experience

• The workshop in **Ljubljana** on **October 2008** dealt with alternative fuels and clean vehicles issue. Climate change – caused to a large extent by greenhouse gas emissions from constantly growing traffic – and the decrease of oil and gas resources accompanied by raising fuel prices are among the biggest global challenges of the 21st century. In Ljubljana several speakers addressed the issue of alternatives, especially due to the recent controversy on biofuels and the raise in food prices.

## **Political Steering Group**

The CIVITAS MOBILIS project is strongly supported by the responsible authorities in all five partner cities. To express this support and to provide strategic guidance to the project throughout its four-year implementation phase, the politicians established a Project Steering Group (PSG) involving high-level political representatives.

- The first (PSG) meeting was held in **Toulouse** in **March 2005**. The five politicians of the CIVITAS MOBILIS cities discussed the content and goals of the project; providing an overall orientation. Several subjects were addressed: (1) the main local transport and mobility issues and policies now and in the near future; (2) the potential influence of CIVITAS MOBILIS; (3) the local contributions to CIVITAS MOBILIS and (4) the expectations. This first PSG provided a crucial reference for the work of the CIVITAS MOBILIS project.
- In **January 2006**, the City of **Venice** hosted the second PSG meeting of the CIVITAS MOBILIS Project. The partners initiated a political debate on the relationship between the general urban planning at agglomeration level and the mobility planning and management within such an agglomeration. The virtues of the mechanisms for the exchange of information between the two sectors fostering a cross sector planning and multidisciplinary management approach were discussed, including regional integration in a centre-periphery context.
- The third PSG meeting hosted by the city of Debrecen in February 2007 provided the CIVITAS MOBILIS politicians an opportunity to review the first

CIVITAS MOBILIS experiences and to make reference to some recent issues in the urban mobility area on the European level. This resulted in comments on the Mid-term review of the White Paper for transport. They positioned CIVITAS as a model for implementation of innovative policy and launched a general call for a clear European policy on clean urban mobility. The five CIVITAS MOBILIS cities committed to be model cities for clean urban transport in Europe and to act as "CIVITAS ambassadors" in their countries.

• "Cycling: Fashion Trend or Paradigm Shift?" was the heading of the final PSG meeting in **Odense** in **May 2008.** Cycling as a good practice example to discuss in a wider perspective the potentials and obstacles for integration of mobility policies as encountered in the Cl-VITAS MOBILIS project. Based on the CIVITAS MOBILIS vision, new strategies to be adopted were considered. These strategies could help to plan for a more sustainable mobility, to face the challenges and to make even better use of the demonstrated innovative solutions.

#### **CIVITAS II Final Conference**

**Toulouse** had the honour to host the final conference of the CIVITAS II programme in **January 2009**. At this occasion, 300 technicians and political representatives from the 17 cities of the 4 demonstration projects had the opportunity to present their main outcomes obtained during the last 4 years. This event was the occasion to exchange experiences between cities, European Commission and the representatives of the new CIVITAS Plus partners.



# **Policy Recommendations**



# CIVITAS created a new urban mobility culture in our cities

To improve the quality of life of their citizens, all European cities need to adopt sustainable mobility culture favouring alternative mobility in their city centres and sub-urban areas. Ever increasing traffic congestion and pollution of the urban environment have to be countered.

The achieved culture change in CIVITAS MOBILIS has only been possible through a profound commitment and close involvement of the local politicians and policy makers.

## Four policy tools

The CIVITAS MOBILIS politicians discussed during four Political Steering Group meetings the importance and nature of integrated local policies for the successful introduction of a new mobility culture. The CIVITAS MOBILIS project identified four distinct types of policy tools:

- Provision of political, policy and regulative support
- Availability of financial means and economic logic,
- Creation of institutional cooperation and stakeholder involvement,
- Increase of user participation and awareness.

The in-depth discussions on these policy tools and the evaluation of the CIVITAS MOBILIS outcomes resulted in policy recommendations for local and EC policy makers and practitioners.

## **Different starting points**

Each CIVITAS MOBILIS city had a different point of departure in their search for a new mobility culture. Several factors which are partly formed by the policies of the European Commission, national and local governments influence these starting points.

Some cities have experienced congestion in their historical centres for some years now, others just recently. Some cities have a long standing bicycle culture, while others until recently favoured private car use. Also factors like geographical characteristics, national fiscal policies or longstanding traditions of institutional cooperation influence the "starting point" of a city.



# **Policy Recommendations**

# Provision of political, policy and regulative support

The CIVITAS MOBILIS change towards a new mobility culture, its integrated packages of policies and measures have to be advocated by all local parties, institutions and administrations. The bicycle policies of the city of Odense are successful as they are endorsed by all political parties.

It is recognised that the backing of a political frontrunner is a key element for success for "visionary" measures. The bio fuel measure in Ljubljana, considering the full life cycle from production-to-wheel, is regarded as a good practice example. Enabling national legislation and fiscal policies proved to be crucial for the deployment of LPG boats in the canals of Venice.



# Availability of financial means and economic logic

Depending on the urban structure a new car sharing service can be made profitable within 5 years with an investment of up to 1 million of Euros. The promotion of walking and cycling can be carried out with a few thousands of Euros annually.

Still today the experience shows that the financial means are relatively easier to obtain for main infrastructure projects than for effective soft measure initiatives. A clear financial chapter in an integrating sustainable urban mobility plan, covering both infrastructure and soft measures, based on cost and benefits analysis can shape a favourable environment for a new mobility culture.



# Creation of institutional cooperation and stakeholder involvement

The creation of institutionalised task forces for each individual or grouped set of mobility measures in the framework of a sustainable urban mobility plan proved to deliver encouraging results and real mobility improvements.

The new mobility group created in Debrecen bringing together all local stakeholders and the joint development of new bicycle policies in Toulouse, Venice or Ljubljana demonstrated their usefulness beyond the lifetime of CIVITAS MOBILIS.

# Increase of user participation and awareness

In general it was experienced that a high level of user consultation proved to be a prerequisite for proper implementation and a key factor of success. Moreover, visibility of project-related advancements needs to be assured. A non communicated measure does not exist. A badly communicated measure has a high risk of failure

User participation and awareness is one of the elements that made the new parking management in Toulouse reach the right results.

# Gender as a topic in the CIVITAS MOBILIS project

#### Introduction

When implementing and promoting sustainable urban mobility a lot of attention is being given to ecological and economical aspects, but social dimensions are often lagging behind. Because mobility is seen as a basic need and an indicator of the quality of life, the CIVITAS MOBILIS project wanted to take account of all factors that can be of influence regarding the degree of mobility. It was decided CIVITAS MOBILIS would take gender issues particularly into account.

When looking at a rather new area in the field of transport and mobility, especially gender, criticism and disbelief are not far away. Why is it necessary to have a closer look at this issue? Is it really necessary to take it into account? And how can we deal with it?

This is how we did it...

## **Screening measures**

Following desk research on gender differences regarding travel modes and travel motives throughout Europe, all CIVITAS MOBILIS measures were screened using the Gender Impact Assessment Tool. This tool involves an assessment of policies and practices to see whether they will affect women and men differently, with a view to adapting these policies/practices to make sure that any discriminatory effects are eliminated (Crawley & O'Meara, 2004).

Using this Gender Impact Assessment Tool, 26 CIVITAS MOBILIS measures were listed as being gender sensitive.

Based on the screening, every CIVITAS MOBILIS city choose one or more of the gender sensitive measures to work on. The measures ranged from carpooling over encouraging cycling use up to PT use, traffic training for children and car sharing.

#### **Results and recommendations**

Results show that there proves to be differences regarding gender in the CIVITAS MOBILIS measures examined and are fully in line with the desk research.

The case of Toulouse illustrates the desk research finding that PT is most popular amongst females: two in three Toulouse PT users are female.

Further, when looking at the new car sharing scheme in the city of Venice, the average user appears to be male between the age of 30 and 45, is married with children. Two in three users of the car sharing scheme is male, one in three female. In order to expand its number of car sharing users, the city of Venice considered the creation of specific gadgets with information on car sharing to be distributed through informal channels to women in places such as gyms, hairdressers or shops.

When it comes to cycling, this mode seems to be more important to men than women. The CIVITAS MOBILIS case of Debrecen research illustrates that cycling is more of a male activity and that men cycle longer distances compared to women.

Taken these results into account, the CIVITAS MOBILIS project has also formulated gender policy recommendations.



# The CIVITAS MOBILIS consortium



#### TOULOUSE (FR) www.tisseo.fr

- Tisséo Public Transport Authority and Operator
- Grand Toulouse Great Toulouse Authority
- SICOVAL South East Toulouse Authority
- City of Toulouse
- City of Blagnac
- Connex Toulouse Public Transport Operator\*
- Gaz de France
- CETE du Sud-Ouest (ZELT)
- AUAT Urban Planning Agency
- CECILE SME groupment specialised in GNSS Technology



#### **VENICE (IT)** www.comune.venezia.it

- City of Venice
- ACTV Public Transport Company
- ASM Mobility Company
- VESTA the local environmental services company\*
- AGIRE Energy Agency
- CDG TALV The Office of the Commissioner delegated by the Government for Waterborne Traffic\*
- FormaUrbis an engineering and architecture SME



#### LJUBLJANA (SL) www.ljubljana.si

- City of Ljubljana
- LPP Public Transport Company
- TEOL, Kemična industrija, d.d., Teol\*
- SAVA \*
- Pinus Rače d.d.– Bio Diesel Producer
- FME University of Maribor
- KIS Agricultural Institute of Slovenia
- REC CEE Regional Environmental Center, for Central and Eastern Europe CO Slovenia



#### **DEBRECEN (HU)** www.debrecen.hu

- City of Debrecen
- DKV Public Transport Company
- HV Hajdú Volán Regional and Urban bus services
- HBM ÁKK County State Road Maintenance Company
- UoD University of Debrecen

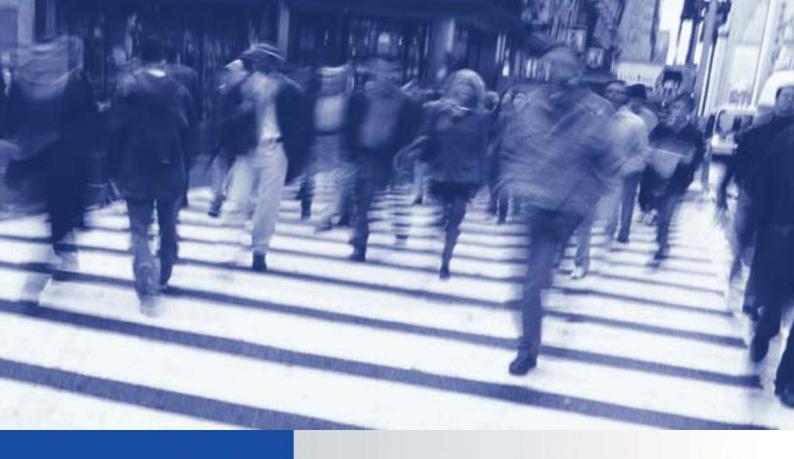


#### **ODENSE (DK)** www.odense.dk

• City of Odense

#### **SUPPORTING PARTNERS**

- Rupprecht Consult GmbH from Cologne (DE)
- Mobiel21 from Leuven (BE)



# CiviTAS Cleaner and better transport in cities

# MOBILIS



## For more information, please contact:

# www.civitas-mobilis.eu

# CIVITAS MOBILIS PROJECT COORDINATOR TOULOUSE

Alexandre Blaquière
TISSÉO
BP11120 – 31011 Toulouse Cedex 6 – France
alexandre.blaquiere@tisseo.fr
Tel +33(0)5 67 77 80 85
www.tisseo.fr

#### **VENICE**

Carlo Andriolo
City of Venice
carlo.andriolo@comune.venezia.it
Tel +39 041 27 49 135
www.comune.venezia.it

#### **LJUBLJANA**

Zdenka Šimonovič City of Ljubljana zdenka.simonovic@ljubljana.si Tel +386 1 306 11 65 www.ljubljana.si

#### **DEBRECEN**

Lásló Szücs City of Debrecen szucsl@ph.debrecen.hu Tel +36 52 511 551 www.debrecen.hu

#### **ODENSE**

Kurt Frederiksen City of Odense kkf@odense.dk Tel +45 6561 2710 www.odense.dk